

## Practitioners and Publics: Situating Mathematical Practice in Colonial India

D. Senthil Babu

French Institute, Pondicherry

What constituted mathematical practice in pre-colonial India? Tamil mathematical texts such as the *Kaṇakkatikāram*, the *Kaṇita Nūl* and the *Āstāṇa Kōlākalam*, which were in circulation in the Tamil speaking region of south India from the fifteenth century, can be studied as records of socially embedded practices of computation. Written in Tamil prosodic verse, these texts show how knowledge circulated orally through the realm of practice of producers, workers and accountants, the 'measuring public' of an agrarian, mercantile social order; and among teachers, apprentices and students. In this paper, I shall briefly point out certain aspects of this world of computational practice to demonstrate the different pathways of mathematization that practitioners pursued as work and learning. The practical work of counting, measuring and weighing, immersed in the complex social networks of real world pursuits, become significant in attempting a social history of mathematics in India.

In this paper I discuss what happened to this world of practice during the early colonial encounter, when ways of measuring under the English East India Company demanded different modes of practice from indigenous practitioners. How did their practical knowledge change through their participation in the making of a new colonial revenue administration? The colonial administration demanded new types of skill and had different expectations of practitioners, which in many ways laid the ground for modern mathematical practice in India. The schools, the revenue administration and efforts to create a different public for mathematics become sites to understand the making of this terrain. I attempt to outline such processes through exploring the changing world of the *kanakkan* (the accountant) and the elementary school teacher in the course of the nineteenth century. Through an elaboration of the changes in policy and practice, I show how the single greatest problem for the colonial masters – rote memory in education – ended up getting institutionalized in the teaching and learning of arithmetic. This constituted a very different public for mathematics and instituted distinct notions about mathematical competence. I show how the conditions of the encounter with modern mathematics for this public, framed through an examination of locality, language and caste, effectively denied them any possibility of making mathematics their own.