# Relativity in the univeRse

File path behavior in different workflows

Kyle Hardage (DWR) 2022-02-10 portable, reproducible code

file path practices vary

goal: understand file path behavior

Fine print: on a Windows machine; RStudio IDE

# Workflows



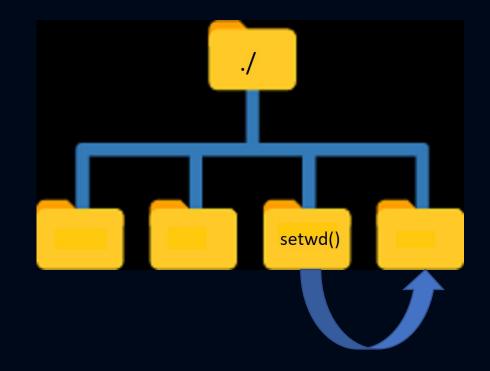
- 1) R script 2) R notebook
- 3) RStudio Project

## R script

setwd("C:/Users/Kyle/no/path/for/you")
Interactive
Temporary

read.csv("example.csv")
read.csv("data/example.csv")
read.csv("./data/example.csv")

"C:/Users/Kyle/no/path/for/you/./data/example.csv"

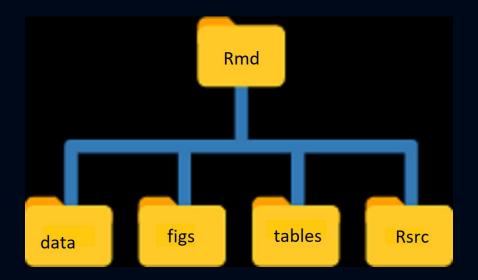


### R notebook

Root directory contains .Rmd file

read.csv("data/example.csv")
read.csv("./data/example.csv")

"C:/Users/Kyle/no/path/for/you/Rmd/data/example.csv"



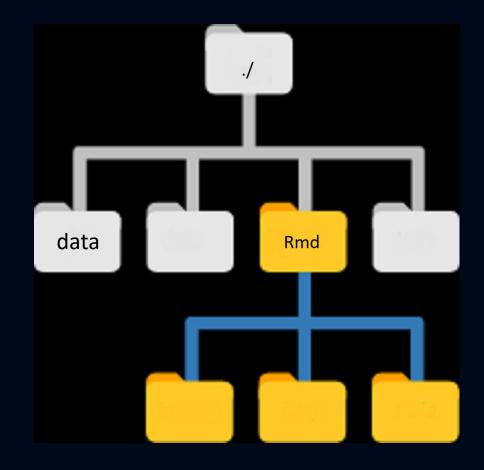
### R notebook

Root directory contains .Rmd file

"." current directory

".." one directory above

read.csv("../data/raw/example.csv")

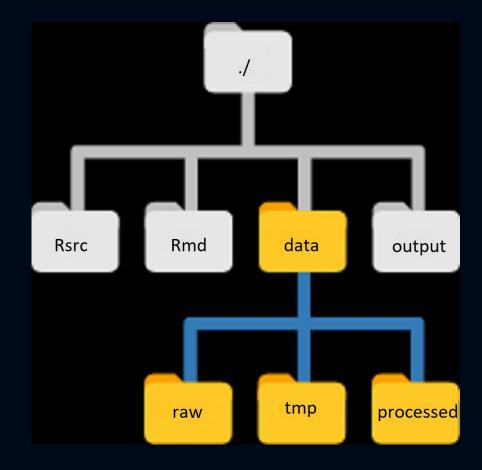


# RStudio project

Paths relative to Project directory

Recall Rmd behavior: ./ ../ .../

install.packages("here")



### Summary

#### R script

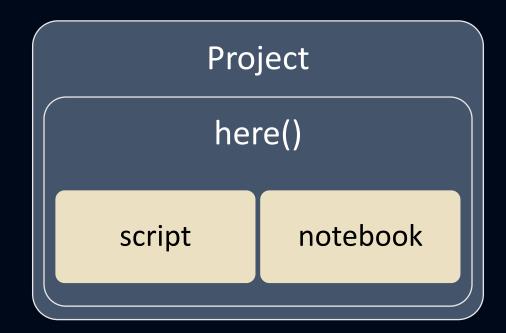
temporary, unstable, relative to working directory

#### R notebook

reproducible, relative to .Rmd directory

#### RStudio project

dynamic file path creation, relative to project directory here package



#### Resources

https://github.com/jennybc/here\_here

https://www.tidyverse.org/blog/2017/12/workflow-vs-script/

https://malco.io/2018/11/05/why-should-i-use-the-here-package-when-i-m-already-using-projects/