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Vox Critique

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Data is important not only for creating and understanding a story, but also for adding credibility to it. However, no matter how irrefutable or organized a dataset may be, if it is not appropriated and transferred in a way that it can be understood easily through the senses, a story can fall flat on it’s face. It may even become harder to glean takeaways from data depending on how it is displayed.

[How Nations Fare in PhDs by Sex [Interactive] - Scientific American](https://www.scientificamerican.com/article/how-nations-fare-in-phds-by-sex-interactive1/)

[What people miss about the gender wage gap - YouTube](https://www.youtube.com/watch?v=13XU4fMlN3w)

I looked at two data sets for this, mainly because I was impressed with the visuals and the manipulations of the data from Scientific American. The data covers gender disparity between men and women that have PhD’s is specific academic fields in specific countries. One example found is that the United States has a large number of both men and women earning PhD’s in Non-science fields, but the gender gap is considerably large compared to other countries. This is especially obvious when you compare it to the rest of the European countries, which are generally well off economically. The data visuals show that more women than men in the United States have PhD’s related to non-science degrees.

There are things I like and dislike about the data chart. I like interactivity and versatility of the visual data. You can view the data by ascending percentage of females, or view it by geographic region. The lines provide clarity as to where the smallest and largest gender gap is. I also like that they broke it down by discipline. A viewer can look at the gender gap across multiple disciplines. Though the data doesn’t directly relate to what I want to research - which is the gender wage gap and what contributes to it- It still demonstrates a way in which a gender gap can be visualized by country.

The data raises questions about what education systems are like in the United States and other countries. I’m left curious as to how we might be behind other countries in terms of educating boys and girls. There is a consistent gender divide in the science fields across a considerably large number of countries. More men hold PhD’s in science fields than women. It makes me wonder about the way we condition girls and boys at a young age as well as how we have biases on what kind of roles men ad women should fulfill in our society.

The contrasting colors is also good because it distinguishes the data. This is especially important when you have data overlap, like wen there’s a very small gender gap, but a large number of men and women are getting PhD’s from a specific country.

I do have questions and some negative criticism of the data. Firstly, a lot of visual data sets have a source from where the data was taken. I would have liked to know what the methodology for gathering the data was.

The next data set was taken from a Vox video on YouTube. I specifically focused on the chart around 2:52. It specifically focuses on wage gaps and career fields. What I don’t like about the data is that I don’t think it fully explains how occupations with less flexible hours contribute to wage loss and the gender wage gap. It only shows wage disparities by gender and occupation. I think if the data looked specifically at the statistics that showed the wage gaps by the flexibility of hours in each job, we’d get a better understanding of what the video and Claudia Goldin are trying to explain. Looking at the chart, I’d want to specifically know what percentage of flexible hours each job has. I think it does at the very least give the viewer information to insinuate what kinds of jobs may or may not provide flexibility in work hours.

[Millions Served by Water Systems Detecting Lead | NRDC](https://www.nrdc.org/resources/millions-served-water-systems-detecting-lead#:~:text=A%20new%20NRDC%20analysis%20of,part%20per%20billion%20(ppb)%20recommended)

The second data story is a data map of all of all of the counties in the United States where there were lead levels above 1pbb in drinking water. This is considered unsafe by the EPA. There are pros and cons to specific formats in data stories, but there are also certain formats that necessitate use for specific data sets. A visual like this gives the viewer a clear understanding.

I’m sure this took a long time to compile. What I would have liked to have seen was more interactivity. There are clearly parts of the country where more people are being affected by potential lead poisoning than others. This is demonstrated by the intensity of color of counties on the maps. What I would like to be able to do, is the ability to isolate specific counties that have the most or least amount of people affected by lead in drinking water. That would add specificity to viewing data on a visual map.

The map does give you information on how many violations there were, but that doesn’t seem to be the contributing factor to what influences the color on the map. The number of people affected by the lead seems to be what influences it. This could make it more frustrating if I was trying to look at which counties had the most violations. Overall, I think if they made the map interactive in a way that facilitated viewing specific data points better, I would regard the data map more highly. Don’t get me wrong, it’s ok, but it could be better.