The Impact of Filter Bubbles and Echo Chambers on Social Media Platforms

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INTRODUCTION

- Growing concern with social media's impact on human interaction
- Creation of filter "bubbles" where users only see content aligning with their existing beliefs
- Facebook = 1.3b monthly active users in September 2014
- Facebook advertising revenue = 9b in 2015
- Study examining echo chambers and what could work as solutions to polarization issues because of these social media platforms
- Vested interest in monetization through ads and keeps users engaged through social media content
- Null hypothesis: Facebook does not do any personalization of their feed to the user
  - Alternate hypothesis: FB personalizes their feed based on keywords, general activity

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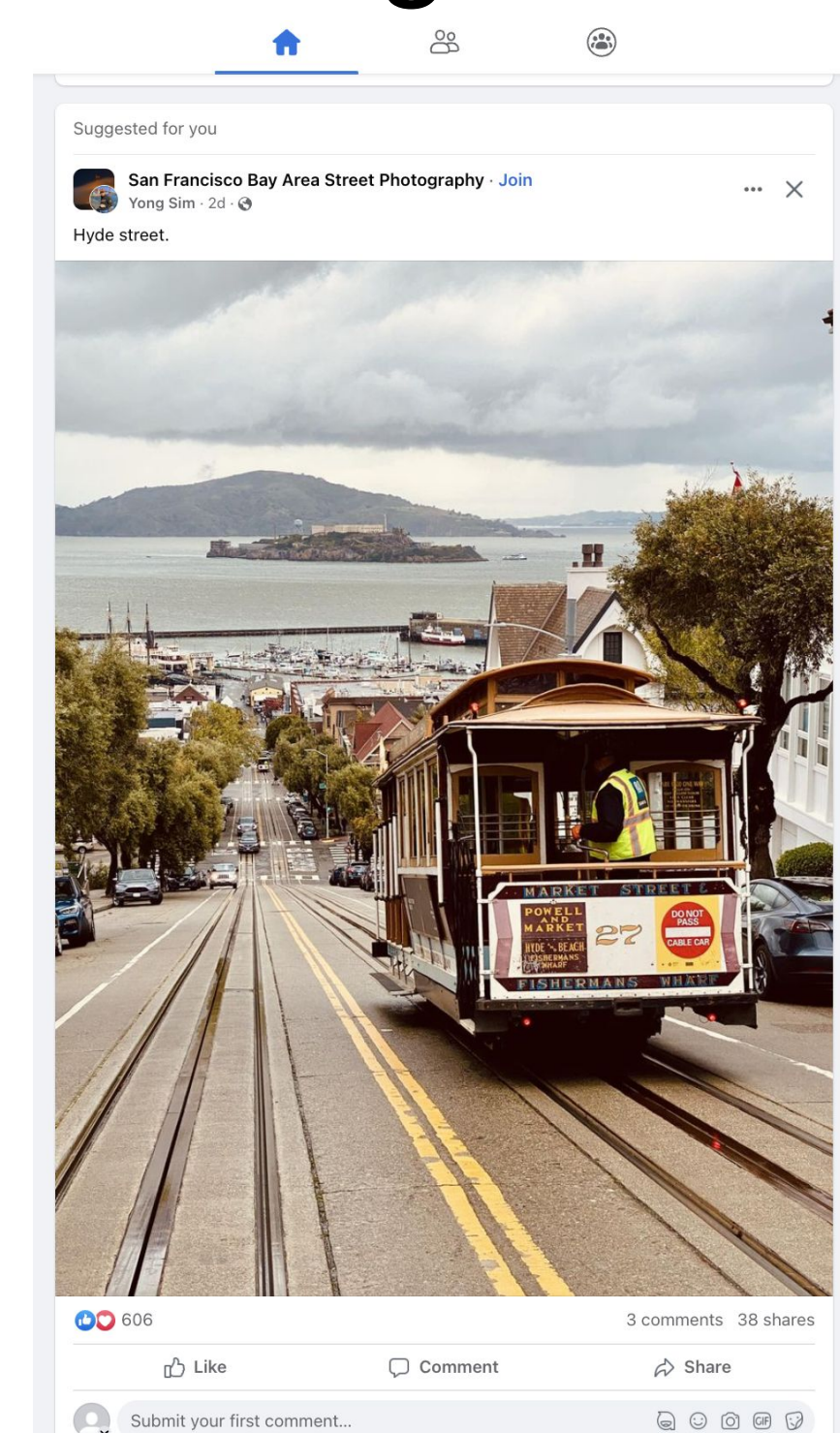
RESEARCH METHODOLOGIES

- Facebook - focus on keywords in search
- Observational study
  - Train new FB personas along opposing dimensions
    - Yankees Fan vs Red Sox Fan, Democrat vs Republican, Pro-choice vs Pro-life
    - Used 10 keywords in search; top 10 SEO keywords; total=6 profiles, 60 keywords
    - Just observed search results; no likes or other interactions with results

- Qualitative Results
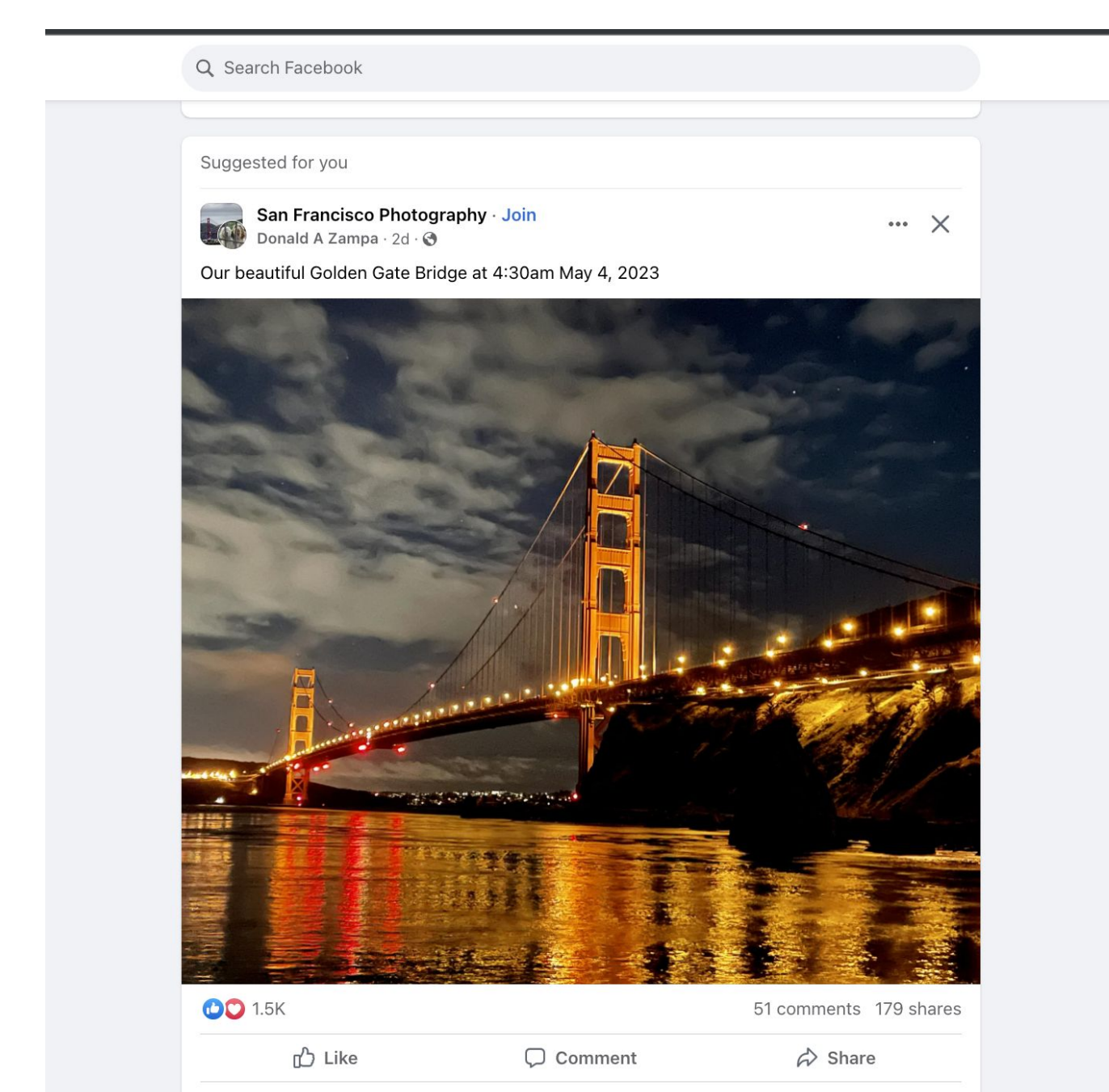 - Looked at change in feed after every keyword search

DATA AND FINDINGS

- Not enough evidence to reject Null!
- Facebook personalized based on location, NOT keywords used
- Got a lot of random posts from people in the area
  - Food, destination, sites etc.
- Went to NY during Spring Break
  - Ended up receiving a lot of data related to buildings and the skyline

Yankees

Pro-Choice

CONCLUSIONS AND ANALYSIS

- Searched keywords for personalization
- Based more off of location data not keywords
- FB most likely using social connections
- Could be using likes, more post interaction in general
- FB also has group memberships - might consider online social interaction for data

IMPLICATIONS, AND NEXT STEPS

- Focused only on keywords due to limited time; other actions on FB can be considered next
- Need to consider Facebook just using location to start off the user with location based ideas and narrowing those down from there

- Did not necessarily have enough time to test out for long term effects on feed
- Most likely would want to be more social - joining groups, liking more posts, etc. to get better results

Works Cited:
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