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 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 visualizations 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). I created several visuals in Power BI, including a scatterplot showing how stream duration relates to viewership and a time-series plot tracking streaming activity and follower growth 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 behavior vary across linguistic groups on the platform Twitch.

For the visual analytics component, I designed an 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.

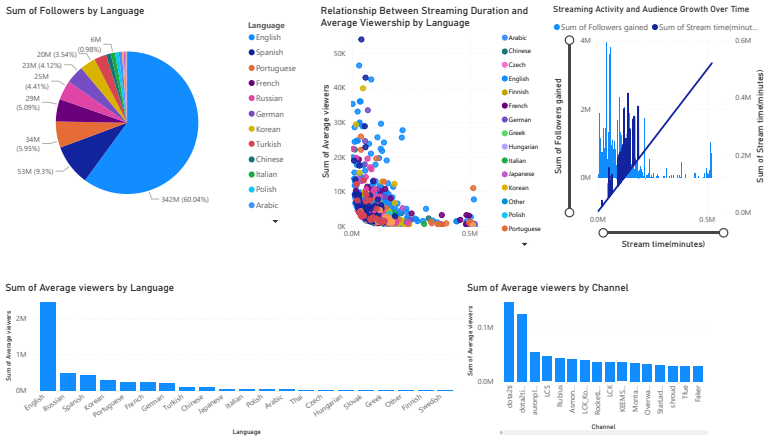

Figure 1: PowerBI Dashboard from Twitch Data

I also created basic calculated measures to support filtering and comparison across 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 behavior 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.

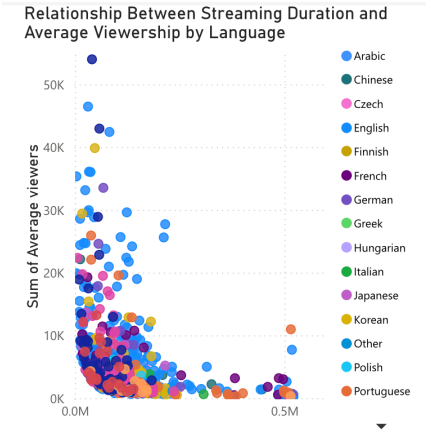

Figure 2: Scatterplot showing the relationship between streaming duration and average viewers.

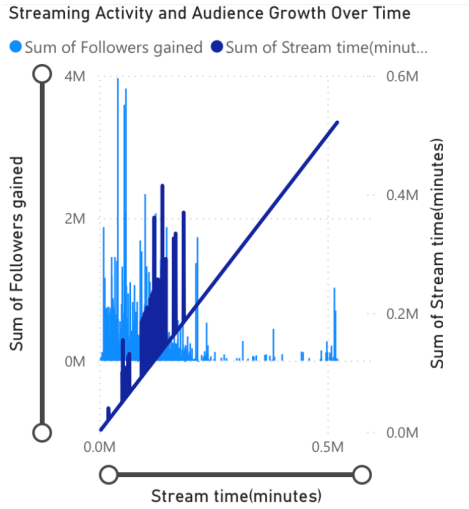

Figure 3: Time-series plot of streaming minutes and followers gained.

While these two visuals offer analytical potential, their visual form is less effective than intended. The scatterplot contains many overlapping points, which makes patterns difficult to distinguish, and the dual-axis time-series graph is visually dense in a way that complicates interpretation. These limitations partly reflect our developing skills in Power BI, which influenced how precisely we could adjust scaling, density, and interactivity. With more advanced techniques, the underlying relationships could likely be shown more clearly. At the same time, the challenges of reading these visuals point to how platform metrics can be complex to interpret, even when presented through standard analytical tools.

In this sense, the weaker visual performance of these two charts underscores the need for the critical shift in part two. Their opacity reinforces the argument that some aspects of streaming, emotional labor, precarity, moderation work, cannot be visualized through conventional analytical tools, motivating the turn toward an affective, feminist visualization as the 2nd part of this assignment.

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).

Figure 4: Reflection

The visualisation I created, titled Reflection, uses a tile-based composition where each tile represents a Twitch streamer from the dataset. The oversized proportions of the top tiles intentionally feel overwhelming, creating a physical sense of platform dominance. While tile size still corresponds to follower count, mirroring the platform's emphasis on quantitative visibility, the aesthetic treatment of the tiles communicates what the dataset leaves out. Large, uniform tiles for top streamers visually reproduce the hypervisibility afforded by follower metrics, while the scattering of small, fragmented tiles evokes the emotional labour, moderation work, harassment, and precarity that remain structurally unmeasured. In this sense, Reflection becomes less a visualisation of data and more a visualisation of its absences

Following Haraway's argument that knowledge is always partial and situated, the darkness and fragmentation of the visual field make perceptible the standpoint embedded in the dataset: what the platform chooses to measure appears brightly visible, while everything else fades into obscurity. Inspired by D'Ignazio and Klein's call for feminist data visualisation, the aim is not analytical precision but affective disruption. The design invites viewers to feel the unevenness of streaming labour rather than merely interpret performance metrics.

In contrast to the dashboard shown earlier from PowerBI, where inequalities appear as neutral outputs of engagement data, the Reflection visualisation foregrounds the political choices embedded in data representation. It challenges the viewer to consider how value and visibility on Twitch are produced, and what forms of human experience remain outside measurement.

The two analyses together show how design choices influence what viewers take away from data. The visual analytics dashboard encourages exploration and comparison but implicitly frames inequalities as natural outcomes of performance metrics. 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 how those measurements shape our understanding of value and visibility on digital platforms. In doing so, the project highlights how data visualisation is a practice of world-making: it not only describes streaming cultures but actively shapes how they can be perceived and valued.

CHARACTERS: 7.372

References:

D'Ignazio, C. & Klein, L. (2020). Chapter 3: On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints. https://datafeminism.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