Assignment 3: Visualising and Visceralising

For this assignment, I chose to work with a dataset titled "Top Streamers on Twitch" sourced from Kaggle. I chose this dataset because I am fascinated by the world of online streaming and how platforms like Twitch shape digital culture, visibility, and success. Twitch is not only a space for gaming but also a reflection of how communities form and how attention is distributed across creators. The dataset includes information about streamers, their languages, total followers, average viewers, stream times, and other performance metrics.

The first part of the assignment uses a visual analytics approach to create data-driven visualisations that show general trends and relationships within the dataset. The aim was to present the data in a clear, structured, and informative way that supports both comparison and interpretation, following established principles of graphical clarity (Tufte, 2001). For this purpose, I created several visuals in Power BI, including a scatterplot titled "Relationship Between Streaming Duration and Average Viewership by Language," which examines how stream time relates to audience size across different languages, and a time-series visual titled "Streaming Activity and Audience Growth Over Time," which shows how followers and streaming activity change over time. In addition, two bar charts, "Sum of Followers by Language" and "Sum of Average Viewers by Language", illustrate how audience size and viewing behaviour vary across linguistic groups on the platform Twitch.
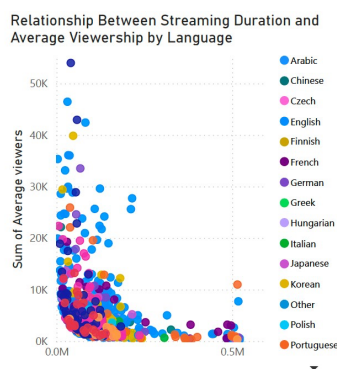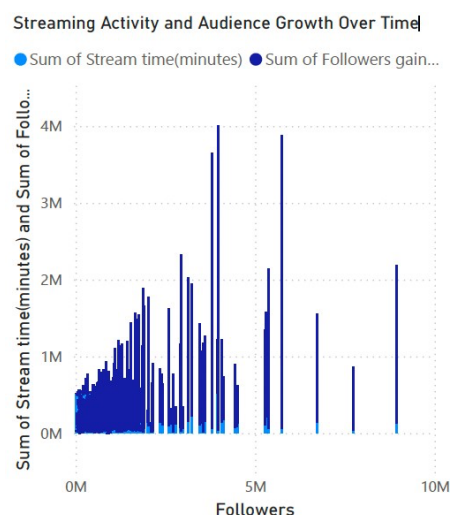

Figure 1.0: Scatterplot

Figure 1.1: Bar chart

For the visual analytics component, I designed a interactive Power BI dashboard combining these four visualisations to highlight patterns of attention, engagement, and growth.

Interactive filters for language, channel, and time range allow the viewer to explore different aspects of the data.

To support this, I created several calculated measures in Power BI, including SumFollowers, SumAverageViewers, SumStreamMinutes, and FollowersGained, as well as a ranking measure to identify top-performing channels. Tooltips provide key contextual information such as channel name, language, average viewers, and followers gained, along with small sparklines that show changes in viewership over time.

The Sum of Followers by Language chart shows the dominance of English-speaking channels while allowing comparisons across smaller language groups such as Spanish, Portuguese, and French. The Sum of Average Viewers by Language visual adds another perspective by showing how viewing behaviour differs between these groups. The scatterplot helps explore whether longer streaming sessions lead to higher audience numbers, while the Streaming Activity and Audience Growth Over Time chart highlights moments of growth, such as viral moments.

Together, these design choices make it possible to see large-scale trends and connections between streaming activity, audience engagement, and visibility. However, they also simplify the complexity of individual experiences, such as the personal or emotional labour involved in maintaining an audience, which are not represented in the dataset.

The second part of the assignment takes a feminist and critical data studies approach, focusing on what is missing or overlooked in the dataset. While the dashboard presents measurable aspects such as followers, viewers, and stream time, it leaves out important social and emotional dimensions, like the labour behind streaming, moderation experiences, or the inequalities that shape visibility on the platform. These omissions reflect the broader critique that data practices often present themselves as neutral or objective, despite being shaped by partial and situated perspectives (Haraway, 1988).

To address this, I developed a conceptual design called "Reflection." Instead of focusing on analytical precision, the goal is to visceralise the data, to evoke emotion and provoke reflection on what the dataset does not show. This aligns with feminist data principles that argue for the importance of emotion and embodiment in understanding data (D'Ignazio & Klein, 2020).

The design could take the form of a Power BI mock-up or a physical installation, where each tile represents a streamer and the size of the tile reflects their follower count.

This act of visceralising data shifts the focus from explanation to experience. It encourages the viewer not just to understand the data intellectually, but to feel the weight of what is invisible and consider the human realities that remain outside of measurement.

The two analyses together show how design choices influence what viewers take away from data. The visual analytics dashboard encourages exploration, comparison, and reasoning but also presents inequalities as natural outcomes of performance. The visceralisation, in contrast, sacrifices analytic precision to make viewers feel what is absent and to question the values behind data representation.

Through this contrast, the project explores how visualisation is never neutral, it always reflects decisions about what to include, what to highlight, and what to leave unseen. My motivation has been to balance explanation with critique: to show not only how streaming success can be measured, but also how those measurements shape our understanding of value and visibility on digital platforms.

References:

D'Ignazio, C. & Klein, L. (2020). Chapter 3: On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints. https://data-feminism.mitpress.mit.edu/pub/5evfe9yd/release/5

Tufte, E. R. (2001). The visual display of quantitative information (2nd ed.). Graphics Press.

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. Feminist Studies, 14(3), 575–599.