3 Manuscripts and copists

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From Roll to Codex

In the lesson on the forms of the Western book, we saw how, between the third and fourth centuries AD, there was a shift from the roll to the codex. The codex is, in essence, the most enduring book form, having survived to the present without yet being displaced by the e-book.

Parchment: Origins, Preparation, and Use

After a brief period during which books in codex form continued to be made of papyrus, parchment gradually became the preferred material. Parchment—made from the skins of sheep, goats, or calves—was more durable than papyrus. Its use for writing is attested at least as early as the Twentieth Egyptian Dynasty (1195–1085 BC), and fragments of parchment rolls have also been found in Hebrew and Greek. From the fourth to the twelfth century AD, parchment was the most widely used writing material; it was also employed in the earliest printed books, which sought to replicate the appearance of the codex even in their choice of material. From the thirteenth century onwards, however, parchment was gradually supplanted by paper.

Let us now turn to the preparation of parchment. Parchment is animal skin that has been processed but not tanned, and is therefore distinct from leather. The term *parchment* derives from Pergamum, a city in Asia Minor. According to Pliny the Elder (*Natural History*, XIII.xxi.70), King Eumenes II of Pergamum wished to assemble a library greater and richer than that of Ptolemy II, king of Egypt—that is, the famed Library of Alexandria. In response, Ptolemy II halted the export of papyrus, compelling

Eumenes II to turn to animal skins, which from that time onwards became known as *parchment*.

Before it could receive writing or illumination, parchment had to be carefully prepared. The processing of the animal skin was aimed at isolating the intermediate layer, the dermis, by removing the outer layer, the epidermis—where the hair follicles are found—and the inner layer, the hypodermis, which is especially rich in fat (fig. III.1).

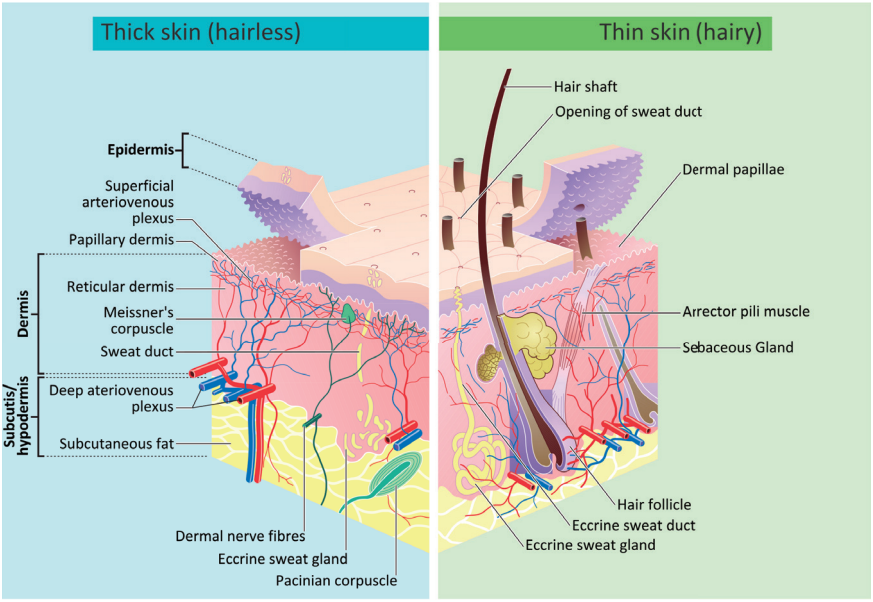

Figure III.1. Animal skin, from Wikipedia (under CC-BY SA-3.0 public licence).

The animal skin was repeatedly immersed in water and lime, then dehaired and scraped with a curved-bladed knife to remove the fat. It was subsequently stretched on a frame to dry. Finally, the surface was smoothed with pumice stone and whitened with a thin layer of gypsum mixed with glue. In the celebrated miniature of the Bamberg Codex (Bamberg, Staatsbibliothek Msc. Bibl. 5, c. 1270–1280), which depicts scenes from a scribe's work, several stages of parchment preparation can be observed: the

cleaning of the skin; the skin fixed to the frame; and the craftsman smoothing it with the curved-bladed knife.

Even after being prepared for writing, parchment retained two distinguishable surfaces: the so-called flesh side, exceptionally smooth and white (as can be seen in fig. III.2); and the hair side, where the hair follicles are still visible (fig. III.3).

Parchment was an extremely costly material, and the production of a single book could require the skins of many animals. It is said that, to produce the *Biblia Amiatina*—a monumental Bible preserved in the Biblioteca Medicea Laurenziana—more than twenty calves were needed. For luxury manuscripts, only the thinnest, whitest, and most flawless parchments were selected, and generous margins were left.

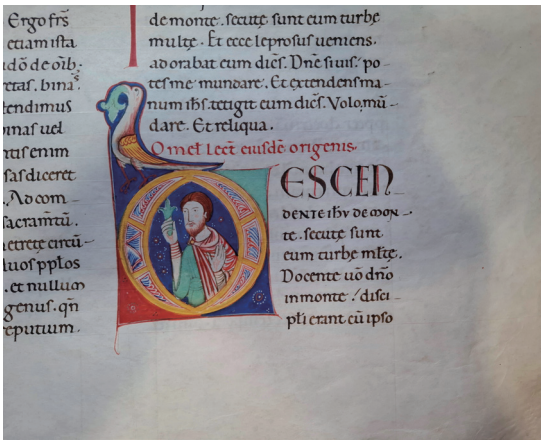

Figure III.2. Flesh side of parchment.

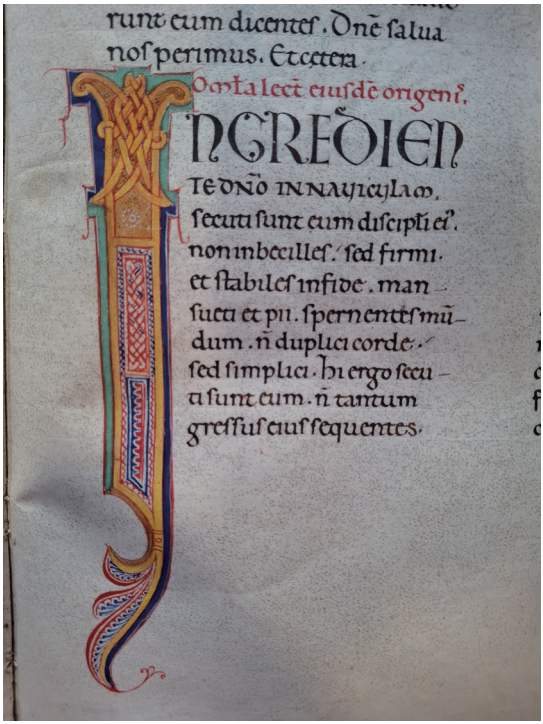

Figure III.3. Hair side of parchment.

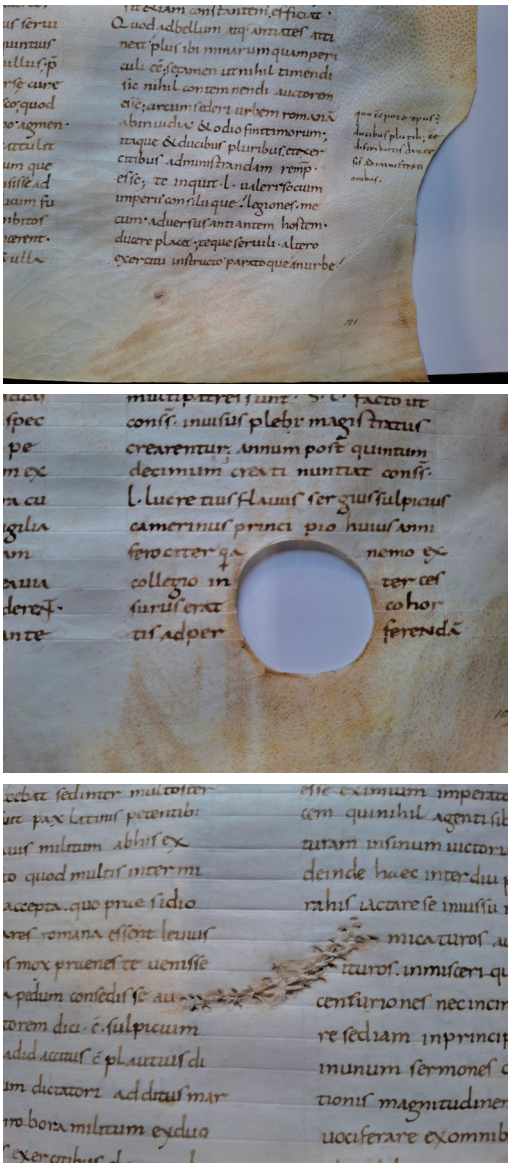

Figure III.4-6. Imperfections in parchment.

For less precious books, even portions of skin bearing visible marks from the animal were used. The figures III.4-6 show examples of such imperfections and the ways in which the scribe adapted to the holes and undulations of the parchment. There are no gaps in the text: the scribe simply avoided the hole or the stitching, or followed the natural contour of the surface.

We speak of a *palimpsest* when a manuscript's original text—the so-called *scriptio inferior*—has been erased to make room for a new text—the so-called *scriptio superior*—thus reusing the precious parchment. The ink could be removed either by scraping the surface with a small knife or by immersing the sheets in milk. The erased text can still be read today with the aid of a Wood's lamp, a device that, through UVA rays, reveals the ink once thought lost.

An example of a palimpsest preserved in the Biblioteca Medicea Laurenziana is Giovanni Boccaccio's manuscript *Pluteo* 29.8, known as the "Zibaldone laurenziano." Part of it is made from leaves taken from a thirteenth-century gradual (a liturgical choir book for the Mass) written in Beneventan script, in which the original lines of writing can be seen running vertically.

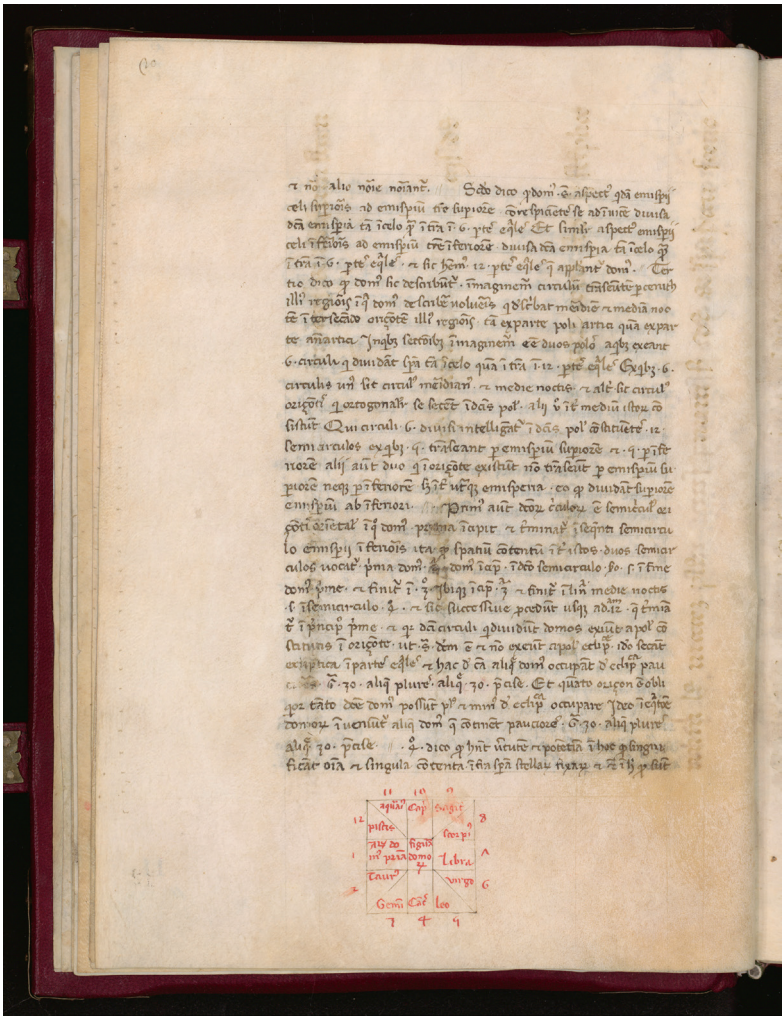

Figure III.7. Florence, BML, Pluteo 29.8; palimpsest folium from Boccaccio's Zibaldone Laurenziano.

The Rise of Paper

The other writing material that came to characterise the manuscript tradition was paper. The invention of paper is of Chinese origin, traditionally dated to the second century AD, although fragments from earlier periods have also been found. From China, paper spread to Morocco and, under Arab rule, reached Spain; the earliest known record of papermaking in Spain dates to 1151, while in Italy the first documented evidence appears in 1276. Chinese paper was made from fragments of bamboo and silk, whereas Arabic—and, later, European—paper was produced from rags. In either case, the basic method of manufacture remained the same.

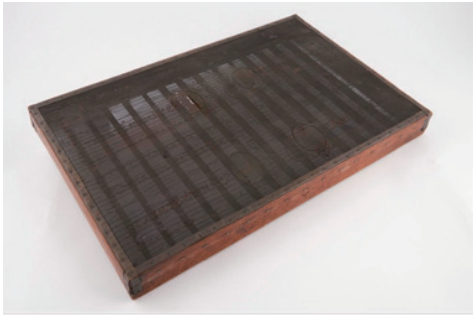

Figure III.8. Papermaking Mould (© The Board of Trustees of the Science Museum; license: Creative Commons Zero).

Figure III.9. Watermark.

The first stage in papermaking is sorting (*cernita*), the gathering of rags of identical material, colour, and quality. These rags are then washed, degreased, and cut into small pieces. The shredded fibres are placed in water, to which limewater is added to help break them down. Once a pulp has formed, a mould is immersed into the vat and lifted out with the pulp, distributing it evenly across the surface.

The mould shown in the photograph (fig. III.8) consists of a wooden frame fitted with metal wires running horizontally, known as *vergelle* or chain lines, and vertically, known as *filoni* or laid lines. These wires leave characteristic impressions on the sheet of paper. To personalise production, paper makers would attach to the mould a figure made of metal wire identifying the paper mill; the impression it produced is called a *watermark*. An example is shown in figure III.9.

Once formed, the sheets were placed under a press to drain away excess water. The final step was drying. When the sheet had completely dried, it was smoothed, after which the process moved on to surface treatments, which prepared the material to receive ink.

Making the Codex: Quires and Ruling

Once the raw writing material—whether parchment or paper—was ready, the next stage was the assembly of the codex.

The fundamental unit of the codex is the quire (in Italian *fascicolo*), made up of one or more sheets folded in half and sewn together with thread. Since a manuscript is first of all the material support of a text, it is essential to examine its quire structure (in Italian *fascicolazione*). Irregularities in the structure often signal possible damage to the manuscript, which in turn almost always has a direct impact on the text.

The quire derives directly from the animal skin or the sheet of paper. Parchment comes from animals whose skins are generally of similar dimensions. A single skin could be folded a certain number of times, producing the quire form. The quires that make up a manuscript can vary greatly in the number of leaves or bifolia they contain. In some cases, a quire can consist of just a single sheet. The smallest quire, composed of two bifolia (that is, four leaves), is called a *binion*. Throughout the history of quire structures in the Western book, the number of bifolia per quire has fluctuated considerably; however, the most frequently attested formats range from a minimum of two bifolia to a maximum of six (that is, from four to twelve leaves in total). Larger quires do exist, but they are less common.

The most widespread format in manuscript history is the *quaternio*, also known in Italian as *quaderno*, a quire consisting of four bifolia, or eight leaves. In everyday language, the term *quaderno* has come to designate, by antonomasia, any gathering of leaves. Up to the twelfth century, the medieval book was dominated by the *quaternio*; from the thirteenth century onward, however, two other quire types came to prevail: the *senion* (twelve leaves) and the *quinion* (ten leaves).

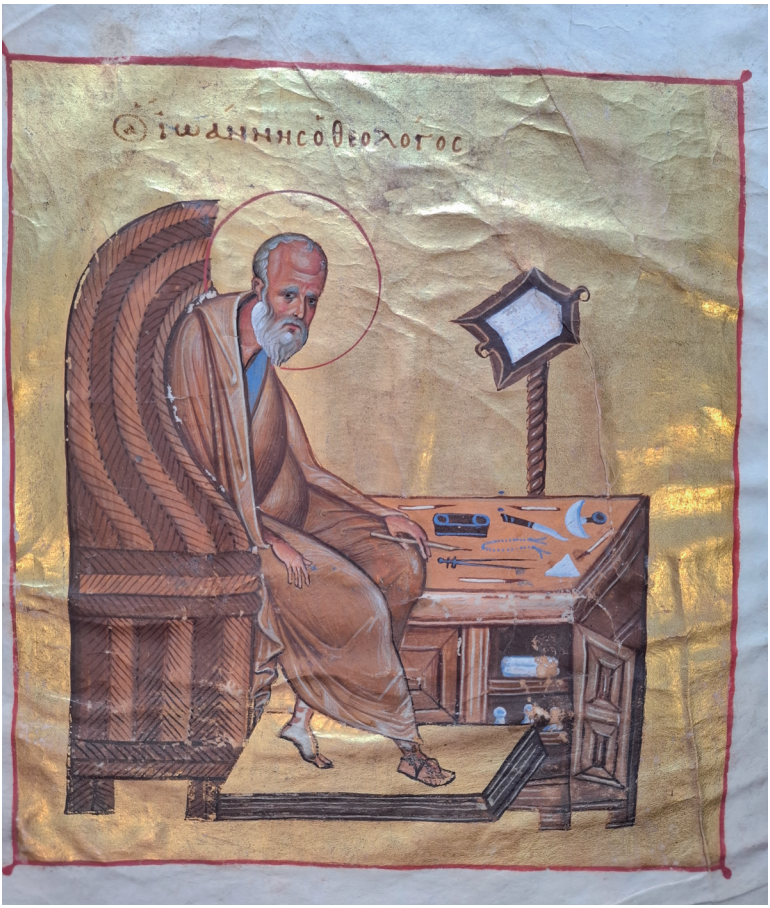

Figure III.10. Florence, BML, Med. Palat. 244, fol. 5v.

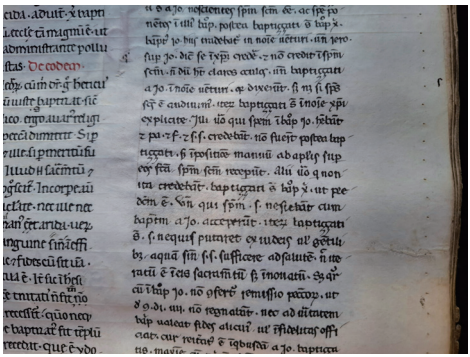

Figure III.11. guide holes in the margins.

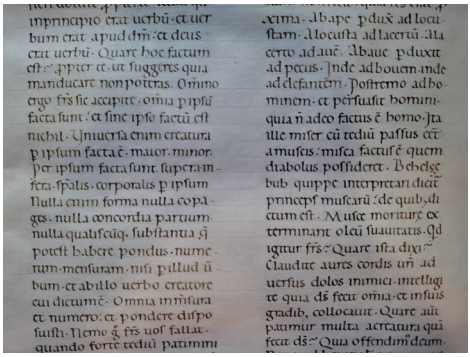

Figure III.12. Dry ruling.

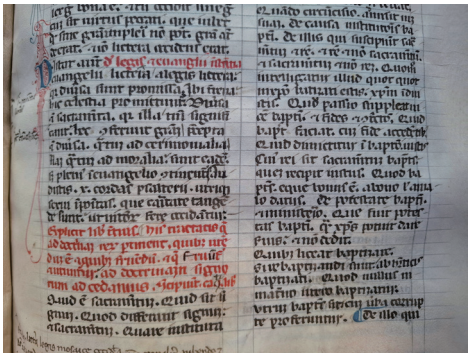

Figure III.13. Coloured ruling.

Once the quires were prepared, the pages had to be ruled in readiness for writing. This stage—intended to distribute the text harmoniously across the page—was carried out by the scribe. In the image from manuscript *Mediceo Palatino* 244, the Evangelist Saint John is shown poised to write, equipped with all the tools of the trade: the stylus, the compass, the curved-blade knife, and the inkwell.

The scribe would begin by outlining the *writing space* (in Italian *specchio di scrittura*), that is, the area within which the text would be laid out. Before ruling the sheet, a preliminary step was required: pricking along its edges, which made the ruling process possible. To carry this out, the scribe used a compass. Pricking involved making a sequence of guide holes—most often in the margins, though not exclusively—which served as reference points for drawing the lines. These guide holes assisted in tracing both the vertical and horizontal lines. In fig. III.11, a row

of small holes used to guide the ruling is visible along the right-hand margin.

The lines could then be ruled in one of two ways: *dry*, by incising the parchment or paper, or *wet*, using a pencil or a pen (i.e., in ink). In figs. III.12-13, both methods are shown.

Binding and Its Materials

Since copying was carried out before the book was bound, the scribe needed to ensure that the binder could assemble the quires in their correct sequence. Once the text of a quire had been copied, the scribe would mark it with an identifying sign: the *catchword*, consisting of the first word of the text in the following quire. This was written on the final leaf of the quire, usually at the bottom. In the photograph (fig. III.14), at the lower right-hand corner, one can see the words *veruntamen*, which reappear at the upper left of the next page.

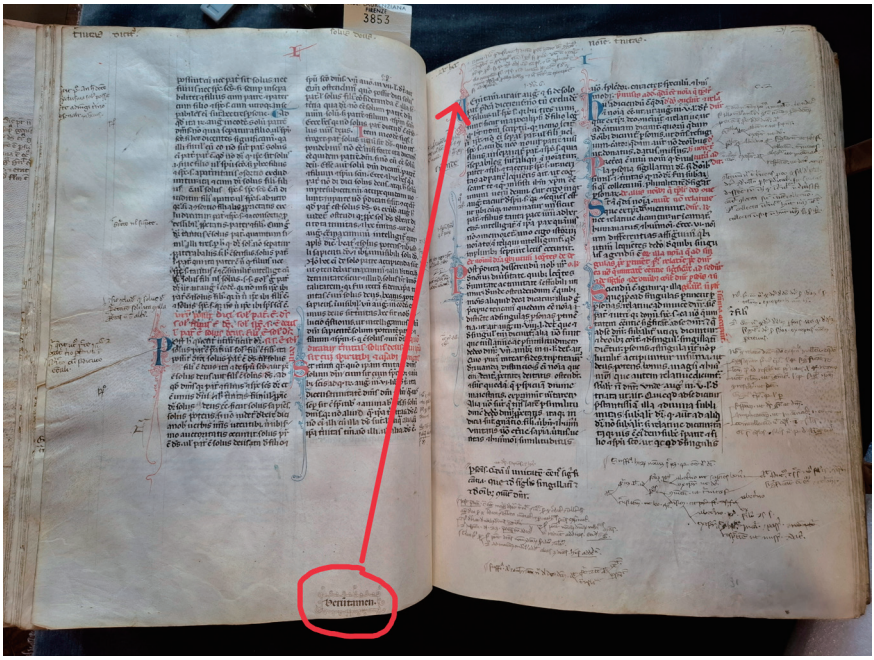

Figure III.14. Florence, BML, Plut. 25 dext.1, fols. 30v-31r - Catchword 'veruntatem'.

The quires that formed the book were sewn together and secured within a binding consisting of a spine and two boards. The purpose of the binding was to hold the block of quires firmly in place and protect them from damage caused by handling. Yet, precisely because the book was meant to be used, the binding was the part most prone to wear and in need of replacement. For this reason, few ancient bindings have survived intact.

Figure III.15. Hemp cords.

In a medieval manuscript, the boards were made of wood, sometimes covered, most often in leather, though occasionally in paper, and then sewn around the quires. Between the binding and the quires, blank leaves known as *endpapers* (in Italian *fogli di guardia*) might be inserted, preventing the gatherings from coming into direct contact with the boards. The leaf (or leaves) sewn at the very beginning, between the board and the first quire, is called the *flyleaf* (in Italian *guardia*), while the leaf glued directly to the board is the *pastedown* (in Italian *controguardia*).

Endpapers could also be made from leaves of other, often older, manuscripts.

In fact, it was a common practice to strengthen bindings with cuttings from other manuscripts. The study of such fragments—called *maculature*—has become an important field of research, as they often preserve otherwise lost texts.

The binder's first task was to sew the quires, passing the needle and thread through the centre of each gathering. Once this was done, the entire set of quires was sewn onto hemp cords. In fig. III.15, these cords are clearly visible as vertical lines—here on a manuscript undergoing restoration and temporarily without its binding.

Figure III.16. Headband.

When the sewing of the quires was complete, the ends of the spine were reinforced with a decorative stitch known as the *headband* (in Italian *capitello*), as seen in fig. III.16.

Figure III.17. Cords.

The book was then attached to the boards of the binding by inserting the cords into the thickness of the spine. In this image (fig. III.17), we can see what lies beneath the leather (or, in this case, paper) covering of the manuscript's spine.

Here are some examples of bindings from the Biblioteca Medicea Laurenziana in Florence.

Figure III.18. Medici binding of the Plutei collection.

Figure III.19. Archival binding.

Figure III.20. Eighteenth-century cardboard binding.

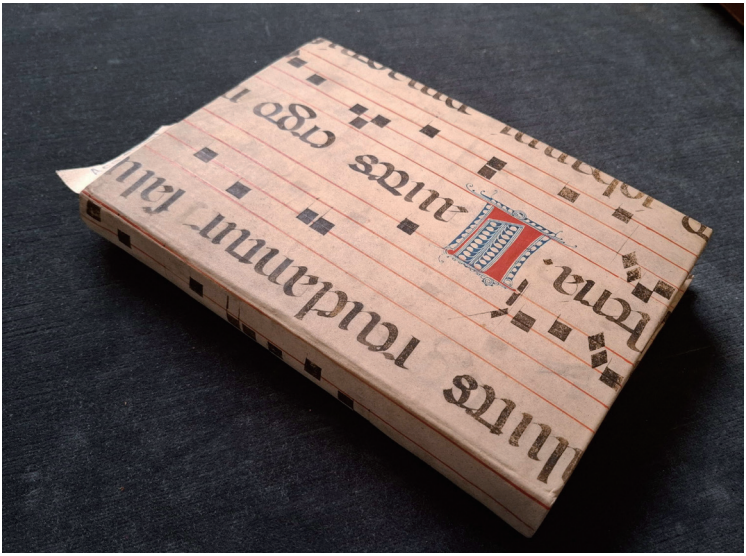

Figure III.21. Binding made with a leaf from another manuscript.

Among them is the typical Medicean binding used for the manuscripts of the *Plutei* collection, the historic library of the Medici.

The Scribe from Monasticism to the City

Let us now turn to the scribe and the evolution of this role over the centuries. In the March lecture, we noted that in the earliest phase of monasticism the copying of manuscripts was tied to the simple need for subsistence, and that monasteries had no dedicated spaces for this work. The monk would copy texts in solitude, without even a desk to lean on, as in the famous image from the *Biblia Amiatina*, preserved in the Biblioteca Medicea Laurenziana.

Figure III.22. Florence, BML, Amiatino 1, fol. Vr.

From the seventh century onwards, book production, and thus the copying of texts, became a means of acquiring knowledge and expanding the monastery's library holdings. Monks were assigned different tasks: some prepared the parchment, others ruled it, while others focused on the actual copying of texts. The first desks reserved for scribal work appeared between the eighth and twelfth centuries. In the *Canterbury Psalter*, or *Psalter of Eadwine*, a twelfth-century manuscript preserved at Trinity College, Cambridge (MS R.17.1), we see the monk Eadwine depicted writing at an inclined desk. In his hand he holds the *calamus*, a quill, along with a small knife used to keep the pen sharpened.

Copying was a communal activity: several monks dedicated themselves to copying a single manuscript. A typical example of an early medieval codex created collaboratively is the so-called *Livy of Ratherius*, a tenth-century manuscript now preserved in the Biblioteca Medicea Laurenziana (Pluteo 63.19), which contains the first ten books of Livy's historical work. The codex was copied within a monastic scriptorium by five scribes, one of whom identifies himself as "Leo diaconus" (fig. III.23).

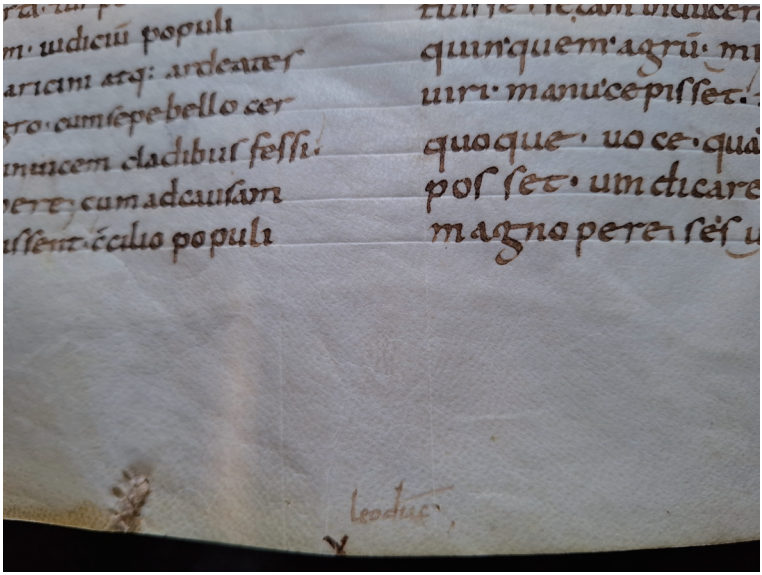

Figure III.23. Florence, BML, Plut. 63.19, fol. 76v - Leo Diaconus.

While the individual hands of the scribes can be distinguished from one another, they all share a strong resemblance, as the monks had been trained within the same environment.

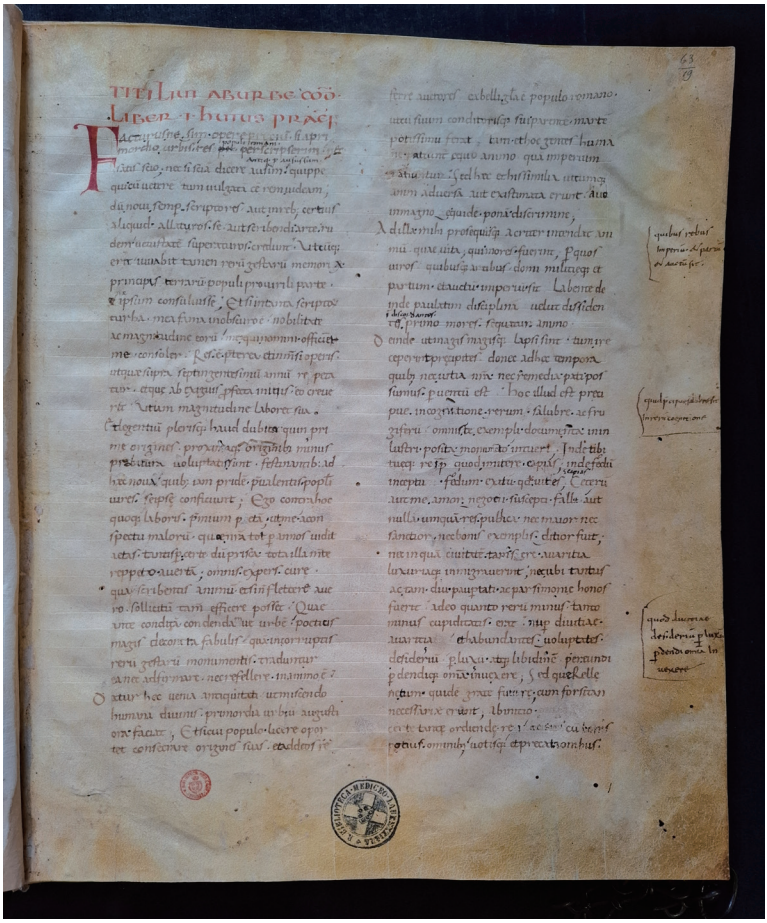

Figure III.24. Florence, BML, Plut.63.19, fol. 1r.

In the practice of scriptoria, scribes often copied a text at the same time from an exemplar that had not yet been bound: each was assigned a group of quires, and once the copying was complete, the text was reassembled. This method was demanding for the

scribe, who had to ensure that his portion ended precisely at the conclusion of a quire so that the sequence could be rejoined without interruption. In the image (fig. III.25), one can see that Scribe B, at the end of the second column, deliberately elongates the letters of the word *Extra* in order to reach the bottom of the space.

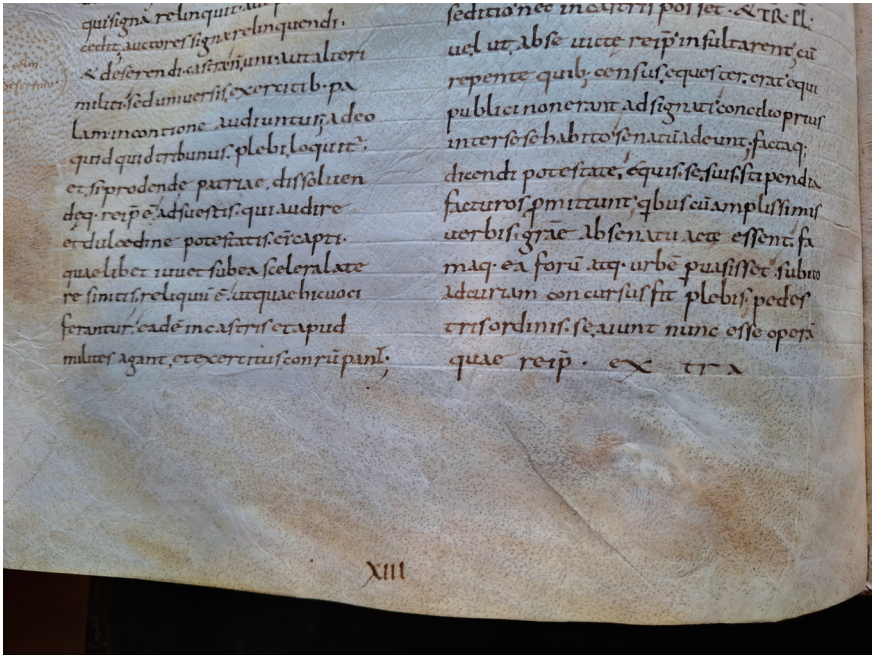

Figure III.25. FLorence, BML, Plut.63.19, fol. 100v.

From the twelfth century onwards, the production and use of manuscripts underwent significant changes for several reasons: the rise and expansion of cities, the emergence of the mendicant orders (especially the Franciscans and Dominicans), and the growth of the universities. Cities, particularly in Italy, began to organize themselves as entities independent of imperial and papal authority, becoming centres of important economic activity. The new social class that developed within these cities, merchants and artisans, needed to be literate and numerate, and sent their children to school. At the same time, many sought to educate themselves as adults and required books, which they

sometimes copied on their own, using the so-called *mercantesca* script.

With time, religious institutions lost their monopoly over written culture, and the figure of the scribe increasingly became a lay profession. In medieval cities there were artisans who specialised in the production of books, professional scribes, and others who copied manuscripts out of personal interest, often transcribing works not in Latin but in Italian or in their own vernacular. It was not uncommon for these scribes to be women. In the image (fig. III.26), we see the colophon, written in red, of a certain Angela, daughter of Donato, who copied for herself a collection of religious texts, stating that she had transcribed them with her left hand, thereby revealing that she was left-handed.

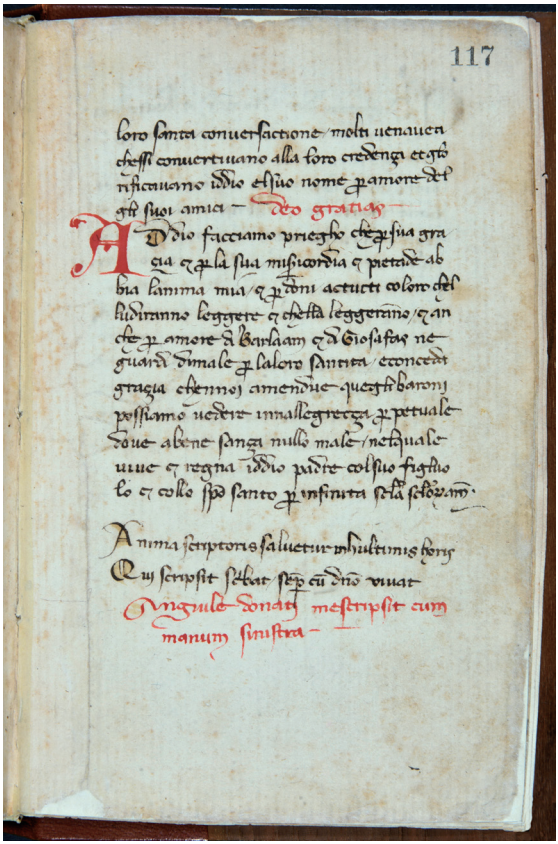

Figure III.26. Florence, Biblioteca Riccardiana, Ricc.1446, fol. 117r.

Some scribes were prisoners, copying manuscripts either to pass the time or to earn an income. This was the case for certain debtors held in the Florentine prison known as the "Stinche," who copied books as a way to repay their debts. In fig. III.27, we see one such example: the colophon of the scribe Paolo, son of Paolo Lippi, who transcribed a work by Boccaccio and openly declared that he had carried out his work while in prison.

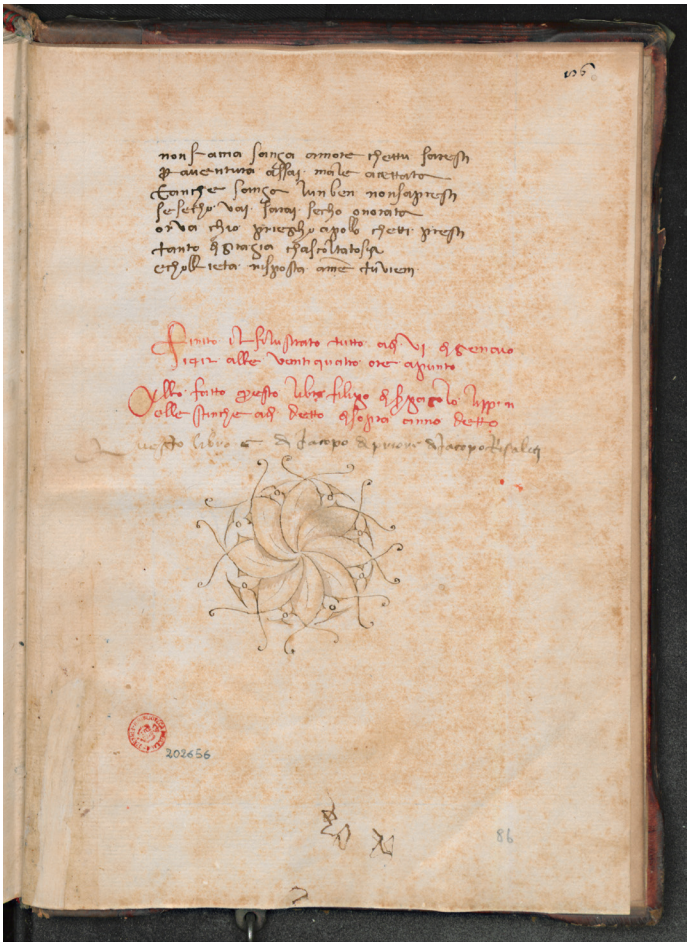

Figure III.27. Florence, BML, Plut.41.29, fol. 86r.

Universities and the Pecia System

The emergence of the universities created an enormous demand for textbooks in the urban centres where they were established—Bologna, Padua, and Paris, for example. In these university cities, both the work of professional scribes and the production of books by students are well attested. It is here that the figure of the student-scribe emerged: a student who copied books both for himself and for his fellow students.

Within the university environment, the need to accelerate the copying process led to the development of an innovative and ingenious method of simultaneous copying: the *pecia* system. At the beginning of each academic year, a commission of university professors determined the official textbooks for the university's courses and verified their content. From these approved textbooks, the university prepared an official copy known as the *exemplar*. This *exemplar* was produced in loose quires, usually binions, which were then given to the stationer. The stationer rented them out to student-scribes. These loose quires were called *peciae*, a term that in a figurative sense means "pieces."

In this way, as many individuals could work on copying a text simultaneously as there were quires into which the manuscript had been divided. This system has been studied in depth by Jean Destrez, author of *La pecia* (Destrez 1935), a treatise devoted to describing the methods of medieval university book production. Evidence of this practice survives in *peciated* manuscripts—that is, manuscripts in which the margins bear a note marking either the end of a *pecia*, the beginning of a *pecia*, or both. In fig. III.28, we see a note written in the margin by an ancient student: *hic finit secunda petia*, meaning "here ends the second quire." Pecia manuscripts occasionally bear the annotation 'cor,' standing for *correctum* ('corrected'): this indicates that the text of the just-copied quire had been checked against the *exemplar* used as a reference.

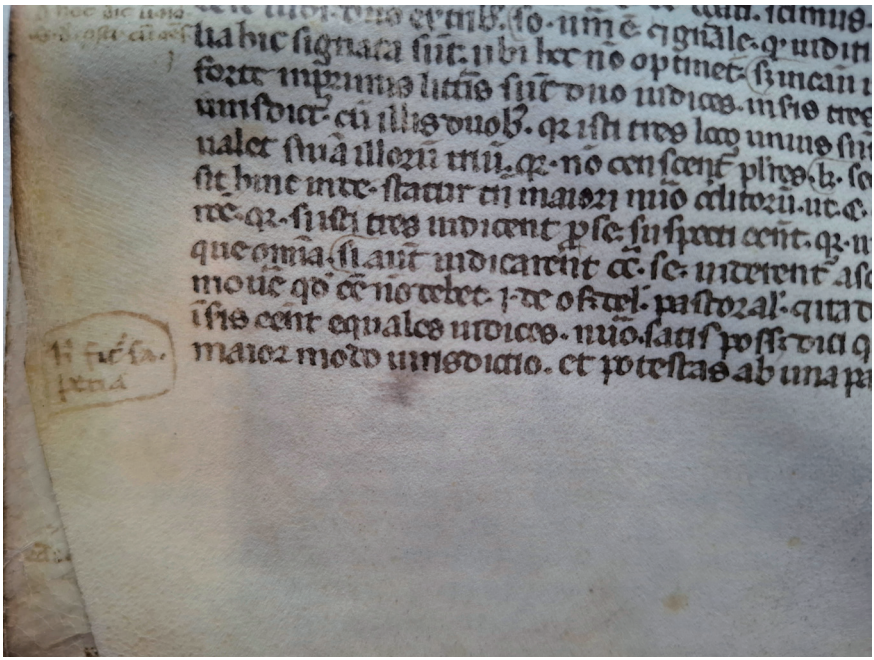

Figure III.28. Florence, BML, Plut.1 sin.10, fol. 5v - Pecia.

Humanist Scribes and the New Scripts

In the next image, taken from a manuscript of the Biblioteca Medicea Laurenziana, we see Francesco Petrarca (1304–1374) seated at his writing desk, pen in hand; behind him stands a cupboard filled with books. This depiction is highly significant, as it reflects a major shift in the perception of the scribe's role from the fourteenth century onwards, from a merely manual task to one increasingly associated with intellectual and authorial activity.

Figure III.29. Florence, BML, Strozzi 172, fol. IIv.

Both Francesco Petrarca and Giovanni Boccaccio (1313–1375) acted as scribes and editors of their own works, though Petrarch at times entrusted the task to a private scribe. Petrarch copied numerous texts by newly rediscovered Latin classical authors, such as Cicero's letters: in 1333 he recovered Cicero's *Pro Archia*, and in 1345 he found others, which he then transcribed with care, as he recounts in his own correspondence, thereby ensuring their survival.

In the course of his work, Petrarch devised a new script that, though not yet humanistic in the strict sense, was markedly easier to read than Gothic. By embodying ideals of clarity and classical order, it laid the cultural groundwork for the humanistic script elaborated in the fifteenth century. An example of his handwriting can be seen in the manuscript Riccardiano 972, which contains a letter to Urban V from the *Epistulae seniles* (fig. III.30).

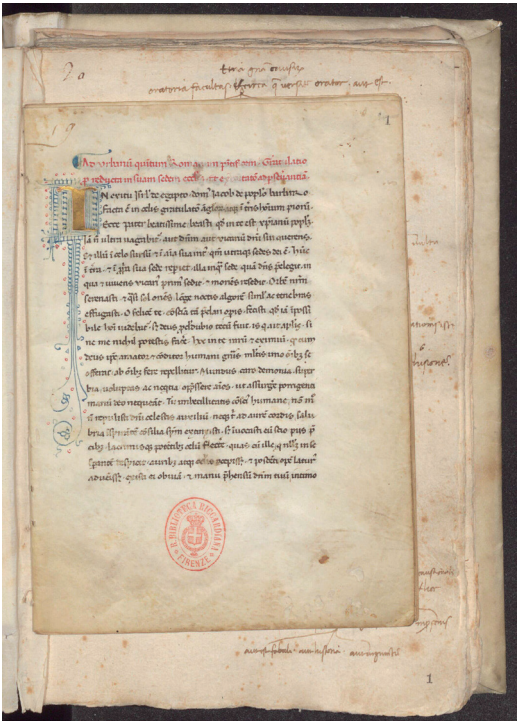

Figure III.30. Florence, Biblioteca Riccardiana, Ricc. 972.

For comparison, the following image (fig. III.31) presents an example of Gothic script—judged by Petrarch to be illegible:

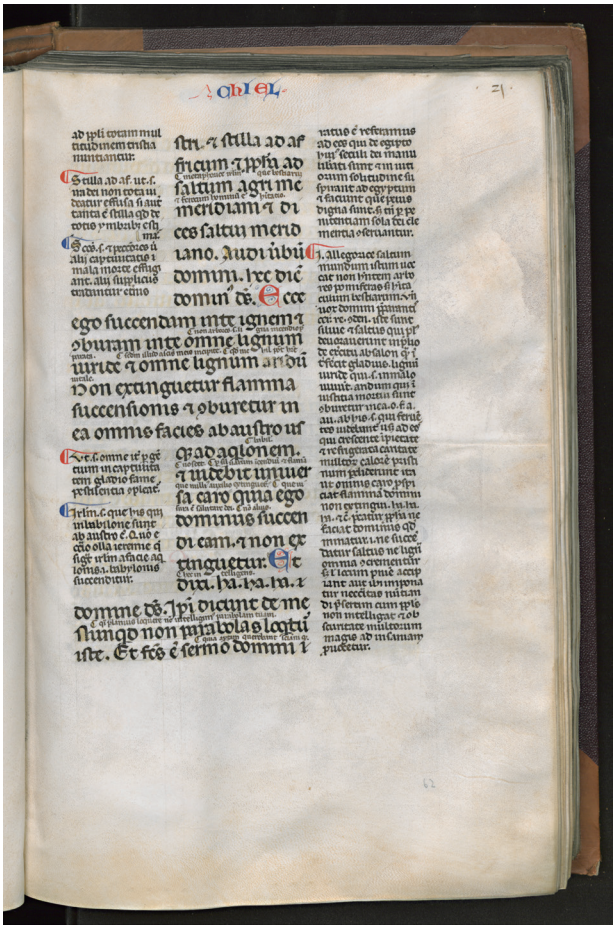

Figure III.31. Florence, BML, Plut.3 dex.6, fol. 62r.

As a scribe, however, Boccaccio surpasses Petrarch both in the quantity and in the variety of his work: thirty-four autograph manuscripts survive, comprising not only his own works but also texts by other authors that he copied. When transcribing works by

others, such as Dante's *Commedia*, Boccaccio introduced corrections and refinements, thus assuming the role of a true editor in the philological sense.

Petrarch and Boccaccio may rightly be considered pioneers of the humanist scribes—those intellectuals who, between the late fourteenth and fifteenth centuries, scoured Europe in search of forgotten Latin classics, bringing them to light and copying them, sometimes emending and improving the text. Among the most prominent was Poggio Bracciolini, who, during his travels, uncovered works by Lucretius, Quintilian, and Cicero. By transcribing ancient Carolingian manuscripts in their original Caroline minuscule—seen in fig. III.32 in a specimen from manuscript BML 17.42—Poggio created a new script, the humanistic script, exemplified in the Laurenziana manuscript Strozzi 96.

Figure III.32. Florence, BML, Plut.17.42 fol. 35r - Carolina minuscule.

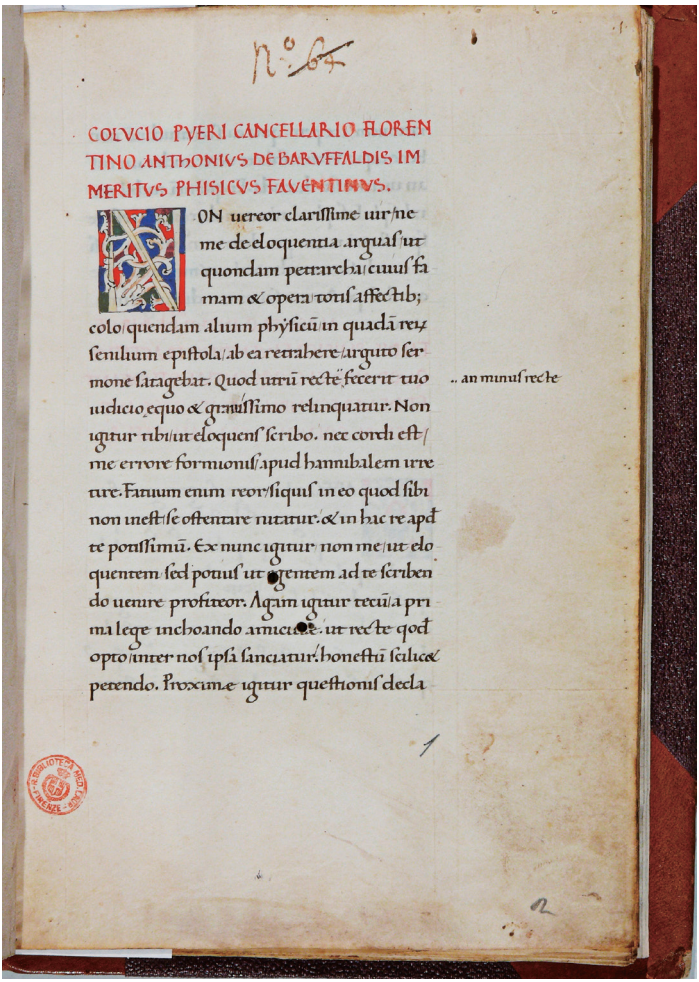

Figure III.33. Florence, BML, Strozzi 96, fol.1r - Poggio Bracciolini's Humanistic Script.

This script, as shown in the Laurenziana incunabulum D'Elci 15 (fig. III.34), would later serve as the model for the Latin typefaces still in use today. But that, as they say, is another story.

Quella Nympha cõfisa la finistra tabula cõtineua, che ascenso hauea sopra il mansueto & candido Tauro. Et quello q̃lla p̃ el tumido mare timida, trãsfretaua. SECVNDA SINISTRA.

Nel fronte anteriore, Cupidine uidi cũ inumera Caterua di promiscua gẽte uulnerata, mirabõdi che egli tirasse larco suo uerso lalto olympo. In nel fronte posteriore, Marte mirai dinanti al throno del magno Ioue, Lamentãtise che el filiolo la ĩpenetrabile thoraca sua egli la hauesse lacerata. Et el benigno signore el suo uulnerato pecto gli monstraua. Et nellaltra mano extenso el brachio teniua scripto, NEMO.

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Figure III.34. Florence, BML, D'Elci 15.

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