

1014-A0-54

Kim L. Plofker*, Department of Mathematics, University of Utrecht, Utrecht, Netherlands.

History of mathematics and original sources in India: A fieldwork report.

Nowadays there is widespread support for the use of original source materials in the history of mathematics, in both research and teaching. Historians of mathematics visit rare book libraries to consult early editions of Agnesi, Fermat, Newton, and Euler. Teachers of courses on history of mathematics bring their students to such libraries to get an idea of the historical context and material culture of mathematical development. Some fortunate ones have access to primary source materials other than printed books: perhaps medieval, Byzantine, or Islamic manuscripts, even Mesopotamian cuneiform tablets. But almost nobody except Indological specialists has the opportunity to see at first hand primary source documents in Indian mathematics.

This talk describes the speaker's recent nine months of fieldwork in Jaipur, India, locating and cataloguing Sanskrit manuscripts on the exact sciences. The background and basic structure of Sanskrit primary sources in mathematics will be discussed, and sample manuscripts will be displayed for the audience to examine. (Received July 07, 2005)