

Old Media in the New Millennium

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I was in a library when I started to think about the topic of this paper. As I looked around, it occurred to me that I was in an especially appropriate setting. For libraries embody the principle I planned to discuss. They exemplify, that is, the coexistence of old media with new. Throughout this country and indeed throughout the world; libraries - until recently the most conservative of all our institutions - have been undergoing radical change; card catalogues have been displaced by monitor screens and new job descriptions are being issued for librarians themselves. They are now called Directors of Information Services. But whatever new title they assume, those in charge still have to contend as librarians always have - at least for the last 500 years with an increased output of printed materials and a persistent shortage of shelf space and storage facilities.

The need to acknowledge the coexistence of old media with new seems especially urgent in view of the unhistorical and often hysterical pronouncements to which recent developments have given rise. Let me begin with a citation from a typical doomsday scenario taken from a well received work entitled *The Gutenberg Elegies*:

... as Marshall McLuhan originally theorized... we are in the midst of an epoch-making transition; ...the ...shift from printbased to electronic communications is as consequential for culture as was the shift instigated by Gutenberg's invention... This circuit-driven renovation is happening in every sector on every level and the momentum will not slacken until the electronic web has woven itself into every potentially profitable crevice. Ten, fifteen years from now, the world will

be nothing like what we remember, nothing much like what we experience now ... our relationship to the space-time axis will be very different from what we have lived with for millenia (Birkerts, p.192-3).

Now of course we have not lived with the printed book "for millennia" or even for one millennium. During the centuries that ensued after Gutenberg's invention, our experience of "space-time" has scarcely remained unchanged. Indeed the feeling of being "in the midst of an epoch-making transition" serves to link our generation with several that have gone before.

To go back no further than the 1830s, Alfred de Musset described how his generation experienced the aftermath of the French Revolution and the Napoleonic wars: "behind them, a past forever destroyed... before them ... the first gleams of the future; and between these two worlds ... a sea filled with flotsam and jetsam ...the present, in a word" (Musset, 5). Later on, Henry Adams wrote about being abruptly cut off from the experience of his ancestors by the Boston and Albany Railroad, the first Cunard steamer and the stringing of telegraph wires (Adams, 1918, 496). Still later, Samuel Eliot Morison said the same thing about the internal combustion engine and nuclear fission (Morison, 1964, 24).

Is the idea that a new age has dawned with the advent of new media also embedded in our past? Let us look at some earlier predictions that were made in the 19th century after paper making had been industrialized and wooden hand presses were giving way to steam powered iron machines. Even while printing industries were flourishing and output was rising to meet increasing demand, nineteenth century observers began to speculate that the end of the book was on hand. According to Thomas Carlyle, the replacement of book by newspaper had already begun in the age of the hand press with the sharp rise in the number of newspapers being distributed in the streets of revolutionary Paris (Carlyle, 1837, 21-25). Carlyle's description of revolutionary journalism was taken over by Louis Blanc whose history of the

French Revolution was written after the author's career as a journalist-turned-deputy had come to an end. In a much cited chapter on the emergence of journalism as a new power in human affairs, Blanc paraphrased Carlyle. Books were suited to quieter times, he wrote, but we are now in an era when today devours yesterday and must be devoured by tomorrow. And then comes the celebrated formula: The age of books is closed; the age of the journal is at hand (Blanc, 122). In the mid-century also, John Stuart Mill expressed concern that most people were no longer taking their opinions from churchmen or statesmen. Nor, he wrote, were they being guided by books. Their thinking was being done for them by men much like themselves through newspapers (Mill, 66). After the century's close, Oswald Spengler summed up the gloomy prognosis in his gloomy *The Decline of the West*: just as the age of the sermon had given way to the age of the book, he wrote, so too the age of the book had given way to that of the newspaper (Spengler, 463).

Taking advantage of hindsight, we may now agree that nineteenth century observers were right to assign special significance to the emergence of a periodical press. It restructured the way readers experienced the flow of time and altered the way they learned about affairs of state (Rétat, 1985). It created a forum outside parliaments and assembly halls that allowed ordinary readers and letter writers to participate in debates. It provided ambitious journalists, from Marat to Mussolini with new pathways to political power (Eisenstein, 1991). It gave a tremendous boost to commercial advertising. It served to knit together the inhabitants of large cities for whom the daily newspaper would become a kind of surrogate community.

Moreover, although early gazettes and newsletters had resembled books, the later dailies developed a distinctive size and format so that they had to be placed in a separate category by archivists and librarians. The front page layout of the modern newspaper was unlike any earlier printed product. The patchwork of unrelated items containing the first paragraphs of chopped up stories each to be continued in some other place (section B or C or D) disproved in spectacular fashion the often

cited McLuhanite notion that print encouraged linear sequential modes of thought. As McLuhan himself observed, "the modern newspaper presents a mosaic of unrelated scraps in a field unified only by a dateline" (McLuhan, 219). Twentieth century painters experimenting with collage techniques may well have been influenced by the front page layout. Daily exposure to newsprint probably accustomed successive generations to the disjunctions and discontinuities which came to characterize modernist movements in art and letters. Now that printjournalism is considered passe, disjunctions get labelled postmodern and attributed to new media.

19th century observers were right to sense that journalism had significant transformative effects. But they were wrong in assuming that the advent of the newspaper signified the end of the book. As it turned out, book and newspaper were interdependent, their fates closely intertwined. Book sales came to hinge on newspaper advertisements and on reviews in the periodical press. Press laws usually encompassed both forms of printed output. To be sure, publishers were less likely to be prosecuted for costly volumes aimed at elites than for cheap papers that presumably stirred up the rabble. Yet efforts to control all printed output characterized authoritarian regimes in the past and still mark totalitarian regimes in the present. Nineteenth century liberals objected to the Index of Prohibited *Books* as well as to censorship of periodicals and newspapers. (A difficult book not a readable pamphlet led to the death sentence imposed upon Salman Rushdie.)

Coexistence and interdependence were especially apparent during the age of Mill and Carlyle. For the nineteenth century novel was often conveyed in serial form by newspapers; chapter endings were artfully composed to keep readers in suspense until the next installment arrived. The soap opera of today and the serial novel (roman fleuve) of yesterday had much in common. It is true that until the advent of the radio, there was nothing quite like that interruption of narratives by commercials that gave the "soaps" their name. Nevertheless, as early as the 1830s, fiction writers

were complaining about the intrusion into literature of vulgar commodities for sale. In his 1834 preface to *Mademoiselle de Maupin*, Theophile Gautier expressed savage indignation at the idea of seeing his work advertised together with such items as elastic corsets, crinoline collars, patent nipple nursing bottles and remedies for toothaches (Gautier, 39).

Gautier's other complaints also strike a familiar note. The public's appetite for scandal was being so whetted by news reports of sensational trials, he wrote, that "the reader could only be caught by a hook baited with a small corpse beginning to turn blue. Men are not as unlike fishes as some people seem to think" (Gautier, 15). As is true of television producers today, many writers expressed disgust at the vulgar sensationalism of others, but few could afford to abandon the hope of creating a sensation themselves.

Novelists were not alone in expressing concern about the effects of sensational journalism. Doctors became alarmed over the deterioration of the nation's mental health. A physician named Isaac Ray published a book entitled *Mental Hygiene* in 1863 in which he noted, among other worries, the adverse effects of crime reporting on the national psyche: "The details of a disgusting criminal trial, exposing the darkest aspects of our nature, find an audience that no court-room less than a hemisphere could hold" (Ray, 237).

On such issues, nineteenth century opinions and present day attitudes do not seem to be very far apart. Although larger audiences are being reached and different mass media are arousing alarm, the complaints are much the same - which is not to say that they were or are invalid. The ubiquity of sex and violence; intrusive commercials and sycophancy to mass taste represent a steady state crisis that is no less troublesome for being so persistent. The "tawdry novels which flare in the bookshelves of ...railroad stations" offended Matthew Arnold more than a century ago (Altick, 310). Similar displays seem no less offensive when exhibited on the shelves of today's airport shops –

if, indeed any books placed there at all.

Still, the newspapers and magazines that are sold in airports probably do not seem as threatening to book lovers at present as they did to those in the past. Disdainful remarks about sound bites now go together with respectful comments about print journalism. In view of the defects of TV newscasts, book and newspaper are now often coupled in nostalgic reminiscences of that golden age when print culture reigned supreme. As already noted, however librarians and archivists are less likely to be nostalgic. They still have good cause to worry about the relentless pressure exerted by the ever increasing output of printed materials on available shelf space.

The advent of the electronic church shows how the sermon, once thought to be outmoded, was capable of being resuscitated. The paperback revolution of the 1960s came as even more of a surprise. In the present decades new giant chain stores (Barnes and Noble/ Borders) are said to be in competition with AMAZON dot com. It's worth noting that Amazon dot com, just like our libraries, is designed not to displace but to facilitate access to books in print. The same point applies to T.V. book programs. Whether highbrow or middle brow (Oprah Winfrey) they demonstrate how resort to new media may increase markets for old media. The death of the novel also seems somewhat less likely at present than in previous years. There is even renewed demand for nineteenth century novels by Jane Austen, George Eliot, Victor Hugo, thanks to recent filmed, televised and staged versions of their works.

These examples may suffice to indicate that the last two centuries have witnessed not a succession of deaths - not the death of the sermon, the book, the novel - (I've spared you discussion of the death of the author and of God) - not a succession of deaths but, rather, a sequence of premature obituaries.

In his introduction to an essay collection entitled *The Future of the Book*, Geoffrey Nunberg takes note of this phenomenon which he attributes to the mistaken doctrine of supersession. This doctrine, he notes,

underlies expectations (false ones it seems at the moment) that photography would put an end to painting, movies would kill the theatre, television would kill movies. To be sure (Nunberg does not point this out but it is worth noting), the doctrine is not always at odds with reality. The age of the hand copied book like that of the horse and buggy did come to an end. Yet, (as recent monographs have documented), hand copied books were still being produced in Western Europe more than a century after Gutenberg. At this point it should be noted that I'm offering a Eurocentric view throughout this discussion. Some non-Western regions still offer employment to scribes. Even in the West, as Curt Bühler noted many years ago, the scribe long outlived the manuscript book and was not superseded until the advent of the typewriter (Bühler,26). One thinks of all those clerks plying quill pens in nineteenth century law offices. And although the manual typewriter may now be on the verge of obsolescence: its keyboard, transferred to the word processor, has received another lease on life.

The advent of printing is seen to outmode, not the manuscript book, but the Gothic Cathedral, in the most celebrated case cited by Nunberg to illustrate the supersession doctrine. It comes from the chapter in Victor Hugo's *Notre Dame de Paris* where the archdeacon first points to the great cathedral and then stretches out his right hand toward a 15th century printed book and announces "Ceci tuera cela". *This* (the printed book) will kill *that* (the cathedral which had served for centuries as an encyclopedia in stone.) Nunberg does not pause over the ironic implications of Hugo's making this pronouncement while living, as he did, in the midst of a Gothic revival. Nor does he comment on the building of Gothic cathedrals in the present century - witness the Cathedral of St John the Divine here in New York and the National Cathedral which my children watched being completed near our home in Washington D.C. Nevertheless he argues persuasively about the fallacy of assuming that new artifacts and styles must always supersede old ones.

Of course there are significant differences between medieval cathedral building and Gothic revival

architecture just as there are between the experience of nineteenth century readers of Hugo's original novel and that of recent viewers of Disney's "Hunchback of Notre Dame" (not to mention the earlier film where Charles Laughton played Quasimodo). To complicate matters (and these issues are remarkably complex), one must also allow for the difference between the way Hugo's novel would have been received in a French language version as against a translated one; by a nineteenth century reader as against a twentieth century one. And then as bibliographers remind us, one must also allow for the way the presentation of the same text varies from one edition to another.

For printed editions do tend to supersede each other. David Hume thought the fact that he was able continually to improve and correct his work in successive editions was the chief advantage conferred on an author by the invention of printing (Cochrane, 19n). But although defective early editions might be superseded by improved later ones; early editions, however defective, might also be regarded as becoming ever more valuable to rare book collectors. (Indeed defects may even enhance the value of a printed product as in the case of a mistake in printing a postage stamp.) It is characteristic of our culture that markets for antiques flourish alongside demand for the latest designs. (*The New York Times* ran a story a year or so ago about a collector of slide rules) Even the horse and buggy has reemerged as a fashionable acquisition along with the antique car. Very soon, it will be the turn of the manual typewriter (but never, I suspect of old floppy disks. Indeed the survival value of a 500 year old book is greater than that of a 10 year old floppy which is the wrong size to fit into today's machines.)

The doctrine of supersession is much too coarse grained to make room for such complications. Indeed it makes no more allowance for revivals than it does for survivals. It thus encourages us to overlook what I think is most characteristic of our own era - namely the coexistence of a vast variety of diverse styles and artifacts reflecting different spirits of different times. Even the New York skyline tells the same story. Skyscrapers are certainly modern

structures; yet, as others have noted, their tops often bear marked resemblance to chateaux, temples and mausoleums. What applies to the ever more eclectic melange of styles and artifacts also pertains to media. That is to say, we confront an ever more complex mixture of diverse media: painting, woodblock, engraving, lithograph, photograph, drama, film, television, radio, videotape, walkman, phone, fax, word processor, copying machine, computer, and so on and so forth - none of which has been superseded, all of which confront us in a bewildering profusion at the present time.

The author of *The Gutenberg Elegies* seems to deny coexistence even while arranging to have his denial appear in a printed book. (Ironically he received a special fellowship to spend a year in the New York Public Library pursuing research in that great repository of the printed word.) That the printed word is, or is about to be, superseded by something else seems most unlikely to me at present - especially when I am preparing a hard copy of this very talk, pondering a request to send another one off for publication in a journal and planning to get an offprint of yet another already published piece duplicated on my copying machine.

Mention of the copying machine reminds me that the photocopier has been undeservedly neglected in recent accounts. Perhaps some of you recall the television commercial for xerox with a monkish scribe taking a text into a monastery, reemerging with a stack of copies and proclaiming "it's a miracle" ? (One recalls the anecdote told by Defoe about Gutenberg's partner, Johann Fust, arriving in fifteenth century Paris with a wagon load of bibles. In this case no miracle was proclaimed but black magic was suspected. When the doctors of the Sorbonne examined the bibles, " They found the exact agreement of every book with another, that every page had a like number of lines, that every line had a like number of words. If a word was misspelled in one, it was also misspelled in all, Nay if there was a blot in one, it was alike in all," (Defoe, *Natural History of the Devil*). They set upon Fust and accused him of black magic. The anecdote gains added resonance from the frequent misspelling of Fust's name as Faust and the resultant confusion between

the legendary sorcerer and Gutenberg's partner.

The Xerox commercial has not been replayed very often in recent years. Newer miracles are now being hyped. Nevertheless, the copier is still indispensable to all of us who frequent archives and rare book libraries. It has dramatically changed my own working habits. I used to make sure before setting off for a library that I had pen and paper on hand to take notes and copy citations. The era of the hand copied book had ended long ago but the hand copying of passages from printed books was still going strong. I recently learned that DeWitt Wallace spent hours in the New York Public Library transcribing printed passages by hand for early editions of *The Readers Digest*. Probably he developed writers cramp as I used to do. Now, of course, we worry more about carpal tunnel syndrome. In any case, I now enter libraries only after checking that I have a special copy card or enough coins on hand to put in the library copier. Researchers have ceased to serve as their own scribes even while they line up to endow printed pages, placed face down in a machine, with a longer lease on life.

Much as medieval universities were surrounded by stationers who farmed out pieces of texts to lay copyists for reproduction, so too late twentieth century universities have been surrounded by shops containing copying machines. When I was a faculty member at Michigan it was common practice to take sections of books to the shop to be duplicated and then have the selections bound together, thus producing special anthologies of readings for certain courses. Medieval florilegia, common in the thirteenth century, thus reemerged in the late twentieth century as "course packs". The publishing revolution that was set in motion by the copier has recently been arrested by law suits brought by publishing firms objecting to infringements on copyright and setting limits on fair use. Whatever the outcome of pending cases, the continuing struggle indicates that vital interests are still believed to be at stake in the printed word.

Of course, litigation over course packs represents only the tip of the iceberg when it comes to

the destabilizing effect of very recent technologies on structures designed in an age of print to safeguard intellectual property rights. I have no idea how the control of texts by authors (and/or publishers) can be maintained in view of the floodgates that stand wide open on the web. Nor do I feel competent to speculate about the effects of EMail, internets and other forms of paperless publishing on scientific research. One wonders what steps are being taken to safeguard the reward structure that has encouraged scientific innovation until now. What will happen to peer review and priority claims? I must confess to becoming less and less certain about the desirability of an entirely unregulated flow of information in view of those special web sites that enable conspiratorial theorists to share their paranoid fantasies. After hearing a few snatches of hysterical commentary, I've also begun to question the desirability of uncensored talk radio.

Mention of talk radio brings up intriguing issues associated with re-oralization in the twentieth century. Although printing is silent and radio broadcasts are not, the two still share some significant features. In 1946, after speaking on the BBC to some twenty million people, Harold Nicolson wrote in his diary that he had no real feel for his audience. "To whom am I talking?" he asked. Although an audience of readers had been replaced by one of listeners, the sense of distance between author and invisible public remained. I've already alluded to the revitalization of the sermon by electronic media. What parish does the electronic preacher address?

Before printing, powerful lungs had been required by orators and preachers who hoped to gain a popular following. After printing, a new rather paradoxical figure emerged: the silent demagogue or the mute orator. The latter phrase was actually used to describe an influential deputy to the French Constituent Assembly in 1789. The deputy had issued an incendiary journal called the *Sentinel of the People* on the eve of the Revolution but he was said to whisper like a woman when called on for a speech (Eisenstein, 1989, 193). Many of those who became prominent on the eighteenth-century political scene were notably deficient in traditional oratorical skills. John Wilkes, in England in the 1760s, was an

indifferent public speaker and when he had to respond extemporaneously he fumbled his words. Tom Paine never swayed a colonial legislature with a single memorable speech. Paine's friend Brissot had a sonorous voice; but he disliked public speaking, was untrained in oratory and timid before crowds. Camille Desmoulins stammered when he spoke. It was solely the power of their pens harnessed to the press that gave such men a metaphorical "voice" in public affairs (Eisenstein, 1991, 152).

The advent of radio introduced a new situation. Powerful lungs are still not needed (except perhaps by coaches engaged in quarrels with umpires and teachers or parents subduing noisy children) but certainly the human voice regained lost ground. At first, groups gathered around radios and TV sets seemed to counteract some of the isolating effects of individual absorption in reading materials. But the most recent trends point in the opposite direction - toward a fragmentation of audiences with the proliferation of radios and TV sets and the ubiquity of niche marketing.

Individuals are also being encouraged to go their separate ways by the opening of new frontiers in cyberspace. A youngster who used to be lost in the -world of books is now also likely to be completely absorbed in playing virtual games. A seventeenth century writer expressed regret at the loss of conviviality in coffee houses where, he wrote, everyone now sat in "sullen silence" reading newspapers (Brewer,148). One is reminded of the many fellow travellers one now sees on planes or trains with earphones clamped on their heads. At least one could catch the attention of the "sullen" silent reader by making a noise, whereas nothing seems to disturb the listener wearing earphones. The ubiquity of tapes and cassettes, and audio books all encourage belief in the supersession of the printed word, until one catches sight of a youngster fully absorbed in the latest Harry Potter.

I've been talking about the fate of the printed word. There is also the printed image to be considered. In such disparate fields as bird watching and art history, the printed image was and still is of enormous consequence. In July, 1996, a ceremony was held here at the Metropolitan Museum of Art to mark the publication of a 34 volume Dictionary of Art, containing 15000 images and 28 million words. "Only in the age of the jet plane, the photograph, the fax and the computer has a work like this been possible, " wrote the reviewer in *The Washington Post* (Oct 16, 1996, Section B, 8). No mention of printed words or images. Yet this dictionary probably owes more to the cumulative results obtained by the old media than it does to jet, fax, or computer. It represents the culmination of a tradition that originated with Vasari's sixteenth century illustrated collective biography of artists - a tradition that also encompassed Diderot's eighteenth century *Encyclopedie* which was subtitled: "A Dictionary of Arts and Sciences" and which contained 17 folio sized volumes of text and 11 volumes of plates - eleven folio sized volumes, that is, devoted exclusively to pictures.

It is too often forgotten that images replicated on wood and metal were introduced at more or less the same time as Gutenberg's invention. As William Ivins insisted "the exactly repeatable pictorial statement" was at least as significant an innovation as was letterpress printing (Ivins, 2). On this point we ought to follow George Sarton's advice and think of a double invention: typography for the text and engraving for the images (Sarton, 116-119). Otherwise we are likely to reinforce the mistaken notion that printing entailed a one way movement from image to word.

To be sure there was such a movement, in Protestant regions, at least, As is implied in Victor Hugo's account, bible stories presented by stone portals and stained glass went out of favor even while bible stories conveyed by printed chapter and verse were being translated into vernaculars and published far and wide. Some iconoclastic Puritans insisted on lay bible *reading* while smashing graven images.

But although newly printed bibles and austere white washed churches did replace sculptured

stone portals and stained glass in some regions; in others, religious imagery was exploited by all available means. Especially in Catholic regions, Baroque illustrations of angels, saints, and martyrs were multiplied in diverse media and circulated among the faithful as they still are being circulated even now. Nor did Puritans object to the use of printed images for didactic purposes. Indeed picture books for children came into vogue under Protestant auspices.

Moreover, use of the printed image was by no means confined to religious, moralistic and didactic purposes. A new culture of the copy affected all the fine arts. Pornography found a large audience in sixteenth century Europe with the publication of Aretino's verses accompanied by those graphic presentations of copulation known as "Aretino's postures". The same era saw frequent resort to political propaganda by means of caricatures and cartoons. The French Revolution produced prints of the storming of the Bastille and peasants with pitchforks that still resonate in the modern political imagination. Image driven foreign policy did not originate with television pictures of starving African children. There were newspaper wars before there were TV wars. Cartoons of Belgian babies being bayoneted by brutal Germans played a part in winning support for American entry into World War I. Later, the discrediting of anti-German propaganda during World War I would encourage an unjustified skepticism about the atrocities that were committed in World War II.

To the historian of early modern science, probably the most important aspect of the double invention is that it led to a greater reliance on image and symbol and less reliance on words. Once it became possible to duplicate precisely rendered drawings of natural phenomena together with exactly repeatable diagrams, graphs, equations and the like, scientific communications became less dependent on ambiguous texts whether in Greek, Arabic, Latin or the vernaculars. Identical maps, charts, and log tables fixed on printed pages made it possible for observers located in different regions to coordinate their findings and to trace the paths taken by moving objects such as planets, comets and supernova with

unprecedented precision .

The remarkable advances that were made after the discrediting of the ancient authorities such as Galen on anatomy or Ptolemy on astronomy help to account for the widespread acceptance of the doctrine of supersession. I'm going to sidestep current debates among historians of science about paradigm switches and simply note that to almost all nineteenth century observers, it seemed obvious that the ancients had been surpassed in science and technology.

Among many Victorians, the doctrine of supersession (together with its counterpart: the idea of progress) was so widely accepted and fully orchestrated that it was applied to all phenomena - not just to Ptolemy and Galen or dinosaurs and dodos but to the entire course of human history and to all cultural artifacts. "In every department of human life - in its business and in its pleasures, in its beliefs and in its theories, in its material developments and in its spiritual convictions - we thank God that we are not like our fathers. And while we admit their merits, making allowance for their disadvantages, we do not blind ourselves in mistaken modesty to our own immeasurable superiority"(Froude, cited by Hartwell, 416). I often wonder what such commentators would make of the counter cultural trends at work today when the march of medicine is being countered by a vogue for homeopathy and acupuncture; when reports of a moon landing are coupled with astrologers casting horoscopes in daily papers. Even now, quite a few of my contemporaries are taken aback by the resurgence of literal fundamentalism and the advocacy of "creationism" more than fifty years after the Scopes Trial in Tennessee.

Such phenomena might seem less surprising if we were not so entranced by the advent of all the new communications technologies that we fail to consider the preservative powers of print. In July, 1995, London's Sunday Telegraph (July 23, 1995 p.5) announced that the Church of England was launching itself into cyberspace to enable churchmen to surf a world wide web of biblical information. This announcement came

to mind when I ran across an article discussing the trend toward globalization. Ignoring evidence of fragmentation and niche marketing on the web, the author asserted that "the world was becoming ever more homogeneous". But the action of the Church of England points in the opposite direction. Not only is the world still divided by adherence to different faiths but within Latin Christendom itself bible printing undermined the use of a single religious tongue. The Gutenberg Bible, of course, was in Latin, but the Lutheran Bible was not. Vernacular bibles produced by Luther's followers balkanized the common Latin culture of the Western Church. New editions of modernized versions have scarcely helped to put Humpty Dumpty back together again. "English was good enough for God; it should be good enough for Texas" remarked a Texan opponent of bilingual education. Efforts to bring the Gospel to everyman are still being undertaken on a global scale and the Bible continues to be translated into hundreds of new tongues. Even now, new literary languages are being created and then fixed in print by missionary societies. The tower of Babel is growing ever higher alongside the expanding Web.

After this final example, let me offer a brief conclusion. Print culture no longer monopolizes modern communications and now shares the stage with a bewildering variety of new media. Nevertheless the printed word has not been superseded. A new found capacity to delete words on a screen can scarcely keep pace with a longer lived capacity to fix words on paper. Indeed all indications are that the knowledge industry is simply going into higher gear, problems of overload are becoming ever more acute. In antiquity when texts were subject to an economy of scarcity the voracious appetite of Chronos, the devouring God of time inspired fear. During recent centuries, a monstrous capacity to disgorge is more threatening.

For all the progress that is being made with electronic journals, Ebooks and paperless publishing, the duplicative powers of print are still leaving a permanent mark on present day culture. To understand the world in which we live, we have to take into account the

unsettling effects of new communications technologies. But this should not distract us from also acknowledging the continuing, ever cumulative and still disturbing effects of a double invention that is now five hundred years old.

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