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UP 494 – Neighborhood Analysis

Week 3 Reflection

Prompt

- How is working with data via a command line interface different from using a graphical user interface?
- How do we balance reproducibility of our analysis with accessibility of the analytical tools?
- What's challenging for you right now regarding learning and using R? What are the "a-ha" moments that you're celebrating?

Reflection

Working with data via a command line interface is different from using a graphical user interface in many ways. Using a command line interface is easier in some ways because there is more room to manipulate outputs – it's easier to go back and make changes to the code, and to know which part of the code needs to be changed. It's also easier to manipulate data as needed. Graphical user interfaces, in comparison, have limited functionality and can make it more challenging to produce outputs precisely how you want them to be. Still, if your data is clean, graphical user interfaces can be easier to use, especially if you're just starting to learn R!

The accessibility of R as an analytical tool seems to be a bit complicated. On one hand, it's a free software that can be downloaded by virtually anyone, but on the other hand, it takes a lot of practice and experience to navigate. I think that how we analyze data in R can be explained in broad terms that can make it reproducible through other tools. R is just one way of organizing and implementing our analysis.

One challenging moment I'm having right now regarding learning and using R is understanding the differences between the different "languages", specifically between base R and tidyverse. Base R makes more sense to me, but I've noticed that the workbooks tend to use other languages. One "a-ha" moment I'm celebrating this week is understanding what each part of a code chunk is. When working with the Session 5 Workbook this week, I struggled with changing the labels on a few graphs, but once I understood how to edit the title, x & y axes, and other labels, I felt like I was really starting to understand how R works and how to get the outputs I want.