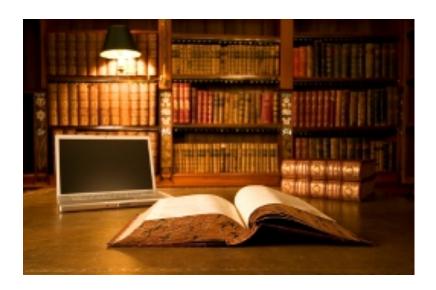To put an end to the spirit of inquiry that has characterized the West, it is not necessary to burn the books. All we have to do is leave them unread for a few generations.

—Robert M. Hutchins

IN DEFENSE OF THE MEMORY THEATER

Nathan Schneider

What concerns me about the literary apocalypse that everybody now expects—the at least partial elimination of paper books in favor of digital alternatives—is not chiefly the books themselves, but the bookshelf. My fear is for the eclectic, personal collections that we bookish people assemble over the course of our lives, as well as for their grander, public step-siblings. I fear for our memory theaters.

There was a time when I thought I could do without much of one. As a student in college and graduate school, moving from room to room virtually every year, the desire to keep my possessions down

to what could be stuffed into a Toyota Corolla overwhelmed the reptilian instinct to collect. That in itself became a pleasurable asceticism, and it suited my budget. As so often accompanies renunciation, I came to love the forbidden objects—the books—more and more. I learned to bind and sew my own, to cut the pages, and to print, illustrate, and letterpress them. Exactly because space was so limited, I could spend an entire Sunday afternoon at a certain used bookstore agonizing over several possible purchases, of which I would allow myself only one.

Mainly, during that time, my bookshelf was a rotating amalgam of whatever my heart desired from the library—and these were really good university libraries, with miles of shelves and easy access to interlibrary loan. On a whim, I could flit to the cavernous stacks and pick up an answer to whatever curiosity crossed my mind. Along the way to finding it, I'd end up grabbing a few more books that attracted me. Those ugly buildings—they were always ugly—became more than homes away from home. Walking into one, I'd feel as if entering an annex of my own nervous system.

But eventually, inevitably, I moved on from the plenty of universities to a string of tiny New York apartments. My little library came with me. In the months that followed, after a countdown of email warnings, my off-campus access to the University of California's online databases went dead. By then I had already learned that, as sprawling as the New York library systems were, they couldn't satisfy me like the academic ones had before. Getting there took not just a stop on the way to class, but a subway ride and a trudge through the cold. Most of what I wanted, anyhow, was in the closed stacks at 42nd Street, and I couldn't take anything there home with me past the watchful guard of the lions out front.

It was, finally, just me and my bookshelf. At first it wasn't even a shelf at all, but piles of books scattered around my room on the floor, as orderly as I could manage and as high as they'd get before tumbling. The collection I had was a good one—largely unfashionable theologies, seductive philosophies, and my prized bestsellers from the 1970s about ancient alien gods and futures unrealized—but so much was missing. I was in New York to write and to think, and I would find myself turning to those stacks in desperation for a connection, a memory, or the loosest association. What suddenly became most evident were the absences, the missing books I could hazily remember having read and digested, yet which would need referring to again. They had turned, terrifyingly, into phantom limbs.

Having at last found a stable place to live, one with wooden shelves already mounted on the walls, I shed the old asceticism and began the process of reassembly. Review copies that come in the mail have helped, and I balance out their novelty with trips to the dustier corners of bookshops and antique stores. But just as I've begun holding on to books, the technology of paper and print drifts into obsolescence, with only unfulfilled techno-corporate promises to replace them. The point here isn't to be steampunk; I'll take my library in any form, so long as it will never abandon me again. Something very basic is at stake.

Ever since the habit of writing first took hold of me as a teenager, I knew precisely why I did it, and why I did it so compulsively: to hedge against the terror of having a terrible memory. Though still young enough to expect no sympathy, I constantly feel the burden of this handicap. Confirmation of it, and that writing is its cure, I discover every time I pick up something I wrote years, or even months ago. Reading those things puts me in an uncanny state, like a past-life regression. Meanwhile, unrecorded impressions, sayings, old friends, and good books vanish without warning or trace. Some read and write to win eternal life; I would be happy enough just to keep a hold of this one.

One of the books that I used to habitually pick up from my college library, and which, recently, I finally bought used, is Frances Yates's classic *The Art of Memory*. First published in 1966, it chronicles lost mnemonic techniques, passed down from the ancient orators to the Renaissance humanists: spaces people would conjure in their minds to help them remember all the precious accoutrements of civilized knowledge.

Yates takes us back to the Greeks, who held memory to be the plumbing of one's soul, a vital tether between the sensory world and the eternal forms. They knew that Mnemosyne, memory's personification, was by Zeus the mother of all the muses. The Greeks and then the Romans created imaginary edifices by which they could carry entire speeches, taxonomies, and epics in their heads. By the medieval period, this tradition was expressed in Dante's circles of Hell and Aquinas's placement of memory within the cardinal virtue of prudence—thereby elevating it to a moral responsibility. As Renaissance polymaths drew from classical and esoteric sources, they designed and even physically built more elaborate theaters of memory. In place of an audience, the 16th-century memory theater of Giulio Camillo presented to its stage an array of images, symbols, and archetypes that amounted to a microcosm of the cosmos. Standing before it, a person could loose the binds of forgetfulness and access the mind's resources unrestrained. "Whoever is admitted as a spectator," reported Erasmus, having heard about the theater from a correspondent of his, "will be able to discourse on any subject no less fluently than Cicero." Shakespeare's Globe Theater, Yates controversially argued, was designed in this way to help the actors remember their lines. Francis Bacon reportedly had a private memory theater in his home, with painted glass depicting "several figures of beast, bird and flower." In those millennia between the advent of knowledge worth clinging to and the invention of the printed word, the Western mind had a desperate obsession with memory—or, one could say, a sensible concern. The art of memory made possible the health of one's soul, the possession of one's culture, and the means of reaching God.

In the age of inexpensive, printed books, our memory theaters have become both richer and more banal; we have entrusted them to our bookshelves rather than to tricks of mental contortion or cosmic schemata. As I look over my own shelf, I see my life pass before my eyes. The memories grafted onto each volume become stirred and awakened by a glance at the spine, which presents itself to be touched, opened, and explored. Without the bookshelf's landscape to turn to, that manifest remainder from a lifetime of reading, how would one think? What would one write?

Modern life, if we can still call it that, occurs as a sequence of gleeful apocalypses. One world constantly gives way to another. If it doesn't, "consumers"—as people now call themselves—get anxious. We're familiar with the drill: new audio/video formats arrive every decade; a new "generation" of cell phone every couple years; and, on a rolling basis, there's the expectation that several totally unexpected paradigm shifts are in the works—the internet, global climate change, a new fundamental particle, and that sort of thing.

The decline of actual, physical book-publishing has been taking longer than it was supposed to. Way back in 1992 Robert Coover announced in *The New York Times* that printed books were as "dead as God." His doomsday was premature. But the digital offerings of Amazon and Google, along with their ever-better delivery devices, promise that finally the end may be nigh. Crotchety complaints about screen-reading aside, it should be obvious to anyone who cares about information that in many respects digital text is a superior technology to the printed page. On Google Books, I just searched "the printed page" (without the quotation marks) across "some seven million volumes of books," instantly returning results in 76,000 of them. And that is not mere statistical flourish; for the several years since I lost my borrowing privileges from research libraries and have had to leave my source texts behind, I've come to rely on Google and Amazon searchable previews. My old dream of a possessionless library, unencumbered and mobile, seems possible again. The very meaning of the word "book" has become something more powerful, dynamic, and accessible than ever before.

Every good reactionary knows well that there arises, in the process of using these wonders, the opportunity for laziness. Days, weeks, and years of archival labor are replaced by a keystroke and, with it, much of the discipline, erudition, and tenacity that the old ways required. But there's no time to be nostalgic and grumpy. Living

well with technology has always been a matter of beating it and abusing it. No one cared much about the electric guitar until somebody turned it up too loud. Now our job is to figure out how to be cleverer than the search engine; when certain ways of finding information become easy, the knowledge really worth having becomes what those methods don't turn up, what the crawlers somehow managed to miss. As the Temple of Knowledge comes to look ever more like the Googleplex, public libraries are downsizing their reference desks, presuming that for every query an internet search will suffice.

Libraries absolutely cannot keel over and let Google replace them. They are our collective bookshelves, the memory theater for a community. As Robert Darnton suggested in the December 17, 2009 *New York Review of Books*, the U.S. government might do well to acquire Google Books outright. France, after legally blocking Google's plans to scan its books, is undertaking a digitization initiative of its own. This is, after all, a basically political matter; the bookshelf is a political arrangement. It carries our words, ideas, convictions, memories, identity, and language—the imaginative substance of any political order. Just as a personal bookshelf becomes the extension of one's body, a democratic society must ensure that its books are held democratically.

One could phrase the basic demands of a hypothetical bookshelf manifesto like this: *for-life, liberatedness, and the pursuit of eclecticism.* They're all related. "For-life" means the right to keep one's books as long as one lives and, just as importantly, to pass them on to one's descendants. They must not be take-away-able by the fiat of a far-away corporation. They must be in a medium and format that will be readable in a hundred years and, if we know what's good for us, in five thousand. "Liberatedness" means that the texts are truly ours to do with as we please, short of harming others. We can lend them to enemies and friends. We can mark them up or damage them. We can move them around wherever we like, and wherever the technology allows, freely organizing and categorizing them to all the limits of our private compulsions. Finally, "the pursuit of eclecticism" means that there should be no limit on the breadth of our collections. Plainly, no censorship. These are all things that my shelf of paper and cardboard do quite well and that the most celebrated digital alternatives, so far, do not.

The Amazon Kindle is a catastrophe: an interface to a proprietary market managed by a profit-motivated outfit that wants to own and monetize your memory theater. On July 17, 2009, in an act so

bumblingly ironic that even Amazon called its behavior "stupid, thoughtless, and painfully out of line with our principles," the company removed copies of George Orwell's *Animal Farm* and *1984* (!) from customers' Kindles without warning or permission. The editions, it turned out, were illicit. While the company was sure to apologize and pay a pittance in damages to the affected customers after the ensuing outrage, this incident demonstrated the sort of powers Amazon has reserved for itself in the design of this new, presumably paradigm-changing device. Books (as well as the annotations one makes while reading, which Amazon saves on its servers) are encoded in a proprietary file format, depending utterly on the device and its software in order to be read. No Kindle—and no Amazon to sell you one—no book. The law has yet to determine precisely what it means to access an e-book on a device like the Kindle: is it more like a lease, a subscription, or an outright purchase? These are complicated questions, and rightfully so, since they involve the fortunes of publishers and authors as well as of readers. While lawyers quibble and companies duel, the Orwell debacle showed that Amazon's technical capabilities far exceed what it, constrained by public relations and legal counsel, has so far taken the liberty of doing. But even those constraints could be transitory ones. The Kindle's license agreement also states that it can be changed without notice at Amazon's will.

Apple's iPad, the overgrown smartphone that has been eating up the Kindle's market-share in the e-book business, isn't much better. The slicker Apple's products get, the more overbearingly they seek to control the user experience. Like the iPhone, the iPad is a closed system that goes out of its way to prevent the kinds of misuse that stops the people who use it from being anything more than customers. It will only load software, and its bookstore will only carry books, that survive Apple's censors. The iPad does offer publishers the option of selling their books in non-proprietary formats, which means that when you want to switch to a different kind of reader, your books can go with you. This is a basic condition of liberatedness that amazingly has been absent from e-readers until recently, and it remains way too far from being business as usual.

Until these companies take seriously the needs and, above all, the rights of readers (the human beings, not the machines), they deserve ruthless suspicion. Just because the Kindle and iPad might seem to work relatively reliably now, and because Google tells itself "don't be evil," we shouldn't keep from entertaining darker, more paranoid, even *Orwell*ian fantasies. Never before has the technology been so good for totalitarian urges, should they arise.

Already, the agreements being hammered out between Google and the publishing industry are likely to allow Google to withhold as much as 15% of its scanned, copyrighted archive from the public. It's unlikely that anyone will bother (or pay) to scan most of those books again. Whoever controls Google Books already controls the future of public knowledge to a very considerable degree.

Far from its pleasantly chaotic salad days, the internet is now tending toward mass consolidation. Companies are less and less interested in helping us store information ourselves and more and more eager to do it for us. We're not keeping our email and documents on our computers' hard drives anymore; Gmail and Google Docs have them on distant servers. Apple wants to follow suit with its subscription-based MobileMe system, pulling more and more of our data into its so-called "cloud." Facebook has already done so with no less than our friendships.

So far, for all the wonders they offer, the digital alternatives to a bookshelf fail to serve its basic purposes. The space of memory and thinking must not be an essentially controlled, homogenous one. Amazon's Kindle and Apple's iPad are noxious ruses that must be creatively resisted—not simply because they are electronic but because they propose to commandeer our bookshelves. I will defend the spirit of mine tooth and nail.

If my non-luddite credentials aren't fully in order, let me say this: The most remarkable memory theater I've ever known is on a computer. It is the work of my uncle, once a biologist at the National Institutes of Health, a designer of fish farms, a nonprofit idealist, and a carpenter. Now he has devoted himself full-time to his theater. A "Cartesian theater," he calls it, subverting the philosopher Daniel Dennett's epistemological derision; it's a digital environment he has built to manage his life and, among other projects, to present a never-to-be-finished play called *The History of the World*.

His theater consists of a series of computer programs written in Turbo Pascal, running on DOS and Windows 98. They revolve around an ingenious text editor, which also functions as a file manager, a viewer, a jukebox, and a programming environment. It is truly, as they used to say, hypertext—text and computer code are one and the same there. Words perform actions. Form is content. A powerful search engine follows you everywhere you go. You feel close enough to the machine to sense its electric pulse behind the two-color display with its blocky, fixed-width characters.

My uncle does most of his reading on that screen. As he reads digital books and articles, he formats them in plain ASCII text, adjusted to fit into his editor and his screen. In the process, every text (or image or sound), whether it be a letter from his daughter describing a dream or Tolstoy's *The Kingdom of God Is Within You*, becomes a part of this single, searchable, integrated organism. When he tells me about it, he uses evolutionary metaphors cribbed from his years researching genetics. The creature mutates and adapts. It learns and grows. Guiding its progress is my uncle's frenetic brilliance and his awareness, like my mnemonic terrors, of running up against the limits of his own mind.

Once, he called himself a "biologian," merging the subject matter of life with the method of a theologian. More recently, he told me that he is an alchemist.

For years, nobody in our family bothered to learn about the world he had constructed. When I first discovered it, I was in college. I immediately dropped almost everything and, for a year, took all the courses I could in the computer science department. My uncle and I had long conversations about it all, and I began to get a sense for what he was doing. But the more I learned the rights and wrongs of conventional wisdom, the more idiosyncratic his tactics seemed. I never stopped admiring his creation, but I could hardly even figure out how to use it. His theater can only be his own, I thought, and the rest of us are doomed to dependence on Apple, Microsoft, and the clutter of open-source alternatives.

In the last year, though, I've been proven wrong. My mother had an enormous book project in front of her, a bookshelf all its own: editing an eight-or-so-volume biography of a South Indian saint. Never having been comfortable with computers, she would call me for long conversations about what software to use and how to go about using it. I hoped to make things simple, so I stuck her with the usual brand-name suspects. I was soon happy to learn that she had ignored my advice entirely. She started calling to tell me how my uncle had set her up to do the work on his system and how much pleasure she got out of every hour she spent applying herself to it. Now, they are expanding the project beyond its original proportions to digitize and catalog a decades-old library of materials about the guru. As they discuss it together, I can see in them the spell that must have driven ancient monks (or, for that matter, the future monks of *A Canticle for Leibowitz*), in their mutual solitude, to amass the great libraries of their time. This collection, this digi-

tal bookshelf, as hand-wrought as any shelf my uncle ever fashioned as a carpenter, was becoming a medium and artifact of their care for one another and an artifact of their love. It was theirs, and their children, I desperately hope, will inherit it.

In my own ways, with less patience than my uncle, I've tried to build my own electronic memory theaters. Blogs have been useful, though never, as a rule, exhaustive. I've stored thousands of pages of reading notes in text files, searchable and as sure as can be not to become obsolete. With each attempt, I become convinced that the bookshelf of the future is yet to come and that we're in desperate need of it. Perhaps I am asking for simply the right piece of software. Or, better: a messy, ingenious variety. Even if Google keeps its promise and doesn't turn evil, and even if the Kindle becomes a noble purveyor of reading material to the people, our best ideas will come from our most inventive memory theaters. The point of all this worrying is to dig a spur in the capacity of human creativity to outsmart the enemies of imagination.

I am in no position to end with prognostication, to predict how all this business will turn out, or to recommend particular policy directives and consumer rules-of-thumb. The companies will have their way, of course; as the filmmaker Chris Marker once put it, I bow to the economic miracle. But I can end with a vision, and it can point to a posture.

Picture a library, in flames, overlooking the city in ruins below—the Library of Alexandria under Caesar's assault all over again. Books by the thousands audibly crinkle as they incinerate, disappearing for all time, never to be read again and, in a generation or two, never to be remembered. They are all irreplaceable; their loss is exactly incalculable. They are now good only to fuel the fire. As bystanders, we're consumed by horror. We imagine ourselves as the books, the books as ourselves. Everything is lost with them. Right?

Or, on the other hand, might we instead laugh and cheer? It wouldn't be the first time at a book-burning. Why not? Isn't there also comedy—a divine comedy—in what freedom would follow the immolation of civilization's material memory? We have only ourselves again, ourselves and our God. Perhaps these flames might go by the name of progress.

I confess to feeling the allure of the burning library. Maybe we all do, a little. A culture so willing to downsize and sell off its libraries must. It gestures toward the shadow side of being so dependent on, and thus protective of, a bookshelf. When it becomes my memory theater, what have I become? What becomes of me without it? A passage comes to mind that I first discovered in Yates' *Art of Memory*, from the *Phaedrus* of Plato. Socrates is repeating the speech of an Egyptian king named Thamus to Theuth, the god who has just invented writing:

> [T]his invention will produce forgetfulness in the minds of those who learn to use it, because they will not practice their memory. Their trust in writing, produced by external characters which are not part of themselves will discourage the use of their memory within them. You have invented an elixir not of memory but of reminding; and you offer your pupils the appearance of wisdom, not true wisdom, for they will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant and hard to get along with, since they are not wise, but only appear wise.

As a student, I worried that this passage prophesied exactly what I was being trained to become: a functionary of a culture that had handed itself over to inanimate objects, amassing such vast and detailed knowledge that no person could possibly possess it, much less translate it into the wisdom that should be the basis of any life worth living.

What if, after Google becomes "The Last Library," a computer virus—or the cataclysmic solar flare that some 2012 enthusiasts like to warn about—finds a way of separating us from our databanks? Or what if my own shelf were lost to fire, forced relocation, or any of the possible calamities of history that might befall it? These thoughts first redouble my zeal for defending our memory theaters against every threat, so surely do they stand as the bulwark against pathos; but that pathos, I must also realize, is partly their invention.

As the business of reading technology continues along its trajectory, whether apocalyptic or utopian or both, perhaps those of us who continue to fancy ourselves concerned readers—however much we give in to the new and shiny—might turn our attention anew to what one might call "inner work." In the part of ourselves which is not technological, we could rediscover the tautology that what makes knowledge so precious is its precariousness, not the

surety of our control over it. We'll need to cultivate the arts of memory and forgetting alluded to in these lines by William Blake, which came to me in a letter from a friend, a librarian who, for years now, has been slowly dying in a monastery:

> *He who binds to himself a joy*
> *Doth the winged life destroy.*
> *He who kisses the joy as it flies,*
> *Lives in eternity's sunrise.*

Even among these wonders now available to us and still to come, all having remains no less a preparation for loss.

Ready? Because that's what is at stake.   📖

Nathan Schneider, senior editor of *Killing the Buddha*, an online magazine of religion and culture, is working on a book about the search for proof of the existence of God. He hosts the blog The Row Boat.

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