

Introduction and background

In 2018, a team of RMIT researchers led by Dr Janneke Blijlevens, working in partnership with marketing company Naked Communications, created a typeface that could potentially help students to better recall the reams of written material they study every year.

The ability to retain written information has been a challenge for anyone who needs to absorb a lot of detail quickly. The field of psychology has explored approaches to memory retention for many years.

In 1994, Robert Bjork, US cognitive psychologist and specialist in human learning and memory, developed the principle of 'desirable difficulty' – the paradoxical concept that making learning more challenging can also make it more effective in the long term.

Dr Blijlevens, founder of the RMIT Behavioural Business Lab, Dr Joanne Peryman, behavioural economist, and Dr Stephen Banham, RMIT's School of Design typography lecturer, took an interdisciplinary approach to addressing this principle. Combining their expertise in psychology and design theory, the team developed a typeface to aid memory retention: Sans Forgetica.

The research

Dr Banham designed Sans Forgetica, informed by research conducted at RMIT's Behavioural Business Lab that explored how to design a typeface that was difficult enough to read to engage memory retention, yet not so difficult that the challenge was an obstruction to recall.

Over 400 students were involved in laboratory and online experiments conducted by the Behavioural Business Lab, where a range of difficult fonts were tested for memory retention.

Sans Forgetica struck the 'desirable difficulty' balance: with just the right level of difficulty to engage rather than obstruct memory retention. It uses gaps and backslant in its design to prompt the brain into deeper engagement with the material. (The subheadings in this case study are in Sans Forgetica typeface.)

Funding support and institutional support

Marketing company, Naked Communications, contributed \$6400 to fund payments to participants in the research. The Sans Forgetica team and Naked Communications also worked with the RMIT Communications and Media team to share the font and its purpose with the world, through press releases, media training and the creation of the website where the font can be downloaded for free under a common use noncommercial license.

Project outcomes

In October 2018, Sans Forgetica was made available for free downloaded at https://sansforgetica.rmit.edu.au/



Overview of the impact

Downloads

Within two weeks of the launch, 193,943 users had downloaded the font to try – a figure that is now in the millions. In that first two weeks, 524,425 visitors came to the website and it had 25,619 chrome extensions installed.

Media coverage

The release of Sans Forgetica was met with widespread media coverage. In 2018, Sans Forgetica was reviewed worldwide in TV, radio and written media outlets, with a combined 200 million views. Reviews included The Washington Post, Teacher Magazine, The Financial Review, The Guardian, Wired.com, and The Sydney Morning Herald.

The project still has traction in 2021. An October 2021 Google search on Sans Forgetica will net you 87,900 results. In the last 12 months, articles on Sans Forgetica have appeared on radio and in online news in nine countries, including Channel 7 in Australia (the others being US, UK, Japan, India, Italy, Albania, Ireland and Taiwan) and six languages (English, Japanese, Italian, Albanian, Turkish and Chinese), including articles in The Economist and on Medium.com.

Awards

The font won many awards in design and in communication including:

- The highly prestigious 2019 Premier's Design Award, Best in Category Winner for Communication Design
- The Patron's Australian Design AwardAustralia
- Best in Class Accolade in Communication Design at the 61st Good Design Awards 2019, where the jury praised it as "simply genius".

User feedback

As Sans Forgetica was made freely available for public use, some users have communicated their user experiences to Dr Blijlevens and her team. Among the many emails they've received, are:

- A report from Canadian Jill Simpson @The Great Brain Workout, who works with older adults and people with dementia. Ms Simpson used Sans Forgetica in her program, testing her subjects' memories with random words. Four of the ten words were written in Sans Forgetica, the rest in Arial Rounded. Ms Simpson found that her group of 66 people, with an average age of 73, had 10.7% greater recall of words presented in Sans Forgetica.
- The Russian WWF has developed Sans Forgetica for the Cyrillic alphabet and will use it in a new publication communicating how endangered animals are fading out of existence (a play on the gaps in Sans Forgetica typeface's design).

Further research

- This typeface has prompted other researchers to undertake replication studies, which have been published in Cognition and Psychology journals Memory, Journal of Experimental Psychology and Scan: The Journal for Educators.
- Dr Blijlevens assisted a year 12 student using Sans Forgetica to develop a unique and authentic scientific research question, hypothesis and experimental design for a major research project with students in his school as participants for their NSW HSC course Science Extension.
- Dr Richard Johnson of the School of Education further explored memory retention in classrooms, referencing Sans Forgetica, resulting in a paper, published in January 2020: Enhancing memory for learning: Teachers' journeys of implementing memory strategies in their classrooms

Next steps

Dr Blijlevens and colleagues Dr Banham and Dr Peryman are working on papers for publication in scientific journals.

Dr Blijlevens is also exploring marketing applications for Sans Forgetica, to see if people are more inclined to remember brands presented in that font. She is also working with Dr Richard Johnson, from RMIT's education school, to further explore the use of flash cards for recall in secondary education.

