

NEUROSCIENCE

# Why you should read this out loud



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Most adults retreat into a personal, quiet world inside their heads when they are reading, but we may be missing out on some vital benefits when we do this.

For much of history, reading was a fairly noisy activity. On clay

tablets written in ancient Iraq and Syria some 4,000 years ago, the commonly used words for “to read” literally meant “to cry out” or “to listen”. *“I am sending a very urgent message,”* says one **letter** from this period. *“Listen to this tablet. If it is appropriate, have the king listen to it.”*

Only occasionally, a different technique was mentioned: to “see” a tablet – to read it silently.

Today, silent reading is the norm. The majority of us bottle the words in our heads as if sitting in the hushed confines of a library. Reading out loud is largely reserved for bedtime stories and performances.

But a growing body of research suggests that we may be missing out by reading only with the voices inside our minds. The ancient art of reading aloud has a number of benefits for adults, from helping improve our memories and understand complex texts, to strengthening emotional bonds between people. And far from being a rare or bygone activity, it is still surprisingly common in modern life. Many of us intuitively use it as a convenient tool for making sense of the written word, and are just not aware of it.

Colin MacLeod, a psychologist at the University of Waterloo in Canada, has extensively researched the impact of reading aloud on memory. He and his collaborators have shown that people consistently remember words and texts better if they read them aloud than if they read them silently. This memory-boosting effect of reading aloud is particularly strong in children, but it works for older people, too. “It’s beneficial throughout the age range,” he says.



*Reading aloud is often encouraged in school classrooms, but most adults tend to do most of their reading silently (Credit: Alamy)*

MacLeod has named this phenomenon the **“production effect”**. It means that producing written words – that’s to say, reading them out loud – improves our memory of them.

The production effect has been replicated in numerous studies spanning more than a decade. **In one study in Australia**, a group of seven-to-10-year-olds were presented with a list of words and asked to read some silently, and others aloud. Afterwards, they correctly recognised 87% of the words they’d read aloud, but only 70% of the silent ones.

In another study, **adults aged 67 to 88** were given the same task – reading words either silently or aloud – before then writing down all those they could remember. They were able to recall 27% of the words they had read aloud, but only 10% of those they'd read silently. When asked which ones they recognised, they were able to correctly identify 80% of the words they had read aloud, but only 60% of the silent ones. MacLeod and his team have found the effect can last up to a week after the reading task.

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Even just silently mouthing the words makes them more memorable, **though to a lesser extent. Researchers at Ariel University in the occupied West Bank** discovered that the memory-enhancing effect also works if the readers have speech difficulties, and cannot fully articulate the words they read aloud.

*Reading aloud can also make certain memory problems more obvious, and could be helpful in detecting such issues early on*

MacLeod says one reason why people remember the spoken words is that “they stand out, they’re distinctive, because they were done aloud, and this gives you an additional basis for memory”.

We are generally better at recalling distinct, unusual events, and also, events that require active involvement. For instance, generating a word in response to a question makes it more memorable, a phenomenon known as the **generation effect**. Similarly, if someone prompts you with the clue “a tiny infant, sleeps in a cradle, begins with b”, and you answer baby, you’re going to remember it better than if you simply read it, MacLeod says.

Another way of making words stick is to enact them, for instance by bouncing a ball (or imagining bouncing a ball) while saying “bounce a ball”. This is called the **enactment effect**. Both of these effects are closely related to the production effect: they allow our memory to associate the word with a distinct event, and thereby make it easier to retrieve later.

The production effect is strongest if we read aloud ourselves. But listening to someone else read can benefit memory in other ways. In a study led by **researchers at the University of Perugia in Italy**, students read extracts from novels to a group of elderly people with dementia over a total of 60 sessions. The listeners performed better in memory tests after the sessions than before, possibly because the stories made them draw on their own memories and imagination, and helped them sort past

experiences into sequences. “It seems that actively listening to a story leads to more intense and deeper information processing,” the researchers concluded.



*Many religious texts and prayers are recited out loud as a way of underlining their importance (Credit: Alamy)*

Reading aloud can also make certain memory problems more obvious, and could be helpful in detecting such issues early on. In one study, people with early **Alzheimer’s disease** were found to be more likely than others to make certain errors when reading aloud.

There is **some evidence** that many of us are intuitively aware of the benefits of reading aloud, and use the technique more than

we might realise.

Sam Duncan, an adult literacy researcher at University College London, conducted a two-year **study of more than 500 people all over Britain** during 2017-2019 to find out if, when and how they read aloud. Often, her participants would start out by saying they didn't read aloud – but then realised that actually, they did.

“Adult reading aloud is widespread,” she says. “It’s not something we only do with children, or something that only happened in the past.”

Some said they read out funny emails or messages to entertain others. Others read aloud prayers and blessings for spiritual reasons. Writers and translators read drafts to themselves to hear the rhythm and flow. People also read aloud to make sense of recipes, contracts and densely written texts.

“Some find it helps them unpack complicated, difficult texts, whether it’s legal, academic, or Ikea-style instructions,” Duncan says. “Maybe it’s about slowing down, saying it and hearing it.”

*If reading aloud delivers such benefits, why did humans ever switch to silent reading?*

For many respondents, reading aloud brought joy, comfort and a sense of belonging. Some read to friends who were sick or dying, as “a way of escaping together somewhere”, Duncan says. One woman recalled her mother reading poems to her, and talking to her, in Welsh. After her mother died, the woman began reading Welsh poetry aloud to recreate those shared moments. A Tamil speaker living in London said he read Christian texts in Tamil to his wife. On Shetland, a poet read aloud poetry in the local dialect to herself and others.

“There were participants who talked about how when someone is reading aloud to you, you feel a bit like you’re given a gift of their time, of their attention, of their voice,” Duncan recalls. “We see this in the reading to children, that sense of closeness and bonding, but I don’t think we talk about it as much with adults.”

If reading aloud delivers such benefits, why did humans ever switch to silent reading? One clue may lie in those clay tablets from the ancient Near East, written by professional scribes in a script called cuneiform.



*Many of us read aloud far more often in our daily lives than we perhaps realise (Credit: Alamy)*

Over time, the scribes developed an ever faster and more efficient way of writing this script. Such fast scribbling has a crucial advantage, according to Karenleigh Overmann, a cognitive archaeologist at the University of Bergen, Norway who studies how **writing affected human brains and behaviour** in the past. “It keeps up with the speed of thought much better,” she says.

Reading aloud, on the other hand, is relatively slow due to the extra step of producing a sound.

“The ability to read silently, while confined to highly proficient scribes, would have had distinct advantages, especially, speed,”

says Overmann. “Reading aloud is a behaviour that would slow down your ability to read quickly.”

*Perhaps the ancient scribes, just like us today, enjoyed having two reading modes at their disposal*

In his book on ancient literacy, *Reading and Writing in Babylon*, the French assyriologist Dominique Charpin quotes a letter by a scribe called Hulalum that hints at silent reading in a hurry. Apparently, Hulalum switched between “seeing” (ie, silent reading) and “saying/listening” (loud reading), depending on the situation. In his letter, he writes that he cracked open a clay envelope – Mesopotamian tablets came encased inside a thin casing of clay to prevent prying eyes from reading them – thinking it contained a tablet for the king.

“I saw that it was written to [someone else] and therefore did not have the king listen to it,” writes Hulalum.

Perhaps the ancient scribes, just like us today, enjoyed having two reading modes at their disposal: one fast, convenient, silent and personal; the other slower, noisier, and at times more memorable.

In a time when our interactions with others and the barrage of

information we take in are all too transient, perhaps it is worth making a bit more time for reading out loud. Perhaps you even gave it a try with this article, and enjoyed hearing it in your own voice?

*Correction: An earlier version of this article identified Ariel University as being in Israel, when it is in occupied territory in the West Bank. We regret the error.*

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