

READING LIST: SPAN 581

Title: Research Methods: Open Science and Reproducible Research in Linguistics

01:940:581:01 - Spring 2019

Meetings: AB 5190, 08:10–11:10

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Office hours: by appointment



Note: Readings must be completed *before* the class that occurs in the assigned week (i.e., readings assigned for week 2 will be discussed *in* the week 2 class, thus they should be read *before*.).

Week 2:

Reading

- Gonzales, K. and A. J. Lotto (2013). “A bafri, un pafri: Bilinguals’ pseudoword identifications support language-specific phonetic systems”. In: *Psychological science* 24.11, pp. 2135–2142.
- Bohannon, J. (2015). “Many psychology papers fail replication test”. In: *Science* 349.6251, pp. 910–911. ISSN: 0036-8075. DOI: 10.1126/science.349.6251.910. eprint: <http://science.sciencemag.org/content/349/6251/910.full.pdf>. <http://science.sciencemag.org/content/349/6251/910>.
- Open Science Collaboration (2015). “Estimating the reproducibility of psychological science”. In: *Science* 349.6251. ISSN: 0036-8075. DOI: 10.1126/science.aac4716. eprint: <http://science.sciencemag.org/content/349/6251/aac4716.full.pdf>. <http://science.sciencemag.org/content/349/6251/aac4716>.
- Crwell, S., J. van Doorn, A. Etz, et al. (2018). *8 Easy Steps to Open Science: An Annotated Reading List*. DOI: 10.31234/osf.io/cfzyx. psyarxiv.com/cfzyx.

Additional resources

- [Guides to better science: Data management](#)
- [GitHub for the useR](#)
- [Good enough practices in scientific computing](#)
- [Using Git and GitHub](#)
- [The replication crisis \(audio\)](#)

Week 3:

Reading

- Gonzales, K, K. Byers-Heinlein and A. Lotto (2019). “How bilinguals perceive speech depends on which language they think they’re hearing”. In: *Cognition* 182, pp. 318–330.
- van’t Veer, A. E. and R. Giner-Sorolla (2016). “Pre-registration in social psychology—A discussion and suggested template”. In: *Journal of Experimental Social Psychology* 67, pp. 2–12.
- Wickham, H. and G. Grolemund (2016). *R for Data Science: Import, Tidy, Transform, Visualize, and Model Data*. O’Reilly Media.
 - <https://r4ds.had.co.nz/r-markdown.html>
 - <https://r4ds.had.co.nz/r-markdown-formats.html>

Additional resources

- [RMarkdown cheatsheet](#)
- [RMarkdown reference](#)
- [Getting started with RMarkdown](#)
- [Data science and R: How do I start?](#)

Week 4:

Reading

- Casillas, J. V. and M. Simonet (2018). “Perceptual categorization and bilingual language modes: Assessing the double phonemic boundary in early and late bilinguals”. In: *Journal of Phonetics* 71, pp. 51–64.
- Wickham, H. and G. Grolemund (2016). *R for Data Science: Import, Tidy, Transform, Visualize, and Model Data*. O’Reilly Media.
 - <https://r4ds.had.co.nz/workflow-projects.html>
- [Guides to better science: Reproducible code](#)

Additional resources

- [What I wish I knew when I started R](#)
- [Getting help](#)
- [Field Guide to the R Ecosystem \(highly recommended\)](#)

Week 5:

Reading

- Wickham, H. and G. Grolemund (2016). *R for Data Science: Import, Tidy, Transform, Visualize, and Model Data*. O’Reilly Media.
 - <https://r4ds.had.co.nz/data-visualisation.html>
 - <https://r4ds.had.co.nz/workflow-basics.html>
- [R for excel users](#)

Additional resources

- [The tidyverse style guide](#)
- [Data structure basics](#)
- [ggplot2 cheatsheet](#)
- [Secrets to a happy graphing life](#)
- [A Compendium of Clean Graphs in R](#)

Week 6:

Reading

- Wickham, H. and G. Grolemund (2016). *R for Data Science: Import, Tidy, Transform, Visualize, and Model Data*. O'Reilly Media.
 - <https://r4ds.had.co.nz/transform.html>
 - <https://r4ds.had.co.nz/workflow-scripts.html>
 - <https://r4ds.had.co.nz/tidy-data.html>
 - <https://r4ds.had.co.nz/relational-data.html>

Additional resources

- [tidyr tutorial](#)
- [Tidy data](#)
- [Non-tidy data](#)
- [Creating new variables with mutate and ifelse \(advanced\)](#)
- [Getting help: reprex 1](#)
- [Getting help: reprex 2](#)

Week 7:

Reading

- Wickham, H. and G. Grolemund (2016). *R for Data Science: Import, Tidy, Transform, Visualize, and Model Data*. O'Reilly Media.
 - <https://r4ds.had.co.nz/data-import.html>
- [papaja documentation](#): Read documentation, install package and play with demo example.
- [R Markdown with papaja \(video pt. 1\)](#)
- [R Markdown with papaja \(video pt. 2\)](#)

Additional resources

- [papaja: Reproducible APA manuscripts with R Markdown \(skim\)](#)
- [More papaja](#)

Week 8:

Reading

- TBA

Additional resources

- [R Markdown presentations](#)
- [xaringan tutorial 1](#)
- [xaringan tutorial 2](#)

Week 9:

Reading

- Kording, K. P. and B. Mensh (2017). “Ten simple rules for structuring papers”. In: *bioRxiv*. eprint: <https://www.biorxiv.org/content/early/2017/05/23/088278.full.pdf>. <https://www.biorxiv.org/content/early/2017/05/23/088278>.
- [An introduction to introductions](#)

Additional resources

Week 10:

Reading

- [Psychopy tutorial](#)

Additional resources

Week 11:

Optional reading

- Anwyl-Irvine, A. L., J. Massonni, A. Flitton, et al. (2018). *Gorilla in our Midst: An online behavioral experiment builder*. DOI: 10.31234/osf.io/kf5nu. psyarxiv.com/kf5nu.

Additional resources

Week 12:

Reading

- Roettger, T. B. and D. Baer-Henney (2018). *Towards a replication culture in phonetic research: Speech production research in the classroom*. DOI: 10.31234/osf.io/q9t7c. psyarxiv.com/q9t7c.

Additional resources

Week 13:

Reading

- McGuire, G. (2010). “A brief primer on experimental designs for speech perception research”. In: *Laboratory Report 77*.

Additional resources

Week 14:

Reading

- [Guides to better science: Promoting your research](#)
- [Unity of science: Why linguistics faces bigger challenges than the replication crisis](#)

Additional resources