

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

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## Extended Abstract

It is often thought, yet rarely observed, that an external threat increases the internal cohesion of a nation [1], and thus decreases polarization. We examine this proposition by analyzing political discussion dynamics on Finnish social media following the Russian invasion of Ukraine in February 2022.

In Finland, public opinion on joining NATO had long been polarized along the left-right partisan axis, but the invasion led to a rapid convergence of the opinion, and eventually led the country to apply for NATO membership. We investigate how this depolarization took place on Finnish Twitter, where the politically active and partisan segment of the population is likely to be present [2]. We collected Finnish tweets from Dec 30, 2021 to Mar 30, 2022 that contain any NATO-related keyword. We mainly examined four time periods: *before* (Feb 10 to Feb 23), *right-after* (Feb 24 to Mar 2), *1-week-after* (Mar 3 to Mar 9), and *4-weeks-after* (Mar 24 to Mar 30). For each period, we constructed a retweet network of users, where a directed link connects user *A* to user *B* if *A* retweeted *B* within the period.

Using a graph partitioning algorithm [3], we find three clusters of users in the network (Fig. 1A). By coding the stances of a sample of tweets spreading in each user group, we find one of the groups to be pro-NATO and the other two to be anti-NATO (Fig. 1F-H). A qualitative reading of the sampled tweets suggests that one of the anti-NATO groups based their arguments on traditional leftists' concerns, such as pacifism and feminism not being compatible with joining a military alliance, and NATO having been involved in violation of human rights. The other anti-NATO group showed a clear engagement in conspiracy theories and disinformation in framing their opposition to NATO. For example, they claimed "NATO equals supporting 'globalism', the global elite, and the World Economic Forum, all of which are supposed co-conspirators that are set out to destroy the Finnish nation", and that "those who want people to inject themselves with 'poisonous vaccines' are the ones who want to join NATO".

After the invasion, members of the left anti group became much less connected internally and more connected to the pro-NATO side, while most members of the conspiracy anti group largely remained in their own internally connected bubble (Fig. 1C). This observation is validated by the number of external retweets of the pro group, the number of internal retweets, and the external-internal (E/I) ratio in each anti group. The partisanship plots (Fig. 1B and Fig. 1D) confirm that the invasion bridged the communication divide between politicians of the Left Alliance (the traditionally most anti-NATO party) and those of the other parties.

Our reading of the sampled tweets suggests that the left anti group shared with the pro group a critical attitude toward Russia's invasion of Ukraine, which potentially connected them in the retweet network. After the invasion, many people in the left anti group also moved away from explicitly voicing anti-NATO stances to asking for more discussion on NATO, in addition to arguing that NATO opponents should not be ostracized. Although this implies that they did not shift their opinion completely toward the other end, the change in their expression opened up a possibility for their interaction with the pro group, as some NATO supporters also

agreed that an open discussion involving both sides is necessary. Meanwhile, members of the other anti group consistently built explicitly anti-NATO arguments upon conspiracy theories and disinformation, and was not changed much by the invasion.

In contrast to existing evidence that suggests the resilience of partisanship-based polarization [5], our analysis of the Finnish NATO discussion shows that polarization in partisanship-divided issues can be weakened overnight by an external threat. Instead, we find that polarization led by groups built around conspiracy theories and disinformation may persist even in the face of a strong external threat and bridged partisan divides.

The topic of NATO membership, however, is one that is closely linked to the external threat, and thus constitutes a relatively easy test for the external threat hypothesis. Therefore, we inspect whether the depolarization effect of the invasion extends beyond the NATO discussion to two other topics that were traditionally polarized in Finland: immigration and climate change.

We collected all Finnish tweets from Jan 1, 2021 to Oct 30, 2022 that contain any keyword related to immigration or climate change. For each topic, we labeled the stance of each user to be pro or anti by clustering retweet networks from the reference period (Jan 2021 to Sept 2021), and then examined how the level of polarization in the weekly retweet network evolves throughout the observation period (Oct 2021 to Oct 2022). For each week in the observation period, we then read through the most within-group retweeted and most cross-group retweeted tweets, to gain an understanding of the polarizing and depolarizing content within the period.

We find that the invasion introduced a higher level of fluctuation into the polarization scores of the weekly retweet networks. Our tweet reading reveals that within the topic of immigration, tweets with regard to helping Ukrainians (e.g., work permits for Ukrainians, examples of personally helping Ukrainians) were shared across both pro and anti groups. However, there is also a clear sign of motivated reasoning from both sides, as the anti-immigration group insisted that Ukrainian immigrants should be treated differently, while the pro-immigration group found the differentiated treatment hypocritical. As for the topic of climate change, both sides agreed on the necessity of getting rid of fossil fuels and the advantage of nuclear energy. However, a similar line of motivated reasoning also exists in that the anti group contended that the green transition is to blame for the energy crisis, while the pro group argued that it is not. The evidence regarding the depolarizing effect of the external threat is thus mixed: pro and anti groups find common ground, but the way they interpret this common ground is heavily influenced by motivated reasoning. This finding implies that the effect of an external threat on political polarization – at least on social media – is likely to be limited.

Overall, our analyses provide an overview of how the Russian invasion of Ukraine changed the political discussion dynamics on Finnish Twitter, and shed light on how external threats may or may not pave a way toward conversation and consensus between polarized actors.

## References

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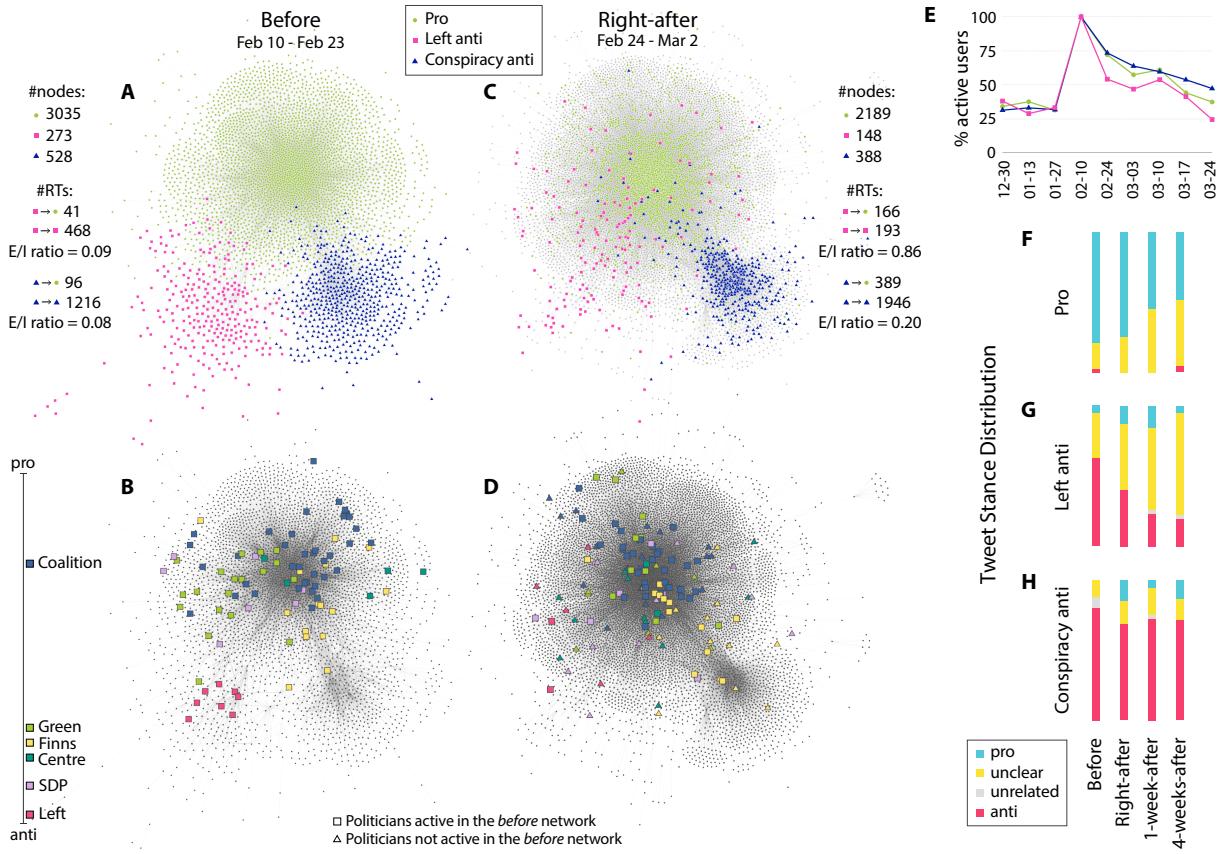


Figure 1: Retweet networks and tweet stance distributions showing how the Russian invasion of Ukraine connected the left anti group to the pro group, while the conspiracy anti group persisted. Retweet networks (A)-(B) before and (C)-(D) right after the invasion of Ukraine. Node colors in (A) and (C) correspond to the three groups detected in the *before* network, and the statistics beside each network show the number of nodes, external retweets of the pro group, internal retweets, and the E/I ratio in each anti group. Node colors in (B) and (D) denote the party affiliation of politicians. Parties in the legend are positioned based on the mean of their candidates' attitude toward NATO in 2019, according to an election poll conducted by the Finnish Broadcasting Company (Yle). (E) Change in percentage of active users in each group. Change in distribution of stances on joining NATO among sampled tweets in the (F) pro, (G) left anti, and (H) conspiracy anti group.