# GRD 610A Data Visualization II

January 27, 2021 | R Basics

#### Visualization of the Week

## **Revisit Padlet**

https://padlet.com/jschilling\_ccs/mmzv9zq2ic8e6igs

# What makes an effective data visualization?

#### Let's Get Started in R

Data Visualization: A Practical Introduction by Kieran Healy, Chapter 2

#### R Markdown

- R Markdown allows a mix of text, code, and images to be written and saved in one document
- Making it easier to keep track of notes, code, and output together
- Outputs documents in HTML, Word, and PDF

Markdown # Header ## Subhead	Output <b>Header</b> Subhead
Plain text	Plain text
*italics*	italics
**bold**	bold
`verbatim`	verbatim
1. List	1. List
2. List	2. List
- Bullet 1	° Bullet 1
- Bullet 2	° Bullet 2
Footnote.[^1]	Footnote!
[^1]: The footnote.	<sup>1</sup> The footnote.

Figure 2.1 from p. 34 of Healy, Data Visualization: A Practical Introduction showing "elements of RMarkdown syntax"

#### R Markdown Setup

- Set parameters and output formats in the YAML
- Formatting text
- Code chunks and parameters on code chunks

- ?html\_document
- Navigation

```
title: "Data Visualization Notes"
author: "Jenn Schilling"
date: "2020-01-27"
output:
html_document:
theme: flatly
toc: TRUE
toc_float: TRUE
code_download: TRUE
```

## R Markdown Notes File

Data Visualization: A Practical Introduction by Kieran Healy, Chapter 2, p. 36

## 15 Minute Break

## Things to Know About R

Data Visualization: A Practical Introduction by Kieran Healy, Chapter 2, p. 38

#### **R** Basics

- R is an interpreter
  - o > means R is ready for a command
  - + means R is waiting for more information (your last command is not complete)
  - If you get stuck with +, press the Esc key to get back to >
  - CTRI + FNTFR
- "Everything has a name"
  - Names are case sensitive
  - Objects
  - Functions
  - Constants
- "Everything is an object"

#### Lab Procedure

- Follow along with the book chapter
- Save your work as a .Rmd
- Knit to an HTML
- Submit to Blackboard after class
- Rubric

## Let's Get into RStudio

Data Visualization: A Practical Introduction by Kieran Healy, Chapter 2, pp. 38-53

#### Tasks to Complete

- Reading (see Syllabus)
- Prepare for your Visualization of the Week