



**DIVINE ART, INFERNAL MACHINE: THE RECEPTION OF PRINTING IN THE WEST FROM FIRST IMPRESSIONS TO THE SENSE OF AN ENDING**

Elizabeth L. Eisenstein  
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For the book artist the book is not a docile medium awaiting authorial expression. The book sets its own stage and each artistic action is haunted by embedded constructs and conventions. If you alter a codex or scroll you will find embedded connotation changing the meaning of the alteration. Book artists can be surprised to find themselves manipulated.

Because of this potent influence of format on expression (paratext on content, device display on design, and historical context on artistry) book artists can advance chances of success with an attention to book studies. To do this it is useful to be aware of trends and progressions in that field. Elizabeth Eisenstein's new book is an academic achievement but it also an advisory for the book artist.

Elizabeth L. Eisenstein studied printing as a third agent at work in production of humanist arts. Her work suggested that printing was a single communications shift that altered many systems of belief. Following her interpretation, printing proved to have strange capacity of advancing itself at the same time that it dissolved religious certainty and disconcerted sciences. Printing commerce and technology marched on and the mostly innocent printers left ruins of revolution behind them.

Bungee-like connections of intended and unintended consequence provokes other questions. Why is the classical reflex between manuscript and print or reformation and counter-reformation or textual and visual literacy so dynamic and so persistent? Is print influence at work to provide a single underlying system of religious, and scientific change? What keeps the book wedged in among other media? Will the book absorb its own latest side effect of combined print and screen delivery?

A selection of publications has recently appeared to further address such issues. These book studies pivot from retrospective views of printing and text production to suggest patterns for the future of books generally. Here is a sampling: concerning scholarly communication see *Transferred Illusions, Digital Technology and the Forms of Print* by Marilyn Deegan and Kathryn Sutherland (2009); concerning book history see *The Book in the Renaissance* by Andrew Pettegree (2010) and concerning book design see *How the Page Matters* by Bonnie Mak (2011) or *Breaking the Page, Transforming Books and the Reading Experience* by Peter Meyers (2012). The last is a forthcoming ebook with the first three chapters now available free.

Meanwhile, Elizabeth Eisenstein continues to engage the field of book studies. *Divine Art, Infernal Machine* is not an unneeded elaboration of *The Printing Press as an Agent of*

*Change, Communications and Cultural Transformations in Early-modern Europe* (1979). The earlier work constructed the premise of interpretation of printing as an active determinant of cultural change. This new work brings out positions of historical institutions and attitudes of authors along with the witness of their publications to confirm that influence of print was also well understood in historical periods. This is not a premise of technological determinism but a story of the opportunism of conflicting belief and emerging secularism exploiting printing technologies.

The new Eisenstein book is arranged in century-like eras of printing history and in each era's special participation in the power of the press. Even more interesting authors, illustrators, printers and publishers vied to preempt the flood of print with their own floods of even more preemptive works. The success of printing became its own enemy.

The fifteenth-century advent of printing was welcomed by the conservative establishment of monastery and church institutions that were well positioned to invest and adopt the new technology. Success in the sixteenth century was increasingly capitalist and commerce driven. Darker prospects arose from realization that any polemic or any counter theology could be advanced by printing. Printing technology proved a great UN-determinant and its power of emerged as an ambiguity.

Seventeenth-century publication excelled in influence, especially as extended by illustrative engravings, maps and charts. Illustration themselves figure into this new Eisenstein work. Familiar engravings such as the print shop from the series *Nova Reperta* are given close attention as Eisenstein pursues this historical return of visual literacy that had dominated prior to printing. Meanwhile the graphic and textual power of the press created constant supper-cession of editions, constant discredits of previous works and a massive, chaotic growth of libraries that almost immobilized researchers. Strategies of deletion became crucial and a churn we now interpret as pre-cursive Internet, emerged.

Printing of the eighteenth century took on additional roles in promotion of new sciences and political philosophies. Innovative authors and innovative readerships also found a larger domain for exercise of imagination and fantasy. Eisenstein again studies implications. An interplay of enlightenment and entertainment dissipated polarized attitudes of the demonic or divine nature of the press. Enthusiasm for publishing was mixed with laments over its crass commercialization and editorial decline.

Eisenstein charges into the nineteenth century "zenith of print culture." The period produced a "tendency to dematerialize printed output". Commentators such as Victor Hugo began to see decoupling of knowledge from monuments as an engine of duplication of copies of copies produced a disembodied book. Nineteenth-century technologic determinants, so quickly discounted in wider studies of social influence, were not trivial as technology facilitated ever greater productivity. Promotion of literacy became a marketing agenda.

As the Eisenstein perspective moves on we encounter the role of the newspaper wedging apart massive literary readerships. This chapter, "The Newspaper Press: The End of Books?", felt more like an interruption than a transition. Formats of pamphlets, books, broadsides and newspapers perhaps require a fuller treatment as formats. Certainly the paratextual structures of each deserve a distinct history. Conditioned reader expecta-

tions, prior to any the sway of any content, makes a newspaper a newspaper, a magazine a magazine and book a book. Eisenstein, of course, discounts simple supercession among media but leaves less considered any implications of their continuing accumulation.

For fans of the embodied physical book there is also another slight disappointment. Eisenstein's magisterial and influential works could be seen as encompassing the whole topic of the book as factor in culture change. Yet paper, only passingly mentioned, was certainly as crucial to realization of the book's influence as was printing. Perhaps the bias here is that progressions of printing can be correlated with reception of content while paper cannot. And what about packaging and advances in the mechanism of the codex?

The last chapter heading, "Toward a Sense of an Ending," sounds conclusive but we are bought to a firewall of the present. We do find a more focused treatment of the role of paratext. She follows McLuhan fixed precepts of newspaper paratext and overlays one of her own, mentioned throughout the book. This is that "the best of the past continues to be set against the worst of the present." Here we come to a principle of the sweep of the history of printing; the "...striking" ...persistence of similar reactions to similar problems...".

Each era was "absolutely certain that its situation was completely unprecedented". One regular pop-up, for example, is that information overload always arrives as a very recent phenomenon. Instead, recurrent continuities, basic paratext and ever increasing accumulation of media are a persistent paradigm. "Being online and in print are by no means incompatible." Only Western "habits of mind" continue to portend the end of books and printing. Allures of rapture constructs or cultural cataclysm will probably continue to be misplaced.

Finally an unanticipated consequence of printing as an agent of change would surprise Eisenstein herself. As the first off-set printing was exhausted the continuing demand was met with print-on-demand production. The POD production is high-speed copier work with blackened, bold text, dithered illustration, and a glare of fuser. With some copies the work would be easier to read on an e-ink screen. The off-set version presents crystal clear illustration and sharp and even text. It is a pleasure to read and a pleasure to contemplate. Here is a contrast between dry and wet ink printing and the consequence is accentuated beyond legibility; the best of the past can be compared with the worst of the present at the same moment in book history. ■

*Editor's Note: Additional paragraphs missing from the end of the article were added February 2013.*