**Example 1:** Example of a good graph from Flowing Data blog post by Nathan Yau. This graphic depicts a map from the Washington Post that displays the regions that saw the largest temperature increases in 2023. I find this thematic map, a choropleth map, very intuitive to understand and clear to interpret. The increasing temperature corresponds to darker red colours and are clearly shown across geographical areas on a world map.

Reference: John Muyskens and Niko Kommenda, The Washington Post, January 17, 2024.

A map of the world

Description automatically generated

**Example 2:** Example of a bad graph: My research is in the field of cognitive neuroscience of memory, so I looked at the Journal of Cognition to find an example of a good or bad graph. This graph depicts delayed recall as a function of accumulated free time at serial positions (1-4) and combinations of cognitive loads (CL) in four experiments. One of the things that I thought made this not a great graph was that my eyes oscillate between the legend and the data points to determine what information the colours corresponded to. I also found that the colours (i.e., the blue and green) were too similar and made it difficult to differentiate the data points, especially as they are quite small.

Reference: Loaiza, V. M., Oftinger, A. L., & Camos, V. (2023). How does working memory promote traces in episodic memory?. *Journal of Cognition*, *6*(1).

A graph of a number of objects

Description automatically generated with medium confidence

**Example3:** Example of a bad graph: This was the graph that I presented in class last week. This graph depicts the prevalence of articles related to culture in the journals of the Psychonomic Society from 2016 to 2020. There is no reason why the graph needs to be in 3D and negatively impacts the interpretability of the graph due to it being in 3D; I found it harder to read, and it being in 3D is completely unnecessary.

Reference: Gutchess, A., & Rajaram, S. (2023). Consideration of culture in cognition: How we can enrich methodology and theory. *Psychonomic bulletin & review*, *30*(3), 914-931.

A graph of a number of articles

Description automatically generated with medium confidence