

Forgetting How to Read

A neuroscientist examines reading in the age of screens

**Reader, Come Home:
The Reading Brain in a
Digital World**

by Marianne Wolf

Harper/HarperCollins, 2018, \$24.99;

272 pages.

As reviewed by Doug Lemov

As you read this—on the subway or the porch, perhaps at your desk between meetings—reading as we know it is engaged in an epic battle it has all but lost.

You are the reason.

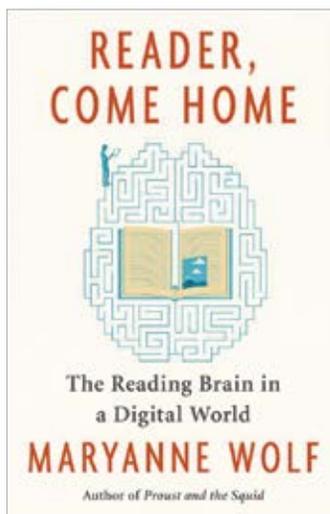
No matter where you are, Device is there with you, stowed in your pocket, at your behest, chirping away pleasantly. Check in with a colleague or the kids? Play Candy Crush? Find a baseball score? All while in line at Target or sitting through the 10 a.m. strategy meeting? Of course, Master. It would be my pleasure.

Suddenly Device must always be with you. You check it 150 to 200 times a day, studies tell us. You switch media sources (for instance, from Web browser to email) 27 times an hour. Your average duration of sustained focus on any digital task is just over two minutes.

Clever Device! Once it was the servant; now it is the master.

Poor Dickens. Poor Toni Morrison. They cannot compete with that. So we read less and less. But more importantly, we read *differently*. This is the subject of Marianne Wolf's profound new book, *Reader, Come Home*.

On the digital screen we read fleetingly, flittingly. Our brains have what scientists call "novelty bias." We are predisposed to attend to new information; from an evolutionary perspective, what's new, bright, and flashing could contain survival information. It gets priority. Reading on screens sets up a cycle of



expectation and gratification. We are repeatedly distracted by whatever pops up, rewarded for each distraction with a tiny surge of dopamine. This attraction to "the new" crowds out reflection, creative association, critical analysis, empathy—the keys to what Wolf calls the "deep reading process." We read in a constant state of partial attention. And, Wolf points out, this is as much cause as effect. Human beings developed the capacity to read relatively recently, over the past 5,000 years or so. The brain has no reading center. Rather, when we learn to read, we call upon multiple areas of the brain, exhibiting a cognitive quality known as neuroplasticity.

There is no single way a brain becomes "rewired," explains Wolf, a cognitive neuroscientist and director of UCLA's Center for Dyslexia, Diverse Learners, and Social Justice. The process happens differently, depending on *how* we read. Readers of Chinese (an ideographic language) rewire differently from those who read Spanish (a logographic one). Individuals also vary in how they rewire, based in part on how and what they read. The study of those who rewire differently because of dyslexia drew Wolf to the science of

reading in the first place.

We made ourselves modern via a collective rewiring when writing and later print emerged and spread across vast strata of society not so long ago. Reading taught us to sustain and logically develop ideas, to enter the minds and perspectives of others through their words. As societies, we became less impulsive, violent, and irrational. Wolf quotes Nicolo Machiavelli reflecting on how he lost himself in a book, conducting an inner dialogue with the author and reading for four hours without interruption. When was the last time you did that?

"The long developmental process of learning to read deeply and well . . . rewired the brain, which transformed the nature of human thought," Wolf writes.

Now there is a new transformation taking place. Skittish, distracted readers rewire differently from thoughtful and meditative ones, and so they—and the collective "we"—come to *think* differently, to develop different architecture for thinking. Through disuse, we are losing what Wolf calls "cognitive patience," and thus the ability to immerse ourselves fully in books.

Wolf herself discovered this when she returned to a touchstone of her youth—Herman Hesse's *Magister Ludi*—and found it mostly unreadable. She could not sustain the concentration the novel required. In just a few years it had all but slipped beyond her grasp.

It's not all bad news. "Unlike in the past," Wolf notes, "we possess both the science and the technology to identify potential changes in how we read and thus how we think before such changes are fully entrenched in the population and accepted without our comprehension of the consequences." In her book

she describes re-disciplining herself to find a way back into *Magister Ludi*. On the third reading of the novel, it comes again to resemble the book she knew.

That story is compelling, as is Wolf's writing, which is buoyed by encyclopedic knowledge of cognitive science and of literature, laced with insight, and infused with a rare mix of science and artistry. As I read, I found myself pausing often, epiphany by epiphany, thinking, scribbling margin notes—in short, dwelling briefly in the fading world of deep reading she describes. That's the good news.

The bad news lies in the chapters that are intended to offer hope. Wolf notes that digital culture has its benefits, but we must find a way to balance the positives of digital reading with the negatives, to manage the process.

She finds solace, for example, in the cognitive gifts that bilingualism bestows upon children. Couldn't we teach young people to be digital and print bilingual? I read hopefully at first but with increasing despondency. Learning Spanish does not degrade one's capacity in English. Mastering more than one language strengthens our verbal and cognitive

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Wolf imagines that schools will form the vanguard in the quest to develop digital-print bilingual readers. They will teach "counter-skills" and "digital wisdom"—disciplined, self-aware switching between print and screen. But this would require schools to buck

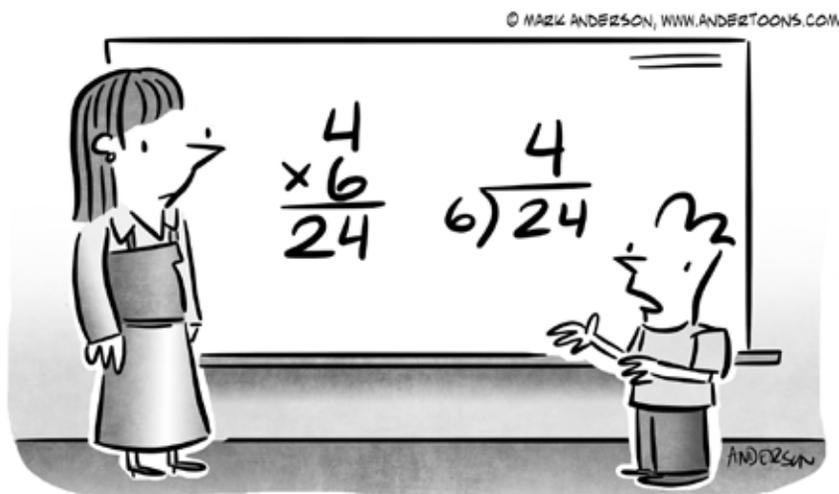
popular trends. Most schools today embrace technology reflexively. Many have stopped issuing print textbooks and offer only digital versions, despite the research on how poorly students read and remember digital content. SMART Boards survive even the tightest budgets. Many schools provide every student with a laptop, thus necessitating that every assignment will be completed with Device nearby, contrary to some parents' efforts to restrict their children's access to screens during homework and reading.

It is true that schools are one of the few places that *could* ensure time and space for deep reading, sustained and meditative. But this would require a changed vision: school as a place apart as much as a place connected; school as bastion against technology as much as acolyte; school as a place that shapes rather than merely accepts social norms. Not easy work, in other words, nor work most schools seem willing to do.

Still, it could happen in isolated places. Imagine schools of choice that intentionally isolate students from technology at strategic times during the learning process. If France can ban cell phones from all schools, as it recently did, it's plausible that a few islands could emerge here and there in our country. It's hard to imagine at scale, though.

So some may find Wolf's optimism reassuring, but as a parent and educator I did not. One night, I awoke and imagined the book as an object in some science-fiction novel—*The Last Book*, written in a society where there would soon be no one left to read it. *Reader, Come Home* is an important, impeccably researched book possessed of just one flaw—its Reader.

Doug Lemov is a managing director at Uncommon Schools, and the author of Teach Like a Champion, a study of high-performing urban teachers and their methods, as well as Reading Reconsidered.



"I understand how it works. But if we're just going to end up back at four, what was the point?"