New Worlds, Ancient Texts
The Power of Tradition and the Shock of Discovery

Anthony Grafton
with April Shelford and Nancy Siraisi

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bombs, armed, powerful, and ready at any moment to explode. The books that had this high status in their readers’ eyes differed radically from one another, and those who wielded them could put them to vastly different uses. It will become clear that the textual canons of the fifteenth century inevitably lost their air of cohesion and completeness and yielded their authority to other cultural forms. But it will also become clear that those canons were more complex, and sometimes contained both far more striking contradictions and far more radical ideas than modern debaters admit.

Any canon of texts formed by a complex society with a long past must contain diverse elements imperfectly mixed. In the particular case of Renaissance Europe, several sets of texts and methods of reading competed for intellectual and institutional authority. Confronted by the New World, none of the available texts proved either too sterile to be useful or so useful as to survive unchanged. Recognition of these historical facts might help to modify both the rages and the enthusiasms of those who now seek to shape our curricula and our public discussion of our past.

Varied in texture and quality, dotted with both the worst and the best of what has been thought and said, authoritative texts provided the Europeans of the Renaissance with the only tools they had for understanding the thoughts and values of alien societies. Like other tools, these often broke in the hands of those who used them, and incompetent and corrupt craftsmen used them badly. But many of them also showed astonishing flexibility and resilience, changing as they were used and often changing those who used them. The task of understanding the full range of problems and possibilities they offered still challenges the historian’s learning and imagination.
In 1500 many European thinkers saw their world as a narrow, orderly place. Readers and publishers shared a taste for comprehensive books that described the world as a whole, summing up between two covers all intellectual disciplines and their results. Such texts ranged the gamut of scales and densities, from pocket-sized elementary textbooks to vast encyclopedias. But all of them embodied the assumption that a basically complete and accurate body of knowledge already existed. All of them suggested that few surprises could await the explorer of the past or the present, the reader of the Bible, or the student of the cosmos. And all of them heightened their appeal with evocative images of the power of bookish knowledge. Like stages brilliantly illuminated, they frame and highlight many of the powerful and long-lived ideas that would soon be brutally contradicted by experience.

Many of these books had their origins in the center of Europe—in the rich, comfortable, sophisticated free cities of the Holy Roman Empire. In these cities, many readers had a keen appetite for encyclopedic works which summed up between two covers all the intellectual disciplines and their results. Publishers—who, as always, knew and shared the prejudices of their audience—produced useful
reference books of every imaginable size and adorned these with powerful, evocative images of the power of books to describe and explain the universe. These purportedly comprehensive books are useful indicators of the general cultural temperature of Europe in the years around 1500.

The German encyclopedias are revealing in a number of ways, which reflect the remarkable communities in and for which they were produced as well as the tastes of their authors. In Strasbourg, Nuremberg, and Augsburg, intellectual life developed with relative freedom, unregulated by university faculties (though occasionally interfered with by town councils). Publishers could produce anything the local patricians thought acceptable, and merchants, lawyers, and craftsmen consumed their books with a confidence enhanced by the robust health of the German economy, the waning of the plagues of the fourteenth century, and the general decline of heretical movements. Die Gedanken sind frei, "Thoughts are free"—the words of the old German song perhaps never applied more closely than to the rich cities of Upper Germany in the last decades before the Reformation.

Konrad Peutinger—patrician, official, archaeologist, and correspondent of Erasmus—typifies this cosmopolitan world both socially and intellectually. He came from, and spent most of his life in, Augsburg, the base of the great banking families, the Fugger and the Welser. But his life was anything but confined to the spheres of administration and commerce. He studied the classics and took a law degree in Italy, collected rare books, published the first printed collection of Roman inscriptions, he even possessed and studied a manuscript road map of the Roman empire copied in the twelfth or thirteenth century from a fourth-century original. Peutinger, accordingly, took a broad view of the forms of knowledge most worth having. But he sometimes felt the need for a small-scale reference
work, and for that purpose he bought a little book published by a teacher at the university of Freiburg: Gregor Reisch's *Margarita philosophica* (Pearl of Philosophy). The *Margarita* traces the history of the world, beginning from the biblical account of the Creation, and schematically describes the canonical seven liberal arts. It reveals no sense that either the world or knowledge about it has changed dramatically since ancient times. Ancient and later authorities coexist, pulled out of geographical and chronological context to debate in a sort of "philosophical present," rather like the "ethnographic present" in which modern anthropologists have represented their subjects. The woodcut with which the book begins embodies a strikingly static vision of the liberal arts. A personified Grammar brandishes an alphabet in one hand and a key in the other. With this she opens the gate to a castle of knowledge, in which the disciplines and the higher faculty of theology passively await discovery by the student. Everything seems to be in order, neat and tidy. Grammar, the art of reading, gives entry to a world of knowledge entirely bounded by authors, one per subject: Euclid for geometry, Ptolemy for astronomy, Peter Lombard for theology. The traditional arts and sciences appear as finished, perfect entities that invite study rather than improvement. And the body of the text presents, between two covers and in a modest format, everything one could possibly wish to know. Grammar, the arts of argument, the natural sciences, theology, Creation and Damnation jostle here, none treated at very great length. "Sermons in books, stones in the running brooks"—so one might summarize this all-too-simple authoritative message. Yet a well-read and traveled man like Peutinger found it worthwhile to buy this book and adorn it with a signature and a warning not to remove it from his house. Evidently he found its map of knowledge—one as formal, schematic, and devoid of complicating detail as the charts of the London Underground—a useful simplification, basically accurate and helpful.
Peutinger's tastes were not idiosyncratic. A decade earlier, in Augsburg's main rival city, Nuremberg, the most aggressive and successful publisher in Europe, Anton Koburger, brought out his most famous and spectacular book. The Liber chronicon, now known as the Nuremberg Chronicle, was written by the humanist Hartmann Schedel and others, printed by Anton Koburger, and magnificently illustrated by the unrivaled woodcut artists of Nuremberg. Dwarfing Reisch's little book in both size and scope, it treats not the structure of the disciplines but the history of man. Vivid—and often fantastic—portraits of biblical and classical heroes and villains and views of ancient cities bring the past to life. The text, more sober but equally comprehensive, describes the Creation, maps the inhabited world, and follows human history step by step through the ages.

Yet in content the Chronicle seems as limited as the Margarita. It, too, tells a deeply traditional story. Its set-piece illustration of the universe portrays the normal cosmology of the medieval schools: one which confines all change to the world of the four elements at the center of things, earth, water, air, and fire, the realm where human beings live. The planets—the moon, Mercury, Venus, the sun, Mars, Saturn, and Jupiter—move regularly around the Earth, never changing, never suffering harm, embedded in perfect, transparent crystalline spheres. Beyond them appear the fixed stars, also embedded in a globe of crystal, outside that the quiring Cherubim—and eight more orders' worth of angels—sing hymns forever to the Creator. This vision of the universe derived its basic elements from the greatest of Greek philosophers, Plato and Aristotle, and its definitive form from the Neoplatonicians philosophers of late antiquity, Plotinus and Porphyry. It was preserved and taught through the Middle Ages by a host of texts, classical and later, big and little, from Dante's Divine Comedy to Reisch's Margarita. And it seemed fully known, comfortable and familiar.

The Chronicle, as its title indicates, was above all a narrative: a history of the world. Like other world histories written in antiquity and the Middle Ages—from which most of its text was drawn, without much editorial intervention—it spanned the millennia from the Creation to the present. It traced the development of human culture and the relations between the holy nation of the Jews and their jealous God. And it folded classical antiquity, the life of Christ, and the later history of the world into its embrace.

For all its cosmopolitan content, however, the Chronicle set out to edify rather than stimulate its readers. It arranged all of history into seven ages, not because empirical facts dictated this schema but in order to show that the long-term history of man symbolically corresponds to the seven days of the first week in which God created the universe. The first six ages are described in great detail, and the seventh—in which startling images of the arrival of the Antichrist and the Last Judgment precede even more frightening blank pages—shows even more vividly that the end of history will come with a bang, not a whimper, as God's plan fulfills itself with the judgment of the elect and the reprobate. History, evidently, is as logical and orderly as the cosmos itself, and both can be read as the stories of God's will working itself out in physical space and human time. Even the esoteric peoples of the past and present are, for the most part, portrayed in familiar terms. Biblical figures appear in fifteenth-century German costume and hairdos, the ancient cities of Nineveh and Jerusalem appear as modern towns, dominated by Gothic spires and powerful castles and hedged in from the darkness and idiocy of the surrounding countryside by crenellated walls. Both this vast, expensive, widely pirated work of art and Reisch's modest little Hitchhiker's Guide to the Seven Liberal Arts portray a past and present, a world and a universe as orderly and meticulously controlled as the guilds of an imperial city. For all their elegance of typography and
Figure 1.1 An eclectic map of the world from Hartmann Schedel's Liber Chronicarum (Nuremberg Chronicle) (Nuremberg, 1493). The basic layout of the continents derives from Ptolemy's Geography, but here the holy city of Jerusalem occupies the center of the world, as it did in medieval schematic T-O maps (Figure 2.3). The map also embeds geography in sacred history by showing the three sons of Noah—Japheth, Shem, and Ham—whose descendants populated the known world.

Figure 1.4 The early history of civilization from Werner Rolevinck's Fasciculus temporum (Cologne, 1474). The Tower of Babel appears anachronistically as a Gothic structure, Nineveh as a walled medieval city. The central timeline, with its numbers and bubbles, gives the dates of biblical patriarchs both in years counted forward from the creation of the world and in years counted backward from the birth of Christ. The texts above and below identify events in pagan history contemporary with biblical history, such as Zaraoaster’s invention of magic and Nimrod founding of the kingdom of Assyria.
The Universities: The World Explicated

In the late fifteenth century as now, the currents of intellectual life ran in a number of different circuits. The city halls and printing shops constituted one, another, much larger one was made up of universities. These institutions, which instilled their faculties and graduates with shared methods and convictions, were rapidly growing in both size and number. They varied in many respects, to be sure. Those in the North were generally governed by the masters, those in the South by the students. Northern universities treated theology as the highest of the sciences and envisioned themselves as basically religious institutions; Italian ones had long ago taken the practical studies of medicine and law as their higher faculties, and developed faculties for theological study only toward the end of the Middle Ages.

For all their variations in scope and organization, the universities resembled one another closely in assumptions and methods. All their students had to begin by studying the liberal arts, mastering a sequence of Aristotelian texts that taught them how to construct rigorous chains of argumentation and to refute the arguments of others. All of them concentrated on two forms of instruction, both verbal in form and both dependent on books for their basic material: the lecture, in which a teacher explicated a set text line by line and word by word, and the disputation, in which two scholars argued for and against a proposition in public. In both spheres understanding and the power to convince others required the dextrous manipulation of one set of basic intellectual tools: the formal syllogism, that still-unrivaled method of setting out a chain of arguments, from major term to minor term to conclusion ('Some dogs are red', 'My dog is red', 'My dog is some dog').

All university faculties, finally, assumed that the authority of the
disciplines they taught resided in a particular set of texts. These canonical works, laid down in antiquity and allowed to mellow in the cask for centuries, had a unique value and function. They furnished the basic body of unchallengeable statements which the specialists manipulated logically to produce usable knowledge. The theologians, for example, knew that they could confidently draw major premises for their syllogisms from the Bible, the lawyers knew that they could do the same with the Roman Corpus iuris, the physicians knew that they could do the same with the natural and medical works of Aristotle and Galen. Thus each could happily and efficiently construct whatever structure of doctrine he might need in order to show that the Host could not bleed or that a town could confer citizenship on newcomers—to name only two of the questions to which fourteenth- and fifteenth-century professors provided elaborate answers.

In each discipline, the senior denizens of the university knew that authoritative texts could pose serious problems. The Bible, for example, told many stories that seemed not only unimproving but immoral. In medicine, Aristotle and Galen disagreed about such basic points as the identity of the most important bodily organ. But these apparent flaws posed no danger to the larger structure of instruction and study. For the professors did not take their texts neat. They and their students consumed authoritative books in a form as canonical and closely regulated as the context in which they consumed them.

In the normal university textbook of the time, the authoritative text appears embedded in a modern commentary, which usually surrounds it on the page. The text normally occupies a central position and appears in a larger script or typeface, which provides physical and aesthetic evidence of its supreme authority: the spiky print of the early glossed Bible, for example, physically repels any
suggestion of fallibility. Around it, the official commentary—written or printed in smaller lettering, keyed by symbols to the relevant places in the text—both enhances the authority of the central text and ensures that its message can cause no problems. It does so in the most direct of ways: by using the tools of allegory and inference to show that the text is never inconsistent with its own values or in conflict with other texts of comparable authority. If necessary, whole independent treatises could be devoted to embedding the texts still more firmly in a frame that enhanced their authority. In some cases—like that of the medical Canon of Avicenna—the philosophers of medieval Islam, from whom Western scholastics took a great deal, had already produced usable supplementary texts.

Well-trained commentators deftly made the ancient text fit modern needs. They set out to show that it told no stories, taught no ideas, and contained no techniques that were irrelevant or unacceptable to its Christian audience. A theological commentator like Nicholas of Lyra could allegorize away such superficially uncomfortable texts as the Song of Solomon, reading them as veiled statements of higher truths. A medical commentator like Pietro d'Abano could use the tools of logic to reconcile his apparently contradictory authorities, Aristotle and Galen. The former saw the heart, the latter the liver as the central bodily organ. Pietro calmly showed that each was right, in a certain sense—and thus that they did not conflict after all.

Reading—practiced reading—was the master skill, which yielded only useful messages. Thus, when the publisher of Pierre d'Ailly's treatises on astronomy wished to show a master leading a pupil through the mysteries of that complex art, he portrayed them as reading together. Both masters and students, in their thousands—the Holy Roman Empire alone had more than fifteen universities by 1500—were men of the book. The text, imprisoned in its armor of commentary, was forced to yield a single up-to-date sense. 3

Historians, examining the conditions and results of intellectual life in this period, have often assumed that it was necessarily sterile. They have treated the dark, looming mountain chains of authoritative books that dominated the universities and flooded the bookshops as impassable barriers to intellectual progress. And they have dramatized the intellectual as well as the physical courage of the men of cunning intelligence, the sailors and conquerors, who discovered new worlds in South Africa and the Americas. These men, not the scholars, brought back the vital inconvenient facts that destroyed the authority of venerable theories. As to the scholars—they, like the scholars of Confucian China a century later, preferred processing a single set of authoritative books to noticing the new data that soldiers and sailors had turned up.

This view is not a new one. It was formulated, in the first place, by the intellectuals of the late sixteenth and seventeenth centuries who wrote the fiercest manifestos of the New Philosophy and New Science. Like most polemists, they wrote less to explain than to undermine the views of their opponents. And their arguments sharply oversimplified the old world of the culture of the book. Its complexities were concealed from the sight of the curious by the smoke poured out by burning straw men.

In fact, no single book or institution can by itself characterize the complex and contentious learned world of the late fifteenth century. The canon of texts that scholars read was less a Gibraltar, a textual pile of unalterable shape and content, than a glacier moving slowly but constantly, composed of the most varied elements, and unstable at many points. The tools and methods that scholars applied to this vast moving target varied as widely as the precious materials they

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Figure 1.7 The astronomer teaches the theologian about the stars, using an authoritative text, he indicates the planets, represented by astrological signs, moving about the earth in their crystalline spheres. This illustration appears in a version of the Concordantia astronomiae cum theologia (Augsburg, 1490) of Pierre d'Ailly, who wrote numerous compendia on natural philosophy, his many readers included Columbus.
looked for in it. We may find, in both the agitation and the consti-
tuent elements of that perpetually moving canon, at least some of
the causes for the intellectual revolution of the next 150 years.

**Humanism: The War over the Canon**

Any panorama of Europe's cultural world around 1500 must include
many scenes of battle. For Europe was in the throes of an intellectual
revolution well before the discovery of the New World. In Italy
from 1350, in northern Europe somewhat later, new men challenged
the scholastic system of the universities on every level. They had
their own ideas about the texts that should form the core of the
curriculum, the form of commentary that should be applied to them,
and the identity of those who had the right to explicate them.

The new men (and their enemies) called themselves "humanists":
by this they meant not that they were especially moral, or indeed
that they were humane, but simply that they defined themselves as
experts in the *studia humanitatis*, the humanities. This term encom-
passed a quite specific range of subjects: grammar, rhetoric, and
dialectic, the arts that gave a command of Latin, the language of
learning, and oratory, history, poetry, and moral philosophy, the
forms of thought and writing that improved the character of the
student. Many of these subjects fitted a young man (or woman) to
occupy a high place in this world, to make moral choices and give
effective commands. After all, so humanists from Petrarch onward
claimed, the liberal arts had enabled the Romans both to rule the
world and to produce an impenetrable heritage of literature and art.
Their revival in the fifteenth century had resulted in a new flowering
of literature and the fine arts as well, and would, if continued,
produce a new elite as cultivated and effective as the Roman one.

The humanists not only argued at length for these ideals, they
also denounced the existing universities for failing to live up to
them. They criticized the emphasis of the university arts curriculum
on formal, logical argumentation, these skills might make men
learned, but they would never make them good or equip them to
make other men good. They criticized, even more sharply, the
university scholars' efforts to embed the classics in commentaries
that removed their sting and made them explicitly relevant to modern
conditions. The humanists insisted that the classics should be read
for what they were. They should be stripped of their medieval armor
of commentary, written or printed in a classical-looking, if not a
genuinely classical, script, and treated as the products of a society
that had not been modern or Christian. In cities and courts from
Naples to Nuremberg and Cracow to Canterbury these men founded
schools where young men and a few young women could gain access
not to the formal, regulated, licensed skills of the university theo-
logians and doctors but to the more general, moral and literary
lessons of the ancient Greeks and Romans.

The humanists gradually convinced princes and prelates, city mer-
chants and rural friars, and their new books and schools proliferated
alongside the scholastic ones, offering an alternative set of sources
and an alternative approach to them. Governments across Europe
found that the products of the humanist school were ideally trained
to perform a wide range of practical tasks: they could carry out
diplomatic missions, write official state histories, compile coherent
records, and produce effective propaganda on command. By the late
1490s, Europe had not one but two canons, each of which served a
particular set of purposes, gave access to a particular set of occupa-
tions, and had its own powerful defenders.³

But humanism amounted to more than a second educational sys-
tem. Both in Italy and in northern Europe, some of the new intel-
lectuals not only offered alternatives to the existing system but also
challenged its very right to exist. They argued that the method the scholastics used radically misrepresented the texts on whose author-
ity they relied. The scholastics, in the first place, took Latin trans-
lations, not only of Aristotle and Galen but of the Bible itself, as
authoritative representations of the originals. They failed to see that
the Latin versions were rife with errors—those made by the original
translators and those introduced more recently by scribes and type-
setters. In the second place, they read these corrupt texts as though
they had been written in their own day rather than in a distant
society. And they put forth their own conclusions not in the classical
prose of the humanists—and the Romans—but in a rebarbative tech-
nical jargon that offended classical stylists, such language had all the
sensual value of water gurgling down a corroded pipe.

The humanists challenged the traditional scholars even in the
domains which were peculiarly their own. Lorenzo Valla pointed
out in his mid-fifteenth century *Annotations on the New Testament* that
the original text of that supremely important document was Greek,
not Latin, and that the Vulgate of his own day misrepresented the
Greek at dozens of points. Half a century later Erasmus printed
Valla’s brilliant polemic, and he and others set to work to take it to
its logical conclusions. Under the official sponsorship of Cardinal
Ximenes, a group of Spanish and Italian scholars produced a critical
text, column by column, of the Hebrew, Greek, and Latin texts of
the Old Testament and the Greek and Latin texts of the New. With
the less official but more efficient support of a brilliant publisher,
Johannes Froben, Erasmus beat Ximenes into print with a Bible that
went still further. He retranslated the Vulgate New Testament into
a more pleasingly classical—and, he thought, more accurate—Latin
of his own. He printed the Greek text beside it, line for line. And
in his commentary on the text he showed, again and again, that
what had seemed the eternal and authoritative doctrines and prac-

tices of the church of his own day rested, in fact, on mistranslations of the Bible. The sacrament of penance which underpinned the whole structure of confession and absolution, the mortifying of the flesh and the buying of indulgences, all found support in the command to "do penance"—pomitissentiam agite, as the Vulgate had it. But Erasmus showed that the text had actually commanded Christians to 'repent'—metanotēte—not to carry out external acts to display their contrition but to come back internally to their true senses. The appearance of two such Bibles in one decade fundamentally challenged the authority of the church itself—to say nothing of that of the theological faculties. When a Franciscan or a Dominican preached a traditional sermon, telling of the foundation of the papacy by St. Peter, a young humanist might well wave a Greek New Testament at him and insist that "St. Peter was never in Rome," since the New Testament nowhere described his visit there. Similar developments took place in law and medicine. Even Aristotle, the master of those who know, received a face-lift from the humanists, who set out to renovate the old, overly literal Latin translations of his works by collating them against the original Greek texts.

Both humanists and scholastics, meanwhile, waged their wars outside as well as within the university faculties. The humanists wrote brilliant, biting satires on the ignorance of their adversaries, cheerfully denying that formal philosophy and similar disciplines, with their claim to rigor and their actual deficiencies, deserved financial or political support. We hear the echoes of these satires in Rabelais's Gargantua better than we do those of the replies to them. But the scholastics fought back vigorously. A Dominican theologian, Giovanni Nanni, or Annius, of Viterbo, attacked the humanists for their interest in the pagan histories of Greece and Rome, which he thought both full of factual errors and inappropriate for study by Christians. To replace them he forged alternative histories of Europe, which showed that the Greeks and Romans were late and inferior peoples by comparison with the profoundly learned sages of Babylon, Egypt, and Ethiopia. As a well-trained systematic theologian, moreover, he provided elaborate formal arguments to buttress the authority of his texts, which he embedded—naturally—in a ring of commentaries.

Annius argued that the new texts deserved credence for several reasons. Their authors were priests, who told the truth ex officio, not ordinary men who lied. They derived their facts from archival documents, which could not be falsified, not from ordinary narratives which could say anything. These arguments proved so hard to answer that most humanists accepted the authority of Nanni's fakes (which became best-sellers, more popular than Herodotus and other genuine texts). Reprinted, summarized, sometimes lifted out of their original mass of glosses, the new texts helped to create a humanist fashion: they traced the origins of every race in Europe back, via ancient heroes from Troy and elsewhere, to the three sons of Noah. Not everyone accepted Annius' view that the Lombards (Latin: Longobardi) descended from two great founders, Longo and Bardus, and the Franks from a third, Francus, but almost everyone agreed with him that etymology offered a key to history. Genealogies and controversies proliferated.

Other scholastics proved able to find real flaws in such major works of humanist scholarship as Erasmus' Novum Testamentum. He left out a passage—now considered a late addition—on the Trinity from his new Latin New Testament on the grounds that it occurred in no manuscript of the original Greek. One of his critics had another Greek manuscript drawn up that included the offending words, and Erasmus felt compelled to restore them. Meanwhile many humanists found that they could use their own tools of philology on ancient texts in new fields—like the natural sciences—which had been a
scholastic monopoly. Each group, in other words, proved capable of mastering the other’s tools when necessary. And the results of such collisions between methods were by no means always conflicts. Marsilio Ficino, the fifteenth-century Florentine scholar who translated all of Plato into Latin, used both humanistic and scholastic methods. He produced a vast and popular range of texts and commentaries designed to serve as an alternative to Aristotle: a new basis for philosophy, at once eloquent and rigorous.

Neither scholastics nor humanists, finally, were harmonious and unified. Scholastics savaged other scholastics, and humanists other humanists, as gleefully as they hurled themselves on members of the other party. Then as now, academic prizes were small and academic politics bitter, and fights raged within every faculty. Scholastics fell into several schools, whose members disagreed fundamentally on the nature of argument and the status of the theories they constructed. In the fourteenth and fifteenth centuries, scholastic natural scientists found themselves challenging the authority of Aristotle, and lawyers that of the Corpus iuris, as the need to maintain consistency in argument or to acknowledge new facts required. Humanists debated the identity of the best classics, the nature of the best state, and less edifying matters—like one another’s orthodoxy, literacy, and even legitimacy.

In 1517 Martin Luther argued in public that basic teachings and practices of the Western church had no support in the New Testament and must be abandoned. Both scholastics and humanists found themselves pulled into radically new alignments, like two football teams suddenly challenged by a third one appearing on the same field. Protestants insisted that only the Bible deserved absolute credence—but failed to agree on what it said. Catholic scholastics insisted that the whole traditional armament of their profession should be not only staunchly retained but fiercely defended. Even Erasmus began to see some virtues in the traditional scholastic culture he had mocked, at least it did not threaten complete social and political disorder, as Protestantism seemed to when religious radicals arose in 1520, demanding the abolition of serfdom and even private property, as the Bible seemed to them to command. The most authoritative texts, once the sure foundation of a whole Gothic cathedral of doctrine, had become the source of subversion, and even the revolution split rapidly into sects as its theologians in turn disagreed about the meaning of powerful words and images that no longer had a secure frame of commentary to restrain them.

By the second and third decades of the sixteenth century, in short, the world of the book was not coherent but chaotic, not solid but riven, and the fissures represented not only the quarrels of individuals who disagreed on specific points of detail but also fundamental debates about intellectual standards and knowledge itself. A young intellectual who reached maturity and began to buy and read books in these years might well find it almost impossible to decide which books to read, what sort of reading to carry out, whether to attend a university and seek formal training and licensing or to attend a humanist school and gain access to a new morality and aesthetics.

The West and the Rest
The complexities and contradictions of the canon were nowhere more apparent than in the segment of it which contained models for describing other cultures. The great encyclopedic Natural History of the elder Pliny, for example, provided a popular and easily imitated model of how to compile misinformation, especially about remote places. Pliny himself had been deeply curious about the natural world, he died while investigating the eruption of Vesuvius that buried Pompei and Herculaneum. But his book rested more on
literary sources than empirical investigation, and it made some fantastic claims about the flora, fauna, and sentient inhabitants of distant places. Both Pliny and his eager ancient reader Solinus provided rich information about the monstrous races who inhabited the rim of the world—men with the heads of dogs, men with their heads beneath their shoulders, men with one large foot under whose shade they rested in the desert sun. Generations of readers thrilled, like Desdemona listening to Othello, at these tales of strange creatures, foods, and burial customs—and were no doubt stimulated by them to see the inhabitants of strange lands as literally outlandish, less than civilized or even less than human.  

Yet even Pliny did not come close to exhausting the relevant models and materials. He himself inherited and drew on a rich tradition of Greek writing about non-Greek peoples. This tradition had begun in the fifth century B.C. when Greeks lived near, and often within, the large and cosmopolitan empire of the Persians and reported to their countrymen on Persian, Egyptian, and even Indian customs and institutions. It developed further after the conquests of Alexander the Great, as writers followed his armies all the way to the court of Chandragupta in India. The Greeks who wrote these reports did like to describe monsters and marvels. Herodotus told his readers about the gold-digging ants of India, and Ctesias, not much later, wrote about dog-headed men and pygmies. Yet their attitudes were hardly uniform or monolithic.

Herodotus, describing Egypt, sometimes used the simplest of principles for organizing the description of a foreign society: he defined it by opposition to everything Greek. Egypt, he said, was the land where everything was different, where the women urinated standing up and the men crouching. Sometimes, however, he took exactly the opposite tack, arguing that Egyptian civilization was not only far older than Greek, but also the source of Greek ideas and
The nine books of Herodotus' History, completed by 425 B.C., went far beyond chronicking the wars of the Greeks against the Persian empire. They contain a wealth of geographical and ethnographic information, no doubt based in part on Herodotus' own travels, but derived far more from secondhand information that became ever more fantastic as it pertained to peoples and places at the edges of the known world.

In the fifteen century, Herodotus' History became more accessible to Western scholars through a Latin translation by the prominent humanist Lorenzo Valla, and Herodotus' descriptions of the exotic customs of foreign peoples—their marriage and burial rites, religions, and martial skills—became models for Renaissance historians and ethnographers.

In his account of the Scythians, a people living along the northern shore of the Black Sea, Herodotus expresses a keen interest in their origins. After presenting the Scythians' own account, which he himself does not believe, and a second Greek myth of descent from Hercules, he writes:

"There is also another different story, now to be related, in which I am more inclined to put faith than in any other. It is that the wandering Scythians once dwelt in Asia, and there warred with the Massagetae, but with ill success, they therefore quitted their homes, crossed the Araxes, and entered the land of Cimmeria. On their coming, the natives, who heard how numerous the invading army was, held a council. At this meeting opinion was divided and both parties stiffly maintained their own view... For the others urged that the best thing to be done was to leave the country, and avoid a contest with so vast a host, but the Royal tribe advised remaining and fighting for the soil to the last... Having thus decided, they drew apart in two bodies, the one as numerous as the other, and fought together."

All of the Royal tribe were slain... Then the rest of the Cimmerians departed, and the Scythians, on their coming, took possession of a deserted land.

Herodotus' skepticism did not extend to the account of the origin of the Sauromatae. These people claimed to be descendents of Scythians and the Amazons, a legendary race of female warriors who would be eagerly sought in the New World. After marrying, they migrated east. "The women of the Sauromatae have continued from that day to the present to observe their ancient customs, frequently hunting on horseback with their husbands, sometimes even unaccompanied, in war taking the field, and wearing the very same dress as the men."

Source: Herodotus 1882.
practices. Sometimes he dismissed non-Greeks—like the Persian soldiers at Thermopylae—as effeminate, disorderly, "Oriental," sometimes he looked up to them as profound and learned beyond the ken of any Greek. And sometimes—above all in his account of the Scyths—he used the same contradictory categories to describe a society that lacked firm settlements and other symptoms of what the Greeks took as civilized life. The proliferation of opposites in custom and belief made plain that no civilization could claim universal validity.¹

Ephorus, Ctesias, and Megasthenes, writing after Herodotus, often attacked or diverged from him on points of detail. But they shared the single great contradiction of his basic attitude, and sometimes showed the warmest interest and respect for the bizarre creatures with which they populated the East. Ephorus argued that Herodotus had described his Scyths too sensationally. Some of them in fact drank milk and showed great humanity in their dealings. Ctesias described the dog-headed men and pygmies not only as human in intelligence, but in fact as 'very just'—more so, presumably, than the quarrelsome and difficult Greeks. Although they could not speak, they communicated with and understood the other peoples with whom they traded, and the emperors whom they reportedly served as bodyguards (one wonders if Jonathan Swift had read Ctesias). The Christian writers who took over and passed down the traditional marvels of the East also moralized them, treating the monsters sometimes as morally degenerate pagans, sometimes as signs of divine power and displeasure. But the Renaissance reader encountered classical and Christian texts that treated strange races, dispassionate and disparaging views of them, simultaneously.²

Historians like Herodotus and Diodorus Siculus, the geographer Strabo, and other writers on the exotic whose works were translated into Latin by fifteenth-century humanists and sold well in the early years of print were hardly innocent observers or professional anthropologists. But they provided a model for detailed, vivid description of the origins, institutions, and manners of unfamiliar peoples—descriptions by no means confined to cramming disparate data into stereotypical molds.

Other ancients, less specialized in their ethnographic interests, were still deeply influential in their presentation of non-Greco-Roman peoples. They used a palette of many colors, some lurid, some bitterly demeaning, and some potentially flattering, to depict worlds outside their own. Plato, the humanists' favorite philosopher, seemed to state in his Timaeus that the Greeks were mere children by comparison with the Egyptians, whose splendid records covered millennia of Athenian history that the Athenians themselves had forgotten—not to mention the tale of a lost continent to the west, Atlantis, where civilization had once bloomed. Aristotle suggested that some barbarians as well as Greeks had had elaborately organized states and that comparisons between Greek and non-Greek polities might reveal a great deal—though he also saw Asians as deficient in that "spirit" that enabled Europeans to preserve constitutional regimes intact.

The Greek medical writers of the fifth and fourth centuries B.C., the Hippocratic school, had argued ingeniously that most human customs and institutions were determined to a large extent by the environments in which the different nations lived. They had accounted for the many different forms of diet, clothing, marriage customs, and military tactics Greeks encountered in Asia Minor and Europe. Following this tradition, Aristotle took different constitutions as adapted to the characteristics of different peoples—a suggestion which would have a spectacular afterlife.

Still others found in cultural difference not only a stimulus to relativistic reflection or to large-scale comparative inquiry, but a
powerful provocation—one that could lead them to rethink the nature and merits of civilization itself. Tacitus, the most powerful and problematic of Roman historians, could evoke the spare courage that animated barbarian resistance as well as the corruptions that ensued from Roman power. "They make a desert and they call it peace," perhaps his most Tacitean saying, he attributed to an English partisan who denounced Roman imperialism. And Livy made clear both that the early Romans had looked rather like the barbarians of his time and that the climb to world power had been accompanied by a fall from primitive virtue.

The sophists, the professional rhetoricians of classical Greece, imagined their own forefathers as barbarians. They drew an analogy between the uncivilized peoples of their own day and the primitive ancestors of the Greeks. All peoples, they argued, became civilized over time, thanks to such human inventions as the art of rhetoric, this position implied that even civilized peoples must have started out as primitives. Both the Greek historian Thucydides and the Roman rhetorical theorist Cicero offered powerful versions of this developmental scheme to the Renaissance scholars. 10

The intellectual who sets out to describe another culture embarks on a task as difficult and elusive as it is fascinating. The would-be ethnographer must make a whole series of strategic and tactical decisions: he or she must adopt an attitude toward both the society to be described and the informants who describe it, select a limited number of topics to cover, since no general description of a society can ever be complete, and choose a literary form to convey the results to a public. In each of these decisions, models matter. Few writers weave whole new tapestries of their own, rather, they make quilts from ready-made ingredients. And the sixteenth-century intellectual who set out to depict the New World could find enough ingredients in the classical heritage to produce a kaleidoscopic variety of juxtapositions and compounds.

Tacitus

A central enterprise of Renaissance humanist scholarship was the recovery and emendation of the works of Tacitus, the Roman historian (born ca. A.D. 55) who chronicled the corruption of imperial Rome. Historians seeking to emulate Tacitus adopted his essentially moralistic view of the purpose of writing history: "This I regard as history's highest function, to let no worthy action be uncommemorated, and to hold out the reprobation of posterity as a terror to evil words and deeds."

Tacitus' Germania and his accounts of the Roman wars with the German tribes had particular significance for German historians attempting to forge and legitimate a history apart from Rome. But the Germania, which included descriptions of the customs of the ancient Germans, also shaped European perceptions of non-European peoples in the period of the discoveries. The subtext of the Germania is a comparison of the virtues of an allegedly savage people with the corruption of Rome. Tacitus can thus be said to be the intellectual great-grandfather of the concept of the Noble Savage.

Tacitus' description of ancient German mores would also prove useful to scholars laboring in what we today call the field of comparative anthropology. Hugo Grotius, for example, supported his argument that North American peoples were descended from Germans by comparing their customs with those Tacitus describes here (see Chapter 5).

"Thus with their virtue protected they live uncorrupted by the allurements of public shows or the stimulant of feastings. Clandestine correspondence is equally unknown to men and women. Very rare for so numerous a population is adultery; the punishment for which is prompt, and in the husband's power. Having cut off the hair of the adulteress and stripped her naked, he expels her from the house in the presence of her kinfolk, and then flogs her through the whole village. The loss of chastity meets with no indulgence, neither beauty, youth, nor wealth will procure the culprit a husband. No one in Germany laughs at vice, nor do they call it the fashion to corrupt and to be corrupted..."

Source: Tacitus 1912.
Consider barbarian, that most loaded of ethnographic terms. It is often said that Renaissance intellectuals had a simple, Aristotelian view of barbarians: they were slaves by nature. In fact, however, "barbarian" had many senses in the Renaissance. Erasmus and other humanists freely applied the term to the scholastics, whom they considered not natural slaves but ignorant free men. Some classical writers had distinguished sharply between Greek and barbarian, assuming a pose of smug superiority to nonwestern noise and disorder, as Herodotus did when he had his Persian king exclaim at Salamis that his women were fighting like men—and his men, unfortunately, like women. Others, however, observed foreign peoples from very different emotional vantage points. Tacitus' Germany—a brilliant piece of ethnographic reportage, beloved of German humanists—powerfully praised the virtues of barbarians—by whom he meant noble savages. Knowing the corruptions of civility all too well, he esteemed the purity and courage that could accompany a life lived in huts and outside Roman civitas. This life—so he and others clearly thought—was far closer than the life of modern Romans to that led by such early Roman heroes as Horatius.

The ancient historian of philosophy Diogenes Laertius recorded a popular attitude of a different kind. He used the term barbarians to refer to ancient Babylonian, Egyptian, and Persian sages, like Zoroaster, and admitted that many Greeks believed that these barbarians had actually invented the pursuit of wisdom. Diogenes was no means the only witness to this line of thought: a popular set of dialogues, the religious and theological texts falsely ascribed to the Egyptian sage Hermes Trismegistus, seemed to most humanists to bear out this view, though Diogenes himself rejected it. One of the collaborators on the Nuremberg Chronicle, Hieronymus Muñzer, recorded the delight he felt in discovering that Aristotle and Plato had borrowed so much from Hermes and from the "first philosophy (metaphysics) of the Chaldeans.""
definitive model for all such efforts. Still others had written polemical ethnography, works designed to prove the unworthiness of another culture. The Description of Egypt by Manetho, the Egyptian priest who wrote in Greek for Ptolemy I, included a vicious attack on the Jews, whom he described as a whole society of lepers, an unclean people. This reached a wide public in the Renaissance because the reliable Jewish historian Josephus quoted it lavishly, in order to refute it, in his own polemical work against the grammarian Apion.

The Romans Cato, Varro, and Macrobius, on the other hand, had written not as narrators or pamphleteers but as scholars in their own right. They had compiled manuals of antiquities, carefully documented collections of the evidence about the ways in which the early Greeks or Romans had worshipped their gods, elected their officials, plowed their fields, and cooked their food. These works were systematic rather than chronological in organization, and their authors felt able to quote primary evidence, describe rituals or buildings, and describe archaeological evidence at length.

Many humanists emulated them, compiling visual as well as textual evidence. Drawings or prints of the statues and inscriptions that lay strewn about the city of Rome and elsewhere could make ancient scenes and customs sharply vivid—and could always be manufactured if they did not exist. A Renaissance ethnographer could, like Fernández de Oviedo, emulate Pliny and fold his anthropological and historical material into an account of the natural world. But he could also tell stories or reconstruct beliefs and institutions without framing them in an encyclopedic description of the natural phenomena that accompanied them—and all without using a single color not available on the palette offered by the ancients. 12

The careful humanist reader, moreover, could hear ancient voices raised in argument about the splendors and miseries of other civilizations not only by collating several texts but often by reading one text carefully. Herodotus, as we have seen, offered portraits in contrast, at once respectful of and demeaning to the nations around Greece. Later writers, less famous now but perhaps more popular, and certainly more trusted, in the Renaissance, taught similar lessons. The great historian Diodorus Siculus, for example, staged a scene of suttee in which two Indian women fought for the right to die on their husband’s pyre. His account brought out what seemed to him the underlying—and powerful—logic of the practice, which had been designed to prevent women from marrying in haste and then poisoning their husbands at leisure. He portrayed the women involved as active figures who consciously chose their fate. And he emphasized the confusion that the sight instilled in his foreign witnesses: “Some were filled with pity, others were profuse in their praises, while there were not wanting Greeks who condemned the institution as barbarous and inhuman.” Revealingly, even the Greeks, who did not hesitate to call the custom barbarous, treated those who accepted it as reasoning beings, but they also cast themselves as expert judges of others’ customs.

The erudite Strabo argued with himself at staggering length about the trustworthiness of the strange tales that he had collected about India and other remote lands. He thought through the problems these posed, giving a clear account of why he believed some writers less likely than others to lie. He ridiculed the earlier Greeks who had brought back from India obviously silly tales about gold-digging ants and men with one foot which they used to shade themselves. And then—many long books later—he repeated the very tales he had ridiculed, with every appearance of interest. Even Ctesias, the first and greatest of Greek travel liars, professed that he had omitted certain marvels in order not to detract from the credibility of those he retained, and criticized other writers for their credulity.

Certain uniformities appear. The Greeks liked to portray themselves as curious about other peoples, as askers of questions. By contrast they represented native informants as blandly incurious,
even contemptuous, of the intentional tourists who needed explanations of their monuments. Greek writers liked to imagine bizarre beings in the hinterlands of the inhabited world, and took the ingredients for their strange portraits of strange men from many sources, from Indian epic to Greek humor. No one but the antiquaries clearly understood that non-Greco-Roman societies developed over time, though every rhetorician and historian knew that the city-states of Greece and the Roman state had come into being over the centuries. Most ethnographers envisioned the societies outside their own as living by customs most of which were as solid, fixed, and inalterable as the pyramids themselves: as collections of men and women who often had a chronology but usually did not, in the Western sense, have a history. But these commonalities were only the thickest and frailest of threads connecting Tacitus with Herodotus, Plato with Pliny.

The mere fact that a scholar turned to the ancients for help in grasping the New World is not enough to enable us to predict the particularities of his project. He might adopt a strategy of wonder ("Goodness, how amazing") as readily as a strategy of superiority ("God, how frightful"), a strategy of alienation ("They turn our customs upside down") as readily as a strategy of assimilation ("Under their skins, they're just like us"). He could insist that other cultures were both similar and different at once—or he could argue that they belonged to a world of their own.

**Cartography and the Canon: Ptolemy**

No text more clearly reveals the richness, the complexity, or the shiny newness of the implements in the Renaissance ethnographer's toolbox than a work now far more maligned than read—the _Geography_ of Claudius Ptolemy (second century A.D.). Ptolemy compiled his work at Alexandria, using both earlier treatises of a technical kind by Hipparhus and Marinus and a wide range of itineraries, route maps, and ethnographies. A great astronomer, he took a deep interest in cartography. Ptolemy explained three different ways of projecting the three-dimensional surface of the spherical earth onto the two dimensions of a map. He collected a vast amount of information about the size of the inhabited world, the locations of and distances between some eight thousand individual places, and the curious creatures who inhabited some distant lands. Among his crisp quantitative data appear references to the magnetic islands, which could tear a ship apart by pulling out all its nails. But for the most part he offered an austere description of distances and places.

In thirteenth-century Byzantium, Greek scholars equipped the _Geography_ with splendid maps. These appear to be late reconstructions of the maps Ptolemy might have drawn rather than copies of his actual work. But they collected a vast amount of information in easily readable and physically dramatic form. The _Geography_ was translated into Latin early in the fifteenth century by the humanist Jacopo d'Angelo. By the middle of the century it had become a bestseller, as copies newly equipped with colorful maps sailed across the Mediterranean world. Scholars and stationers competed to draw up maps that followed Ptolemy's instructions as precisely as possible, and to complement his work with a second set of maps of the modern world. The _Geography_ reached print in 1475, and many editions, as well as many luxurious manuscripts, attest to its popularity thereafter. Unknown in the West in the Middle Ages, it became both a learned authority and a splendid adornment in the libraries of the Renaissance, a huge and brilliantly colored coffeetable book before the advent of coffee, itself one of the most dramatic new products to flood into Europe as a result of the discoveries.

Modern historians of the discoveries and of maps often regret the
Renaissance's interest in Ptolemy. They point out, correctly, that Ptolemy made many mistakes. He made the Mediterranean far too long, Ceylon far too big. He thought the Indian Ocean had no southern opening. And he also perpetuated a few exotic fantasies, lending them his own scientific authority. Especially when encountered in the inaccurate translation by Jacopo d'Angelo, he was more likely to mislead than to inform an explorer or scholar. It seems a pity, then, that deep into the sixteenth century this majestic constellation of attractive errors held unchallenged authority in the realm of geography—even after medieval and modern sailors had revealed so many of its flaws and gaps. Ptolemy's only virtue was a serendipitous one—his curtailed value for the distance to the mysterious East helped to inspire Columbus with the confidence he needed to set sail. Otherwise the tyrannical authority of Ptolemy was a disaster.

This account of Ptolemy's impact is anachronistic and inaccurate. The greatest scientists of the Renaissance, in the first place, had learned the lesson of the humanists. They began work in any field of natural philosophy by returning to the classics of Greek science, in the original texts. They corrected or replaced the medieval translations, many of which had been inaccurate or cryptic, and translated many vital works, like those of Archimedes, for the first time. Regiomontanus, the most original student of the exact sciences in fifteenth-century Europe, went to Italy to learn Greek. He set himself to improve the astronomy of his time by updating and explicating Ptolemy's manual, the Almagest. Regiomontanus' Epitome, completed in the 1460s, introduced all serious astronomers to Ptolemy's models of planetary motion for a century and more. It was only natural, then, that when he decided to improve geography, he did so in the first instance as a textual critic. He collated Jacopo d'Angelo's translation of the Geography with the Greek, identifying many passages in the Latin which neither made sense nor matched the original. And though he died before completing his work, the scientists and scholars of sixteenth-century Nuremberg, Johannes Werner and Willibald Pirckheimer, continued his enterprise, retranslating the Geography and printing his notes. The study of the Geography, for all its faults, fitted precisely into the most advanced scientific projects of the time.

Ptolemy, moreover, never adopted the persona of an unchallengable authority. He made clear that geography was a cumulative and partly descriptive science, not an exact one. Nations and peoples changed continuously, the good geographer must try to keep up by using only the most recent accounts. But all geographers would err, as Ptolemy's predecessors had. He clearly expected to be superseded over time. The scribes and editors who added new portfolios of modern maps to manuscripts and early editions of the Geography worked in Ptolemy's own spirit, as many of them knew. No wonder that Leonardo da Vinci—who usually mocked written authorities and those who depended on them—described his studies of human anatomy as intended to provide "the cosmography of this lesser world [the human body], in the same order as was used by Ptolemy before me." The great student of nature who liked to describe himself polemically as "a man without letters" found himself hooked on the challenge—and the power—of this one old book."

As read in the Renaissance, finally, Ptolemy's book offered a model of a presentation of the facts basically unconditioned by ideology. Every map, it is fashionable now to say, is political, the location of the landmark meridians of longitude, the forms of lettering, the images that designate cities and resources can all express political and cultural claims. Medieval maps had been more political than most others. Schematic rather than strictly representational, they had situated Jerusalem at the center of the world, which they divided into three continents separated by rivers. Their outskirts, naturally, harbored the monstrous races who lived outside civilization.

By contrast Ptolemy's maps—that is, the Renaissance Latin ver-
Figure 1.10 A world map from Willibald Pirckheimer’s 1525 Strasbourg edition of Ptolemy’s Geography, which included the critical notes of the great fifteenth-century scientist Regiomontanus. This updated version opens up the Indian Ocean, although Africa is still portrayed in the traditional Ptolemaic manner.

Figure 1.11 The map of Africa from the 1513 Strasbourg edition of Ptolemy’s Geography. The precise annotation of distances contrasts with random descriptions—for example, that the kingdom of the Ethiopians is where white elephants, rhinoceroses, and tigers are born.
sions of Byzantine Greek ones—located the prime meridian in the Fortunate Isles (the Canaries), a place without evident political significance. They made clear that Asia bulked vastly larger than Europe. And even in their earliest printed versions, they faithfully expressed Ptolemy’s sense that his own geography, however coherent and sophisticated, was imperfect. Most of them designated the land with which he closed off the Indian Ocean, for example, not as something known with certainty but as *Terra incognita secundum Ptolemaon*—unknown land, by Ptolemy’s account.” They thus invited exploration and revision.

Both were soon forthcoming. The 1482 Ulm edition of the *Geography* added details to Ptolemy’s version of the frozen North, the 1513 Strasbourg edition included, quite in Ptolemy’s spirit, a whole second atlas, which included detailed modern maps of Europe and one of the African coast as surveyed by the Portuguese. The Renaissance editions of the *Geography*, in short, were neither a gallery of pretty pictures devoid of use nor a set of images chosen for symbolic content rather than conformity to the known facts. They were the most serious effort that could then be made to comprehend ancient and modern discoveries in one verbal and visual description. Hence the *Geography* provided perhaps the most successful of all ancient models for coping with the flood of new facts from the West. 13

**First Encounters**

The fertility of these models is evident. By the second decade of the sixteenth century writers who described the New World or used it as a stimulus for imaginative constructions of their own had already put many of them into play. Peter Martyr, an Italian humanist who worked in Spain, published his spectacular account of the New World in 1516, using the primary evidence of Columbus and much additional evidence, from language to customs. He encouraged those who actually went to the New World, as he did not, to report back systematically. But he also used a vast range of classical authorities to frame his account. He compared New World parrots with those described by Pliny, the life of the islanders on Hispaniola to the Golden Age depicted by Virgil and Hesiod, the elusive cannibals of the Caribbean to the Thracians who went to Lesbos to impregnate the Amazons. Peter admitted that he found the lip-plugs worn by Mexicans repulsive, but insisted that this proved only the parochialism of his own habits of perception: “The Ethiopian considers that black is a more beautiful color than white, while the white man thinks otherwise. . . . It is clearly a reaction of the emotions, and not a reasoned conclusion, that leads the human race into such absurdities, and every district is swayed by its own taste.” In this combination of attitudes, at once culture-bound and open-eyed, he showed himself the heir of Herodotus. 15

Thomas More, by contrast, showed himself the heir of Plato, situating his imaginary ideal state in the new realms to the far West, these would long offer a favored site for the perfect societies of Renaissance philosophy. In the same year, Fernández de Oviedo was inspired by his meeting with Peter Martyr to frame yet another comparative account of the New World, this time on Pliny’s model rather than a purely ethnographic one, but using others as well. For example, he applied to the destruction wrought by the Spanish in the Caribbean the lapidary phrase of Tacitus’ Englishman, Calgacus: “Those who have perpetuated these crimes call the uninhabited places ‘peaceful.’ I feel they are more than peaceful, they are destroyed.”

Even the existence of the New World did not seem altogether threatening. After all, many ancient texts referred in one way or another to unknown lands in the West. Plato had described Atlantis; the Carthaginians had colonized western lands; Seneca had prophet-
Figure 1.12 Thomas More’s Utopia was the first of many ideal societies to be located in the realms newly discovered. His Libellus vero aureus sec minus salutari quam fæstus, Utopia (Louvain, 1516) is an exercise in European social criticism rather than a depiction of New World realities. A small, densely populated island off a settled continent, Utopia is an ideal form of England where there is no private property.

Figure 1.13 Another version of Prolemy’s world map as it appears in the 1503 Freiburg edition of Reisch’s Margarita philosophica. At bottom right, a legend on the land mass which, for Prolemy, enclosed the Indian Ocean, states firmly: “Here there is not land, but ocean. In it there are islands of extraordinary size unknown to Prolemy.”
sied the discovery of a new world in his Melus. Appropriately, Willibald Pirckheimer—citizen of Nuremberg, scholar and scientist—was only one of many who greeted the news of America by collecting ancient passages that seemed to show that it was not news after all, but another classical revival.

Had a revolution taken place? Did the crust of the cannon tear and heave as new facts surged upward? Even the encyclopedias with which we began render this interpretation doubtful. Neither the Margarita nor the Nuremberg Chronicle was as stable and coherent as it seemed. The Chronicle, for example, repeated Pliny's catalogue of monstrous races, framing it between columns of vividly printed images that were probably as old as the imaginary creatures themselves. But it also included a stop-press addendum by Muenzer on the voyages of the Portuguese. Even the humbler little book of Gregor Reisch, which derived its astronomy from the up-to-date work of Regiomontanus, had a revealing fold-out world map. This was antiquated in some respects, to be sure. But it did indicate—only four years after Vasco da Gama's return from India—that Ptolemy had been wrong about the Indian Ocean: “Here there is no land, but ocean with islands of extraordinary size, but they were unknown to Ptolemy.” By 1515 a Strasbourg edition had a map that depicted the New World, with a descriptive text on its reverse side.

Reisch, as many modern readers have been willing to point out, knew less than we do, so did Ptolemy. But anyone who has tried to describe a complex set of data in a coherent way may find more cause for admiration than for grumbling in what they achieved. The texts provided European intellectuals not with a single grid that imposed a uniform order on all new information, but with a complex set of overlapping stencils, a rich and delicate set of patterns and contrivances. These produced diverse, provocative, ultimately revolutionary assemblies of new facts and images.