

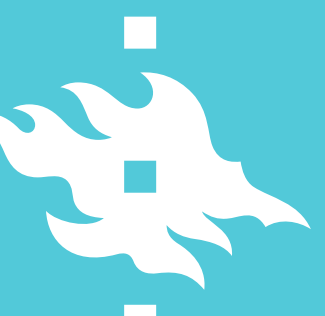
Did the Russian invasion of Ukraine depolarize political discussions on Finnish social media?

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HELSINGIN YLIOPISTO

Data: Finnish tweets containing keywords related to NATO, from Feb 10 2022 to Mar 30 2022.

Method: Community detection (Leiden algorithm¹) + network structure analysis + tweet content analysis.

TOPIC: NATO MEMBERSHIP

"We don't want nuclear weapons, we want peace"
"NATO has been involved in violation of human rights"

- ### THREE BUBBLES
- Pro-NATO
 - Left-wing anti-NATO
 - ▲ Conspiracy anti-NATO

"NATO equals supporting globalism, which is set out to destroy the Finnish nation"
"Those who support the poisonous vaccines are the ones who want to join NATO"

Retweet Networks

#nodes:
● 3035
■ 273
▲ 528

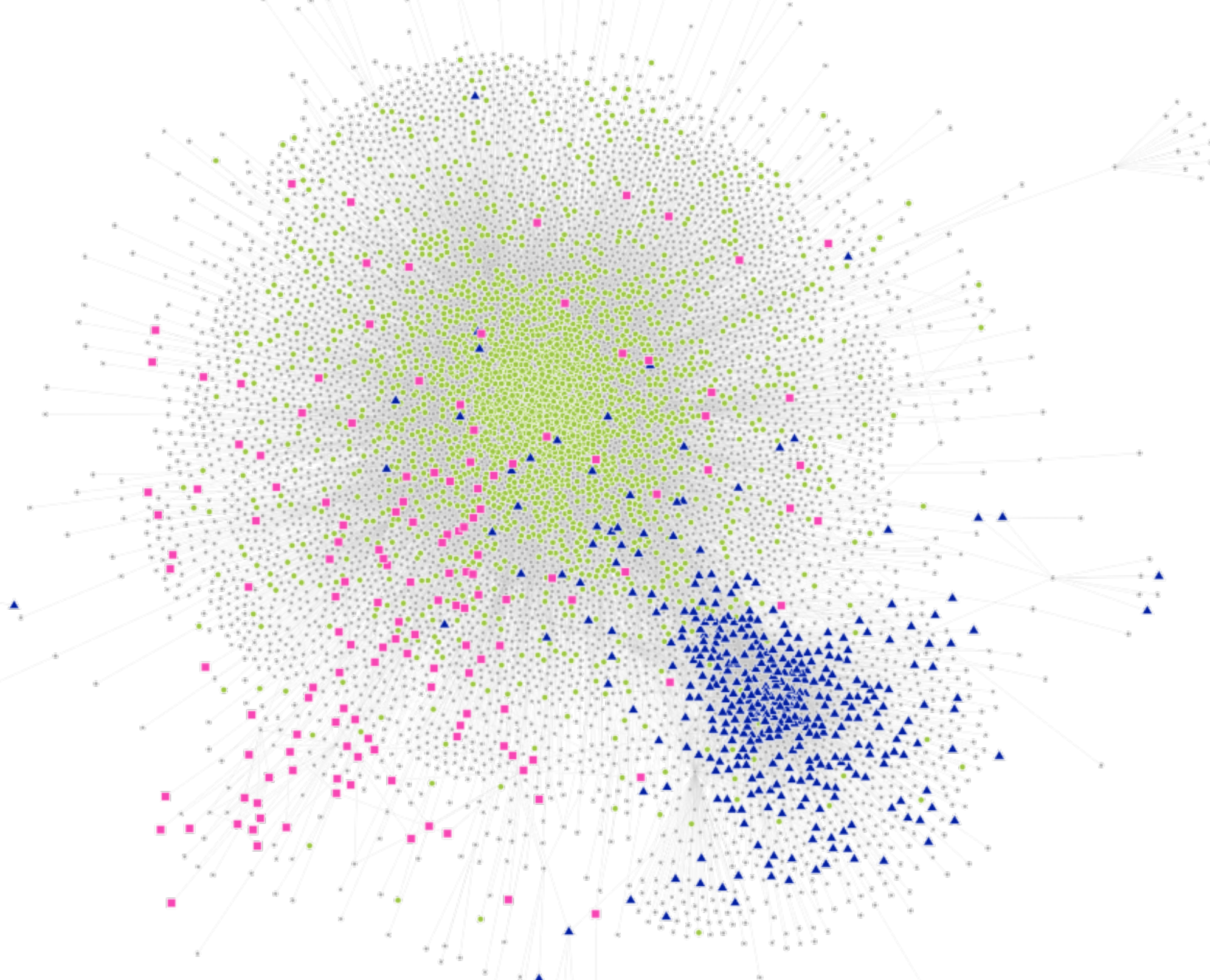
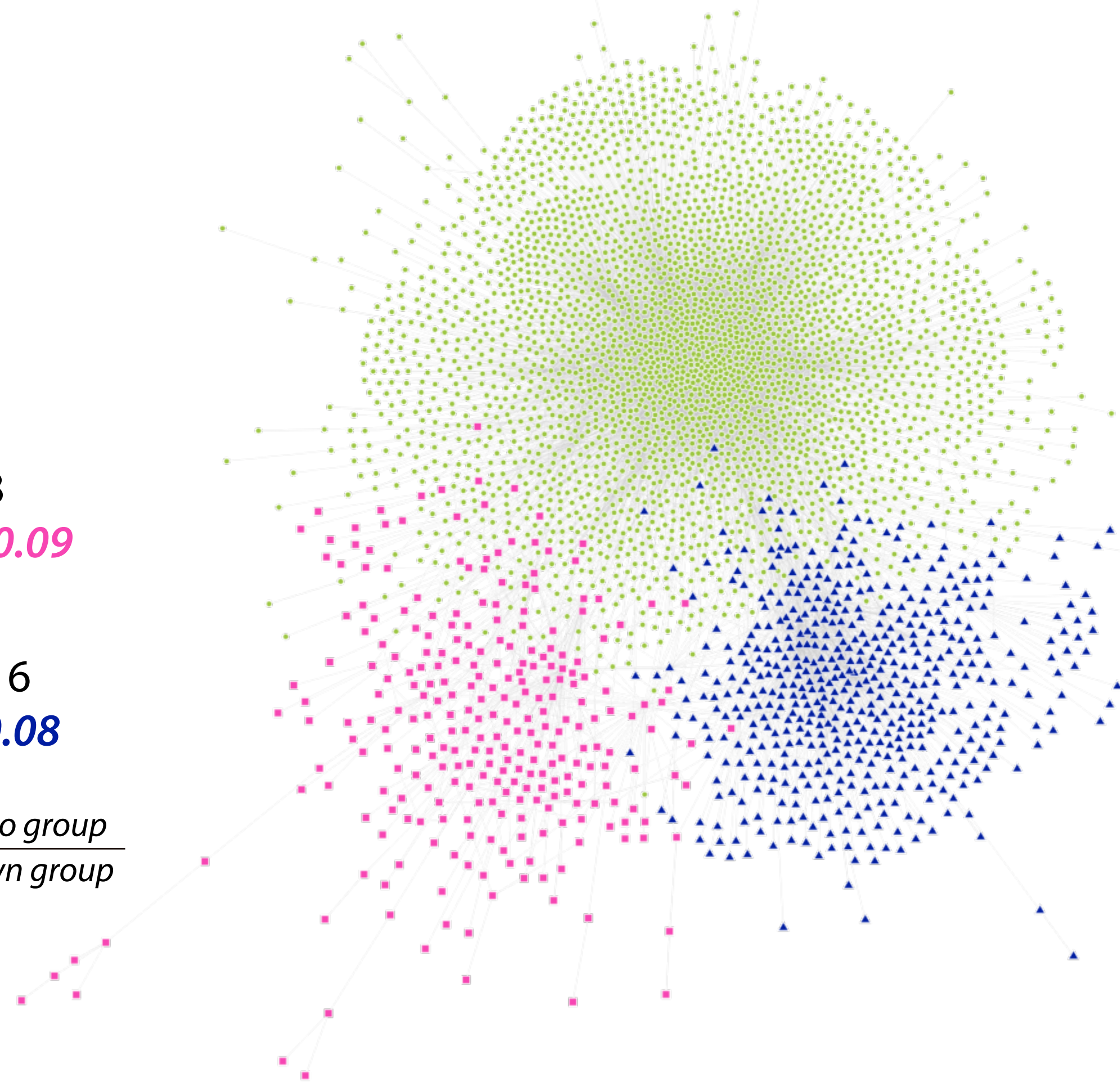
#RTs:
■→● 41
■→■ 468
E/I ratio* = 0.09

▲→● 96
▲→▲ 1216
E/I ratio = 0.08

$$* E/I \text{ ratio} = \frac{\# \text{retweets of pro group}}{\# \text{retweets of own group}}$$

Before invasion
Feb 10 - Feb 23

Right after invasion
Feb 24 - Mar 2



#nodes:
● 2189
■ 148
▲ 388

#RTs:
■→● 166
■→■ 193
E/I ratio = 0.86

▲→● 389
▲→▲ 1946
E/I ratio = 0.20

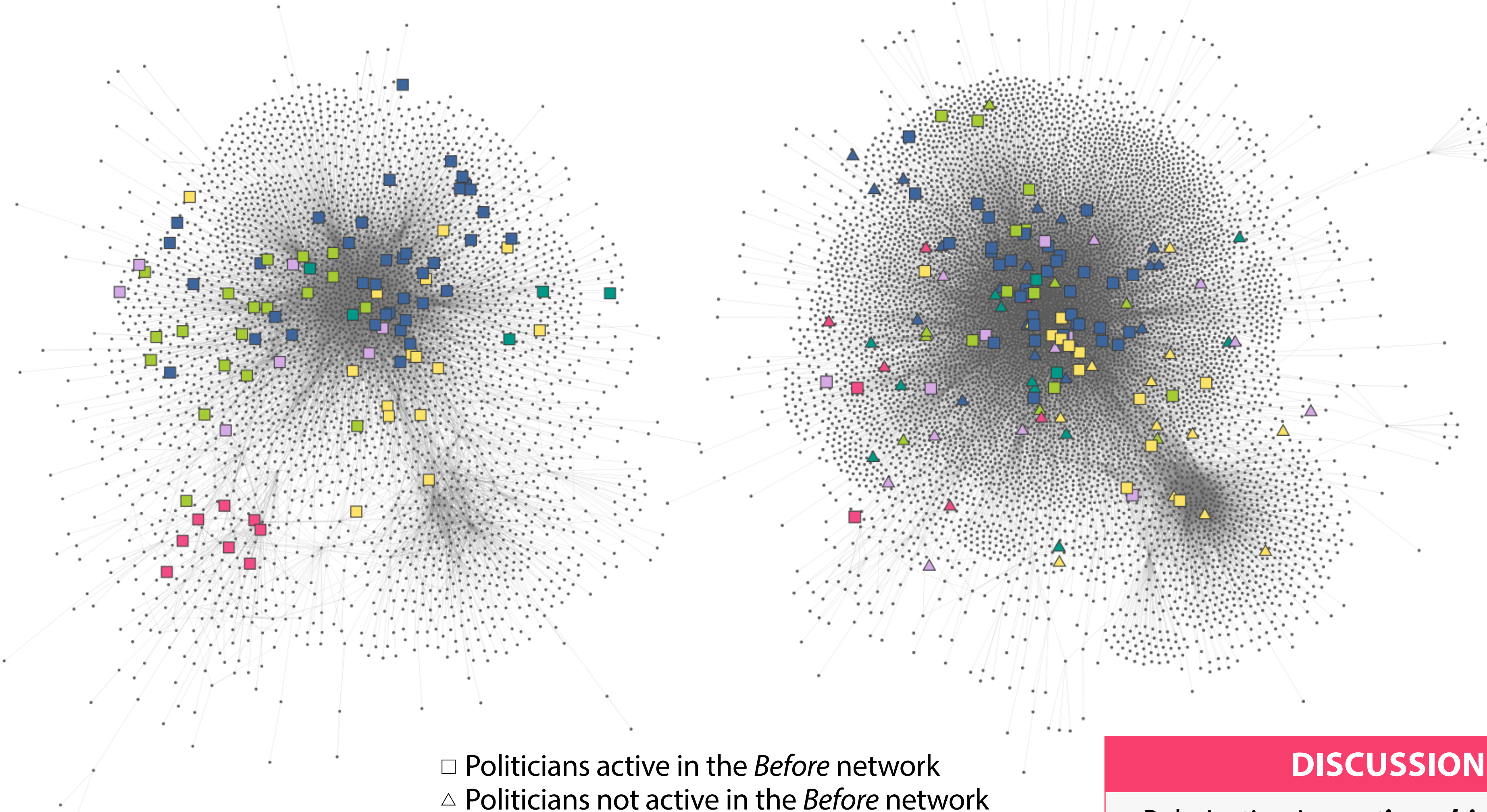
CHANGE IN NETWORK STRUCTURE

- **Left-wing anti group:** Less internally connected, more connected to the pro group.
- ▲ **Conspiracy anti group:** Mostly remained a separate bubble.

Politician Accounts

- Pro-NATO
- Coalition
 - Green
 - Finns
 - Centre
 - SDP
 - Left
- Anti-NATO

Average candidate attitude toward NATO in 2019 poll

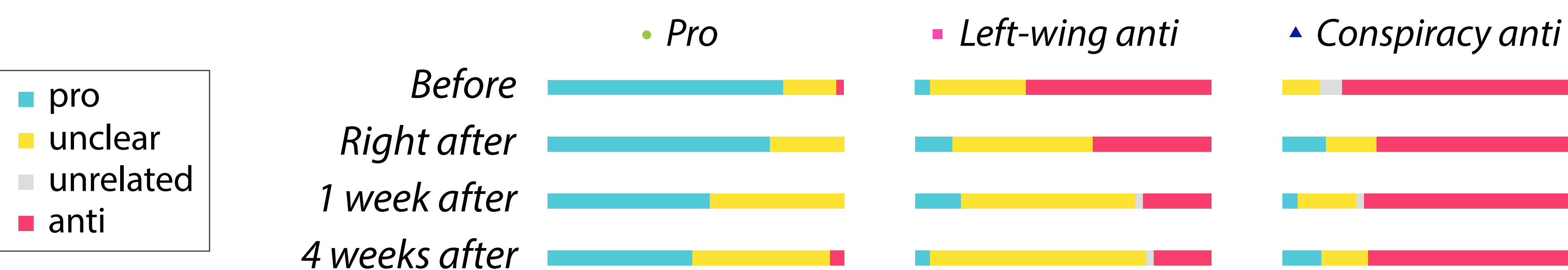


DISCUSSION & CONCLUSIONS

- Polarization in **partisanship-divided issues** can be weakened overnight by an external threat.
- Polarization led by **conspiracy theory and disinformation consumers** might be extremely entrenched.

Tweet Stance Distribution

(of 42 sampled tweets per bubble per time period, manually labeled)

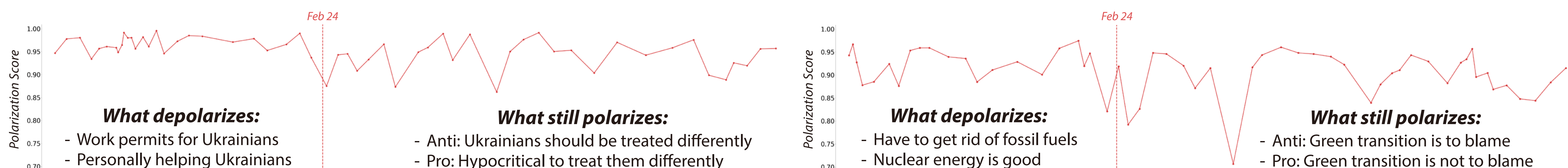


CHANGE IN DISCUSSION CLIMATE

- **Left-wing anti group:** Shared with the pro group a critical attitude toward the invasion; Moved from explicitly voicing anti-NATO stances to asking for more discussion on NATO.
- ▲ **Conspiracy anti group:** Consistently anti-NATO.

Data: Finnish tweets containing keywords related to immigration or climate change, from Jan 1 2021 to Oct 30 2022.

Method: For each topic, 1) identify a pro group and an anti group by clustering retweet networks from Jan 2021 to Sept 2021, 2) construct the weekly retweet networks among these users from Oct 2021 to Oct 2022, and 3) plot the polarization score (negative Krackhardt E-I index²) of each weekly network.



What depolarizes:

- Work permits for Ukrainians
- Personally helping Ukrainians

What still polarizes:

- Anti: Ukrainians should be treated differently
- Pro: Hypocritical to treat them differently

What depolarizes:

- Have to get rid of fossil fuels
- Nuclear energy is good

What still polarizes:

- Anti: Green transition is to blame
- Pro: Green transition is not to blame

TOPIC: IMMIGRATION

DISCUSSION & CONCLUSIONS

- The invasion induced **more fluctuation in the level of polarization** in retweet networks.
- Pro and anti groups find **common ground**.
- But they interpret it based on **motivated reasoning**.

TOPIC: CLIMATE, ENERGY

References

1. Traag VA, Waltman L and Van Eck NJ (2019) From louvain to leiden: guaranteeing well-connected communities. *Scientific reports* 9(1): 1–12.
2. Krackhardt D and Stern RN (1988) Informal networks and organizational crises: An experimental simulation. *Social Psychology Quarterly* 51(2): 123–140.

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