

# **Week 13: Communicating results**

EMSE 4197 | John Paul Helveston | April 08, 2020

# Final projects timeline

- 4/14 - 17: Team calls with Prof. Helveston.
- 4/20 - 5/01: Push on analyses & polishing results.  
Virtual office hours on Mondays
- 4/22: Project reports due.
- 4/29: Peer reviews due.
- 5/04: Final reports due by 11:00pm.
- 5/05: Slides due by 11:00pm.
- 5/06: Team presentations.

S	M	T	W	Th	F	Sa
			08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	01	02
03	04	05	06			

No late days on project assignments

# Communicating results

1. Telling a story
2. Designing slides
3. Giving a talk

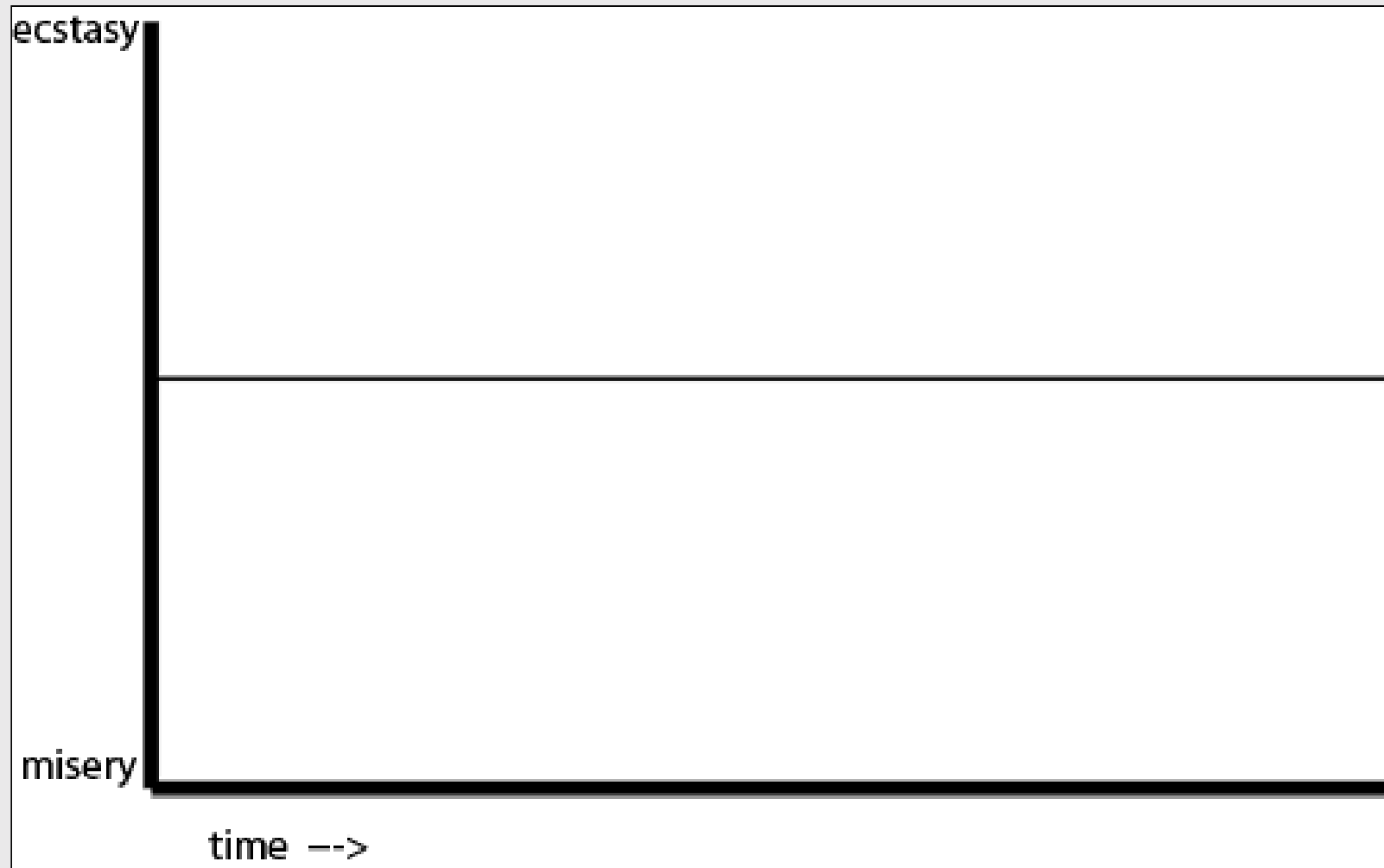
# Communicating results

1. Telling a story
2. Designing slides
3. Giving a talk

# What is a story?

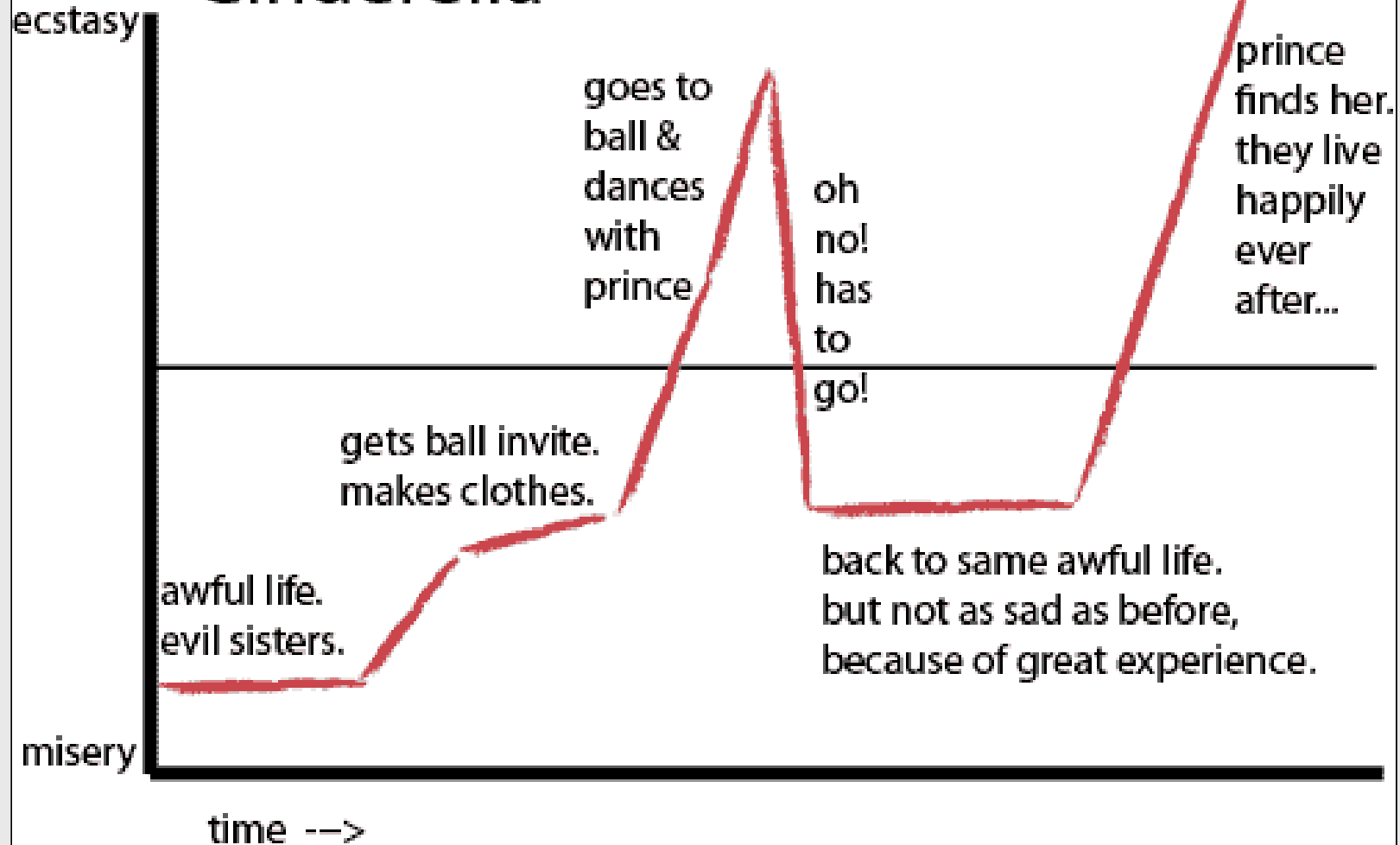
A story is a set of observations, facts, or events...that are presented in a specific order such that they create an **emotional reaction** in the audience.

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

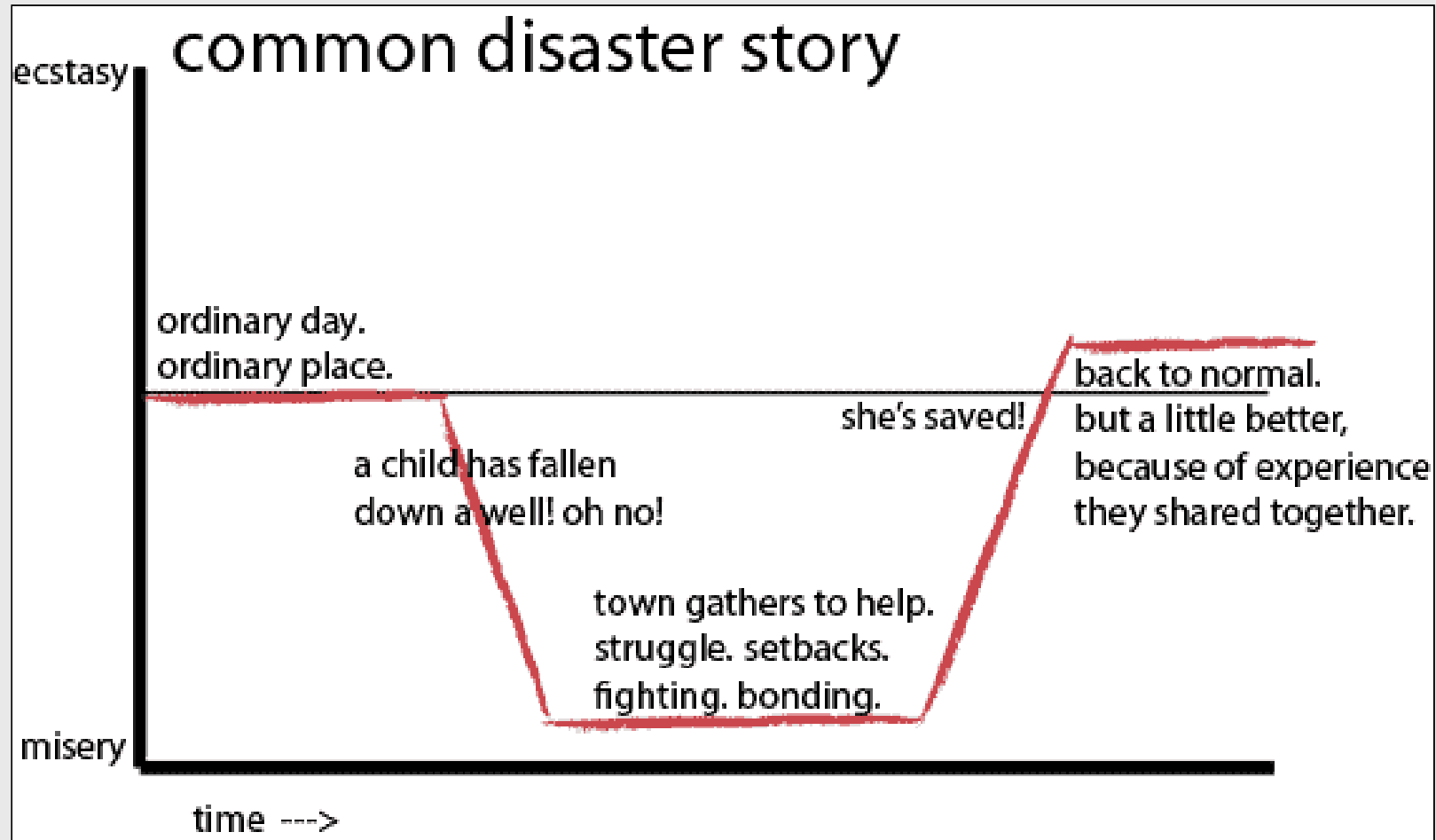


source

# Cinderella



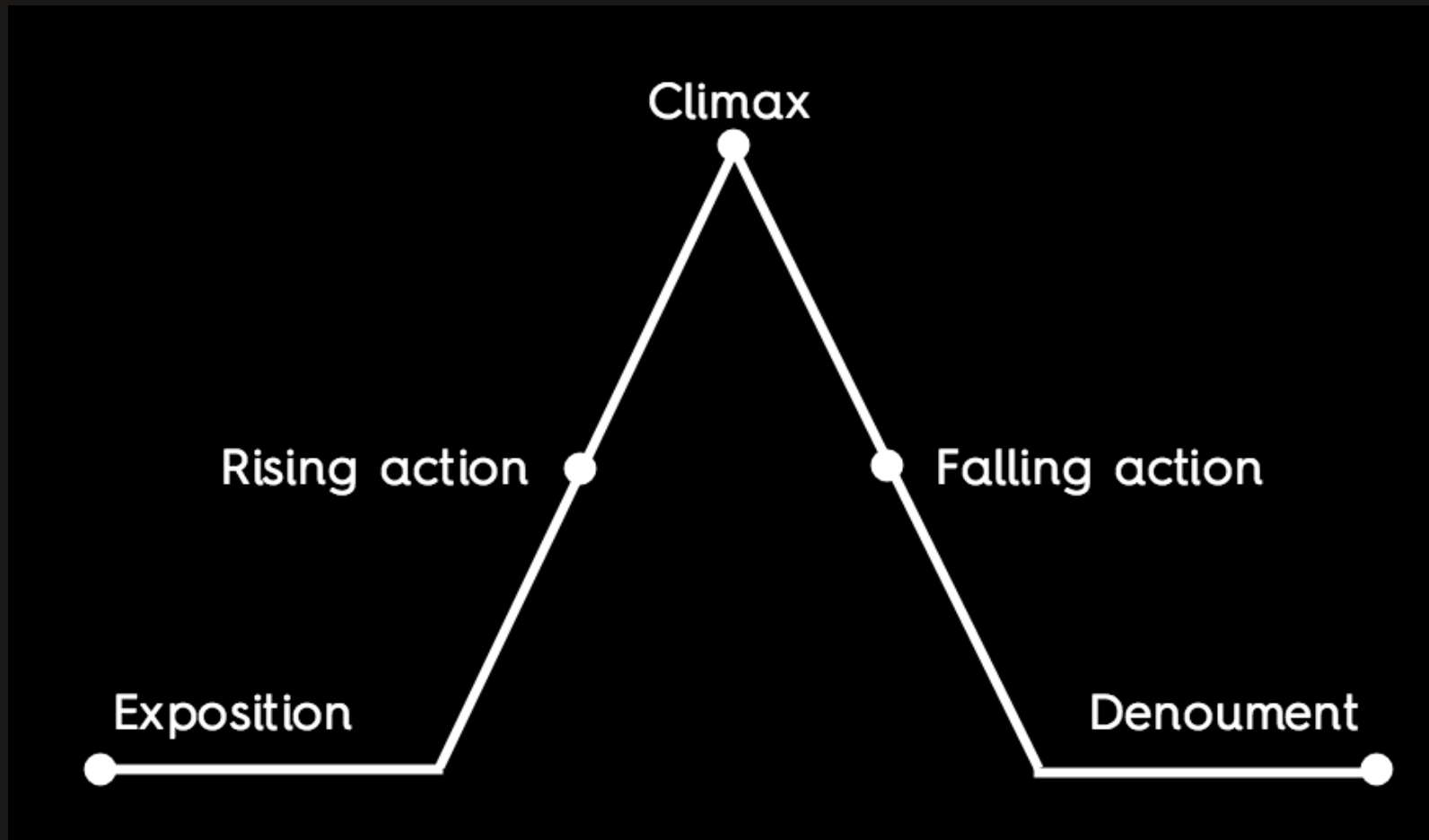
[source](#)



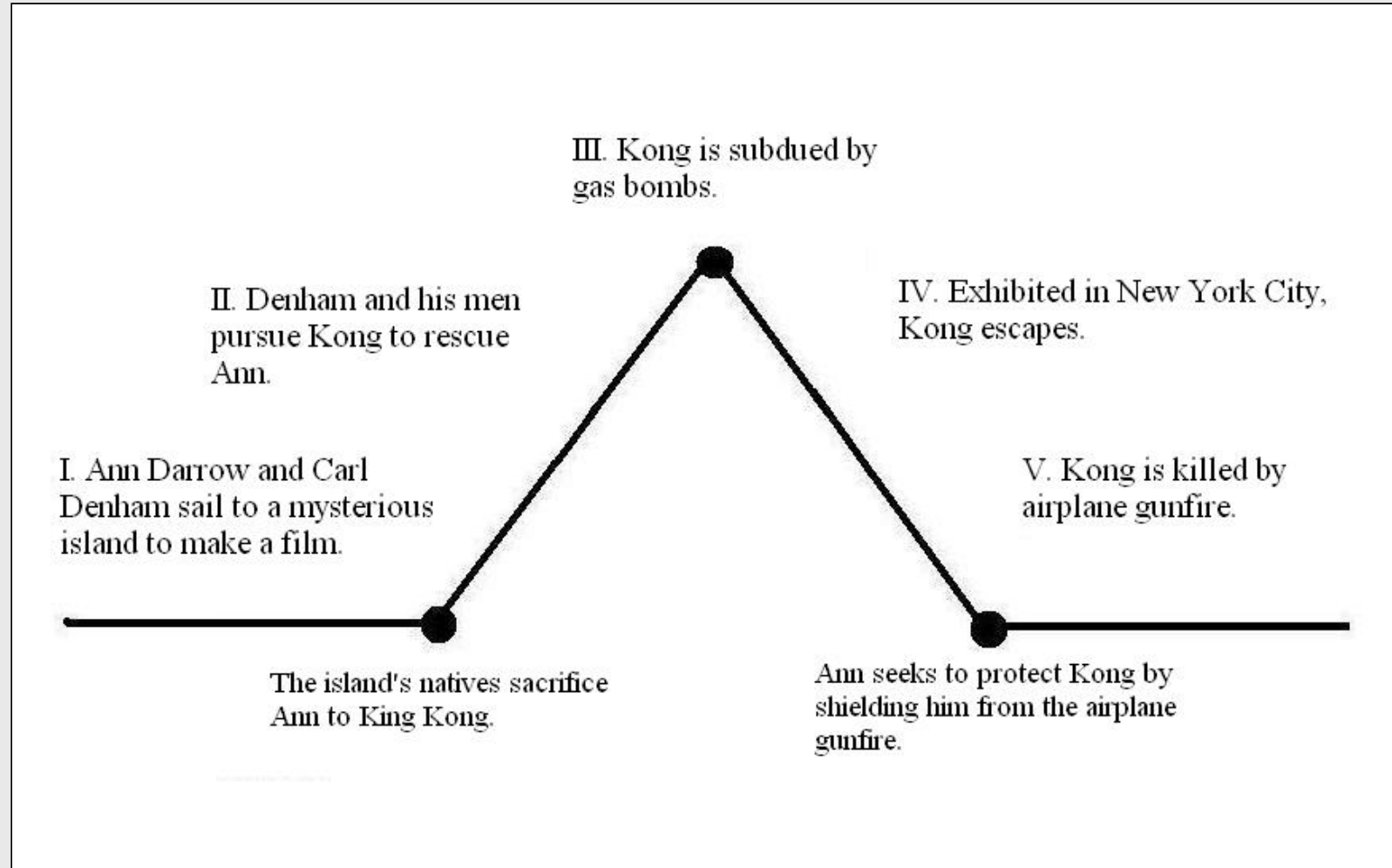
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# Freytag's Pyramid

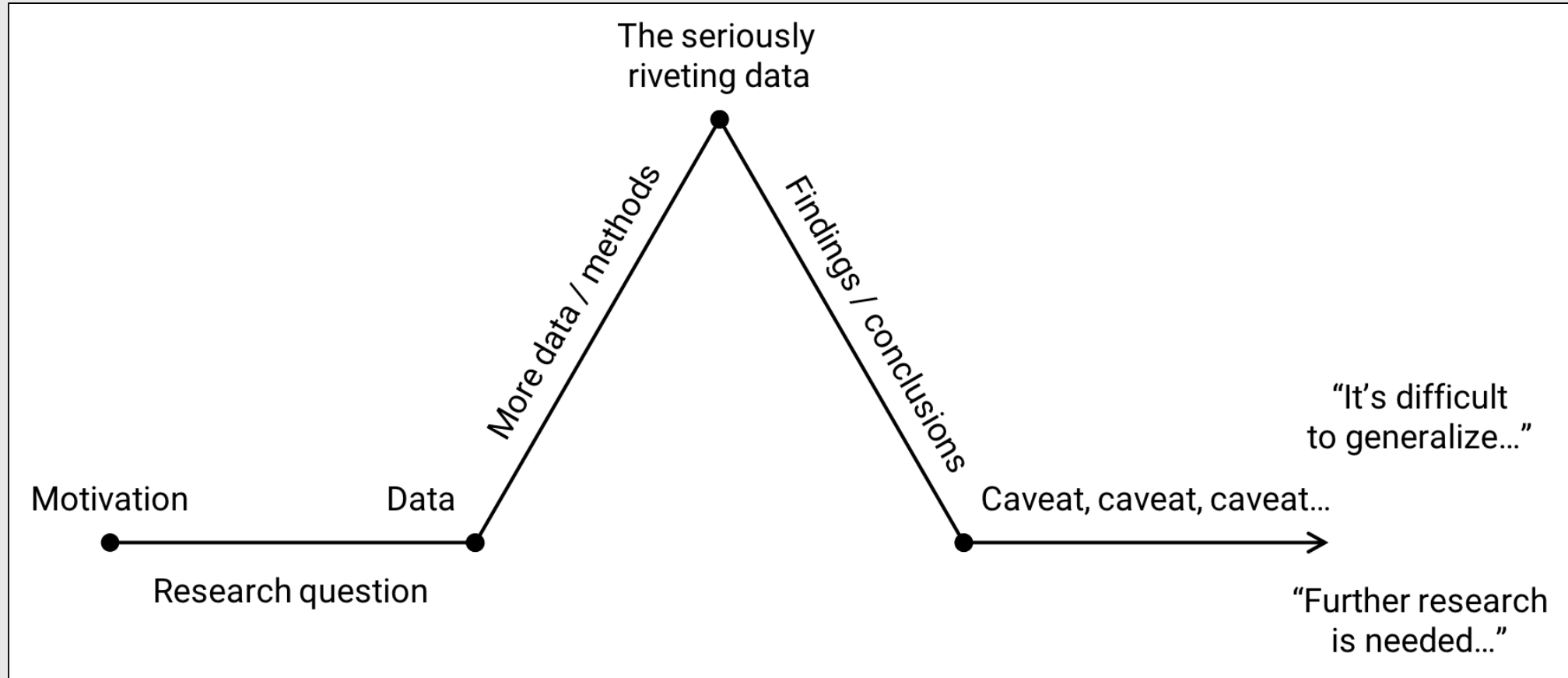


# Freytag's Pyramid: King Kong



source

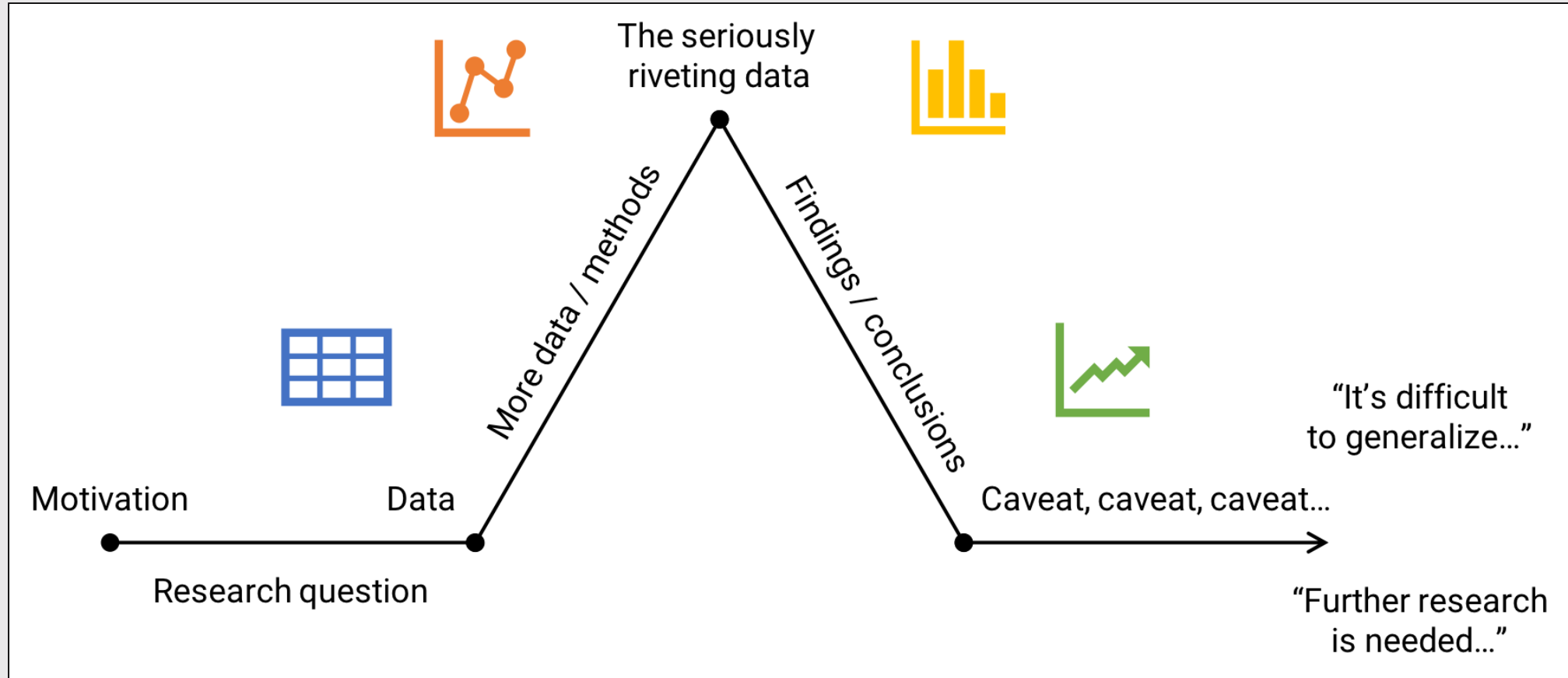
# Freytag's Pyramid: Research Project



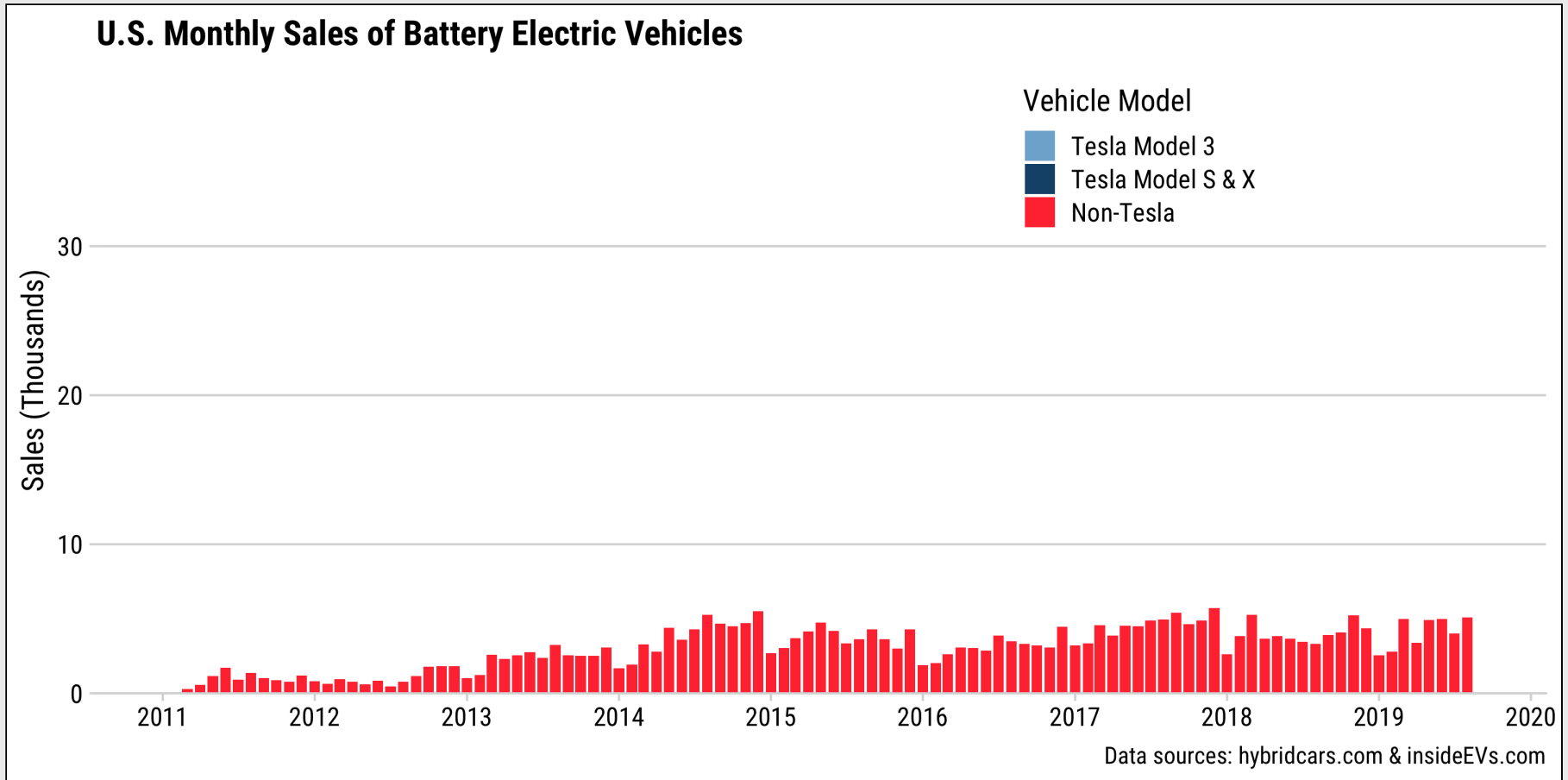
"A single (static) visualization will rarely tell an entire story"

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

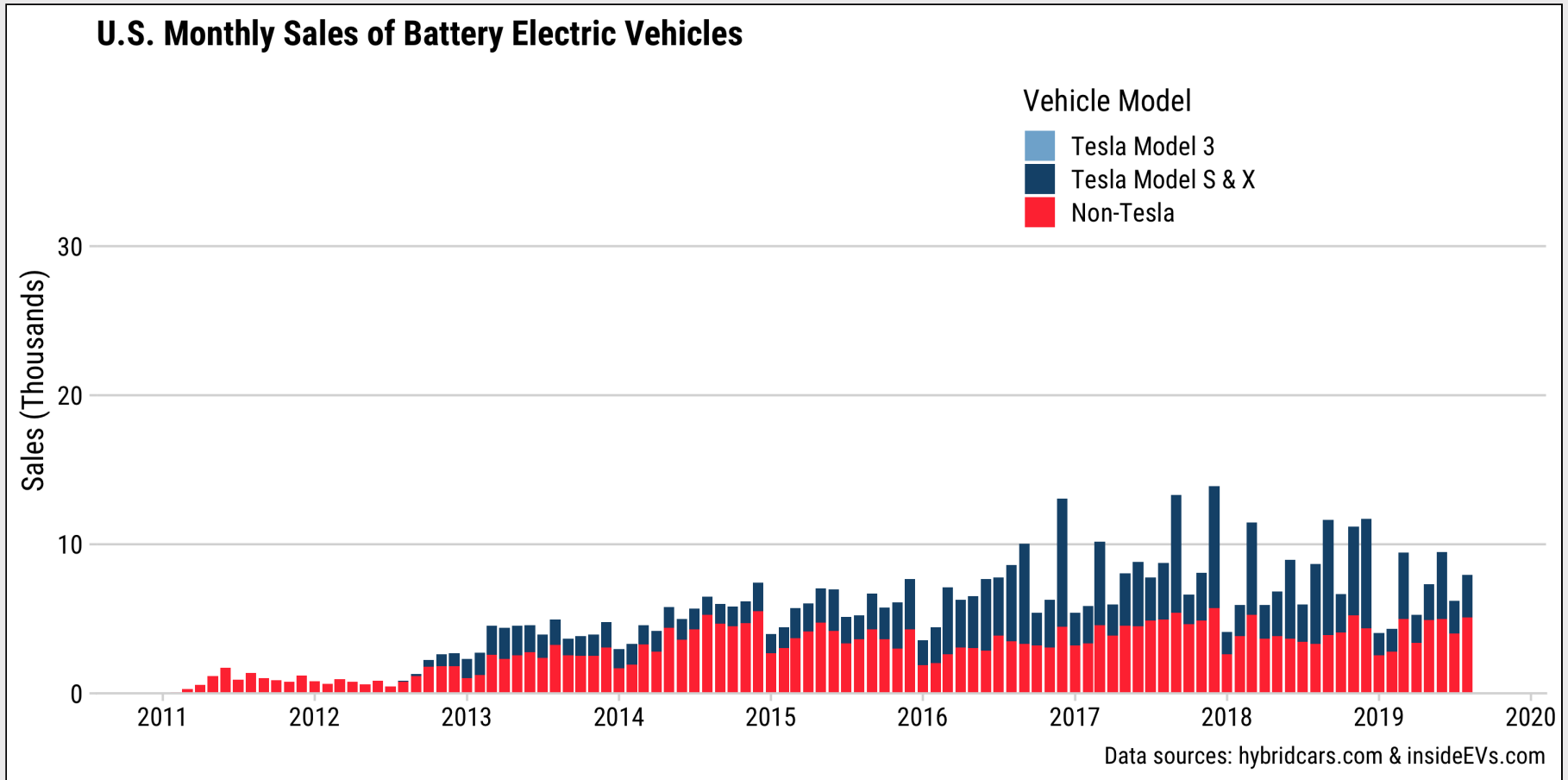
# Freytag's Pyramid: Research Project



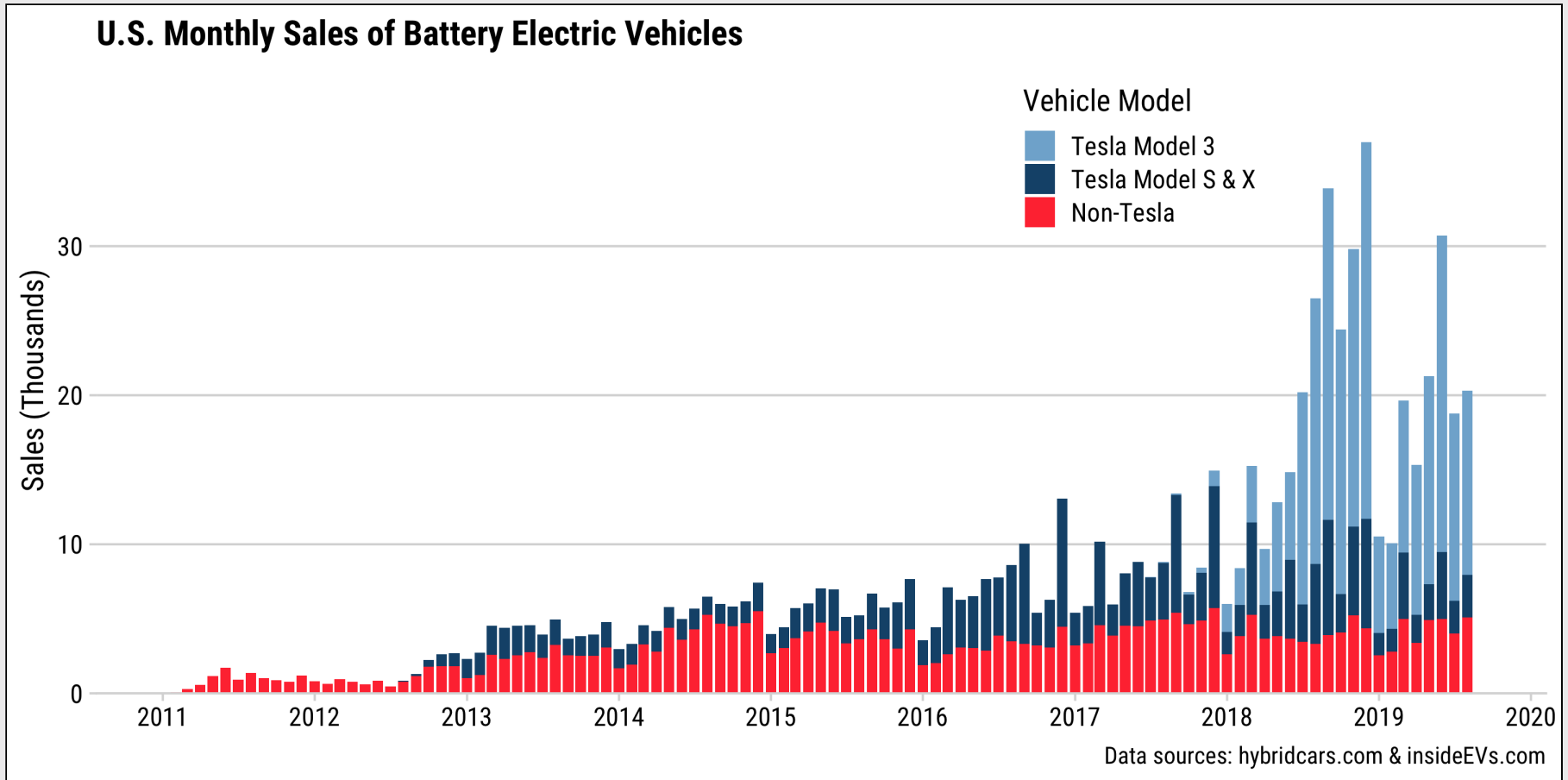
# Use **layers** to build tension / provide context



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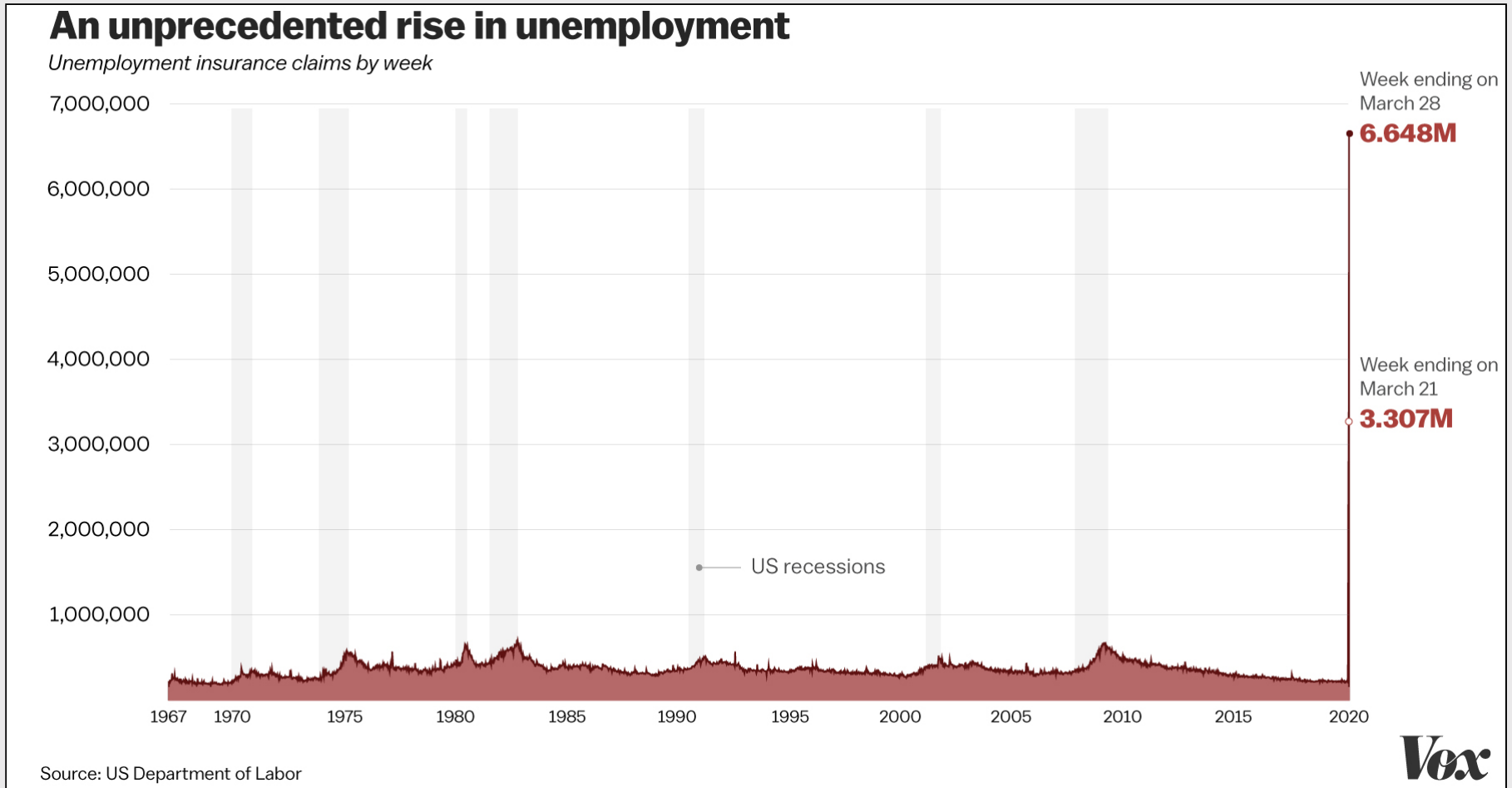


# Use **layers** to build tension / provide context



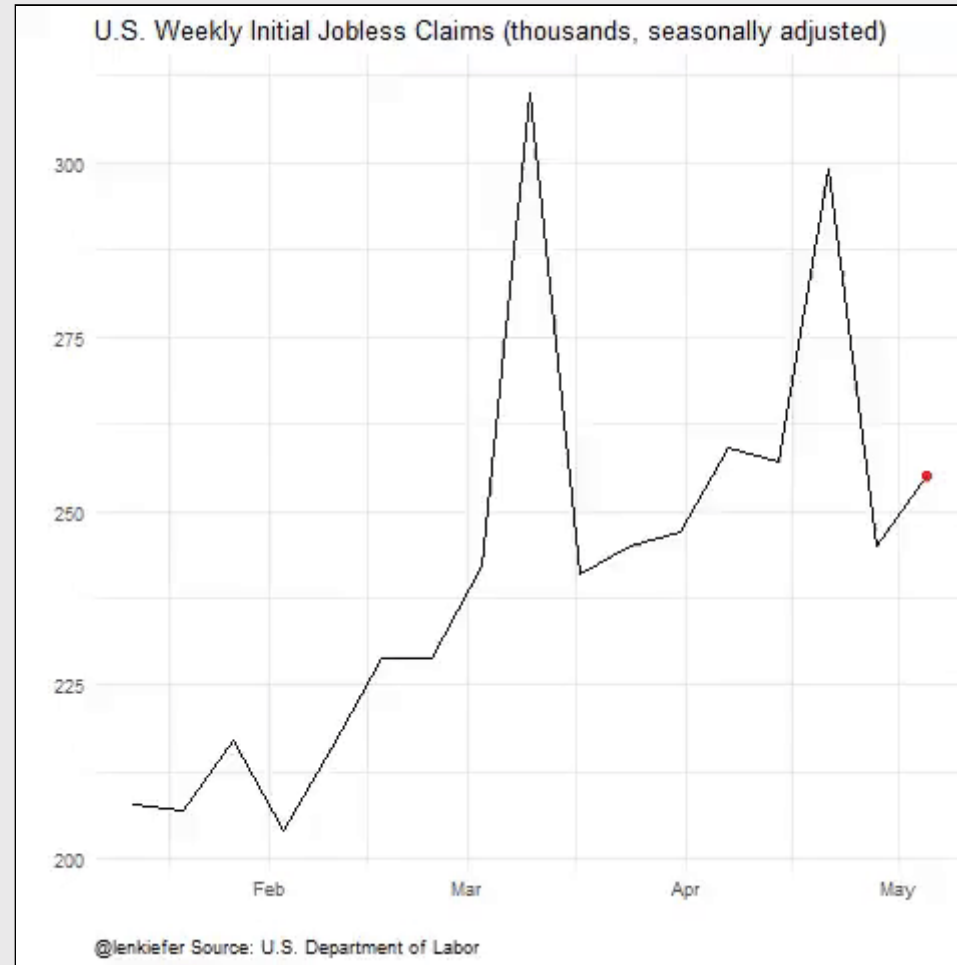


# Use **animation** to build tension / provide context



[source](#)

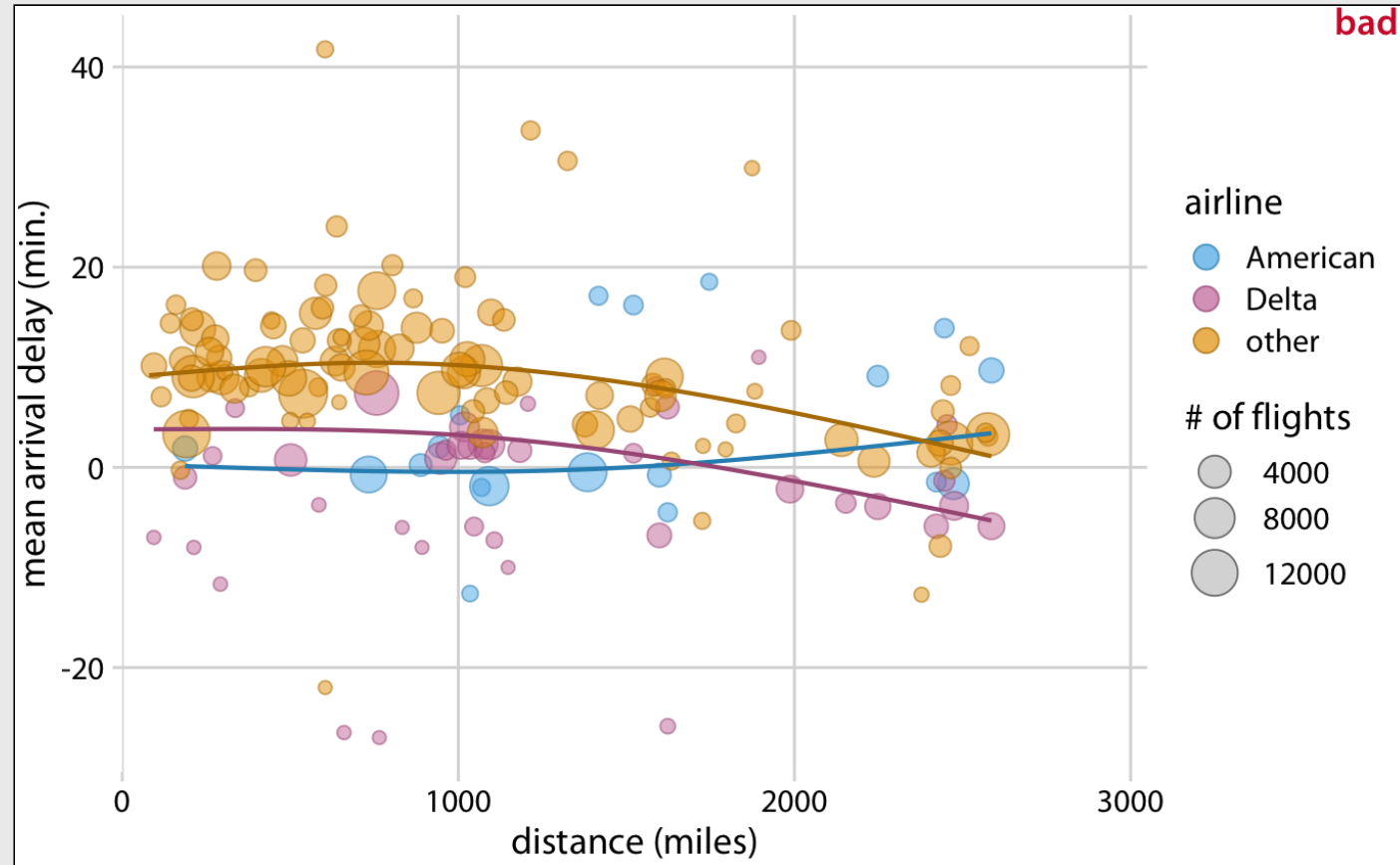
# Use **animation** to build tension / provide context



source

# Make charts for the generals

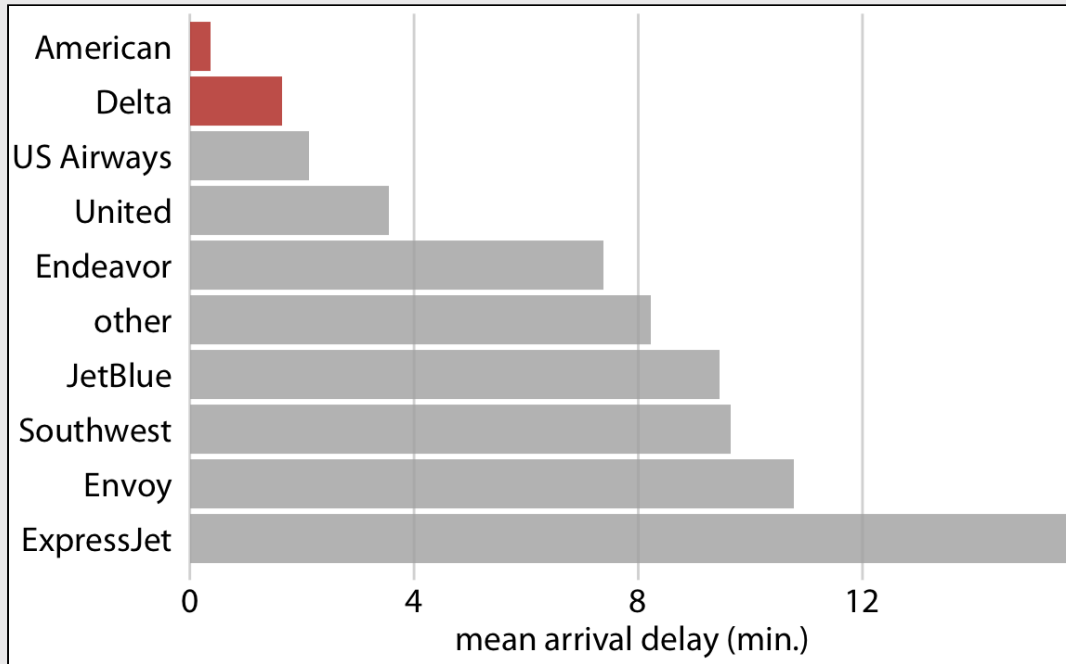
(i.e. keep it simple)



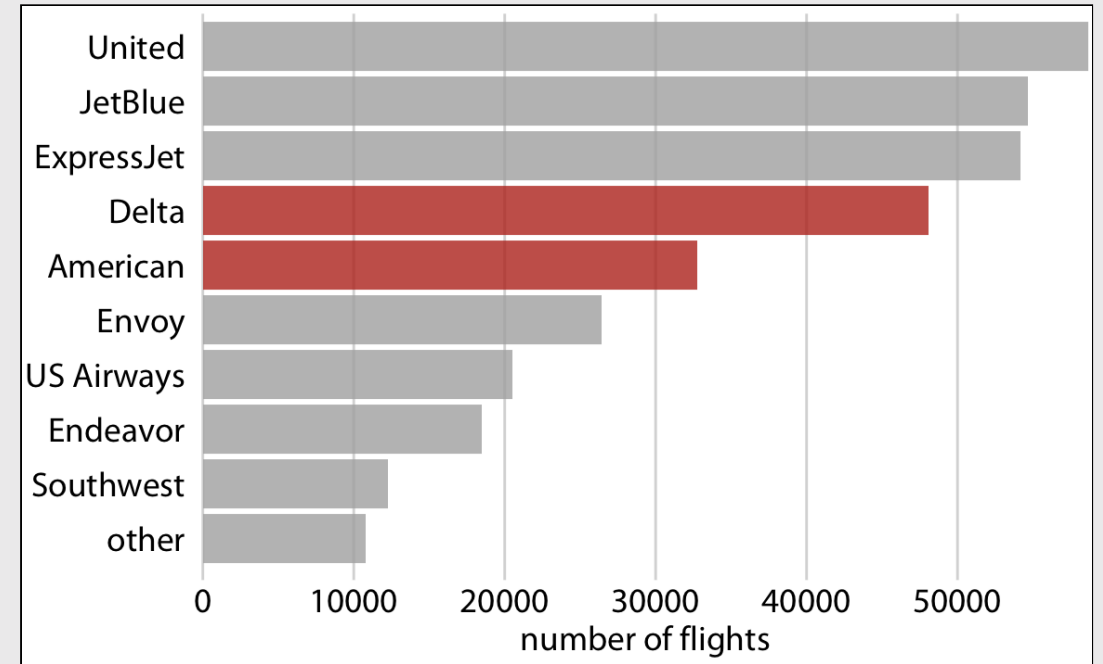
source

# Make charts for the generals

(i.e. keep it simple)

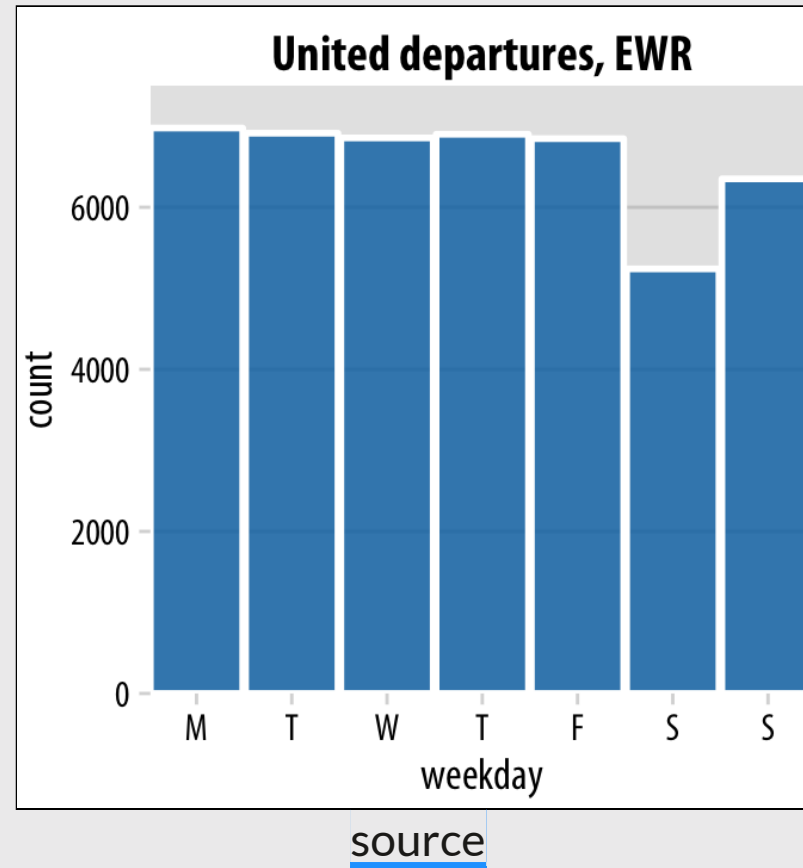


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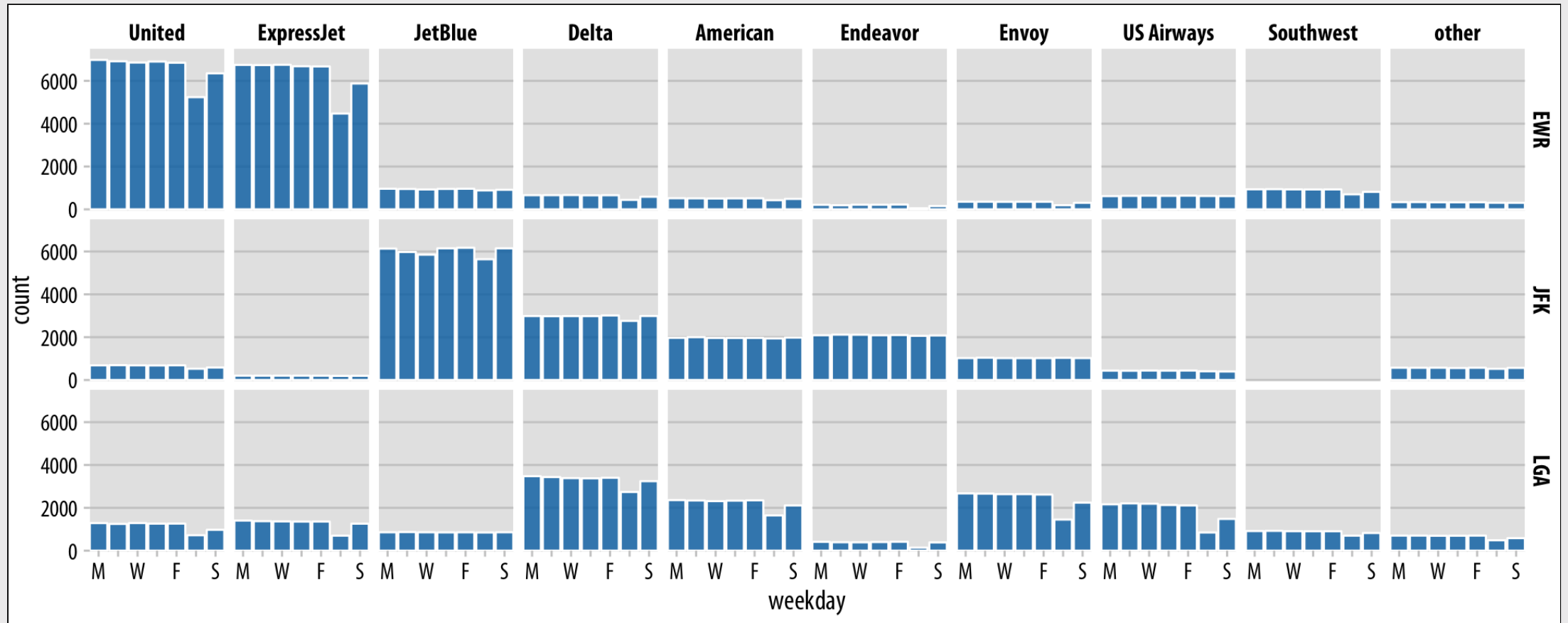


[source](#)

# Build up towards complex figures

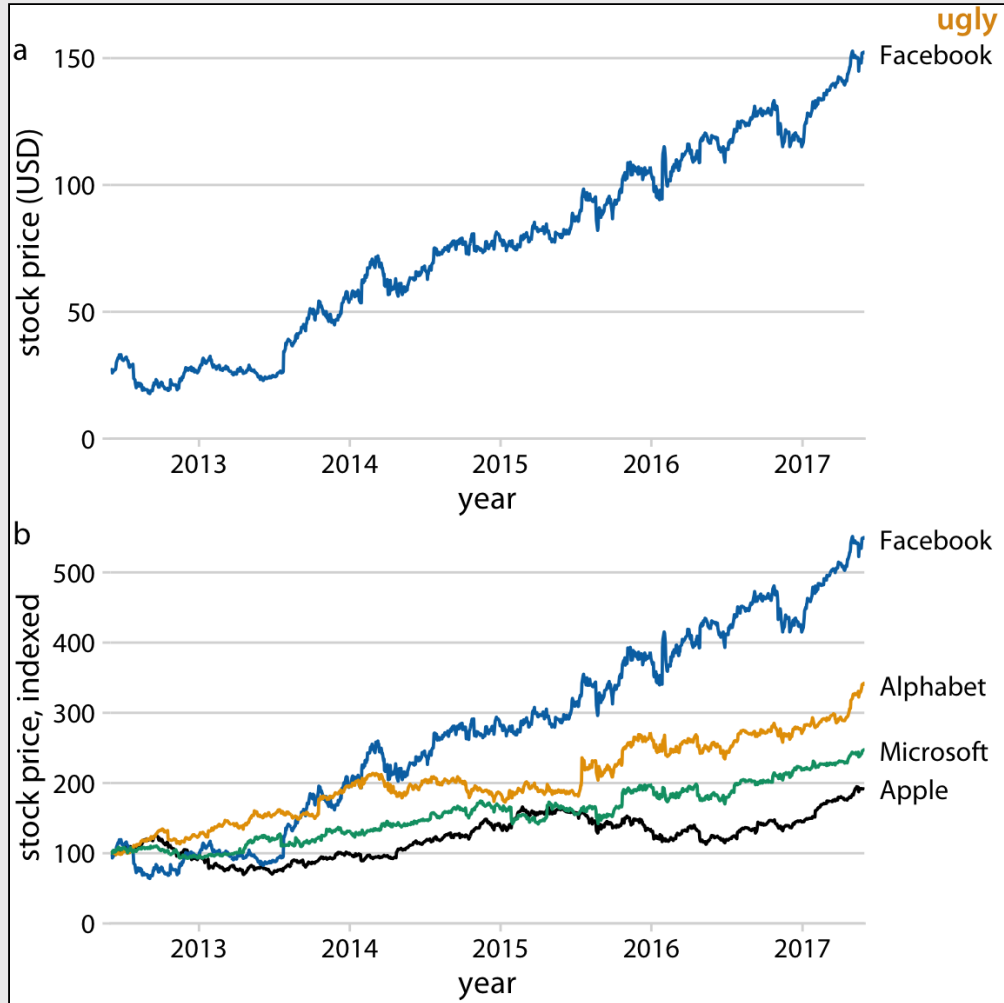


# Build up towards complex figures

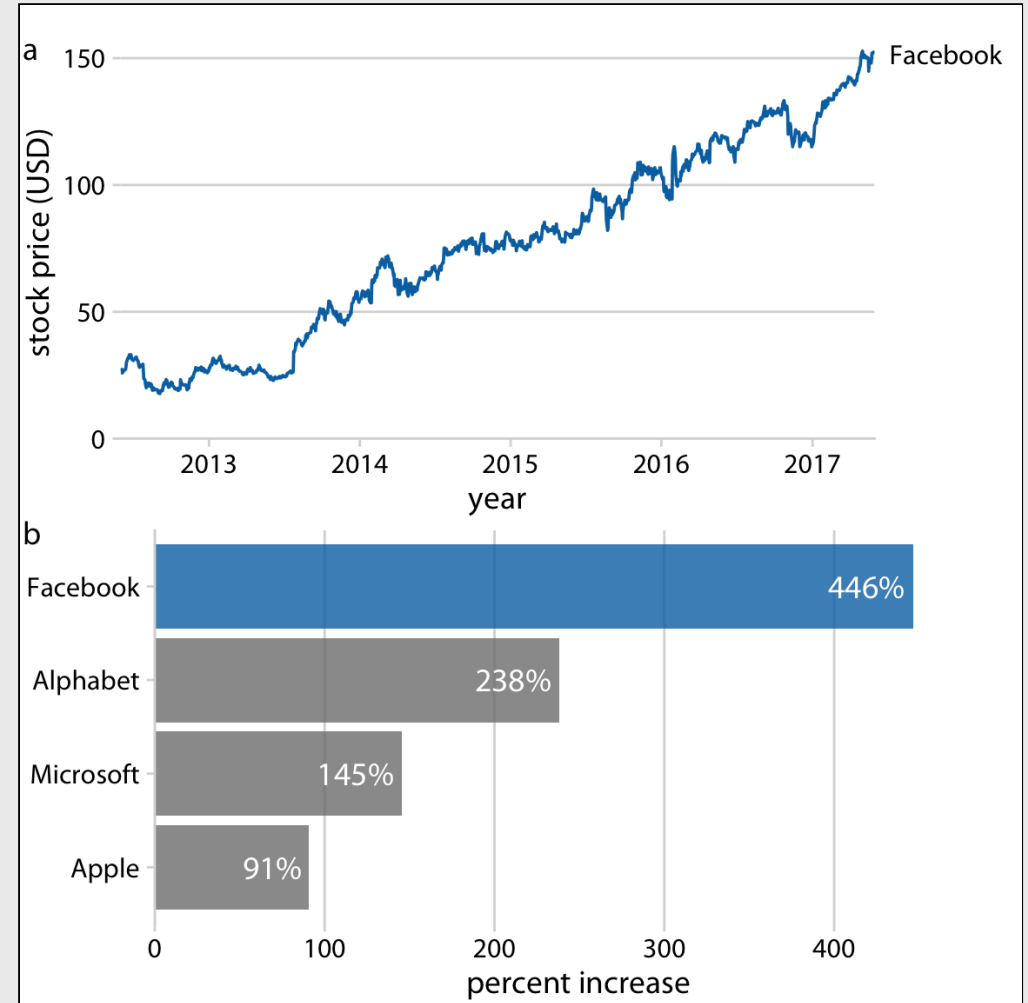


source

# Be consistent, but don't be repetitive



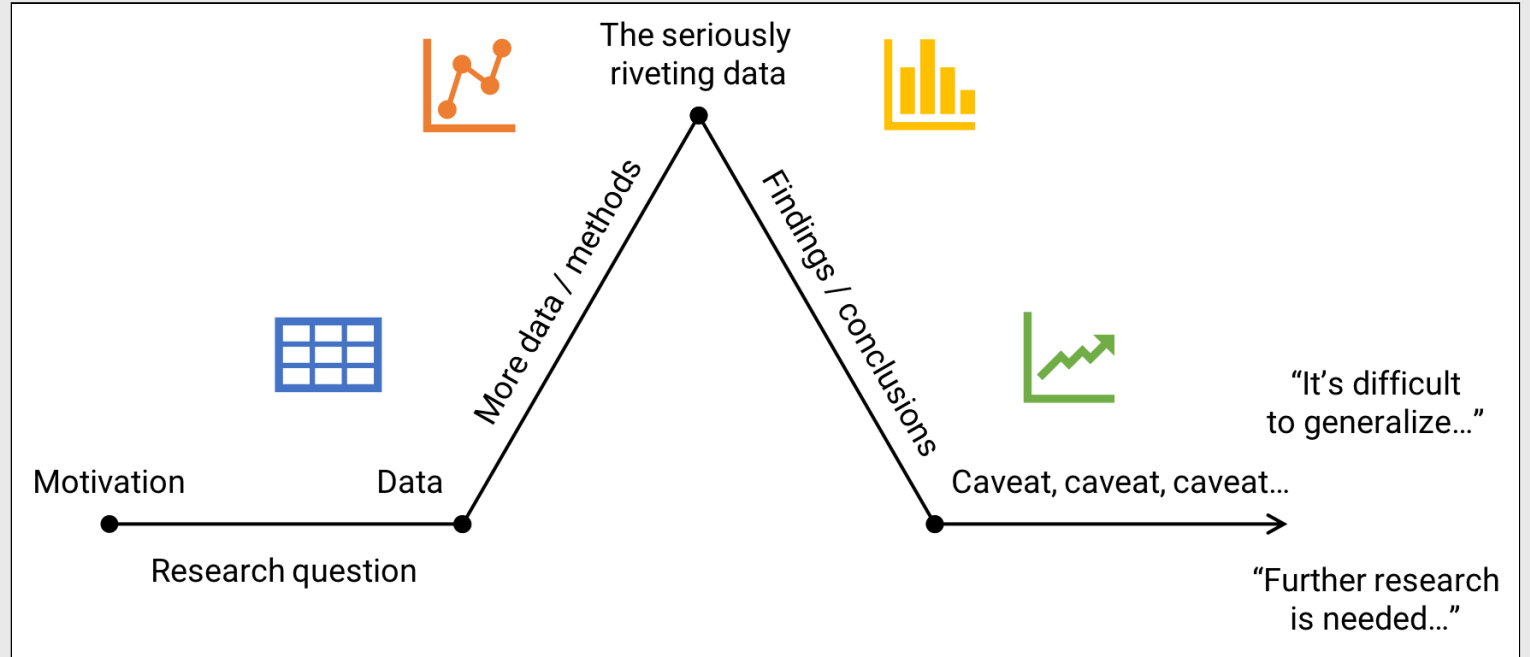
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source

# Summary: Telling a story

"A single (static) visualization will rarely tell an entire story"  
- Clause O. Wilke (2019), Chp. 29



- Use **layers** or **animation** to build tension / provide context
- Make charts for the generals (i.e. keep it simple)
- Build up towards complex figures
- Be consistent, but don't be repetitive



# Communicating results

1. Telling a story
2. Designing slides
3. Giving a talk

# 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

example

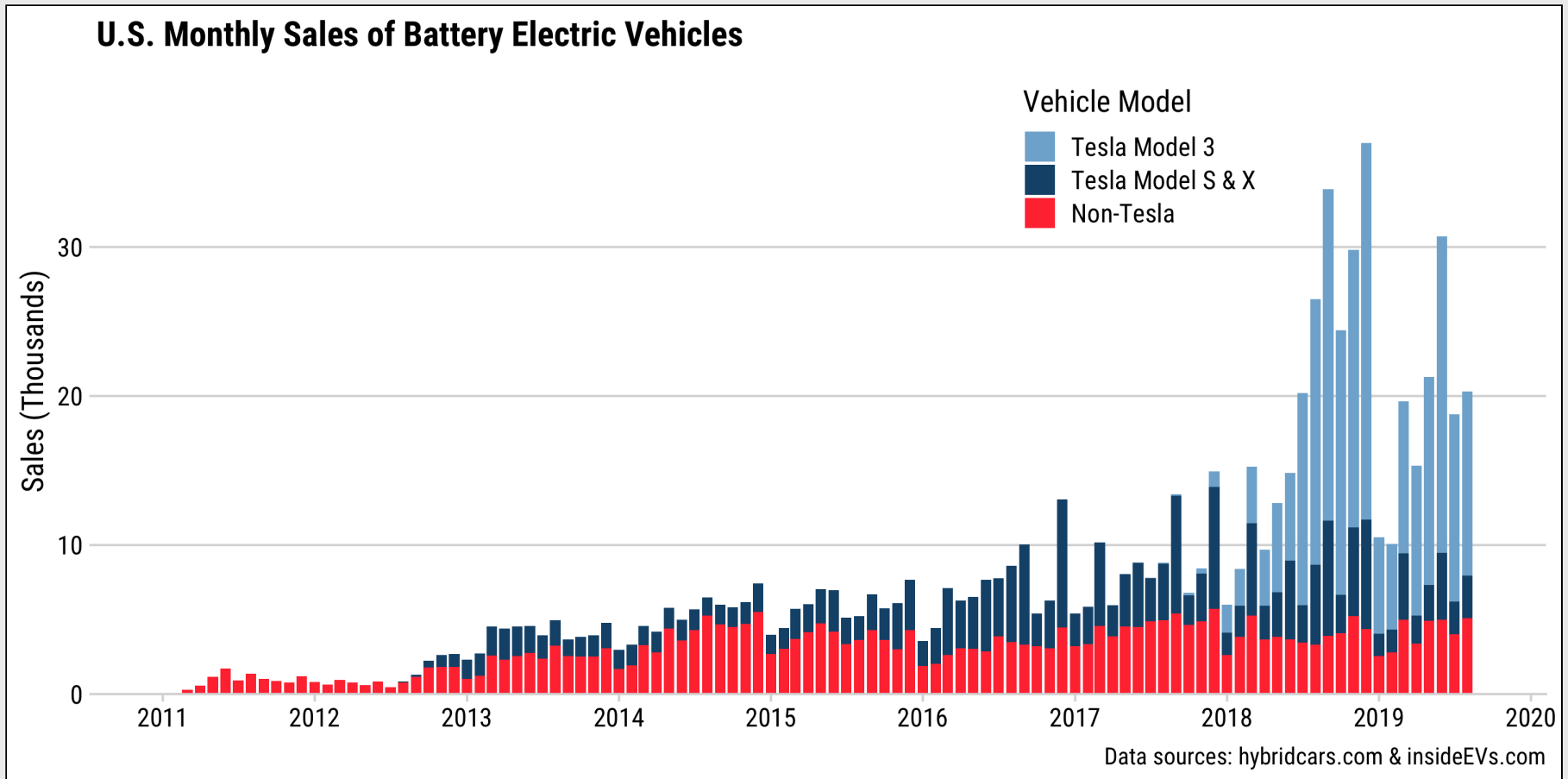
...and finally you will read this

# You will read this first

and then you will read this

State the main point of the slide in the title

# Except for Tesla, EV adoption is **flat**



Use handouts  
(1-2 pages)

> 40pt font for titles

> 24pt font for all other text

*Think of fonts as pre-attentive attributes*

Use san-serif fonts  
for most text

*Use italic, serif fonts  
for quotes*



Use a light-colored background  
(tan / gray)

(avoid solid white or black)

Dark text on a  
light background  
works best

Yellow text on a  
white background  
works poorly

Light text on a  
dark background  
also works well

Blue text on a  
black background  
is horrible

NEVER EVER use

Comic Sans

Papyrus

They make your work look terrible and amateurish

Break up main points into multiple slides  
(1 slide, 1 idea)

Number your slides!

Remove “chart junk” from your slides

- Exceptions in slider footer:
- References / data sources
  - © Symbol

An acceptable slide footer

# Slide design guidelines

- Use handouts
- Use a light-colored background (tan / gray)
- Slide titles: A single statement about what slide means
- Slide numbers: bottom-left or bottom-right
- Remove “chart junk”: logos, footers, etc. (exception: ©)
- Use large font sizes (>40 titles, >24 text)
- San-serif fonts for all text (italic serif for quotes)



# Communicating results

1. Telling a story
2. Designing slides
3. Giving a talk

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

Watch [this video](#) to find out

10:00

42 / 46

# How to start a speech

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



# How to start a speech

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

"Chinese automakers make one out of every two electric vehicles in the world."

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

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

## 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



# For team meetings next week

Have the following ready:

- Your revised research question.
- Your data sources.
- A draft of your opening sentence for your presentation (I will ask you to say it).
- Working code / data files.
- Questions for me.