

alphabet directly or indirectly from Greek. The first known poet to write in Latin was a Hellene, while the first Roman historian wrote in Greek. By the time of Augustus, the well-educated Roman was bilingual; the rhetorician Quintilian even wanted boys to learn Greek grammar before Latin.²⁵

Pergamum first taught Greek philology to Rome. One story credits Crates of Mallus, a Pergamene scholar, with awakening Romans to philology. Visiting Rome around 168 BCE, Crates broke his leg in a sewer. Naturally, he whiled away his convalescence giving philological lectures. Whatever the truth of this adorably academic anecdote, Rome did have close ties to Pergamum—which became even closer when Pergamum's last king, Attalus III, bequeathed it to Rome in 133 BCE. The Pergamenes massively swayed Romans trying to catch up intellectually with the Greek-speaking world. Not until three quarters of a century after Crates's leg healed did a scholarly Roman, Lucius Aelius Stilo (ca. 154–74), import Alexandria's critical symbols and methods: or so it was later said. Stilo went briefly into exile in Rhodes in 100 BCE, and he may have picked up Alexandrian tools from Dionysius Thrax, then teaching on the island. Stilo loyally clung to Pergamene grammar when adopting Alexandrian critical ways. He applied his newfangled criticism to the earliest Latin comedies, those of Plautus (fl. 200 BCE).²⁶

Whatever Stilo did in naturalizing Hellenistic philology in Rome paled beside the efforts of his pupil Marcus Terentius Varro (116–27). More than a century after Varro's death, Quintilian called him *vir Romanorum eruditissimus*, the most learned Roman; and Augustine said that Varro read so much that it was hard to believe he had time to write, and wrote so much that it was hard to believe anyone could read all his books. Varro wrote about art, antiquities, agriculture, libraries, as well as literary and linguistic topics. His antiquarianism looked back nostalgically to the supposedly incorrupt life of republican Rome before the civil wars, and a lot of what we know of that earlier Rome comes through him. His philological repute rests chiefly on *De lingua Latina* (*On the Latin Language*)—itself antiquarian in flavor—a mutilated six of whose twenty-five books survive. With his Rome lolling in the intellectual shade of Pergamum, Varro naturally shared its enthrallment with etymologies. A later Roman work also tags him as first to divide rhetoric into its enduring three styles: simple, intermediate, and copious (also termed plain, middle, and grand—a partition, one quickly adds, that scarcely mattered to the greatest Roman master of rhetoric, Quintilian).²⁷

Varro's attention to rhetoric hardly surprises given the Roman fixation on oratory. Public speaking played, if anything, an even larger part in Roman than in Greek life; and in Rome all sorts of literature, even poetry, got grouped under rhetoric. Roman writers not only systematized Hellenistic rhetoric but amplified its critical vocabulary. Nothing in Greek came close to the massive, methodical *Institutio oratoria* (ca. 95 CE) of Marcus Fabius Quintilianus (ca. 35–late 90s), famous in later ages simply as Quintilian. The manuals of rhetoric passed down through the Middle Ages to the Renaissance and beyond

were Roman: Cicero's early, uncompleted *De inventione* (ca. 90 BCE); the similar but full-blown *Rhetorica ad Herennium* (ca. 85 BCE), studied throughout the Middle Ages under the mistaken belief that Cicero wrote it; and Quintilian's great *Institutio*. (Ironically, medieval teachers preferred the *Inventione* and *Ad Herennium* to Quintilian, which then circulated in truncated form.) Even the fourth-century *Ars grammatica* of Aelius Donatus discusses style and figures of speech.²⁸

Yet, as Varro's range suggests, Romans also plundered Greek learning far removed from rhetoric. And such thieves abounded, capturing Hellenistic methods for Roman and Latin topics. Like the Alexandrians, Cornelius Nepos (ca. 110–24 BCE), labored to build up accurate chronologies—but, in his case, of Roman history. Marcus Verrius Flaccus (ca. 55 BCE–20 CE) compiled an Alexandrian-style glossary of unusual or obsolete Latin words, a landmark of ancient lexicography that outdid anything we hear of from Alexandria. Quintus Remmius Palaemon (fl. 35–70 CE) adapted Hellenistic grammar to Latin language and literature. Marcus Valerius Probus (ca. 20–105) used Alexandrian tools in correcting and commenting on Roman authors, including Vergil and Terence. The *Noctes Atticae* (*Attic Nights*) of Aulus Gellius (ca. 125–180) shows us an ancient 'grammatical' work in its widest sense: 398 chapters of textual, linguistic, rhetorical and literary criticism—not to mention history, philosophy, law, and medicine—drawn from Gellius's lifetime of poring over Roman and Greek writers. Gellius went beyond the Alexandrians in inventing, according to Gian Biagio Conte, "the method of comparing point by point the style of a Latin poet with that of his source," a new tool of research in textual philology. Around 400 CE, a grammar teacher in Rome called Servius (full name unknown) turned out a commentary on Vergil larded with irreplaceable antiquarian detail, especially about religion. Servius's work typified a new sort of commentary, first appearing around two hundred years before him: scholia. These provided unbroken observations on a text, verse by verse. They had the colossal advantage of collecting in one place insights of different earlier critics of a text. Scholia in the long run became a normative critical form.²⁹

Such learned Romans proved crucial. True, Roman philologists followed paths blazed in that outburst of Alexandrian creativity rather than turning in entirely new directions. But Roman grammarians greatly refined and expanded analysis of language. Roman rhetoricians did the same in their field. Roman textual philologists made Alexandrian methods more sophisticated. Moreover, Alexandrian scholarship barely survives in bits and pieces refracted through later sources (notably quotations in the scholia just mentioned). The Romans were the ones who transmitted philological method, the philological focus on text and context, and the fruits of philological erudition to later ages. Like *De inventione* and *Rhetorica ad Herennium*, the grammars of Donatus (fourth century) and Priscian (fifth or sixth century) became workhorses of medieval schooling.³⁰

In one key institution, Roman development and diffusion of Greek invention decided the future of philology. In the last century BCE, the Isocratean ideal of higher education as rhetorical training became pervasive among the Roman elite, with grammar the universal stepping-stone to it. Quintilian's *Institutio*, a manual for teachers and parents that covered education from early childhood to maturity, outdid any Greek educational treatise. (After recovery in its entirety in 1416, it served Renaissance scholars as the warehouse of ancient educational wisdom.) Having learned to read and write, a Roman boy with prosperous parents—in Gaul, Spain, Asia, Africa, or Rome itself—moved to the school of a *grammaticus* and then graduated to teaching by a *rhetor*.^{*} The boy's instruction was solely literary or, better, philological. (His sister's, if she got any, most likely took place informally at home.) From the early empire through the breakdown of Roman power in the west, as Robert Kaster observed, the “grammarian's school was the single most important institution, outside the family, through which the governing classes of the empire perpetuated and extended themselves.” This makes sense only when one recalls that *grammar* had a much wider reach than the word now does.³¹

Roman grammar mirrored the rapacious curiosity of the Hellenistic philologists who hatched its progenitor. The teaching of grammar fused into a unified pedagogy textual criticism, analysis of language, and use of antiquarian data and historical writings to illumine works under study. And all the while the *grammatici* sustained the seamless passage onward to rhetoric for the boys they taught. Without question a gap yawned between so hopelessly totalizing an ideal and the sometimes stultifying reality of schooling. The devotion even of erudite graybeards to this all-embracing dream of knowledge ebbed and flowed over the centuries to come.

But again and again the integrative impulse reemerged in philology. In the Renaissance and after, philologists going about their business of emending texts and dissecting language could not keep their hands off antiquarian research and rhetoric. Not only Varro subsumed under grammar the study of history, chronology, antiquities, oratory, and poetry; and not only he insisted that grammar should instill in students the abilities to emend, interpret, and explain texts, as well as skill in reading them out loud.³²

Varro also wrote a kind of encyclopedia, one of the earliest in Latin, of the *artes liberales*. He divided it into nine books, each devoted to an individual area of study: grammar, dialectic (or logic), rhetoric, geometry, arithmetic, astronomy, music, medicine, and architecture. This list (its membership a little unstable) reappeared in north Africa well over four centuries later—in Augustine and again in an allegory of the marriage of Mercury and Philology by Martianus Capella, both widely read in the Middle Ages. From late antiquity, the liberal arts migrated, via the schools of grammar and rhetoric, into medi-

^{*}Recall that ‘school’ did not imply a dedicated building. In Greek and Roman antiquity, schooling took place in whatever space was available.

eval schooling. There, stripped of medicine and architecture, the now seven liberal arts became the curriculum: the mostly philological *trivium* (grammar, rhetoric, dialectic) and the mathematical *quadrivium* (geometry, arithmetic, astronomy, music). (In antiquity and the Middle Ages, astronomy and music were mathematical sciences, studied theoretically rather than practically.) Fittingly, Martianus Capella made Rhetoric salute Philology with a noisy kiss.³³

CHRISTIAN ADAPTATIONS

Martianus was a pagan, writing in troubled times to defend and pass on the pagan cultural heritage; his readers mostly were not. In 313 the coemperors Constantine and Licinius had granted Christians freedom of worship; in 380 Theodosius proclaimed Christianity the state cult. Once marginal, still a minority (especially in the countryside), Christians now moved to the center of Roman life.

Imperial sanction mattered a lot to the Christians—and to Roman culture and politics—but not to philological method. Just as Christian bishops pilfered pagan shrines to build churches, even remodeled old temples for new rites, so Christian scholars adopted and adapted pagan literature and erudition. Christians could learn from a commentary on Vergil how to write one on Genesis; and the biblical commentary quickly became as paradigmatic a form for scholarly Christians as the Homeric commentary for the philologists of old Alexandria. Christians embraced Roman schooling, too, if they belonged to the elite that got schooled.³⁴

Famously, frictions did arise. Everyone knows of Tertullian's snappish query, "What has Athens to do with Jerusalem?"—and of Jerome's supposed wrestling two centuries later with the luscious siren of Ciceronian eloquence. But Tertullian did as much as any early Christian to fit literary Latin to Christian purposes; and, whatever his vows, Jerome notoriously could not keep his hands off Latin literature.³⁵

Early Christians fretted over the dangers of pagan, secular literature; but few wanted to toss out baby and bathwater. Basil of Caesarea opined that pagan literature actually prepared students for Christianity. Augustine wished to pillage the classics of anything useful to Christian teaching and throw away the rest. (So he turned Roman rhetoric to the task of improving Christian preaching.) And yet all through his life Augustine grappled with Vergil, as Sabine MacCormack has shown, "whether by way of imitation, of adaptation, or of contradiction." One fifth-century Roman aristocrat in Gaul kept his Christian books at one end of the library, where ladies sat, his pagan classics at the other, 'male' end. Cassiodorus, who in the sixth century adopted Augustine's more severe precept, found room in it for Martianus Capella, whose pagan allegory he baptized for centuries of medieval readers. Cautiously, Christianity made itself more or less at home with pagan philology.³⁶

Yet it also added fresh ingredients. Take for an example the Christian scholar Origen (185–254). He worked first in Alexandria (still a capital of philology) and then in Caesarea in Palestine. Origen started from a background of Neoplatonic and Stoic speculation on language. Wrestling with the Gospel of John, in which λόγος (*lógos*, ‘word’) figures decisively at the start, he came up with the novel notion that language exists apart from the human voice.³⁷ His theory matters here not for its substance, but for showing an early Christian engaged creatively with the ruminations of pagan philosophers on language. Curiosity like Origen’s linked his pagan predecessors with his Christian successors in the Middle Ages and ultimately his post-Christian heirs beyond: all speculators on the origin and nature of language. This ever-moving tradition of inquiry, from which today’s linguistics emerged, drew on past philology at every step—although the starting place (whether Platonic speculation or Priscian’s grammar or somewhere else) changed at every stage of the journey as concerns of inquirers shifted and as the past available for mining grew in bulk. The more immediate point is that early Christians did not passively absorb previous study of language and texts in all its varieties; they reshaped it in accord with their distinct needs and problems. Jerusalem had more to do with Athens than Tertullian alleged—and a lot more to do with Alexandria.

Most fatefully for philology, the new religion added a momentous new set of texts to the writings philologists scrutinized. The earliest followers of Jesus were one of several squabbling Jewish sects, and they naturally used Jewish scriptures in their worship. But these ‘Christians’ (a label quickly slapped on them) soon produced other, Jesus-oriented writings for instruction or use in worship. Their inherited Jewish scriptures came to be known as the Old Testament. In late antiquity, after much dispute over the status of various Christian writings, some of them settled into a second canonical collection called the New Testament. Old and New together comprised not just any book but, for Christians, *the* book.* Homer did not vanish from the face of the earth—for one thing, too many of him were lying around—but he slouched into disgruntled semiretirement. The Bible, its stories telling of the providential action in history of the one God, its teachings key to salvation, was holier than Homer could ever hope to be. And as the handbook of a vigorously missionary faith, the Bible needed translation for the many Christians or potential Christians who did not understand Greek. It equally demanded exegesis: not every passage had a crystal-clear meaning, and those that did might bear more meanings than the obvious one. Christian philologists had a lot of work on their hands.³⁸

All true, but far too simple, for the new Christian Bible did not evolve in isolation. Jews—like Greeks, Romans, and other ancient Mediterranean peo-

* Or, more accurately, *books* (plural). Singular ‘Bible’ only emerged later from Latin *biblia*, itself from Greek βιβλία, both plurals. In medieval Latin the neuter plural *biblia* came to be taken as a feminine singular, the two forms being identical in spelling.

ples—had a temple for their rites, where priests sacrificed animals to a god. Jews stood out for having only one god and one temple, in Jerusalem. Even a reader of the Christian Gospels learns how deeply pilgrimage to the temple in Jerusalem mattered to a pious Jew like Jesus. Yet a Jew living in Alexandria or Babylon had a tough haul getting to Jerusalem. Possibly for this reason (no one really knows), buildings for communal prayer and scripture reading as well as secular community activities began to appear among Jewish populations: synagogues. The first clear evidence for them (not yet called synagogues) comes from Egypt in the third century BCE. In these last centuries before the Common Era, teachers learned in interpreting Torah also appeared who became known as rabbis. (The Gospels call Jesus “rabbi.”) The synagogue complemented the sacrificial worship in the temple in Jerusalem; indeed, the temple itself may have contained one. But the synagogue could not displace the temple rites: Torah itself so dictated. Then, in 70 CE, crushing a Jewish revolt, Roman legions sacked Jerusalem and destroyed the temple. Jewish sacrificial worship ended, from that moment to the present day.³⁹

The destruction of the temple left a vacuum in Jewish life; and the synagogues, as well as the scriptures and the traditions of interpreting them, flowed into it. This process created the rabbinic Judaism that persists to the present day. Rabbinic Judaism did not appear overnight, but neither did Judaism as a ‘religion of the book’ come from nowhere. In the last centuries before the temple fell, sects proliferated within Judaism. As a result, so did scriptural interpretations and even new scriptures. All Jews accepted as authoritative the five books of the Torah and probably as well (though less weighty) the works now known collectively as the Prophets. (The New Testament thus in a few places refers to ‘the law [Torah] and the prophets,’ a phrase that occurred earlier in the Dead Sea Scrolls.) But around Pentateuch and Prophets swirled a sea of other texts, their scriptural status disputed. At least one group of Jews revered the book of Jubilees, which appears in no standard Bible today. In the centuries after the temple fell, rabbis strove to bring order to this textual confusion, to define a canon of holy scripture for all Jews. The final component of the Jewish Bible (‘the writings’) had been agreed no later than about 100 CE, at least among the rabbis. Before 1000 CE the precise *words* of the Hebrew scriptures had been fixed in the Masoretic Text, still used in Jewish worship—and used today also by Christians in translations of their Old Testament.⁴⁰

In the same few centuries after the sack of Jerusalem, Christian leaders engaged in a parallel task—in an eerie, mostly silent pas de deux with the rabbis amid growing Christian hostility to Jews. The Jesus movement attracted a lot of Greek speakers, soon a majority of its members. Thus early Christians adopted as their Bible (eventually to become the Old Testament) the Greek translations of Hebrew scriptures known as the Septuagint, in use among diaspora Jews. Possibly partly for this reason many rabbis distanced themselves from the Septuagint. (Scholars do not agree on how to interpret sketchy and

obscure evidence.) Around 130 CE a Jewish convert named Aquila produced a new Greek translation of Hebrew scriptures to replace the Septuagint in Hellenistic synagogues. Aquila came from a Greek-speaking region of Anatolia where Christianity evidently made some of its earliest inroads, so he may have been alert to Christian kidnapping of the Septuagint. Though mostly now lost, his translation seems to have been very literal, very close to the Hebrew original; and apparently many rabbis embraced it with joy. As the rabbis converged on an agreed canon of Hebrew scriptures at the beginning of the Common Era, they excluded some material in the Septuagint—and hence in the Christian Old Testament. Meanwhile, despite Christian venom against Jews, the Christians' own sacred books required them to stay connected philologically to learned rabbis. "The Jews," Augustine said, "are our librarians," the "guardians of our books."⁴¹

Christian scholars remained tied to pagan predecessors, too. By the time Christianity emerged, Alexandria had become not only a center of Homeric scholarship but also of Neoplatonist philosophizing. The Jewish philosopher Philo of Alexandria (fl. early first century CE) borrowed the allegorical mode of interpretation worked out by Neoplatonic students of Homer; but Philo applied it in commentaries on the Septuagint. A Christian, Clement of Alexandria (ca. 150–215), in turn pirated the method from Philo to vindicate his own religion. From a Christian point of view, the Old Testament—about three quarters of the pages in the Christian Bible—direly needed a rereading. In the Old Testament the Jews played the role of the Chosen People, but Christians believed that God had now pushed the Jews from the stage and made *them* the stars. Within a couple of decades of Jesus's execution, Christian preachers were using a typological interpretation familiar to Jews to show how Jesus fulfilled the Jewish scriptures. The Old Testament thus began to be read as foreshadowing the mission of Jesus and even prophesying Christianity's supersession of Judaism. The symbolic style of reading worked out by students of Homer allowed Clement to fortify and expand this new construal of the Bible. Clement's student Origen—with his own copies of Philo's works—followed his master's example. Clement and Origen's strategy came under fire from other Christians at first, particularly in cities like Antioch, where Jewish traditions remained powerful within the new faith. But Origen's threefold exegesis, moving from the literal meaning of a text to a spiritual meaning cloaked in allegory, would powerfully sway medieval exegetes. Origen also applied more down-to-earth philological tools to understanding the scriptures: history, grammar, and so forth.⁴²

Yet the Christian Bible posed problems beyond baptizing its Jewish majority. Stitched together from books written originally in three languages, it also got rendered into yet other languages (unlike, say, the *Iliad*, which usually remained Greek, or the *Aeneid*, a stay-at-home in Latin). This jumble of translations created vexing philological woes. Discrepancies between the Septuagint and the Hebrew text of the rabbis in the early Common Era posed perhaps the

most worrisome problem: which was God's word? After moving to Caesarea in Palestine in 231, Origen focused on the question. He brought textual philology to bear on clashes between Hebrew and Greek renderings of the Old Testament (using Alexandrian critical signs in the margins). Origen got along with Jews better than most Christians did. Drawing on rabbinic expertise, he set up an apparatus that exhibited six different versions in parallel columns, his famous *Hexapla*. (He thus prefigured the Polyglot Bibles of early modern Europe, though all but shreds of his work is lost.) Origen never doubted the salience of the Hebrew text for his labors. But he gave it only chronological, not theological, priority. Like many Christians in his day, he believed the *translation* in the Septuagint inspired, a gift of God to upgrade the Jewish scriptures. He perused Hebrew scriptures only to emend manuscripts of the Septuagint.⁴³

This seemed massively wrongheaded, a century later, to his philological successor Jerome (347?–419). This scholarly monk also relocated to Palestine, though from the Latin-speaking western Roman Empire. Jerome knew Hebrew better than Origen; and—at risk of getting labeled heretic—he draped himself in Jewish learning. Jerome spurned the Septuagint as derivative. He took the original Hebrew scriptures as the inspired word of God and, therefore, the proper basis for the Christian Bible. (He wasted no time worrying that the *original* Hebrew scrolls were long gone: a kind of problem that did not yet bother scholars, Christian or rabbinic.) In translating Old Testament texts into Latin, Jerome applied philological expertise equal to Origen's. His version won slow acceptance as the common Bible of the Latin church (the 'Vulgate' Old Testament; much of the Vulgate New Testament is his as well).^{*} Clement, Origen, and Jerome were soldiers in a growing corps of Christian scholars putting pagan textual philology to new uses.⁴⁴

Another such scholar overhauled one of the antiquarian pursuits long linked to philology. As mentioned in passing earlier, Hellenistic and Roman philologists struggled to sort out the chronology of long-ago events. They devised techniques to put in order the pasts of their own peoples, such as the Greek dating by Olympiads invented in the third century BCE. But they also tried to integrate the records of different peoples into a universal history. Here 'synchronisms' proved essential: years when the same happening showed up in more than one system of reckoning. Let us say that Babylonian and Egyptian chroniclers both give a date to the same solar eclipse. This known common event links the two different calendars in a relation with each other. You can now figure out which other Babylonian and Egyptian events occurred at the same time—although you still have to deduce the corresponding years in your own calendar. In principle, enough synchronisms allowed a scholar to meld disparate *relative* chronologies into one *absolute* chronology. In practice, ancient evidence was and is very messy—not to mention that Babylonians

^{*} *Vulgate* comes from the Latin verb *volgare*, meaning 'to make generally known.'

used two different calendars, Egyptians three, and both tended anyway to date events by regnal years, not calendar years.⁴⁵

Eusebius of Caesarea (ca. 260–339) put the old study of chronology on a new footing: “I have perused diverse histories of the past which the Chaldeans and Assyrians have recorded, which the Egyptians have written in detail, and which the Greeks have narrated as accurately as possible.” In the first of the two books of his *Chronicon* (*Chronicle*, ca. 310), he recorded in traditional narrative the results of his labors. But in the second book he did something dramatically new. Eusebius used synchronisms to, well, synchronize his data in tables easy to compare, one each for roughly twenty peoples. The columnar *Hexapla* of his Caesarea forerunner Origen perhaps inspired Eusebius’s brainchild.* From the patriarch Abraham up to Eusebius’s own times, the *Chronicon* collated year by year all the reigns, battles, biblical events, foundings of cities, floods, legendary exploits, inventions, Jupiter’s adulteries (several entries), notable buildings—you name it—that Eusebius could recover. As Anthony Grafton and Megan Williams observed, the work “served until the sixteenth century as the richest single source of information for anyone interested in the history of human culture.” And its structure became the model for later chronology. The highly specific, year-by-year format itself forced scholars from Eusebius on to face squarely the knottiest problems of dating. But the *Chronicon* was not Eusebius’s only innovation in writing about the past.⁴⁶

In composing historical narratives, he quoted extensively from documents, the first known historian to do so. Eusebius larded both his history of the Christian church (ca. 325) and his unfinished life of the emperor Constantine with excerpts from written records. Perhaps he did so because he saw actual documents as rhetorically more effective in proving the truth of Christianity—the purpose of his history. Later church historians, with similar apologetic agenda, would emulate him in hauling the archives into their narratives. Historians of secular affairs generally did not. Eventually, many centuries later, the creation of the modern discipline of history would pivot on linking archive and narrative: on merging the philologist’s zest for texts with the teller’s love of a good yarn, on yoking the ecclesiastical historian to the civil historian.⁴⁷

Many of the books that Eusebius toiled over looked, in physical form, very unlike the scrolls that Aristarchus and Varro marked up. For centuries, besides using papyrus, writers had scribbled more casually with a stylus on thin rectangles of wood coated with wax. The writer could tie two or more such tablets together with string running through holes drilled along one side. The Romans called this multilayered memo pad a *codex*. They also figured out that using sheets of parchment or papyrus instead of wood made a codex less un-

* It is a useful reminder of parallel traditions of philological erudition in other civilizations that Sima Qian, working at the Han dynasty court of Emperor Wu, made chronological tables of Chinese history structurally similar to Eusebius’s some four hundred years before him. See Hardy 1999, 29–35.

wieldy: you stacked a few sheets in a neat pile, folded them down the middle, and sewed them together at the crease. The idea caught on, evolved. Take several such codices; bind them together; and you have space for more than a grocery list. You can write down the *Aeneid*. The name *codex* got transferred from the multitiered notepad to the many-paged tome. The new codex had an edge over scrolls: it was easier to read (turning pages instead of unrolling and rerolling); higher in capacity and thus lower in cost; less of a nuisance to carry around. And (if you had a table to set it on) it left one hand free to scratch flea bites—or to take notes (a boon to philologists). Still, few species show more inertia than the bookworm. The newfangled codex existed in Rome by the late first century CE; but not until around 300 did it equal the scroll in popularity, and only at around 500 did it take over. Just as slowly, papyrus gave way to parchment: more durable, easier to write on both sides of, and manufacturable outside the Nile valley. (Paper displaced parchment for most purposes in the late Middle Ages, ultimately making the printing press practical.) Curiously, from the outset Christians much preferred their writings in codices. Several plausible tales explain why, but scholars only guess.⁴⁸

Just as the novel codex was winning a majority, philology split into two Christian streams. In 330 the emperor Constantine betook himself to an ancient Greek town on the Bosphorus called Byzantium, rebuilt it grandly, made it capital of the Roman Empire, and renamed it New Rome. Other people called it Constantinopolis (Constantinople to us): Constantine's city. The center of gravity of Roman culture shifted from the Latin west to the Greek east. The Roman Empire erratically flourished in the east for several centuries, then hung on for a few more before finally succumbing to the Ottoman Turks in 1453. Modern historians label it the Byzantine Empire after about 600.

In the east, Roman schooling and Roman scholarship persisted, in Greek rather than Latin. The schooling shifted in the Byzantine period to the same sequence of *trivium* and *quadrivium* that prevailed in the medieval west—probably not rigidly followed in either region. (West may have got it from east.) Quantity and quality of scholarship ebbed and flowed with the political and economic fortunes of the empire. But, save at the worst of times, scholarly activity never ceased in Constantinople. From the ninth century onward, scholars did their work in a new 'minuscule' script, leaner and easier to write. Even as the empire wheezed toward its demise, Byzantine philologists produced writings that mattered. Demetrius Triclinius (ca. 1300–?) reworked scholia on a number of authors into helpful new commentaries and snatched from oblivion nine plays of Euripides. Manuel Moschopoulos (ca. 1265–1316) produced an expert edition of Sophocles and a lexicon of the defunct Attic dialect of classical Athens. The latter work descended from another lexicon prepared four centuries earlier by the learned Patriarch Photios (ca. 820–92). On the whole, eastern empire scholarship seems unadventurous, in keeping with a tradition-minded culture.⁴⁹

Byzantine philology mattered to later humanistic scholarship not for dramatic breakthroughs but for saving a lot of texts and scholarly practices otherwise lost. For instance, the stylistic ideas of the second-century rhetorician Hermogenes of Tarsus stayed alive only in Byzantium. In 1426 George of Trebizond brought them to western Europe and sent a fresh breeze through Renaissance literature. And do not forget those nine plays of Euripides that we still have, thanks to Demetrius.⁵⁰

MEDIEVAL SURVIVAL

If the Greek east tended to timidity, the Latin-speaking western half of the empire never rose to that level after the fifth century. It is telling that John Edwin Sandys's venerable *History of Classical Scholarship*, when it reaches the western Middle Ages, becomes no longer a history of scholarship (of critical editions, commentaries, and scholia) but of survival—of where knowledge of ancient texts persisted, of where grammar and rhetoric were still taught.⁵¹ Nonetheless, as begetter of later European philology, the Latin west must command more attention in this book than the sturdier Byzantine Empire.

In the west, 'barbarian' armies ravaged the empire from Italy to Africa, from Gaul to Hispania. So-called barbarians were not necessarily more barbaric than Romans they defeated. Barbarian leaders could be thoroughly Romanized, even well disposed toward erudition. Roman aristocrats, and the grammarians and rhetoricians who schooled their children, could flourish under barbarian rule. The problem was episodic disorder, often extreme. The Roman Empire fell apart in the Latin-speaking world in the late fifth century. In the seventh century the new power of Islam seized the eastern and southern Mediterranean portion of the old empire, from Syria to the Atlantic; early in the next century Muslim armies captured the bulk of the Iberian peninsula as well. In most of the rest of the former western empire, administration decayed; networks of communication frayed; cities shriveled; schools withered; literacy declined.⁵²

Scholars strained to keep alight the guttering flame of ancient learning, now mostly in order to illuminate Christian texts. Magnus Aurelius Cassiodorus Senator (ca. 490–585) was one such salvager. A high official when Ostrogoth kings ruled Italy, Cassiodorus finally fled the maelstrom of politics. He founded a monastery on his estate in southern Italy, provided a library, then set his monks to copying books. He himself proved philologist enough to use critical marks to manage manuscripts (not the signs inherited from Alexandria). Around 537, he wrote for his monks—and kept revising for decades—a handbook known in its final form as *Institutiones divinarum et humanarum lectionum* (*Introduction to Divine and Human Reading*). Cassiodorus's *Institutiones* became a stock item in medieval libraries. In it he conserved the erudi-

tion of “the secular teachers” to ensure that the scriptures were rightly interpreted and accurately copied: “both in the Bible and in the most learned commentaries [on it] we understand a great deal through figures of speech, through definitions, through grammar, rhetoric, dialectic, arithmetic, music, geometry, and astronomy.” Here are Martianus Capella’s liberal arts, put to Christian purposes. Cassiodorus listed in what became the traditional order the *trivium* and then *quadrivium* of medieval education. A forerunner of this new way of schooling, his monastery went under in chaos brought by Lombard invaders soon after his death. Its library, scattered, left traces in medieval manuscripts made as far away as northern England.⁵³

In the next century, in the temporarily more peaceful setting of Visigothic Spain, Bishop Isidore of Seville (ca. 570–636) more extensively reworked ancient knowledge for the new world. Isidore arranged his *Origines sive Etymologiae* (*Origins or Etymologies*) by the curious device of tracing meanings of terms to their supposed roots (in a sense a faint echo of Pergamene etymology). This encyclopedia amassed in twenty books a hoard of information about education, medicine, law, languages, monsters, metallurgy, ships, building, farm implements: you name it. Isidore’s work spread rapidly—remarkable in the seventh century. It became possibly the most vital single adapter of ancient knowledge (educational ideas and philological learning included) to the European world taking shape.⁵⁴

Other signs of a new order appeared. Some monasteries carried on Cassiodorus’s program of copying secular as well as religious texts—although others scraped the ink off their classical parchments to write instead the words of the Bible or Church Fathers. (‘Palimpsests,’ through which a skilled reader can discern an original script under new writing, helped later in recovering ancient texts.) Scholarly churchmen such as Gregory of Tours (ca. 538–94) and Paul the Deacon (ca. 720–99) set histories of new ‘barbarian’ nations within Romano-Christian frameworks like Eusebius’s. In England the historian Bede (ca. 673–735) found access to parts of Vergil, Pliny, Macrobius, and other Roman authors. His critical attitude toward sources, his care for documentation, and his antiquarian interests imply that he also shared ideals of ancient erudition. Besides his famed history of the English church and people, Bede drew up a world chronology like Eusebius’s, more tightly bound to biblical and Christian history. He died working on a translation of the Gospel of John into Old English. This last philological project put him very broadly in the lineage of Origen and Jerome. But, unlike them, Bede probably never wondered whether the Latin text he translated needed emendation. Medieval scholars did not usually fret about textual philology when studying the Bible—or secular works. Yet grammar did intrigue Bede and his Anglo-Saxon contemporaries; and in this, too, they foreshadowed later medieval erudition.⁵⁵

A younger, learned Anglo-Saxon, Alcuin of York (ca. 735–804), helped to launch the ‘Carolingian Renaissance.’ Alcuin became in effect minister of edu-

cation under the Frankish king Charlemagne (in Latin, Carolus Magnus; hence Carolingian). Charlemagne fostered learning, even sponsored (exceptionally) emendation of the Bible. He and his immediate successors supported scholars in monasteries but also drew learned men to court. The Carolingian Renaissance renewed interest in ancient grammar and in classical writings, although sacred literature almost always took precedence. Almost: the Benedictine abbot Lupus of Ferrières (ca. 805–862), at least, preferred Cicero to theology. Lupus also emended the classical texts he collected by collating manuscripts: a philological routine largely abandoned in the Latin-speaking world. Carolingian chronographers compiled mosaics of historical data as Eusebius had done, but now built to show the new Frankish empire as continuing the Roman one. Much Carolingian energy went into transcribing. Our oldest copies of many classical works date from this period. They were written in Carolingian minuscule, a new hand parallel to the Byzantine minuscule developed about the same time. Easily legible to modern readers, Carolingian minuscule is ancestor of the typefaces printers use today. *Older* scripts may sometimes have tripped up Carolingian copyists. This would explain why they left so many errors for early modern scholars to emend. Charlemagne's courtier Einhard memorialized his monarch in a sometimes elegant Latin biography modeled on Suetonius's life of Augustus. Then a new period of turmoil made this 'renaissance' a false dawn.⁵⁶

Around 1100, calmer social conditions and the spread of cathedral schools nurtured a 'twelfth-century renaissance.' This revival of letters and learning had a poetic and rhetorical flavor, although some of the erudite also pursued literary and textual research as under the Carolingians. Grammarians improved on Priscian's late-antique discussion of language by developing the concepts of subject and predicate. Biblical texts occasionally came under philological scrutiny. Andrew of St. Victor (ca. 1110–75) even consulted rabbis in the neighborhood of his monastery in northern France. Another scholar devised a method to pick out *nova falsitas* (newly introduced error) in liturgical texts. He scoured records of past synods and the like to find precedent; failing to find it, he tossed out the suspect words. Given the state of records, a lot of innocent verbiage must have died on the trash heap. But textual philology did not occupy many people. More typically, the *Didascalicon* of Andrew's teacher Hugh of St. Victor (1096–1141) reworked the seven liberal arts. Hugh abandoned the snippets and summaries used by earlier medieval teachers and required students to read entire speeches or poems in order to grasp them as works of literary art.⁵⁷

Hugh's contemporary Bernard of Chartres (?–ca. 1130) also stressed literary study of major Latin writers, teaching in a pretty standard rhetorical-grammatical mode. John of Salisbury, who studied under Bernard's disciples in the cathedral school at Chartres, told what he had heard of him. The report gives a flavor of the tradition. Bernard

would point out, in reading the authors, what was simple and according to rule. On the other hand he would explain grammatical figures, rhetorical embellishment, and sophistical quibbling, as well as the relation of given passages to other studies. . . . The evening exercise, known as the “declination,” was so replete with grammatical instruction that if anyone were to take part in it for an entire year, provided he were not a dullard, he would become thoroughly familiar with the [correct] method of speaking and writing. . . . He would also explain the poets and orators who were to serve as models for the boys in their introductory exercises in imitating prose and poetry.

Bernard’s fondness for pagan writers upset some people, but prayer pervaded his teaching at Chartres—a Christian edition of the philological, rhetorical education inherited from antiquity.⁵⁸

And thus the philological legacy of antiquity survived, thin and pale. Long after the twelfth-century renaissance went the way of its Carolingian predecessor, throughout the later Middle Ages educated men still read Ovid and Statius, Horace and Vergil, Seneca and Cicero. Some of these authors appeared in school texts alongside grammars adapted from ancient authors. Tales derived from Livy or Vergil circulated in medieval dress. The tradition of chronology also endured, though now localized in monastic or court chronicles (some of which showed skill in sorting out absolute dates). So did ‘paradoxography’: like the scholars of Alexandria, some medieval writers—frowned on by university philosophers—cataloged startling or bizarre natural phenomena or human artifacts. Above all, the *trivium*, the base of more advanced education, included grammar and rhetoric as well as dialectic. As Marcia Colish stressed, the education of medieval men “saw to it that the trivium was as much a part of their mental equipment as their Christian faith.” Whatever the fate of grammatical and rhetorical *scholarship*, not even to speak of textual philology, every educated man had learned grammar and rhetoric as a schoolboy. So philology persisted, even if as a passive, ghostly presence. Yet for two centuries after 1200, Hugh’s *Didascalicon* or teaching like Bernard’s did look more like relics of a dead past than jewels of a living tradition.⁵⁹

The creation of universities during that period furnished new frameworks for a type of intellectual life averse to philology: the Scholastic program of education and research. A late fruit of the monastic and cathedral schools that preceded universities, Scholasticism made itself at home in the new institutions. Scholasticism privileged dialectic, with its stress on logical abstraction and its filiation with philosophy and theology, over grammar and rhetoric, with their emphasis on textual and literary studies. Thirteenth- and fourteenth-century scholars north of the Alps by and large turned away from the philological and even rhetorical heritage of antiquity to pursue instead its philosophical legacy. “By the mid-thirteenth century,” as Daniel Hobbins observed, “the notion of the ‘liberal arts’ was more symbol than substance, and studying

at a university meant studying Aristotle.” (Rhetoric remained central in Italian universities.*) True, later medieval scholars did avidly pursue certain kinds of old texts. Around 1150 Adelard of Bath translated into Latin the astronomical tables of the ninth-century Persian mathematician al-Khwarizmi, themselves based on Sanskrit work; Adelard thus brought to Europe previously unknown techniques of Indian astronomy. More famously, the rediscovery during the later twelfth century—again via the Islamic world—of key works by Aristotle made a great stir in Scholastic circles. In fact, the translation of these ‘lost’ books virtually created mature Scholasticism in the thirteenth century.⁶⁰

But Scholastics pretty well limited their interest in ancient writings to philosophical, scientific, and ethical works—and largely forgot that even such manuscripts raised philological problems. That ancient invention, the learned commentary on an individual text, survived as a standard tool of Scholastic erudition. (Scholars even still read Servius on Vergil.) But Scholastic commentaries neglected the historical and antiquarian material key for Hellenistic and Roman scholars. Not until the Renaissance did philological modes of commentary reemerge.⁶¹ Meanwhile, much of Quintilian’s rhetoric lay hidden in forgotten manuscripts. Other classical texts of a literary, historical, or antiquarian nature, scrupulously copied by Carolingian scribes in their lucid minuscule script, likewise gathered dust in monastic libraries. Serious engagement with the philological heritage of antiquity held no appeal for Scholastics. The erudition born in Alexandria went into near hibernation in most of Europe after 1200.

Ancient rhetoric and grammar did carry on a shadow life within Scholasticism. The Scholastic zeal for dialectic sharpened a dichotomy perhaps first clearly asserted by Plato. On one hand, philosophy gave access to assured knowledge, certainty, truth (*scientia*, ‘science,’ in a medieval meaning very different from our own). On the other hand, rhetoric (and the philology allied with it) offered probability at best and a suspicious-looking resort to mere persuasion. Medieval Scholastics voted for truth and ‘science.’ But they kept rhetoric and grammar on life support: they absorbed rhetoric into logic; and they approached grammar—the one part of ancient philology many of them admired—as if it *were* dialectic. Early medieval Latin grammars had imitated classical ones, devoted to practical analysis of a single actual language. Starting in the twelfth century, grammars became more philosophical and logical in character, more remote from any actual language. At the same time, old-style rhetoric and grammar remained school subjects, and pedagogical texts used in earlier eras survived—indeed, a brief burst of new grammar books appeared in France and northern Italy in the late twelfth century, incorporating the more logical Scholastic version of the subject.⁶²

* Education in northern Italian cities had never lost its civic complexion, inherited from Roman schooling. Instruction in rhetoric still prepared students for public life, and this agenda carried over to universities when they developed. This ‘Italian difference’—to use Ronald Witt’s phrase—mattered a great deal to the rest of Europe at the end of the Middle Ages.

But *schooling* is one thing; *erudition* another. The antiquarian and historical curiosity of Hellenistic and Roman scholars, still lush in Bede, largely withered. Hugh of St. Victor was no slave to dialectic: he wanted his students to study scripture in light of history and geography—that is, philologically. But, to find such contexts, he could direct students to little more than the Latin Fathers and the Bible itself. A century later, Hugh's successors, by squeezing biblical truths through the grid of philosophical analysis, created a totally ahistorical theology that could be studied independent of the sacred text from which it ultimately derived. Scholasticism, its interests directed elsewhere, made an arid landscape for philological learning.⁶³

Not an unwatered desert. Medieval dialecticians strove to use words precisely. They even created a 'science of language.' This, at least, is one way to see the well-known debate between realists and nominalists at the heart of medieval philosophy. Did general terms point to something real, like a Platonic form? Or were they purely nominal conventions, convenient for referring to all the individual entities sharing certain traits? Did the species 'horse' denote an actual universal horsiness, or only the myriad of particular horses? This realist-nominalist debate carried forward, in much altered terms, ancient arguments between naturalists and conventionalists about the origin and character of language, echoing the dispute laid out in Plato's *Cratylus*. Moreover, the Scholastics' intensely logical approach to grammar eventually produced, starting from Priscian's late-antique grammar, a *grammatica speculativa* (speculative grammar). This science sought rules common to all languages, assuming that each reflected the real makeup of things. *Grammatica speculativa* faintly echoed some ancient conjectures and built a base for later linguistic theorizing. On the margins of the academic world, too, speculation on language continued. Jewish kabbalist mystics in Spain and Provence believed that language mirrored reality and that manipulating letters therefore yielded esoteric knowledge. Dante studied the splintering of the Romance languages; he sought to shape an Italian vernacular that would restore the primal linkage between words and the objects they name—a return, he believed, to the linguistic bliss of the Garden of Eden.⁶⁴

Even scriptural study—which before and after the Middle Ages seemed a predestined site for textual philology—drifted away from it during the medieval period. In this case, Scholasticism was not the agent. The ancient Christian writers who allegorized the Bible, mimicking the interpreters of Homer, were ultimately responsible. From Augustine up to Aquinas, most Christian readers found several layers of meaning in scriptural passages, with spiritual senses often overwhelming the literal one. For a scholar mining the Bible for theological insight, a preacher using scripture to give moral direction, or a nun reading to deepen her spiritual life, having several strata in the text enriched the Book. Exegetes disagreed about how many distinct types of meaning a passage should bear. The down-to-earth Hugh of St. Victor favored three: literal (historical); allegorical (doctrinal); and tropological (moral)—and, un-

usual in his day, insisted on the literal as the basis of all readings. More fanciful commentators found as many as seven kinds of meanings. A fourfold exegesis was commonest: literal, allegorical, tropological, and anagogical (mystical). Such construals put a premium on theology, preaching, contemplation. They turned attention away from philological problems.⁶⁵

A rationalizing Scholasticism pulled the reins on fancy. Hugh of St. Victor began the restraint. Thomas Aquinas provided a stronger theoretical basis, as Beryl Smalley noted, by importing into Scholasticism the Aristotelian principle “that substance could only be known through its sensible manifestations.” It followed that “the ‘spirit’ of Scripture” was “not hidden behind or added on to, but expressed by the text.” Scholastic pedagogical method pushed in the same direction. In the new universities, lecturers addressed not just a biblical text directly but also collected glosses on that text. To avoid hopeless confusion, teachers had to assume in the text itself, first of all, a straightforward, foundational, literal meaning—though they did allow spiritual modes of reading on top of the primary literal meaning.⁶⁶

Literal exegesis thus came into a certain vogue after perhaps 1300, though still buried under mounds of textual glosses: the inheritance of a long tradition of learned but nonphilological commentary. The Franciscan exegete Nicholas of Lyra (1270–1349) insisted on the primacy of the literal sense when many of his contemporaries still vigorously allegorized. But he included in ‘literal’ both the original writer’s intent and “the prophetic meaning that was to come.” For late medieval interpreters like Nicholas, ‘literal’ did not mean historical in the sense of illuminating the text with ancient context. But sooner or later, under the new regime, biblical scholars *would* need Hebrew and Greek and historical research to do their job well. This literalist turning within Scholastic exegesis gave new energy to textual philology, but very slowly. The handful of philologically-minded students of the Old Testament text in the 1200s—who struggled with Hebrew, consulted erudite rabbis, and scoured manuscripts for variant readings—worked outside the universities. In contrast, just a little later, Nicholas of Lyra’s command of Hebrew learning may help to explain his rapid rise at the University of Paris. (He used the same learning to attack Judaism.) In the early 1300s, two church councils and a pope ordered major universities to set up professorships of Greek and oriental languages (Hebrew, Aramaic, and Arabic), probably to support evangelizing. A couple of universities made feeble stabs at obeying, but nothing much happened for another century. Competent candidates were not pouring out of the academic establishment. Biblical philology required the literary and historical learning that Scholasticism had devalued in favor of philosophy and its irrefutable *scientia*.⁶⁷

Philological expertise would take time to recover. Around 1400, hints of movement rustled even through the heartland of Scholastic Europe, north of the Alps. Some French writers tried to compose more elegant Latin, holding up Cicero as their silver-tongued ideal. Those who spent time at the papal

court in Avignon developed an ardor for classical texts that reminds one of Lupus of Ferrières. Jean Gerson, chancellor at the University of Paris, proudest citadel of Scholasticism, decried the “great famine of worthy and eloquent historians and poets” afflicting France. He worried that dense, technical theological jargon made no impression on the reading public, even as that public grew in number. He criticized the literary clunkiness of Scholastic writings and called for deeper study of rhetoric—though dialectic held him enough in thrall that he called rhetoric a second kind of logic! In Scholasticism’s other premier university, Oxford, around the same time, theologians were growing disenchanted with an excess of logic and showing a new fondness for the ancient Church Fathers. None of this amounted to full-throated philology—Jean Gerson never collated a manuscript—but straws floated in the breeze.⁶⁸

And even the high medieval heritage included tidbits that philology later devoured. After around 1100, government, legal proceedings, trade, and religion all made more and more use of writing, and texts multiplied. In particular, Scholastic method demanded that university teachers and students master authoritative books in detail; and the number of works requiring control ballooned during the thirteenth century, especially as ancient Greek learning preserved by Islamic scholars leached into Latin. The growing ‘information overload’ needed management: search engines, one might say. So learned men either refined tools inherited from antiquity (such as the encyclopedia), or they invented new ones (such as the alphabetical index to a book). The most widely used index—employed by preachers as well as teachers—was the biblical concordance.* This implement indexed at first the words in the Bible but soon topics, too. When philology eventually revived, its adepts adapted such reference works to their own uses. More substantively, *grammatica speculativa* had offspring in what would later be called linguistics. In the very long run, too, spiritual exegesis of the Bible left its mark on erudition. The grafting of ancient modes of reading Homer onto the Christian scriptures, after a thousand years, had embedded itself deeply in reading practices. Digging beneath the surface of a text to excavate hidden meanings could offer a way of understanding secular books as well.⁶⁹

All this lay dormant. With few notable exceptions, later medieval scholars neglected philology for other interests. Ancient learning eked out a bare existence as the least respected parts of the *trivium*. Yet rhetorical and grammatical erudition, literary and textual criticism, even chronology and antiquarianism, had not vanished. They lay on countless library shelves, in monasteries across Europe, waiting to be discovered anew.

*The concordance in turn led to dividing the books of the Bible into our present standardized chapters, to help users find a given word or topic regardless of how a particular manuscript of the Bible was laid out. This Christian invention eventually became standard in Jewish Bibles, too.