Finding Content Rabbit-holes on TikTok vs YT-Shorts

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Project Statement

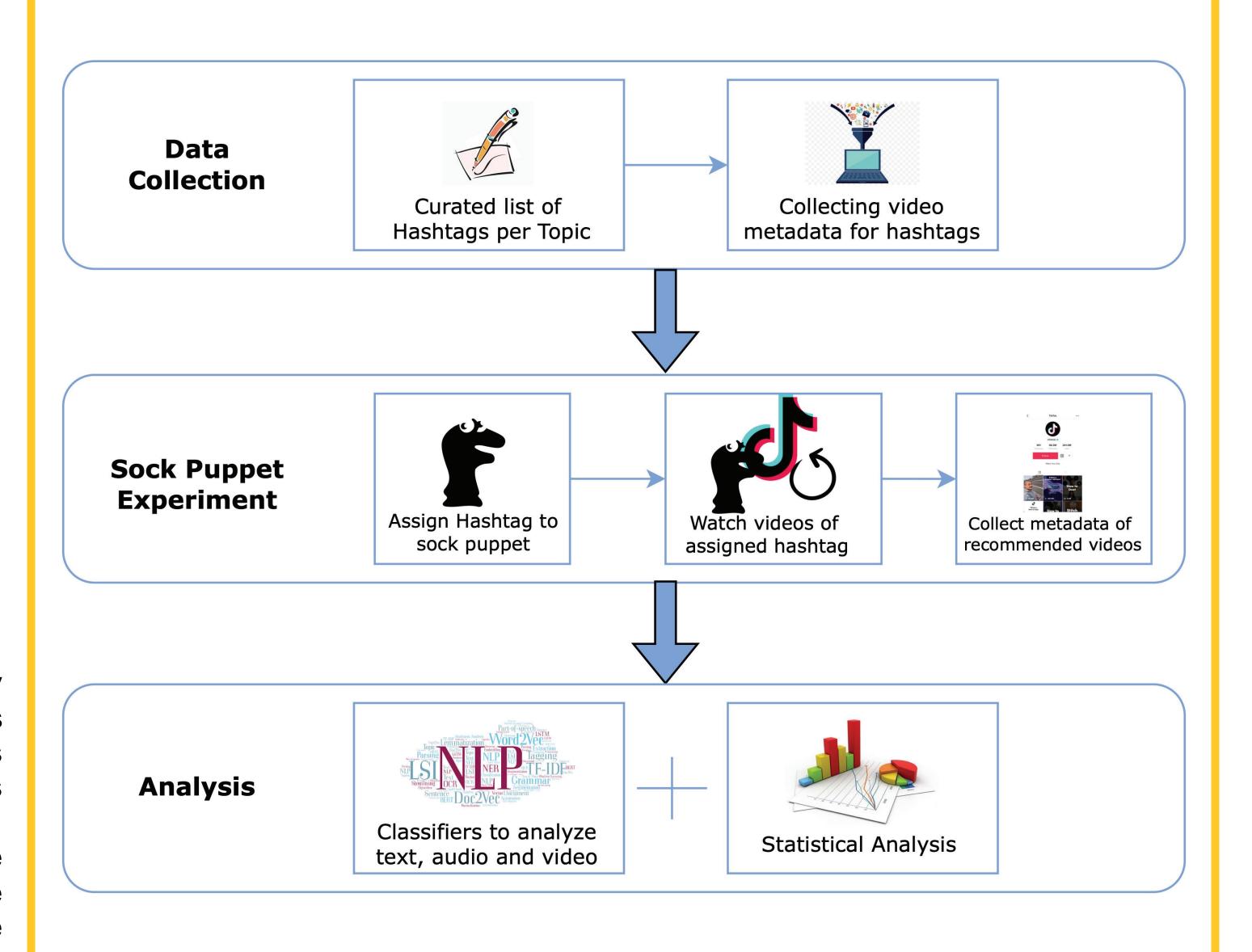
- In the recent couple of years short-video platforms like TikTok have taken the internet by storm.
- Research indicates that around 90-95% of TikTok views come from recommendation algorithm as opposed to users searching for the videos.
- As a response, traditional social media giants like YouTube, Facebook and Instagram have also come out with their own brands of short videos.
- In this comparative study we want to investigate how quickly and aggressively TikTok's algorithm sends users into content Rabbit holes as opposed to YT Shorts.
- We will focus on three different genres of content on these platforms; **Political**, **Emotional**, and **Misinformation**.

Project Goals

- Firstly, we would like to gauge how quickly TikTok is sending our automated accounts (sock-puppets) into content rabbit-holes vs YT Shorts i.e with how much watch-time is personalization happening on the platform.
- Secondly, we would like to see that after the sock-puppets have been pushed into the content rabbit-holes what percentage of the following recommended videos are of the same topic.
- Finally, we will also try to measure which topics are inter-connected on these platforms

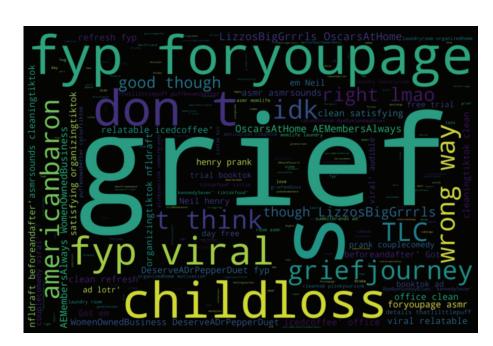
Methods

The experiments are conducted in 3 major steps: **Data Collection**, **Deploying Sock-Puppets**, and **Analysis** of results. The process is the same for both TikTok and YT-Shorts and we will analyze the three different genres separately.



Challenges & Next Steps

- A major challenge was the lack of an official TikTok API to collect data. This required searching for the hashtags indirectly.
- Currently, we have finalized the hashtags and the classifiers (for all three genres) and are collecting video metadata on the different hashtags.
- Additionally, we ran preliminary experiments to see the extent of personalization after a sock-puppet watched 20 videos of a hashtag.
 The following was the word cloud for the hashtag "Grief"



• We hope to present the results of our experiments soon.