



Parchment and vellum through the ages

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Parchment is an ancient writing material made from processed skins, mostly from calves, sheep and goats. It was much more durable than papyrus, and was widely used until the arrival of paper in Europe around the twelfth century. From earliest times its use has been highly valued, not only for its suitability as a writing material, but also because it lasts almost indefinitely.

Historically parchment was made from the full substance of the sheepskin, but was later made thinner in the Middle Ages by shaving. The modern practice, however, is to use only the lining or flesh layer of the split. Today, the term parchment refers to sheepskin linings, and vellum refers to unsplit calf or goatskin.

The earliest use of animal skins for writing is lost in antiquity. Many passages of the Old Testament refer to a Hebrew word meaning 'roll of skin' or 'leaves', and there is evidence that, from the time of Moses, the Jews wrote the Tablets of Law on rolls of parchment.

The Dead Sea Scrolls, 300-100BC, were written partly on parchment. One source quotes that the manufacture of parchment dates back to the Middle Kingdom of Egypt, or approximately 2500BC. The Egyptians used parchment for their most important and valued writing such as temple rituals and royal archives.

According to the Roman Historian Varro, Pliny wrote that parchment was invented in the second century BC in Pergamum, (*Asia Minor or Bergama in modern day Turkey*) hence the term 'parchment' from the Latin 'pergamena' meaning "of Pergamum".

In 197BC an unusual boost was given to the development of parchment by Emeneus, the king of Pergamum, when he began to enlarge the library of his capital to rival that of the extensive collection in Alexandria. The Egyptian King Ptolemy forbade the export of papyrus from Egypt, hoping to hinder the development of the rival library. In his search for another writing material, King Emeneus so improved the already long-established use of animal skins that a new name was born, 'charta Pergamemne' or present day parchment or French 'parchemin'.

The refined methods of cleaning and stretching involved in parchment making were thus developed, and these new techniques enabled both sides of the leaf to be

used. Previously, when books were in the form of rolls, only one side of the skin was prepared for writing.

In 1909 two parchment documents were discovered at Avroman in Kurdistan, which bear dates equivalent to 88 and 22BC. Also, in 1923 excavations at the site of the Roman fortress of Dura discovered more parchment documents which correspond to the dates of 189-196BC. This leads some authorities to believe that parchment was extensively in use before the time of the Pergamum Library and the process was simply refined at Pergamum.

The manufacture of parchment arrived in north-western Europe with Christianity. In the Middle Ages it became the most important writing material. Sheepskin and calf skin were commonly used in England and France, while in Italy goatskin was favoured. Some important documents were delicately dyed violet or purple.

A later example of the extensive use of parchment comes from Paris in 1291, when we read of special powers to protect students and artists from deceptions resulting from the great competition among traders. The rector of the University of Paris had the special privilege of inspection, and refusal if necessary, of all parchment brought into Paris no matter where it was from. He was furthermore allowed to pick the best parchment for himself. Next in line were the bishops of Paris, followed by the king's agents and finally the merchants.

The parchment maker or parchmener came from the Latin *percamenarius*. In the late Middle Ages parchment makers took their place among the artisans and tradesmen of every town. ►

**Panel 1****Palimpsests**

During the 7th through 9th centuries, many earlier parchment manuscripts were scrubbed and scoured to be ready for rewriting. These recycled parchments were called palimpsests. Later, more thorough techniques of scouring the surface irretrievably lost the earlier texts. Medieval parchment was often re-used through the ages, suffering every fate from being punched full of holes to serve as grain and flour sifters to being cut into strips to create the interfacing for waistcoats.

The early manufacture of parchment

The first recorded use of lime for unhairing was in the 4th century AD. Prior to this, a combination of salt, flour (to cause fermentation), dates or dog-dung and other vegetable products such as oak gall were used. There is some evidence that urine was also used as an alternative to lime for the unhairing process.

The following instructions for creating vellum are from an early Latin manuscript written by Theophilus. This was a somewhat lengthy process lasting 22 to 30 days!

"Take some goatskins and soak them in water for a day and a night.

Take them out of the tub and wash them until the water runs clear.

Prepare a new bath and add some very old lime and water, stirring thoroughly to a thick, pale cream.

Press the skins down into this mixture, folding them so that the fleshy side faces outward.

Turn them with a wooden pole two or three times a day.

Leave them for a whole week, two weeks in winter.

Take the skins out of the tub and remove the hair.

Pour away the contents of the tub and fill it again using the same mixture as before.

Place the skins in the liquid and prod them once a day for a week.

Take them out of the tub and wash thoroughly until the mixture is absolutely clear.

Place the skins once again in a bath of clear water and leave them to soak for two days.

Take them out of the bath, attach cords to them and tie them to the circular frames.

Leave them to dry, then scrape them with a sharp knife and keep them in the shade for another two days.

Moisten them again and rub the fleshy side with powdered pumice.

After two days moisten them again by sprinkling them with a little water, and then finish smoothing the fleshy side completely with powdered pumice while it is still wet.

Next tighten the cords firmly but evenly, so that the vellum will be smooth and strong.

Once dry there is no need for further treatment."

(Translation from Arni Magnusson Institute, Iceland) 

Panel 2**Parchment:
past, present and future**

In 1456 Gutenberg used the skins of 300 sheep to produce his first Bible.

Goldbeater's parchment was made from the caecum of cattle intestine. This form of parchment was processed and formed in the same way as ordinary parchment. It is thin, tough, and resilient and can stretch without breaking. For this reason, goldbeaters use it to separate sheets of gold when building a block, which can then be hammered into finer leaves of gold.

Today parchment is still used, though somewhat restricted, for certain kinds of documents such as state and legal documents, certificates, in specific religious roles and every type of document that has to convey distinction and excellence. It continues to play a role in Jewish ritual: a book of laws must be written on skin and all synagogues have their parchment scrolls. Some uses include an Arabian Princess's wedding invitations, special royal marriage licences in England, limited editions of books, reproductions of the Magna Carta, Freedoms to the City of London, and Rolls of Honour in cathedrals. A classic example is that all acts of parliament are recorded on vellum.

And there are other uses: vellum covered furniture and wall panels are becoming increasingly popular, in particular vellum covered tables. Vellum is also used for drumheads and as parts of musical instruments.

As to the future, Simone Weil, a French philosopher, said, "The future is made of the same stuff as the present." For the future of parchment, this holds true, as its production and applications have changed little in the last 800 or so years.

Because of its durability, aesthetic properties and prestige, there will always be a market for it, although this may not be as extensive as it once was.

It should also be remembered that when considering the best media for storing important information one must bear in mind that at times the older technologies are sometimes superior to modern forms.

Recent testing indicates CD-ROMs are not the stalwarts against deterioration we had hoped for. Oxidation, magnetic fields and humidity can harm them, and disk media can decay. An important additional risk exists as well. Even if digital storage has retained flawless digital copies, 20 years from now there may be no way to retrieve the data. The methods used to create and read the data may have become obsolete. Parchment scrolls, centuries old, can be more legible than faxes of 10 years ago. Perhaps the future of parchment is more important than we can imagine today.