

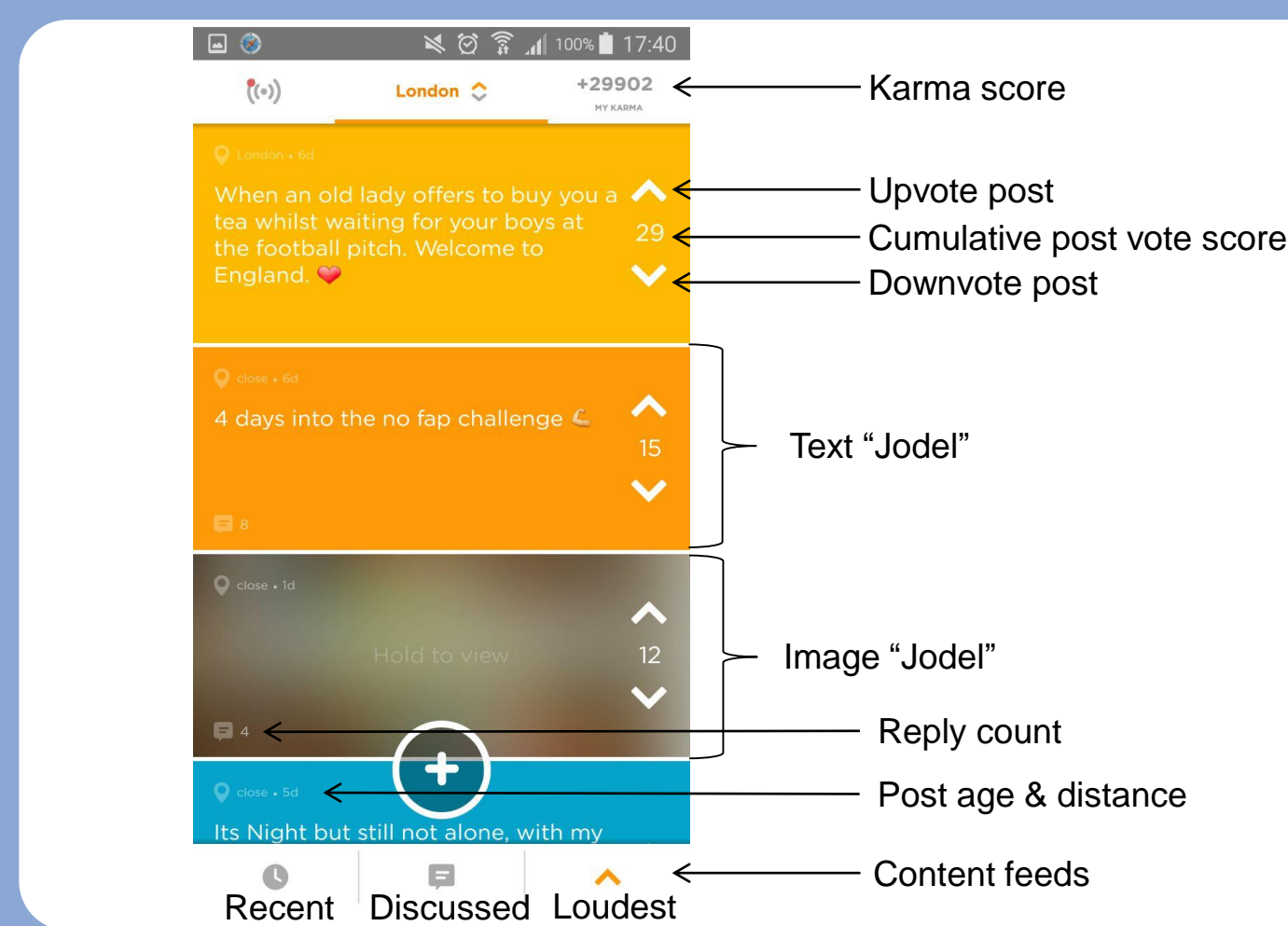
The Rise of an Anonymous Social Network

Motivation

Online Social Networks (OSNs)

- Popular Internet service and exist in different flavors
 - Infrastructure: centralized vs. decentralized / P2P
 - Geographic coverage: global, regional, location based
 - User profiles: names, pseudonyms, anonymous usage
 - ...
- Global & centralized OSN well studied
 - Example Networks: Twitter, Google+, Flickr, ...
 - Example Techniques: (Friendship-) graph analysis
- Location-based & anonymous OSNs emerging
 - Enable to post anonymous content displayed locally
 - Example: YikYak (closed in 2017), Jodel
 - Few studies only, emerging research field

The Jodel Social Network



Anonymous Social Network

- No user information displayed
 - No user handles / profiles

Location-based Social Network

- Posted content displayed within <30 km

World-Wide User Base

- Large communities: Europe, USA, Arabic countries

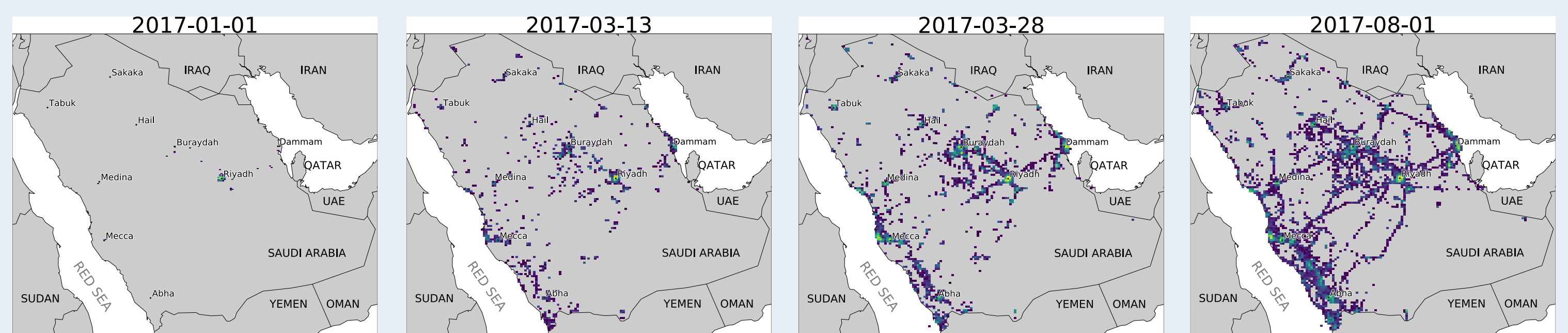
Main Features

- Users can post text & images
- Community driven moderation & filtering

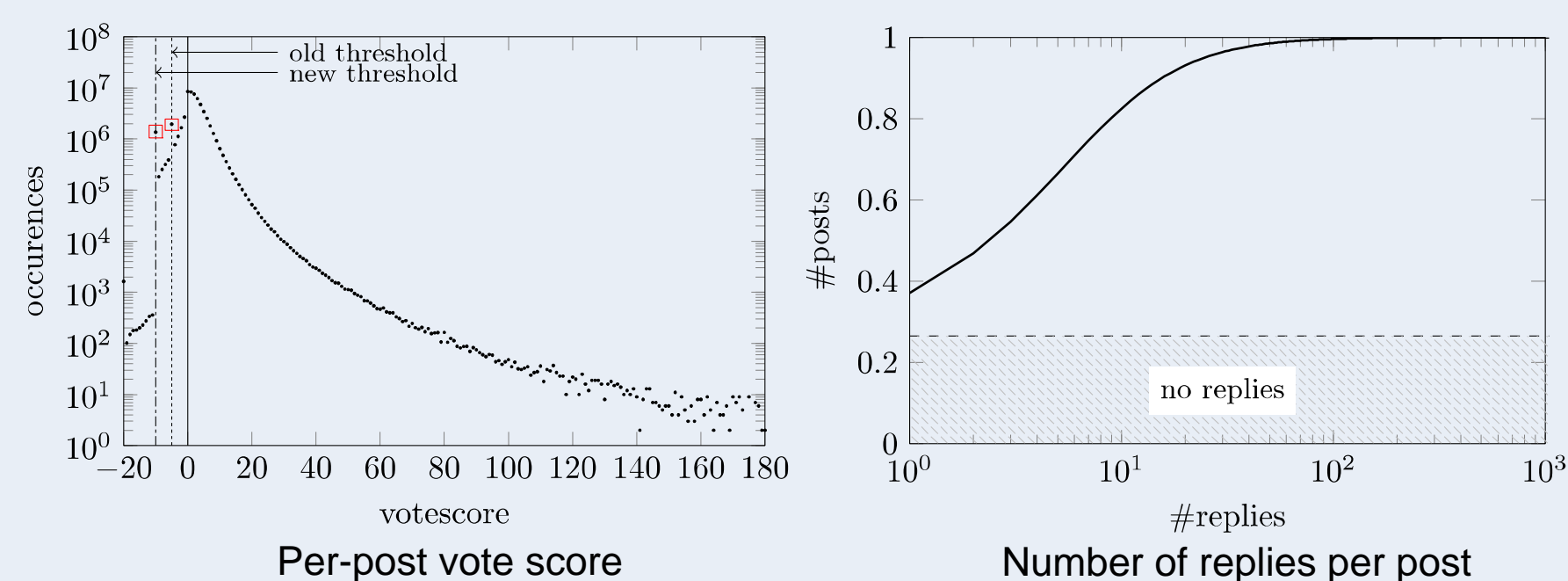
The Rise of Jodel (يودل) in Kingdom of Saudi Arabia

Tracing the Birth of a Community

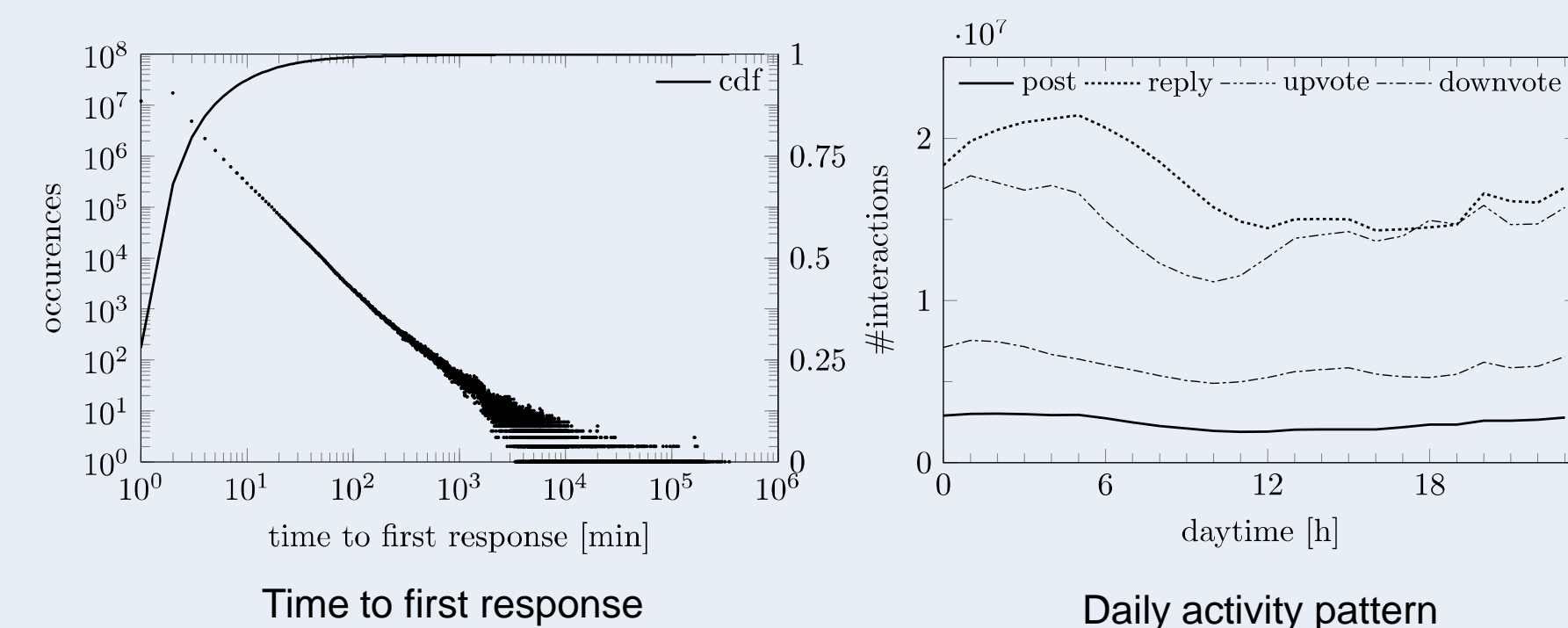
- How does a social network becomes popular in a new region?
- Insights ease network operation and management
- Example: Birth of Jodel in KSA
 - First adoption in August 2016
 - Massive user explosion in March 2017



General Network Activity



- Per-post vote scores follow a power law – high vote scores unlikely
- < 30% post have no replies (hatched area), few posts have high reply counts



- When replied, posts quickly get their first reply (typically within minutes)
- The daily activity pattern peaks at night times and remains constant over the day

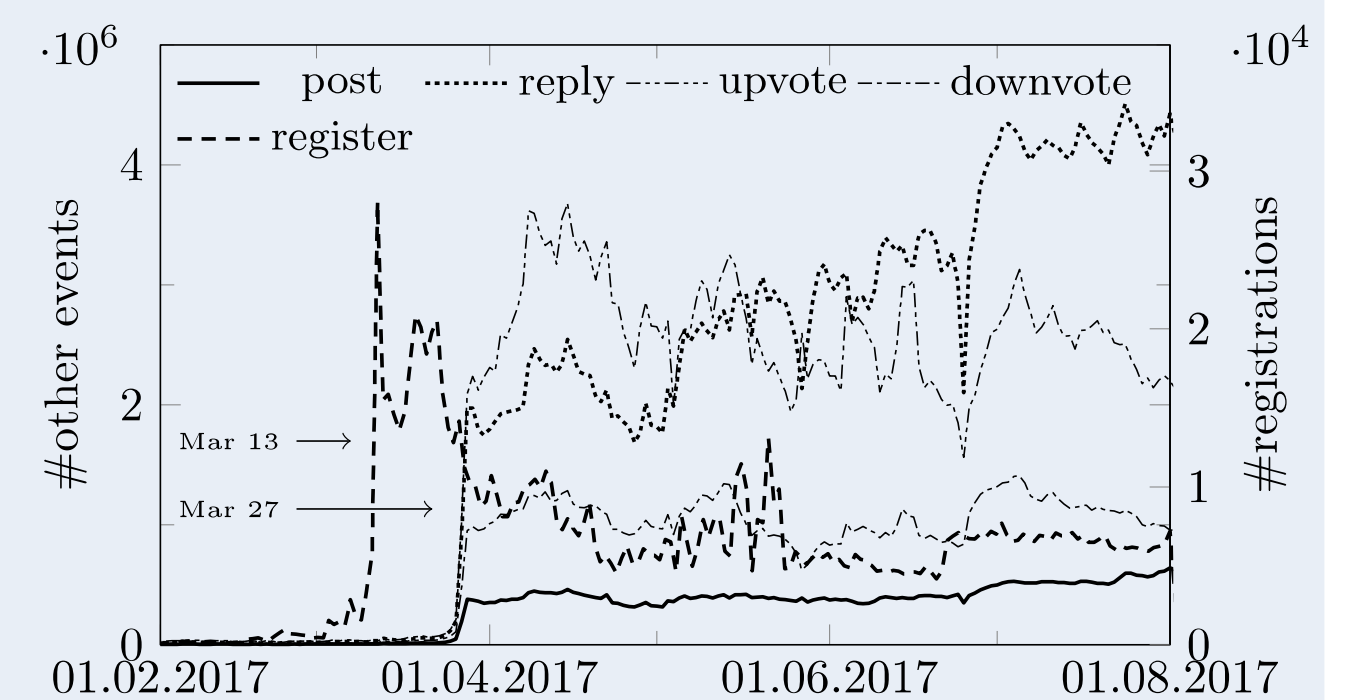
User Activity

Massive arrival of new users

- Registration peak in March
- Content creation peaks two weeks after

How do users interact with Jodel?

- Dominated by replies
- Chat oriented interaction

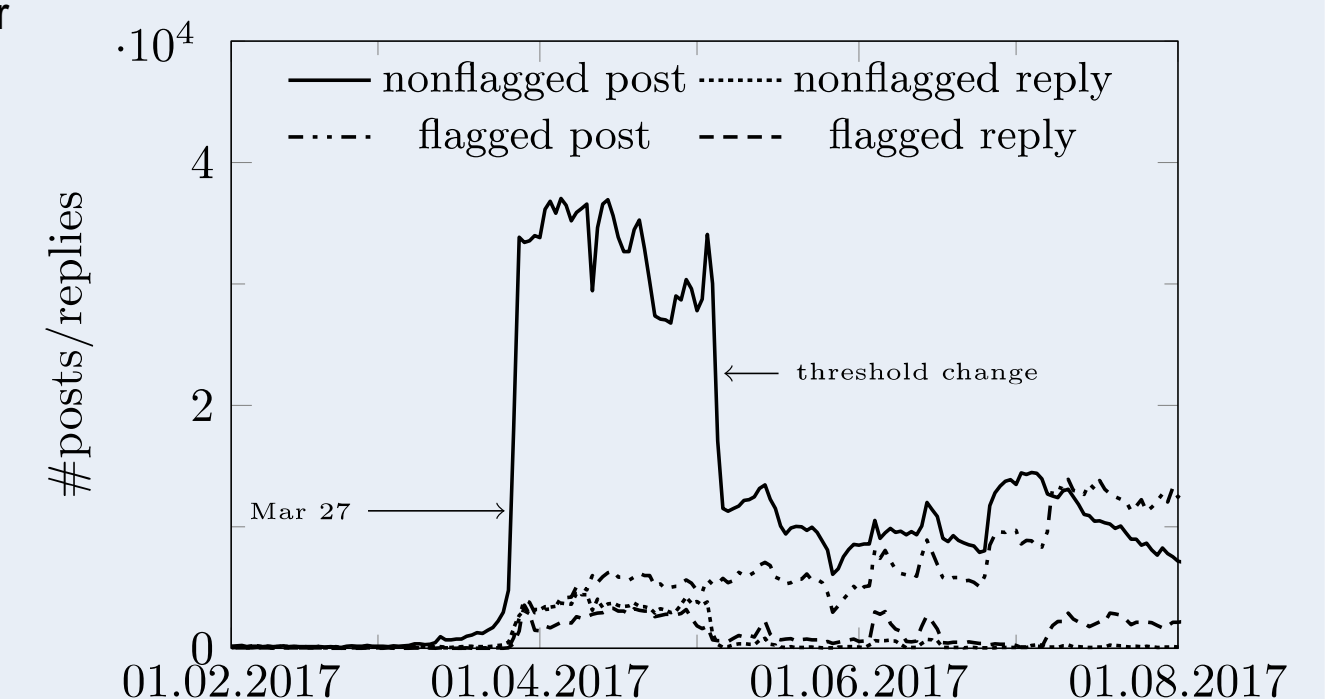


Community-Driven Content Filtering & Moderation

- Moderation is a success factor
 - Filter abusive content

Community-driven scheme to operate at scale:

- Users can vote content
 - Removed from feed when exceeding threshold
- Users can flat content
 - Handled by community moderators
- 50% flagged posts get blocked by moderators



Future Work

Summary

- Anonymous social networks are a new type of OSN
 - Offer potential for different user interactions
 - Less studied, motivating further research
- The birth of Jodel in the Kingdom of Saudi Arabia
 - Example of a rapid and massive community formation
 - Highly active and chat oriented community

Future Work

- Content classification
 - Posted / deleted / flagged content
- Statistical user models
 - Motives to join / leave the network
- Comparison to other countries

Acknowledgements

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