PHILOLOGY

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THE FORGOTTEN ORIGINS OF THE MODERN HUMANITIES

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Prologue

In his *Adages* (1500) the great humanist Erasmus of Rotterdam quipped, "The fox knows many things, but the hedgehog one big thing."[1] Might the two animals know the same stuff? Could the hedgehog's one contain the fox's many? The book you are reading began in my growing curiosity about whether humanistic scholarship in the West is ultimately many or one.* I have more to say about how I got curious, but first a few words are in order about what our fox and hedgehog comprehend.

Studia humanitatis—humanistic studies—in one guise or another have for many centuries dwelled at the heart of Western learning.[2] In British, Irish, and North American universities today, the 'humanities' make up a central strand of teaching and research. But their present forms are a modern novelty. The many humanistic disciplines that today's fox knows date only from the nineteenth century. Trace their several origins, and (as the hedgehog realizes) the trail usually leads back to one big, old thing: philology—the multifaceted study of texts, languages, and the phenomenon of language itself.

Philology has fallen on hard times in the English-speaking world (much less so in continental Europe). Many college-educated Americans no longer recognize the word.[3] Those who do often think it means no more than scrutiny of ancient Greek or Roman texts by a nit-picking classicist, while British readers may take it as referring only to technical research into languages and language families. Professors of literature use the term to belittle a simpleminded approach to their subject, mercifully discarded long ago. Indeed, for most of the twentieth century, philology was put down, kicked around, abused, and snickered at, as the archetype of crabbed, dry-as-dust, barren, and by and large pointless academic knowledge. Did I mention mind-numbingly boring? Whenever philology shows its face these days in North America or the British Isles—not often, outside of classics departments or linguistics faculties—it comes coated with the dust of the library and totters along with arthritic creakiness. One would not be startled to see its gaunt torso clad in a frock coat.

* Non-European civilizations have their own vigorous traditions of humanistic scholarship; for instance, Confucian erudition in China. These figure in this book only when they affected the Western tradition, such as the impact of the Sanskrit learning of India described in chapter 4.

It used to be chic, dashing, and much ampler in girth. Philology reigned as king of the sciences, the pride of the first great modern universities—those that grew up in Germany in the eighteenth and earlier nineteenth centuries. Philology inspired the most advanced humanistic studies in the United States and the United Kingdom in the decades before 1850 and sent its generative currents through the intellectual life of Europe and America. It meant far more than the study of old texts. *Philology* referred to *all* studies of language, of specific languages, and (to be sure) of texts. Its explorations ranged from the religion of ancient Israel through the lays of medieval troubadours to the tongues of American Indians—and to rampant theorizing about the origin of language itself.

The word *philology* in the nineteenth century covered three distinct modes of research: (1) textual philology (including classical and biblical studies, 'oriental' literatures such as those in Sanskrit and Arabic, and medieval and modern European writings); (2) theories of the origin and nature of language; and (3) comparative study of the structures and historical evolution of languages and of language families. This last inquiry had stunning result: the recovery of a vanished, previously unsuspected language, parent of most tongues of Europe, northern India, and the Iranian plateau.*

These three wide zones of philological scholarship, diverse in subject, shared likeness in method. All three deployed a mode of research that set them apart from the other great nineteenth-century model of knowledge, Newtonian natural science. All philologists believed *history* to be the key to unlocking the different mysteries they sought to solve. Only by understanding the historical origins of texts, of different languages, or of language itself could a scholar adequately explain the object of study. Moreover, all breeds of philologist understood historical research as *comparative* in nature. Only by placing a classical text or the grammar of Sanskrit into multiple comparative contexts could a scholar adequately understand either—by comparing the classical text with other manuscripts and with historical evidence surrounding them; by comparing Sanskrit grammar with similar Indo-European grammars (as well as, at least tacitly, dissimilar grammars of other language families). Furthermore, philologists understood history not only as comparative but also as *genealogical*. They aspired to find historical origins in a very specific sense of the term: to uncover lines of descent leading from an ancestral form through intermediate forms to a contemporary one. Later in this book we shall see how *historicism*, with its insistence on *comparison* and *genealogy*, replicated itself in the DNA of the modern humanities.

Equipped with these powerful tools of investigation, philology animated sundry types of knowledge across the academic countryside. Until the natural sciences usurped its throne in the last third of the nineteenth century, philology supplied probably the most influential model of learning.[4] The immense

* This long-lost language is now called Proto-Indo-European.

resonance of philology as a paradigm of knowledge is much less well known today than the parallel influence of natural science, because science won and philology lost. Victors often erase the footprints of the defeated. Ask any modern student of ancient Carthage.

I stumbled on some buried ruins by accident, over thirty years ago. In the early 1980s, I set out to write a life of Charles Eliot Norton. Norton was the most prolific begetter of the humanities at the time when modern American higher education was taking off, the decades after 1870. It made sense to start research for a biography with my subject's parents. The mother, Catharine Eliot Norton, left behind only scraps of correspondence. The father, Andrews Norton, a Bible scholar, supplied a lot more posthumous debris. The trove included notes for his Harvard University lectures on biblical criticism. In perusing these, I learned that a 'conventionalist' theory of language (more about this in chapter 1) undergirded the elder Norton's understanding of the Bible and theology. He even believed that other philosophies of language threatened religious faith. In the 1830s, Andrews Norton got into a public argument with his sometime student Ralph Waldo Emerson over the latter's heterodox religion. In plowing through the printed and private records of their row, I discovered that Emerson's ideas about language frightened and angered Norton as much as his religious doctrines: Emerson's linguistic heresy, Norton insisted, underlay his religious infidelity.

In the spring of 1985 the history department of the University of Michigan invited me to deliver what we in the trade call a job talk. I took the opportunity to decipher further the Norton-Emerson rhubarb by poking around in other American writings about language in the period. I found myself trying to convince my Ann Arbor listeners that a peculiarly American style of linguistic theorizing, now largely forgotten, flourished in Norton's day and might help to explain thinkers as influential as the philosopher Charles Peirce and the anthropologist Lewis Henry Morgan. I got the job, at least. A few years later an acquaintance in Paris found these musings curious enough to publish in a journal there.[5] The ball was rolling.

But Andrews Norton still mattered to me mostly for shaping his son. As biblical critic, Andrews made the Gospels his specialty. To explain such ancient texts, he taught, one had to set them in historical context. Their interpreter needed to know the idioms of the first-century Greek in which the Gospels were written; literary forms then current; the mind-set of Jews of the era and of their Roman rulers; customs governing relations between the sexes and family life; religious practices; economic activities; legal codes; diet—the welter of details that enabled a modern reader to decode the texts as their writers intended. To amass this expertise, the critic had to bring to bear on the Gospels other texts of the era: these cast light on not only linguistic and literary problems but more broadly the culture, specific to its time and place, that formed the Gospels' authors. They could no more escape it than a medieval peasant could escape his culture or Madame de Maintenon hers. And every

text of the era revealed *something* about the culture it came from; and so the Gospels helped the scholar to understand other contemporary texts, just as these other texts cast light on the Gospels. Each text might provide a snippet of information that made something clearer in the others. By tacking back and forth between the books of central concern (here the Gospels) and texts surrounding them, the critic re-created, as best he could, the lost world that produced all these texts. He thus made the original meaning of the Gospels clearer to a modern reader. Andrews was, in short, a textual philologist.

Like father, like son. Charles Norton first made his scholarly mark by translating Dante—a task requiring philological skills like those he knew from his father's works. Later in life, he edited seventeenth-century English poetry, another act of philology. But the younger Norton never limited himself to studying texts. He became best known, in fact, as a historian of art—the first professor of that subject in the United States. He also wrote about classical archaeology—and founded the Archaeological Institute of America, which became the major professional group for that new academic discipline. As I tracked his career of innovation in the humanities, it dawned on me that Charles Norton treated Greek temples, medieval cathedrals, and Renaissance paintings all as 'texts.' He put these physical relics of past worlds into their historical contexts, comparing them with other 'texts' of their times (literal and metaphorical) in order to recover their meanings to the people who made them. He then in turn used, for instance, the Parthenon or the cathedral of Siena to throw light on the long-dead cultures that produced these buildings. This man—who more than any other individual became 'founding father' of the modern humanities in the United States—applied the same historicizing, comparative, genealogical philological methods whether he studied poems, buildings, or pictures.[6] And I doubted that Norton was sui generis.

He was not. Historical scholarship is a small world. Colleagues elsewhere knew I was at work on Norton. When organizing conferences, they sometimes solicited papers from me on related topics. So, while writing Norton's biography, I had the chance to test my hunches about the kinship of philology and the modern humanities. Samples excavated from other archives gradually turned my guess into a working hypothesis. When Norton breathed his last in 1999 (for the second time, poor man), I set out to learn how far the fingers of philology extended into modern humanistic learning. By then I did not feel nearly as lonely as in 1985. More and more explorers were detecting traces of philology in various fields of scholarship.

Still, we are only beginning to recover how language study in its heyday formed the skeleton of modern erudition and gave us many disciplines that today make up the humanities and even social sciences. Historians have excavated philology's role in the origins of anthropology, of classics (as distinct from mere teaching of Greek and Latin), of comparative study of religions, of literary scholarship, indeed of certain kinds of legal research. We have also become increasingly aware that two other learned activities, related in topics,

contrast, archaeologists and linguistic anthropologists today 'look' more like scientists than humanists. Yet, as we shall learn, they, too, ultimately derive from the philological tradition and lines of study associated with it, especially during the period between the Renaissance and 1800.

In short, the bins into which we today sort academic knowledge—at least in the 'humanities' and 'social sciences,' if those labels have coherent meaning—produce unfortunate outcomes. Our categories require ripping apart modes of knowledge and methods of acquiring it that were once connected. Self-awareness about these matters will allow all of us in universities to see more clearly what our disciplines mean, where they tie into each other, how we can most effectively cooperate with each other, and how we can most sensibly and usefully organize knowledge. These are things students, professors, deans, and provosts need to know.

They are also things citizens need to know. Higher education may be perpetually in crisis, but today pressures on it in America and Europe are exceptionally relentless. Some are financial, as state support ebbs and tuition costs surge. Some are economic, as demands rise for colleges and universities to focus on 'practical' fields like science, technology, or business. Some are curricular, as course offerings grow more diffuse and student learning more dubious. Higher education needs reconstruction—from the general-education component, to the structure of specialized programs, to the layout of graduate training, to the configuring of knowledge itself beyond the present disciplinary setup. But rebuilding can only proceed intelligently if we understand how knowledge has evolved over time. Otherwise we will miss important pieces of the puzzle latent in the structure of knowledge today, as well as pieces now so much taken for granted that we overlook them.

We lack much of this needed historical understanding. The history of natural science *is* a mature field. The history of the social sciences is a toddler, the history of the humanities an infant. Look in any well-stocked library; you will find lots of historical monographs on special aspects of individual disciplines all across the map of knowledge. You will find many broad historical surveys of natural science as a whole. You will find a few such books about the social sciences collectively. You will find no general history of the humanities written in English—the sort of work that would show how different humanistic fields of study grew over time, in changing relationship to each other and to other areas of knowledge.

To clearly see connections and disjunctions requires a wide vista of the development of humanistic learning. This book tries to offer one to readers living amid the educational and research institutions of the English-speaking world. To ensure breadth of view, the first four chapters are devoted to the formative 'prehistory' of nineteenth-century philology and its partners rhetoric and antiquarianism, from ancient Greeks to the end of the eighteenth century. But 'the humanities' as *we* know them came into existence only in the nineteenth century; and so the book reaches focus *after* 1800 on the English-speaking

lands ringing the north Atlantic. Philology in the nineteenth century pervaded the intellectual life of every country in Europe and the Americas and in Europe's settler colonies elsewhere. But I pay closest attention to England, Scotland, and the United States. (Ireland gets less heed than it might deserve, and Canada barely any, because relevant secondary literature and archives are sparse.) One reason for this focus is personal: my career as historian has centered on the English-speaking north Atlantic. There I can most easily detect connections among different fields of knowledge crucial to this story. But common language and, to some extent, shared history and mutual prejudices linked English-speaking scholars across the Atlantic. They looked more like a quarrelsome clan, with a single family history, than like distantly related tribes.

They shared much with counterparts in France or Chile but also pursued philology and its offshoots in distinctive British and American ways. One revealing instance: many German philologists absorbed the philosophical hermeneutics (theory of interpretation) sketched by Friedrich Schleiermacher. These philosophical concerns stood out in August Boeckh's *Encyclopaedie und Methodologie der philologischen Wissenschaften* (*Encyclopedia and Methods of Philological Scholarship*),* posthumously published in 1877. By then, every American and British classicist knew Boeckh's pathbreaking *Staatshaushaltung der Athener* (1817), translated into English as *The Public Economy of Athens* as early as 1828. Yet his *Encyclopaedie und Methodologie* went untranslated and, as far as I can tell, unread by English-speaking philologists—even those who had, as students in Germany, attended the lectures that made up the book![7] Far more empirically minded than their German colleagues, they left Schleiermacher's theorizing to the theologians.

Still, Anglophone philologists borrowed heavily from foreign work. German universities housed the masters of philological research from the late eighteenth to the start of the twentieth century; English-speaking scholars leaned heavily on German writings and personal contacts, at least from the 1830s, when ability to read German grew more common. German philologists appear often in the following pages, both as background to and as direct influences on English-speaking scholarship. To a lesser extent, so do savants from France and other non-English-speaking lands. But their roles, even when seemingly ever-present (as in the early chapters), are always ancillary to the story of philology and its offspring in the Anglophone north Atlantic.

A further clarification: this book does not concern humanistic *higher education* but rather the humanities as *fields of academic knowledge*. They could inhabit freestanding research institutions as well as colleges and universities—or even live outside any institution. The appearance of a subject in university teaching does testify to a discipline's acknowledged existence, and I cite

* You may also see it spelled as Böckh. But, like Johann Wolfgang von Goethe's, Boeckh's name is more commonly rendered (in German as well as English) with an *e* instead of the umlaut; that is how it appears in this book.

such evidence from time to time. But knowledgeable observers on both sides of the Atlantic recognized anthropology as a scholarly discipline well before 1860, even though university courses and faculty appointments in the subject appeared only some twenty years later (save one course offered in Toronto in 1857). Discussions of higher education merely subserve the real topic of this book: the emergence of the humanities as academic disciplines.

Readers who did not specialize in history as undergraduates may find helpful an explanation of chronological labels used, fuzzily, by historians of the West, including me. 'Antiquity' means the period before around the seventh century CE. 'Late antiquity' (a category imported into English from German-language scholarship in 1971) runs from about the fourth century to the end of antiquity. The 'Middle Ages' begin when antiquity ends, around 700 CE, and stop with or just before the Protestant Reformation, shortly after 1500. After that, it's all 'modern'—except that modern history, like antiquity, is divided in two. The 'early modern' period ends with the eighteenth century (classically with the outbreak of the French Revolution in 1789); 'modern' *pur sang* goes from then to now.

One word commonly used in the following pages may also need clearing up: the verb *publish*. A work is *published* when made *public*. With reference to ancient Rome, publication might simply mean that an author gathered acquaintances at home to hear him read a new composition. In the era of manuscripts, a work is also said to be published when made available to be copied for wider circulation: the standard medieval method of publication. But an author might also circulate copies of a manuscript within a small group, intending to keep the work semiprivate. Pretty much the same situation persisted after 1450 when printing made copying books easier. A printed work is not published when it comes off the press, but when it goes on sale or otherwise becomes available for public distribution. A famous example is the Complutensian Polyglot Bible, discussed in chapter 2: the printers had it ready by 1514, but its publication waited for the pope's OK in 1522. In the nineteenth century, scholarly authors with enough money often had a draft work printed to send around for comment; we do the same now, without needing as much money thanks to laser printers and e-mail attachments. In neither case is the work 'published'; in both, the author gives it to selected readers. Perhaps the best-known case of unpublished circulation in American literary history is *The Education of Henry Adams*, privately printed in 1907, not published until Adams's death in 1918, but in between rather widely read. 'Publication' is not always clear-cut.

Translations into English are my own unless otherwise indicated in the reference notes. Italicized words in quotations were emphasized in the original unless otherwise noted. Double quotation marks signal material quoted from another work. Single quotation marks are 'scare quotes,' indicating a term or phrase I have singled out because it needs emphasis, interpretation, or qualification.

Sources appear in endnotes, where author's surname and year of publication lead to the list of works cited. Some endnotes also provide supplementary information for specialists. The footnotes contain explanations or asides that I think might interest all readers. More specialized elaboration of comments in footnotes and sources for them sometimes appear in the endnote for the paragraph.

To avoid blinding readers in a hailstorm of personal names, I have deployed a smaller number of representative figures, sometimes repeatedly.

No reader can feel more keenly than I how much the following pages omit, compress, and simplify. Squeezing inflicted sharpest pangs in the early chapters, where centuries cram into paragraphs. To take but one instance, I barely hint at the rich, tortured relations between Christian biblical philologists and their Jewish counterparts. A book could be written about what Christian scholars learned about their Old Testament from just one medieval rabbi, the famed Talmudic and biblical commentator called Rashi.* In fact, the book *has* been written.[8] Other fascinating swathes of scholarship do not even get a bare hint. You will find no discussion of musicology, of Turkic philology, or of many other flourishing, if smallish, humanistic disciplines. Folklore studies could easily have filled a space between anthropology and literature. Such neglect appeared to me mandatory, however painful. I skim lightly over oceans of erudition because plumbing the depths—or merely dipping down a fathom or two—would stretch this book from a few hundred pages to a few hundred volumes. I offer a *tour d'horizon*, not an encyclopedia.

Some readers may wish for explanations of other choices I have made, in matters including gender-neutral language, dates, geographic names, and the like. These can be found in the section titled "Conventions" immediately following this preface. The rest of you should dive right into the story.

* Rashi is the conventional acronym for Rabbi Shlomo Yitzhaki (1040–1105), formed in the same way as (to mention an individual better known to most readers) the nickname Rambam for Maimonides: *R*abbi *M*oshe *b*en-*M*aimon.

Conventions

It has in recent years become a convention in works by professional historians to lay out, at least in reference notes, one's agreements and disagreements with other historians. I resist the trend. Experts will see where I stand in relation to others. Nonexperts will not care. Besides, in a book of this breadth, marking every specialist quarrel would make the endnotes explode.

The gender-neutral language expected in scholarly works usually goes missing in this one. Absence stems not from churlishness but from an effort to reflect historical reality. Until the late nineteenth century, the learned people I discuss were almost all male. This situation may now appear disgraceful, but to call the generic philologist of 1500 or 1850 'him or her' merely veils the disgrace.

Chronological clarity is essential, yet too many dates fog the windshield. Mostly, I keep time by giving year of publication when mentioning a book. In the earlier chapters, which cover long stretches of time, birth and death years also appear in parentheses for individuals who loom large, as well as for less prominently featured persons whose place in time may otherwise be unclear.

I translate titles of books in foreign languages unless I believe their approximate meaning obvious to readers. Thus Leone Modena's *I riti degli Ebrei* gets 'Englished' as *The Rites of the Hebrews*, whereas Johannes Buxtorf's *Synagoga judaica* appears only in Latin.

CE (Common Era) and BCE (before the Common Era) replace the venerable AD (anno Domini, year of the Lord) and BC (before Christ). The older usages imply that everyone recognizes Jesus as Lord or at least as the central figure in history. Even Christians who wish this were true know it is not. The adoption of Christian time reckoning as the international standard has made it truly 'common,' no longer distinctively Christian. And 'Common Era' is no recent product of political correctness. It appeared in the title of the great astronomer Johannes Kepler's *Eclogae chronicae* (1615), while the first volume of Ludovico Muratori's *Annali d'Italia* (1744) began, as its title page proclaimed, "Dall'Anno primo dell'Era volgare"—from the first year of the common era. Both as an amateur astronomer and as a teensy historian standing on the shoulders of giants like Muratori, I happily follow their lead.[1]

Much recent historical writing about philology focuses on its political penumbra: its place in the genealogy of anti-Semitism, for example, or its role in

Acknowledgments

Anyone who undertakes a history of this scope, put together over so many years, amasses debts of gratitude too extensive to confess fully or even to recall exactly. The University of Notre Dame repeatedly gave time off for research and writing as well as liberal funding to use the time efficiently. The former Max-Planck-Institut für Geschichte in Göttingen and the John W. Kluge Center for Scholars at the Library of Congress hospitably housed my research in autumn 2003 and spring 2004, respectively. I owe special thanks to Hartmut Lehmann in Göttingen and Peg Christoff in Washington. The Spencer Foundation and the National Endowment for the Humanities generously supported a year of writing in 2007–8 that produced a first draft of this book. Earhart Foundation with equal generosity made possible a leave in 2011–12 that resulted in the final one.*

The thing more needful even than money and time in writing a book like this one is helpful people. Librarians at the University of Notre Dame and, before that, the University of Michigan bore the brunt of my research. Nancy Mitchell was my cheerful and reliable lifeline to the Notre Dame libraries during the last years of research and writing. I am grateful also to archivists and librarians at the American Philosophical Society Library; Bentley Historical Library, University of Michigan; Bodleian Library, Oxford University; British Library; Cambridge University Library; Center for American History, University of Texas–Austin; Courtauld Institute; DeGolyer Library, Southern Methodist University; Dr. Williams' Library; Edinburgh University Library; Gould Library, Carleton College; Harry Ransom Humanities Research Center, University of Texas–Austin; Eisenhower Library, Johns Hopkins University; Hoole Library, University of Alabama; Houghton Library, Harvard University; Library of Congress; National Library of Scotland; Niedersächsische Staats- und Universitätsbibliothek; Queen's University Belfast; Regenstein Library, University of Chicago; Wren Library, Trinity College Cambridge; Trinity College Dublin; and University College London.

* The NEH requires grantees to state, "Any views, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect those of the National Endowment for the Humanities." The same, of course, holds true of other institutions that supported my research.

I learned much from audiences who over the years responded to my developing ideas at the École des Hautes Études en Sciences Sociales (Paris) on multiple occasions; the Library of Congress; Oregon State University; Pazmany Peter University (Budapest); Princeton Theological Seminary; Princeton University; Sogang University (Seoul); and the Universities of Calcutta, Michigan, Notre Dame, and Texas.

My early thoughts about ramifications of philology germinated in talks with Tom Trautmann when we worked together at the University of Michigan between 1984 and 1995. The research assistance of Siobhan Donnelly many years ago at Michigan aided my first investigations. Among scholars who kindly replied when I pestered them for advice were Margaret Abruzzo, Steve Alter, Mary Ellen Brown, Erwin Cook, Tony Grafton, Paul Gutjahr, Sean Harvey, Iván Jaksić, Wolfgang Kullmann, Ulrich Lehner, the late Sabine MacCormack, John McGreevy, Margaret Meserve, Mark Noll, Mike O'Brien, Jon Roberts, Bob Sullivan, the late Frank Turner, and Caroline Winterer. There are surely others whose names I cannot now recall but for whose aid I am nonetheless thankful. Steve Alter, Keith Bradley, Brad Gregory, Iván Jaksić, Sabine MacCormack, John McGreevy, Margaret Meserve, Mark Noll, Jim VanderKam, and John Van Engen read draft chapters and gave helpful advice; Chris Stray supplied very useful comments on a related paper. Caroline Winterer read the full, semifinal version with her sharp eye for style and organization. Tony Grafton and Frank Turner commented shrewdly on an entire first draft.

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The untimely deaths of Frank Turner in 2010 and Sabine MacCormack in 2012 were great losses to me and to the republic of letters. This book stands as one among many monuments to their erudition and generosity.

PART I

From the First Philologists to 1800

Language and its products enthrall human beings. Our enduring love affair with words should not surprise. After all, the expanding capacity of *Homo sapiens* to use language in ever more intricate ways partly powered our evolution, gave us an edge over other animals, deepened the interdependence basic to humanity. The earliest schools, in Mesopotamia, taught not augury, astrology, or the art of war but how to handle written language. When systematic erudition emerged in ancient civilizations, it often made language its subject. In *Shuo Wen Jie Zi* (121 CE), the Han dynasty scholar Xu Shen invented the strategy of indexing Chinese characters by the root elements they shared, still basic to Chinese dictionaries. But already, some four centuries earlier, in present-day Pakistan, Pāṇini had composed his dauntingly terse grammar, the *Ashtadhyayi*; in it he set out rules covering Sanskrit syntax, morphology, and semantics—arguably the fountainhead of the science of linguistics. Here I can merely nod toward the boundless steppes of philology lying beyond the confines of Western civilization.

This book's more provincial story begins in the Mediterranean basin, with Greek speakers who lived in Pāṇini's era. Some of these Hellenes invented the language-centered instruction that supplied the basis of European schooling for many centuries to come—and in some senses still does. Others of them devised methods for meticulous inquiry into questions more or less related to such education—that is, into problems posed by language. Where did words come from? How do they function together? How does the Greek tongue specifically work? How ought one to interpret *texts*, wherein written words weave intricate nets of meaning? (English *text* and *textile* share the same Latin root, meaning something woven.) How could one keep texts under control when their numbers multiplied vastly? In doing all these things, these teachers and

these scholars together midwived the fraternal twins born of language: the practical art of rhetoric and the erudite science of philology (the latter then including grammar, other sorts of linguistic theorizing, and the multisided study of texts).

Neither child enjoyed an untroubled life. When the Roman Empire gobbled up the Hellenic world, it absorbed Greek rhetoric and philology. Learned Romans took great interest in both, honed them, complicated them. But the empire split in two, and its western half soon collapsed into chaotic centuries poisonous to any form of learning. The shards of the western empire eventually re-formed as Latin Christendom (the immediate ancestor of 'Europe'). But its erudite elite had things on its mind other than philology. Not until nearly a thousand years after the disintegration of the western Roman Empire did a shift in intellectual climate—conventionally called the Renaissance—revive philology and rhetoric.

By then, teaching and scholarship had evolved vastly more elaborate institutions. To the old Greeks and Romans, a 'school' was a gaggle of pupils and a teacher who met in any space at hand—even outdoors. And with rare exceptions ancient scholarship went on in the houses of whichever rich, leisured men happened to care about such things. But medieval monasteries and cathedrals birthed schools with an abiding existence; by the late Middle Ages some even got their own buildings. After 1200, universities emerged. These provided homes for erudition, though rarely philological erudition in their early centuries. In the sixteenth and seventeenth centuries, 'academies' began to spread: establishments for advanced learning separate from universities, often patronized by a royal or noble court. After perhaps 1500, improved communication and the new technology of printing increasingly tied together scholars based in universities, academies, or elsewhere—even Jesuit missionaries in China—into an international Republic of Letters.

In this worldwide web of learning, philology and rhetoric stood out. They were often closely allied with an antiquarianism that delighted in material relics of the past—from prehistoric stone monuments to Roman coins. (Scholars in the ancient Mediterranean world had shown this same sensibility.) Early modern philologists still astound with their energy, creativity, and diverse curiosity. Our purposes require looking especially closely, in the later seventeenth and eighteenth centuries, at the heterogeneous stew of British philological erudition. Our true subject, the modern humanities in the English-speaking world, grew right out of it.

quest proved as bloody and difficult as it was protracted. But by 100 BCE Rome controlled the Iberian Peninsula, much of north Africa, mainland Greece, and chunks of Asia Minor. A hundred years later, Romans not only held sway over lands washed by the Mediterranean. They had also expanded their empire northward to absorb what are now France and the Low Countries (adding England later). Roughly speaking, where the Greek language had already taken hold—in the eastern half of the Mediterranean—it remained the common tongue. Around the western half of the Mediterranean and (to the north) in the continent west of the Rhine, Latin played the role of Greek in the east: the language of business, of administration, of schooling, of the elite.* In the *agora* of Alexandria or Ephesus, a traveler heard Greek; in the *forum* of Hippo or Barcelona, Latin.[3]

Greek Origins

It may be no accident that Hellenes started philology on its long European career. The ancient Greek language consisted of a cluster of regional dialects: a situation not unusual as such. In Greek, however, unusually clear boundaries divided the dialects. Yet Greek speakers—who could and regularly did talk across dialects—drew a bright line between Greek and other ('barbarian') tongues. Perhaps this diversity-within-unity was what pushed some Greek speakers to ponder language. In any event they did, and their reflection on language and on its written products gave the West philology.[4]

Greek philosophers wondered about the source and nature of language. Pythagoras, in the second half of the sixth century, apparently gave thought to where the names of things came from. Heraclitus of Ephesus, around the century's end, believed that words somehow reflect the inner essence of the things they name. His approximate contemporary Hecataeus of Miletus argued that historical events lurked behind personal names and place-names. Mere scraps survive of such early conjectures. But in the first half of the fourth century Plato's dialogue *Cratylus* staked out three positions distinctly: (1) language is conventional: words mean what they do only because people agree to use them in that way; (2) language is natural: words express the nature of the things they name (or they are meaningless); (3) language is both: words are based on nature but altered by convention. This last position—spoken by Socrates in *Cratylus*—was Plato's own. Words, he believed, arose from efforts to mimic natural objects vocally; but usage changed their forms, and custom fixed their meanings. *Cratylus* features fantastic etymologies, possibly meant as parody. But it also made the first serious stab at analyzing language to sur-

* The extent of Greek colonization complicated this picture. Merchants around Roman Massilia (modern Marseilles), originally a Greek foundation, continued to use Greek; and it was spoken in parts of southern Italy into the twentieth century.

vive from the ancient Greek world. Plato and his pupil Aristotle sorted out some basic linguistic concepts that later scholars would develop; for instance, word and sentence, verb and noun phrases, inflection.[5]

Another stream feeding into philology also arose in early Greece—and drenched classical antiquity far more thoroughly than these guesses about the nature and history of language. Hellenes doted on public debate: think of the quarrelsome assemblies in the *Iliad* or of the βουλευτήριον (*bouleutérion*, 'council hall') that today's tourist finds in every ruined Greek city. Small wonder that rhetoric grew into a formal study. Around 500 BCE, Athens put in place political and judicial regimes based on citizen participation. In the wake of these democratic reforms, certain 'sophists' began instructing students how to argue capably in public. (Sophist derives from σοφος—*sophos*, 'wise'—but in early Greek σοφος also meant 'skillful.') To hostile eyes, such newfangled teaching scorned appeal to truth or tradition in favor of the sinister power of manipulating opinion. This alleged amorality brought down on the sophists' heads the wrath of Plato. Paradoxically, Plato's own Socratic dialectic gave a terrifically effective example of rhetoric, though one supposed to reach certainty rather than preference or likelihood. Plato connected dialectic (philosophic argument) to assured knowledge of truth and tied rhetoric to opinion or 'mere' probability. The linkages proved enduring. So did the orientation of rhetoric to civic life. Plato's pupil Aristotle—engrossed by actual politics, unlike Plato—respected rhetoric more than his master had. Where Plato accepted as knowledge only a grasp of universal, timeless essences, Aristotle believed that awareness of particulars and of rough generalizations also qualified as knowledge. Where *dialectic* proceeded from *universally* accepted opinions, he said, *rhetoric* started from *individual* ones. He thus stressed the importance of knowing the facts of a case and reasoning logically from them.[6]

Through the centuries to come, this dichotomy appears again and again, in one form or another: philosophy arrives at universally valid generalizations, whereas philology interprets individual cases. Here lies in embryo the modern distinction between law-seeking ('nomothetic') natural sciences like physics and chemistry and interpretive ('hermeneutic') disciplines like literature and history.

But return now to antiquity, when Aristotle's *Rhetoric* paled in impact beside the writings of Isocrates (436–338). Isocrates did much to rescue the teaching of public discourse from the calumny of his contemporary Plato. Isocrates insisted that speakers must never make "the worse case appear the better"; that oratory should be used only for public good; even that a lofty style would elevate a speaker's morals. The style he taught highlighted composition in balanced periods, equal in length, achieving equilibrium through (in Thomas Conley's words) "parallelism and antithesis at every level from that of diction to that of larger units of composition." If Isocratean style sounds insufferably baroque, think of Edmund Burke or Daniel Webster; and the popularity of Isocrates's instruction may become clearer.[7]

But Isocrates did not really innovate in rhetorical theory; rather, he became vastly influential because he made rhetoric the heart of advanced education. Before him, Greek education—beyond teaching some boys how to read and write—was scattershot. No detailed information survives about Isocrates's own school: just its fame and a few of its elite pupils. Even his extant statements on teaching tell us little except that he stressed deliberative discourse, written as well as spoken. Yet classical Greco-Roman education at its higher level was rhetorical schooling descended from his practices. These spread through the Mediterranean in the wake of Alexander's conquests. Rome, in turn, adopted Hellenistic rhetorical education, implanted it everywhere, and passed it on, much modified, to the Middle Ages. This enduring Isocratean heritage kept rhetoric prominent in the family of *philología*. Rhetoric's relation to philological *scholarship* always proved shakier. A few learned men did explore rhetoric. Many more humdrum schoolmasters only drilled pupils in it.[8]

The first scholars actually to call themselves philologists stood at a distance from rhetoric. They worked in a library rather than in the public square. They devoted their labors to texts rather than to the spoken word. And the texts that most absorbed them were those of Homer.

To understand why requires a digression, backtracking in time from the era of Plato and Isocrates. Ancient Greeks long looked on the *Iliad* and *Odyssey* with unique reverence, much as Jews and Christians view the Bible.* The Homeric epics even seemed storehouses of divine wisdom, masked in allegory. No wonder that, as John Sandys said, from "the days of Solon" onward, "Homer was constantly studied and quoted, and was a favorite theme for allegorizing interpretation and for rationalistic or rhetorical treatment." Yet what did the name Homer mean in the days of the Athenian lawgiver Solon (ca. 638–558 BCE)—and thereafter? Unlettered singers had long entertained Greeks by stitching together tales of the Trojan War and the wanderings of Odysseus. Solon's contemporaries ascribed such epic yarns generically to Homer, a great songster of uncertain date and reality. Some time after the Greeks learned the alphabet (again, soon after 800 BCE), someone committed some of these stories to writing, perhaps first as an aid to oral performance. No one today knows who, where, when, or in what form. One dubious tradition says it happened by order of the Athenian ruler Pisistratus around 550 BCE. Some modern classicists have plumped for a century or two earlier. If Pisistratus did so act, he may have wanted a transcript for use by the rhapsodes who intoned the *Iliad* and *Odyssey* at the Greater Panathenaea, a quadrennial festival. But not until the second century BCE did Homer's poems settle down into the shape known today. The relentless quotation, the varying interpretations, the wish for an authoritative version, all help to explain why textual philology eventually developed.[9]

* One biblical critic has argued that New Testament authors consciously imitated Homer; see MacDonald 2000 and 2003.

But philology happened only after books become common enough to pose complex problems. During the fifth century BCE, written works snowballed in prose as well as verse. At the same time, run-of-the-mill terms used to pass moral judgment on oral recitations acquired new, technical meanings; for example, μετρον (*metron*), meaning 'measure' (as in 'due measure'), came to mean poetic 'meter.' These idioms better fitted discussion of written work and eventually provided jargon for critical scholarship. Near the century's end, bookselling appeared as a recognized if rare business. Booksellers imply book manufacturers, turning out multiple copies. Copyists wrote, as had the authors they duplicated, on rectangular papyrus pages pasted together to form long sheets, one page wide; these sheets were rolled up for ease in handling and storage.* A reader would hold one end of the roll in one hand, the other end in the other hand, unscrolling from one side and rolling up from the other as he read. (Or as she read, far less often. Patriarchal though it was, classical antiquity did not utterly deny schooling to girls, especially girls of high caste.) Throughout antiquity, indeed until modern times, books remained the indulgence of an elite; but the tiny elite was growing slightly larger. Once booksellers existed, book collectors appeared. After 400 BCE, more and more references pop up to private libraries. Most at first must have been small, holding more like a dozen than hundreds of scrolls.[10]

Handwritten scrolls, copied by hand, offered boundless chances for error to creep in. Even the most meticulous scribe could slip when lamps guttered or ink smudged. Cicero's gripe to his brother described the stock of many an ancient bookseller: "both written and sold so carelessly." The complaint echoed down through the ages, from Galen in second-century CE Pergamum to Maimonides in twelfth-century Egypt and Chaucer in fourteenth-century London. The more copies of a work, the more mistakes. In works as long and as commonplace as Homer's epics, whole lines vanished or materialized out of thin air. Rhapsodes reciting Homer altered words and even added their own riffs, multiplying the variants circulating in writing. Where religious propriety demanded consistency—recall the declaiming of the *Iliad* at the Greater Panathenaea—unreliable texts shamed a city. During the later fourth century certain plays of Aeschylus, Sophocles, and Euripides were repeatedly performed in Athens during state religious celebrations. The politician Lycurgus mandated, around 330, that official versions of these plays be kept with the public records. One might joke that Lycurgus legislated textual philology and made the Athens record office into the first public library.[11]

The real first public library (so far as anyone knows), and the nursery of textual philology, lay across the Mediterranean. After Alexander the Great's death in 323 BCE, one of his generals made himself king of Egypt as Ptolemy I.

* Papyrus—whence 'paper'—is a Nile reed (*Cyperus papyrus*) from which Egyptians formed durable, flexible sheets for writing, exported all over the ancient Mediterranean world. βιβλος, the Greek word for the papyrus plant, got transferred to the scroll made from it. *Biblos* gave us bibliography, bibliophiles, and the Bible.

Cultivated and ambitious, Ptolemy carried a Greek tradition of monarchical literary patronage to spectacular new lengths. Many Greek cities had a Μουσεῖον (*Mouseīon*), a shrine to the Muses, sometimes a center for literary activity. Around 300 Ptolemy set up in Alexandria his own Μουσεῖον (whence our word *museum*). But he really created a new species: a college of scholars and scientists on royal salary engaged in both teaching and research. Ptolemy aimed to challenge Athens as cultural center of the Greek world. For at least the next three reigns (to 205), his successors—confusingly also called Ptolemy—must have shared this ambition. Dogged royal persuasion lured to Alexandria's Museum intellectual stars like Euclid and Eratosthenes (he who computed the earth's circumference). Ptolemy I or more likely his son Ptolemy II added the great Library.* The Ptolemies seemingly planned to amass all Greek texts, from tragedies to cookbooks. By the time the dynasty's final heir, Cleopatra VII, began dispensing her books, along with other favors, to Julius Caesar in 48 BCE, the Library of Alexandria held thousands and thousands of scrolls. The Ptolemies got their manuscripts by sending out agents to buy, by hijacking books from ships docked at Alexandria, and by bald-faced deceit. Ptolemy III supposedly borrowed Athens's official manuscript of plays by Aeschylus, Sophocles, and Euripides—after posting an enormous bond—and then pirated it, sending Athens a copy and forfeiting the bond. (The first library fine?) Such free-spending bibliomania affected the quality of the collection for bad as well as good. Some dealers turned out as dodgy as the third Ptolemy, passing off sloppy copies, even outright forgeries of 'old' manuscripts. (Booksellers in Rome were pulling the same scam three or four centuries later, when the rhetorical teacher Quintilian also groused that they swiped his lectures.) The mushrooming Alexandrian trove contained, too, lots of duplicates, rarely identical in wording.[12]

These quality-control issues posed problems for which the invention of textual philology gave the solution. The Alexandrians around the library were not first to see such predicaments or to handle texts with a scholarly cast of mind. The earliest scroll to survive from ancient Greece was dug up in 1962 in the residue of a funeral pyre, badly singed. This Derveni Papyrus contains a strange, line-by-line, allegorical commentary on passages ascribed to Heraclitus, Homer, and the mythical Orpheus. In form, the exegesis prefigures later literary commentaries. The scroll dates from about 330, but its contents maybe from seventy years earlier. Clearly, the tide of written books swelling from the later fifth century onward had begun to turn attention to problems of texts and their meanings. The poet Antimachus of Colophon (fl. 400) studied Homer's language and prepared the first known 'edition' of Homer; on what basis no one knows. Aristotle's lost work *Homeric Problems* used historical context to clear up puzzles in the text. Aristotle had earlier emended the *Iliad* for his

*Our knowledge of the Library of Alexandria and of Hellenistic scholarship in general depends on assertions by later writers: thus there is much uncertainty in what follows.

obelus). The ball Zenodotus started rolling never stopped. We still put tiny marks on pages to guide readers through the maze of words. Succeeding Alexandrian critics dreamed up other marginal signs. These included the *diplē* (>) to signal something worthy of note in Homer (replaced in non-Homeric texts, puzzlingly, by the letter chi [χ]) and the *asteriskos* (*) to mark a wrongly repeated passage in a manuscript. Aristarchus even concocted a sign to object to Zenodotus's deletions. Too arcane for ordinary readers, the system proved a huge boon to scholars. They could now show emendations without altering the words of a manuscript. Absent these editorial symbols and the commentary, we might be stuck today with an *Iliad* warped by even the wackiest of Zenodotus's inspirations. Instead, the slash-and-burn approach that some Alexandrians took to Homer vented harmlessly in editions with *obeli*-littered margins. The most prolific inventor of signs for guiding readers through a scroll was Aristophanes of Byzantium. He not only came up with several new critical symbols but also devised accent marks in use today (acute, grave, and circumflex); these aided nonnative speakers of Greek (the majority in the Hellenistic world) to pronounce correctly words that they read. And he invented other new marks to help such readers know when and how long to pause in a text when reading—the comma, the colon, and the period (or full stop). The first textual philologists gave us punctuation. Any casual museumgoer trying to decode a Roman inscription knows the value of that gift.[19]

Besides their editions, commentaries, and grammars, the philologists of Alexandria—and of other Hellenistic centers of erudition—did much that looks to modern eyes more like history than philology. They wrote scholarly biographies; collected old lore about shrines, gods, heroes, cities, and so forth; copied inscriptions; described monuments; and tried to sort out the chronology of past events and writings. Much that historians now do, these learned men did—though 'history' did not yet mean only past happenings. But (comparing them to earlier Greek historians) Hellenistic philologists did not share the sensibility of a Thucydides, who fixed his eye on war and politics. They look more like Herodotus, with his omnivorous appetite for curious details about this people or that. And yet they did not try to compose organized narratives such as Herodotus had written—and such as a Hellenistic contemporary like Polybius (ca. 200–118) created in his history of Rome. If anything, they preferred to arrange the scattered fragments they excavated from the past into revealing mosaics. We would perhaps label these ancient scholars antiquarians; and their interests do resemble those of the antiquarians who would play a huge role in early modern scholarship. Learned research into such matters as natural wonders or chronology does not, by modern lights, fit well with textual criticism and rhetoric. But to divide such inquiries from philology would warp Hellenistic conceptions of learning. And antiquarian erudition stayed tightly bound to philology as it developed in Rome and then in Europe in later centuries.[20]

The scholars around the library and Museum probably had nothing to do with the best known monument of Alexandrian philology. Under the Ptolemies the city housed a large Jewish community. By and large these Jews, Hellenized in culture, spoke Greek as their mother tongue. Like all Jews, they revered as the scriptural center of their faith the ancient Hebrew writings called Torah—'teaching' or 'law.' (Jews also called the Torah the Five Books of Moses: thus to Greek speakers the 'five scroll-cases,' πεντάτευχος, whence Pentateuch, a term still standard.*) But few Hellenized Jews understood the Hebrew of the Torah—a pickle like that of English-speaking Catholics before the 1960s hearing the Latin Mass. Around the early third century BCE, Jewish scholars in Alexandria translated the Torah into Greek: compare the English missals that those Catholics used to carry to Mass. The work possibly went on under the patronage of Ptolemy II, who would have had his own royal reasons for wanting the law of a subject people in his library. There followed—and maybe preceded—other Greek translations of Hebrew scriptures. Collectively, these came to be called the Septuagint, abbreviated with the Roman numeral LXX (seventy), although the writings under this label varied. (The name and abbreviation come from a tale that seventy-two translators miraculously finished their work in seventy-two days.) These translations found wide use in the Jewish diaspora, until eventually versions reckoned more authentic expelled them. But they survived long enough for early Christians to adopt the Septuagint as their divinely inspired Old Testament. It will reappear soon, along with knotty relations between Jewish and Christian philologists.[21]

But first another new path blazed in Hellenistic philology needs explication. Of the four main strands of ancient philology—language theory, rhetoric, textual criticism, and grammar—the last emerged latest as an independent study. Grammatical issues did crop up in early rhetorical teaching, and stabs at figuring out how pieces of language work go back to at least the fifth century BCE. The sophist Protagoras then stumbled toward the ideas of noun gender and verb mood. Aristotle recognized a notion of verb tense, a few parts of speech, and difference between active and passive verbs. Alexandria's great rival as a hub of scholarship was Pergamum, in present-day western Turkey, site of the *second*-largest library in the Hellenistic world. As with Alexandrian erudition, mere echoes of fragments of Pergamene learning survive. But scholars in and around Pergamum apparently spent more time analyzing language than wrestling with textual problems. Later sources suggest that, as early as the third century BCE, Pergamenes were at work on etymology and phonetics (sidelines in Alexandria) and on grammatical problems. Yet Pergamum was in the lead, not alone. In second-century Alexandria, grammar formed part of Aristarchus's discussions. His methodical dissection of language yielded propositions that might be called grammatical laws, although

* The Pentateuch comprises the books known in English as Genesis, Exodus, Leviticus, Numbers, and Deuteronomy.

perhaps not yet grammar as an autonomous branch of learning separate from textual philology.[22]

Aristarchus's student Dionysius Thrax (ca. 170–90 BCE) may have been the first person to devote a book to grammar. At any rate the Τέχνή γραμματική (*Téchnē grammatikē*; *Art of Grammar*) was long ascribed to Dionysius. Recent scholars doubt the attribution, while thinking the opening section of the *Téchnē* and its basic system to be Dionysius's. Whoever the author, he (like Aristarchus) melded Alexandrian and Pergamene traditions. The mixing probably mattered. Bypassing an apparent Alexandrian quest for general prescriptive rules, the more empirically minded grammarians of Pergamene seem to have gotten much further than their rivals in breaking down Greek into parts of speech and identifying their inflections. Recognizing how little we really know, one might hazard a guess that Alexandria supplied the broad framework of the *Téchnē* and Pergamum most of its detailed contents. A reconstructed version, some fifty pages in print, covers everything from accents and punctuation, through declensions and conjugations, to relative, personal, and possessive pronouns. The little book remained a standard handbook through the Middle Ages. School grammars today are its great-great-grandchildren.[23]

But in antiquity grammar meant much more than parsing sentences. Dionysius divided grammar into six parts. His pupil Tyrannion separated it, more influentially, into four modes of treating a text: recitation, explanation, emendation, and evaluation. This program boiled down to teaching people how to read, with sophisticated grasp, in a culture of oral reading where voice mattered as well as comprehension. Yet here grammar gains almost the breadth of *philología* itself. And why should it not? What did a refined ancient reader need, besides well-modulated vocal cords? He (again, far less often she) required a scroll purged of errors, mastery of the language written on it, and knowledge of the historical and mythological lore to which the writer referred. Add some arguments about etymology and you have a summary of Hellenistic philology and its associated antiquarian research. Such range suggests how grammar could become the core of secondary schooling, as it did in the Roman world. Rome, not coincidentally, is where Tyrannion settled around 67 BCE. There he made a bundle as a chic teacher. There his four-part division of grammar, adopted by the Roman scholar Varro, became normative—in theory if not in the ordinary schoolmaster's drill.[24]

Roman Annexation

By the time Rome's imperial paw finished pinning down the Greek-speaking world, Hellenes like Tyrannion had completed the foundations of 'philology'—in a meaning as broad as its nineteenth-century usage, though far from identical to it. The Romans absorbed Hellenistic *philología* as they soaked up so much else from the Greeks. Centuries before, they had borrowed even their

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]

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 βίβλια, 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 taleteller'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.

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-

2

"A Complete Mastery of Antiquity"

Renaissance, Reformation, and Beyond

No sharp break divided late medieval intellectual life, with its Scholastics who scorned philology, from the Renaissance, with its humanists who gave philology new life. Jean Gerson long personified the supposed aridity of late Scholasticism. Yet Gerson pioneered new literary forms and admired the Latin style of humanists of his era. Italian universities of the fifteenth and sixteenth centuries, once pictured as hostile to humanists, turn out to have welcomed them.[1]

Yet one need not caricature the *dramatis personae* to realize that a new act opened in the northern Italian peninsula during the thirteenth century. There Scholasticism had not seized control of the universities. There self-governing city-states had evolved a civic consciousness alert to ancient Roman writings suited to urban republics. Teachers of rhetoric had shifted focus from preaching to *ars dictaminis*, the art of letter writing; they looked back to antique models, but their literary skill brought present-day jobs as secretaries and chancellors in state offices. Finally, study of Roman law to aid civic governance awoke scholars in places like the University of Bologna to the vigor of antiquity. These circumstances combined to transform intellectual life in urban centers dotting the peninsula north of Rome. The ancient philological and rhetorical heritage again enticed. Italians revived it, then extended it.[2]

Italian Humanism

The unlikely revolutionary was a judge in Padua, Lovato dei Lovati (1241–1309). Around him congregated a coterie of admirers of classical antiquity. Lovato's wide reading in ancient Roman writers showed in his own works, ranging from letters in Latin verse to a little essay explaining Seneca's meter

(possibly the first such analysis of classical verse since antiquity). Like ancient antiquarians, he loved old inscriptions and other tangible traces of Padua's past. When by chance builders unearthed an early Christian sarcophagus, Lovato declared it to hold the bones of Antenor, mythical Trojan founder of Padua; patriotic Paduans applauded. According to Nicholas Mann, Lovato displayed key traits of emerging humanism: "an appetite for classical texts; a philological concern to correct them and ascertain their meaning; and a desire to imitate them." He also pioneered in hunting rare manuscripts buried in monastic libraries. And in his Latin poetry Lovato mimicked ancient authors. His disciple Albertino Mussato imitated the ancients in another way: he became in 1317 the first individual since the end of antiquity known to celebrate his birthday. Italian humanism was born.[3]

In the next century, Francesco Petrarca (1304–74)—Petrarch in English—turned Lovato's activities into something like a program. Tuscan by birth, raised around the papal court in Avignon, trained in Roman law at Montpellier and Bologna, Petrarch fell under the spell of ancient Latin literature. Famed for vernacular poetry as well as Latin eloquence, Petrarch matters here as philologist. His rhetorical and legal education landed him a job as a papal bureaucrat in Avignon, with access to the riches of the pope's library. Petrarch traveled often on church business—indeed, he spent much of his life in motion before settling near Padua in his last years. In Liège in 1333 he found a manuscript of Cicero's forgotten oration *Pro Archia*. In Paris he came across a copy of the first-century BCE love poems of Propertius. Both texts he emended and annotated. He edited, too, Vergil *and* Servius's commentary on Vergil (correcting errors in Servius). He partly restored the fragmented text of the historian Livy—by collating manuscripts like his ancient predecessors and, when that failed, by conjectural emendation. His ample knowledge of Roman history fed antiquarian studies—of coins, inscriptions, monuments. When he died, he owned more Roman literature than any other private person, some of it his own discoveries. Petrarch personified comprehensive study of Latin classical antiquity, grounded in philology and antiquarianism. He brought back to life the all-embracing ancient 'grammar.'[4]

And he became a model for future humanist scholars. In Petrarch's wake, humanist erudition did three jobs: (1) policing the purity of contemporary writing (i.e., how closely it mirrored an idealized ancient usage); (2) finding, editing, and appraising ancient texts; and (3) pursuing historical and antiquarian research. But not all Italian humanists aspired to erudition. Most cared more about rhetoric than learning, while a Neoplatonist like Marsilio Ficino (1433–99) bypassed the historical concreteness of philology in search of abstract universals. Only a minority practiced scholarship of Petrarch's sort.[5]

Among those who did, study of ancient buildings and statues paralleled scrutiny of old manuscripts. Petrarch wandered Rome with Giovanni Colonna, admiring its ruins. Their rambles commonly ended at the Baths of Diocletian, where, he remembered, "our conversation often turned on history."

Petrarch's sensibility took more methodical form in later generations. Poggio Bracciolini (1380–1459) tried to date the ancient gates of Rome by inspecting construction materials and inscriptions. *Roma instaurata* (*Rome Restored*, 1447) by Flavio Biondo worked on a grander scale. Examining old books, archives, inscriptions, and coins, observing ruins, even turning over ancient bricks lying in the streets, Flavio did what his title promised. Humanists throughout Italy sketched old bridges and buildings, copied inscriptions, gathered coins. Their activities bring to mind ancient Roman antiquarians like Varro. Humanists were reviving an ancient program that Arnaldo Momigliano called "Varronian": recovering a civilization "by systematic collection of all the relics of the past." "Relics" included origins of place-names, historical events, and so forth, as well as physical remains. Antiquarians typically arrayed their finds—tangible or otherwise—in a mosaic of a place over time rather than in a linear narrative as a historian might.[6]

Above all, Italian humanists praised ancient elegance of expression; and classical rhetoric made a comeback. During the Middle Ages, squeezed between elementary schooling in grammar and the really serious higher education in dialectic, rhetoric had shrunk to a shadow of its ancient self. Humanist attitudes fed a resurgence. "The Christian religion does not rest on proof," declared the humanist Lorenzo Valla (1407–57), "but on persuasion, which is superior to proof." So much for Scholastic *scientia*. A crucial moment came in 1416. Attending the Council of Constance as a papal bureaucrat, Poggio Bracciolini, a tireless manuscript hunter, found at the nearby monastery of St. Gall a complete manuscript of Quintilian's *Institutes*, much of it lost since antiquity. Quintilian made rhetoric the master key to a complete educational curriculum. He also endorsed the hegemony of grammar and philology in the realm of scholarship. Recovery of Greek rhetoric from the faltering Byzantine Empire further stoked fervor for classical rhetorical education in fifteenth-century Italy. What effect the new rhetoric had in real schoolrooms is uncertain, but it gilded the prose coming out of Italian chancelleries where many humanists worked.[7]

This rhetorical revival did not cause humanists to abandon dialectic but to reimagine it. Petrarch sneered at technical Scholastic dialectical exercises yet accepted that students needed to learn logic. Lorenzo Valla proposed to rebuild dialectic as training in how to argue in ordinary words, as opposed to the formalized, arcane Scholastic version. This new dialectic could then play its *proper* role—as handmaid of rhetoric. In Valla's reformed *trivium*, rhetoric rules; dialectic makes rhetoric more effective; and grammar (meaning grounding in ancient languages and literatures) provides the raw material.[8]

The revival got interrupted, and a revised dialectic again pushed classical rhetoric into storage. The Dutch humanist Rudolfus Agricola (who had read Valla on the subject) carried Italian humanist rhetoric across the Alps in the later fifteenth century. But he merged it with dialectic—and gave dialectic the whip hand. Agricola's was a new humanist dialectic, engaged with Latin litera-

ture, not the despised Aristotelian logic of the Scholastics. His *De inventione dialectica* (1479) exerted wide influence. His equally anti-Aristotelian disciple Petrus Ramus (Pierre de la Ramée, 1515–72) may have exerted even wider. Ramus subordinated rhetoric to another new-model dialectic, less subtle than Agricola's, more schematic, better suited to schoolroom use. Ramus's program appealed especially to fellow Calvinists in England; in New England it shaped schooling into the eighteenth century. Practical rhetoric (teaching boys to write and speak well) remained important; and among grown-ups esteem for Ciceronian eloquence waned rather than vanished. So techniques of classical rhetoric survived in the classroom—and also in writings by people as famous as Kepler and Galileo. Yet not until around 1700 did classical rhetoric again become *à la mode*.[9]

Meanwhile, Italian humanists got lessons in historical change as, striving to emulate classical style, they learned more about ancient vocabulary and syntax. In 1355 Petrarch, then employed by Emperor Charles IV, used expertise in classical Latin (and Roman history) to prove fake an 'ancient Roman' document undercutting imperial authority. Because he worked so hard to copy classical eloquence, Petrarch saw the gap dividing 'barbarous' medieval Latin from the real, dead thing. And humanists soon learned that ancient literary Latin supplied a moving target, not one timeless style. Cicero provided one model, Tacitus another. By the early fifteenth century, humanists were studying how Latin usage changed over time in ancient Rome.* Lorenzo Valla showed an even keener historical sense than Petrarch. Purportedly, Emperor Constantine, after moving his capital east, granted authority over the western empire to the pope: the so-called Donation of Constantine. In 1439–40 King Alfonso of Aragon was feuding with Pope Eugenius. Alfonso's secretary was Valla. He applied to the 'donation' historical and linguistic analysis like Petrarch's, mixed with antiquarian expertise. With precision and acid tongue, he proved the document a medieval fabrication. Many had smelled a rat in the donation; but Valla's philology first nailed the rodent (a feat, apparently, with no practical result). Glen Bowersock called Valla's "analysis of language and style" the "beginning of serious philological criticism." Valla did not stop with Constantine. An influential Neoplatonic philosopher (today called Pseudo-Dionysius) was traditionally thought to be Dionysius the Areopagite, St. Paul's Athenian interlocutor. Tradition met Valla. He showed that a legal council, not philosophical academy, sat on the Areopagus, making Paul's Dionysius closer to jurist than philosopher. Valla went on: Neoplatonism hardly existed in Paul's day; a first-century date created historical absurdities in 'Dionysius's' writings; no one before Pope Gregory the Great (590–604) mentioned the book. Real historical criticism was at work.[10]

* Studies of Latin spilled over into vernaculars, increasingly vehicles for literature. Classical grammar supplied the model for vernacular grammars, such as the *Grammatica della lingua toscana* (ca. 1440) of Leon Battista Alberti.

Valla shows the possible, not the ordinary. Humanist emendation perhaps damaged more manuscripts than it improved. And for every genius like Valla, there was an Annius of Viterbo. A Dominican friar, Annius, in the spirit of Valla, laid out rules for critical evaluation of old sources. He practiced what he preached, in a sense. In 1498 appeared his *Commentaria super opera diversorum auctorum de antiquitatibus loquentium* (*Commentaries on Works of Various Authors Who Discuss Antiquities*). This tome melded excerpts from a raft of ancient authors with discussion of them by Annius. Expert philologists saw that Annius composed not only the commentaries but most of the 'ancient' writings. More typical humanists gobbled up the forgeries. Annius was far from the only counterfeiter.[11]

Still, by Valla's day, Renaissance erudition had staked out its territory. Humanist scholars salvaged forgotten manuscripts, chiefly from monastic libraries. (Some long-lost ancient texts were recovered; other manuscripts helped to correct or expand works already circulating.) Employing the ancient technical apparatus of critical marks, they emended these manuscripts—more often by conjecture than collation. They prepared editions. They wrote commentaries and similar works of criticism. They reformed Latin vocabulary, style, and grammar following the 'best' classical models. Parallel to this textual and rhetorical philology, they pursued antiquarian research into material relics such as buildings and coins.[12]

Angelo Ambrogini (1454–94), nicknamed Poliziano, showed the potential of Italian Renaissance philology. He had a couple of mangled manuscripts of Epictetus's *Enchiridion*; using quotations from the *Enchiridon* in a sixth-century commentary on Aristotle, Poliziano plugged holes and emended the text. In commenting on Ovid, he correctly traced the Latin word *nablĭum* (a sort of harp) through Greek ναῦλον (*naūlon*) back to Hebrew *nevel*—observing in the process the systematic consonant shift from Hebrew *v* to Latin *b*, a precocious insight foreshadowing nineteenth-century linguistics. Poliziano even inferred on philological grounds (off base this time) that Egypt influenced ancient Hebrew worship. And, unlike most contemporaries, he collated manuscripts as basis for emendation, turning to cautious conjecture only when manuscripts failed. With sometimes dazzling ingenuity and care, the best philologist of his generation was again doing textual and linguistic scholarship like the most skilled of his ancient forebears.[13]

But Renaissance philologists did such work from a historical point of view unavailable to their ancient models. Ancient philologists—emending old texts or recording civic myths—had seen their own times as continuous with the pasts they studied (Golden Ages and the like excepted). Even when lamenting his degenerate age, Varro knew it as part of the unbroken centuries of Roman history. Renaissance scholars differed. A long-dead ancient Rome, humanists believed, spoke through the words surviving from it. Philology enabled moderns to recover the historical reality behind these words. The literature, even the Latin, of classical antiquity had faded; now they were being retrieved. This

made more use of languages other than Latin—especially Greek and Hebrew—and used them in biblical as well as classical philology. 'Chiefly' matters: northern humanists did not break from the past but expanded what Italians began.

Consider Greek. Ability to read it never vanished in the Latin Middle Ages, but it became rare.* Italian humanists shifted the momentum. Petrarch took a stab at learning Greek until his tutor left. In the late 1300s, knowledge of Greek began to increase in Italy. In the mid-1400s, as the Ottomans closed in on Constantinople, refugees sped its spread. Even before, the Byzantine diplomat Manuel Chrysoloras taught Greek intermittently in Italy for a number of years from 1397. His pupils included Leonardo Bruni, the historian of Florence. Around 1500—when the number of Greek teachers got large enough to notice—the language began to meet some resistance. To Latin Christians, it could seem tainted with Greek Orthodox heresy; to some Scholastics who resented rhetoric and philology, it was tainted with humanism, too. Yet Scholastics also benefited from Greek: Aristotle, after all, was their great master.[21]

Scholastic and humanist stood at odds not in valuing ancient Greek writings but in how to approach them: the one philosophical, the other philological; the one dialectical, the other rhetorical; the one logical, the other historical. Both used Greek, but in dissimilar ways, on a differing range of texts. Bruni made controversial translations of Aristotle; but Aristotle the master of rhetoric and ethical guide intrigued him, not Aristotle the logician, physicist, and metaphysician. Bruni criticized Scholastic translators of Aristotle as so overly literal as to puzzle readers: the translator should grasp the broad meaning of a passage and mold it into elegant Latin prose for an educated general readership, not transliterate for a coterie of academic philosophers. Not Greek itself, but the typical philologist's disinterest in metaphysics, his interest in rhetoric, and his broader way of looking at the ancient world set philologist apart from Scholastic.[22]

Besides Aristotle and other pagan books, Greek opened to philological study the most high-risk text, the New Testament. Valla undertook—for practically the first time in the Latin west since antiquity—to examine Greek manuscripts of it. (No one knows which ones.) He worked up a string of notes, using the Alexandrian method of collating texts. But he compared Greek texts with the normative Latin Vulgate; for he planned to emend not the Greek Bible but the Vulgate itself. Circulated warily in his lifetime, his observations paved the way for later scholars, notably Erasmus of Rotterdam (ca. 1469–1536).[23]

By Erasmus's day a learned humanist would blush if he had no Greek, and Hebrew was spreading among Christian philologists. At first Hebrew mattered mainly for proselytizing Jews (urged already by the Council of Vienne in 1311).

*Readers will recall from chapter 1 that Greek had persisted since antiquity as a spoken language in out-of-the-way parts of southern Italy.

But, as noted in chapter 1, a handful of medieval Christian biblical scholars asked rabbis for help; by the fourteenth century a few even learned Hebrew themselves. A scattering of Italian humanists dabbled in the language. Motivated by philology and piety, Lorenzo Valla sought the *hebraicam veritatem* (Hebrew truth) of the Psalms. Pico della Mirandola studied Hebrew under Jewish teachers in order to read the mystical writings known as Kabbalah. (How far he got is unclear.) In 1416 Poggio Bracciolini found a converted Jew to introduce him to Hebrew. Poggio thought Hebrew "of no use in increasing our wisdom" but that "it adds something to our study of the Humanities"—specifically "Jerome's method of translation."[24] Both dismissive attitude and philological motive persisted, as Christian scholars reluctantly began to admit the value of rabbinic erudition in interpreting the Old Testament.

Until perhaps the late sixteenth century, Christian study of Hebrew was a minefield. Anti-Judaism made Hebrew odious to many Christians. (The street ran both ways; other Jews sometimes hassled those who helped Christian philologists, and Christian derision of Judaism got answered in kind. Christians flung a lot more mud.) Still, in 1524 Robert Wakefield, the first Hebrew lecturer in Cambridge, declared in his inaugural oration that he "judged worthy only that person who approached complex mysteries of sacred scripture . . . equipped with diverse languages"—Hebrew the essential one. The far more learned Hebraist who helped to make a Wakefield possible was the German Johannes Reuchlin. He published in 1506 a Hebrew grammar-cum-dictionary to help Christians learn the language.* His grammar squeezed Hebrew into the straitjacket of humanist Latin, and Reuchlin read Jewish writings through Christian glasses. Yet other Christians turned on him when he opposed a 1510 edict to destroy Jewish books throughout the Holy Roman Empire. Vitriol and cries of 'heretic' bombarded him until his death in 1522. Erasmus dragged his feet before finally endorsing Hebrew studies, and then he sweetened his backing with anti-Jewish bile. The great philologist Isaac Casaubon (1559–1614), who pored over rabbinic literature and treated it much as he handled Greek texts, stood out among Christian Hebraists in showing some tolerance, even amity toward actual Jews. Anti-Judaism was not the sole stumbling-block to Hebrew learning. In 1525 the French theologian Pierre Cousturier (Petrus Sutor)—with a sneer at the "little rhetorician" Erasmus—called it "completely insane" to learn *either* Greek or Hebrew for biblical study. The church had declared the Latin Vulgate version sufficient.[25]

Still, both languages spread; and their popularity among the learned spawned the 'trilingual college,' mixing in its curriculum Greek and Hebrew with the traditional Latin. The first *collegium trilinguae* appeared in 1498 within a new Spanish university at Alcalá de Henares, just east of Madrid. In

* From Reuchlin's and other Hebrew grammar books, Christian scholars also got the concepts of root, prefix, and suffix, previously unknown to Latin grammarians but soon applied to vernacular grammars.

1518 the Collegium Trilingue [*sic*], inspired by Erasmus, arose in Leuven in present-day Belgium (separate from the unfriendly Scholastic university there). In imitation, in 1530, François I established the Collège Royal in Paris (ancestor of the Collège de France). Under the aegis of Erasmus's humanist friend John Fisher, bishop of Rochester, St. John's College in Cambridge (founded 1511) morphed into a collegium trilinguae—followed by the slightly younger Corpus Christi College in Oxford. (In 1511 Erasmus, urged by Fisher, had become first to teach Greek in Cambridge, briefly.) In the 1540s Henry VIII founded regius professorships of Greek and Hebrew at both universities. In the next century a new Catholic congregation, the Oratorian priests in France, required seminarians to learn Latin, Greek, and Hebrew. In the 1630s a collegium trilinguae opened on Europe's far frontier: Harvard College in the young Massachusetts Bay Colony.[26]

From the later 1500s serious scholars commonly had Hebrew and dealings with learned Jews. Well-educated Calvinist Protestants might pick up the language in routine schooling, as Isaac Casaubon did. By the 1600s, Sephardic Jews in Amsterdam were writing books aimed at Christian readers, evidence of regular contact across a hostile border. A few Calvinist philologists, mostly Dutch, reciprocated by admitting in public that rabbinic books illuminated the Old Testament. By 1600 most Protestant exegetes also agreed on the trustworthiness of the rabbis' Masoretic Text of the Hebrew Bible. Their consensus made it tougher to howl about rabbinic corruption of the biblical text, as Christians had done for centuries. But, as a rule, neither this consensus, widespread use of Hebrew, nor links with erudite rabbis softened Christian animosity to Jews and Judaism.[27]

Hebrew and Greek together enabled a massive, precedent-setting, and delicate work of biblical philology: the Complutensian Polyglot Bible. (Complutum is the Latin name of Alcalá de Henares, home of the Spanish university where the Polyglot was made.) This sensitive enterprise went on under—and probably needed—the auspices of a powerful cardinal, Francisco Jiménez de Cisneros. Many converted Jews lived in Spain, their Hebrew at least baptized. The Polyglot's editors applied methods by then standard: seeking the oldest manuscripts available, collating many copies to fix the likeliest readings among variants. But it was *not* standard to pair the Vulgate with Greek and Hebrew versions of the Bible. The resulting Latin-Hebrew-Greek leviathan (the Pentateuch also in Aramaic) revived Origen's system of printing the text, in its different languages, in parallel columns. The method left prudently untouched choices of variants among the versions—and thus the authority of the Vulgate. The Complutensian Polyglot was published, in 1522, in a medium scarcely seventy-five years old: printing with movable type. *Printed* several years before the papacy allowed it to be *published*, the Polyglot contained the first printed Greek New Testament and thus opened a new era of scholarly biblical texts, copied by machine.[28]

Even before 1500, presses printed fourteen European languages, but printing affected philology little. Procedures of emending and commenting on manuscripts did not change because the final product appeared in print. Printing did tend to stabilize texts and reduce scribal error (though not as much as one might think); but print also stabilized mistakes. Printer-publishers, philologists at their side, worked fast to get an edition into print as soon as possible; they commonly collated only one or two manuscripts rather than several; they relied heavily on conjectural emendation: all practices guaranteed to generate errata. Printing did make texts more widely and cheaply available. In particular, Hebrew texts became more accessible to Christian scholars. (But then Catholic authorities came down on Jewish printers after the Roman Inquisition condemned the Talmud in 1553.) Changes other than printing mattered far more for philologists.[29]

One was growing knowledge and technique, as Erasmus's career shows. Indeed, one might characterize Erasmus (besides as a man with a disposition for the boxing ring) as synthesizer of philological craft built up since Petrarch. As peripatetic as Petrarch, Erasmus oscillated mainly among the Low Countries, England, and Basel, with briefer stays elsewhere. *Errans-mus*, 'roving rat,' his foes called him. In 1504 he discovered (in Parc Abbey near Leuven) and in 1505 published (in Paris) Lorenzo Valla's notes on the New Testament. Drawing again on earlier scholars, he promoted a new Greek pronunciation, believed closer to that of antiquity. His edition of the Greek New Testament (1516) ultimately proved an albatross around the necks of later philologists: Erasmus worked too haphazardly; yet his New Testament—owing to its priority and its editor's fame—long stood in the way of more accurate versions. But his edition did fix two key principles: that the same philological rules apply to the Bible as to other ancient texts and that a text in its original language overrules any translation. The latter might seem obvious. Not so. Erasmus's Greek manuscripts of the first epistle of John lacked a verse in the Latin Vulgate upholding the doctrine of the Trinity; so he discarded it. But editors of the Complutensian Polyglot kept this 'Johannine comma' (as it is now called)—translating it from Latin and inserting it into their Greek text! The Latin Bible sanctioned by the church trumped the Greek original.[30]

Erasmus's scholarship showed historical consciousness stronger even than Valla's. Erasmus thought historical contexts vital for fathoming the origin and transmission of any text, and thus for emending it. By imagining himself as a long-ago copyist, he articulated a dogma of textual philology: the principle of the 'harder reading.' Consider an uncertain scribe about to copy a confusing line. The copyist might inadvertently slip in a clearer phrase for one hard to get. Faced with two variants, the philologist should—counterintuitively—prefer the clumsier. It less likely reflected a copyist's error. In writing a biography of St. Jerome, Erasmus discarded traditional hagiography and studied Jerome's life as history—stripped of holy legends—in order to understand his writings.

Conversely, he scrutinized the works to understand the life. Text and context entangled in the same web of history. Erasmus wrote that he wanted to know "not only what is said but also by whom, to whom, with what words, at what time, on what occasion, what precedes and what follows." Students of the Bible, he insisted, needed to learn ancient history and geography as well as languages, but above all to ask what the biblical writer was thinking.[31]

Erasmus never questioned Valla's supposition of mental and moral continuity with the past. Antiquity seemed to both men a *distant* but not truly *different* world. According to Erasmus, philology could retrieve how a biblical author thought. The world where Paul and Luke walked and talked differed in many details from his own, but not in kind. The ancient past—classical as well as Christian—seemed at once unlike the present yet familiar.[32]

The past grew less familiar in writings by one of Erasmus's friends in Basel, Beatus Rhenanus. Beatus proved himself an accomplished textual philologist, notably in his 1526 *Annotationes* to Pliny the Elder's natural history. He insisted on great caution in emendation; on scrutiny of a whole manuscript for clues to the reading of any passage in it; on checking related texts and other writings of the same period for additional hints; on close attention to handwriting (what scholars now call paleography)—"the very letters in the old manuscripts"—to ensure that the philologist had gotten the word right (which some copyist perhaps misread). Unusually explicit about methods, his work became a model for reconstructing texts. History pervaded his writing: a history more alert to cultural difference (as we would say) than perhaps any before. In 1519 Beatus edited Tacitus's *Germania* (about German tribes encountered by the Romans). It hit Beatus that the people in Tacitus's pages behaved and thought nothing like modern Germans. (That ancient Germans were certified Barbarians, not St. Paul or Cicero, made it easier to realize how much they differed from modern folks.) Using skills honed in editions and commentaries, Beatus set out to make sense of masses of confused information about ancient and medieval Germans, scattered through motley sources. He assembled these data in *Res Germanicae* (*German History*, 1531). Beatus's compendium—a kind of anthology of primary material—supplied the first foundation for writing early medieval German history.[33]

Philology Reeling from Reformation

Historical sensitivity could get a philologist into trouble amid the upheavals of the Reformation era. It would be risky to suggest, say, that Moses had not actually composed the first five books of the Old Testament.[34] As Catholic and Protestant rulers struggled to impose their varied orthodoxies in the wake of the Reformation, heretics burned at the stake. Philologists rarely roasted; but they came under pressure to eschew any hint of heterodoxy and actively to defend orthodoxy—as defined locally. For obvious reasons, biblical philology

Creation." Calling Moses "principal Secretary to the Holy Ghost," Donne declared the secretary's account of creation "infallible"—although exactly how long ago God did his work "is matter of reason, and therefore various and perplex'd." By Donne's day, Protestants began to ask questions that would not have troubled an allegorically minded medieval exegete unconcerned about biblical 'history.' Where exactly sat the Garden of Eden? How scientifically precise was Moses in recording creation?[39]

Aside from its effect on biblical studies, 'confessionalization' of learning replaced key humanist ideals with new ones. These met a need for dogmatic exactitude created by the quarrels within Western Christianity. Protestant schools gave up aspirations to broad learning (an ambition, as already noted, that perhaps never got far in grubby reality); they opted for a narrower focus on doctrine and classical languages: raw material to make good Protestant servants of the state. The new Jesuit schools did offer a broader rhetorical training of high quality, but with a whopping dose of Catholic doctrine. On both sides, religious policing took priority in the curriculum. Personally scholars suffered from the same confessional stresses. Within a few years of Luther's theses, neutrality became a dead option. Learned friendships dissolved in acrimony. Scholars fled to safer cities, gave up sensitive topics, or put down their pens altogether. In Paris both Catholics and hard-line fellow Huguenots bedeviled Isaac Casaubon. He decamped to the then milder climate of England in 1610.[40]

Interconfessional quarrels sharpened the ever-developing sense of history. Catholics and rival Protestant groups hurled competing claims about origin and development of doctrines, church offices, and religious practices. The need to back up assertions breathed new life into the old genre of ecclesiastical history. The shade of Eusebius must have smiled upon the thick, heavily documented volumes. Polemical such histories were—thoroughly. But they also honed standards of historical evidence, as one tome after another came under fire. Protestants, banging home the message that Rome had strayed far from true Christianity, stressed the yawning gap between Jesus's world and present papist institutions—while also commonly insisting that their own teachings and customs returned to the church Jesus had founded. Catholics, clobbering Protestants for ruinous innovation, insisted on the continuity between that primitive church and the Church of Rome. The wrangling never got settled, but it did force scholars to mull over differing features of historical epochs. A more nuanced awareness of Jesus's context convinced some church historians to try to fill in its background of Jewish rituals and beliefs. The new Christian Hebraic scholarship made the effort more feasible.[41]

A trajectory arcs from Petrarch to Valla to Erasmus to Beatus Rhenanus to these ecclesiastical historians. Scholars with different religious and philosophical commitments, applying philological method in different ways, contributed to growing mindfulness of cultural variance between historical periods.

Without invoking determinism, a later observer nonetheless sees the result of philology's comparative method, as it continually set the present against the past and varied pasts against each other.

Yet politico-religious motives, not any internal dynamic of erudition, spurred investigation of the past. In this sense, history in the age of the Reformation grew decidedly ahistorical. To cite one case, English Protestants battled with English Catholics in exile to control the distant origins of English Christianity. What had really happened in sixth-century Kent was secondary. Such learned wars of religion had institutional fallout. The great Bodleian Library in Oxford opened in 1602 as a battery of *Protestant* learning—to "beate the Papists," as its first keeper put it, "with the forcible weapon of Antiquitie." This warrior sought to blow out of the water Catholic scholarship on the early church by showing that "the Papists" had tampered with manuscript evidence. (Alas for him, they had not.) The papists of the Bibliothèque du roi in Paris, meanwhile, amassed their own manuscript arsenal to bombard the rebel Protestants. The Reformation made erudition a weapon of war.[42]

Philology in the Wake of Reformation

Yet the Reformation did not kill humanism; rather, humanism's own limitations, *along with* changes in the world around it, pushed it in new directions. The common humanist aversion to philosophy, for instance, made it too one-sided to work for long as a broad worldview, especially after the Reformation threw theological disputes into high relief. Then, when religio-political violence tore Europe apart, humanists abandoned the perilous civic arena to take refuge in the scholar's study and university lecture hall. Compare the humanist Thomas More (1478–1535) with another great legal humanist four decades younger, Jacques Cujas (1520–90). More served Henry VIII as lord chancellor of England. Cujas shrank from public involvement. He no longer studied Roman law to apply it to contemporary problems, as earlier scholars had; instead he interrogated ancient texts to discover their meanings in their own time. The violence of the Reformation swirled about both More and Cujas. The politically engaged More died on the scaffold. The politically withdrawn Cujas died in his bed. What the Reformation did in northern Europe, political turmoil had already done in Italy. Early Florentine humanists studied Roman republicanism to better their own republic. But in the late fifteenth century, with Florence under the thumb of Lorenzo de' Medici, Poliziano withdrew into pure scholarship; like Cujas, he tried to understand the past on its own terms, gave up on finding lessons for the present.[43]

Scholars between the Reformation and the late seventeenth century are still rightly called humanists because of their languages and methods, but they looked on their work differently than did their earlier namesakes. More and more, erudition ran as a self-contained business. Scholars saw in each other

members of the same company, tied together with thick webs of correspondence. They formed the international Republic of Letters—a term that entered common use during the tumult of the early Reformation. In 1875 Mark Pattison, biographer of Casaubon, remarked about the sixteenth century, "There came now into existence, what has ever since been known as 'learning' in the special sense of the term." He was onto something. Such learning remained the animating ideal of the Republic of Letters until *philosophes* bumped *érudits* off their pedestals around 1700. By the time Erasmus died in 1536, the old rhetorical humanism was already beating a retreat into the fortress of the grammar schools. There Latin and Greek remained the touchstone of elite education into the twentieth century. But even there teaching of classical languages became, as a rule, ahistorical gerund grinding, barely aware of the ancient civilizations that spoke those languages.[44]

Ironically, this narrowing of the meaning of humanism diversified humanist scholarship. When church authorities dampened historical scrutiny of the Bible for a century after the Reformation, philological energy and ingenuity turned in new directions. And, with many classical texts already in print by the 1520s, erudition did not simply shift back toward text-oriented classical philology.[45]

Classical studies hardly vanished. Massive collections of emendations, variant readings, and observations on ancient history and life rolled off the presses. In 1557 Francesco Robortello published the first systematic handbook of classical textual philology; and in 1572 appeared the hefty, still authoritative Greek dictionary of Robert and Henri Estienne. Unedited texts remained to print (notably those of Sextus Empiricus in the 1560s, with widespread philosophical consequences in the revival of ancient skepticism). Classical texts already in print needed betterment. And, more intimately familiar with classical languages, writings, and history, philologists made better-informed conjectures about how to restore corrupt passages.[46]

Still, where philologists before the Reformation converged on classical and then biblical *texts*, their later successors diverged into manifold fields. A German humanist physician, writing in 1578, included within the purview of philology the study of—among other things—linguistic matters, aphorisms, proverbs, fables, histories, chronology, significant people, rivers, mountains, landscape, cities, morals, the cultures of peoples and races, religious rituals; in short, everything to be found in "good authors." He was no oddball. A quarter century later, a manifesto called *De Polymathia* (*On Polymathy*) appeared in Hamburg. It identified polymathy as historically oriented 'grammar' in the spacious ancient Alexandrian sense, citing Eratosthenes as exemplar. The author envisioned the insatiable polymath traipsing "per omnes disciplinarum campos"—through all fields of disciplines—filling up a bottomless bucket with sundry facts and material objects. The philologist thus claimed all knowledge created by human thought and action, generously leaving to other inquirers the natural world, or most of it.[47]

This intellectual imperialism diluted the humanist's special relationship with classical antiquity and altered its focus. Antiquity still mattered a lot; but polyhistors—as these universally learned scholars came to be called—found much else to occupy their hours. Philological polymathy even bridged for a time the age-old gap between philosophy and philology. Since 'grammar' now commanded *all* realms of the human mind, it took charge of philosophy as well. Early modern philologists grew specially fond of preaching the ancient Stoics. Scholars also homed in on neglected, specialized areas of ancient knowledge, such as geographical, botanical, or critical writings. The learned jurist Guillaume Budé produced in 1529 a fat lexicon-cum-commentary of Greek legal terms. Two decades later, Conrad Gesner published an even more elephantine *Bibliotheca Universalis*. It provided biographies of all ancient writers of Greek, Latin, or Hebrew—together with an encyclopedia of all knowledge, more or less, though heavy on the classical past.[48]

In the encyclopedic spirit of Gesner but more concisely, it will be helpful to visit a few domains of philology and related erudition, as these grew from the sixteenth century through the seventeenth; for the proliferation of philological curiosity appears in hindsight a big step toward the modern humanities.

Classical Antiquarianism, Chronology, and the Expansion of Antiquity

Since antiquity, artifacts had interacted with philology. The back-and-forth created a thicker, more nuanced sense of history. By the late sixteenth century, antiquarians were using more critical, better-informed methods to analyze ancient coins, buildings, tombs, and other relics; by the seventeenth, pictures of objects mentioned by ancient authors illustrated editions of their works. The study of inscriptions—much later named epigraphy—in particular grew more systematic. Epigraphers—to use that anachronistic term—borrowed approaches from textual philologists (such as studies of the historical evolution of Latin) to understand and date inscriptions. Catalogs and indexes made more usable the printed volumes of inscriptions that multiplied with every decade, while textual philologists checked their accuracy.[49]

In 1546 diggers in the Roman Forum uncovered monumental inscriptions listing dates of kings, consuls, and military victors, from the legendary founding of Rome in 753 BCE up to the end of the republic. Moved to the Capitoline Hill, the inscriptions became known as the Fasti Capitolini. (*Fastus*—plural, *fasti*—in this context means a calendar, listing such items as festivals or magistrates then in office.) A monk called Onofrio Panvinio prepared a scholarly edition of the find, *Fasti et triumphi Romani* (1557). Panvinio also put together a sort of companion to the Fasti, *Reipublicae Romanae commentariorum libri tres* (*Three Books of Commentaries on the Roman Republic*).[50]

This latter work showed how closely philology and antiquarianism cooperated. For instance, Panvinio wanted to sort out the confusingly diverse Roman priesthoods. He dragged in evidence from as many quarters as possible: coins, texts, long inscriptions from monuments, short ones from tombstones. Then he had to make sense of it. William Stenhouse described his predicament:

> How could Panvinio be sure of a particular arcane word in a text, for example, if the manuscript of the ancient author from which it came was known to have been carelessly copied? Could his correspondents offer any parallels, or any general pieces of advice? How was a particular abbreviation in the letters around a coin's edge to be interpreted, and did the figure on the coin represent a priest? How many inscriptions were known at Rome which featured a particular sacrificial officer, and how were the variations in the way the name was spelled to be interpreted?

To recover the ancient past, the written record could not be kept apart from coins, architecture, inscriptions; nor vice versa. Panvinio himself amassed some three thousand inscriptions and nursed a plan—unfulfilled—to publish all known inscriptions. The philologist and the antiquarian were often the same person.[51]

The Fasti Capitolini helped to make the ancient subject of chronology a hot modern one. The quest for correct historical dates traveled far beyond Rome. Comprehending ancient calendars and supplying absolute dates for early events—a renewed version of Eusebius's research—defined what Anthony Grafton called "one of the great encyclopaedic disciplines of late humanism, technical chronology." Chronology veered alarmingly close to the Bible but also puzzled over the history of recently conquered Americans. Its greatest practitioner, Joseph Scaliger, was also one of the finest classical textual philologists of his age; philology in his hands became key to unlocking chronology. Scaliger also pursued the history of languages, fretted over how to group them, and tried to put the ancient study of etymology on a scientific basis. The extent of Scaliger's polymathy amazes, but diversity of learned interests was normal.[52]

Chronological research like his supplied a springboard into study of ancient Egypt and Israel and farther afield. Topically these 'oriental' studies were the most innovative thing early modern philologists did. Scaliger played a big part. His chronology conjured an alluring vision: in Peter Miller's words, "a new history of Europe that integrated the ancient Egyptian, Israelite, and Phoenician worlds of the eastern Mediterranean with the Greek and Roman civilizations of the western." Other philologists, too, turned skills forged to study Greece and Rome onto ancient cultures of Asia and even beyond. Such soundings could subvert orthodoxy as severely as biblical philology. Isaac La Peyrère invoked ancient chronologies from the Near East and New World, antedating the biblical timescale, to argue in *Prae-Adamitae* (1655) that human

dently once scurrying all over western Europe—but with a Germanic people called Franks.) French historians often acquired their philological skills through legal education, odd as that may sound. Legal scholars sought principles to bring order to the turmoil of their day, and civil law was inherited Roman law. So jurists applied philology, such as expert knowledge of ancient Latin vocabulary, to remains of Roman legal texts. They tried to figure out what each word meant to the ancient authors—in contrast to Scholastic jurists, who had rationalized such texts to fit current needs. Jacques Cujas, mentioned earlier, was preeminent among these philologically minded jurists. In their search, many of them saw—even more clearly than Bruni and Biondo—how different their times were from the ancient Rome that created the law Europe still tried to use. Disciples of Cujas went on to apply his approach to the medieval history of France, melding philology and historical narrative. Cujasians not only made scholarly readers more mindful of historical difference. They also sharpened methods that later historians would pick up.[58]

Such erudition was anything but disinterested. Nation-states evoked patriotic fervor: "after what I owe to God," wrote one student of Cujas, the historian Jacques-Auguste de Thou, in 1604, "nothing should be more dear and sacred to me than the love and respect owed to my *patrie*." A mix of nationalism and religious quarrels animated seventeenth-century English medievalist research. Christian antiquity fascinated scholars in the Church of England throughout the century, but the contents and meaning of ancient Christianity bounced around with every theological twitch.[59]

De Thou's English friend William Camden pulsed to his own nationalistic rhythms. He wrote an adulatory history of the reign of Queen Elizabeth, an account of the Gunpowder Plot, an inventory of the epitaphs in Westminster Abbey, and, above all, *Britannia* (first edition, 1586), a multivolume survey of Great Britain. It embraced scenery, Roman coins, folklore, monuments, law courts, customs, the sea, ancient and recent history, the kitchen sink.* It is worth a pause—a long pause—to get a flavor of the varied curiosity of the early modern antiquarian. Here is Camden introducing his account of the origin of the name Britain:

> [I]f you run over all particulars severally both new and old; you shall find, that every nation was of others called by divers names, from those that they themselves used. Thus they that in their native tongue had Israelites to their name, according to the Greeks were called Hebrews and Jewes, and by the Aegyptians *Huesi*, as witnesseth Manetho, because they had Heardmen for their governours. So the Greeks named them Syrians who, as Josephus writeth, called themselves Aramæans. They that named themselves Chusians, were by the Grecians of their blacke faces called Æthiopians. Those which after their own speech were named

* *Britannia* exemplified an early modern discipline called chorography, a topical survey of a region covering everything from soil types to antiquities.

> Celtæ, the Greeks termed Galatæ, of their milke-white colour, as some would have it, or of their long bush of haire, as I said erewhile. So, they that nominated themselves after their owne language Teutsch, Numidians and Hellenes, by the Romans were named Germans, Mauri and Grecians. . . . By the same reason we are to deem, that our ancestours, which termed themselves Cumero, were upon some other cause either by themselves or others, named Britans: From whence the Greekes framed their Βρετανία [Britania], and delivered the same as it were from hand to hand unto the Romans.

At long last, "This ground being laid let us enquire now into the names of our I[s]land."[60]

The reader glimpses here how philology, along with material artifacts, history, and legend, fertilized early modern antiquarianism—fascinated by old words as much as by old coins. The humanist Camden and other learned antiquaries of his day fussed over the forms of names, quoted Pliny in preference to any modern writer, grounded their work in timeworn documents. Just as characteristically, in 1599 Camden and his disciple Robert Cotton made the long journey from London to near the Scottish border to survey Roman ruins. Cotton specialized in the etymology of English words; but he also corresponded with historically oriented continental scholars such as De Thou, and he built up the largest library of old manuscripts in England. Cotton's friend Arthur Agarde scoured royal archives to solve puzzles connected with the eleventh-century survey of England called the *Domesday Book*. Curled up within antiquarianism was the fetus of history—but also of anthropology, sociology, folklore, the study of religion, economics, geography, soil science, and linguistics—not to mention travel writing.[61]

Into this jumble leached the anxiety about textual authenticity that obsessed philologists. Camden, with the air of a Valla dissecting the Donation of Constantine, disdained "Speeches and Orations, unless they be the very same verbatim, or else abbreviated." His friend John Selden—antiquary, legal historian, orientalist—scorned "mythic reports" and "bardish hymns." The modern concern for factual accuracy owed something to philology. Methods for digging up reliable facts about the past thus grew more expert, more 'objective,' even though the data went to partisan use. Among the most adept scholars of the seventeenth century were the monks of the congregation of Saint Maur. Their abbey at Saint-Germain-des-Prés, just outside of Paris (now in the heart of it), became synonymous with erudition. Working at first on the hagiography of their own Benedictine order, on monastic history, and on editions of Church Fathers, they sharpened philological skills. In 1675 an incautious Jesuit questioned the genuineness of early medieval charters privileging the Benedictine abbey of St. Denis. The Benedictines assigned the most acute of their Maurist philologists, Jean Mabillon, to vindicate his brothers. Mabillon crushed the skeptical Jesuit under the weight of *De re diplomatica* (1681). In

this treatise Mabillon codified the eclectic methods of philology to create the technical discipline of diplomatics: the science of deciphering and assessing old records to determine their authenticity and meaning. *De re diplomatica* put historical research on a more systematic basis.* So effective a tool did not escape the notice of the crown. By the early eighteenth century the learned monks of Saint-Germain were devoting their labor largely to shoring up the grandeur of France.[62]

The Phenomena of Language

Using philology to glorify the *patria* reached an acme of sorts in debates over Adam's language. What did Adam and Eve speak in the Garden of Eden? Was it the perfect language, given directly by God, mirroring the real essences of things? The question was old. Augustine had views; Dante tussled with it. Had the Edenic language vanished at the Tower of Babel, or did some language today echo it? Despite enmity to Jews, scholars had long bet on Hebrew as the likeliest candidate for Adam's language (or its closest descendant). Isaac Casaubon was sure of it. In 1613 Claude Duret even demonstrated the relationship of Hebrew to the language of animals. Such impartial universalism could not hold out against early modern patriotism. Already in the 1540s the Florentine Giovan Battista Gelli identified Tuscan as the most nearly perfect language, descended directly from Noah's Aramaic. Georg Stiernhielm (1598–1672) made a similar claim for Old Norse, and Jan van Gorp (1519–72) for Flemish—specifically, the dialect spoken around Antwerp. Flemish, in fact, got several votes among the learned. It helps to recall that the learned at this time concentrated heavily in Leiden, Leuven, Antwerp, and Amsterdam. In 1688 Andreas Kempe's *Die Sprachen des Paradises* (*The Languages of Paradise*) had God speaking Swedish to Adam, Adam replying in Danish, with meanwhile the serpent seducing Eve in French. Parody got close to reality.[63]

This chauvinistic melee had two serious consequences. First, it spurred research into language families and the genealogy of tongues. Many scholars believed that all European languages formed a single family, derived from the speech of Noah's son Japheth. In 1584 a Slovene grammar recognized that what came to be called the Slavic languages were connected. Other sixteenth-century philologists put together the family later named Semitic. *Lingua belgica* (1612) by Abraham van der Myl speculated on the history of the Germanic tongues. (He included Scandinavian languages, English, and Lowland Scots, as would later linguists). He advanced the plausible theory that older languages would have spawned more, and more widespread, daughter tongues

* Works like *De re diplomatica* and, fifteen years later, Jean Le Clerc's *Ars critica* sought more broadly to vindicate historical and philological erudition against the revival in early modern Europe of ancient philosophical skepticism.

than younger ones: so the size and dispersal of a language family suggested its age. But how to determine filiation of languages remained very uncertain.[64]

Second, the Adamic language debate invigorated inquiries into language itself as a general phenomenon. This thinking took two forms. One was an old quest for a universal language: an artificial tongue with which people could communicate across natural linguistic barriers. This pursuit carried with it (to some extent required) a second, parallel labor: to identify traits shared by all human languages. These lines of work—whether aimed at meta-analysis of human tongues or at invention of a universal language—hearkened back to the *grammatica speculativa* of the medieval Scholastics: turning grammar into rules that must underlie all languages.[65]

A perfect universal language would mirror without distortion the order of nature itself. (Recall the ancient thinkers who believed that words expressed the nature of the things they named.) Such a man-made tongue, easy to learn because of its logical structure, would allow people to communicate regardless of vernaculars and with exactness impossible in natural languages. It might replace Latin as the idiom of science. The idea traveled widely in the seventeenth century. René Descartes, lover of clear and distinct ideas, toyed with it. But in England the project of inventing a universal language really caught on. There, Francis Bacon had railed at the ambiguities of natural language and the barren, merely semantic disagreements it engendered. He called for a new kind of grammar to clarify how words related to things. Bacon's disciples in the new Royal Society (chartered 1662) stressed the need to report scientific research in lucid, simple language.[66]

One of these disciples—a founder of the Royal Society—was Bishop John Wilkins. He produced the best-known, most finished artificial language of the century. After working for a quarter century, Wilkins published in 1668 *An Essay toward a Real Character and a Philosophical Language*, supposedly founded on basic terms common to all natural languages and "legible by any Nation in their own Tongue." In 270 folio pages of tables, Wilkins laid out a classification starting with forty genera, branching into 251 "characteristic differences" and then into 2,030 species. Wilkins's new language did not, in fact, replace Latin as the language of learning. Rather, foreign savants begged the Royal Society to have his *Essay* translated into Latin so they could read it. But it did prepare ground for future nonnatural languages (such as American Sign Language) and, more significantly, for semantic theories. Wilkins would have boggled at electronic computers but not at the languages invented to program them.[67]

Related efforts to devise a universal grammar also thrived. Descended directly from *grammatica speculativa*, universal grammar promised analysis of natural language that would explain all tongues. In 1587, the Salamanca professor Francisco Sánchez de las Brozas published *Minerva sive de causis linguae Latinae* (*Minerva, or, On the Properties of the Latin Language*). Any language, Sánchez pointed out, could be translated into any other. Therefore, he

argued, all languages must share an underlying structure, reflecting the elemental categories of thought. These categories would have formed the grammar of the original language ancestral to all existing ones. Yet extant languages have different structures. Therefore, all of them must include implicit rules for sentence formation that mediate between deep patterns (the elemental categories common to all languages) and the surface structure peculiar to a given language. Such rules comprise the grammar of any actual language like Latin. Sánchez influenced the next century's most famous searchers for universal grammar. This group gathered around the abbey of Port-Royal—a half-hour stroll from the philological monks at Saint-Germain-des-Prés. The generative thinkers in the Port-Royal coterie were Blaise Pascal and the younger Antoine Arnauld. In *Grammaire générale et raisonnée* (1660; often known simply as the Port-Royal Grammar), the Port-Royal grammarians equated grammar and mental processes. With unprecedented thoroughness they analyzed the structures of language on foundational rational principles, rather than on usage alone. Port-Royal deemed linguistic forms to be logical, not merely conventional. Work like this evolved into modern theoretical linguistics in the nineteenth century.[68]

The nineteenth century had not arrived, and rigorous linguistic research was shadowed by half-cracked speculations like those of the Jesuit polymath Athanasius Kircher (1602–80). Take Alexander Pope's dictum, "a little learning is a dangerous thing"; imagine it walking on two legs and you have Kircher in his wilder moments. A modern student of Kircher called him "the last man who knew everything." Among his feats of linguistic omniscience, he purported to decode Egyptian hieroglyphs (not actually done until the nineteenth century)—and to prove that Chinese characters derived from them. After all, he thought Confucius might have been Moses. Kircher's erudition so impressed contemporaries that most found his flights of fancy plausible.[69]

The Return of Biblical Philology

The persisting religious hostilities that cramped biblical philology eventually roused the Dutch humanist Hugo Grotius to turn to it. Grotius had studied, brilliantly, under Scaliger in Leiden before getting a law degree from Orléans. Even in the fairly tolerant Netherlands, religious politics got Grotius thrown into jail for life in 1618. In 1621 he escaped, aptly hidden in a trunk supposed full of books, and went into exile in Paris. There he wrote his most celebrated work, *De iure belli ac pacis* (*On the Law of War and Peace*, 1625), a founding text of international law. Grotius believed that philological research into the Bible would also help to bring peace and reunite Christian Europe. Philology could reduce doctrinal quarrels by emending corrupted texts that fueled theological fights. It could even bring to a reasonable minimum the articles of faith that Christians professed. Grotius may sound like Pollyanna Philologica, but

did not much innovate. Rather, he assembled systematically a mass of conclusions heretofore sprinkled over thousands of scattered pages.[74]

That was his offense. He laid out at length alterations in the Old Testament text, chronological faults, transpositions, variants, borrowings from lost documents, dubious authorship—all the defects of the inspired word of God. He insisted on analyzing the sacred book with the panoply of historical and critical methods that philologists applied to classical texts: let the results fall where they may. And he wrote not in Latin, hidden to all but scholars, but in lucid French. The police tried to burn all 1,300 copies. Simon's religious order expelled him. Simon tried to vindicate his orthodoxy: to no avail. A copy that escaped the bonfire made its way across the English Channel. A faulty Amsterdam printing soon circulated, then an English version ("ill translated," said John Evelyn). In 1685 Simon agreed to the book's republication in the more lenient Netherlands. In 1689 he brought out a *Histoire critique du texte du Nouveau Testament*, in 1690 a *Histoire critique des versions du Nouveau Testament*, in 1693 a *Histoire critique des commentaires du Nouveau Testament*, and finally in 1702 an annotated translation of the New Testament. Church authorities condemned it, too. Simon also compared rabbinic traditions and Jewish rituals with Christian theology and ceremonies, arguing that early Christians modeled their liturgies on synagogue rites. He immersed in history not only the biblical text but even the evolution of Christian belief and worship.[75]

A young firebrand of the Republic of Letters, Jean Le Clerc, crossed swords with Simon. Le Clerc had no objection to Simon's historical approach to the Bible; he simply thought the older man's scholarship shallow. In 1685 Le Clerc posed the questions *he* thought crucial to answer: did the time-honored authors of the ancient Hebrew books actually write them? if not, when could they have been written and when and how compiled? Le Clerc had his own evolving answers. Moses, for instance, wrote part of the Pentateuch, melded with other writings by later editors. A century earlier, it would have been practically impossible to phrase such queries. Modern historical criticism of the Bible had arrived.[76]

Philology and History at Century's End

Le Clerc had broad notions of the task of 'criticism' and of historical writing in general. Finding out who had composed a text, tracing its transmission and the errors that crept in, only began the task:

> We still must discover, if possible, with what aim the author wrote, what occasioned him to take up his pen, and to which opinions, or to which events, this Work can refer, above all when it is not a matter of a book that contains general reflections or eternal truths, which are the same in all centuries and among all peoples of the world.

Le Clerc published in 1697 the first modern general theory of philology, *Ars critica* (*The Art of Criticism*). It summed up rules evolved to govern textual philology during the preceding century, an era of growing technical refinement. *Ars critica* made methodological axioms of textual philology explicit and displayed the deeper sense of historical distance between ancient texts and modern readers that philologists had developed. The book insisted that historically grounded philological criticism of a text, not speculative reason or authoritative tradition, offered the right road to biblical or any other interpretation. Le Clerc sharply distinguished between rhetoric—where history traditionally dwelled—and the *proper* practice of history. Historians must eschew bombastic, made-up declamations. Their job is watchful criticism of sources and realistic evaluation of possibilities, laid out in prose just as restrained. *Ars critica* influenced the English-speaking world into the nineteenth century, even as its Latin began to reek of an archaic scholarly world. In 1830 Cambridge University Press finally published a partial English translation.[77]

The Dutch scholar Jacob Perizonius showed how to apply principles like Le Clerc's—and showed to what extent European philology had grown 'historicized.' In *Animadversiones historicae* (*Historical Observations*, 1685) and later works, Perizonius fussed over the early history of Rome. He identified mistakes and confusions in ancient historians. Yet he argued that philological criticism could extract kernels of fact even from fables like that of Rome's founder Romulus. The historian should apply three criteria: reliability of the source; inherent possibility of the event; and contradiction by other sources (or its lack). In the case of the Romulus tale, Perizonius defended the trustworthiness of sources available to ancient Roman historians; dismissed yarns like the she-wolf suckling Romulus as absurd; and noted that Roman writers agreed on Romulus as founder. Ergo, a man named Romulus did found Rome, and afterward legend glorified him with claptrap. Perizonius also tried to ferret out lost sources hidden in surviving ones. He adopted a theory—suggested by a sentence in Cicero—that traditional songs (lost by Cicero's day) had preserved memories of historical events for early Roman historians to draw on. Perizonius's source criticism shows how historically conscious some philologists had become. And it shows the limits of that consciousness: Perizonius presumed that Romans would have found Romulus—bastard, fratricide, rapist—too disgraceful to invent. Ancient Romans still shared the values of modern Dutchmen.[78]

Unlike *Ars critica* and *Animadversiones historicae*, Simon wrote his *Histoires critiques* in French; and this was another step in a new direction. Spinoza's radical friend Lodewijk Meyer groused about the dominance of Latin in academic writing: it shut out ordinary people from intellectual life. That did not stop Meyer from writing Latin. But Simon broke the mold, and he was not alone. In the decades before 1700 a shift toward vernaculars began in the Republic of Letters. Latin remained the default language of the learned, but more and more followed Simon's example. International periodicals founded to in-

form the erudite—first Denis de Sallo's *Journal des sçavans* [*savants*] (1665), then Pierre Bayle's *Nouvelles de la république des lettres* (1684) and Le Clerc's *Bibliothèque universelle et historique* (1686)—commonly appeared in French. The Royal Society published its *Philosophical Transactions* in English from the first issue in 1665. In 1718 Christoph August Heumann issued in Hanover a survey of learning (an early form of intellectual history) entitled *Conspectus reipublicae litterariae* (*Conspectus of the Republic of Letters*). Sixteen years later Nikolaus Hieronimus Gundling produced at Frankfurt-am-Main a similar thing. (It was a popular genre among the professoriate.) But Gundling's appeared in German, *Vollständige Historie der Gelahrheit* [*sic*] (*Complete History of Learning*). And when Johann Erhard Kappen published at Leipzig in 1754 a new, more systematic history of the Republic of Letters, it, too, came out in his native tongue, not the traditional scholars' Latin. The slow emergence of vernacular intellectual cultures would affect philology. As time went by, English-speaking scholars, spending more and more time encased in their own language, would veer from usages of German or French peers.[79]

It is time now to focus on those English-speaking scholars. What did they inherit from earlier erudition? The hasty survey of European philology and allied braches of learning in this chapter has left out worlds more than it included. Where, for just one instance, is the study of mythology, which entered a new phase in the late seventeenth century?[80] But even this quick overview gives a sense of how philology evolved. Italian humanists recovered the legacy of ancient philology, grown mossy in the Middle Ages. This included rhetoric, textual criticism, and grammar, as well as related activities like antiquarian inquiries and chronology. Italian humanists often just copied methods of their Roman predecessors. But the most skilled of them learned to analyze and emend texts with new sophistication and even with a feeling for historical change missing in antiquity. They restored classical rhetoric before it got adapted to new forms of dialectic by their heirs north of the Alps. Those inheritors, dexterous in Greek and Hebrew, applied humanist methods to the Bible as well as to classical manuscripts. Buffeted by the Reformation, they settled down into something like 'professional scholarship' and greatly extended the range of their studies. Scholars reclaimed much of the material patrimony of Rome and taught themselves how to organize these remains, whether inscriptions, buildings, or coins. They pursued antiquarian research also into national pasts. They revived the ancient study of chronology and extended 'antiquity' beyond Rome and Greece, learning Arabic and other 'oriental' languages. They looked into religions beyond the familiar trio of Christian, Jew, and Muslim. They built on medieval grammar to deepen understanding of the phenomena of language, broaching the idea of language families and beginning awkwardly to assemble a few of them. Finally, daringly, even shockingly, some returned to scripture with a new historical approach.

In all these learned pursuits, history usually played some role—whether the history of languages, of nations, or of the biblical text—while comparison pro-