Sebastian Kjær
Curating Data
Aarhus University

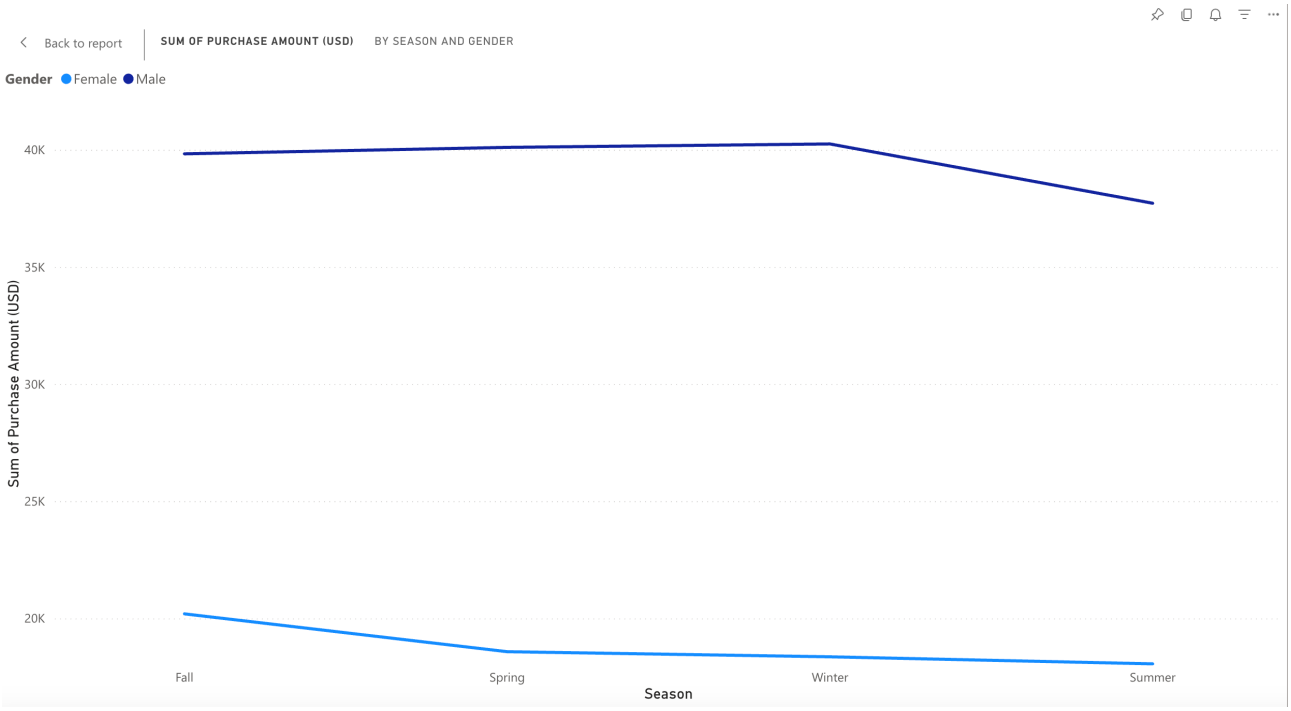
09. Nov 2025
Characters: 5.834

Assignment 3: Visualising and Visceralising

In this assignment I used the dataset shopping_behavior_updated.csv found on Kaggle which contains information about customers gender, purchase quantity and purchase frequency. Both visualizations are constructed in Power BI.

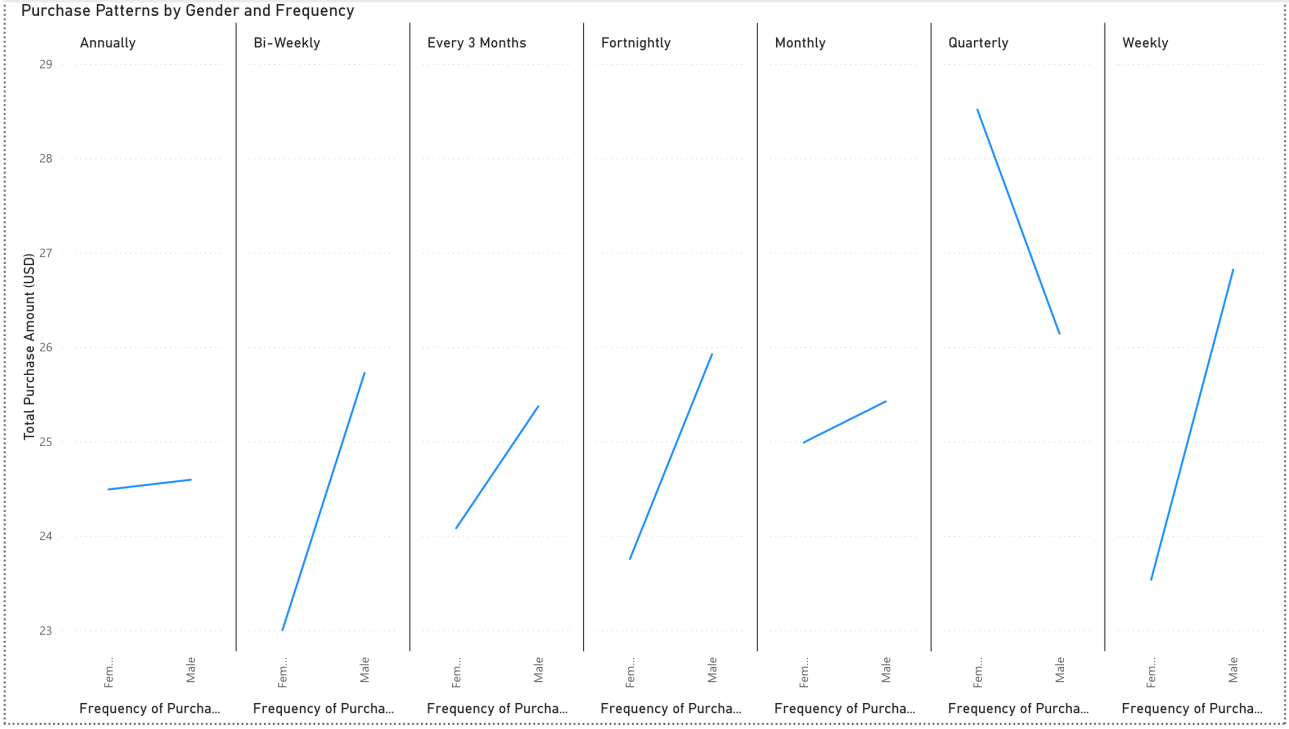
The purpose of the visualization “Average Purchase Amount (USD) by Frequency and Gender” was to examine differences in men's and women's consumption patterns, while considering differences in group size that appeared in the dataset.
My first analysis showed that men's total purchase amount was way higher than the women's.

Here is my very first visualization:



By further examination the dataset showed that there were approximately 2600 male representatives and only approximately 1600 women representatives. This meant that a

comparison of totals gave a skewed picture, as men were simply overrepresented in the dataset. By instead showing the average sum of purchase per customer, the visualization became more balanced. The differences between the genders then became more equal and in some cases the women even spend more, which now gives a more usable version than my previous visualization.



The purpose of visualization was to support analytical reasoning by using data to create insight and overview. By combining categorical (gender and frequency) and numerical values (amount of purchase) as the variables in Power BI, it then became possible to examine patterns, that would not appear to the naked eye before the visualization. However, the visual also reveals an important point that data is never neutral. Even an objective visualization can show complexity, if you do not reflect on the dataset, such as who and how many are repenetrated in the dataset. As Johanna Drucker states, “data are not given, but taken constructed as an interpretation of the phenomenal world, not inherent in it” (Drucker, 2011).

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My second visualization *"The Binary Lens: How Data Sees Gender",* represents a different approach. It may appear simple but the main purpose if this visualization is not the create an overview, but to evoke a feeling and create reflection on how data produces certain understandings of the world.

The visualization consists of a treemap where the dataset is simply two gender categories, male and female which is visualized in blue and pink. The two bright colors are chosen to highlight how stereotypical color codes are used to naturalize differences. The large bule color highlights the dataset skewed distribution and symbolizes the masculine dominance in the data collection. The pink shows how the women appear less in the dataset and appears almost squeezed into the visual composition.

With the title *"The Binary Lens: How Data Sees Gender",* is the visualization trying to criticize the limitation of the dataset to only two genders. This binary division makes all other identities invisible and reduces complex human experience to either/or.
This is an example of how data not necessarily represents the reality but shapes it by defining who can exist in the logic of the system/data. Furthermore, visualizations are never neutral.

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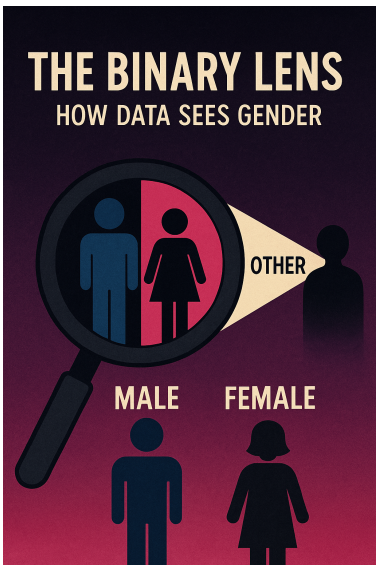
They are always formed by the choices the designer makes, what is being included, excluded or highlighted. As D'Ignazio and Klein says

"Any communicating object that reflects choices about the selection and representation of reality is a rhetorical object." (D'Ignazio & Klein, 2020)



To make a more exiting visualization and a more visual engaging visualization I have made this by using generative AI. This visualization uses a magnifying glass as a metaphor on how the dataset only sees and uses the two binary sexes, man and woman, while other gender identities fall outside the light cone and thus not registered.

Visually this draws upon *"Data Feminism"* principles such as *Rethink Binaries* and *Examine Power* (D'Ignazio & Klein, 2020). It shows how a seemingly technical decision to register gender as "Male" or "Female" simultaneously is an ethical and political decision. By using visualizations in a sort of untraditional way to highlight a form of data criticism that hopefully creates feelings of absence and exclusion in the viewer.

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The two visualizations express two different ways of viewing data, an analytical and I critical approach. In the first visualization it is about finding patterns and understanding differences, while the other draw upon challenging questions and make power visible. Together these shoes that data is never just information, but they are interpretations shaped by the choices you make in your analysis and visualization. The design choices in both visualizations shows how choices affect understanding. In the first part the visualization shows equality and stability, but the second part underlines an experience of imbalance and absence. By placing these two visualizations side by side it shows a clear picture of how data can be used to both to reveal and challenge reality.

This assignment underlines that working with data is not just about measuring but also about seeing and about being aware of who is seeing and what is being seen. By combining *visual analytics* and *feminist data studies* it becomes possible to understand data as ethical, aesthetic and political field, where multiple factors shape our understanding.

References:

- D'Ignazio, C., & Klein, L. (2020, March 16). 3. On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints. Data Feminism. https://data-feminism.mitpress.mit.edu/pub/5evfe9yd/release/5
- D'Ignazio, C., & Klein, L. F. (2020d). Data feminism. In The MIT Press eBooks. https://doi.org/10.7551/mitpress/11805.001.0001
- DHQ: Digital Humanities Quarterly: Humanities Approaches to Graphical Display. (n.d.). https://dhq.digitalhumanities.org/vol/5/1/000091/000091.html