

EAP1457 Methodology Report

EAP1457, Mathematical Practices of the Indian Ocean World in coastal communities of the Coromandel and Malabar, South India

The project involved survey and digitization of the endangered archival materials relating to mathematical tradition of the Islamic communities in Coromandel and Malabar, South India. Such documents were identified that are preserved at various sources in the regions.

As the first step for the implementation of the project, the Principal Investigator Dr. J. Raja Mohamad (for Coromandel), Dr. M.H. Ilias, Co-Principal Investigator (for Malabar) constituted a team comprising a Field Researcher and a Hired Technician for digitization works for each region.

A training programme was organized by the French Institute, Pondicherry, the Archival Partner for the project. Training was imparted to the team, including the Investigators, on digitization techniques, documentation process and meta data preparation.

The team members undertook tours to various places in the regions and digitized materials concerning mainly on mathematical and computational practices. The major source for the materials for the project were mosques, madrasas, Arabic college libraries, private collections in traditional families. Manuscripts and printed books were the available materials and they were taken for digitization.

Coromandel Region

The language of documentation in the region was Arabic, Tamil and Arabic Tamil. Manuscripts and printed books dating back to late nineteenth century were in our attention. Priority was given to manuscripts. Out of the fifty-nine items that we had digitized there were ten manuscript materials. Among the common thematic materials, like the Holy Quran, only of unique nature among them were digitized such as the first transliteration of Holy Quran in Arabic language (1881) and the first translation of the Holy Quran in Tamil language (1929).

Twelve items - books and manuscripts were digitized fully and in the rest, selective and important pages were digitized for want of time and space.

Very early materials were chosen for digitization which give details about the traditional mathematical practices on calculation of zakath, partition of properties, calculation of prayer timings through natural elements and architecture. Some more contents in the digitized materials include: customs and practices in social life, health, siddha and ayurvedic medicines, astronomy, astrology, mysticism, philosophy, folklore, history, minor literary works etc. All these materials were widely circulated and read in South India, Srilanka and Southeast Asian lands.

We had to avoid the inclusion of certain items, even though we had digitized them - for example, marriage registers from 1850s from many towns - for want of immediate permission to publish them from the respective stake holders. We are hopeful of getting consent.

Malabar Region


On the Malabar coast the documents preserved at various sources were dealt with. As the first step of implementation of the project, a team comprising a field researcher and a technician hired for the purpose of digitization work was constituted.

A training programme was conducted by the French Institute, Pondicherry for all the members of the team. The training was given in digitization techniques and preparation of metadata. The team surveyed and digitized materials (about 50 numbers) concerning mainly measuring and weighing techniques, mathematical and computational practices. Two major sources of material for the project were mosque/madrassa libraries and private/family collections. With regard to the form and content type, only two categories of materials were digitized; manuscripts and printed. Materials in other forms such as palm-leaf inscriptions were completely absent in the collections digitized.

The languages of the documents included Arabic, Malayalam and Arabi-Malayalam. Most of the materials digitized were originated (written or printed) locally, but having trans-regional importance. Published from South India but widely circulated and read in Southeast Asia and the Arab world (eg. Fathul Mui'n, the famous text of fiqh). The collections digitized from mosque libraries covered mainly subject fields like Islamic sciences, fiqh, tazawwuff, astronomy and history while those from the private collections included texts of history, Islamic sciences, fiqh, Ayurveda, astronomy, architecture, tazawwuff, talsamat etc. The team concentrated mainly on texts dealing with mathematical traditions, astronomical calculations and architectural measurements, weighing and measuring techniques, computational practices, methods of fixing the direction of Qibla, methods for measuring the timing of prayer and sighting moon, laws of inheritance, Islamic banking and the like.

General

Most of the materials have not been in good condition, not preserved scientifically. No dedicated rooms or shelves for keeping them and not catalogued properly in most of the cases. Kept in wooden cupboards or small boxes, no measures have been taken to prevent them from the physical damages. Fragile and partially brittle, some of the manuscripts are in a very bad shape with tremendous amount of damages to the pages and physical structure of them requiring urgent care. In certain cases, pages were having holes due to termite attack. In the case of manuscripts, colour has been faded and ink spread across the page. Fungus attack on papers was very common. Covers are lost and pages are torn in certain cases. Thus these endangered materials need our urgent attention. The lack of care and attention by the owners is mainly because of unaffordability of the cost of preservation and maintenance.


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