

# How to make a <sup>good</sup> GIF

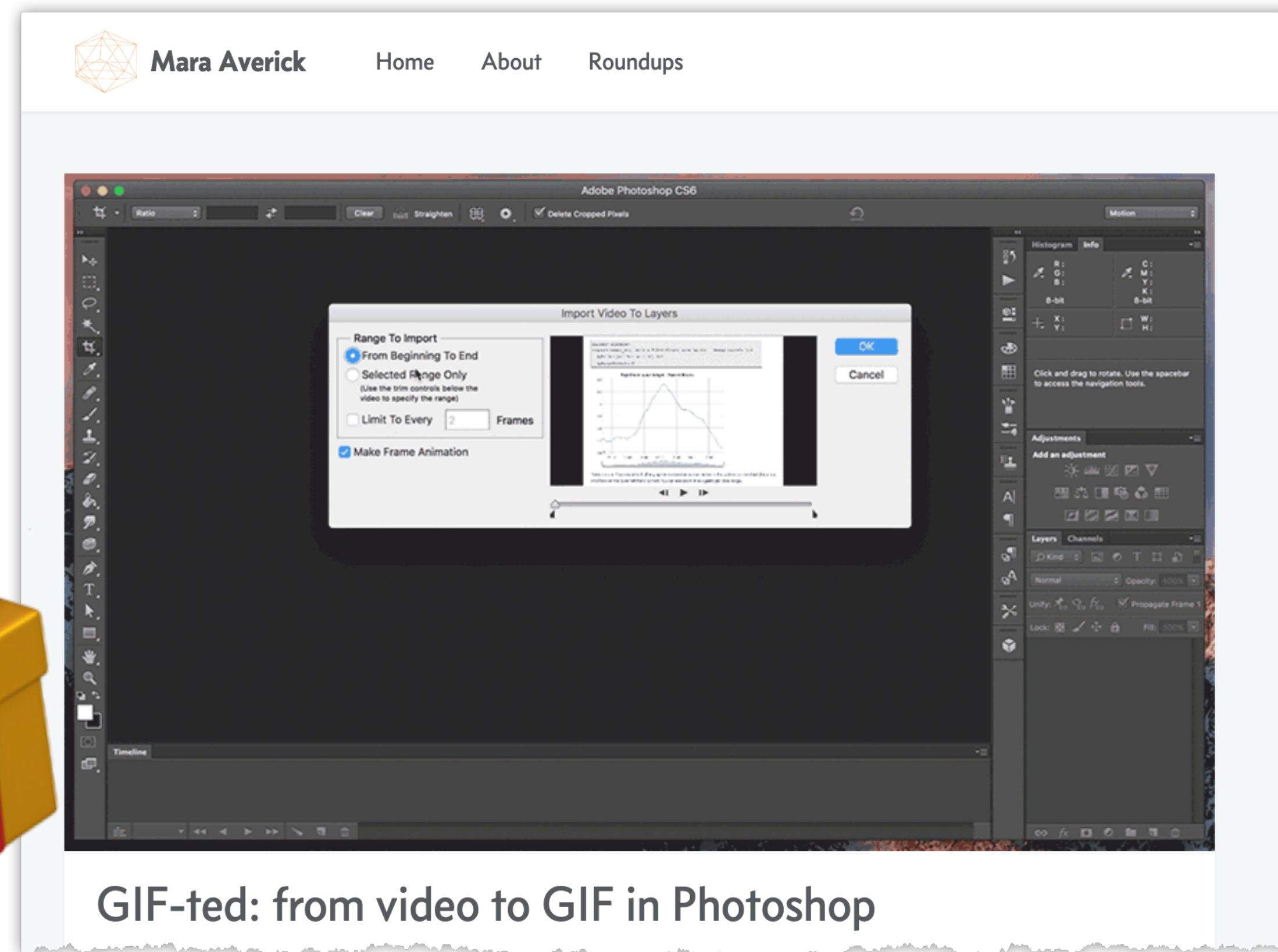
Lunch & Lightning

Mara Averick (@dataandme)  
Tidyverse Developer Advocate, RStudio

pronouncing it as /tʃɪˈpɒsɪt/ (Chippotle Mexican Grill, 2011, 0:32–0:42).

Pronunciation happens to be a hot issue even in the IT sector. During the 17th Webby Awards<sup>2</sup> in 2013 Steve Wilhite, the creator of the Gif (Graphics Interchange Format), a data compressing technique, announced that his invention should be pronounced with /dʒ/ rather than with /g/: “It’s pronounced ‘jif’ not ‘gif’” (The Webby Awards, 2013, 0:55–1:12). The Oxford English Dictionary and the American Heritage Dictionary both allow two optional pronunciations with a post-alveolar voiced affricate and a velar voiced plosive, based on poll preference results. This intervention of the coiner of the acronym in the defence of the correct rendition of the word sparked a flood of responses from web users, who played on the spelling and sound discrepancy, such as a post by Scathe to Reddit: “Unless we are going to pronounce graphics as jgraphics he makes zero sense,” or the reaction of *Creative Review* magazine: “Well theer you jo.” (Gif’s inventor, 2013).

Our next step is pronunciation questions asked in TV quiz shows. In



## GIF-ted: from video to GIF in Photoshop

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# What is a Graphics Interchange Format

Presented by Ron Blum

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# Why bother?

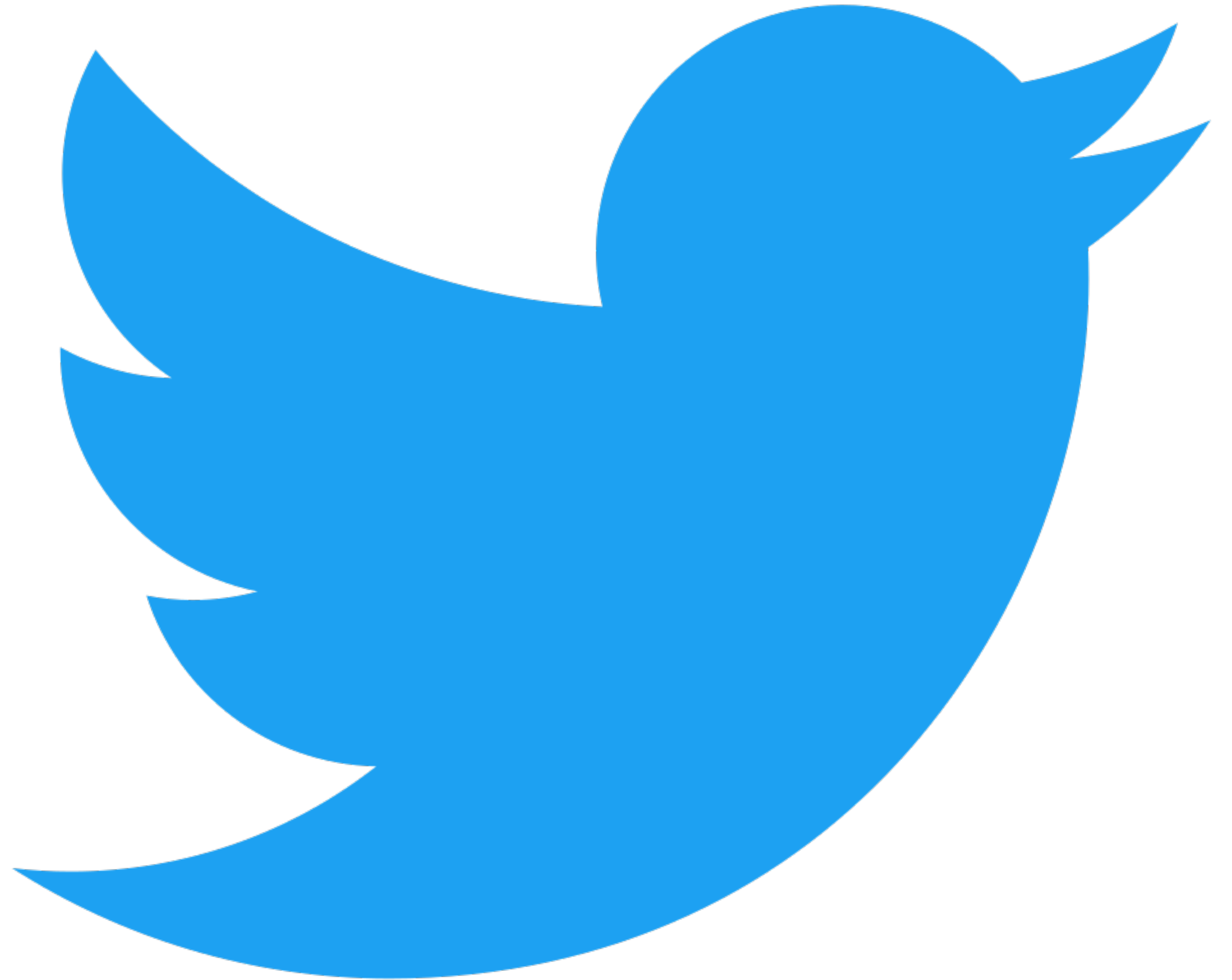
- Eye-catching 🙄
- Emotive 🎭
- Entertaining 🎞️
- Silent 🔇
- "Differently" accessible\*

\* They're actually super inaccessible in terms of visual impairment. So, be sure to have accessible descriptions of whatever it is you're showing.



# Why bother?

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# Design tips

- Big (zoom in)
- Bold (subtlety is not your friend)
- Simple (no one can see the details)
- Visible
- Redundant

# Tools

- Video capture (e.g. Quicktime, OBS Studio, asciinema, iMovie, Snagit)
- Video or images  $\Rightarrow$  GIF (e.g. ezGIF, Keynote, ffmpeg, PhotoShop)
- Extras (e.g. KeyCastr)



# Method #1: Video to GIF

**EZGIF.COM**  
ANIMATED GIFS MADE EASY

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[Video to GIF](#) [GIF to MP4](#) [Rotate video](#) [Resize video](#) [Reverse](#) [Cut video](#) [Crop video](#) [Video speed](#)

## Video to GIF converter

Upload video file

Select video from your computer:  
[Choose File](#) No file chosen

OR paste video url:

MP4, WebM, AVI, MPEG, FLV, MOV, 3GP and other video files  
Max file size: 100MB

Upload video!

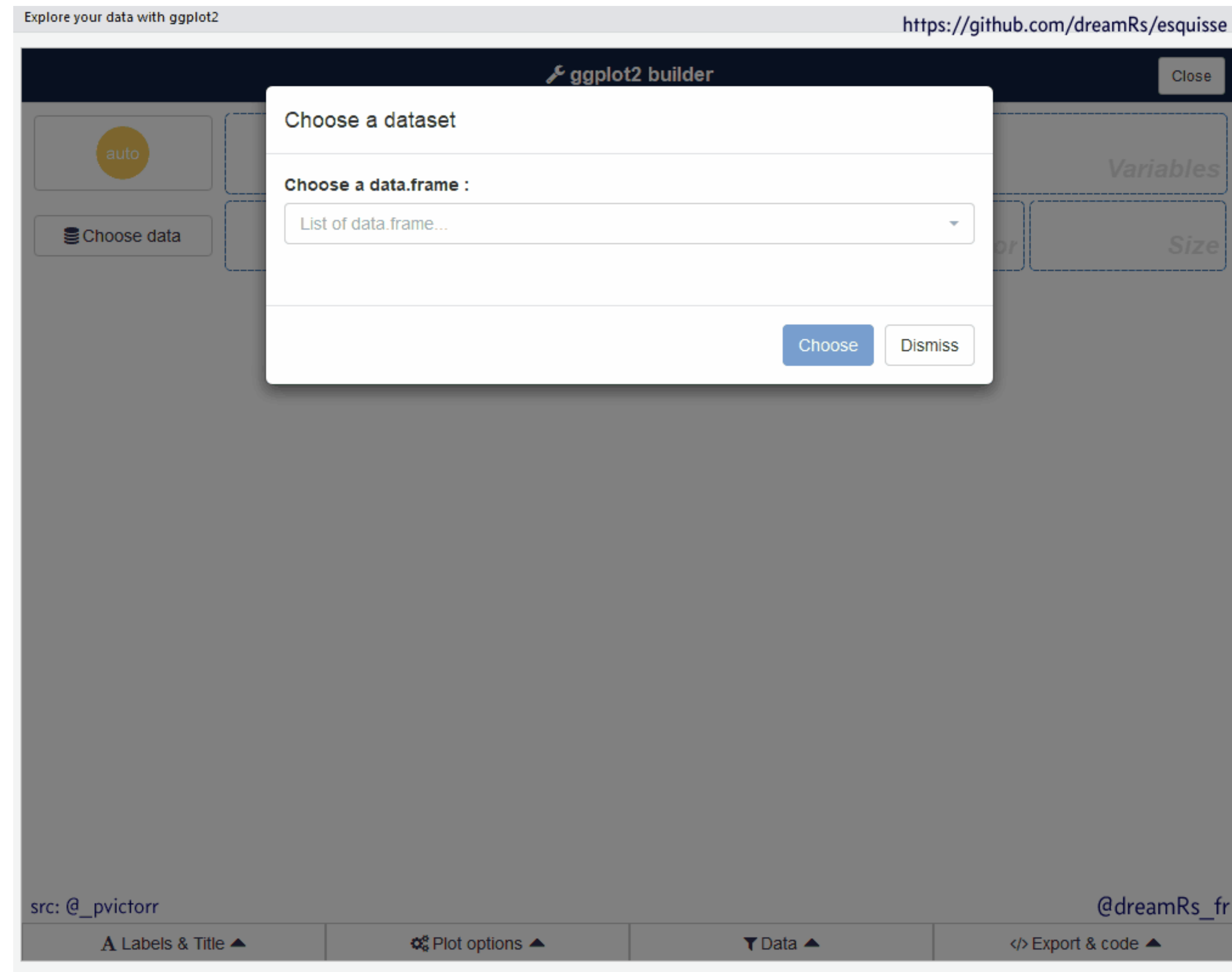
For permanent links you can use: <https://ezgif.com/video-to-gif?url=https://example.com/video.mp4>

Output GIF:

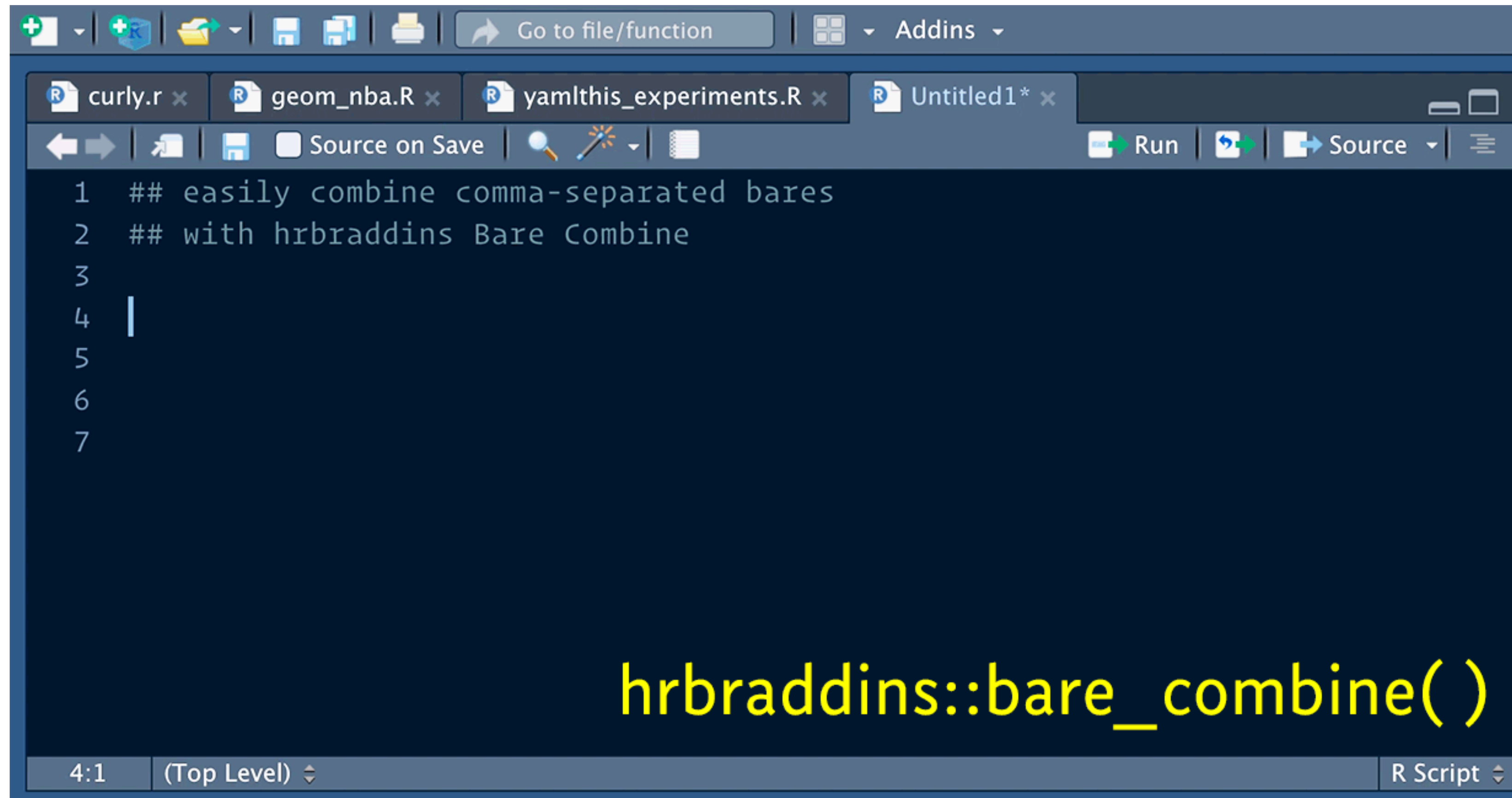
# Method #1: Video to GIF



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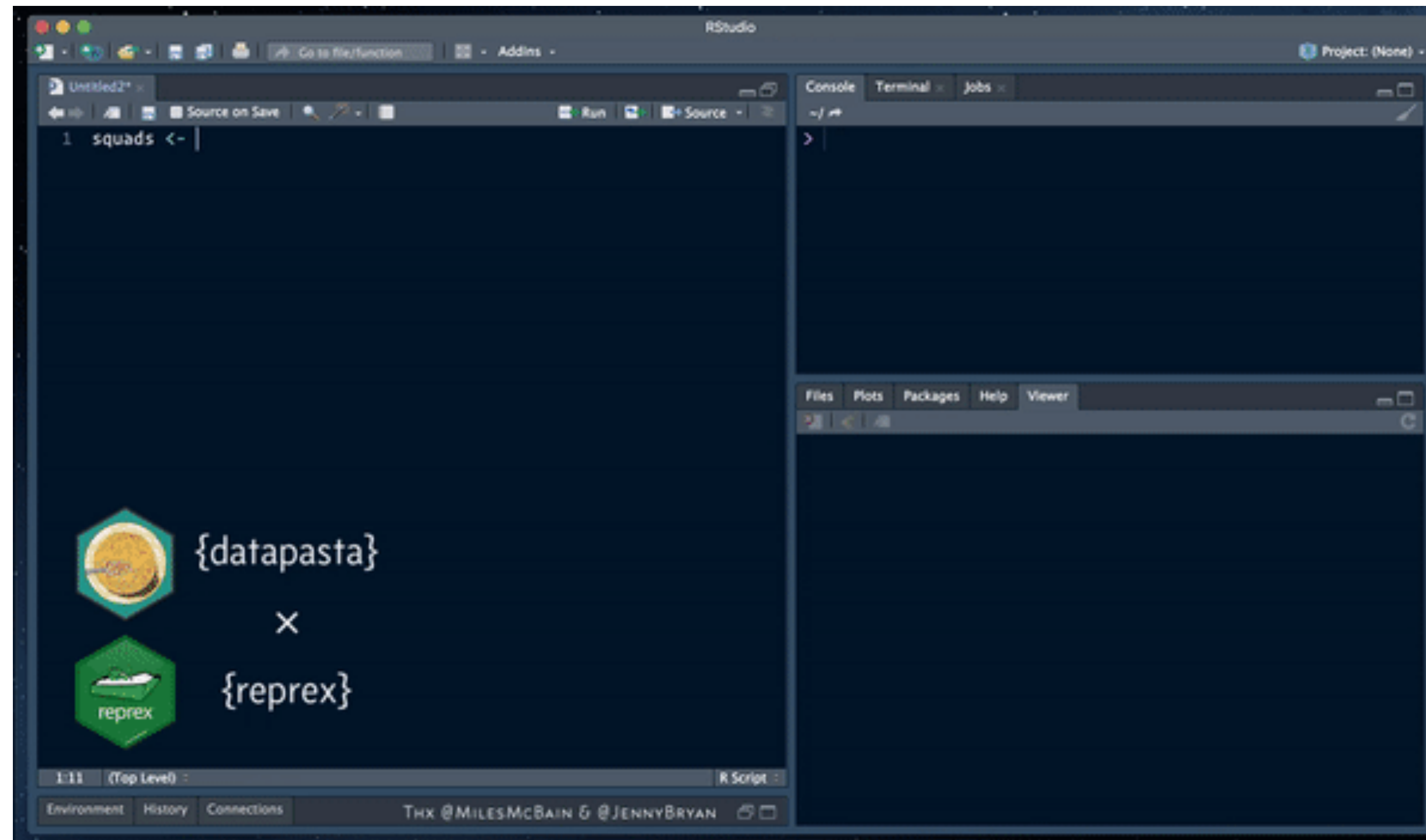
The image shows a screenshot of the RStudio IDE. The top toolbar includes icons for file operations (new, open, save, print) and a search bar labeled 'Go to file/function'. Below the toolbar, the file explorer shows four open files: 'curly.r', 'geom\_nba.R', 'yamlthis\_experiments.R', and 'Untitled1\*'. The main editor pane displays an R script with the following content:

```
1 ## easily combine comma-separated bares
2 ## with hrbraddins Bare Combine
3
4 |
5
6
7
```

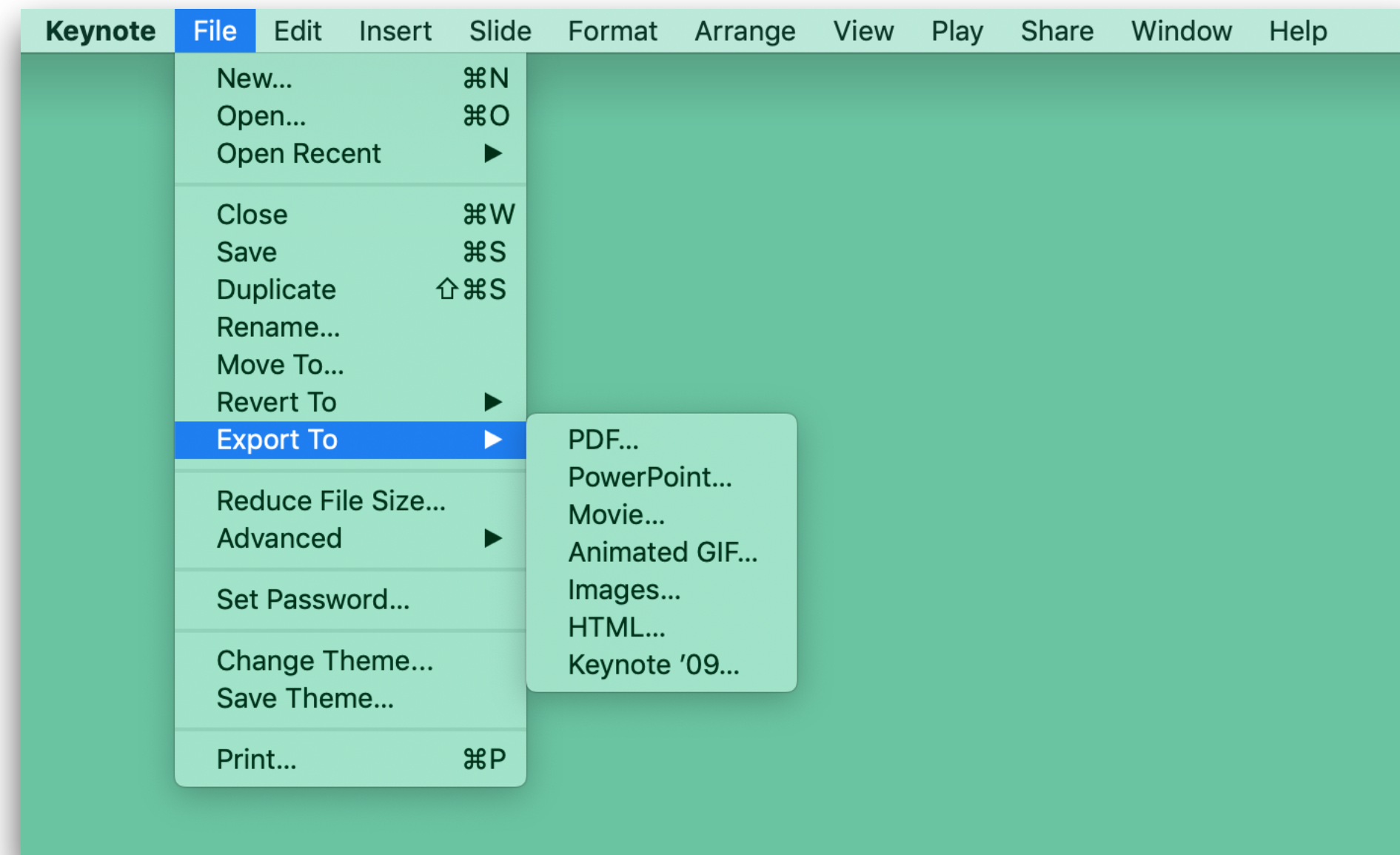
The text 'hrbraddins::bare\_combine()' is highlighted in yellow at the bottom of the editor pane. The status bar at the bottom indicates the current position is '4:1' and the scope is '(Top Level)'. The file type is identified as 'R Script'.



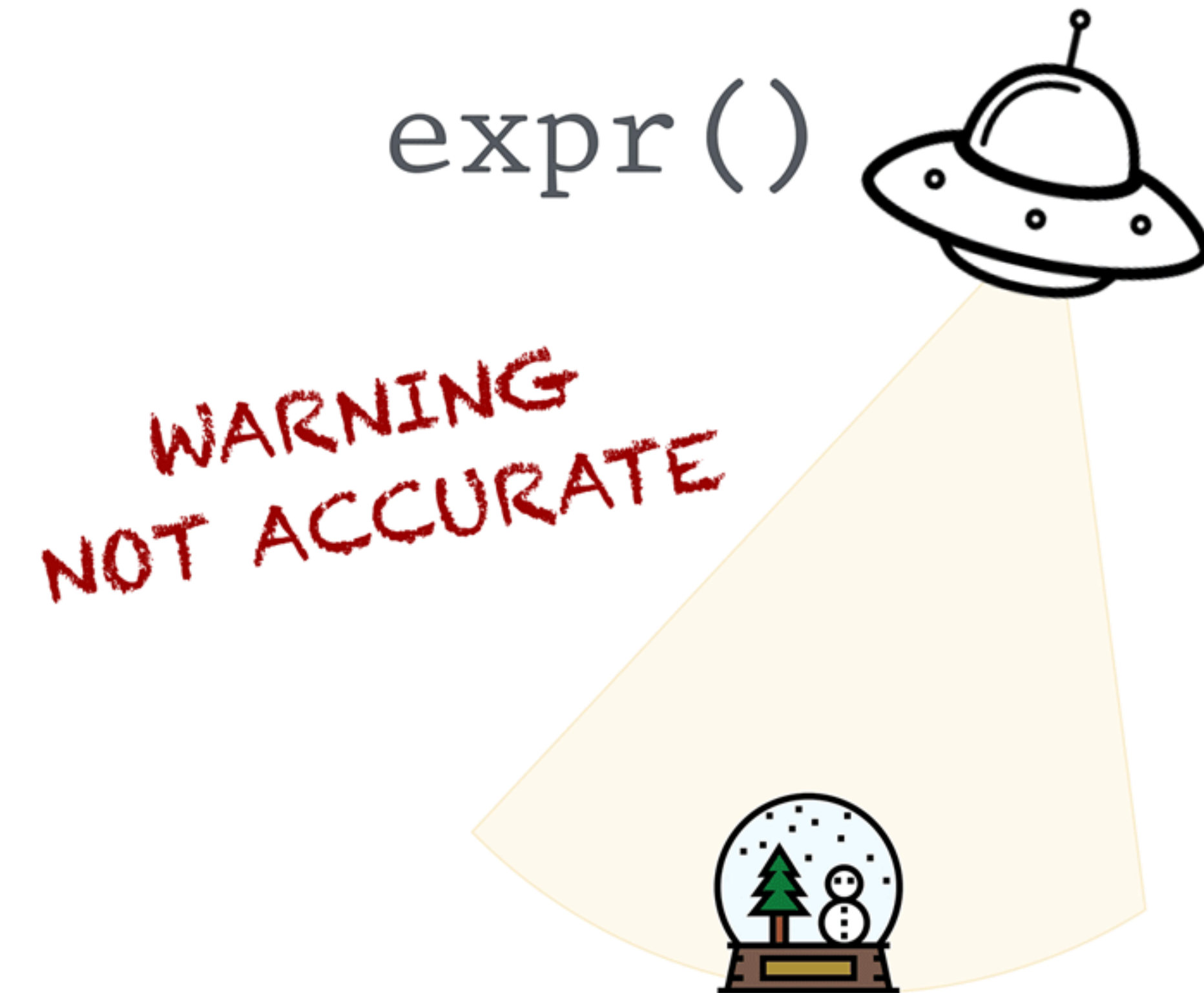
# Method #1: Video to GIF



# Method #2: Animate



# Method #2: Animate

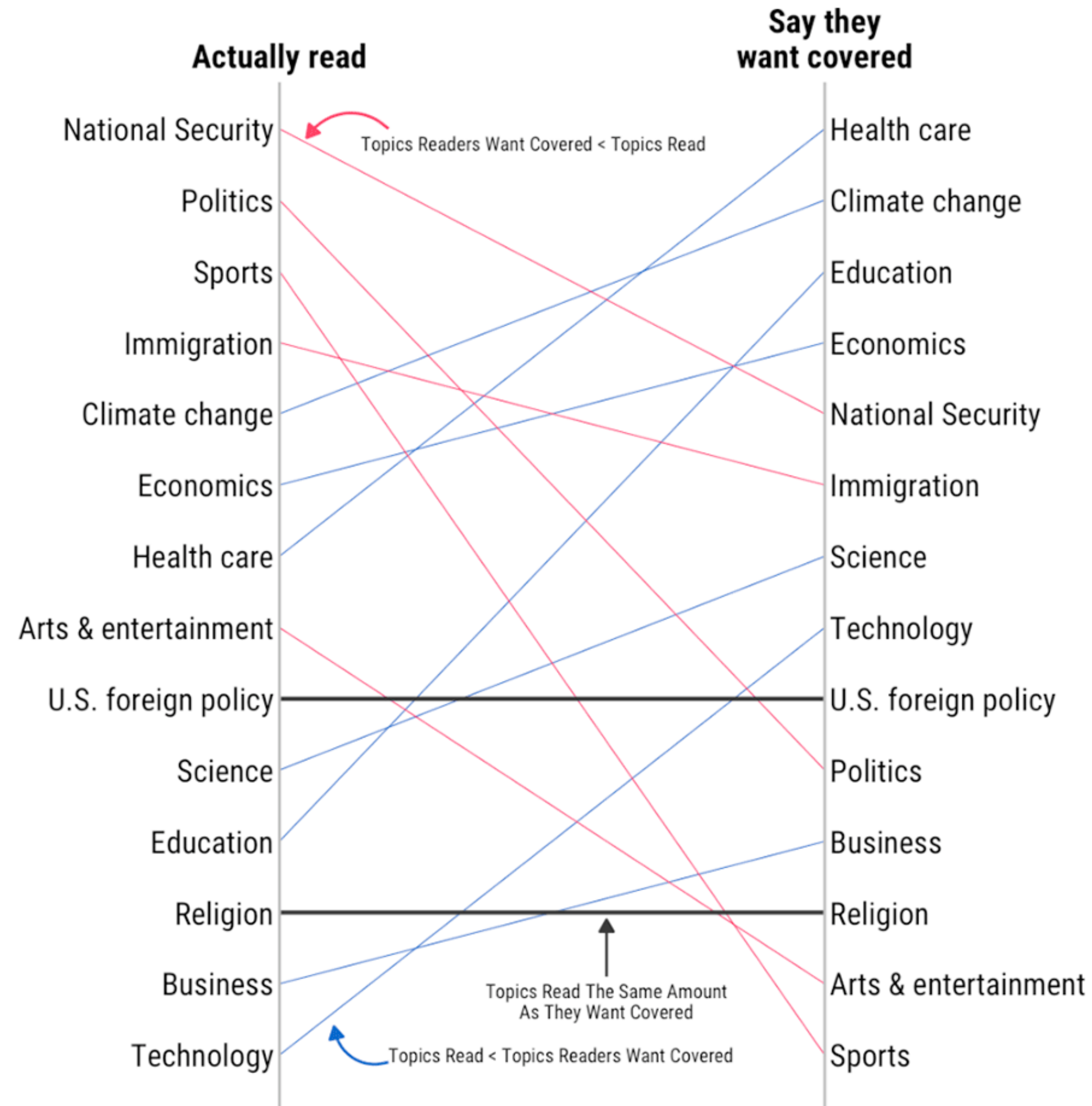




# 14 Topics Ranked by What Americans Read vs Want Covered

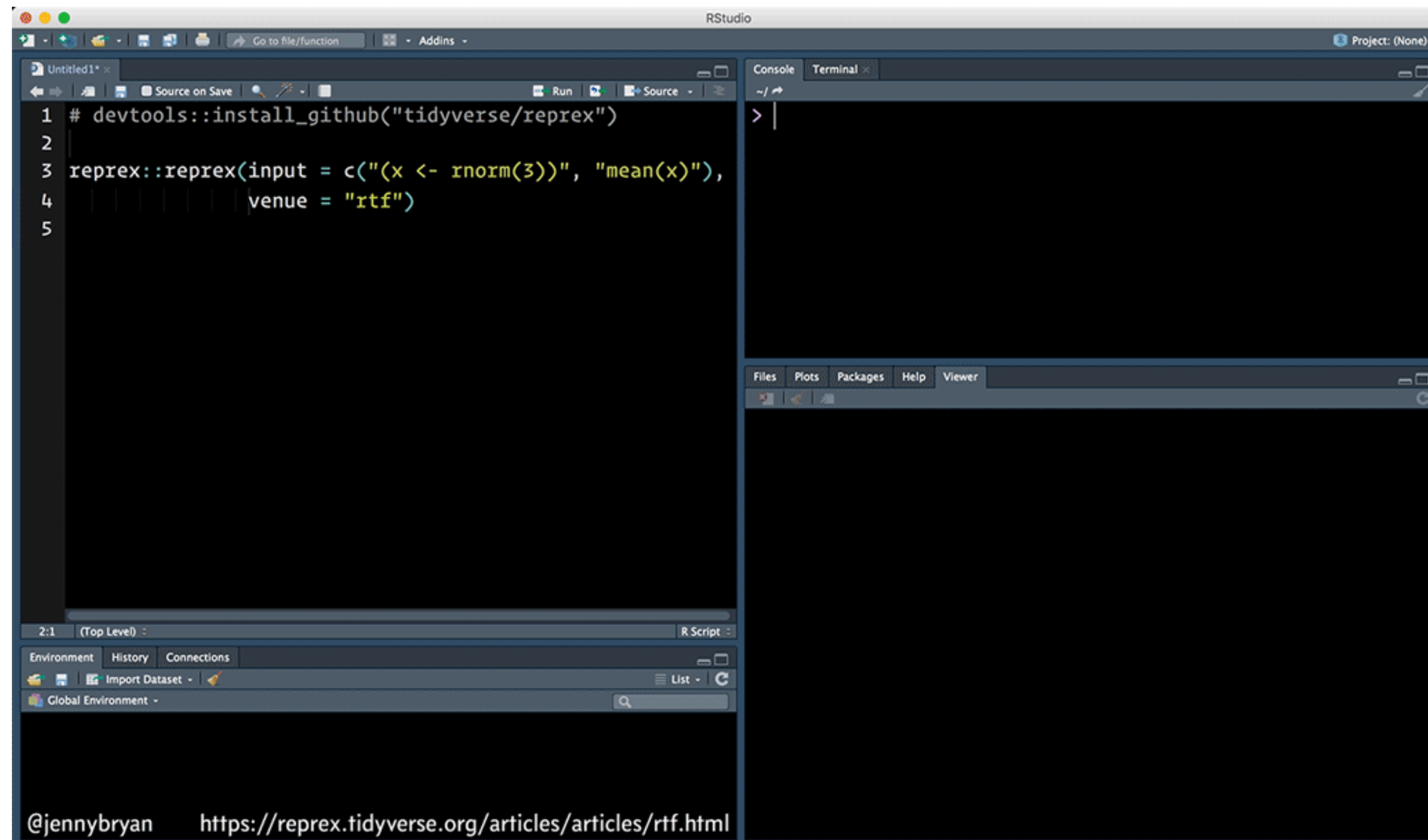
'Read' rank from Parse.ly May 2019 data.

'Want covered' rank from Axios/SurveyMonkey poll conducted May 17-20, 2019



Source: Axios <<https://www.axios.com/news-consumption-read-topics-56467fe6-81bd-4ae5-9173-cdff9865deda.html>>  
Makeover by @hrbrmstr

# Method #2: Animate



See reprex venue RTF for details <<https://reprex.tidyverse.org/articles/articles/rtf.html>>

# Method #2: Animate

```
ttest_fun ← function(response) {  
  form ← paste(response, "~ group")  
  lm(as.formula(form), data = dat)  
}
```

src: @aosmith16

<https://aosmith.rbind.io/2019/07/22/automate-model-fitting-with-loops/>

# Optimize

dither

colours

lossy

size

Preset: GIF 128 No Dither

GIF

Selective

No Dither

Colors: 128

Dither:

Matte:

Amount:

Web Snap: 0%

Lossy: 0

Interlaced

Convert to sRGB

Preview: Monitor Color

Metadata: None

Color Table

128

Image Size

W: 640 px

H: 500 px

Percent: 100 %

Quality: Bicubic

Animation

Looping Options: Forever

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# Optimize



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GIF optimizer

PNG optimizer

JPG optimizer

BMP to JPG

PNG to JPG

GIF to JPG

SVG to PNG

## Online GIF optimizer

Select image

### Lossy GIF compression

GIF compressor optimizes GIFs using gifsicle and [Lossy GIF](#) encoder, which implements lossy LZW compression. It can reduce animated GIF file size by 30%—50% at a cost of some dithering/noise. You can adjust compression level with a simple slider to get the best result for your use case. This is the default method and should work for any GIF.

### Color Reduction

This tool shrinks GIF file size by reducing the number of colors in each frame. Each GIF frame can use up to 256 unique colors, and by reducing this number, you can achieve a smaller file size. It makes multiple variations of your input image, and you can choose the one that has the best size/quality ratio for your needs.

### Remove every *n*th frame

The frame drop option can remove every second, third, or fourth frame to reduce frame rate and, therefore, file size. Useful for long gifs with a high frame rate.

Another option is to remove only duplicate frames. This method will search for identical or very similar, consecutive frames, remove them and merge their display duration. This will not do anything for most GIFs, but can be useful in some special cases.

### Optimize Transparency

This option keeps the first frame in the background, and makes unchanged parts of the following frames transparent. The results heavily depends on the nature of the image. It may give huge file size reduction in some cases when images have large, static areas, e.g. recorded screen capture of some program, but most likely will give poor results for converted videos or photo slide shows, where all or most pixels between each frame are completely different. The fuzz factor represents how similar colors can be considered as equal.

If you can't achieve the file size you require with these methods, consider [resizing the image](#) to smaller dimensions or [cutting the duration of animation](#).

[Read more about GIF optimization »](#)

# References & Resources

- What is a Graphics Interchange Format by Ron Blum
- GIF-ted: from video to GIF in PhotoShop by me (Mara Averick)
- reprex venue RTF
- reprex-ing with {datapasta} 