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OBITUARY

DEBIPRASAD CHATTOPADHAYA

Born on 19 November, 1918, Debiprasad Chattopadhaya had a brilliant academic career. He topped the lists both in B.A. (Philosophy Hons.) and M.A. (Philosophy) in Calcutta University, and joined City College, Calcutta, as a lecturer in Philosophy. Apart from extensive lecture tours in India and abroad, he acted as visiting professor in the Universities of Calcutta, Andhra and Poona. He received D.Litt. of the Calcutta University, D.Sc. of USSR Academy of Sciencies, Moscow, and was elected a member of German Academy of Sciences, Berlin. After retirement he was drawn by the National Institute of Science, Technology and Development Studies, New Delhi as a guest scientist and project in-charge of History of Science and Technology project. Death overtook Prof. Debiprasad Chattpadhyaya on 8 May, 1993.

Debiprasad Chattopadhyaya (1918-93)

Though a Philosopher by training and occupation, Chattopadhaya had a life-long interest in science, specially in the application of science in the service of man. His studies in ancient Indian materialist philosophy *(Lokāyata)* had won him many a laurel, both at home and abroad. Further research led him to the study of the philosophical basis of Indian medicine. *Science and Society in India* (1977) proved to be a prosising work. Thus he was drawn to a new field–the history of science and technology in ancient India. After editing a two-volume anthology on this, he devoted himself full-time to a thorough going exploration of the origins of exact sciences in India. Along with a number of collaborators he produced two volumes of *A History of Science and Technoloy in Ancient India*. A third volume was ready for press when he breathed his last.

Apart from his works on philosophy, Marxism, and history of science, Chattopadhyaya was also known in Bengal as a literateur. He has a number of books for children to his credit. He was a keen advocate of the people's science movement and edited a collection of essays by eminent Bengali savants from Rammohan Roy to Satyendranath Bose to foster science consciousness (*Pratirodha*)

By the end of the 19th century, when the spirit of nationalism was fast developing

in India, it ws necessary to project the past glory of India in science, technology and philosophy to enhance this spirit. The only source material then available was Vedic literature, because archaeological evidences were not yet plentiful. And so, Vedic verses were often unduly pressed to trace their origin to an antiquity even to the extent of 8000 B.C. Tilak traced the origin of the first phase of Vedic literature to 6000 B.C. They did not know what was waiting for the future.

The Indus valley civilisation was excavated in 1921. It was an urban civilisation and the use of burnt brick is first found here in India. Then for a period of some 2000 years, till 500 B.C., the period of sttlement of Aryans in India, no archaeological evidence has yet been found to suggest the use of burnt brick.

Meghnad Saha raised the partinent question: why do the champions of the Vedasprefer to remain silent about this glorious past of Indian civilisation? Is it simply because of the fact that the makers of the Indus Valley civilisation were pre-Aryan and pre-Vedic?

Chattopadhyaya studied this past and opened up a new horizon.

While in Europe, Chattopadhaya pointed out to Joseph Needham, the well-known historian of science, that there are casual reference to astronomical phenomena in the *Vedāṅga Jyotiṣa* and Vedic literature which refer to a period and latitude-belt where there was no Aryan settlement. Are these pointers to the earlier civilisation of the Indus Valley?

Biot asserted that the system of 27 asterisms had originated in China whereas Needham (and, before him Bentley) believed that the Chaldeans first discovered it. The researches of Chattopadhyaya have shown that the Indus Valley civilisation can also claim priority in this discovery. As the entire astronomical literature of *Vedāṅga Jyotiṣa* is based on this asterism system, Chattopadhyaya has raised the question: How much Aryanism is there in the so-called Vedic astronomy?

The geometrical literature of the Vedic people, the *Śulva Sūtra,* relates to the mensuration of burnt bricks in construction of certain brick structures. Chattopadhyaya raised the question: If ..... the mathematics embodied in the Śulva texts is inconceivable without the assumption of very sophisticated brick technology, how are we to understand the fact that the Śulva texts themselves belong to a period in which, archaeologically speaking, the technology of making and using burnt brick is conspicuous by its absence? Chattopadhyaya continued: Could this be a pointer to the possibility of the following thing: the brick technology as well as the mathematics emerging to meet its requirements actually developed in the Harappan culture was somehow transmitted to the Vedic people of later India?

Chattopadhyaya has left a rich heritage of a new methodology for interdisciplinary research to be persued by successive generations of scholars.

A.K. Chakravarty