Data Pre-processing

Script written by Emiko Muraki and adapted by Veronica Diveica

**Participants** The participants were recruited via the online platform Prolific (www.prolific.co). Responders were restricted to those who did not participante in the first experiment, had a 100% approval rate on Prolific, and self-reported being fluent in English and having no language disorders. Participants completed the study in 20 minutes on average and were compensated with GBP £4. We collected data from a sample of 73 participants, with ages ranging from 18 to 70 (*M* = 31.22, *SD* = 11.23). Of the participants, 21 were women, 47 men and 1 unknown. On average, participants completed 15.85 years of formal education (*SD* = 2.65).

**Data Cleaning** We collected a total of 19564 observations, including verb and noun trials. We excluded data from 4 participants with below-chance accuracy. All noun stimuli received correct responses from at least 50% of the remaining participants. However, 643 of the experimental trials (6.57%) were identified as RT outliers and were excluded from the analyses. Therefore, the analyses reported are based on 9139 experimental observations, out of which 7801 are correct trials.

**Session Info**

xfun::session\_info()

## R version 4.2.0 (2022-04-22)  
## Platform: x86\_64-apple-darwin17.0 (64-bit)  
## Running under: macOS Mojave 10.14.6  
##   
## Locale: en\_GB.UTF-8 / en\_GB.UTF-8 / en\_GB.UTF-8 / C / en\_GB.UTF-8 / en\_GB.UTF-8  
##   
## Package version:  
## askpass\_1.1 assertthat\_0.2.1 backports\_1.4.1   
## base64enc\_0.1.3 bit\_4.0.4 bit64\_4.0.5   
## blob\_1.2.3 broom\_0.8.0 bslib\_0.4.0   
## cachem\_1.0.6 callr\_3.7.2 cellranger\_1.1.0   
## cli\_3.3.0 clipr\_0.8.0 colorspace\_2.0-3   
## compiler\_4.2.0 cpp11\_0.4.2 crayon\_1.5.1   
## curl\_4.3.2 data.table\_1.14.2 DBI\_1.1.2   
## dbplyr\_2.2.0 digest\_0.6.29 dplyr\_1.0.10   
## dtplyr\_1.2.1 ellipsis\_0.3.2 evaluate\_0.16   
## fansi\_1.0.3 farver\_2.1.1 fastmap\_1.1.0   
## forcats\_0.5.1 fs\_1.5.2 gargle\_1.2.0   
## generics\_0.1.3 ggplot2\_3.3.6 glue\_1.6.2   
## googledrive\_2.0.0 googlesheets4\_1.0.0 graphics\_4.2.0   
## grDevices\_4.2.0 grid\_4.2.0 gtable\_0.3.1   
## haven\_2.5.0 highr\_0.9 hms\_1.1.1   
## htmltools\_0.5.3 httr\_1.4.3 ids\_1.0.1   
## isoband\_0.2.5 jquerylib\_0.1.4 jsonlite\_1.8.0   
## knitr\_1.39 labeling\_0.4.2 lattice\_0.20.45   
## lifecycle\_1.0.2 lubridate\_1.8.0 magrittr\_2.0.3   
## MASS\_7.3.56 Matrix\_1.4.1 memoise\_2.0.1   
## methods\_4.2.0 mgcv\_1.8.40 mime\_0.12   
## modelr\_0.1.8 munsell\_0.5.0 nlme\_3.1.157   
## openssl\_2.0.2 parallel\_4.2.0 pillar\_1.8.1   
## pkgconfig\_2.0.3 plyr\_1.8.7 prettyunits\_1.1.1   
## processx\_3.7.0 progress\_1.2.2 ps\_1.7.1   
## purrr\_0.3.4 R6\_2.5.1 rappdirs\_0.3.3   
## RColorBrewer\_1.1.3 Rcpp\_1.0.9 readr\_2.1.2   
## readxl\_1.4.0 rematch\_1.0.1 rematch2\_2.1.2   
## reprex\_2.0.1 rlang\_1.0.6 rmarkdown\_2.14   
## rstudioapi\_0.13 rvest\_1.0.2 sass\_0.4.2   
## scales\_1.2.1 selectr\_0.4.2 splines\_4.2.0   
## stats\_4.2.0 stringi\_1.7.8 stringr\_1.4.1   
## sys\_3.4 tibble\_3.1.8 tidyr\_1.2.0   
## tidyselect\_1.1.2 tidyverse\_1.3.2 tinytex\_0.39   
## tools\_4.2.0 tzdb\_0.3.0 utf8\_1.2.2   
## utils\_4.2.0 uuid\_1.1.0 vctrs\_0.4.1   
## viridisLite\_0.4.1 vroom\_1.5.7 withr\_2.5.0   
## xfun\_0.33 xml2\_1.3.3 yaml\_2.3.5