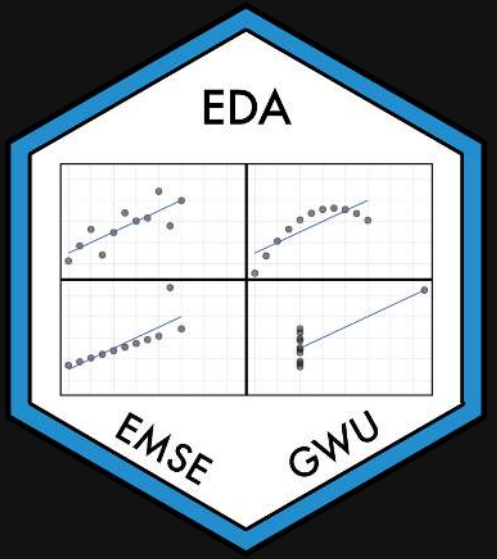

Week 14: *Story Telling*

EMSE 4572 / 6572: Exploratory Data Analysis

John Paul Helveston

December 06, 2023

Week 14: *Story Telling*

1. Telling a story
2. Designing slides
3. Giving a talk
4. "Final" thoughts

Download this cheetsheet for today's content

Week 14: *Story Telling*

1. Telling a story
2. Designing slides
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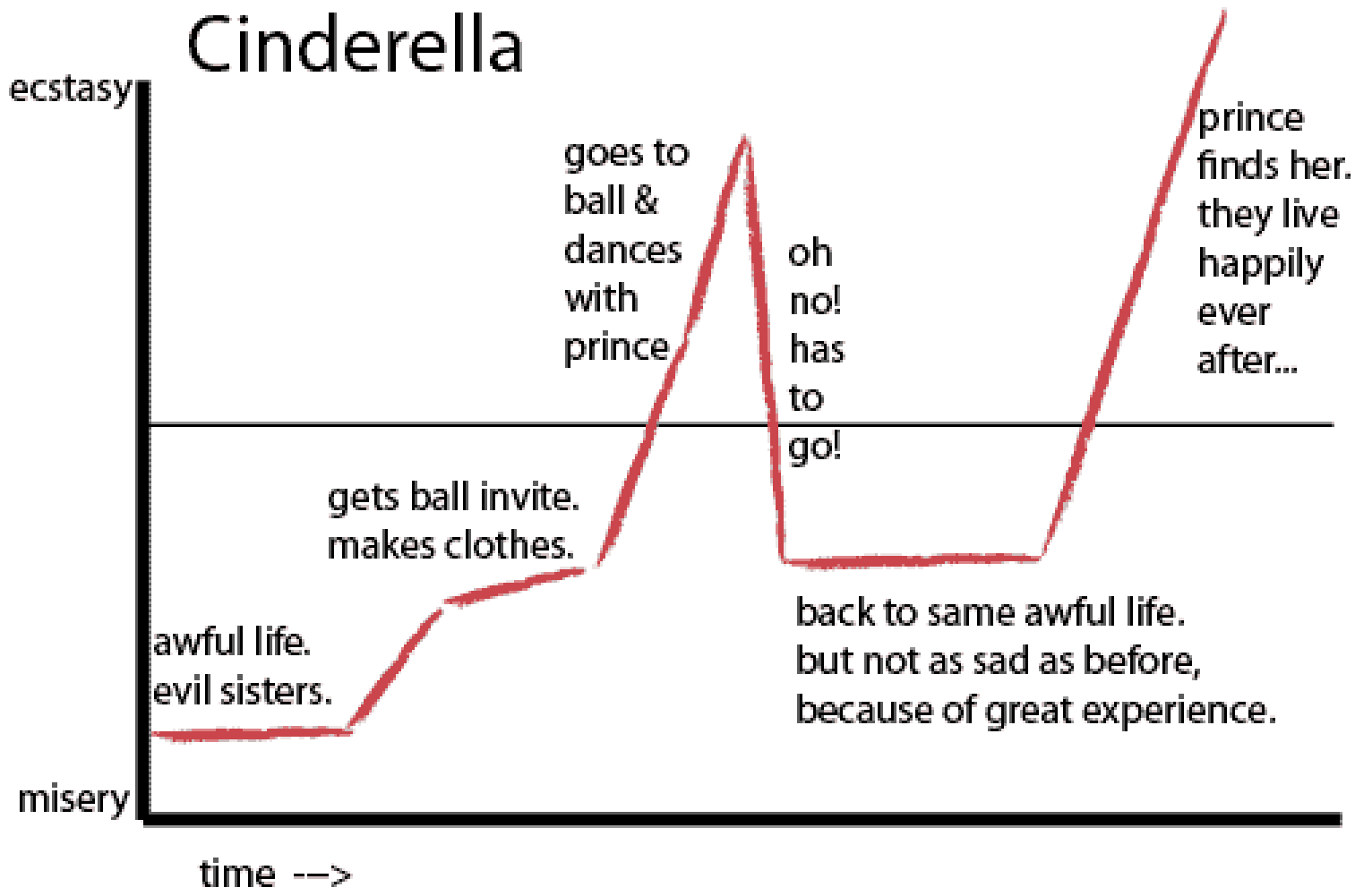
What is a story?

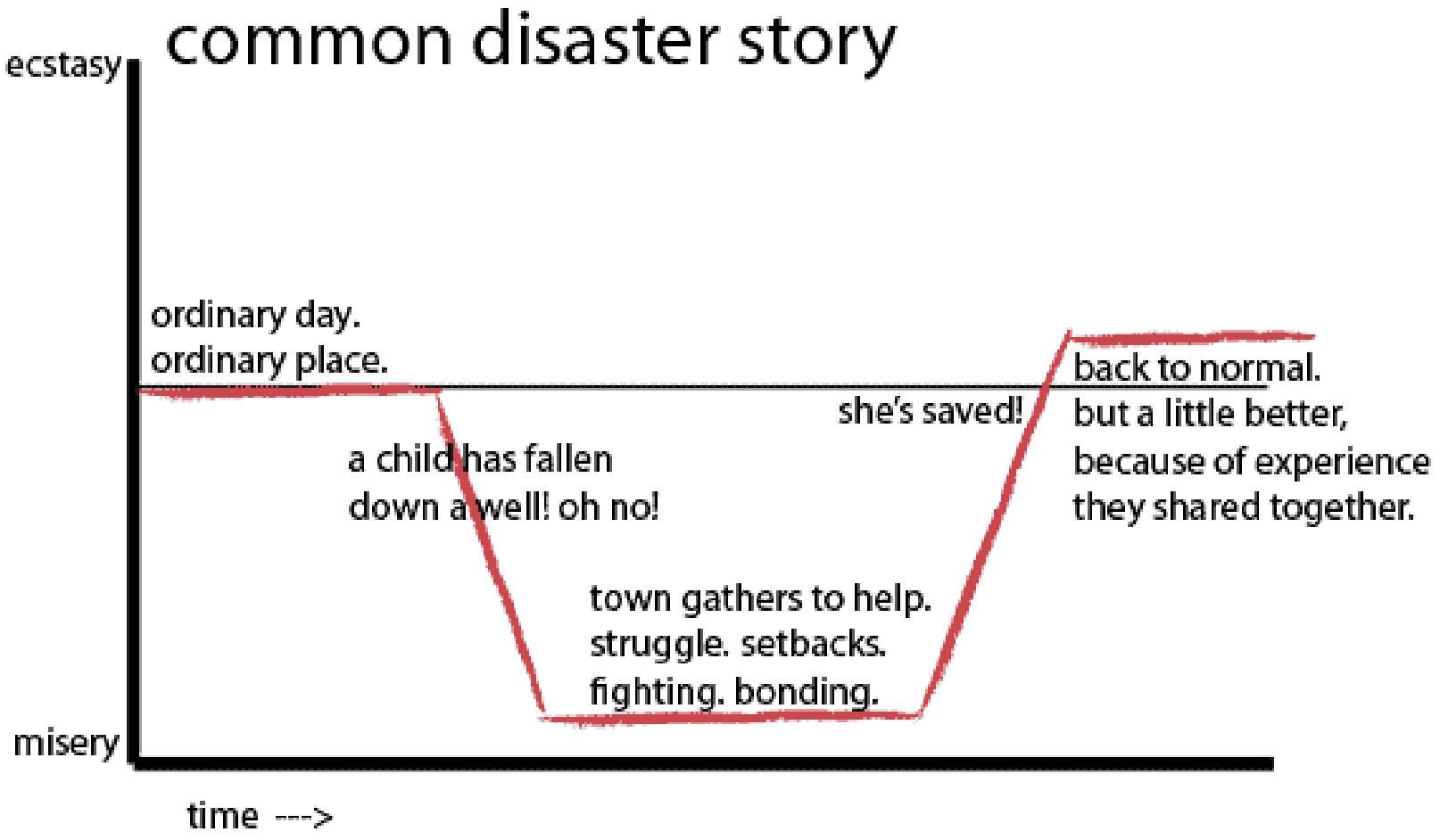
A story is a set of observations, facts, or events...that are presented in a specific order such that they create an **emotional reaction** in the audience.

- Clause O. Wilke (2019), Chp. 29

source

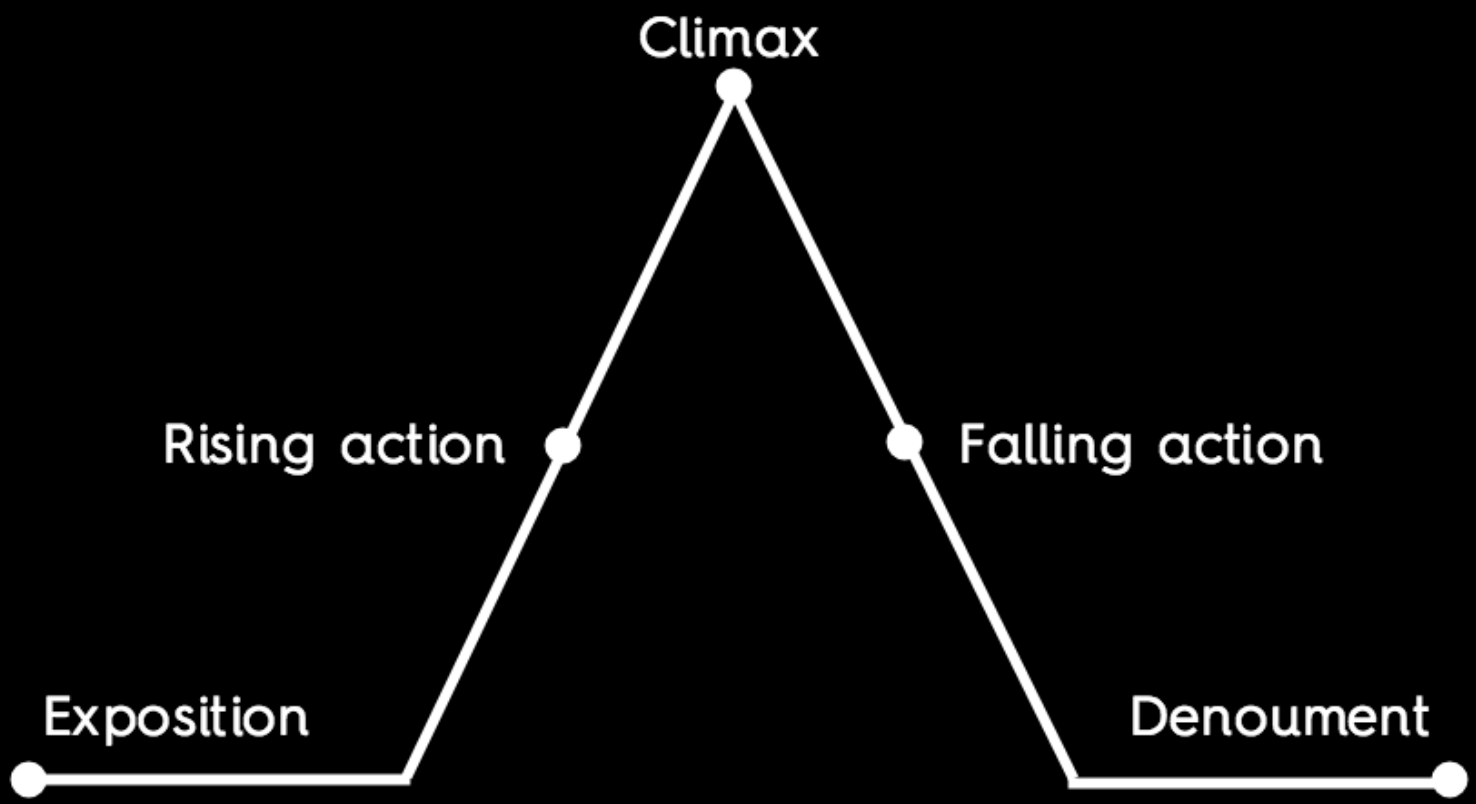

Cinderella
ecstasy
misery
time -->
awful life.
evil sisters.
gets ball invite.
makes clothes.
goes to
ball &
dances
with
prince
oh
no!
has
to
go!
back to same awful life.
but not as sad as before,
because of great experience.
prince
finds her.
they live
happily
ever
after...

source

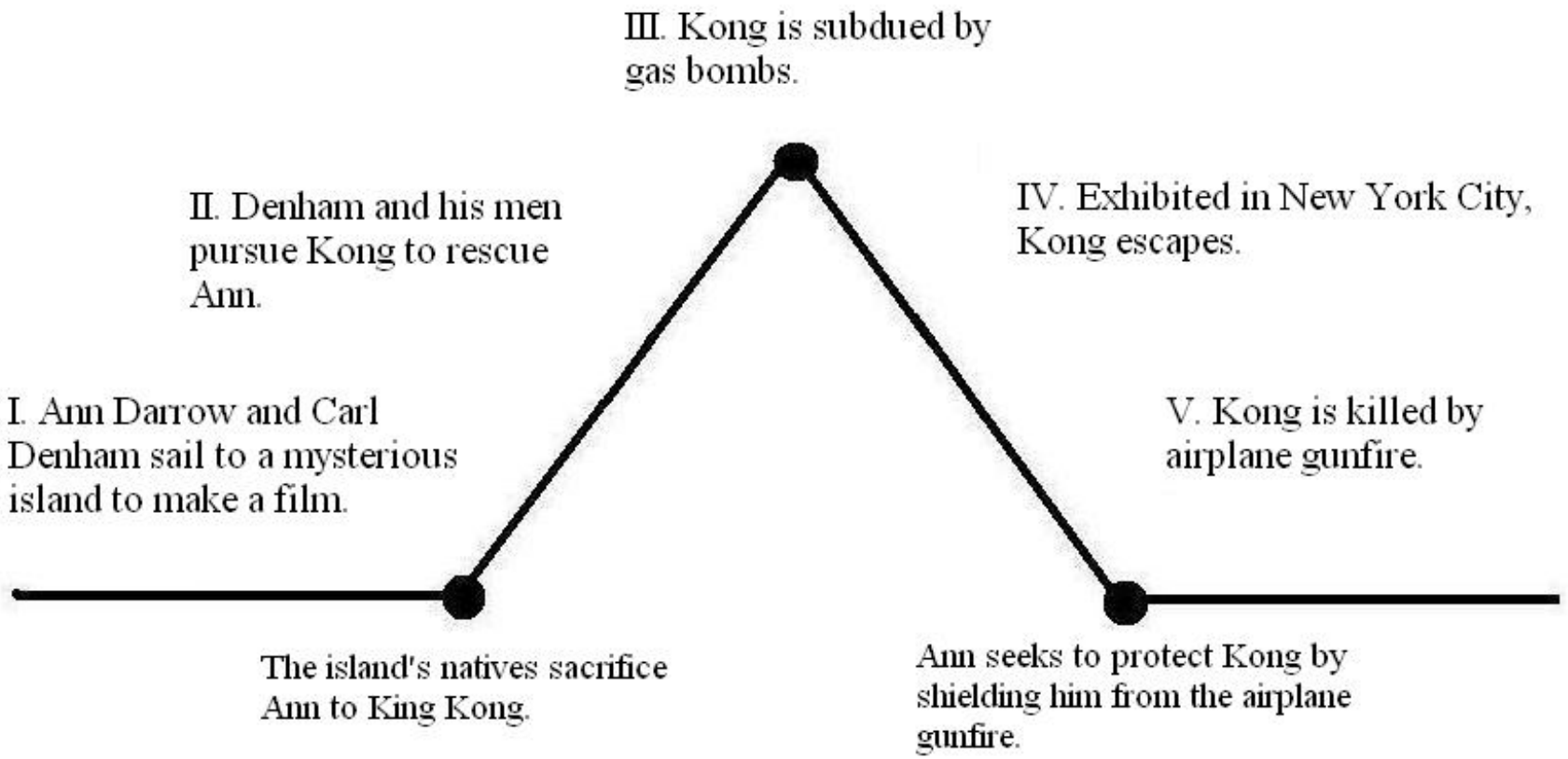

common disaster story
ecstasy
misery
time --->
ordinary day.
ordinary place.
a child has fallen
down a well! oh no!
town gathers to help.
struggle. setbacks.
fighting. bonding.
she's saved!
back to normal.
but a little better,
because of experience
they shared together.

source

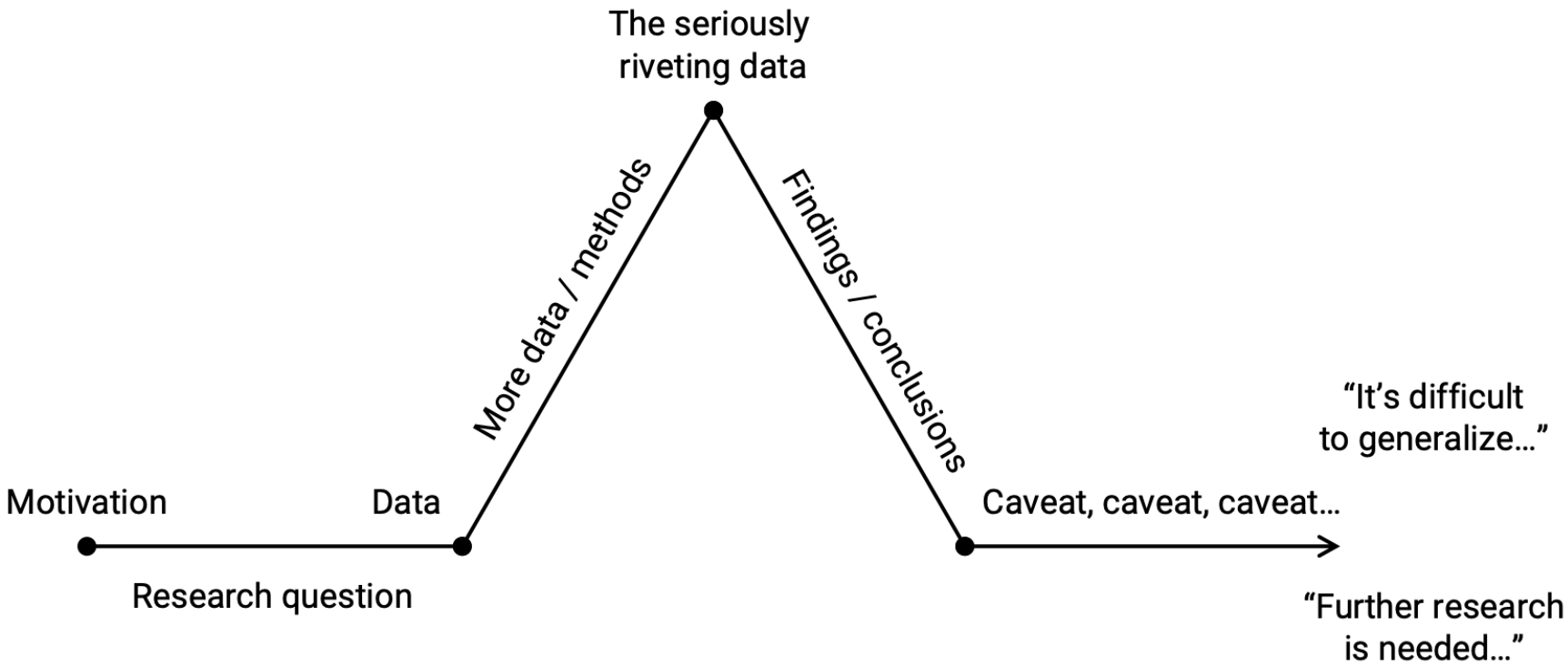
Freytag's Pyramid



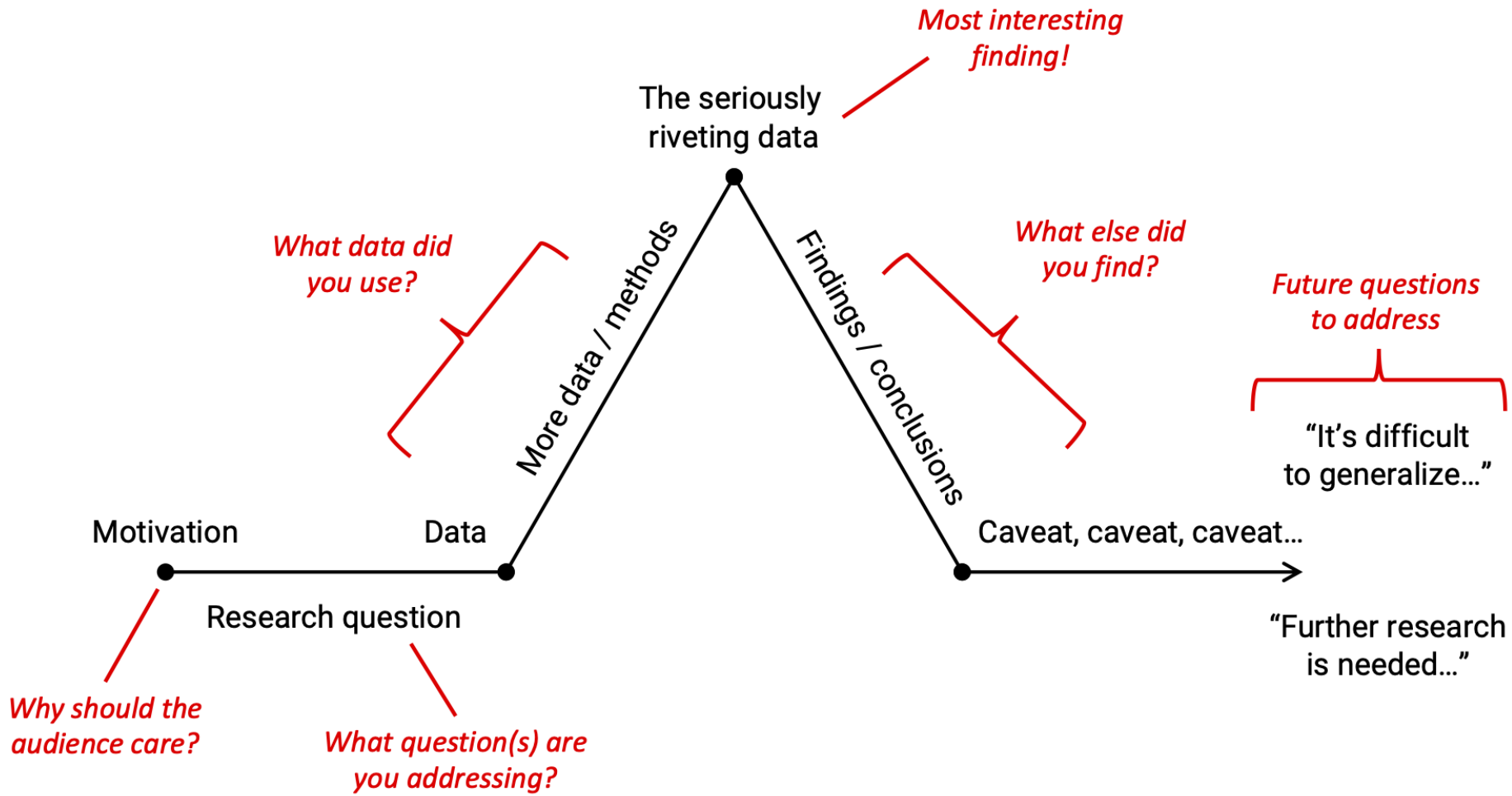
Freytag's Pyramid: **King Kong**



Freytag's Pyramid: **Research Project**



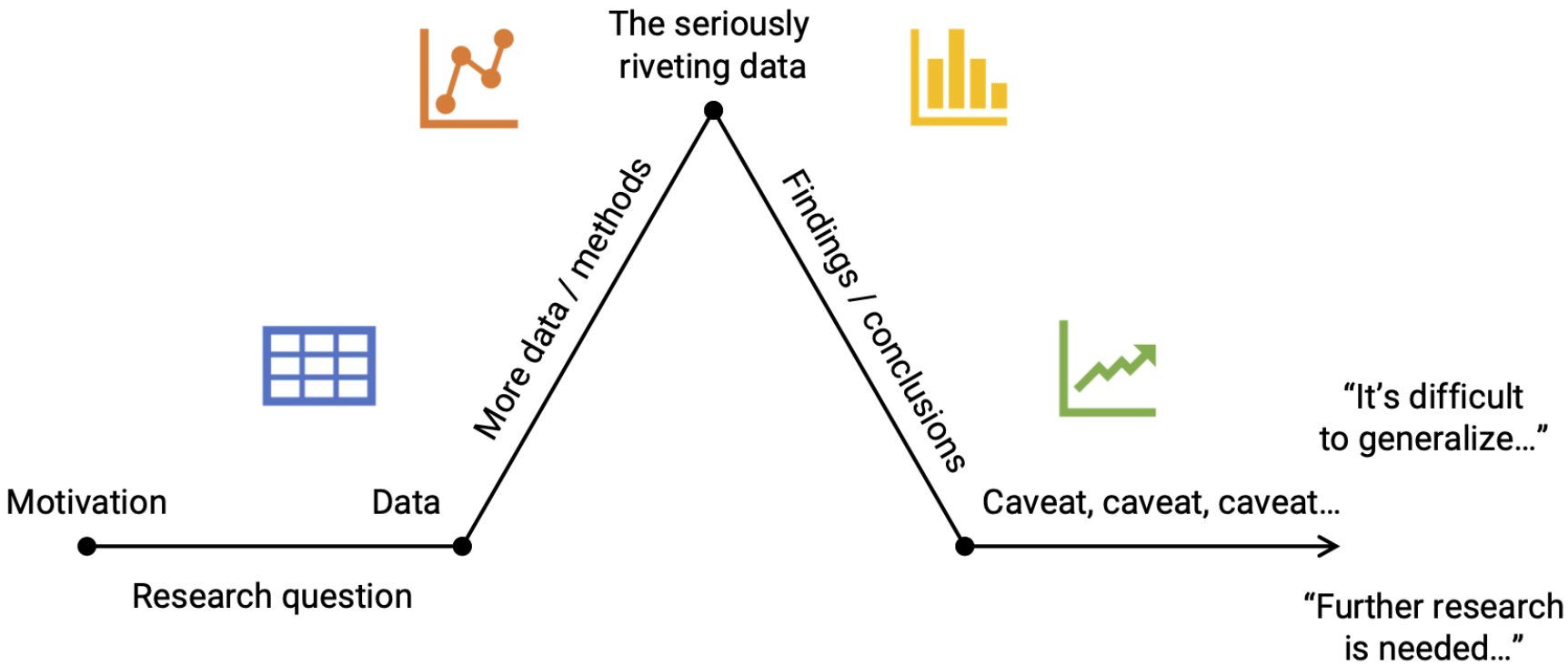
Freytag's Pyramid: **Research Project**



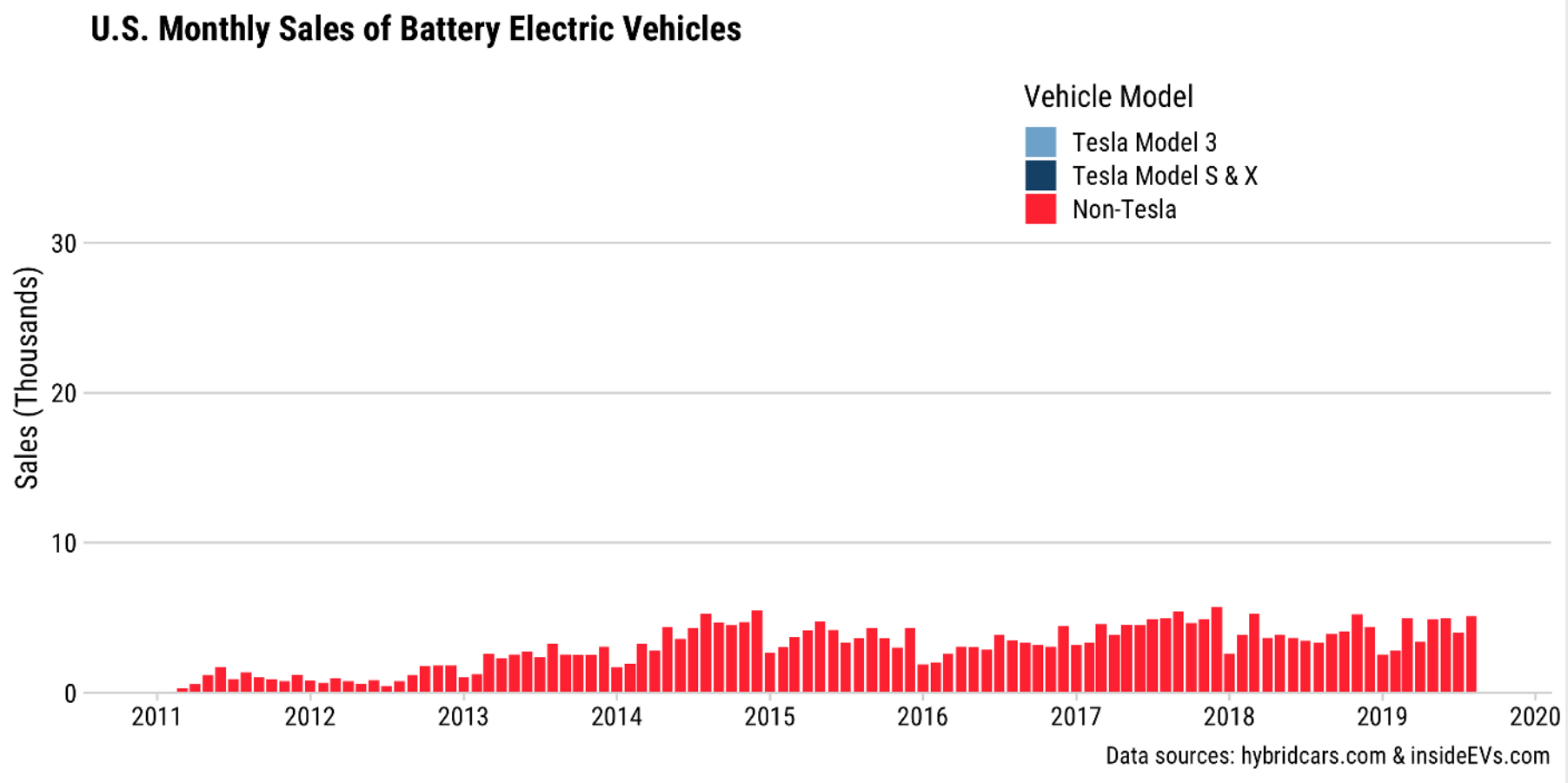
"A single (static) visualization will rarely tell an entire story"

- Clause O. Wilke (2019), Chp. 29

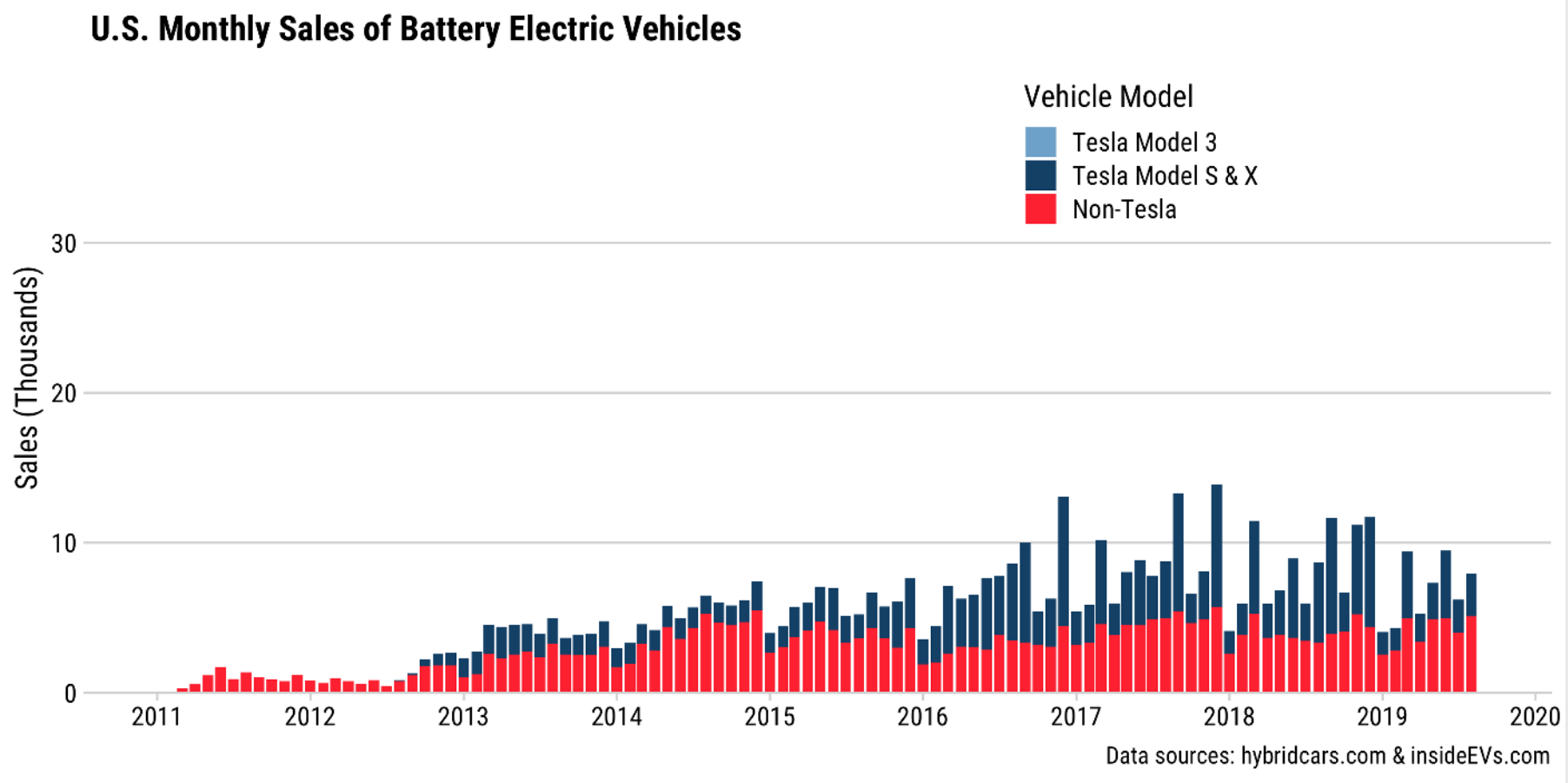
Freytag's Pyramid: **Research Project**



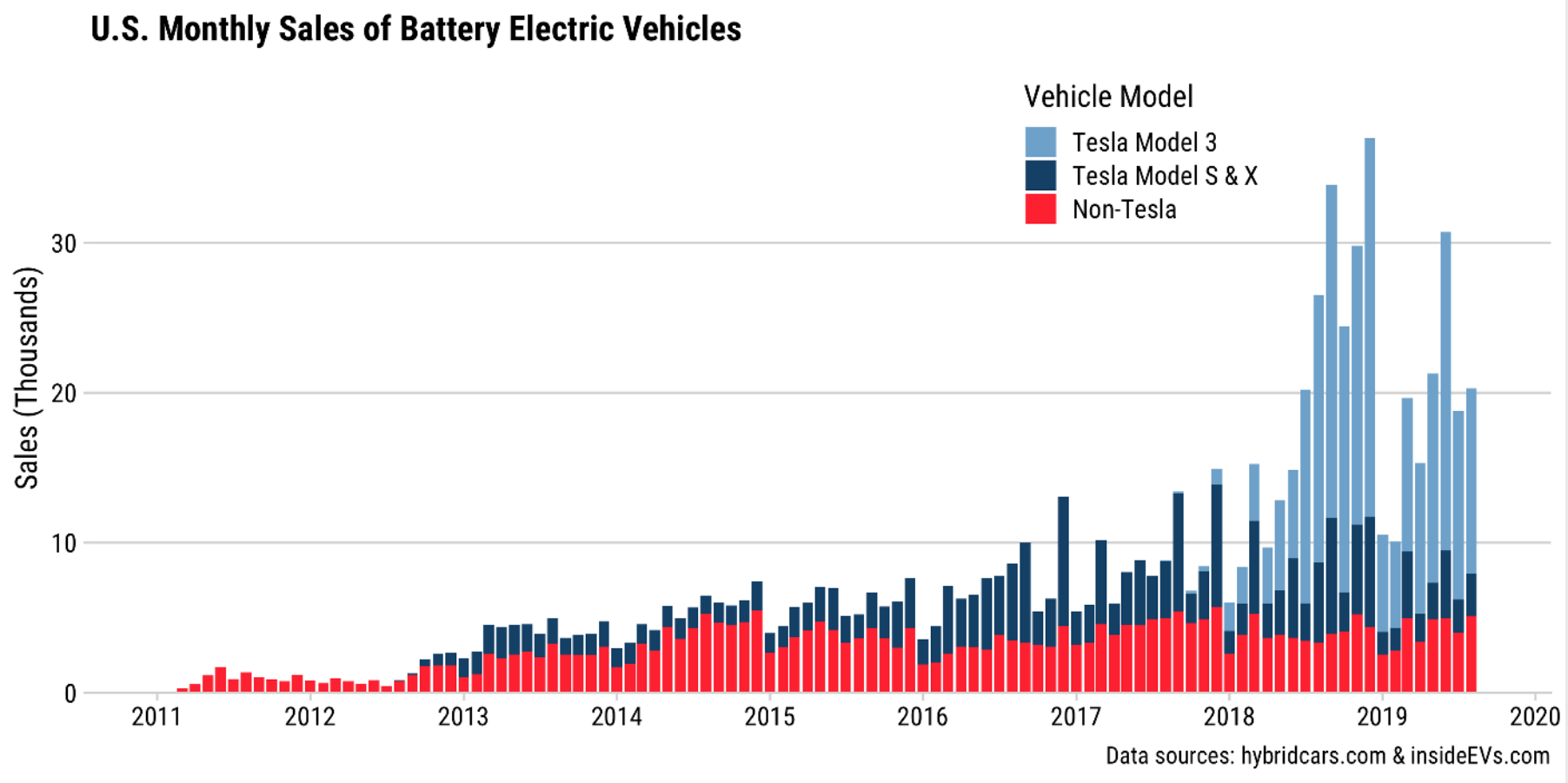
Use **layers** to build tension / provide context



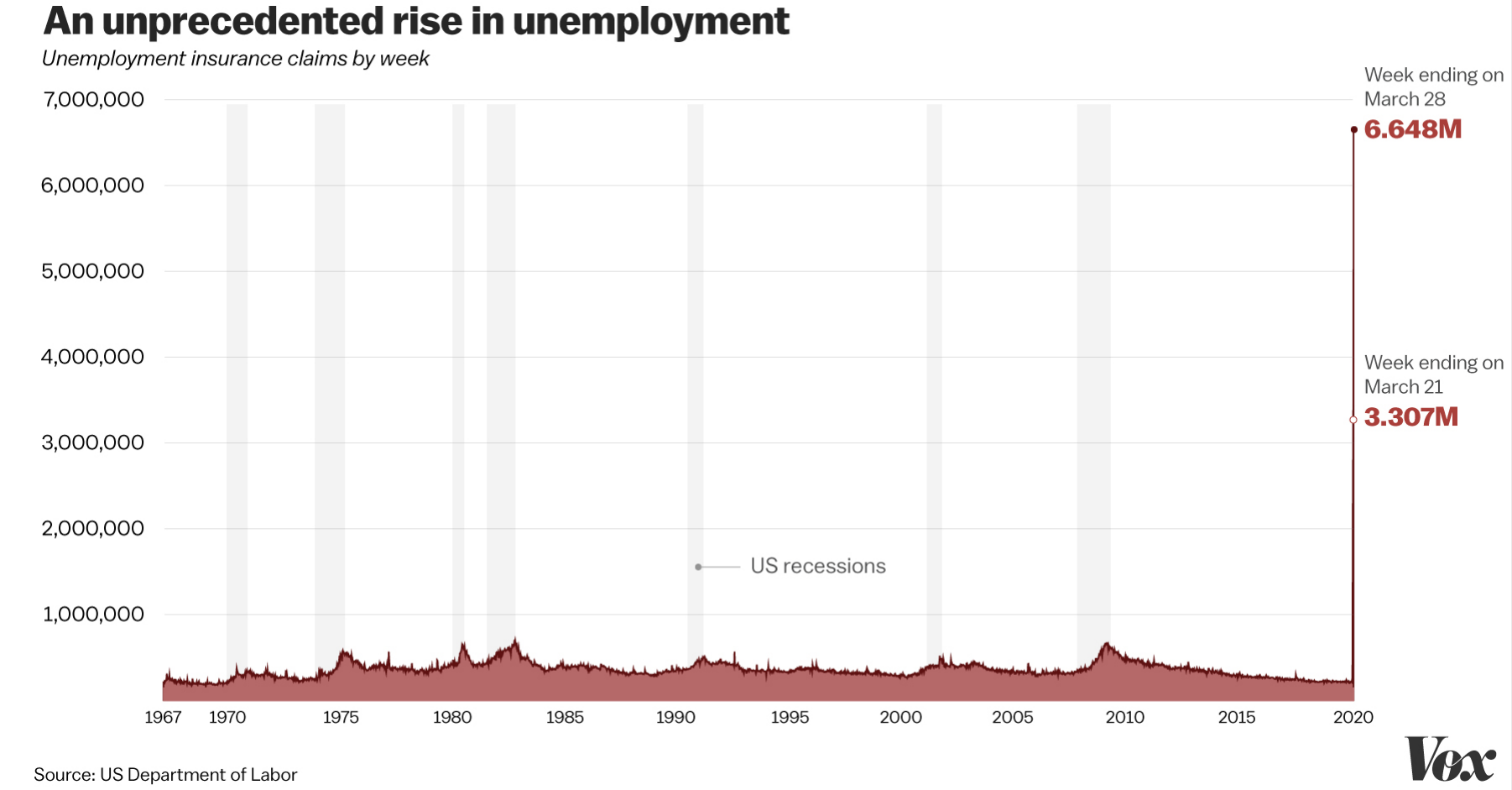
Use **layers** to build tension / provide context



Use **layers** to build tension / provide context

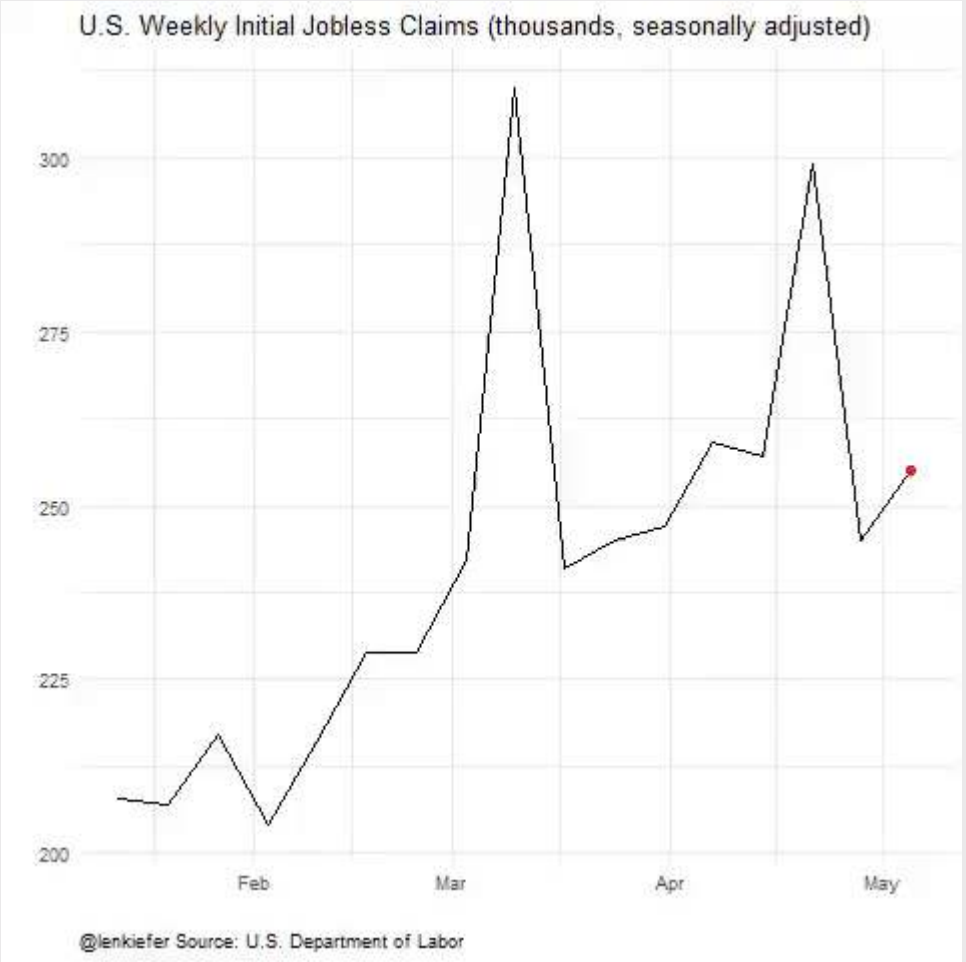


Use **animation** to build tension / provide context



source

Use **animation** to build tension / provide context



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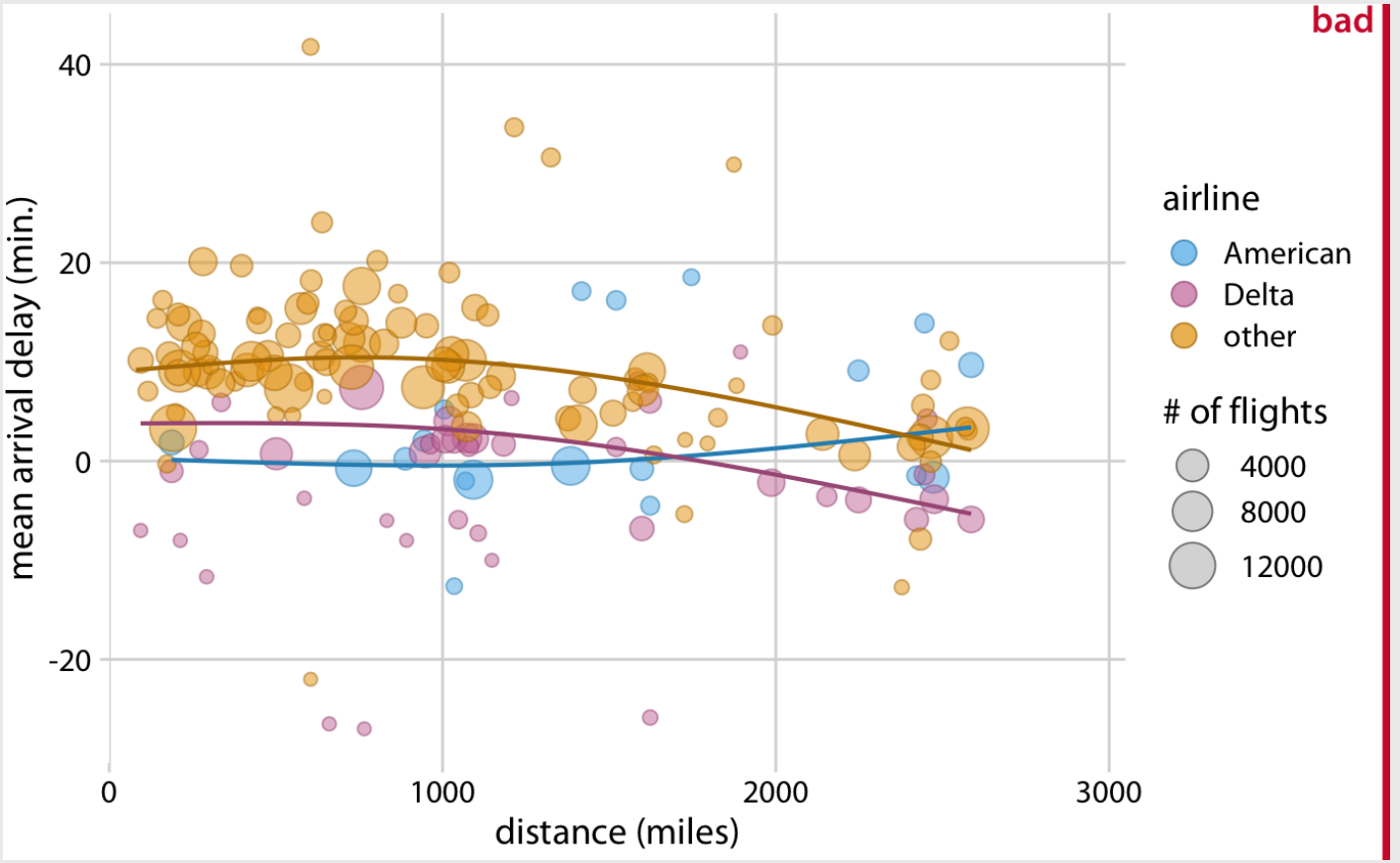
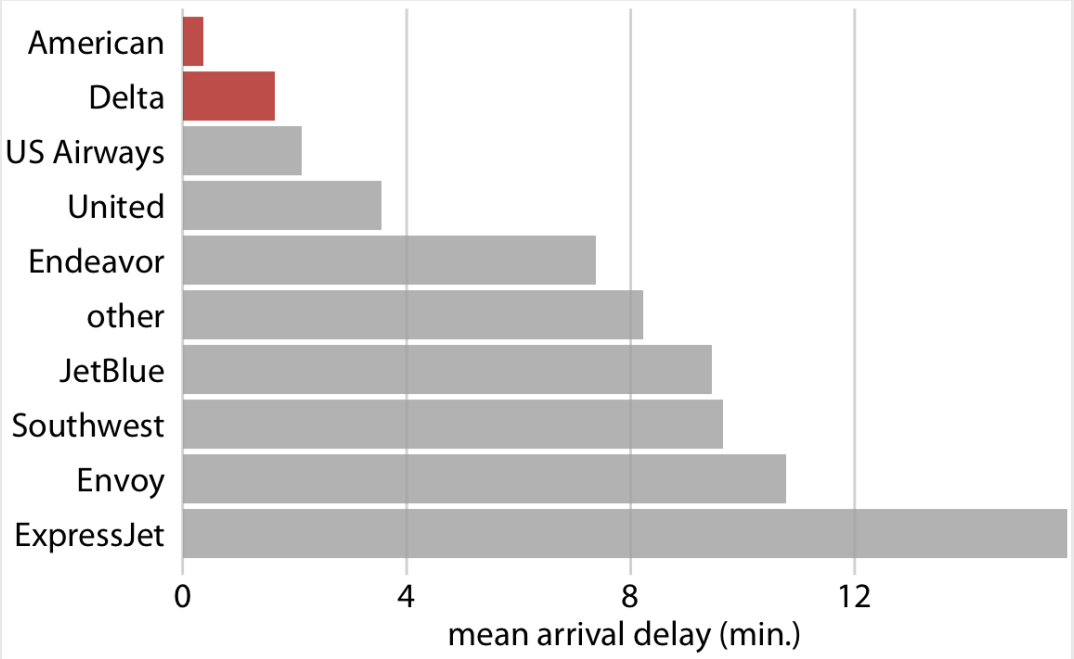
Make charts for the generals

(i.e. keep it simple)



Make charts for the generals

(i.e. keep it simple)



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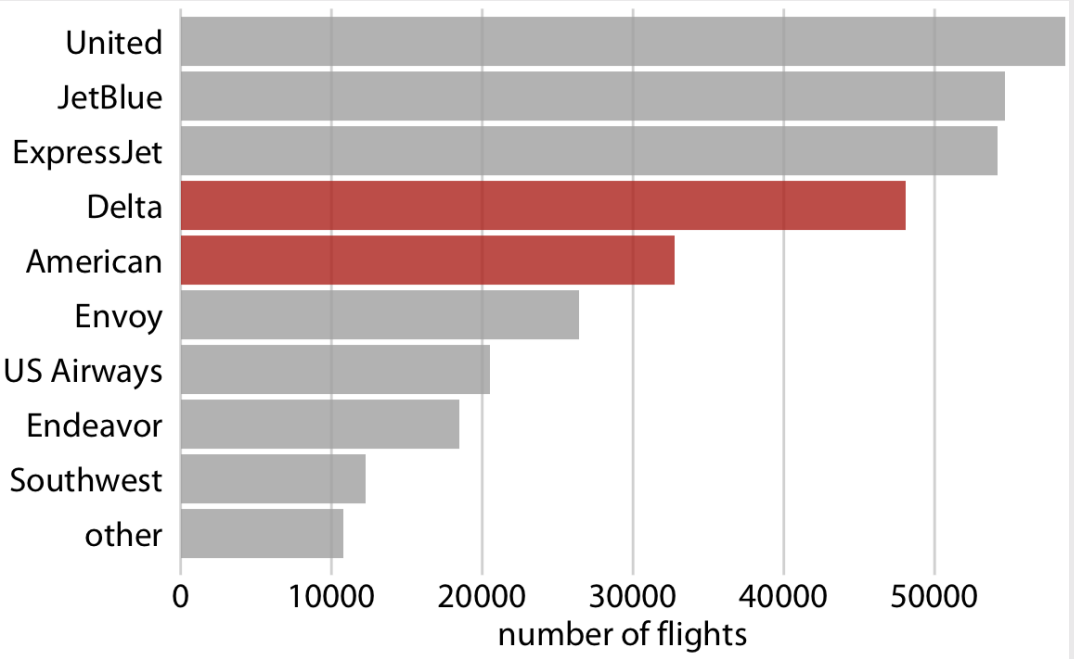

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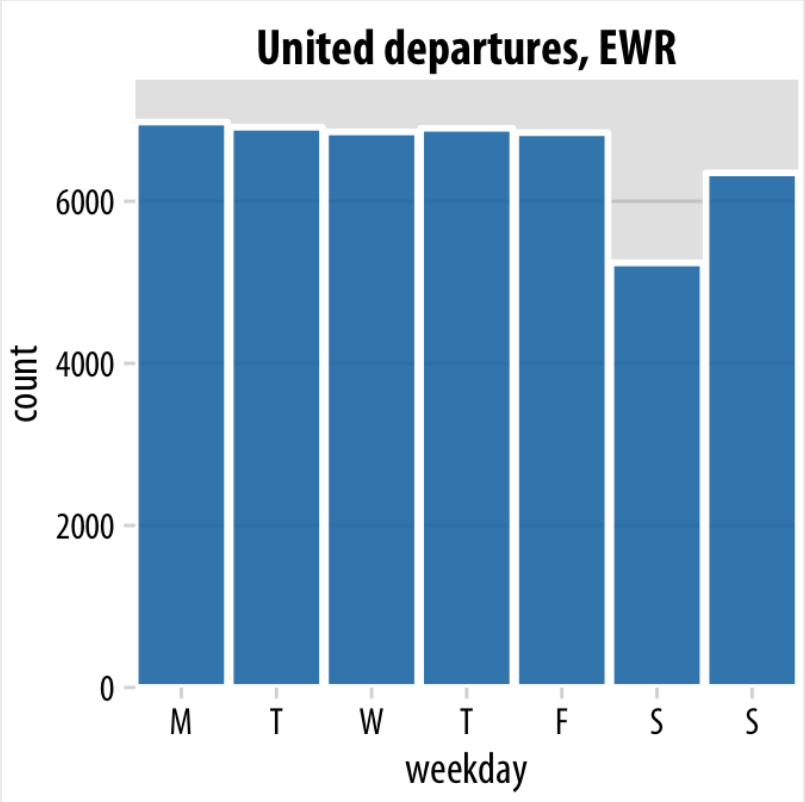
Build up towards complex figures



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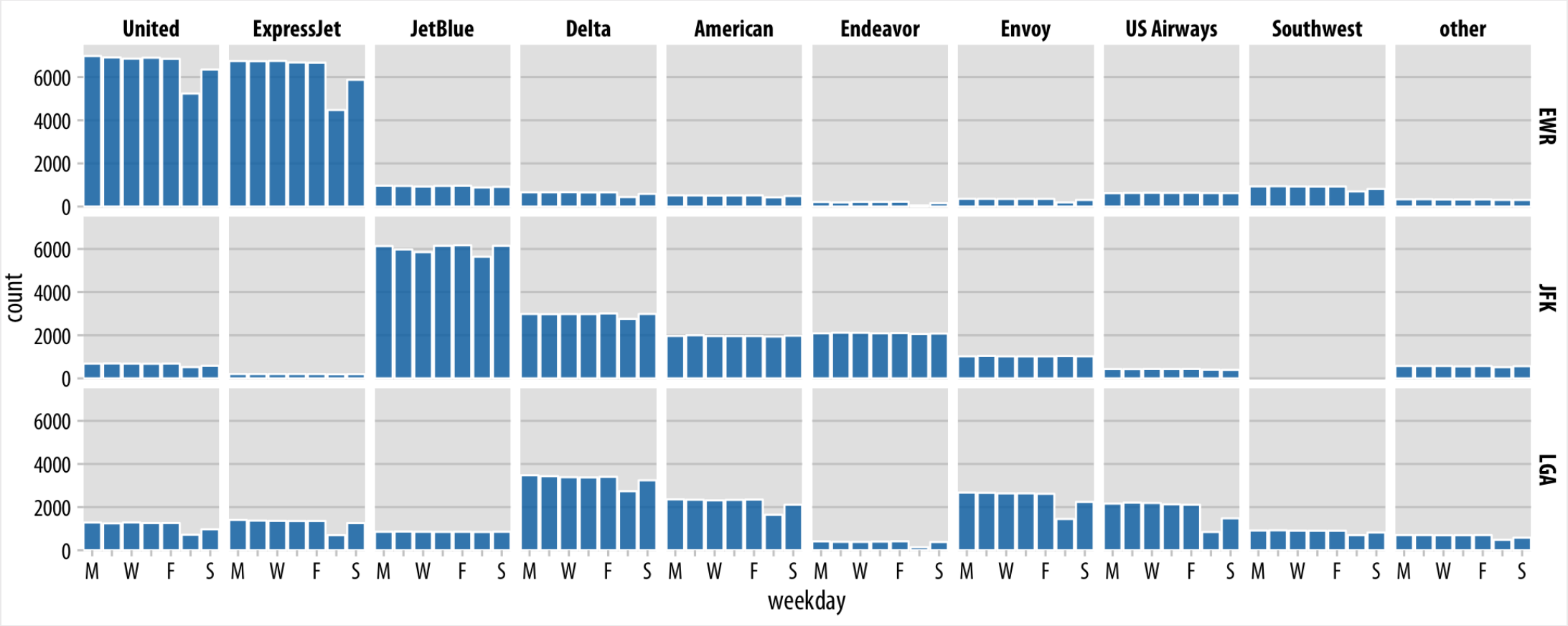
Build up towards complex figures



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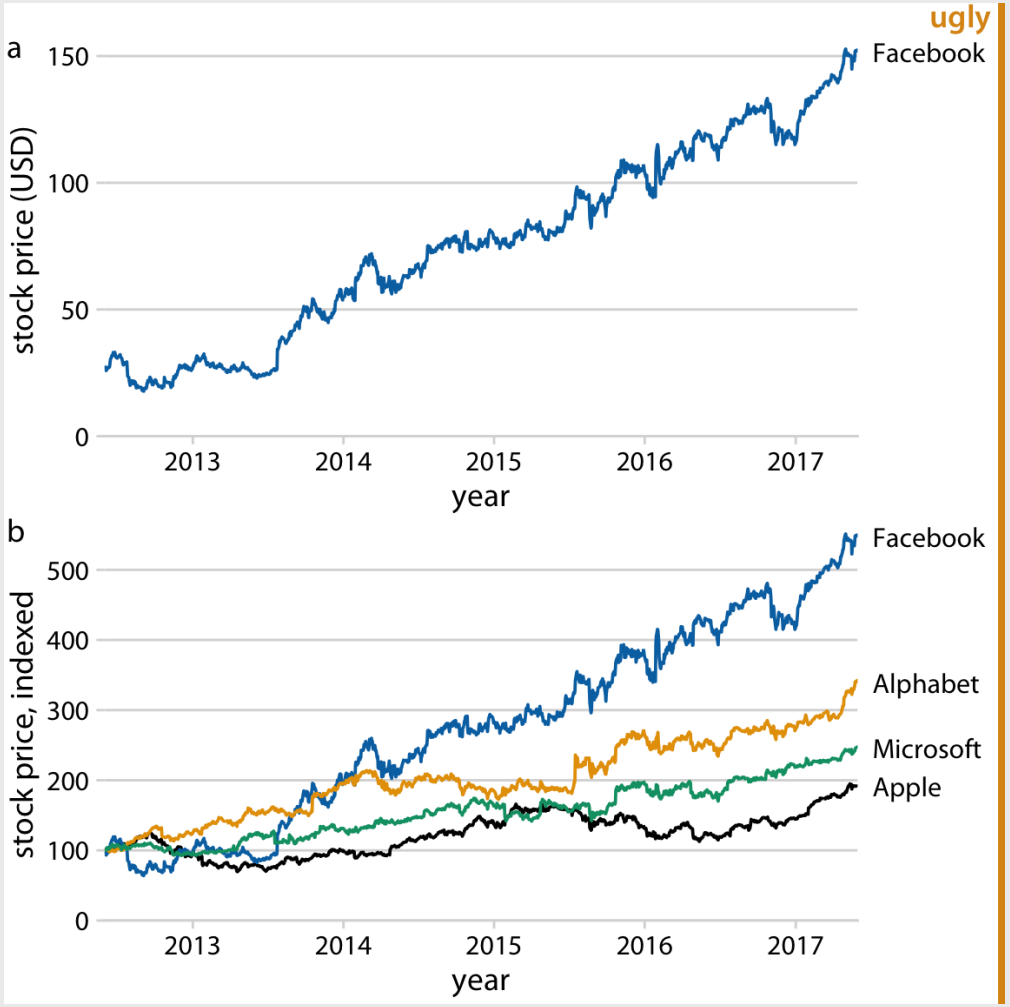
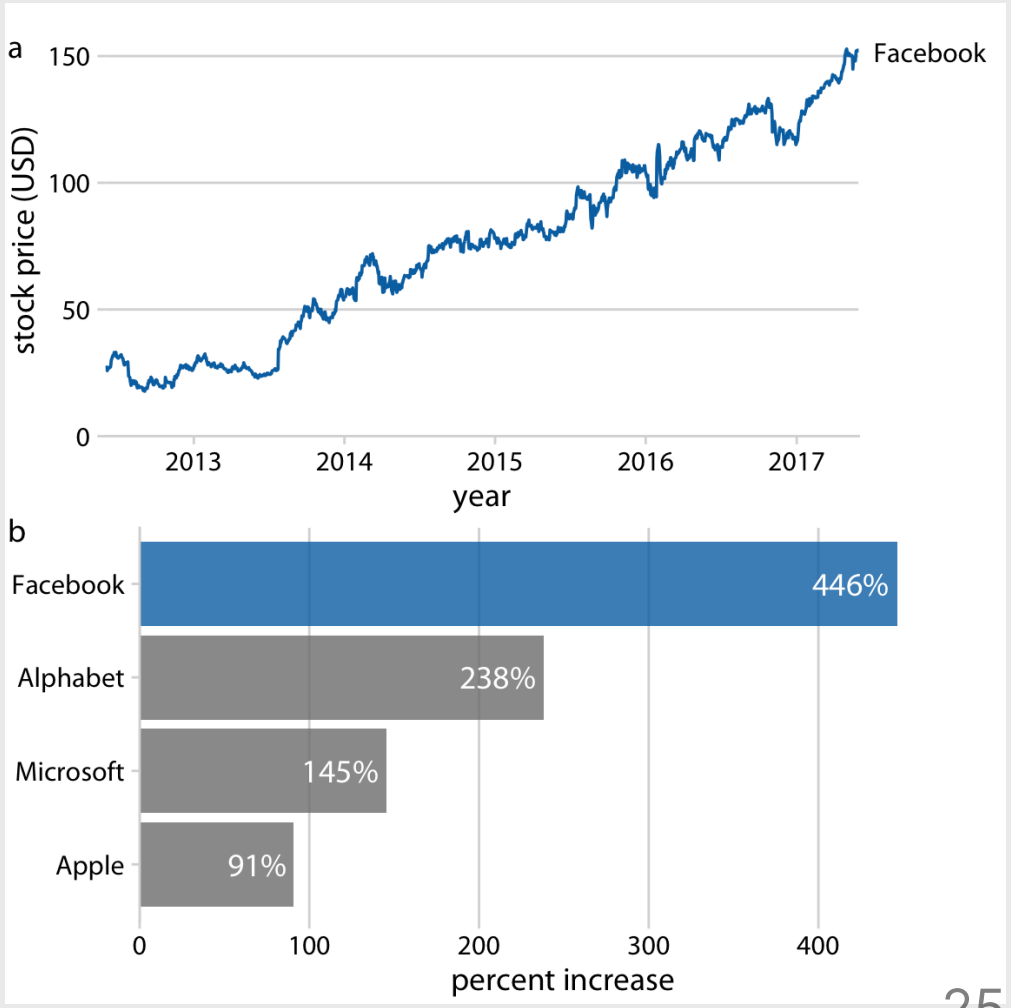
Be consistent, but don't be repetitive





Week 14: *Story Telling*

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Hitchcock's rule

Hitchcock's rule

The size of any object in your frame should be proportional to its importance to the story at that moment

Watch this example

Hitchcock's rule

The size of any object in your ~~frame~~ **slide** should be proportional to its importance to the story at that moment

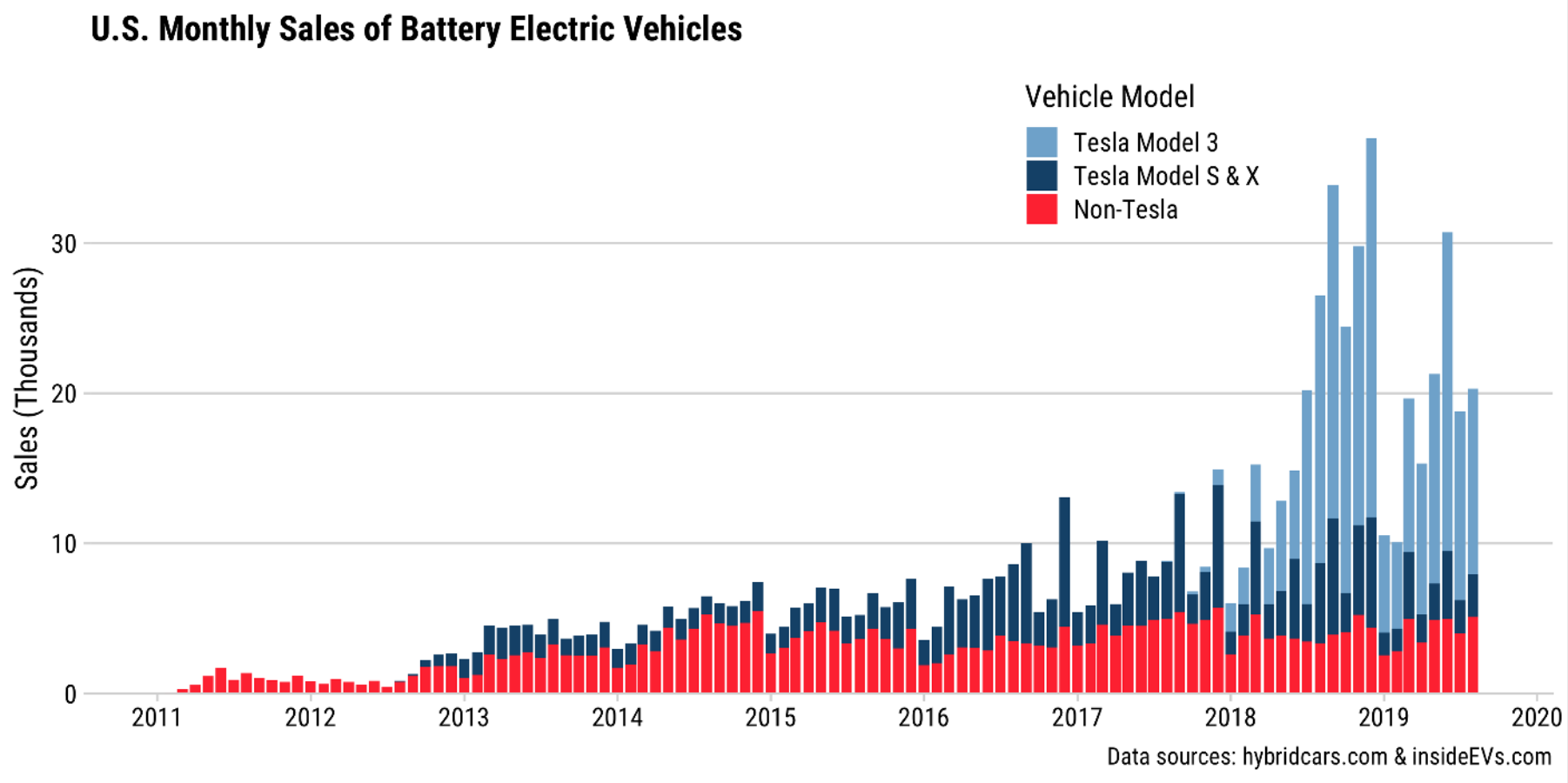
You will read this first

and then you will read this

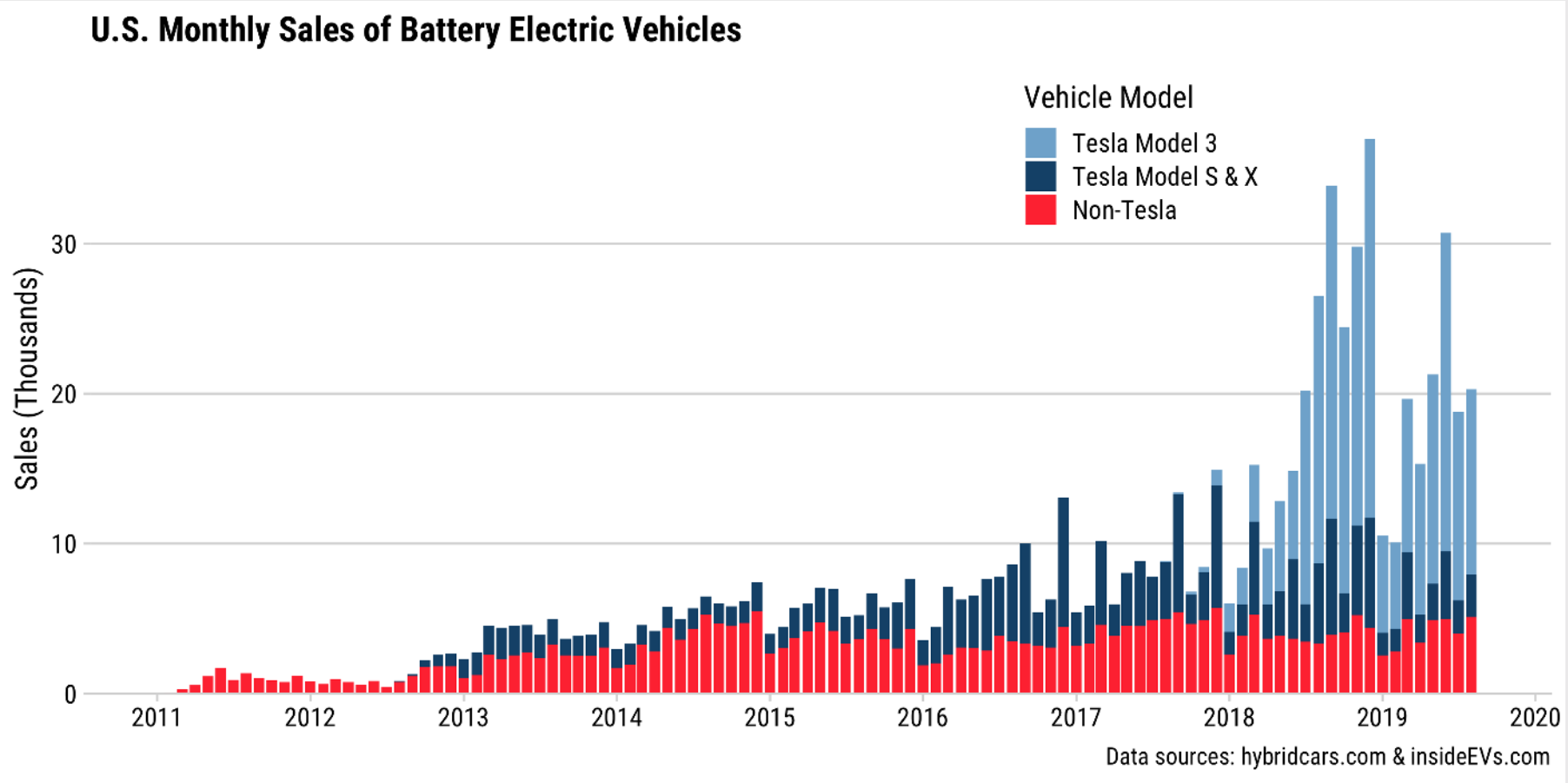
Put main point at top and use big font size!

(see Stephanie Evergreen's blog post "So What?")

Except for Tesla, EV adoption in the U.S. is **flat**



Tesla's Model 3 is a Game Changer for EVs



> 40pt font for titles

> 24pt font for all other text

(Exception: footer text can be small)

Think of fonts as pre-attentive attributes

San-serif fonts for most text

"Italic, serif fonts for quotes"

- Prof. Helveston

Consider using a light-colored background (tan / gray)

Use high contrast between font and background color

Dark text on a light background works well

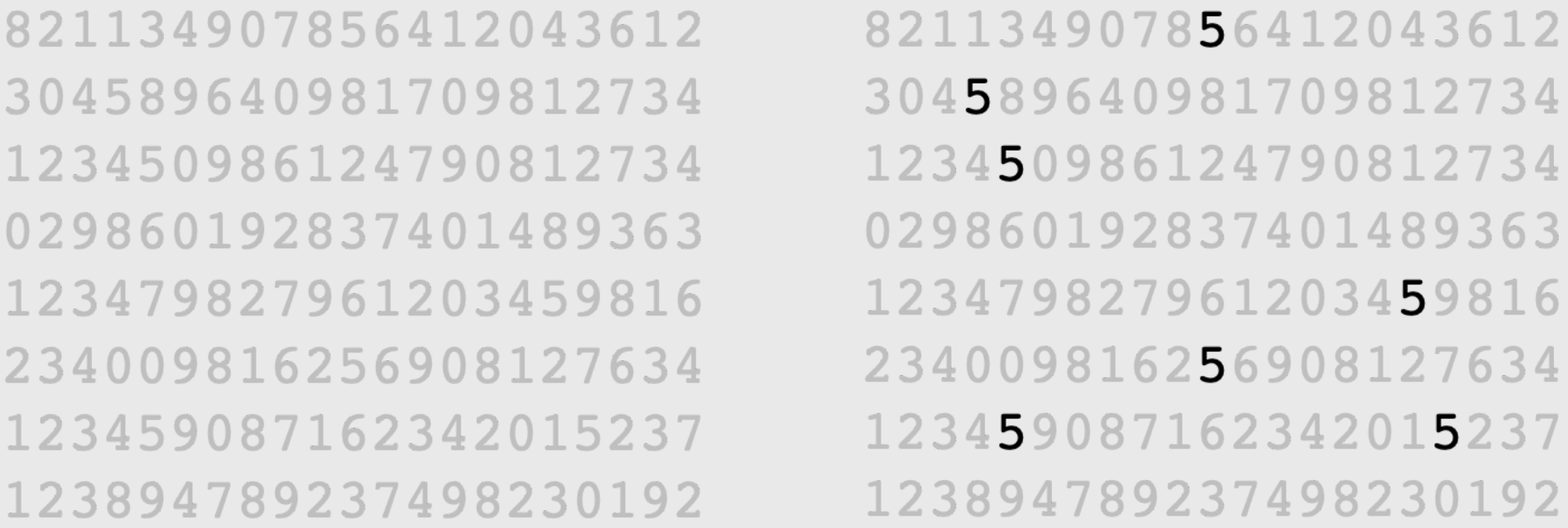
Light text on a dark background also works well

Use high contrast between font and background color

Yellow text on a white background is horrible

Blue text on a black background is horrible

Use high contrast between font and background color


82113490785641204361230458964098170981273412345098612479081273402986019283740148936312347982796120345981630023400981625690812763412345908716234201523712389478923749823019282

Avoid fonts like

Comic Sans

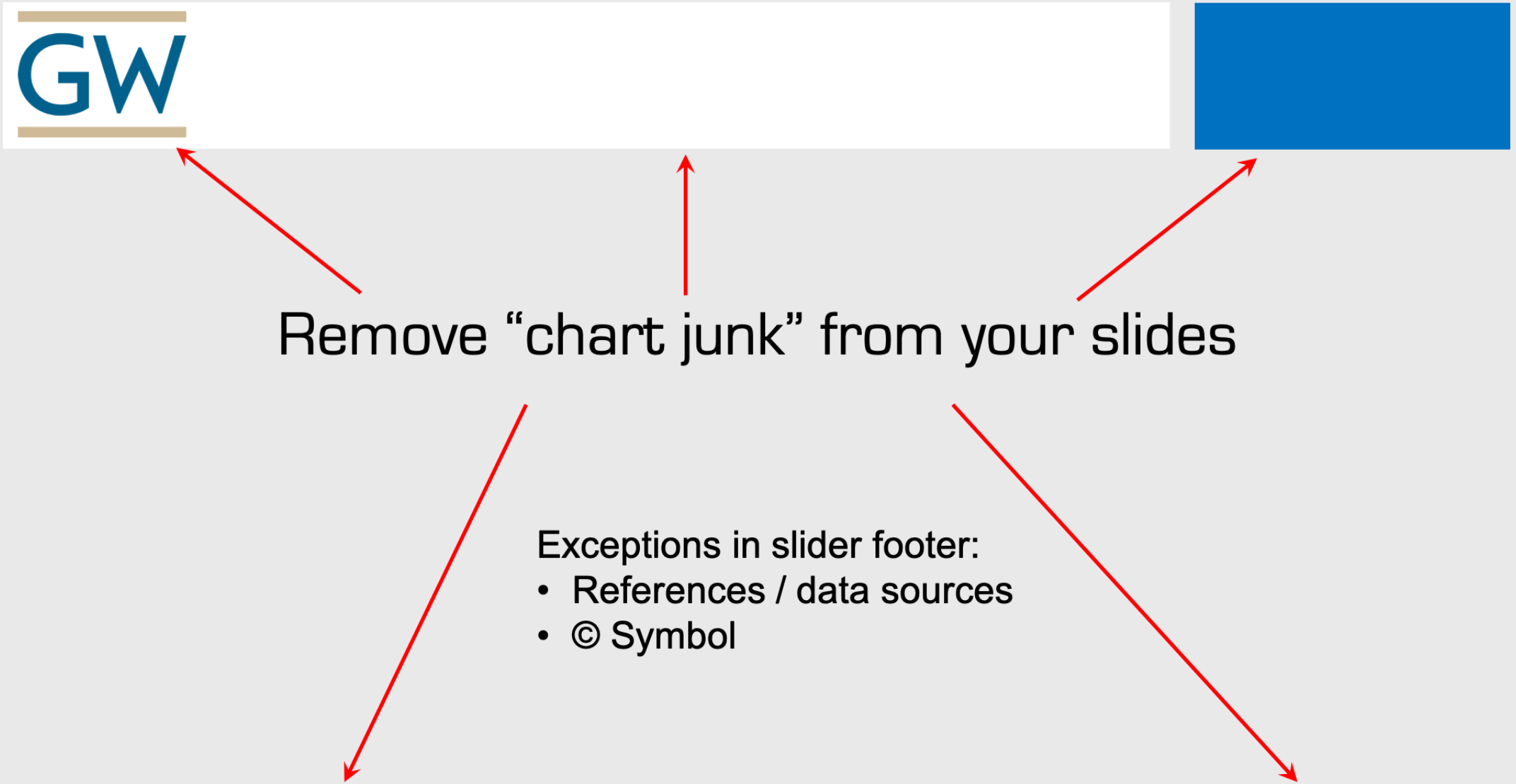
Papyrus

They make your work look amateurish

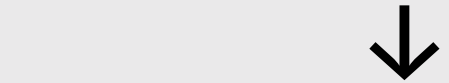
1 slide, 1 idea

Break up main points into multiple slides

Number your slides!


Remove “chart junk” from your slides
Exceptions in slider footer:
• References / data sources
• © Symbol

Example of an acceptable slide footer



 © John Paul Helveston, GWU, Apr. 2021

If you are in person, consider using handouts (1-2 pages)

Week 14: *Story Telling*

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What are the first words
you should say in a speech?

Watch this video to find out

How to start a speech

3. With a question that matters to the audience ("Have you ever...?")

2. With a shocking factoid ("There are more people alive today than have ever lived...").

1. Tell a story, talk about **people** ("Imagine...")

Development and Adoption of Plug-in Electric Vehicles in China

Presented by:
John Paul Helveston, Ph.D.
Postdoctoral Fellow
Institute for Sustainable Energy
Boston University

January 26, 2018

3) With a question that matters to the audience:

"What's the current federal subsidy for buying an electric car in the US?"

2) With a shocking factoid

"50% of the world's EVs are made by Chinese automakers"

1) Tell a story, talk about **people**

"Whenever I talk with people about electric cars, they usually ask about Tesla..."

Your turn

05:00

Brainstorm different strategies for how to start your presentation for your projects:

1. Tell a story, talk about **people** ("Imagine...").
2. With a shocking factoid ("There are more people alive today than have ever lived...").
3. With a question that matters to the audience ("Have you...?").

Afterwards, we will go around the room and one person from each team will practice giving their start to their presentation.

Week 14: *Story Telling*

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Final Reports due 12/10 (You have 4 days left!)

- Read prompt carefully
- Be sure to include a copy of the data you're using
- Use a theme ✨
- Check for spelling errors:

```
spelling::spell_check_files("report.qmd")
```

Final Presentations (Due 12/12)

- We'll watch these during class period on Dec 13
- 10 projects x 10 mins each
- At the end, we'll announce awards:
  - 🗑️ **Janitor Award**: For most intense wrangling of messy data
  - ✨ **Shiny Award**: For single most impressive visualization

Final Interviews (12/11 - 12/12)

- Schedule for a 10-minute interview using this link
  (will also be posted in Slack)

- Suggestions (from Prof. Mazzuchi):

1. Bring water to drink - it will calm you when you are nervous and your mouth dries up. You can also pause and think while you drink.
2. Don't answer right away - think a bit.
3. Answer the question asked. Don't try to impress or I will ask more questions.
4. Don't say "I don't know." Try and I will help you.