A Critique of the Data Story:

'Analyzing the Gender Representation of 34,476 Comic Book Characters'

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Introduction

Who created it?

- The data story was created by Amanda Shendruk. Amanda Shendruk works as an opinion's graphics reporter at The Washington Post.
- Tyler Shendruk assisted Amanda during the data analysis stage, and Nicole Derksen, created the illustrations and gifs used in this article.

What data did they use and where did it come from?

- They analyzed data for all 34,476 characters from Marvel and DC. The decision to focus on these two major comic book universes, was made to cover the greatest breadth and history of characters.
- The data was from the ComicVine database, which is fan-edited.

What tools they used?

- It is not explicitly mentioned in the story which specific tools or libraries were used for its creation.
- The design and interactive storytelling could be powered by HTML, CSS, and JavaScript.
- The features like clickable charts and interactive graphs suggest that they likely utilized web-based visualization libraries like D3.js or Chart.js for the data visualizations.

How did they process the data?

- The data included categories for “female,” “male,” and “other.” “Other” was excluded, it mainly refers to non-human characters like robots and spirits.
- Duplicates of characters exist due to reboots or variations (e.g., Batman-X vs. Batman). They decided not to remove them, as doing so could overlook gender changes across different versions, like with Robin, who has had both male and female iterations.
- Powers were filtered by removing those where the gender difference wasn’t significant (95% confidence level) in a t-test.

Overall Message and Takeaways

The analysis aimed to go beyond just the gender ratio to explore how females are represented in Marvel and DC comics. They looked at naming conventions, types of superpowers, and team composition to better understand gender portrayal.

- **Superpower**: Data suggests that female characters in superhero media are more likely to possess less-physical powers like empathy, intellect, and telepathy, while male characters are often depicted with physical abilities or gadget-based powers.
- **Naming Conventions**: 28.5% of female characters have diminutive names, compared to just 12.6% of male characters. This suggests that female characters are more often given names that may make them appear weaker or less aggressive.

Overall Message and Takeaways

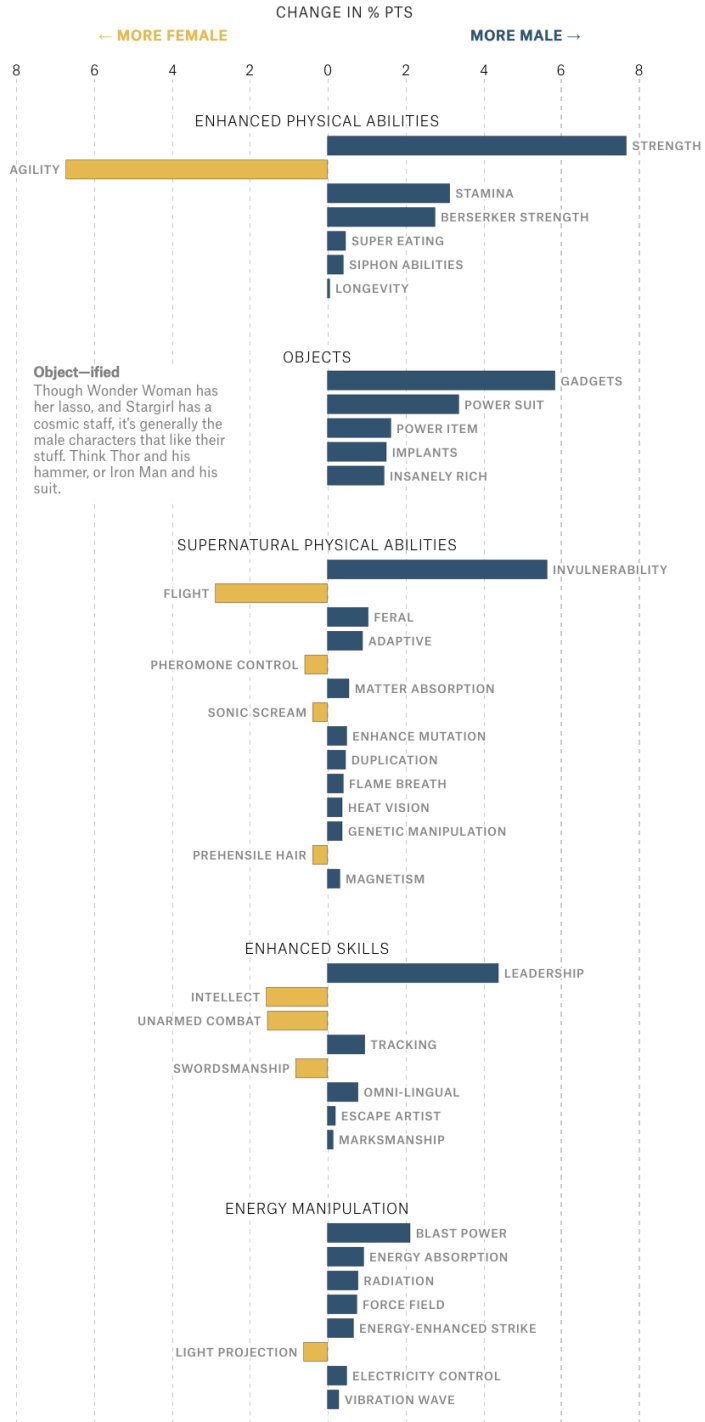
Across all forms of media, including children's literature, cartoons, video games, and even coloring books, all of which have a long history of poor female representation and gender imbalance. Media often mirror the world we live in, and this is reflected in the fact that only 27% of characters in major comic franchises like Marvel and DC are female.

Strengths of the Analysis and Visualizations

Clear Visualizations: The visualizations clearly show the differences in gender representation, like how superpowers and character names differ between genders, making the complex data easy to understand.

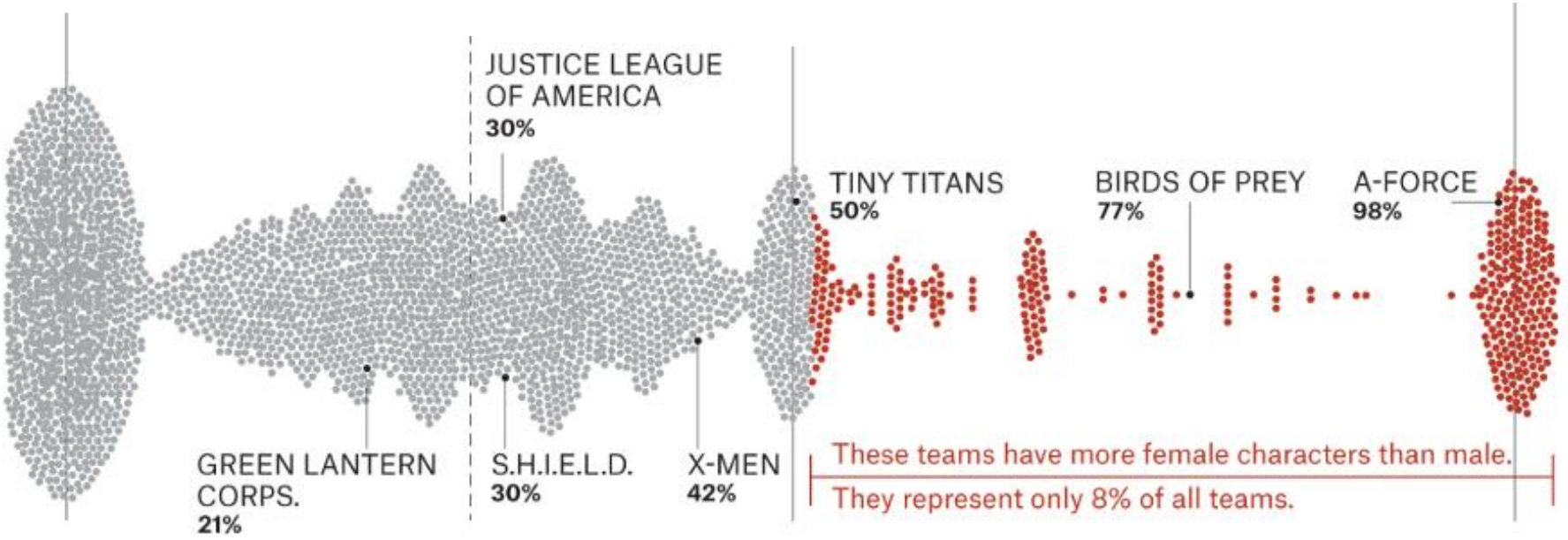
Interesting Observations:

- **Superpower Representation**: Female characters tend to have more "less-physical" powers like empathy and telepathy, while male characters are more likely to have physical powers or those involving gadgets.
- **Gender Stereotypes**: Certain powers, like pheromone control (5x more common in females), sonic scream (twice as common), and prehensile hair (7x more common), highlight the link between these abilities and traditional gender stereotypes.



Weaknesses of the Analysis and Visualizations

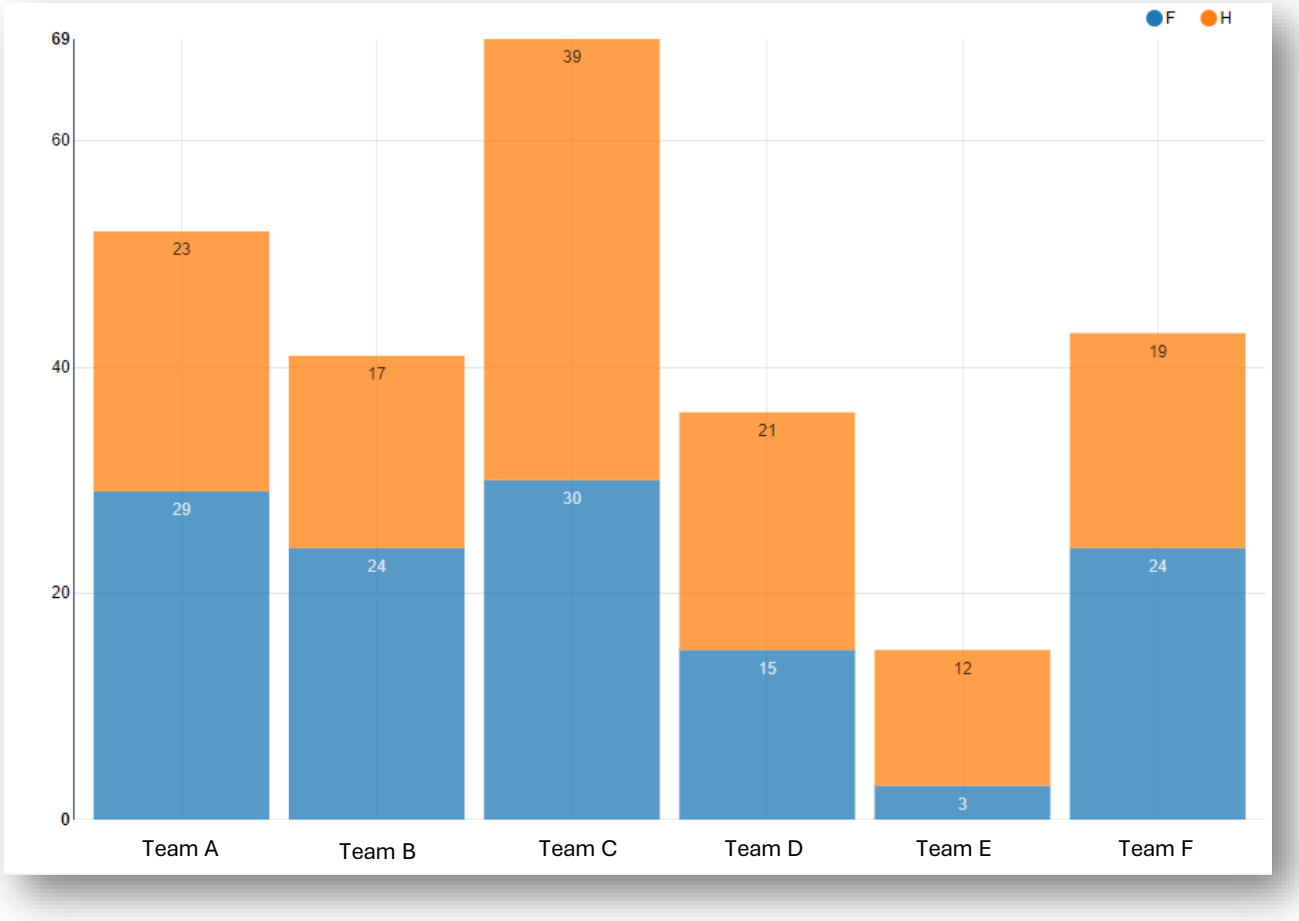
- The data comes from a fan-made database, so it may not be entirely accurate. However, since it is being used for an article analyzing the representation of male and female characters in comic books, this should not pose a significant issue.
- The graph below is difficult to interpret. From what I gather, each dot represents a team/group from DC and Marvel, with the groups listed from left to right in order of increasing percentage of female members. However, the way the data is presented makes it challenging to understand, and it could have been conveyed much more clearly.



Weaknesses of the Analysis and Visualizations

What could they do better?

- The explanation of the plot(shown on the previous slide) could have been clearer. The paragraph that follows doesn't address or reference the graph at all. Instead, it shifts focus to discussing how the names of female teams/groups reflect their femininity.
- Instead of using the plot with individual dots, a stacked bar chart could be more effective. A stacked bar chart could show both male and female representation within each team/group, making the comparison clearer.



Refrences

The original data story:

- https://pudding.cool/2017/07/comics/

Amanda Shendruk's Profile(Author):

- https://twitter.com/ashendruk

Database:

- https://comicvine.gamespot.com/api/