# **Screen Reading Can Wreck Your Attention. Here's How To Save It**

Experts say digital reading and print reading are two languages with different advantages

#### Steven Johnson

or Maryanne Wolf, it began "innocently enough." As her work became more and more digital, emails shortened. She dropped magazine subscriptions. She started leaning on Google searches and weekly summaries for her reading — plenty of time to read more deeply over the weekend.

Then leftover tasks took the weekends, too.

If anyone should have been prepared for the change, it would have been Wolf, a scholar and literacy advocate who recorded her experience in her book Reader, Come Home: The Reading Brain in a Digital World.

But digital work, of course, spares few. The sheer volume of emails, articles and DMs leads to a "defence strategy," Wolf said: skimming.

"You are missing words. You are missing clues. You are missing your ability to put your background information to work in the most productive way," said Wolf, director of the Centre for Dyslexia, Diverse Learners and Social Justice at the University of California at Los Angeles.

#### The broader problems with screens have to do with impatience and boredom. Digital environments are primed for distraction.

- Daniel Willingham, professor of psychology, University of Virginia

Maybe that's fine for a few texts with friends. But what about the most demanding parts of daily work? Many of the day's most important tasks involve careful, sequential thinking — functions honed by what scholars call deep reading. Some, like Wolf, have worried that constant digital work threatens those cognitive processes.

"We have already begun to change how we read — with all of its many implications for how we think," Wolf writes in Reader, Come Home.

The brain's "reading circuit" is adaptive, Wolf writes. Processes that aren't used can wither, and the circuit will adjust to the digital environment's rapid-fire demands.

"What if, one day, you pause and wonder if you, yourself, are truly changing," Wolf writes, "and, worst of all, do not have the time to do a thing about it?"

To others, the threat isn't so dire.

Daniel Willingham, a professor of psychology at the University of Virginia and author of The Reading Mind: A Cognitive Approach to Understanding How the Mind Reads, has argued digital work probably can't drastically reshape our cognitive systems. But he agreed there are obvious shortfalls to digital reading.

#### Print vs screen

A long strand of research has shown that reading comprehension is better on paper than on screens. The reasons are unclear, though researchers have some theories why. Study designs vary (and some find little difference in comprehension, depending on the conditions).



### **GOOD PRACTICES FOR READING ON-SCREEN**

- When you can, pick the right environment. For a lot of us, it's kind of romantic to read in a coffee shop. But if you're doing difficult reading, that may be pretty distracting.
- Cut out remaining distractions. Turn off WiFi or even put your phone in aeroplane mode.
- Take breaks. There's lots of evidence that taking breaks truly refreshes your mind. The best timing for those breaks may vary from person to person.
- Don't use breaks for Instagram and email. That's not actually very restful, it's just a different type of work. It never hurts to take a walk.
- Take mornings or evenings (or both) off-screen. Contemplation and reflection are just as important as the work you're leaving behind. Get in the habit of bookending your days with an "alternative view of what productivity really needs."

The divide depends on the type of reading, Willingham said.

"Informational" texts are harder to read on screen than "narrative" ones, according to a 2018 review of research by Spanish and Israeli scholars. Reading to memorise complicated facts or to gain a new skill is often easier on paper. Reading a novel for fun, on the other hand, is probably fine either way.

Readers who are pressed for time also tend to show higher comprehension on paper, the

review found.

"We are most productive when we can have insights that come into our work that allow us to go beyond just what's in front of us. Deep reading provides that."

- Maryanne Wolf, scholar and literacy advocate

Willingham prefers to read tougher materials in print, but it's not always convenient. On planes, he's usually stuck with his phone. For work, it's most practical to stick with PDFs. But their highlighting and annotating tools don't compare with good old paper. He'll often find himself with a PDF and a Word document open at the same time, highlighting in one and noting down thoughts and page numbers in the other. "My workaround is pretty clunky," he said.

If screen reading is here to stay, how can it be better? Software designers go about it in different ways. Some cut down on distractions to imitate the sa-

cred dullness of the printed page — think browser add-ons that chop out ads or phone apps that imitate page turns.

Others do just the opposite, harnessing notifications and real-time commenting to nudge readers toward good habits. Educators have started using that kind of technology to help students read complex texts, making reading almost like a social platform.

#### Immersive reading

When it comes to comprehension, there could be small, cumulative effects from design tweaks such as virtual page flips, Willingham said. But those effects on their own are "ornaments on the basic architecture of the cognition that gets reading done," he said. Things including vocabulary, background knowledge and syntactical skills remain larger contributors, he said.

The broader problems with screens, he said, have to do with impatience and boredom. Digital environments are primed for distraction.

That doesn't mean they're hopeless for thoughtful work.

Rather than see digital reading and print reading as frighteningly different, Wolf writes in Reader, Come Home, we should see them as two languages, with different advantages. Tomorrow's ideal reader will be fluent in both.

So what does this research mean when you're stuck in a train station or airport with only your phone to read? "It's probably not exactly the same experience as reading a paperback book, sitting in your easy chair," Willingham said.

But no need to stress too much. "Look at what those small differences are and use technology for what it affords best," he said. Good practices for concentration are good practices for reading on-screen.

These rules of thumb are all about cultivating attention. "We are most productive when we can have insights that come into our work that allow us to go beyond just what's in front of us," Wolf said. "Deep reading provides that."

The stakes, Wolf said, are higher than how much a person is able to get done in a day.

Immersive reading, with its ability to take on other perspectives and ideas, has implications for the basic stuff of society, Wolf said: empathy and connection. Contemplation. A richer emotional life.

"Sometimes we don't realise," Wolf said, "it's equally productive in our days if we have that within us."

#### Kyle Chayka

or a word that suggests as little as possible, so many different things fall under the label of "minimalism" at the moment. A home interior might be described as minimalist if there's nothing hung on its white walls. A dress is minimalist if it's simple and functional, or monochrome and expensive. Cleaning out your closet and choosing to consume less is minimalist, but there are also plenty of products you can buy that are "minimalist": hundreds of lamps, wallets and posters available on Amazon. Avoiding using your phone, checking your email or updating social media is "digital minimalism." Everything on Instagram seems to be minimalist.

I wrote my book, The Longing for Less, to solve the mystery of why minimalism was applied to all these various objects, styles and ideas. I wanted to understand where the word came from as well as what it means to us now and why it's so popular. Through my research and travel, from rural Texas to Kyoto, Japan, I found that the current mania for minimalism is actually a distortion of the movement's origins. All the cleaning and careful arrangement, the pre-packaged solutions of minimalist furniture and storage boxes, are actually a misunderstanding of its intentions. Minimalism has become another form of consumerism.

In the obsession with objects (owning either less or more) we've lost the basic ideas of minimalism. It might appear simple but it's also a philosophical challenge, not to find exactly the right stuff to buy but to rethink our relationship to the world around us, from the ground up. Rather than the single generically blank style that's now noticeable everywhere, minimalism is fundamentally about a diversity of visions.

#### **Minimal Art**

It starts with the word itself. "Minimalism" was kicked off by the British art theorist Richard Wollheim in a 1965 essay called "Minimal Art." Wollheim was trying to understand a group of artists who made work that wasn't readily identifiable as art. It looked more like industrial manufacturing. At the time, the artist Donald Judd was building plain wooden boxes that he installed on gallery floors, Dan Flavin affixed coloured fluorescent light fixtures to walls and Yayoi Kusama (now better known for her Infinity Rooms) covered everyday furniture like a couch and armchair with phallic fabric protrusions, which made them unrecognisable and unusable.

This art was shocking, as Wollheim observed, because it didn't fit our usual idea of what art was: It had "minimal art content." Earlier forms of art were all about self-expression and communication of emotions or narratives. With its mundane materials, minimalism was a return to the basics of sensory perception. It was about creating an excess of sensation through a "demand that we should look at single objects for and in themselves," Wollheim wrote. As Frank Stella put it, "What you see is what you see."

#### Traditional ideas of beauty don't apply

In fact, the artists who were associated with minimalism largely hated the term and its connotations of lack. They didn't feel that anything had been lessened. ("There isn't any such thing as minimalism," Judd wrote in a letter to The Village Voice in 1981.) Minimalism didn't mean cleanliness; it got in the way. It wasn't monochrome, elegant or well suited to home decor. It was difficult and strange, forcing the viewer to understand that our traditional ideas of beauty didn't apply anymore. In fact, in 1990 the art historian Anna Chave wrote that minimalism could be "domineering" and "brutal," not so far from authoritarian.

#### Minimalism as a static style will inevitably end...and we'll turn against the empty walls, skeletal furniture and soft textures. We'll embrace bright colours and loud patterns and call them the next new thing. But minimalism's fundamental ideas will remain.

#### - Kyle Chayka, journalist

One has only to visit the homes Donald Judd designed for himself, a SoHo warehouse building in Manhattan and clutches of industrial complexes in Marfa, Texas, to realise that he wouldn't be interested in the emptiness that's popular today. His spaces are crowded with stuff: Native American rugs, cassette tapes of bagpipe music, wooden sake cups. The long tables he designed for his Marfa library are piled with books held down by rocks and shells. He built daybeds and installed one in every room so he'd have places to lie down and think.

Minimalism, to me, is more about attention than anything else. It advocates seeing the world not as a series of products to consume, but sensory experiences to have on your own terms. A stand mixer can be as beautiful as the Mona Lisa. Historically, minimalism tells us to focus on what doesn't at first seem pleasant or beautiful and turn it into art instead of creating a worldview based only on what we already like.

#### The silent piece

Another often misunderstood minimalist artwork is the composer John Cage's "4'33"," his famous silent piece. Cage created a length of time with no sound in it; a piano player does nothing but turn the score pages and periodically open and close the keyboard lid for the 4 minutes 33 seconds of the title. Yet this wasn't silence in the manner of noise-cancelling headphones, a vacuum of sensation. At its debut in a semi-outdoor concert hall in rural upstate New York in 1952, the listeners were restless as the pianist David Tudor did nothing. They knocked around, chattered and eventually abandoned the performance to start their cars and drive away.

This awkwardness is exactly what made Cage's performance important. "4'33" " reframes the ambient sound around us as beautiful music that's worthy of attention, whatever it is, even the sound of people grumbling or the leaves rustling overhead. It's similar to how Judd makes us appreciate the plain quality of his boxes. Cage said he performed "4'33" " by himself throughout his life, just listening for the designated length of time. As I wrote the book, I also started hearing things differently, the chaotic soundscape of cities transforming into a randomised composition. "The highest purpose is to have no purpose at all," Cage wrote.

#### The imperfection of reality

Too often, trendy minimalism is a way of numbing ourselves to reality and maintaining a comfortable, solid barrier through which nothing unpleasant intrudes. I want to expand its definition to include the possibility of dwelling in discomfort, even the awareness of death.

## We find beauty not in the thing itself but in the patterns of shadows, the light and the darkness, that one thing against another creates.

- Junichiro Tanizaki, Japanese novelist

My ideal concept comes from Japan, which has developed its philosophy of absence for more than a millennium, via Japanese Buddhism. "Mono-no-aware" is a term that means something like "the beauty of things passing"; it can be found in thousand-year-old texts like Murasaki Shikibu's The Tale of Genji, in which characters take particular pleasure in everything that is transient: blooming flowers, decrepit wooden mansions, fire embers on a cold night.

So often minimalism portends to be permanent, a fixed end state, instead of flux and change. Minimalism is a process that has to be kept up and refreshed day to day. I'm always inspired by this quote from a 1933 essay called In Praise of Shadows, by the Japanese novelist Junichiro Tanizaki: "We find beauty not in the thing itself but in the patterns of shadows, the light and the darkness, that one thing against another creates."

Minimalism as a static style will inevitably end, as all trends do, and we'll turn against the empty walls, skeletal furniture and soft textures. We'll embrace bright colours and loud patterns and call them the next new thing. But minimalism's fundamental ideas will remain as long as human civilisation, because we never quite learn its lesson: What already exists immediately around us is more important than all of our anxieties about what's not there yet. The imperfection of reality is perfect

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