

REVIEW ARTICLE

TWO BOOKS ABOUT PRINTING

Elizabeth L. Eisenstein. *The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early-Modern Europe*. Two volumes. New York: Cambridge University Press. 1979. Pp. xxi, 794. \$49.50

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This book, which won the Emerson Award of Phi Beta Kappa for the best scholarly book in the social sciences published in 1979, is almost unreadable and cannot be recommended for the non-specialist. Why the editors of the Cambridge Press did not insist on cutting the text by fifty percent I do not know. Pedantic detail is piled on pedantic detail and lengthy asides on the occult, witchcraft, astrology and a dozen other subjects contribute little to the general thesis. Professor Eisenstein also antagonizes the reader by her arrogant way of setting everyone, whether living or dead, to rights whenever their views differ, however slightly, from her own. Nearly every well-known historian of the Renaissance, the Reformation, or the Scientific Revolution gets ticked off somewhere in these pages. Yet Mrs. Eisenstein is not a scholar of the calibre of the people she criticizes so freely: her book is a review of secondary sources and contributes almost nothing in the way of new information from original sources.

Nevertheless, and with some reluctance, the reviewer is forced to conclude that this is a very important and stimulating work and one which will provoke much interesting controversy and discussion.

If Professor Eisenstein is not an original scholar, she is on the other hand an enormously learned surveyor of the work of those who have done the basic work of research. Her study is based on a thorough knowledge of the secondary literature and her bibliography lists more than a thousand titles. Hundreds of footnotes and quotations indicate that she has read with care. Thus her book is an overview of what hundreds of monographs have examined in detail, an attempt to put the pieces together and make general statements about European culture from 1450 to 1700, the years which historians have usually called

the beginning of the modern era. This is certainly a most valuable and necessary part of the work of historical scholarship.

Moreover, the question Professor Eisenstein addresses is obviously important: what effect did the invention of printing have in the two and one-half centuries after its discovery? And this is an original study because, as one learns with astonishment from Professor Eisenstein, no one has really asked the question before. The L classification in the Alexander Library at Rutgers contains dozens of books about the invention of printing and its rapid spread. The great German *Gesamtkatalog* of books printed before 1500, begun in 1925, has filled eight folio volumes and has only got through the letter "F". We know that about eight million books were printed between 1450 and 1500, perhaps more than were made by scribes in the whole previous thousand years. But no one has asked the significance of all this. Francis Bacon noted in 1620 that "printing, gunpowder and the compass . . . have changed the appearance and state of the whole world." But historians have not followed Bacon's suggestion that they should investigate the nature of that change. One historian bypasses the whole matter by writing, "The exact nature of the impact which the invention and spread of printing had on Western Civilization remains subject to interpretation." Another notes that "it would require an extensive volume to set forth even in outline the far-reaching effects of this invention in every field of human enterprise." Another historian notes that "the . . . revolutionary change which it (the invention of printing) brought about can be summarized in one sentence: Until that time every book was a manuscript!" Perhaps more typical is the case of W. L. Langer's *Encyclopedia of World History* (1940 edition) which does not mention the invention of printing at all.

Professor Eisenstein's thesis is clear, dramatic and startlingly new: printing began a communications revolution which was responsible for the end of the Middle Ages and the beginning of the modern era. Printing was the cause of the Renaissance, the Reformation and the Scientific Revolution, the three general developments which historians have usually credited with ushering in the modern world. Or, to be more exact, printing assured the success of these movements. In the thousand years before 1450 there had been several revivals of learning—the Carolingian Renaissance, the Twelfth Century Renaissance, and so on and there had been many religious revolts and several outbursts of scientific activity. But none of these had been of permanent effect.

Professor Eisenstein is most persuasive when she points out that no classical scholar, before the invention of printing, had access to anything approaching the full range of classical texts extant. Many texts existed in single copies buried in obscure monastic libraries. If a scholar came upon one of these, he had no way of making it available to the whole company of European scholars, nor indeed any way of telling the world that he had discovered it. Many manuscripts once found were subsequently lost again, sometimes permanently. No library had a complete set of the extant works—indeed no one knew what works were extant—of Cicero, Vergil, Seneca, or any Latin author. Until libraries could print lists of their holdings, no scholar could know, except by word of mouth, where to find a copy of any particular work. Greek manuscripts were so scarce that it did not seem worthwhile to most scholars to learn Greek—they had no access to Greek books. But by 1550, most of the important classical texts, Greek and Latin, had been printed and sold to buyers from one end of Europe to the other. Almost as important was the fact that while texts copied by hand tended to become more and more corrupt as scribes made mistake after mistake, printed texts became better and better. Copies were uniform and when a hundred scholars all had the same text, each of them could compare it with any local manuscript available and thus begin the slow process of collation which would eventually produce the most perfect text. Finally, the complete classical humanist needs maps, geographies, histories, prints of architecture and sculpture—only printing could give him that.

On the effect of printing on the Reformation, Mrs. Eisenstein is less original since scholars have long pointed to the use which the reformers made of the press in disseminating their revolutionary pamphlets and books and in making vernacular texts of the Bible available to all literate persons and at the same time publishing grammars and schoolbooks to help people become literate. She points out that the Bible Belt and Fundamentalism could not exist without printing. But in Biblical studies, the search for a “pure” text turned out to be impossible and was eventually destructive of orthodoxy.

Science, Mrs. Eisenstein argues, is a cumulative enterprise so that until scientists had access to a reasonably complete library of what had been written they had no tradition on which to build. They could not do what every scientist has done since the invention of printing, begin with “a literature search.” Copernicus, she points out, was not much given to observation, but he had, thanks to printing, the opportunity to

survey a wider range of records and to use more reference books than any astronomer before him. And when, by means of print, scientists could circulate quickly and accurately their observations and theories the community of scientific workers was created and that in turn made possible that vertiginous advance in knowledge which we call the scientific revolution.

This short summary does not do justice to the richness of this book. Professor Eisenstein notes that geographical exploration could not proceed rapidly until navigators had standardized accurate (read "printed") maps and charts and could disseminate accurate descriptions of what they had discovered; the legal practice of Europe was transformed when printing made available accurate records of charters, statutes and precedents, some of which had been entirely forgotten. The idea of progress, born in the early modern period, was the result of printing which made learned men in all fields realize that they were constantly increasing the store of knowledge inherited from the past. And if "no social revolution in European history is as fundamental as that which saw book learning (previously assigned to old men and monks) gradually become the focus of life during childhood, adolescence and early manhood," printing made that revolution possible.

In the end, Professor Eisenstein seems to make her point that printing "brought about the most radical transformation in the conditions of intellectual life in the history of western civilization." But then we may ask, "what brought about printing?" Printing remains for Mrs. Eisenstein the *deus ex machina*, the unmoved mover, the uncaused cause. There is a whiff of monomania in this book.

Martin Lowry. *The World of Aldus Manutius: Business and Scholarship in Renaissance Venice*. Cornell University Press. 1979. Pp. 350. n.p.

This is an original monographic study of the kind Professor Eisenstein used for her generalizing overview and is impressive because it digs in the sources and emerges with important new insights.

Aldus Manutius and the press which he founded and managed in Venice from 1490 to his death in 1515 (his successors continued until 1597) has been thoroughly studied by typographers and bibliographers. Less rigorous and careful of facts, intellectual and cultural historians have praised Aldus as a great scholar, humanist, classicist and editor without examining in detail what he actually did. Martin Lowry gives

us the first down-to-earth, documented study of the Aldine Press and, without detracting from the importance of Aldus, clears away the romantic myths surrounding his name (see, for example, the article "Manutius" by John Addington Symonds in the 11th edition of the *Encyclopedia Britannica*.)

Lowry begins by looking at Aldus as a business man. Venice was the first city in the world to feel "the full impact of printing and to experience the most important revolution in human communications between the development of letter-symbols some time in the fourth millennium before Christ and the emergence of electronic mass-media in our own age." By the year 1500, some 150 Venetian presses had published more than 4,000 titles in about 2,000,000 copies. Printing was one of the earliest and most spectacularly successful of capitalist enterprises. It was enormously profitable, it grew entirely free from the restrictions imposed by guilds and feudal regulations on other enterprises—it was easier to set up a printing press in Venice in 1500 than to open a new bakery or tailor's shop. Lowry describes the complicated operations of the early printers—the amassing of capital by borrowing and by selling shares, costs, labor force, wages, strikes, hiring proof-readers and editors, advertising, pricing and distributing, booms, gluts and busts. The hand copier produced on order for a single patron; the printer produced many copies in the speculative hope of selling them to many customers.

The earliest printers in Venice and elsewhere encountered the prejudices of the educated classes—scholars, professional men, gentlemen who despised the uneducated printer-merchants who had no care for good literature and intellectual excellence but printed the wrong things for the wrong reason—profit. (The same attitude is not unknown today in academic and literary circles.) It was one of the principal accomplishments of Aldus that he made printing respectable.

Aldus Manutius was born in Rome in 1450 and had an excellent classical, humanist education. Until the age of 40, he was a teacher of Greek and Latin. He was passionately certain that literature (Greek, but also Latin and the best of Italian—Petrarch and Dante, for example) was the only basis for a good education, that good education produced good men and through them the good society. He hit upon the idea of using the somewhat dubious invention of printing to disseminate that literature. He came to Venice at the age of 40 to set up a press. And he came to Venice, not because Venice was the cultural

center of Italy—Florence had the much better claim—but because Venice was the commercial capital of fifteenth-century Europe. There he could hope to find capital, skilled workmen and the marketing opportunities he would need.

An able organizer, Aldus founded a partnership, got capital from rich men, including a nephew of the Doge. He hired type designers and founders, editors and proofreaders and was soon engaged in a large-scale enterprise. By 1503 he was printing one thousand copies per month and the monthly expenses of running his business was equal to the annual income of a rich landowner of the period. Lowry gives a fascinating description of the Aldine house where Aldus housed his family, his press and workmen, editors, proofreaders and distinguished visitors like Erasmus of Rotterdam. That house became an intellectual center for the whole of educated Europe and was visited by Hungarians, Englishmen, Germans, Frenchmen and many others.

The myth grew in the nineteenth century that Aldus was some sort of early liberal who wanted to produce cheap books for the masses. In fact, his editions were not cheap and were directed to an audience of upper-class professional men who might be expected to become the philosopher-kings of an enlightened Europe. For these men, he invented the octavo volume which could be carried about and read in the intervals between important engagements. He wanted to insure that great literature would not be lost and that it would be available for the education of the rulers and leaders of European society and this he accomplished with spectacular success.

Another myth is that Aldus was an exemplary editor. In fact, since he could only work with the imperfect manuscripts near at hand, and with no manuscript catalogues nor philological and paleographic studies to be had, Aldus appears now as a slipshod editor. He often had poor pressmen and proofreaders—there was no standard set of proofreaders marks in his time—and he was under constant pressure to hurry his editions into the market. Lowry examines eleven manuscripts actually used in the Aldine press—they have the inky thumbprints of the printers on them—and notes the very large number of misprints and misreadings. But, as Eisenberg has pointed out, a printed text was the first step in the eventual production of standard texts.

By 1515, Aldus had printed at least 120,000 copies. He printed the first editions of ninety-four classical authors including Plato, Aristotle, Herodotus, Thucydides, Xenophon, Demosthenes, and all the Greek

dramatists except Aeschylus. Many of these were printed in editions of 3,000 in handy octavo volumes. They were distributed all over Europe and are to be found today in libraries in England, France and Germany where they were originally acquired. Sir Thomas More sent Raphael Hythlodaye to Utopia with the neat, portable octavoes of Aldus, to teach Greek to those otherwise cultivated people.

Lowry tells a splendid tale and describes convincingly how a combination of business acumen, the ability to cultivate friends and patrons in high places, combined with the skill of a scholar and a passionate belief in the values of that scholarship made Aldus one of the great teachers of Europe, perhaps of greater effectiveness than the more famous Erasmus whom he employed as an editor and whose books he printed. Lowry concludes, "By the time of his death, Europe was filled not only with his books, but with eager, committed groups of his admirers, who strove to reproduce in London, Vienna, or Poznan the glittering world of high scholarship and good company which they had once known in Italy."