Experiment 1

The experiment was conducted using a SR-Research EyeLink 1000 desk-mounted eye-tracking running at 1000 Hz sampling rate. Stimulus presentation was implemented in EyeTrack 0.7.10m (University of Massachusetts Eyetracking Lab). Participants were seated about 70 cm from an LCD display running at 60 Hz refresh rate in 1650 × 1050 pixel resolution. Materials were presented in a 20pt Calibri font printed in black over a light grey background. Line spacing was set to 30 pts such that the fixation locations could be unambiguously mapped onto a corresponding line of text. Viewing was binocular, but only the dominant eye was tracked. A chin rest and a forehead rest were used to stabilise participants' head position and keep viewing distance constant. Button responses were collected using a hand-held Microsoft USB game controller.

The experiment began with a 9-point calibration and validation procedure. Participants always saw 2 filler trials at the start of the experiment. The rest of the trials were presented in a random order. Each trial began with a gaze trigger which was located at the upper left side of the monitor. A fixation on this triggered the presentation of the passage. Participants read the passage silently and at their own pace. They pressed the X button on the controller to terminate the text presentation, which either triggered the next trial or a yes/no comprehension question regarding the story they had just read. Participants answered the questions using the left ('yes') or the right ('no') response button. Answering the question triggered the next trial.

Experiment 2

Stimulus presentation and audio recording were implemented in OpenSesame (Mathôt, Schreij, & Theeuwes, 2012) on a Dell Optiplex lab computer. The presentation used a 1024 × 768 pixel resolution. Stimuli were presented in black text (18 px, Arial font) over a light grey background.

Each trial started with the string "NEW STORY" at the centre of the screen for 1000ms, followed by the story. Participants were instructed to read the presented story out loud, and as fluently as possible. Their oral reading was recorded with a microphone in front of them. After reading each story, they would press the spacebar on a keyboard to proceed to the next.

Experiment 3

The experimental procedure was mostly identical to that in Experiment 1. The only difference was the introduction of concurrent interference tasks. Each testing session was split into two blocks. In the phonological interference block, participants silently read stories while verbally counting *'one, two, three, four …'* in a recursive manner at ~160 words per minute. The chin rest was not used in this block to allow jaw movements. In the manual interference block, they silently read stories while tapping the desktop with their left hand in a recurring sequence of index finger, middle finger, ring finger and little finger, also at ~160 taps per minute. Prior to each block, participants practised the corresponding interference task until they felt comfortable with it. During each block, participants were allowed to engage the interference task only during reading, and to rest between trials. If they forgot to maintain the interference task or did not follow the task procedure properly (e.g., verbal counting gradually turning into mumbling or slowed down significantly; finger tapping did not follow the correct sequence, etc.), they were reminded by the experimenter to re-engage the task before the next trial started.