

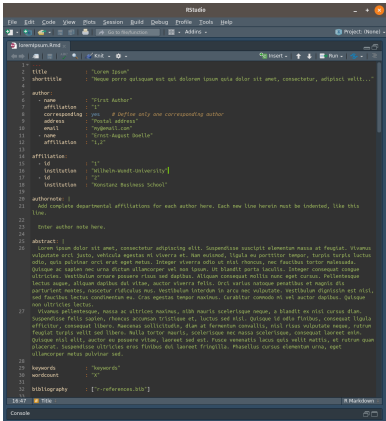
Reproducible Science with "papaja" (R)

(Preparing APA Journal Articles) by Frederik Aust

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From R to Z in one click

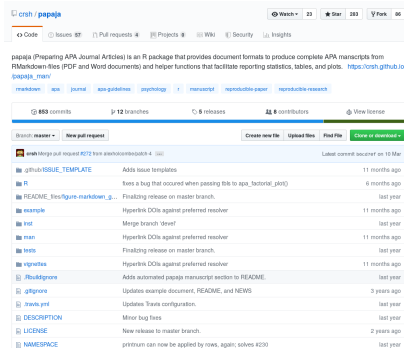


What you will need

- ▶ **\LaTeX / MikTeX / MacText**
- ▶ **R / RStudio**
- ▶ **lots of Packages that come with RStudio automatically (markdown / knitr / pandoc)**
- ▶ **papaja**
- ▶ **frustration tolerance (as with all programming languages)**

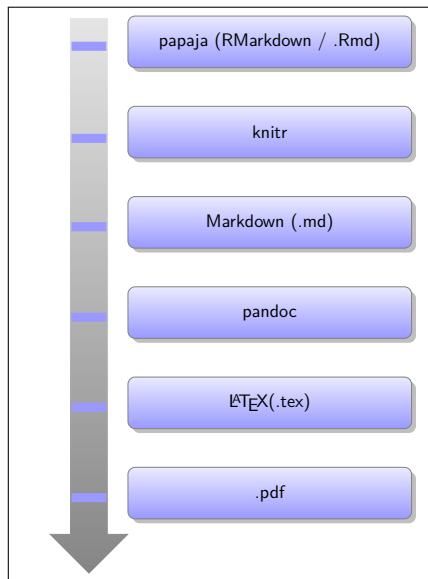
How to install papaja

```
install.packages("devtools")  
devtools::install_github("crsh/papaja") #it's not on CRAN
```

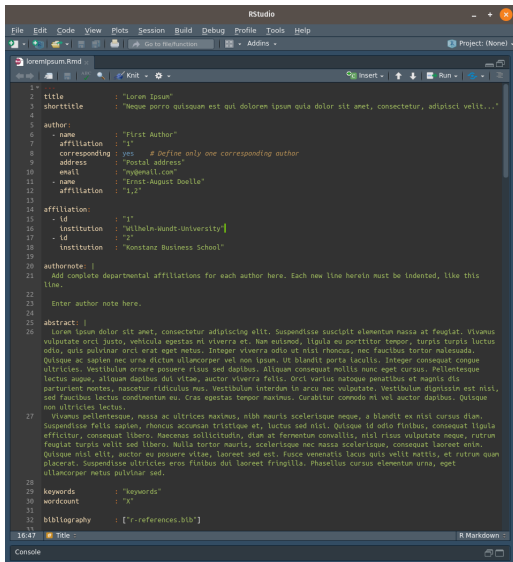


The screenshot shows the GitHub repository page for `crsh/papaja`. At the top, there are navigation tabs for Code, Issues, Pull requests, Projects, Wiki, Security, and Insights. Below these, a description of the project is provided: "papaja (Preparing APA Journal Articles) is an R package that provides document formats to produce complete APA manuscripts from RMarkdown files (PDF and Word documents) and helper functions that facilitate reporting statistics, tables, and plots." A link to the GitHub repository is also present. Below the description, there are tabs for different document types: markdown, apa, journal, apa-guidelines, psychology, manuscript, reproducible-paper, and reproducible-research. The main content area shows a list of commits, with the most recent commit being a pull request from `crsh` to the `master` branch, titled "Merge pull request #272 from crsh/combinepatch-4". The commit list includes various files and their commit dates, such as `github-issue-template` (11 months ago), `R` (6 months ago), `README_files/figure-markdown_g...` (last year), `example` (11 months ago), `inst` (last year), `man` (11 months ago), `tests` (last year), `vignettes` (11 months ago), `/buildignore` (last year), `.gitignore` (3 years ago), `.travis.yml` (last year), `DESCRIPTION` (last year), `LICENSE` (2 years ago), and `NAMESPACE` (last year).

Internal Workflow



Lets see it in action



```
1 <
2 title      : "Lorem Ipsum"
3 shorttitle : "Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit..."
4
5 author:
6   - name      : "First Author"
7     affiliation : "1"
8   corresponding: yes # Define only one corresponding author
9   address      : "Postal address"
10  email         : "myemail@com"
11  - name      : "Ernst-August Doelle"
12    affiliation : "1,2"
13
14 affiliation:
15   - id      : "1"
16     institution : "Wilhelm-Wundt-University"
17   - id      : "2"
18     institution : "Konstanz Business School"
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20 authornote: |
21   Add complete departmental affiliations for each author here. Each new line herein must be indented, like this
22   line.
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25 abstract: |
26   Lorem ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse suscipit elementum massa et feugiat. Vivamus
27   vulputate orci justo, vehicula egestas ni viverra et. Nam euismod, ligula eu porttitor tempor, turpis turpis luctus
28   odio, quis pulvinar orci erat eget metus. Integer viverra odio ut nisi rhoncus, nec faucibus tortor malesuada.
29   Quisque ac sapien nec urna dictum ullamcorper vel non ipsum. Ut blandit porta laculis. Integer consequat congue
30   ultricies. Vestibulum ornare posuere risus sed dapibus. Aliquam consequat mollis nunc eget cursus. Pellentesque
31   lectus augue, aliquam dapibus dui vitae, auctor viverra felis. Orci varius natoque penatibus et magnis dis
32   parturient montes, nascetur ridiculus mus. Vestibulum interdum la arcu nec vulputate. Vestibulum dignissim est nisi,
33   sed faucibus lectus condimentum eu. Cras egestas tempor maximus. Curabitur conmodo ni vel auctor dapibus. Quisque
34   non ultricies lectus.
35   Vivamus pellentesque, massa ac ultrices maximus, nibh mauris scelerisque neque, a blandit ex nisi cursus diam.
36   Suspendisse felis sapien, rhoncus accumsan tristique et, luctus sed nisi. Quisque id odio finibus, consequat ligula
37   efficitur, consequat libero. Maecenas sollicitudin, diam at fermentum convallis, nisi risus vulputate neque, rutrum
38   feugiat turpis velit sed libero. Nulla tortor mauris, scelerisque nec massa scelerisque, consequat laoreet enim.
39   Quisque nisi elit, auctor eu posuere vitae, laoreet sed est. Fusce venenatis lacus quis velit mattis, et rutrum
40   quam placerat. Suspendisse ultricies eros finibus dui laoreet fringilla. Phasellus cursus elementum urna, eget
41   ullamcorper metus pulvinar sed.
42
43 keywords      : "keywords"
44 wordcount     : "x"
45
46 bibliography  : ["r-references.bib"]
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```

How to get what you want

- ▶ **try it with regular RMarkdown**
- ▶ **if that does not work, try it with \LaTeX**
- ▶ `header-includes` :
 - `\interfootnotelinepenalty=10000`
 - `\usepackage{setspace}`

Try to get creative with the parsing flow from earlier:

e.g. names of a table column:

```
"$\\text{CR}_{400}$" #or
```

```
"$\\Delta$-C" #or
```

```
"\\emph{$\\beta$}"
```

Where to get help

- ▶ Example -> see git folder
- ▶ Most of the stuff you will solve with RMarkdown -> See Markdown Documentation
- ▶ For some you might have to use \LaTeX
- ▶ know your escape(-symbols)
- ▶ "Reverse engineer": Think of what you would like in the \LaTeX file and go backwards from there (find out how to parse it through markdown and pandoc)
- ▶ GitHub: <https://github.com/crsh/papaja>
- ▶ your favourite search engine

And last but not least

Heycke, T., & Stahl, C. (2018). No Evaluative Conditioning Effects with Briefly Presented Stimuli. *PsyArXiv*. <https://doi.org/10.17605/osf.io/ujq4g> (R Markdown and data files: <https://osf.io/3dn7e/>)

Heycke, T., Aust, F., & Stahl, C. (2017). Subliminal Influence on preferences? A test of evaluative conditioning for brief visual conditioned stimuli using auditory unconditioned stimuli. *Royal Society Open Science*, 4(9), 160935. <https://doi.org/10.1098/rsos.160935>

Heycke, T., Gehrmann, S., Haaf, J. M., & Stahl, C. (2018). Of two minds or one? A registered replication of Rydell et al. (2006). *Cognition and Emotion*, 0(0), 1–20. <https://doi.org/10.1080/02699931.2018.1429389> (R Markdown and data files: <https://osf.io/c57sr/>)

Heyman, T., & Heyman, G. (2018). Can prediction-based distributional semantic models predict typicality? *PsyArXiv*. <https://doi.org/10.17605/osf.io/59xtb> (R Markdown and data files: <https://osf.io/nkfjy/>)

Jordan, K., Buchanan, E., & Padfield, W. (2018). Focus on the Target: The Role of Attentional Focus in Decisions about War. *PsyArXiv*. <https://doi.org/10.17605/osf.io/9fgu8> (R Markdown and data files: <https://osf.io/r8qp2/>)

Lakens, D., Scheel, A. M., & Isager, P. M. (2018). Equivalence Testing for Psychological Research: A Tutorial. *Advances In Methods and Practices In Psychological Science*, 1(2), 259–269. <https://doi.org/10.1177/2515245918770963> (R Markdown and data files: <https://osf.io/qamc6/>)

Maxwell, N., & Buchanan, E. (2018a). Investigating the Interaction between Associative, Semantic, and Thematic Database Norms for Memory Judgments and Retrieval. *PsyArXiv*. <https://doi.org/10.17605/osf.io/fcesn> (R Markdown and data files: <https://osf.io/y8h7vi/>)

Maxwell, N., & Buchanan, E. (2018b). Modeling Memory: Exploring the Relationship Between Word Overlap and Single Word Norms when Predicting Relatedness Judgments and Retrieval. *PsyArXiv*. <https://doi.org/10.17605/osf.io/qekad> (R Markdown and data files: <https://osf.io/j7qtc/>)

McHugh, C., McGann, M., Igou, E. R., & Kinsella, E. L. (2017). Searching for Moral Dumbfounding: Identifying Measurable Indicators of Moral Dumbfounding. *Collabra: Psychology*, 3(1). <https://doi.org/10.1525/collabra.79> (R Markdown and data files: <https://osf.io/wm6vc/>)