ELIZABETH L. EISENSTEIN, The printing press as an agent of change: communications and cultural transformations in early-modern Europe, Cambridge University Press, 1979, 2 vols., 8vo, pp. xxi, 794; vol. 1, £30; vol. 2, £25; or £50 the set.

Bookmen have never managed to achieve an agreed definition of their field of study. Bibliography has been claimed on the one hand by mere, but useful, enumerators of authors and titles and on the other by lofty textual critics and scarcely less elevated literary ones. The librarians appropriated the subject as part of their professional mystery, only to abandon it for the siren lure of silicon chip and management studies. There were the chaps whose austere and sole delight was to reveal, exclusively to each other, the intricacies of press-figures, skeleton-formes, turned chain-lines, pin-holes, and compositorial analysis. Others devoted their labours to charting the evolution of type design, the careers of publishing houses, or the distribution of paper-mills. Some even deserted the medium for the package, in spite of the late Harry Carter's contemptuous dismissal of the ancient craft of bookbinding as "a species of cobbling".

Over the last fifteen years many of these traditional and sometimes competing kinds of bibliography have been drawing together into a new historical genre represented by a growing volume of monographs and journal articles and complete with the now obligatory French label as a seal of academic respectability - histoire du livre, best translated perhaps as "the historical sociology of the book". It will come as no surprise to learn that the French inspiration and first embodiment of the enterprise came in a series called Histoire et civilisation du livre, sponsored by the École Pratique des Hautes Etudes, Centre de Recherches d'Histoire et de Philologie in Paris.¹ The general editor, and a notable contributor, Henri Jean Martin, was a pupil of, and later a collaborator with, no less a scholar than the social historian and co-founder of Annales, Lucien Febvre. The flavour of the new bibliographical history ("la bibliologie rétrospective" is a recently used alternative label) may be caught from the title of Martin's own contribution to the series, Livre, pouvoirs et société à Paris au XVII siècle.² English-language readers had their first substantial taste of the new French confection in 1976 with the publication of David Gerard's translation of Febvre and Martin's L'apparition du livre under the title The coming of the book: the impact of printing 1450-1800.3 Much of the factual material in that book was from well-known secondary sources but the arrangement and conclusions revealed the authors' intellectual allegiance. English readers received a salutary jolt from a crisp demonstration, in their own language, of how provincial and underdeveloped British book production and distribution was, during the centuries before the eighteenth, compared with that of continental Europe. The Annales method was exemplified by the emphatic use of economic, geographical, and, admittedly fragmentary, statistical evidence. A final chapter on 'The Book as a Force for Change' struck a new though not entirely unprecedented note in English bibliography by examining the influence of

¹ Geneva & Paris, Librairie Droz, 1966 onwards.

² Geneva, Librairie Droz, 1969, 2 vols.

³ Paris, Albin Michel, 1958. English translation, London, New Left Books, 1976.

printing and publishing on humanism, religion, science, and the rise of vernacular literatures.

Anglo-American scholars made notable contributions to the new history of the book, not always with any detectable dependence on French models. Richard D. Altick's The English common reader: a social history of the mass reading public, 1800-1900^s was published as long ago as 1957 and approached book history through the experience of a particular class of reader using evidence from the record of popular publishing. Two recent books falling within the same genre are Bernard Capp's Astrology and the popular press: English almanacs 1500-18006 and Robert Darnton's fine study of the publishing history of the Encyclopédie using the archives of the Société typographique de Neuchâtel.7 In his acknowledgments Darnton declared that he "learned a great deal from the French masters of histoire du livre". Febvre and Martin had felt the need for an introductory chapter on the manuscript era,8 and a special aspect of this theme was taken up by M. T. Clanchy in his From memory to written record: England 1066-1307.9 Clanchy's concern is "the use of literacy in the Middle Ages" (sc. in England). His evidence is from records and documents rather than codices, but it is surely legitimate to extend the meaning of "book" to materials which give rise to many similar problems of supply and demand, communications technology, and distribution. The maverick among scholars concerned with the impact of print upon society was the late Marshall McLuhan. 10 It will be some time before the reverberations of his always stimulating, if cranky, ideas fall silent.

The two large volumes under review must be regarded as marking the coming of age of histoire du livre, at least so far as the English-speaking world is concerned. Whatever reservations one may have about Eisenstein's massive work of synthesis, she has incontestably mapped out in exhaustive fashion the main foreseeable areas of concern for future historians of the book. Historians of Renaissance, Reformation, and the Scientific Revolution will have no possible excuse for ignoring or minimizing the role of the printed book. Volume 1 contains Eisenstein's general reflections on the shift from script to print and her suggestions about the part played by the printing press in the momentous cultural and religious changes of the fifteenth, sixteenth, and seventeenth centuries. Volume 2 applies her theme to the history of science and medicine, and concludes with a fifty-eight-page "bibliographical index".

It is generally unsound to criticize a book for not being something other than its author intended; usually the book the reviewer himself would have written given prior wit and sufficient imagination. Eisenstein tells us frankly that her book is based on

⁴ For an interesting discussion of the archival reasons why histoire du livre is more easily based on French sources than British ones, see John Feather, 'Cross-channel currents: historical bibliography and l'histoire du livre', The Library, 1980, 2(1): 1-15.

⁵ Chicago and London, University of Chicago Press, 1957. Phoenix Paperback edition, 1963.

⁶ London and Boston, Faber & Faber, 1979.

⁷ R. Darnton, The business of Enlightenment: a publishing history of the Encyclopédie 1775-1800, Cambridge, Mass., and London, Harvard University Press, 1979.

⁸ By Marcel Thomas, pp. 15-28 in the English translation.

⁹ London, Edward Arnold, 1979.

¹⁰ Notably his *The Gutenberg galaxy: the making of typographic man*, London, Routledge & Kegan Paul, 1962.

secondary sources which she has spent fifteen years absorbing and reshaping. The result, at the very least, is an invaluable summary of the historiography of those grand historical themes mentioned above. The book is much more than just a review of past work, but the author's admitted distance from primary sources prompts strong reservations about the value of much of her enterprise. Eisenstein comes perilously close to endorsing the fallacy of the infallibility of print in a manner which would be impossible for anyone who had actually worked with early printed books, let alone manuscripts. The following quotations with their different but converging emphases reveal an ominously naïve approach:

"... all texts in manuscript were liable to get corrupted after being copied over the course of time" (vol. 1, p. 10).

This sentence might be rewritten with equal force – "all printed texts were liable to get corrupted after being reprinted over the course of time".

"The Power which Printing gives us of continually improving and correcting our Works in successive editions" (vol. 1, p. 112, quoted approvingly from David Hume).

The "Power" is certainly there, the achievement usually otherwise. It has to be said, loud and clear, that the process of reprinting generally tends to textual corruption. Eisenstein is fond of remarking on the way she supposes printing arrested the corruption of scribal texts or halted what she calls "scribal drift" (e.g. vol. 2, p. 596). The fact of the matter is that the process of transferring thoughts into print is intrinsically no more accurate than putting down those same thoughts on paper with a quill-pen. Consider the wretched compositor faced with his author's crabbed, blotted, and much-corrected copy. Each letter has to be selected from a large type-case and placed correctly on a composing stick to form a line of type which is, from the workman's point of view, upside-down and set mirror fashion. There is a good deal more to the process before the first line, let alone page or sheet, is ready for imposition. Accuracy in committing message to medium depends entirely on the quality, skill, and devotion of the workman rather than any virtue inherent in the technical process.

The author has a tendency to forget the obvious fact that behind every printed page there lies a handwritten copy. Few authors, in the days before word-processors, enjoyed the luxury of conveying their words directly into print. This leads her to comment (vol. 2, p. 661) on what she supposes to have been "the new *leisure* that printing gave to a *learned* class" affording them, apparently, "released time *from* grinding labour" and "time off from slavish copying and freedom from compiling long tables of numbers by hand" (author's italics). Who does she think provided copy for the printer?

Eisenstein remarks elsewhere (vol. 2, p. 576 ff) on the "degeneration" by scribal reproduction of Mondino's anatomy contrasted with the "improvement" of Vesalius by reprint. What actually happened was a swift and opportunistic plagiarism of Vesalius's famous plates by means of greatly inferior printed copies. This process of expedient corruption of anatomical illustrations by printers had a long and dishonourable history into the nineteenth century.¹¹

"Full discussion and illustration in L. Choulant, History and bibliography of anatomic illustration in its relation to anatomic science and the graphic arts, trans. and ed. by M. Frank, University of Chicago Press, [1920].

It is precisely her apparent lack of acquaintance with the irritating inconsistencies of the real products of the early hand-press which makes one wish that the author had stuck to deploying her other incontestable bibliographical arguments concerning the replicative and hence preserving power of print. It is the printing press's ability to produce quickly (once the initial type-setting is complete) multiple copies (not all necessarily or even usually exactly alike, but sufficiently so) to the limits of technical or economic capability which marks it off as a radically different and more efficient mass communications medium from scribal reproduction. Eisenstein's book must put paid to anyone's doubts on this score.

Aspiring Ph.D.s will plunder her pages for research topics, so they need to be warned that Eisenstein's complete dependence on modern literature has produced some considerable distortion in her otherwise comprehensive account of the revolutionary changes effected by the invention of printing from movable types. Fifteen years is none too long a time in which to absorb the suffocating amount of commentary and exegesis which has gathered around the large historical themes with which this book is concerned. It is to be doubted whether quite so much of the resulting synthesis needed to be presented to the reader. These lavishly produced volumes were published at £35 a set, a sufficiently horrid price which has risen, in the interim, to an absurd and indefensible £50. A severely condensed version in paperback, setting out the author's main hypotheses, minus much of the supporting material from secondary literature but retaining the valuable bibliographical index, would be a signal service on the part of the publisher not only to students but also to the author herself.

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ROBERT G. FRANK jr., Harvey and the Oxford physiologists. A study of scientific ideas, Berkeley, Los Angeles, and London, University of California Press, 1980, 8vo, pp. xviii, 368, illus., £16.50.

Harvey's discovery of the circulation of the blood (1628) is customarily looked upon as an isolated event in medical history. It is treated as an erratic block which stands out as the Copernican turning-point when the old order was put down and an entirely new dispensation was embarked upon. In reality, the situation was fluid. The truth of the new view and the observational and experimental detail on which the conclusions and finally the discovery were based remained as much alive as the Harveian spirit. However, Harvey, the lifelong thinker vexed by the problem of the purpose of circulation, could hardly have failed to see that he would leave a large legacy of unanswered questions – a programme for research. This notably concerned respiration – the constant need for air, the real necessity of its entry into lungs and heart in view of the non-existence of "vital" or any other "spirit" supposedly generated and "cooled" by it; his explanation of the colour difference between arterial and venous blood in terms of the Aristotelian unity (henotes) of all blood as products of a "straining" or optical artefact may have contributed to dissatisfaction just as much as his playing-down of the lymphatics and the role of the thoracic duct.

In 1642, when he had reached his sixty-fourth year, Harvey arrived at Oxford with