Booting up books: The codex will survive

by Rodney Clapp in the March 9, 2010 issue

Hardly a day passes without someone declaring the death of the book. Recently Lisa Miller of *Newsweek* viewed an electronic edition of the Bible that was replete with linked maps, a commentary and dictionary, and 700 paintings depicting biblical scenes. Astonished almost as much as Moses at the sight of the burning bush, she sputtered, “This is the beginning of the end of the Word.”

Those of us who care about the church and its future may rest easy. Theologically, the future of the Word as the Bible remains assured. That is because the God met in Israel and Jesus Christ acts in history, and the church (as well as the synagogue) can give no remotely adequate account of its faith and practice without resort to the memory of a story, a story that has been preserved via the spoken and written word. So reading media may change, but reading and “the book” will live as long as anything like Christianity survives.

Still, you can understand Miller’s exaggeration. The last decade has been little short of apocalyptic for print magazines and newspapers. In that light, what can we say about the future of the book?

We will think more clearly on this topic if we remember that the printed and bound book is itself a form of technology. And it is not the first technological medium in which books were produced. Books have been written and reproduced on scrolls of papyrus or animal hides. Before that they appeared on wood, stone, wax, bronze, pottery and silk among other media.

The form of the book that many now think is passing away is the codex, in which leaves of paper are bound into a single brick. Invented by the Romans in the third century before Christ, the codex is a remarkable piece of technology—it is compact, durable and affordable. With its folio organizational system (that is, page numbering and chapter labeling) and such devices as a table of contents and an index it is an efficient and precise vehicle of textual memory and communication.

One testament to the usability and endurance of the codex is the way newer forms of technology mimic it. Digital forms of text on computer screens are still referred to as “pages,” and e-books are organized by chapters. The Kindle and Sony Reader try to look and work as much as possible like ink on opaque paper.

This borrowing of the new medium from the old is a key recurrence in the history of media. Occasionally one medium more or less replaces an already established form of communication, but the more usual development is that the older medium survives in adapted form. Radio was not replaced by television (as many people predicted) but it did switch from presenting dramatic or comic serials to concentrating on music.

All of this is to say that the book remains a healthy medium, no matter the immediate or eventual fate of the codex. It is likely that the digital book is here to stay, and the codex may increasingly lose its dominance. The signal advantage of the electronic book is its compactness and portability. The Kindle, physically smaller and lighter than most hardcover texts, can store up to 1,500 books. Anyone who has ever moved a home library can appreciate what that means.

The electronic book will continue to develop and improve. Apple’s recently released iPad, for instance, can present full-color artwork. Sharpened, consistently reliable search functions for the digitized book will be more efficient than thumbing through printed and bound pages. If—or when—e-book reading devices become easily affordable, the codex may pass into the realm of the art or fetish object—admired and displayed for aesthetic or sentimental reasons, much like vinyl LPs are enjoyed in the age of the compact disc or candles used in the era of electric lighting.

Then again, the codex may not be supplanted to that extent. The electronic book, as its name admits, depends on an abundant and cheap supply of electricity. It has been commonly assumed that electronic reading media would be less ecologically burdensome than the “dead-tree” technologies of print media. But Chris Anderson argues on his blog The Long Tail that “dead-tree magazines have a smaller net carbon footprint than Web media.” Nicholson Baker in *McSweeney’s* observes that in 2006 computer server farms consumed 60 billion kilowatt hours of electricity, while paper mills consumed 75 billion kilowatt hours. This means servers and paper mills already leave “a roughly comparable carbon footprint”—and server energy consumption is increasing exponentially.

The “dead-tree” codex remains an elegant piece of technology. Its energy needs are minimal. Once produced, a codex copy requires only the energy of the reader—and some sunlight. Depending on future circumstances, such as the ready availability of electronic energy, factors that are unpredictable but massively consequential, the humble codex may have a long life yet. There are reasons it endured for 23 centuries.