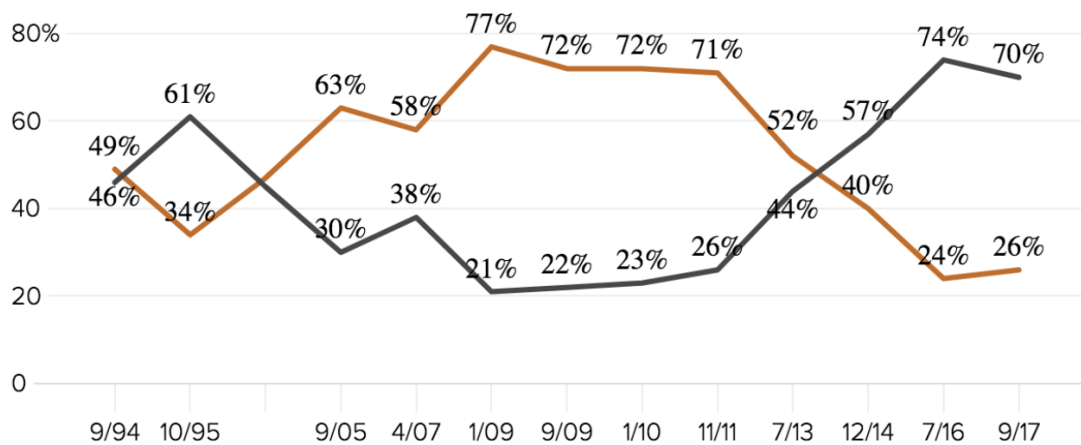


Critique of graph

In general, do you think race relations in the U.S. are ____ ?

■ Total Good ■ Total Bad



NBC NEWS

Data: NBC News/Wall Street Journal poll. September 14-18, 2017

Source:

<https://www.nbcnews.com/politics/first-read/nbc-wsj-poll-americans-pessimistic-race-relations-n803446>

1. Gestalt principle & visual structure: A lineplot is used to present development over time. In this case angle/direction is a pretty okay way of presenting the data, as it is easy for the eye to tell the change in of the two variables apart.

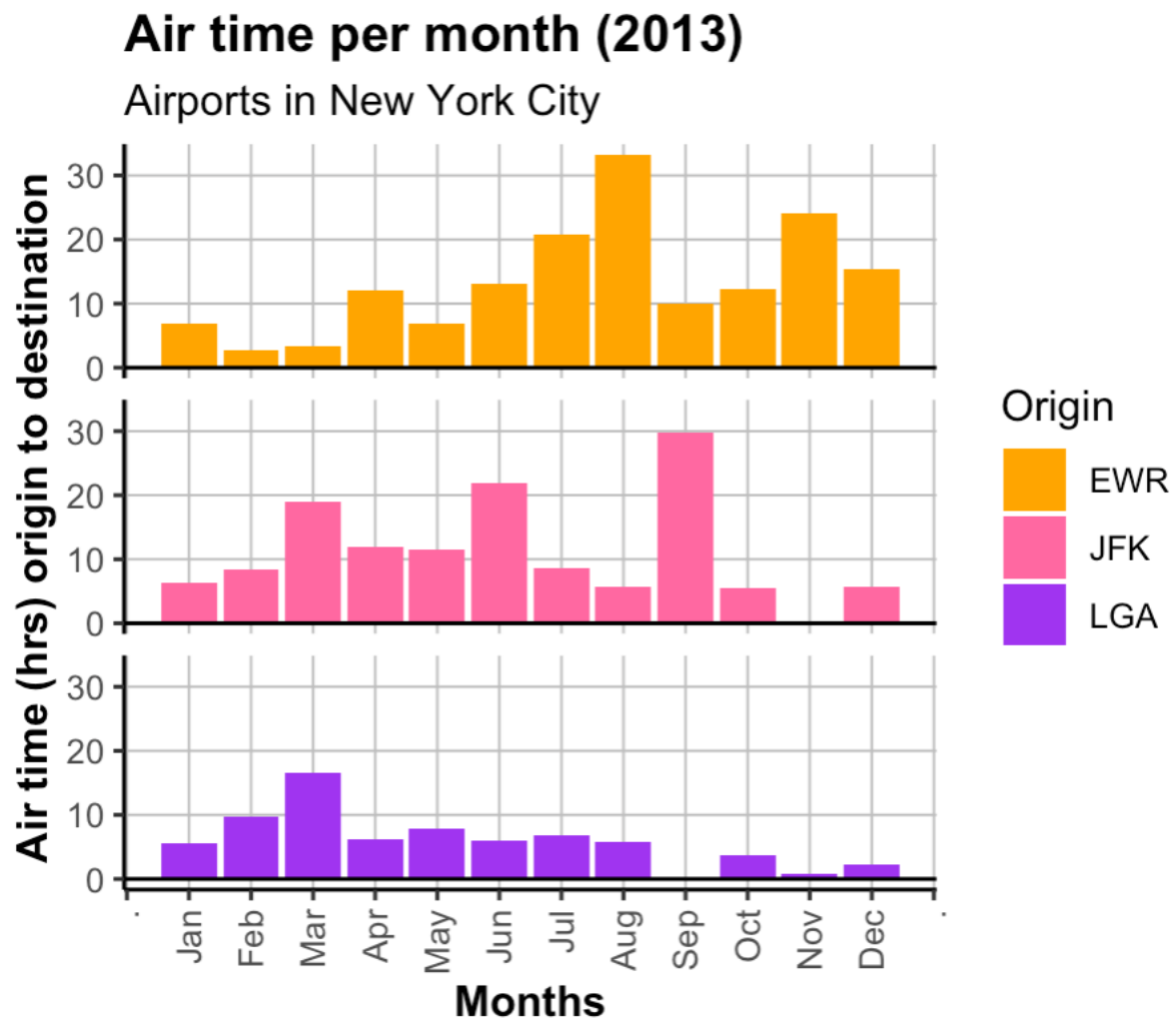
2. Less is more: Chart junk & data ink ratio: The percentages given in the graph make it easy to decode. However I still consider it to be redundant information, as it takes the job of the y- axis. Also, given that the total is 100% for each point of the x-axis, the variables of “total good” and “total bad” will always be opposite of each other (subtracted from 100%), making one of them redundant information.

3. Keep it simple: Decoding & operations: Decoding is made easy by the percentage given for every break on the x-axis. Reading of values without this redundant information would however be hard because of missing vertical grid lines to provide reference and too long intervals on the y-axis.

4. Annotation & stand-alone readability: Stand alone readability is at first glance okay, as the title lets us know a little bit, and one understand that it is some kind of measurement of peoples opinion and a trend showing. However, once you start actually looking at the values, it is pretty hard to understand. The annotations are missing for both the x- and y-axis, but we understand that the y-axis shows percentage. Still we are not given any information on what the percentage is of, like who their sample is or the size of it. Is it a random one drawn from the pool of all Americans? Is it only blacks? Whites? Students? Elderly? Voters of a certain political party? We are not provided with much context. In addition, the values on the x-axis are hard to understand. It looks like month/day, but the two first values and the text below it looks like month/year. The breaks on the scale are also very strange and inconsistent.

5. Graphic data integrity & lie factor: The sum of each point on the x-axis vary from 93%-98%, leaving us without information on the missing percentages. The graph follows opinions over time, so who is in the sample is important to the integrity of the graph. Are they the same or are they different? Is the sample random or biased? Both of these points reduce the graphs integrity.

Self made graph



The figure shows air time per month for three airports. Air time meaning how many hours a plain that left one of the airports spent in the sky before landing at a new destination.

1- Gestalt principles & visual structure: I found the bars to be the best method to show the data in an intuitive and understandable way. I made the bars in color blind friendly colors and put the panels underneath each other to easily compare each month for the different origins.

2- Keep it simple: Decoding & Operations: I changed the scale on the x axis so it hits right on the month and did not cut right in the middle of two months, making it more easy and intuitive to read. I changed the names on labels from numbers to month so it is easy to decode and the reader doesn't have to convert numbers into months. I made the months 3 letters, as it was a lot of text to have whole names. I turned the angle of the labels on the x-axis to get room for all month names so they weren't crammed up and unreadable. I converted air time from min to hrs because hours are easier to understand than tens of thousands of minutes.

3- Less is more: Chartjunk & data-ink ratio: I made the background black and white so the originally grey one wouldn't be unnecessarily dominating. I also switched out the original grid lines so they were not double but singular, taking away unnecessary "noise". I removed the facet labels to not have redundant information.

4- Graphical data integrity & lie factor: Tried to use scales that gave integrity, like convert from minutes to hours to give an accurate image of the air time, as 30 000 minutes seems way more than 30 hours.

5- Annotation & stand-alone readability: I made explaining text and titles bold to make it as explanatory as possible so that the reader would hopefully not be left to any wandering about what the graph is about and having to think hard and spend a long time to try to figure it out.