DESIGNING DIGITAL INCLUSIVITY

MAPPING AND SHAPING ONLINE ENVIRONMENTS FOR THE LGBTQ+ COMMUNITY (DATA DONATION RESEARCH)

INTRODUCTION + MAIN FINDINGS

Online environments have been an essential part of the lives of LGBTQ+ people for finding community. However, they are disproportionally subjected to hate and marginalization on the internet. How can we examine online environments of LGBTQ+ people? We asked **three people** who identify as queer to donate their Instagram data and one of them also donated their TikTok data. With this ecologically valid dataset we were able to explore these two platforms from individual, unique perspectives.

Main findings

1. In the TikTok network analysis, queer hashtags frequently coincide with other content clusters and appear to be central to the donater's interests (Figure 1).
2. Despite only representing 8% of videos watched (Figure 2), queer videos reported the highest rate of video watch times, indicating the TikTok donor pays more attention to this content (Figure 4).
3. This high engagement in queer content of the TikTok donor did not appear to influence advertising efforts as ads shown and promoted posts were not often part of the queer cluster.
4. Due to the eleven years of Instagram data available, we were able to observe the shift of donors interacting with mostly individual accounts to later on, larger, public queer accounts. (Figure 5).

REFLECTIONS ON DATA DONATIONS

With data donations social media posts can be analyzed chronologically within context of the donor's feed. Posts with low view counts made up a large proportion of posts viewed by the donor's. Compared to analyses of social media platforms with bot accounts this ecological valid data is closer to actual user activity.

Working with data donations depends heavily on the information provided by social media platforms. Between TikTok and Instagram, who structure user data differently, the discrepancies present methodological challenges to cross-platform analysis.

TIKTOK

FIG 1. **A QUEER CO-HASH NETWORK**
This network graph represents the primary topic clusters derived from coinciding hashtags in the captions of videos watched by the data donor. The size of the node corresponds with the frequency of the hashtag appearing within the dataset (17,788 vids).

Neurodiversity · Beauty · Queer · Fitness · Cats

FIG 2. **CONTENT CLUSTERS BY THE NUMBERS**

Percentage of **total** dataset — 8%, 4%, 5%, 6%, 11%, 10%
8% of videos served are **queer**-related

Percentage liked — 55%, 34%, 42%, 44%, 28%, 37%
55% of the **queer** videos are liked

Percentage favourited — Queer, Fitness, 3% Neurodiversity, Cats, 2% Beauty, 5% Food

TIKTOK TIME-SERIES ANALYSIS

We sorted the dataset by date of the video watched and computed the cluster percentages over time using a rolling window of 300 consecutive videos. A rolling window averages data within a fixed number of points to smooth fluctuations and reveal trends. We then computed the average watch time for each video in a specific cluster by dividing the video's length by the time gap between two consecutive videos.

FIG 3. **THE PERCENTAGE OF QUEER VIDEOS REMAINS RELATIVELY LOW ...**
Average percentage per category, over a rolling window of 300

CATEGORY: Queer, Pets, Neurodiversity, Gym, Food, Beauty

At this point in time, over 43% of the videos were related to **beauty**

At most, 17% of the videos shown were **queer**-related

Percentage of total videos / Consecutive videos served

FIG 4. **... BUT THEY ARE CONSISTENTLY VIEWED FOR THE LONGEST TIME**
Average completion rate of a video, over a rolling window of 300 videos

Average times a video is watched / Consecutive videos served

INSTAGRAM

FIG 5. **STREAMGRAPH & RANKFLOW INSTAGRAM**
While the streamgraphs highlight when queer content was engaged with via suggested accounts, the RankFlows zoom in on how they individually engage with queer content.
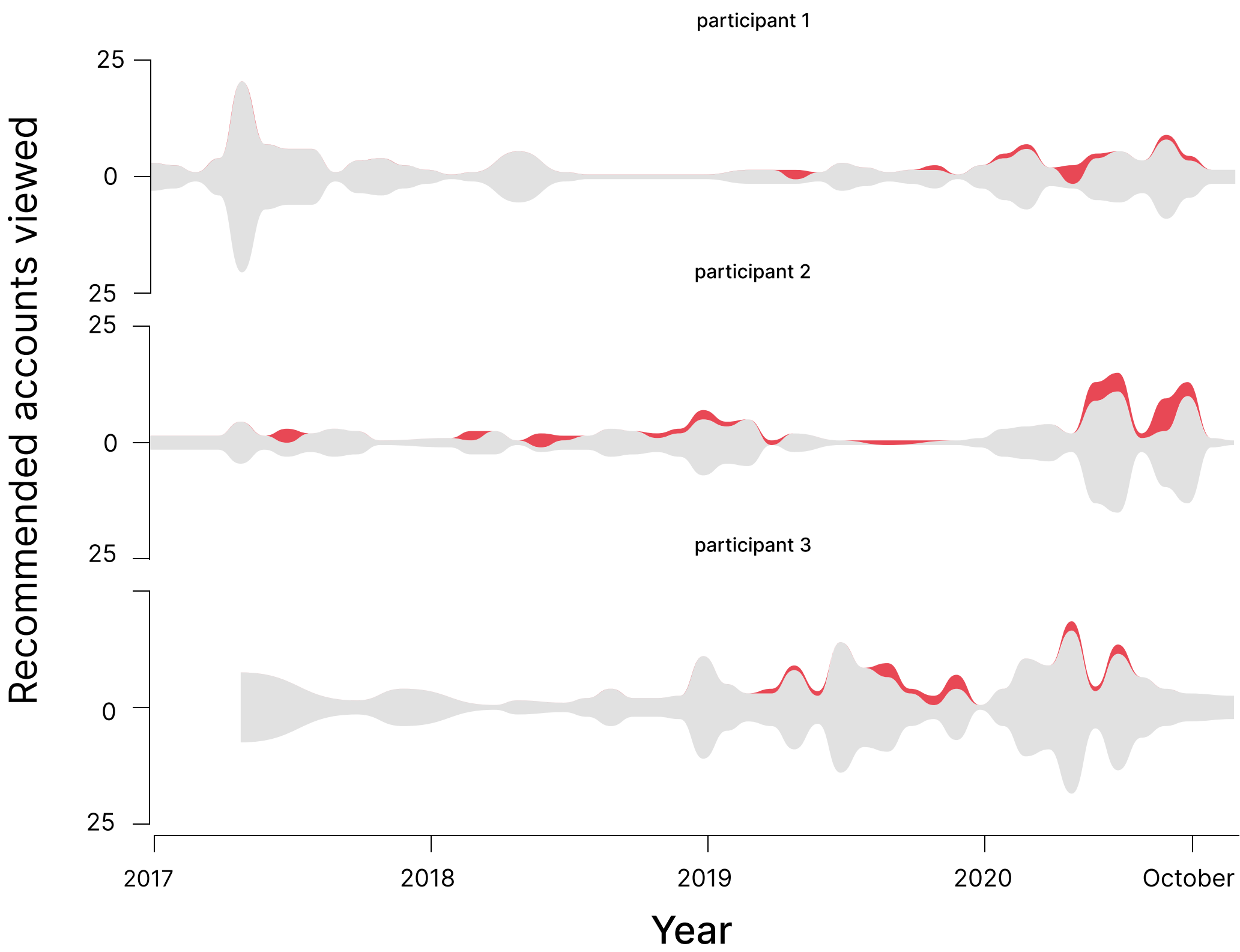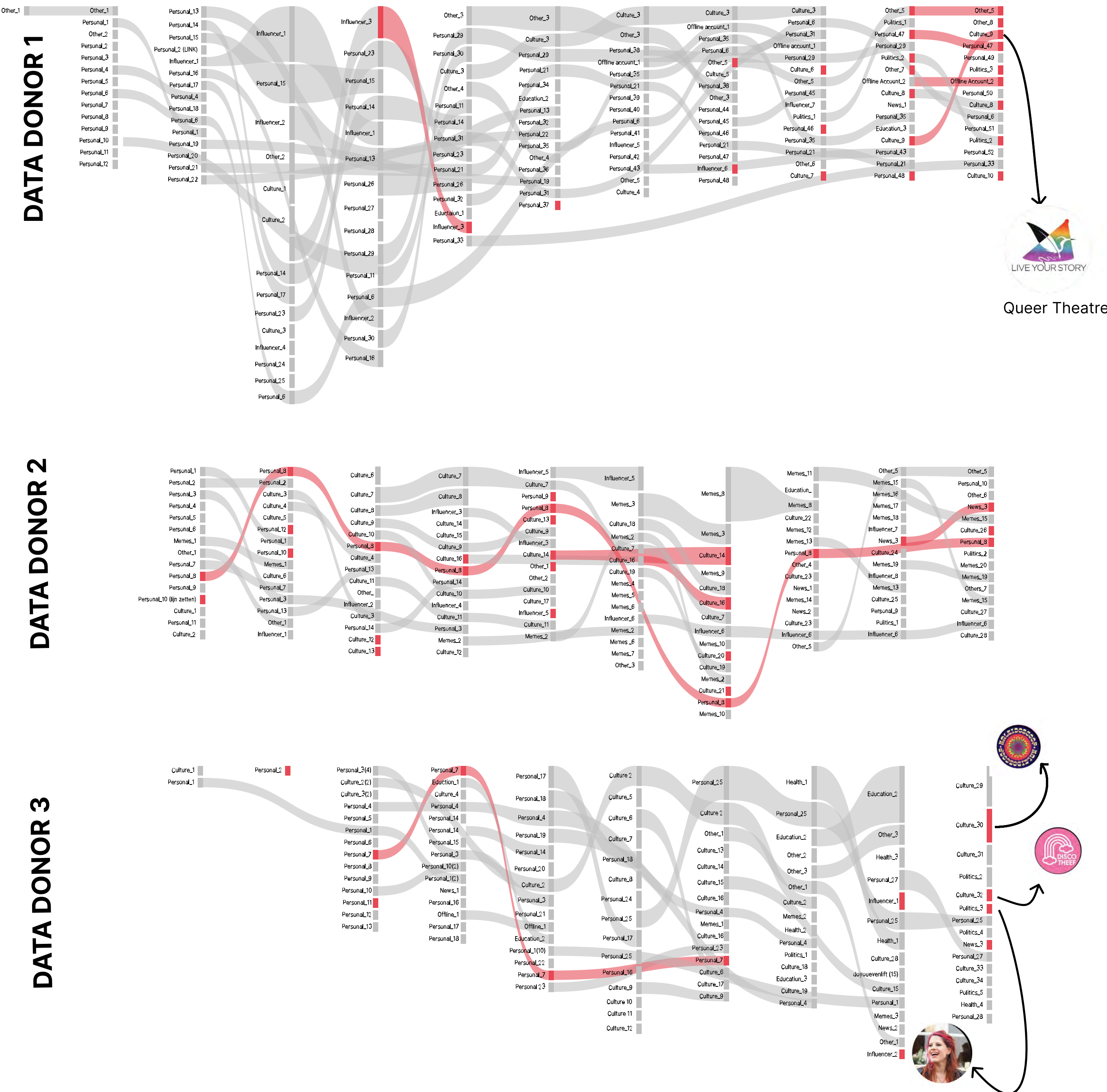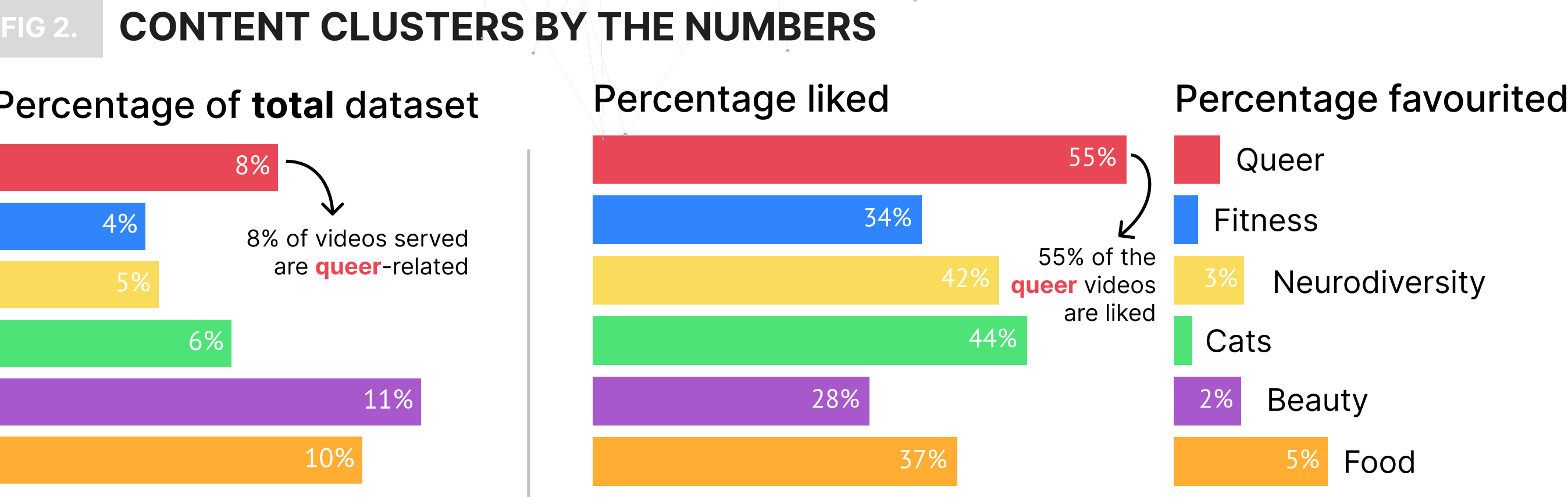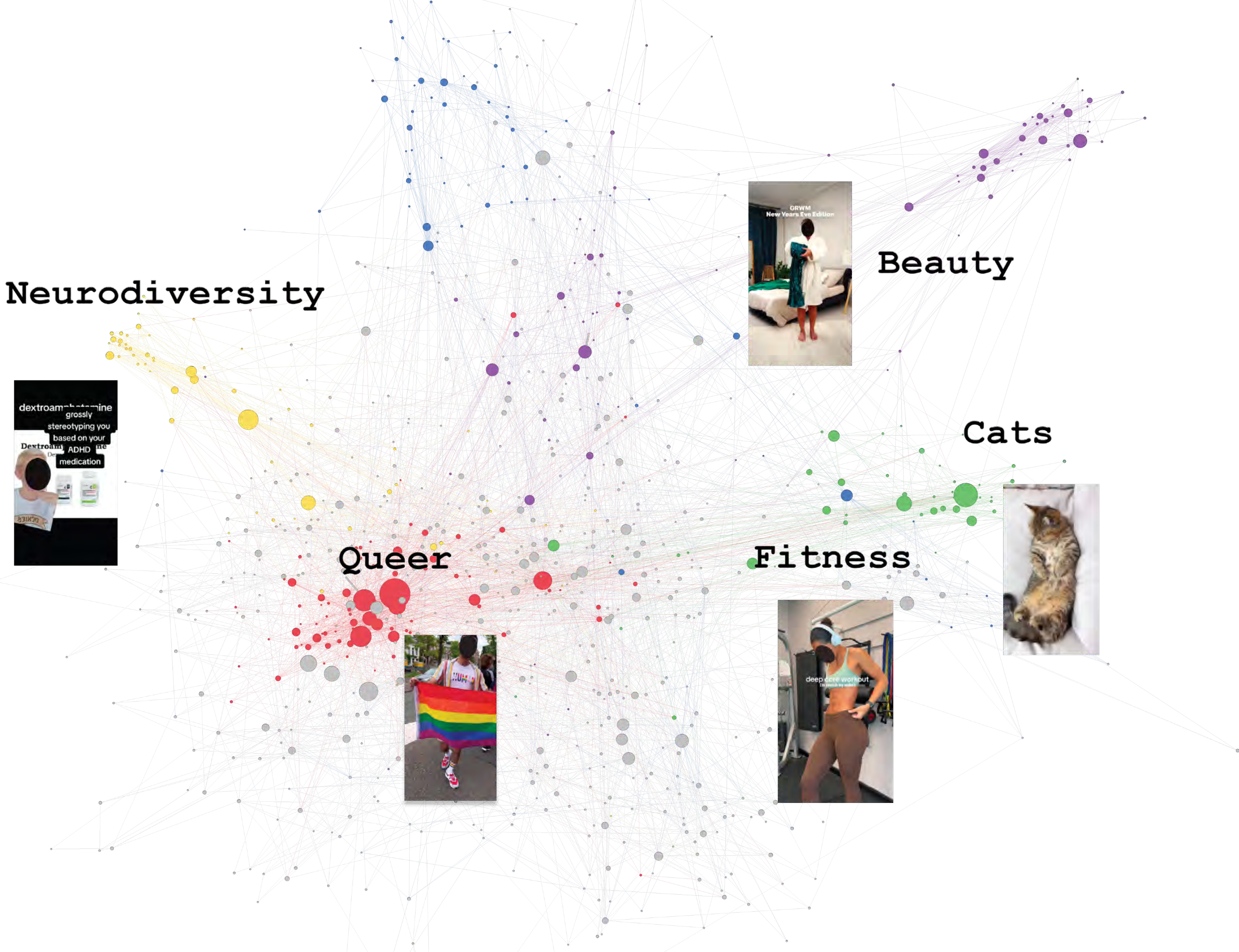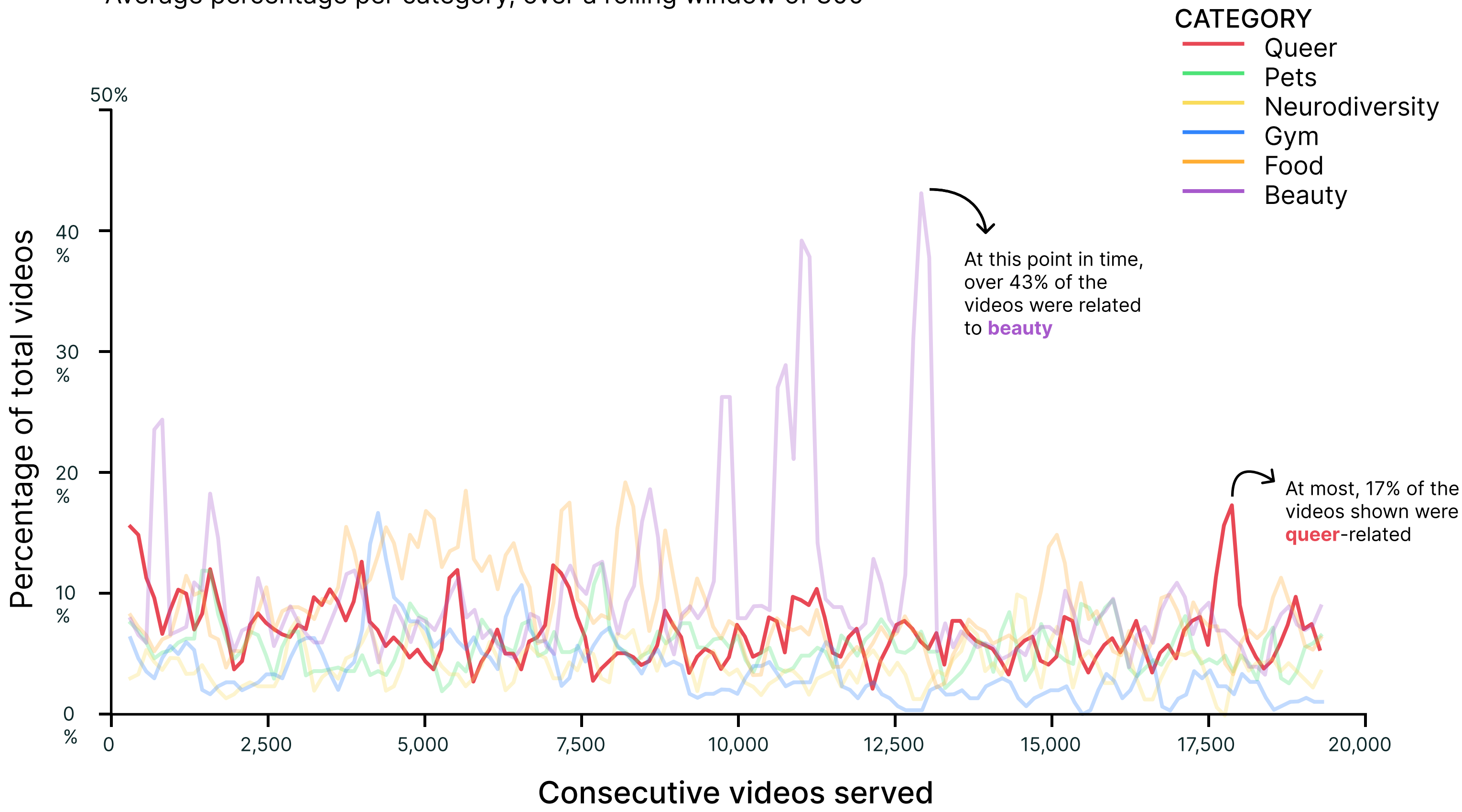

participant 1 · participant 2 · participant 3

Recommended accounts viewed / Year (2017, 2018, 2019, 2020, October)

FIG 6.

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

DATA DONOR 1 · DATA DONOR 2 · DATA DONOR 3

LIVE YOUR STORY — Queer Theatre