

## Book and Media Recommendations: Stories, Style, and a Few Study Breaks

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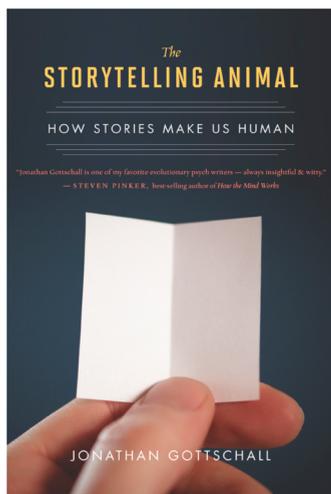
**ABSTRACT:** Humans are keenly sensitive and responsive to effective storytelling. An effective oral or written narrative, combined with experience, is still one of the most compelling ways to understand something new. Recently, using information from cognitive science, people have been re-examining the hallmarks of effective written communication, producing advice and guidelines that are certainly relevant to any formal or informal instructional setting.

**KEYWORDS:** General Public, Public Understanding/Outreach, Interdisciplinary/Multidisciplinary, Textbooks/Reference Books, Ethics

We know the cliché: everyone loves a good story. And deep down, we know that, among other things, an excellent teacher is not only someone who has something to say, but also has the skill to know how to say it well. Many evolutionary biologists and cognitive scientists agree that conceptualizing events and communicating them effectively in the absence of the primary stimulus (“there is danger over that hill”) probably gave the brain its most profound adaptive benefit. We are fine-tuned to storytelling. The authors of this set of books provide some solid, take-it-to-the-bank advice on how to explore and improve your narrative skills, and although they are focused on writing, it is not difficult to make the leap to how you think about your lessons. After all, the oral tradition predates that new fangled invention, namely writing, by millennia.

### ■ ADDICTED TO STORIES?

*The Storytelling Animal*<sup>1</sup> (Figure 1) is a free-form walk through an idea with a ton of face validity: a favorable evolutionary



**Figure 1.** *The Storytelling Animal: How Stories Make Us Human*<sup>1</sup> cover image provided by Houghton Mifflin Harcourt and reproduced with permission.

adaption of the human brain includes its ability to live vicariously and to facilitate the vicarious experience of others. In other words: to listen to and to tell stories. Author Jonathan Gottschall argues that watching plays, reading novels, attending sporting events, listening to music, relating family histories, seeing movies and television, playing computer games, being captivated by a damn good yarn told by your uncle Bob, and probably even through the lessons learned in your dreams, are all “an essential and wholesome nutrient for the human imagination. [These vicarious experiences] help us rehearse for the big dilemmas of life.”<sup>2</sup> Through stories, and the dual cognitive skills of telling them and understanding them, our prehistoric ancestors, finding the advantage to forming social groups, learned to relate situations to one another without the need for everyone to have the same first-hand experience, and to imagine, day-dream, fantasize, and/or make strategic plans about future events with an eye on outsmarting whatever obstacles might interfere. My colleague, evolutionary biologist Richard Alexander, claims that this highly developed skill, which he called *anticipatory scenario building*, is a key advantage characterizing our species.<sup>3</sup>

Gottschall absolves all of us for escaping to our personal Neverlands, whatever and wherever they may be, because they are so critical to imagination and its role in both personal and professional success. He cautions us about the power of most skillful advertising campaigns, from politics to pet rocks, in creating such captivating narratives that we are simply walked down a path we might have had no intention of taking. And, to me, perhaps most surprising, he does not explore explicitly the obvious and compelling connection of storytelling to the attributes of an effective educator. Activating the imagination of students, and getting them to fantasize about—*think about that!*—the internal intellect life of academic and scholarly study, and the active and deliberate role that teachers must play in that process, is a compelling part of what it means to be a professor. The lessons are in there, however, and make this book a light and enjoyable read.

## ■ SATISFY THE CRAVING

In *Wired for Story*,<sup>4</sup> author Lisa Cron examines what differentiates a good story from bad story, and why. Her advice often goes against common, received wisdom. Her take on “show, don’t tell” is illuminating because she emphasizes our deep interest in learning the core motivations for behaviors in addition to the behaviors themselves.

Cron anchors her arguments in a slightly deeper level of cognitive neuroscience than Gottschall,<sup>1</sup> yet her message is the same: a critical and differentiating function of the human brain is to anticipate and sort through an imagined portfolio of future events, and to make strategic decisions with a keen eye on success and survival, winning the game, whatever it might be.

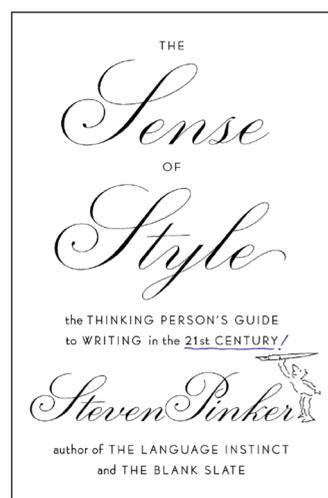
Although Cron’s purpose is to provide practical advice for writers, the extension of this to the narratives that *ought* to govern a learning environment is, to me, obvious. In literary criticism, an alpha reader is someone such as an editor, or a proofreader, who has a specific purpose to improve a piece of writing, while a beta reader is an attentive representative of the prospective audience, who sees the work more holistically, with an eye on continuity, logical flaws, and so forth. Some of Cron’s questions for beta readers strike me as exactly the ones we should ask of students at the end of any lesson: what do think is going to happen next? What is missing from what you have heard? Or, the closely related question, what are you now eager to know or to find out?

Cron’s book takes each of her messages and ties it to an understanding of how brain function may be adapted to it. Again, while she does not extend her advice to the narrative of a classroom, the extrapolations are easy to make and fun to think about. It is not enough, then, to tell students that they should develop curiosity about our lessons, but we are responsible for helping them activate the dopamine high that will compel students to pay attention and to worry—to have a form of authentic anxiety—about what happens next. *For that matter, how did I do in this review?* If you are now eager to learn more, and to imagine how to connect her messages to your teaching, Cron would say I have made her point.

## ■ WITH STYLE

After including two books written by authors from the literary side of the academy who are using brain science to make their points about the spirit and purpose of writing, it seemed fair to hear what noted psycholinguist Steven Pinker had to say about the mechanics of it. In his short and breezy book, *The Sense of Style*<sup>5</sup> (Figure 2), Pinker strikes a compromise between rule-driven adherents whose rules might have never made sense (“to boldly go” is just fine because the no-split-infinitive rule comes from Latin infinitives being one inseparable word) and the free-wheeling linguistic liberals who say that contemporary usage is enough to justify an anything-goes attitude.

To find this compromise, Pinker ends up weakening the good point he wants to make, which is that rules are guidelines of first-principles, but only to the extent they do not negate common sense, clarity, grace, flow, and the communication of the intended ideas. In the end, he offers not much more than his opinion for why worrying about “who versus whom” and “that versus which” is needless, while the proper use of collective nouns is important. There is no clearly defined set of criteria that would allow others to come to the same conclusions, and so you are left with keeping the book nearby and asking, “what would Steven do?”



**Figure 2.** Cover image for *The Sense of Style: The Thinking Person’s Guide to Writing in the 21st Century*,<sup>5</sup> by Steven Pinker, is provided by Penguin Random House Viking Press and reproduced with permission.

Still, given that the justifiable target of his greatest criticism is the horrendous prose of the modern academics living both in science and in humanities departments, his appeal for clearly communicating the story, first and foremost, is welcomed. He makes an excellent pitch for writers to access a modern usage guide instead of only a hundred-year-old style guide. He also advocates for attentive reading of good writing, and then reverse-engineering what is good about it.

The book is filled with examples from written sources and from cartoons, and Pinker topples, with casual grace, some pillars of usage rules, many of which, he contends, do not amount to much more than urban legends (not beginning a sentence with a conjunction; the distinction between like, such, and such as; not using prepositions at the end of a sentence...).

Unlike some of Pinker’s other books, *The Sense of Style* is light on research-based findings. And unfortunately, in some of his attempts to bring a more rigorous view to his arguments, such as with some unhelpful sentence diagrams, he bogs down his own prescript for an uncluttered view of the main point. I might not find myself referencing this book as a guide, keeping it within arm’s reach, which is what I think is part of the author’s intent, but I did enjoy the overall message and most of the way he conveyed it.

## ■ AND MEASURED

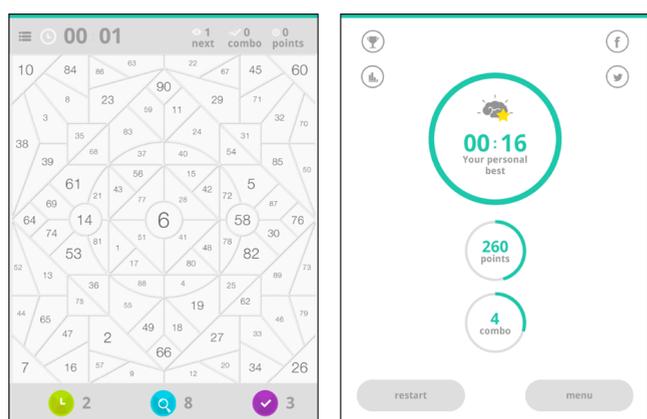
If you do much cut-and-paste with picture editing on a computer screen, you might already play games with yourself: How well can I estimate the height  $\times$  length pixel count I am trying to get? I do. There must be enough people like that around, because the decontextualized version of that personal challenge exists as a browser-based game called Pixact.ly.<sup>6</sup>

When you are writing, Gottschall<sup>1</sup> and Cron<sup>4</sup> would argue that moving off-task yet keeping your brain engaged is a useful strategy for sifting, sorting, and processing the information you are writing about. I do not know how to test that notion, but I appreciate a good study break as much as I did when I was a student. Pixact.ly is currently one of my go-to games. The idea could not be easier. You are presented with the dimensions of a rectangle, and you drag the cursor to the best approximation of that size that you can manage on the blank screen. The closer

you are, the lower your score. You get five rectangles to construct in each round.

## ■ SIMPLICITY

What could be simpler than having a few minutes on the timer and tapping on the numbers 1 through 35 in order? As it turns out, it is more challenging than it might seem, and it is the premise behind the phone/tablet app named Next-Numbers (Figure 3).<sup>7</sup> This little game is one of many in the



**Figure 3.** Next-Numbers App screen shots provided by Vito Technology and reproduced with permission.

neuroplasticity exercise genre, and I have found it to be a compelling distraction while waiting in line, sitting on planes, and when I wanted a little break. The version for the phone has an easy mode (tap 1–16) and a medium mode (1–35), and with more screen acreage, the tablet mode has another level (1–90). You can play in the Zen mode (timing how quickly you can make it through), or in the Blitz mode (tapping against a count-down timer). Progress is monitored. There are definitely a few strategies that you can use to improve your score, but you get the immediate sense that the core abilities of visual memory and concentration really are truly being taxed, and maybe even exercised.

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### Notes

The authors declare no competing financial interest.

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