

- 1. Free
- 2. Graphics
- 3. Programming
- 4. Reproducibility
- 5. IDE
- 6. Packages
- 7. Community



R is free

Free as in free beer.

· Public can obtain and run your code, with low barrier

Free as in *free speech*:

- You can combine R with other systems, as can commercial entities, without hitting licensing constraints
- · You can inspect and modify the code if you want
- You know what you are getting



R has excellent graphics support

R's graphics are *publishable*:

- No need to use external specialist software to produce graphics and charts
- Data-focused grammar of graphics



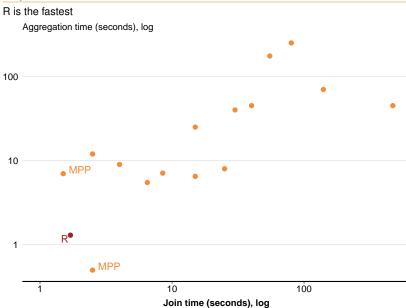
R is a fully-fledged programming language

- Direct, powerful scripted programming
- Tasks beyond data, and interacting with external software, can all be achieved from R, in particular . . .
- The way R manages different namespaces and versions is intuitive, simple, and powerful



R is fast







R is the fastest

```
> system.time({fread("~/sandbox/dev-fread-vs-cran-fread/DT-n-8.csv")})

Read 10000000 rows x 6 columns from 4.955GB file in 00:03.511 wall clock time (can be slowed down by any other open apps even if seemingly idle)

user system elapsed
21.13 1.20 3.77
```



R makes your work reproducible

Never underestimate your ability to make small errors!

Copying-and-pasting numbers and charts, version control very difficult to do manually.

R through ${\tt knitr}$ enables you to embed code, charts, and tables in your document.

Updates due to new data trivial. Single-build documents.



IDE

RStudio, the IDE for R, is excellent.



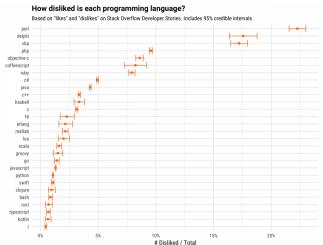
An outstanding ecosystem of packages

- Packages cover literally all statistical tools
- CRAN is both straightforward to contribute to, easy to access, and maintains a high standard throughout the R community





R is well-liked



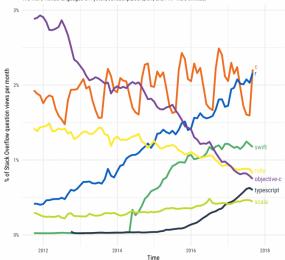




R is growing

Stack Overflow Traffic to Programming Languages

Based on visits to Stack Overflow questions from World Bank high-income countries. The more-visited languages of Python, JavaScript, Java, C#, and PHP were omitted.





Bizarrely good support

