

As Far As Your Brain Is Concerned, Audiobooks Are Not ‘Cheating’

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By Melissa Dahl

As is required of all women in their 30s, I am in a book club. At the first meeting of this group, one poor unsuspecting woman mentioned that she had listened to that month’s selection instead of reading it. That, the rest of the group decided together, is definitely cheating. Never mind that no one could exactly articulate how or why it was cheating; it just felt like it was, and others would agree. She never substituted the audiobook for the print version again (or, if she did, she never again admitted it).

This question — whether or not listening to an audiobook is “cheating” — is one University of Virginia psychologist Daniel Willingham gets fairly often, especially ever since he published a book, in 2015, on the science of reading. (That one was about teaching children to read; he’s got another book out next spring about adults and reading.) He is very tired of this question, and so, recently, he wrote a blog post addressing it. (His opening line: “I’ve been asked this question a lot and I hate it.”) If, he argues, you take the question from the perspective of cognitive psychology — that is, the mental processes involved — there is no real difference between listening to a book and reading it. So, according to that understanding of the question: No, audiobooks are not cheating.

His reasoning reveals some fascinating insights about the way the brain makes sense of language, whether written or spoken. But first, consider what that assertion — that listening is cheating — is saying: It suggests that the listener got some reward without putting in the work. Because that does seem to be the typical argument, Willingham said. “It’s not that you’re missing out on something, or it’s not that this experience could be better for you,” he told *Science of Us*. “It’s that you’re cheating. And so they think you’re getting the rewarding part of it ... and it’s the difficult part that you’ve somehow gotten out of.” So that implies, Willingham argues, that to your brain, listening is less “work” than reading. And that is true, sort of — but it stops being true somewhere around the fifth grade.

There are two basic processes happening when you’re reading: There is decoding, or translating the strings of letters into words that mean something. And then there is language processing, or comprehension — that is, figuring out the syntax, the story, et cetera. (It’s obviously much more complicated than that; this is what’s known as the “simple view” of reading, but it’s sufficient for thinking about the question at hand.) Researchers have studied the question of comprehension for decades, and “what you find is very high correlations of reading comprehension and listening comprehension,” Willingham said. As science writer Olga Khazan noted in 2011, a “1985 study found listening comprehension correlated strongly with reading comprehension — suggesting that those who read books well would listen to them well. In a 1977 study, college students who listened to a short story were able to summarize it with equal accuracy as those who read it.” Listeners and readers retain about equal understanding of the passages they’ve consumed, in other words.

Decoding, by contrast, is specific to reading, Willingham said; this is indeed one more step your mind has to take when reading a print book as compared to listening to the audiobook version. But by about late elementary school, decoding becomes so second-nature that it isn’t any additional “work” for your brain. It happens automatically.

According to the simple model of reading, then, you really can’t consider listening to a book to be easier than reading it. But there are other differences here, of course, one being that it’s really easy for your mind to begin to wander when you’re listening to an audiobook. But is that more or less likely to happen as skimming the less interesting parts when you’re reading? There’s not exactly an easy way to test that question empirically, but there are some comparable things about the way people circle back to catch the stuff they missed, whether they’re reading or listening. “About 10 to 20 percent of the eye

movements you make are actually regressions, where your eyes are moving backwards,” Willingham explained. Many of those regressions happen when you thought you had the word, but — whoops, no, you didn’t quite get it; others happen when you might be trying to work out syntax.

And something similar happens with the brain’s auditory system, specifically a phenomenon called echoic memory. “I’m sure you’ve had the experience where someone says something, and you’re not really listening, and then you can tell from their intonation that they’ve stopped talking and that they’ve asked you a question,” Willingham said. “And you’re like, ‘Oh, shit, I totally was not listening to this person.’ And then you say, ‘I’m sorry, what?’ And then in that moment where you say, ‘I’m sorry, what?’ — you’re able to recover what it was they asked you.” You did not listen. And yet you still heard, and there is a wisp of a memory of that, which is still banging around inside your mind. “And you are, in the time it takes you to say, ‘I’m sorry, what?’ — you are consulting that little memory store, and you get the last second or two of what they said,” he continued. So that, he argues, is comparable to the visual system’s eye regressions: In both mental processes, your mind ticks back to what it just consumed, in order to double check the meaning.

The TL;DR version of all of this is that as far as the mental processes are concerned, there really isn’t much difference between reading and listening to a book. One is not more work than the other. And yet there is, maybe, something to the way your elementary-school teacher might’ve phrased the question — you’re only cheating yourself. Returning for a moment to the simple model of reading: The decoding process does become automatic once you’ve passed a certain level of reading proficiency, but you can become even better at this well into adulthood — and the only way to get better is by reading. The improvements are small (“infinitesimal,” as Willingham put it) but they are there, and up for the grabs for a reader. Comprehension, too, is something that improves the more you read. And there are also, of course, times when you need to remind yourself of something farther back in the text, something that is no longer held in that one- to two-second echoic memory. (Which Greyjoy is Victarion, again?) You could pause the audiobook and hit that 15-second rewind button until you find it. But you probably won’t.

There’s also this question to contend with: Are you consuming the text the way the author intended it? (And how much does that matter?) The reader of Willingham’s own audiobook did a wonderful job, for example, but there were jokes stepped on, punch lines that didn’t quite land the way Willingham exactly intended. (This, incidentally, is why listening to one of those recent books in the funny female memoir genre — like Amy Poehler’s *Yes Please* — is often a much better experience than reading them.) “The idea that you are experiencing the novel in a way the author did not intend, that you’re missing out in some way — I’m much more open to that than ‘You listened to it, you big cheater,’” Willingham said.

The literary value of audiobooks versus print books — that’s up for wider interpretation. But there’s another way to consider the question of cheating, one that, incidentally, annoys Willingham the most. On my commute this week, for example, I began listening to *H Is for Hawk*, and so some might argue that, once I’m done, I can’t claim to have really “read” it. “There are people who think of reading as a sort of achievement, a mark of honor that you’ve done something worthy of respect,” Willingham said. “There’s this sense that when you have read a book, you’ve done something that is worthy of pride, and it is worthy of other people patting you on the back.”

This, to his mind, is nonsense, a holdover from elementary-school days. “You know, there are classrooms that are set up with that very much in mind,” he said. “There’s a reader wall and you get a star next to your name every time you finish a book, and the number of books is counted. And I think some of that feeling in adults may be ... a hangover from prior school experiences.” It’s a rather sad way to view reading as an adult, he contends, and he has a point. After all, grown-ups can’t exchange a list of books they’ve read for a free personal pan pizza.

Is listening to a book ‘cheating?’

By Valerie Strauss

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Ever since audiobooks began to gain in popularity more than a decade ago, this question has been raised: Are kids who listen to assigned books rather than reading them actually cheating? Is reading a book anywhere near the same thing as listening?

In this post, cognitive scientist Daniel Willingham asks and answers these questions. Willingham is a professor of psychology at the University of Virginia, where he has taught since 1992. Until about 2000, his research focused on the brain basis of learning and memory, and today, it concerns the application of cognitive psychology to K-16 education. He is the author of “Why Don’t Students Like School?” and “When Can You Trust the Experts?” and “Raising Kids Who Read.” He blogs here, and his posts have been appeared frequently over the years on this blog, including “What is developmentally appropriate in learning,” and “Why kids lose interest in reading as they get older.” This appeared on his blog. He gave me permission to publish it.

By Daniel Willingham

I’ve been asked this question a lot and I hate it. I’ll describe why in a bit, but for now I’ll just change it to “does your mind do more or less the same thing when you listening to an audiobook and when you read print?”

The short answer is “mostly.”

An influential model of reading is the simple view (Gough & Tunmer, 1986), which claims that two fundamental processes contribute to reading: decoding and language processing. “Decoding” obviously refers to figuring out words from print. “Language processing” refers to the same mental processes you use for oral language. Reading, as an evolutionary late-comer, must piggy-back on mental processes that already existed, and spoken communication does much of the lending.

So according to the simple model, listening to an audio book is exactly like reading print, except that the latter requires decoding and the former doesn’t.

Is the simple view right?

Some predictions you’d derive from the simple view are supported. For example, You’d expect that a lot of the difference in reading proficiency in the early grades would be due to differences in decoding. In later grades, most children are pretty fluent decoders so differences in decoding would be more due to processes that support comprehension. That prediction seems to be true (e.g., Tilstra et al, 2009).

Especially relevant to the question of audiobooks, you’d also predict that for typical adults (who decode fluently) listening comprehension and reading comprehension would be mostly the same thing. And experiments show very high correlations of scores on listening and reading comprehension tests in adults (Bell & Perfetti, 1994; Gernsbacher, Varner, & Faust, 1990).

The simple view is a useful way to think about the mental processes involved in reading, especially for texts that are more similar to spoken language, and that we read for purposes similar to those of listening. The simple view is less applicable when we put reading to other purposes, e.g., when students study a text for a quiz, or when we scan texts looking for a fact as part of a research project.

The simple view is also likely incomplete for certain types of texts. The written word is not always similar to speech. In such cases prosody might be an aid to comprehension. Prosody refers to changes in pacing, pitch, and rhythm in speech. “I really enjoy your blog” can either be a sincere compliment or a sarcastic put-down — both look identical on the page, and prosody would communicate the difference in spoken language.

We do hear voices in our heads as we read, and sometimes this effect can be notable, as when we know the sound of the purported author’s voice (e.g., Kosslyn & Matt, 1977). For audiobooks, the reader doesn’t need to supply the prosody — whoever is reading the book aloud does so.

For difficult-to-understand texts, prosody can be a real aid to understanding. Shakespearean plays provide ready examples. When Juliet says “Wherefore art thou Romeo?” it’s common for students to think that “wherefore” means “where,” and Juliet (who in fact doesn’t know Romeo is nearby at that moment) is wondering where Romeo is. “Wherefore” actually means “why” and she’s wondering why he’s called Romeo, and why names, which are arbitrary, could matter at all. An actress can communicate the intended meaning of “Wherefore art thou Romeo” through prosody, although the movie clip below doesn’t offer a terrific example.

So listening to an audiobook may have more information that will make comprehension a little easier. Prosody might clarify the meaning of ambiguous words or help you to assign syntactic roles to words.

But most of the time it doesn’t, because most of what you listen to is not that complicated. For most books, for most purposes, listening and reading are more or less the same thing.

So listening to an audiobook is not “cheating,” but let me tell you why I objected to phrasing the question that way. “Cheating” implies an unfair advantage, as though you are receiving a benefit while skirting some work. Why talk about reading as though it were work?

Listening to an audiobook might be considered cheating if the act of decoding were the point; audio books allow you to seem to have decoded without doing so. But if appreciating the language and the story is the point, it’s not. Comparing audio books to cheating is like meeting a friend at Disneyland and saying: “You took a bus here? I drove myself, you big cheater.”

The point is getting to and enjoying the destination. The point is not how you traveled.