

Desert timelords to rewrite history

The discovery of thousands of ancient texts will tell us how Africa and Islam developed – if they can be preserved...

Mohamed Mahmoud's family home is a simple clay house, its fragile weather-beaten walls showing the effects of centuries of drought and being lashed by sand. Yet bundled in a back room, lie priceless literary treasures passed down to him by 15 generations.

Mohamed lives in the city of Chinguetti, in Mauritania. For hundreds of years it was the gateway to the Sahara, a link between north and west Africa and a welcome oasis for travellers amid the arid dunes. Founded in the 11th and 12th centuries, to serve caravans crossing the desert, Chinguetti became both a thriving commercial and religious centre. Merchants flocked to the market in search of salt, gold and slaves while pilgrims from west Africa gathered here on their way to Mecca.

● Amazing desert libraries

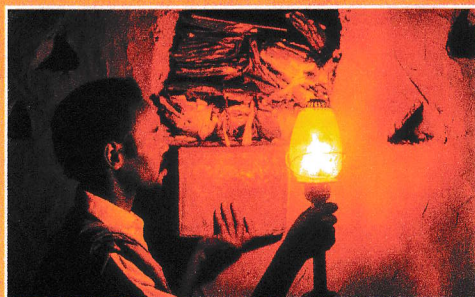
Chinguetti today is a far cry from the busy, cosmopolitan city of its prime. Gradually the town's inhabitants made the inevitable exodus to bigger cities and over the centuries the spectacular processions of caravans and camels were replaced by more modern means of transport, leaving a dwindling population of just four thousand.

Yet among the sand and simple living conditions that define everyday life for those left behind, priceless trophies remain as evidence of a prestigious past. A wealth of beautiful manuscripts inscribed with carefully written golden illuminations can be found there today having been handed down



Crossroads to Mecca

Far left, Map showing the ancient city of Chinguetti, a crossroads for pilgrims and traders and, inset, Mauritania



Mohamed Mahmoud is guardian of the family library which is 15 generations old

A people's written legacy

More than 3450 volumes of ancient scripts, dating from the 12-18th centuries. They are written on parchment, paper, wood and goatskin, depending on which period they originate from



Conserving books is a fine balance

The process of preserving precious manuscripts is a delicate balancing act. Conservationists seek to make a "balance between the physical integrity and the aesthetic integrity of the object" says Jean Brown, a conservation expert at Northumbria University. This means that it may be necessary to repair the item using materials that will alter its appearance but will not cause further deterioration. "All conservation is underpinned by a science of materials", says Brown. By understanding this, conservationists are able to reduce the decay of manuscripts and thus preserve them for future generations.

Virtual aid. The battle to conserve ancient artefacts now receives a helping hand in the form of 'virtual' conservation. Important relics can be digitally scanned in minute detail, with a near perfect 3D image as the end result. The scanners used can quickly replicate an item by running a laser beam in a straight line across it. The process is repeated over the whole item with an accuracy to within tens of microns (millionths of a metre) giving a complex field of data. This data can then be translated by the computer to render a solid image. Thus an image of the item can be created that is impervious to decay and will not alter in appearance. As a result the need to handle the original item is reduced, allowing it to be stored safely.

Hidden depths. Perhaps the most intriguing aspect of the process is that laser reading can reveal facets of an object invisible to the naked eye. When digital images of the Dead Sea Scrolls were enhanced, the legibility of the writing was increased and words that had been over-written became visible.

Of the 3450 volumes, 90% were found to be in

throughout the centuries, from generation to generation.

Just as Alexandria was considered a great city of learning in Egypt, Chinguetti attracted scholars from the entire Arab world, its reputation drawing travellers to pray, study and, mostly, to write. Man's motives for leaving these precious texts behind mirrors the city's past as both a centre for trade and religion. Some were presented as a spiritual offering to ensure their previous owner had a safe passage through the Sahara. Others were used as a commodity and, as such, were left by traders in exchange for camels, food and water.

The manuscripts from the middle ages were 'discovered' in 1993 when Elise Lucete, a journalist for the

French TV channel France 3, visited the city of Chinguetti and neighbouring city Ouadane (located 100 km to the north. Ouadane has deteriorated even more dramatically). Although Mauritania won its independence from France in 1960,

there is still a strong French influence and interest in the area.

After seeing the books, many of which are kept in the backrooms of once wealthy families, she decided to set up the 'Desert Libraries' association to try and preserve the



Mohamed Mahmoud at his laptop. He can use it between 8-11pm when electricity is supplied. He'd like to put Chinguetti on the Web but there are no telephone cables to the town

an advanced state of decay

books. The philanthropic foundation of the French chemicals company Rhone-Poulenc provided the financial backing needed to get the project off the ground. The result was an expedition to Mauritania, sponsored by the Rhone-Poulenc Foundation and organised by the United Nations' Educational, Scientific and Cultural Organisation (UNESCO).

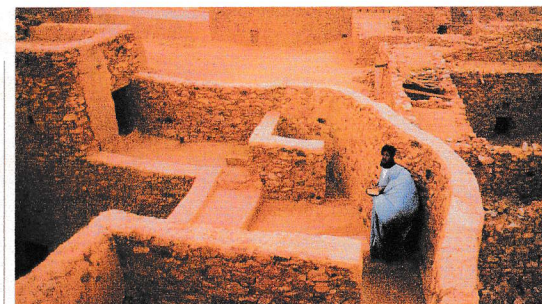
• The first dictionary found

Once the conservation challenge had begun, the true extent of the Chinguetti private library was soon revealed. In one house alone the Hamonis family was found to have a total of 250 ancient texts, some dating from over 600 years ago. The books were found in piles in the 'reading room' of their 14th-century

residence. The collection included religious manuscripts written before Christopher Columbus had discovered the Americas and a grammar book written 300 years before Dr Samuel Johnson began his *Dictionary of the English Language* (1747).

Across the street, the Habbot family library includes no less than 1500 works, the largest collection in Chinguetti. These books are carefully organised in metal cabinets and protected by cardboard covers thanks to an archiving system that was encouraged by UNESCO. But it soon became apparent that a real restoration programme and not just filing equipment was needed to save these ancient texts.

Unfortunately, out of a total of approximately 3450 volumes, 90%



The terrace of Ouadane's House of Culture where the texts will be stored

were found to be in an advanced state of decay due to their extreme age, the climate, the effect of sand, insects, (mainly deathwatch beetles and termites) and their frequent

handling, a result of the growing tourist interest in that region.

As immediate action was essential to preserve the manuscripts a large-scale conservation programme was launched under the auspices of UNESCO in coordination with the Mauritanian authorities and the National Foundation for the Protection of the Ancient Cities of Mauritania (FNSVA).

• More to be revealed

The action plan aims: to catalogue and duplicate the manuscripts to create a computerised database for reference, and to aid the preservation of the originals; to house the books (particularly those requiring treatment) in either Ouadane's 'House of Culture' or the 'Public Manuscript Library', which will be built in one of Chinguetti's restored ancient houses; and to train Mauritians in the skills of manuscript conservation and restoration. All three elements are underway and work on the library is due to begin this year.

"Work is still being done in the primary stage of archiving the books," says Caty Forget, General Secretary of the Rhone-Poulenc Foundation. "What we know so far is that many of the books are written in an early form of Arabic."

"But there appears to be a mixture of languages and regional Islamic texts - due to the variety of travellers that passed through the ancient city walls. And as Mauritania was once part of the French colonies some of the texts contain French. As the quest to catalogue all the texts continues we expect to reveal much more."

Rhone-Poulenc is also contributing its technical expertise in the form of a newly developed insecticide created by its scientific research subsidiary Rhone-Poulenc Agro. This is used not to treat the books but the wood around the library so the creepy crawlies so common in



Libraries of the desert

Many of the texts discovered have been kept in the homes of wealthy families for over 15 generations. Here the Ahmed Cherif family study one of the oldest: an C11th facts and gestures of the prophet, written on gazelle hide

Without the peasant librarians the history of an ancient civilisation would have been lost

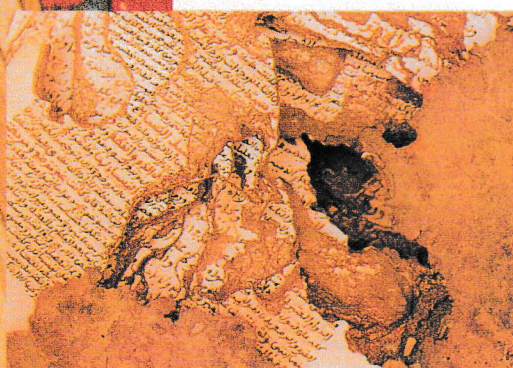


Pages from down the ages

These two pages are from a C14th copy of The Koran. Together with other versions from the C15th and C16th, they map the development of religious thinking through the Middle Ages

Book bugs

Insects have so destroyed these texts they are not recognisable. Such damage led UNESCO to classify them as important to humanity's World Heritage



The Habott family library has some 1500 books, given to them 200 years ago by Moroccan sultan Molay Smail

Chinguetti are kept at bay. Safeguarding the books from roaches and termites is not the only hurdle for the Rhone-Poulenc Foundation. Getting the books themselves may prove a problem. The books have long been seen by their guardians as private property, an inheritance handed down within families.

Islam's priceless relics

"The manuscripts are the pride and joy of many families. They use them to teach their young about Islam," says Forget. "If anyone does not want to part with them we will show them how to treat them at home. But most locals agree that the library is advantageous as it generates new jobs and helps the economy," she adds.

These books are priceless relics of Islamic history, but they also bear witness to the worldwide progress of religion, art, law, literature, medicine, astronomy and mathematics.

"It's not unusual to discover manuscripts – they often languish in libraries for many centuries before the wider world identifies what they are," says Fredrick Bearman, preservation and conservation library consultant. "In this case the books have been found at a geographical crossroads where information was gathered from people who travelled

from all over the Islamic world. These books chronicle religious thinking as there are copies and interpretations of the Koran from the 14th, 15th and 16th-centuries.

"They've got books on poetry, historical accounts and theories on astronomy too. There's even a book in which someone's written down all the ins and outs of judicial court proceedings. All these manuscripts reveal something about the wisdom and knowledge, the culture and people of that time in western Africa. That's what makes them valuable."

As the process of transferring these manuscripts from the private to the public domain continues, the Arab world's memory is there, within arm's reach, behind the leather bindings worn by the wind and sand. Amazingly the peasant librarians of Chinguetti have preserved an urban fabric created between the 12th and 16th-centuries despite the nomadic culture of the people of the western Sahara. It is to their own credit and the benefit of the world that they did. ■

Ali MacArthur

For more information visit the British Library at <www.bl.uk> or Rhone-Poulenc at <www.rhone-poulenc.com>