

An Introduction to Medieval Manuscripts



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Front cover illustrations taken from:

Horae, B. V. M., [Book of Hours, Paris] *Horae diue virginis marie secundum ritum ac consuetudinem ecclesie Romane, totaliter ad longum* (Paris, 1525)
(Sheffield Reference Library: 096 SR6)

Book of Hours, use of Sarum, with Calendar; manuscript on vellum, illuminated;
probably from Gloucester [15th cent]
(Sheffield Reference Library: 264.02 SR6)

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Sheffield City Council acknowledges the help of William Cowley Parchment Works (www.williamcowley.co.uk) in producing this booklet.

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An introduction to Medieval Manuscripts

Sheffield Archives and Sheffield Reference Library have a rich resource of medieval manuscripts with the earliest document in the collections at Sheffield Archives dating from c. 1180. This *Guide* explains both the types of manuscripts that were produced and how they were made. It also includes details of further reading for those who want to find out more.

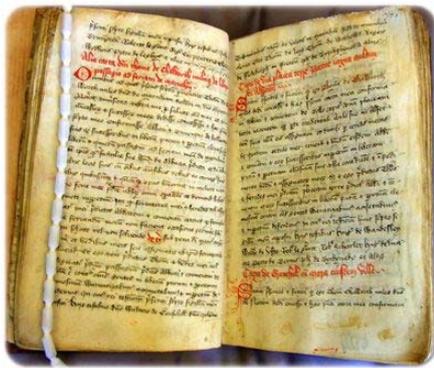
Considering the vast majority of the population could not read or write what sort of information was written down?

There were two main reasons for medieval society to record information: legal (such as land ownership) and spiritual (as an aid to learning about God and worshipping Him).

Here are a few categories of medieval documents:

- Deeds recording the changing ownership of land, or property, or charters conveying rights and freedoms on organisations (such as a charter) permitting a market to be held in a town square each Monday).
- Book of Hours - these were prayer books and are the most common medieval illuminated manuscripts. They contain extracts from the Bible such as psalms and prayers as well as list of church feast days. Usually written in Latin, they were ordered according to the specific times of the (liturgical) day. The earliest surviving Book of Hours in England dates from 1240.
- Psalters – book of Psalms from the Bible as well as liturgical text.
- Hymnals – book of hymns.
- Gospel Books containing one or more of the four Gospels and New Testament of the Bible.
- Bibles.





A parchment book within wooden board covers (Sheffield Archives: MD3414)

Prior to the late 15th century when the printing press began to spread across Europe, texts had to be copied by hand by scribes. Scribes could either be monks or secular, working for the government or for book sellers for instance. Once the printing press became more widely used, devotional books such as books of hours and psalters, etc began to be printed rather



than handwritten. Legal documents, however,

continued to be hand produced.



The majority of legal documents

were written on parchment, with some on paper. They can be highly illuminated, colourfully decorated or simply written in either carbon or iron gall inks.

A paper deed (Sheffield Archives: ACM/WD950)

A parchment deed (Sheffield Archives: WWM/D3)

What is parchment and why was it used?

Parchment (sometimes called vellum) is the skin of a calf, sheep or goat that has been treated and prepared for use as a writing material. It is extremely durable, and could be carried over large distances with little risk of damage.

It was widely used across Europe, from the earliest times until the late 15th / early 16th century when paper began to replace it, particularly for the production of books. Printing books on paper was cheaper and quicker than having to write them out by hand onto parchment. However, parchment continued to be used for some legal documents such as deeds, until well into the 19th century.

How is parchment made?

Parchment is mainly produced from the skin of young sheep but goat, calf or deer can also be used. The skin is pickled in lime and alum (a type of salt) and then the hair and fatty layers of the skin are scraped off. The skin is then washed. After washing it is stretched out on a frame and further scraped with a ½ moon shaped knife called a lunellum.

Vellum is mainly produced from calf skin, which has been treated in the same way as parchment. Calf skin tends to become more rigid and yellow in colour than parchment and was more often used for the binding of books rather than as a writing material.

The images below show how parchment is produced (images used with permission from William Cowley Parchment Works www.williamcowley.co.uk)



A pickling pit (or vat)

Skin being stretched on frame





Skin being scraped with a lunellum

After scraping the skin is degreased further with chalk then left to dry on its frame.

Empty frames



Skin being graded after removed from frame

Inks

There are two main types of ink - carbon and iron gall.

Carbon Ink

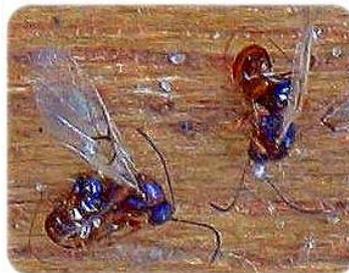
Carbon ink is made from charcoal or “lamp-black” which is soot. It is then mixed with gum Arabic (a form of hardened sap from the acacia tree) to thicken the ink. Carbon ink is very stable and, importantly, does not ‘eat’ into or damage paper. Such ink had primarily been used in the ancient and eastern worlds, but has been found on medieval manuscripts from Europe. However, it was not particularly good for use on parchment, as it did not adhere to the parchment due to the greasy nature of the animal skins.

Iron gall Ink

Later, iron gall ink became more popular, coming into use during the 7th - 9th centuries and by the 11th century had largely replaced carbon ink as a writing medium. This was mainly due to the introduction of parchment and vellum as writing materials.

Iron gall ink was made by mixing iron salts (ferrous sulphate FeSO_4) with tannins from a vegetable source which in this instance was oak gall.

Galls are frequently found on branches, shoots and leaves of the oak tree, hence they are called oak galls.



Left to right: oak leaves and gall, empty oak gall and gall wasps

The oak gall is produced by the tree as a consequence of it having been “bitten” by a female (gall) wasp. The wasp lays her egg in this “bite” which causes the tree to produce plant juices which envelop the larvae and protect the rest of the tree. This is the start of the oak gall being made. When the insect matures and leaves, the oak gall can then be used to make ink.

After mixing ferrous sulphate and oak galls together they are left to ferment in water. After fermentation, the mixture is strained and then thickened with gum Arabic. When the ingredients were combined in the proper amounts, usually a 1:3 ratio (1

part ferrous sulphate, 3 parts tannin oak gall extract), a pale, easy flowing ink is achieved. The gum Arabic prevents the ink from being too watery.

After a few days exposed to the light and air, a black ink darkened by oxidation was produced. However, on aging, this ink turns brown due to the metal and acid content and by being exposed to daylight. This ageing affect can be seen on most medieval manuscripts, but nevertheless the inks have remained legible.

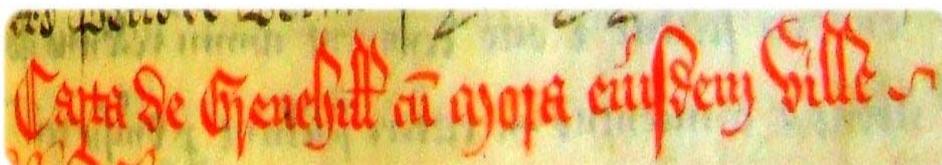
Early scribes were also known to have added 'spirits of salt' (hydrochloric acid) or 'oil of vitriol' (sulphuric acid) to their ink. This made the ink absorb more easily into the writing surfaces. This had very little if no affect on parchment and vellum because of the alkaline nature of the material, but it was to become disastrous for paper. The acid in the ink burned through the paper over time to create a 'lacy' manuscript full of holes.



Start of lacy affect on paper manuscript
(Sheffield Archives: MD596)

Ink was stored in either pots with screw top or in storage pots made from animal horns.

Different coloured inks



Above and right - red ink
(Sheffield Archives: MD3414)



Red ink was the second most popular ink colour after carbon (black) or iron gall inks (black/brown). It was used to underline, correct and to write headings, titles, initials, the order in which liturgical manuscripts needed to be read and the red letter days on calendars.

Red ink could be made from either vermillion (mercuric sulphide) which was turned into ink by grinding it up and mixing it with egg white and gum Arabic or from Brazilwood chips, which were soaked in an acetic acid such as vinegar or urine. After straining, gum Arabic was added to the liquid.

Green and blue inks did exist but were very difficult to make and so were not used very often.

What was used to write on parchment?

Feather quill



A scribe
(Sheffield Reference Library: 096
page180)

Quills

Quills “penne” feathers were used for writing. These were made from the large feathers mainly obtained from geese or swans. The best feathers were the five outer wing pinions. The end of the feather, which is the part attached to the bird’s wing is like thin bone and similar to human nails. This end was cut with a knife and shaped to a point. The point, which was quite hard, was dipped into ink. The point would gradually become soft due to the wetness of the ink. At this stage the scribe would cut the soft bit off and re-point the quill.

There were a number of styles of writing used in medieval times, for example: Book or Text hands, and Anglicana. For legal documents, Documentary hands which were also known as Charter, Court, Business or Secretary hands were used.



Example of Book hand
(Sheffield Reference Library:
264.02)

The work of a scribe

The Venerable Bede



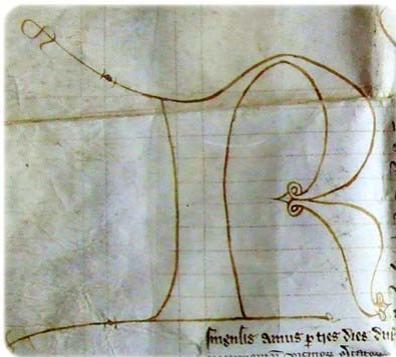
If the scribe was a monk then he would be employed to copy books or texts. These could be Bibles, Psalters or Gospel Books to name but a few. He would have copied them from a monastery library.

If the scribe was secular he would be employed either by the government to write up charters and deeds or he would have been associated with booksellers, mainly working in university towns.

A legal document written by a government scribe
(Sheffield Archives: WWM/D3)



Secular scribes who worked with booksellers were often employed to copy original books and texts. These were called “exemplars”. The exemplar was placed on a sloping desk with the scribe’s blank copy sheets. The original book was held open by using hanging weights as parchment pages were quite springy and would often close. The scribe would copy the writing onto a folio of parchment (a folio is one side of a folded sheet). He would draw guide lines on the parchment to ensure his writing was straight. These were called “plummet lines.” This was done by creating a margin at both the right and left hand side of the folio. A prick mark was made by using an awl (a pointed tool) along the margins. The prick marks were joined together by using a metal pointed stylus thus creating straight lines. To make the impression more visible the lines were lightly drawn in by using pen and ink or red lead.



Plummet lines showing awl marks and lines drawn in (Sheffield Archives: ACM/WD951)

Scribes would sit on tall backed chairs, next to the lectern style desk.

Before writing on parchment, the surface was sanded with a fine pumice stone to create a slightly rough surface, after which chalk was rubbed in to remove surface grease. This would prevent the ink from running. The scribe would hold his quill in one hand and a penknife in the other. This was done so he could write, correct his mistakes straight away by scraping off the ink, and could re-sharpen his quill when it became too soft from the ink.

The scribe (St. John) with quill in one hand and penknife in the other





Parchment with scraped area (Sheffield Archives ACM/WD951)

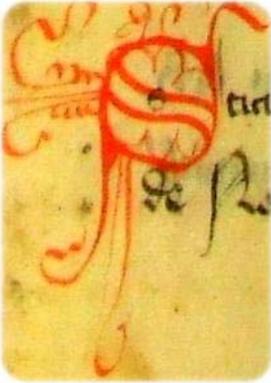
Before the scribe started to copy he would practise his handwriting either by using a scrap of parchment or on the proposed fly leaf of the book to be. His test piece would be, for example, a few letters of the alphabet, a brief sentence or a few words. Sometimes, at the end of very lengthy books, you may find a “colophon” (an inscription) which was written by the scribe describing briefly his joy and relief of completing the labour intensive task. Some remarks were frivolous, “Oh for a jug of wine!” or more serious, “God please grant me eternal life!”

Parchment pages (folios) of a book were then collated in the correct order - this is called a “quire” or “gathering”. The section was joined together at a centre fold by sewing. The stitching could be secured on the spine of the book using either a chain stitch or the stitching was secured around leather thongs. The boards which held the pages (textblock) to the cover were often made from wood, usually oak in England. The thongs would be laced over the cover (boards). The covers could be further protected by leather or, if a fabric was used, highly decorated with jewels.



Wooden oak boards with thongs laced- in (Sheffield Archives: MD3414)

Decorated medieval manuscripts



Decorated letters
(Sheffield Archives: MD3414)

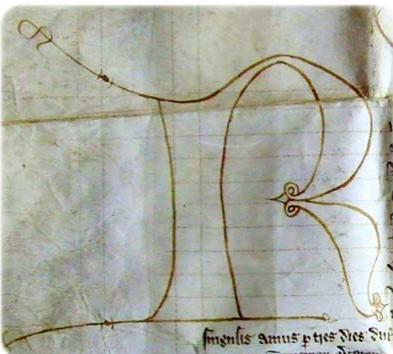


Many medieval manuscripts and pages of books were decorated. The simplest form of decoration was to enlarge the first letter. This could be either written in red or iron gall ink or the iron gall ink could be infilled with colour. Further to this, the smaller letters could have dabs of colour added.

Medieval books did not have title pages. To identify the beginning of a book the first letter of the first page was the largest. This showed that the book was opened at the front and was at the start. Letters of subsequent chapters were smaller.

Miniature drawings were also included in some of the larger letters or separately around the borders of the page.

The text was always written first before any decoration was added. If decorations were required then these areas were left blank. Therefore it was crucial that the scribe planned before he put 'penne' (quill) to parchment. Examples have survived where the text has been completed with only an outline of what decoration is required.



Above left
Plummet lines with blank letter
(Sheffield Archives: ACM /WD951)
Above) plummet lines with decoration
filled in (Sheffield Reference Library:
264.02 pages 7-8)

The illustrations which were chosen depended on the context of the text.

There were pattern books and pattern sheets that showed styles of letters, images and designs that could be copied. There were also templates or “models” for example, of birds, animals, trees, leaves, flowers, saints, martyrs, God, the Virgin Mary, angels, mystical creatures (such as unicorns and dragons), the sun, moon stars and sample alphabets.



Selection of patterns
(Sheffield Reference Library: 096
pages 15, 26 and 154)

Illustrations could be drawn free hand or traced by using “pouncing”. This was done by obtaining an outline of the chosen “model” which was pin-pricked on a very thin sheet of parchment. This was then laid over the page and dabbed with charcoal dust in a bag. This left a dotted impression of the design. The dots were joined up using quill and ink.

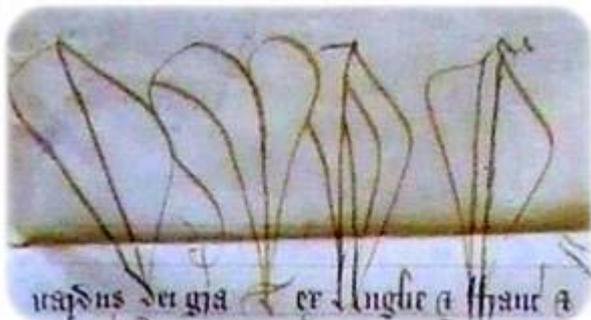
Illuminated manuscripts



An illuminated manuscript
(Sheffield Reference Library: 096
pages 42-43)

Illuminated manuscripts get their name from the gold used in their decoration as the light reflected from the gold is the illumination.

The illuminator would most probably treat the parchment again so the ink, pigments and gold which he intended to use would adhere to the skin. Other than the pumice stone and chalk, finely ground glass mixed with bread crumbs or chalk was also used. This left a clean surface for drawing the design.



Sketch of title left blank for illumination (Sheffield Archives: ACM/ WD951)

(Sheffield Reference Library: 096 pages 58-59)



Using gold leaf

Gold leaf is gold which has been folded and hammered flat until it is virtually without thickness and is as light as a feather.

When gold was used in a design it was placed first before other colours were added. The reason for this is gold adheres to any pigment and therefore would ruin the design. Also, gold required burnishing and this would ruin the painting as burnishing (rubbing to polish) is quite a vigorous process.



Highly burnished gold leaf
(Sheffield Reference Library: 096
page 43)

In order to attach gold leaf to parchment “gesso” was used. Gesso was plaster of Paris mixed with white lead powder, egg white and water. Honey was also added to keep this mixture moist for longer. Also, as new parchment was quite white, Armenian bole was often added which turned the mixture pink. This made the gesso more visible. (Armenian bole is a red greasy clay).

The gesso was applied by quill in puddles and drawn out to the edges of the design or letter which would be gold leafed. It was left to dry after which any unevenness was scraped away. The gesso was still damp enough in the morning for the gold leaf to be attached.

The gold leaf was picked up with a fine brush and placed over the gesso. To secure it in place the illuminator gently blew it down flat, then breathed over it ensure it was in place. He would overlap the gold to ensure there was sufficient coverage. Once he was happy with the result he would then press it firmly down with a piece of silk. The gold leaf was then left to dry, after which it was burnished quickly with a dog tooth. Today, agate stones in the shape of a dog tooth are used to burnish gold leaf. On drying and after burnishing the gold leaf gave the impression of an almost three dimensional drawing as the light caught the gold from different angles.



Strawberries and flowers
appear to be standing proud
of the gold background
(Sheffield Reference Library: 096
page 88)

The illuminator worked on a flat table to ensure the gesso and the pigments used would not run.

Gold could also be applied in a powdered state and this was called ‘shell gold’. The powdered gold was mixed with goat’s milk and gum Arabic and used like an ink. It got its name as the solution was used from a sea shell. It could then be applied either with a pen or a brush and was used on top of pigments. This gold ink is also known as ‘liquid’ or ‘matt’ gold. Gold ink was far more expensive as it was difficult to powder the gold leaf and to apply sufficient layers to the outlines of the drawings so a shimmer could be seen.

Letters which required colouring were marked out with what was called “under drawings” these were tiny letters which indicated which colour was to be used. Similar to painting by numbers. For example:

- **a** would be blue (azure),
- **r** would be red (rouge),
- **v** would be green (vert) etc.

Colours were diluted either by water or by adding white (lead).

The medieval illuminator used natural pigments made from vegetable and mineral sources. For example:

Vegetable – saffron for yellow; petrocarpus draco for red; madder for purple

Mineral – lapis lazuli for blue; coal, carbon for black; copper oxidation (“verdigris”) for green; lead for white

To obtain these natural pigments they were either ground, soaked or squeezed to extract their colour. They were blended with either gums, egg white or gelatine (gelatine was made from boiled parchment pieces or fish lime). This binder made the paint thicker which attached itself better to the parchment skin.

Finally, the colours for the illustrations were painted on to the designs. In order to obtain the right shades and depth of colour and to compliment the almost three dimensional effect of the gold light colours were blended with darker colours to portray folds in materials, distance and perspective e.g. night fall; the inside of a room.



Above left (Sheffield Reference Library: 264.02 page 81)
Above right (Sheffield Reference Library: 096 page 26)

Suggested Further Reference

Sheffield Archives has dozens of manuscripts dating from the medieval period. The main collections in which they occur are listed below (the catalogues of these

collections are available to search via the Access to Archives online catalogue (www.nationalarchives.gov.uk/a2a)

- Duke of Norfolk's Estate, Arundel (Arundel Castle Manuscripts) (Sheffield Archives ref. ACM)
- Athorpe family of Thorpe Hall (AH)
- Bagshawe Collection (BagC)
- Bacon Frank Family of Campsall (BFM)
- Copley Family of Sprotborough (CD)
- Cooke Family of Wheatley (CWM)
- Earls of Wharnccliffe (WhM)
- Edmunds Family of Worsbrough Hall (WM)
- Freemantle Collection (FrC)
- Jackson Collection (JC)
- Lindsay Collection (LC)
- Newton Shawe Collection (NSC)
- Sheffield Church Burgesses Trust (CB)
- Wentworth Woodhouse Muniments (WWM)
- Wheat Collection (WC)

There are also numerous individual documents from the medieval period scattered across a number of smaller collections.

Sheffield Reference Libraries early books include a Book of Hours from Paris, dated 1525 (096 SR6) and also a Book of Hours, probably from Gloucester [15th cent] (264.02 SR6)

Cheney, C. R., *Handbook of Dates* (Royal Historical Society, 1970) (Sheffield Archives: REF C; also available at Local Studies Library: 902 S (1945 edition) and Sheffield Reference Library: 902.02 (1991 edition))

Glaister, Geoffrey Ashall, *Glaister's Glossary of the Book: Terms Used in Papermaking, Printing, Bookbinding and Publishing with Notes on Illuminated Manuscripts and Private Presses* (Allen and Unwin, 1979) (Sheffield Central Library store: 655.03)

Grieve, Hilda, *Examples of English handwriting, 1150-1750; with transcripts and translations* (Essex Education Committee, 1954) (Sheffield Archives: REF B; also available at Sheffield Central Library Store: 417)

Hamel, Christopher de, *A History of Illuminated Manuscripts* (Phaidon, 1986) (Sheffield Central Library Store: 096. Q)

- Hector, Leonard Charles, *The Handwriting of English Documents* (Edward Arnold, 1966)
(Sheffield Archives: REF B; also available at Sheffield Central Library store: 417)
- Hey, David, *Medieval South Yorkshire* (Landmark, 2003)
(Sheffield Local Studies Library: 942.74 S)
- Hills, Richard L., *Papermaking in Britain 1488-1988 : A Short History* (Athlone, 1988)
(Sheffield Reference Library: 676.2)
- Hunter, Dard, *Papermaking The History and Technique of an ancient Craft*
(Dover Publications, 1978)
(Sheffield Reference Library: 676.2)
- Ker, Niel, R. *Medieval Manuscripts in British Libraries*, vols. 1-5 (Clarendon Press, 1977 - 2002)
(Sheffield Reference Library: 016.091)
- Latham, R. E., *Revised Medieval Latin Word-List* (Oxford University Press, 1965)
(Sheffield Local Studies Library: 479.3 S; also available at Sheffield Archives: REF A)
- Marshall, Hilary, *Palaeography for Family and Local History* (Phillimore, 2004)
(Sheffield Archives: REF B)
- Newton, K. C., *Reading Medieval Local Records* (Historical Association, 1971)
(Sheffield Archives: REF B; also available at Sheffield Central Library Store: 417)
- Owen, Dorothy, *Medieval Records in Print : Bishops' Registers* (Historical Association, 1982)
(Sheffield Reference Library: 907. Q)
- Reed, R., *Ancient Skins, Parchments and Leather* (Seminar Press, 1992)
(Sheffield Central Library Store: 675.2)
- Smith, D. M., *Medieval Latin Documents, Series 1. Diocesan Records* (University of York, 1979)
(Sheffield Reference Library: 417. Q)
- English Mediaeval Handwriting* (University of York, 1973)
(Sheffield Reference Library: 417. Q)

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