Data Visualization Critique Paper
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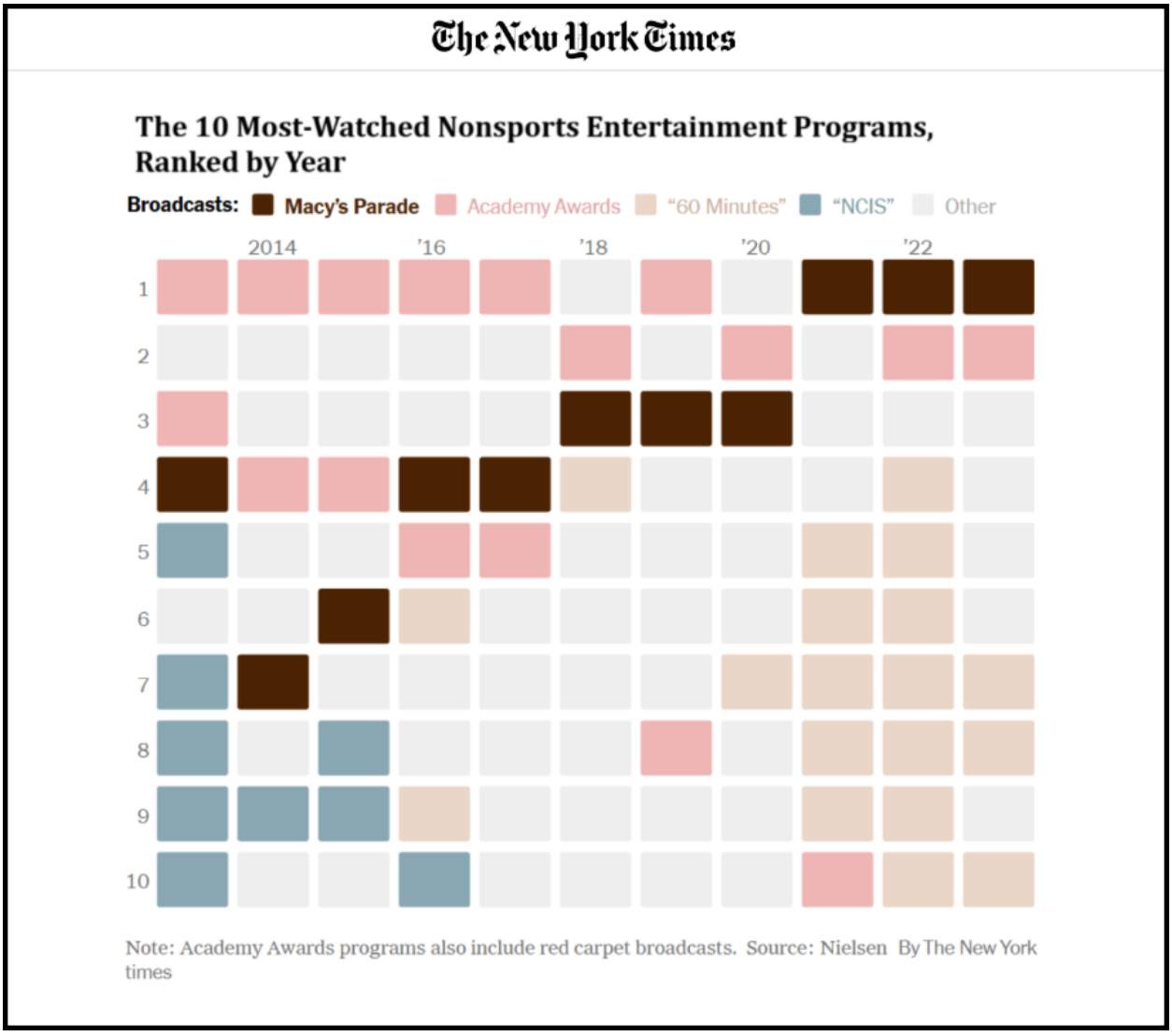
The graph below is a type of chart displaying the movement of rankings of shows over time. The graph was part of the article “America’s Great Unifying Event: The Macy’s Thanksgiving Day Parade,” published in the Business section of The New York Times on Nov. 27, 2024. Because it comes from a credible news source and supports a broader journalistic narrative, this visualization is a strong example of data visualization “in the wild.” While the chart may seem visually appealing, several design choices limit how effectively it communicates its underlying story.



How effectively it conveys the story:

One can intuitively tell that this seeks to inform us that a small set of non-sports television programs repeatedly dominate U.S. viewership rankings year after year. The article says “10 most watched” but the graph explicitly shows only 4, and a group labelled Others, which one could assume has the other 6 shows. Where this Viz. works is, the grid layout makes repetition visually apparent, allowing viewers to quickly notice which programs recur across years. The colours are also aesthetically pleasing, not jarring to ones scan through experience.

At the same time, a reader must mentally track colours to identify what shows had the majority of viewership, which increases cognitive load. The chart prioritises structure over insight; it tells us who ranked where but not by how much. Also, in certain years the same shows are marked on several ranks. What does this imply? Couldn't possibly have multiple ranks?

Potentially misleading aspects:

While the article emphasies on most-watched, meaning high volume of viewership, it still doesn't define any numbers. The boxes of each graph are all the same size and have the same gap in between them, but we know that viewership being equal across all shows, through eyars is highly unlikely. This goes against the Principle of Proportional Ink. Numerical viership labels would have helped here. Another point to note is, we have no idea what language, genres and bingenility the shows in the “Others” group are. Would not be a fair comparision without creating genre buckets.

The labelts too are not uniformly labeled.

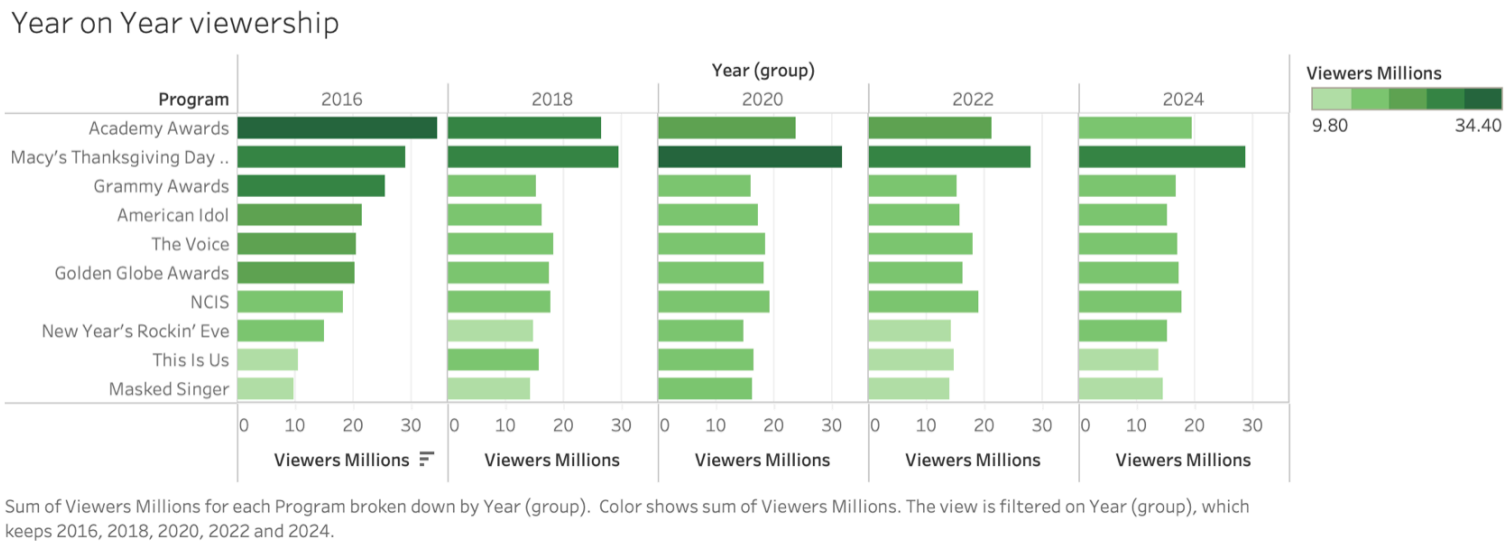
Visualization principles and storytelling strategies that are in this viz.:

According to visualization principles discussed in class, effective data storytelling relies on accurate visual encoding, reduced cognitive load, clear annotation, and alignment between the visual form and the narrative.

- Vizualisation = Art + Science: Good viz. balances both accuracy, correctness, proportionality and aesthetics, readability. This chart **does not**.
- Data Presentations: **No** intentional conclusions communicated.
- Proportional Ink Principle: the boxes across the graph are all the same size, **misleading** readers to believe they could have equal viewership
- Colours: Colours chosen are purely **decorative** and not intentional
- Axes haven't been labels making the y-axis especially confusing
- The chart **aligns** with minimalism, but **sacrifices** accuracy, missing an opportunity to guide the reader toward the important insights. missing an opportunity to guide the reader toward the most important insights.

How the Visualization Could Be Improved:

- Incorporate viewership magnitude by displaying the number of viewers.
- Use bar length to encode audience size, which would allow viewers to immediately perceive differences between programs.
- Add annotations to emphasise key patterns, such as programs that consistently rank first or those that rapidly decline.
- Colours chosen could be difficult to distinguish for colour blind individuals.
- These changes would reduce cognitive load, improve perceptual accuracy, and better align the visualization with established design principles.Year-over-Year Viewership of



YOY Viewership of Top Nonsports Television Programs (2016–2024)

The redesigned visualization uses small multiple bar charts to display viewership* by year, allowing viewers to compare both ranking and magnitude within each time period. Unlike the original rank-based grid, this approach makes audience size explicit and reduces cognitive load by relying on bar length rather than colour or position alone.

The original NY Times visualization may be appealing and succeed as a compact overview of television rankings over time. However, its reliance on rank alone limits its ability to communicate the magnitude and significance of viewership. By redesigning the chart using ranked bar charts, I can display the actual audience size. The improved version reduces ambiguity, enhances interpretability, and tells a story more effectively. This critique illustrates how even well-designed visualizations can benefit from better data alignment, visual encoding, and having an intentional narrative to help tell a story.

Link to the article: https://www.nytimes.com/2024/11/27/business/media/macys-thanksgiving-day-parade-viewership-appeal.html?searchResultPosition=1

*Data for Reimagined viz - Dummy cvs data file created using ChatGPT promt “Build me a dummy data set for 2014,2016,2018,2022,2024 with Top Ten shows watched in the USA, genre and viewrship”