Introduction to R

Toni Rodon

February 7, 2022

R introduction, scraping and text analysis (UB)
Universitat Pompeu Fabra
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🐦 @tonirodon

- Assistant Professor

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- Research Fellow at the LSE

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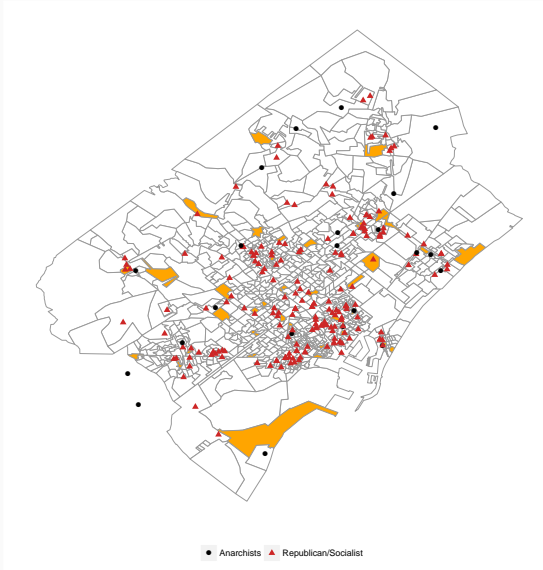
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- And lots of maps!

Digitization

● Anarchists ▲ Republican/Socialist

Who are you?

- Name / surname
- What do you do?
- Usual data analysis software
- Haver you ever used R? If yes (or, if no), why?

Today
The objective of this course is to learn how to use R.

We will also learn how to analyze, gather and work with social science data (in R).

We will also learn how to not be afraid of using R.

After Tuesday's session, most likely you will feel overwhelmed. This is perfectly fine!

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- R version 1.0.0 is released.
- CRAN package repository features 18,859 available packages.

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  - Everything else

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- Data analysts are in high demand!

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- R had functions Stata did not have–scraping, text analysis...
- It was very annoying to waste my time (paying) or searching for a license key

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- Create 3-D objects (https://www.tylermw.com/3d-ggplots-with-rayshader/)

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- Using R you can even order a pizza!

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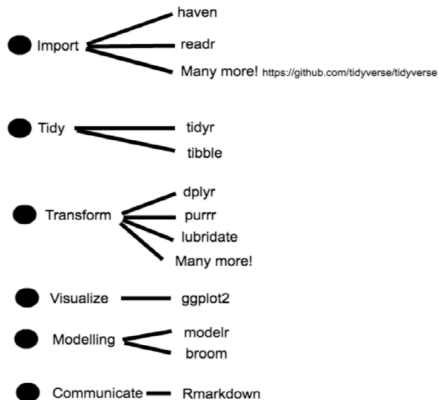 - Some tools for text analysis
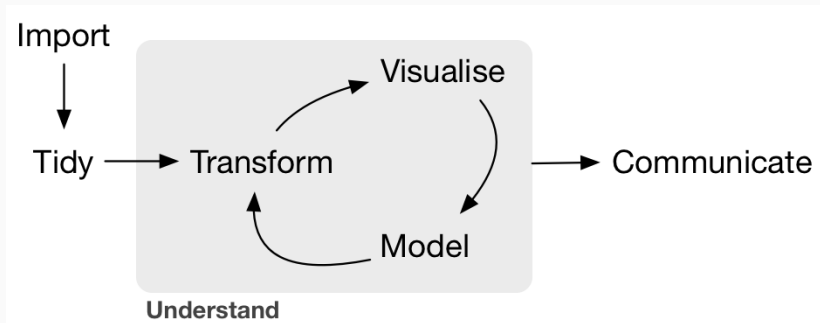 - etc.

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    - etc.
- R works for small/medium sized data (me: up to 8 milion observations)

Inspirational quotes

Hadley Wickham
The bad news is that when ever you learn a new skill you're going to suck. It's going to be frustrating. The good news is that is typical and happens to everyone and it is only temporary. You can't go from knowing nothing to becoming an expert without going through a period of great frustration and great suckiness.

Inspirational quotes (II)

Kosuke Imai
One can learn data analysis only by doing, not by reading.

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- Comment your code
- Code should (must!) work from the beginning to the end

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- Everything is an object
- Every object has a class
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- There is consensus, however, that variable names can't have blank spaces

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- An object can only be of one class (not hybrid objects)
- It is possible to work with multiple objects at the same time (multiple "datasets")
- This means we often need to "call" the object (i.e. when using a variable in a dataset)

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- Tip: Create data frames whenever you can

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- Exercises - and we will go over them together.

R time

R
Let's go for it!

Install R

- https://github.com/hbctraining/Intro-to-R/blob/
  master/lessons/01_introR-R-and-RStudio.md

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