

Too often, we perceive books as invincible, inanimate objects. But their history is as ancient as it is ambiguous—what is a book anyway? If it's a writing surface comprising stories and information, then everything from our present-day tablets to pre-historic clay, bone, and wooden tablets, silk scrolls, manuscripts, pottery, and rock and cave etchings should count as different manifestations of a book.

The form most familiar to us dates from the Han dynasty in 2nd century China, where paper was first made from rags being pounded and stirred in water, and then collected on a mat. The raw materials eventually went on to include vegetable fibres and tree bark; the manufacture of bark cloth spread from China through the islands to the Pacific and Central America, and through the Indian Ocean to Central Africa. Printing using wooden blocks dipped in ink was in use in China by 705 CE. According to Eric Marshall White, curator of rare books at Princeton University Library, in his article "Europe's

Tamil book was produced in Goa.

The book as we know it today is therefore a palimpsest of eras of multitudinous cultural, intellectual, and industrial history, all of which reside in the paper, cover, binding, ink, and even marginalia making up the object. The materials are all vulnerable to a host of invasive elements: biological enemies such as bugs, insects, and human tampering, chemical threats such as fungus and mushroom growth triggered by storage in dark spaces, and other environmental threats including sunlight, heat, water, shocks of light from thunder, and any number of man-made and natural disasters. Implications of the losses resulting from such damage are beyond measure. This is where book conservation and preservation come in—a hugely under-practiced art in Bangladesh.

CONSERVATION IN LIBRARIES

Alexis Hagadorn, conservator and head of the conservation programme at Columbia

Dr Islam, who is the only one to teach conservation at DU, distinguishes between 'conservation' and 'preservation': the former refers to chemical and physical processes that try to preserve the original physical characteristics of archival documents such as manuscripts, classified records, books, and other artefacts. This might include binding, tissing, salving, maintaining a register of the artefacts, and repairing damages to the paper or ink. Proper conservation measures prolong the longevity of a book, making it available for future generations of readers and researchers. They also ensure proper utilisation of the funds dedicated to the manufacture and maintenance of books.

Preservation, on the other hand, involves maintaining the library and its artefacts in a usable and durable state, meaning that it both conserves the documents and substitutes and repairs them when needed. Offering proper storage facilities, proper temperature, packing materials, and other necessary environmental conditions would all count as preservation. Alexis Hagadorn explains how even building design can play a role in maintaining stable temperature and relative humidity for such practices. She says, "Sometimes it may be best to look at traditional building methods and housekeeping practices to do this: in tropical climates, for example, buildings designed with good passive air flow have historically kept collections in stable condition, and these structures may provide the most sustainable option, whereas installing expensive air conditioning that may fail could have catastrophic results."

"It is important to have someone inspecting collections regularly, every few days if possible, and looking for signs of infestation and leaking that could lead to water damage and mould growth," Hagadorn adds.

Both the national library and the public university libraries in Bangladesh have basic preservation facilities, according to Dr Islam. A separate binding section is present at the DU library, although not all other libraries have in-house binding and repair facilities. At both DU and the National Library, the books are cleaned, dusted, fumigated, and repaired on the premises. Some books are repaired through Japanese tissues placed between damaged pages (a form of lamination), and some through solvent cleaning, although that is more commonly used on manuscripts. Some artefacts—such as one of the first books by Jalal-addin Rumi, painted with enamel and therefore impervious to water—are processed through aqueous cleaning.

"Each conservation treatment decision has to be made in context." Alexis Hagadorn explains.

Continued to page 5

How to look after a book

University, explains how temperate climates and winter dryness can cause cracking of wooden components, shrinkage of leather and parchment, and flaking of paint layers in books. "But in tropical regions [like Bangladesh], heat and humidity contribute to rapid chemical deterioration, and foster growth of mould and spread of insects that are both quite damaging to collections," she says.

Dr Mehababul Islam, professor of Information Science and Library Management at the University of Dhaka, highlights, "Even the metro rail being built close to the DU Library can have adverse effects. Dust and sound pollution from highways and construction work can hamper the physical conditions of old books."

SARAH ANJUM BARI



"It is important to have someone inspecting collections regularly, every few days if possible." – Alexis Hagadorn, conservator and head of the conservation programme at Columbia University.

PHOTO: COLLECTED

First Printer", the world's earliest surviving book printed with movable type was made in 1377 at the Hungdoksa Temple, Chóngju, Korea.

Meanwhile, in Europe, paper arrived in Italy through Arab Spain in the 12th century; by the 14th century, Italian manufacturers were using animal glue and gelatine instead of vegetable glue as adhesives. The first printed books were appearing in Europe by the mid-15th century, when the Gutenberg printing press was invented. In the 16th century, Christian missionaries hoping to print the Bible in different native languages brought the technology to India, where the first printed



"MY HOME IS AS GREAT AS THE PADMA BRIDGE TO ME"

COUNTRY'S NO. 1 STEEL EXPERT



Whether for your home or the Pillars of Padma Bridge We forge steels with the same expertise