How the Russian invasion of Ukraine depolarized the Finnish NATO discussion

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Abstract

The Russian invasion of Ukraine in February 2022 dramatically reshaped the European and global security landscape. In Finland, the invasion rapidly overturned the long-held policy of military non-alignment and led the country to apply for NATO membership, as a result of the largely converged public opinion on NATO that used to be polarized along the left-right axis. We investigate how this change took place among polarized actors on Finnish social media, and how the NATO discussion was depolarized by the external threat posed by Russia. By analyzing Twitter retweeting patterns, we find three well-separated user groups before the invasion: a pro-NATO, a left-wing anti-NATO, and a conspiracy-charged anti-NATO group. Soon after the invasion, members of the left-wing anti-NATO group broke out of their retweeting bubble and established connections to the pro-NATO group despite their difference in partisanship, while the conspiracy-charged anti-NATO group mostly remained a separate cluster. Our content analysis reveals that the left-wing anti-NATO group and the pro-NATO group were likely bridged by a shared condemnation of Russia’s actions and shared democratic norms. Meanwhile, members of the other anti-NATO group, who built arguments mainly upon conspiracy theories, disinformation, and Russian war propaganda, consistently demonstrated a clear anti-NATO attitude and retained strong within-group cohesion. Our findings show that a dramatic external threat can bridge partisan divides in issues linked to the threat, while groups upheld by conspiracy theories and disinformation more likely persist.

Introduction

Despite a period of momentum building, the Russian invasion of Ukraine on Feb 24, 2022 came as a shock to most observers. The shock was most acute in Ukraine but was indirectly felt also in countries bordering Russia. Finland, the militarily non-aligned European country that shares a 1344-kilometer border with Russia, witnessed a sharp shift in its public opinion on NATO membership, based on a reappraisal of the external threat posed by Russia. Traditionally, around 20–30 percent of the Finnish population have been in favor of joining NATO. After the invasion, support for joining NATO soared into as high as 70–80 percent. Behind this major change in opinion, the rising external threat seems to have a depolarizing effect on the Finnish NATO discussion. For long, Finnish opinions on NATO embodied a polarization that is largely partisanship-based: voters of the main right-wing party (National Coalition) were largely in favor of joining, and voters of left-wing parties had been the most vocal opponents of NATO. After the invasion, however, many left-wing supporters changed their opinion, and eventually the Finnish parliament almost unanimously voted in favor of joining NATO (188 for, 8 against).

Social media opens a window into how this dramatic change emerged among people who are more vocal in their political stances (Bail 2021), and who often play an important role in steering the discussion (Matsubayashi 2013). The digital traces of user interactions make it possible to measure structural polarization by constructing endorsement networks of individuals and observing cohesive groups in them (Garimella et al. 2018; Salloum, Chen and Kivelä 2022). Further, network analysis can reveal the structure of these user groups and track how they change over time (Chen et al. 2021), providing insight into the information spreading and user interaction dynamics that drive opinion (de)polarization.
We analyze the Finnish NATO discussion on Twitter, where the more politically active and partisan segment of the population is likely to be present (Ruoho and Kuisipalo 2019; Bail 2021). Specifically, we employ network analysis methods to inspect how the Russian invasion of Ukraine changed the polarization landscape of the Finnish NATO discussion online. While previous empirical research has found limited evidence that external threats decrease partisan polarization (Myrick 2021), our study echoes the long-held theory that external conflicts increase internal cohesion (Coser 1956) by showing how a dramatic external threat brings partisan actors together. However, we find that those engaged in conspiracy theories and disinformation are likely more persistent in their communication patterns and stances.

Results

We collected Finnish tweets from Dec 30, 2021 to Mar 30, 2022 that contain any NATO-related keyword (see Appendix). 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.

We focus our analysis on users who were active in the before network in order to track stance changes induced by the invasion. Using a graph partitioning algorithm (Traag, Waltman and Van Eck 2019), 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 (see Materials and Methods), 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”.

Our user partisanship analysis further enriches the profile of each group. Specifically, we plot a list of Finnish politician accounts in the before network, colored by their publicly available party affiliation (Fig. 1B). Quite surprisingly, we find that politicians of most parties, including many that traditionally took a neutral or an anti-NATO stance, already fell on the pro-NATO side in the before network; presumably, this results from the buildup to the war since the end of 2021. However, politicians affiliated with the Left Alliance – the traditionally most anti-NATO party – still fell exclusively in the left anti group. Meanwhile, the conspiracy anti group seems to accommodate few politicians, which suggests its relatively fringe position in political communication.

Plotting the pro, left anti, and conspiracy anti users in the retweet networks after the invasion, we observe a significant change in the network structure. In the right-after network, 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 confirmed by the number of external retweets of the pro group, the number of internal retweets, and the external-internal (E/I) ratio (Krackhardt and Stern 1988) in each anti group: although the E/I ratio of the conspiracy anti group also more than doubled in the first week after the invasion, the E/I ratio of the left anti group had an almost tenfold increase in the same period.

This change in retweet network structure reflects a breakage of the cohesive cluster formed by the left anti users, as they instantly developed connection and alignment with the pro group after the invasion. The partisanship plot after the invasion (Fig. 1D) confirms that the invasion bridged the communication divide between politicians of the Left Alliance and those of the other parties. By contrast, the sustained bubble structure of the conspiracy anti group suggests that the invasion did not change its communication dynamics as much.

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.

1 This structural change in the retweet network also remains in the 1-week-after and 4-weeks-after periods.
How the Russian invasion of Ukraine depolarized the Finnish NATO discussion

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. Many were also repeating messages of the official Russian propaganda, and some of them, as well-known figures in the Finnish disinformation and conspiracy theory scene, have been interviewed on Russian state TV as supposed experts. Thus, this conspiracy-charged and pro-Russia group presumably did not find much common ground with the pro group, and was not changed much by the invasion.

The stance distribution of the sampled tweets confirms that the conspiracy anti group held a consistently strong anti-NATO attitude even after the invasion (Fig. 1H). Meanwhile, the left anti group saw a notable decrease in the expression of anti-NATO attitude after the invasion (Fig. 1G), yet it also did not turn clearly pro-NATO. This change potentially reflects some extent of self-censorship in this group: while many users might have retained an anti-NATO leaning, they avoided stating anti-NATO stances explicitly after becoming a minority in the discussion.
Our user activity analysis reveals another possible form of self-censorship in the left anti group. Before the invasion, the two anti-NATO groups had a comparable percentage of active users in each retweet network (Fig. 1E); yet after the invasion, the percentage was consistently lower in the left anti group. The partisanship plot (Fig. 1D) also shows that only two of the eight Left Alliance politicians in the before network were still present in the right-after network. Coupled with the change in retweeting dynamics, the decreased user activity in the left anti group hints at a spiral of silence (Noelle-Neumann 1974) among a part of the left anti users, who likely chose to not share their opinions in response to the shifted discussion climate.

Discussion

Our analyses provide an overview of how the Russian invasion of Ukraine changed the polarization dynamics of the Finnish NATO discussion on Twitter: the left-wing anti-NATO users broke out of their retweeting bubble and connected with the traditionally right-wing pro-NATO group based on established common ground, but the conspiracy-charged anti-NATO group mostly remained a densely connected cluster of its own and persisted in holding an anti-NATO attitude.

Our study sheds light on how a dramatic external threat can change the discussion dynamics among polarized actors. In contrast to existing empirical evidence that suggests the resilience of partisanship-based polarization (Myrick 2021), our results show that polarization in partisanship-divided issues can be weakened overnight by a dramatic external threat, as people of opposite leanings start building connections on the basis of a shared target of criticism (Russia) and a shared understanding of democratic norms (discussion about, and even opposition of NATO are part of democracy). Although this depolarization can take the form of self-censored opposition (Brody and Shapiro 1989) and the actual opinion change might be limited, it still creates an opportunity for information exposure and conversation between the different parties, which can serve as a first step toward actual ideological depolarization (Mutz 2002).

Our results also suggest that people who engage in conspiracy theories and disinformation can be very persistent in their attitudes, and more likely communicate within their own cluster. This echoes and strengthens the finding of previous work on how consumers of conspiracy theories tend to concentrate on within-group content and interaction (Bessi et al. 2015), and provides insight into when external threats may not pave a way toward conversation and consensus between polarized actors.

Materials and Methods

For tweet stance coding, 42 tweets were randomly sampled for each group in each period, with the sampling probability of each tweet proportional to its number of in-group retweets in the period. A group of four coders, all co-authors, labeled the stance of each tweet to be pro-NATO, anti-NATO, unclear, or unrelated to NATO. The coders were split into two teams, with two coders on each team. From 504 tweets in total, 24 tweets were randomly sampled for both teams to code; for the remaining 480, one team coded half and the other team coded the remaining half. Within each team, each coder first labeled the 264 tweets independently, then the two coders discussed cases of disagreement and reached a consensus as a team. The inter-team agreement for the 24 double-coded tweets, as evaluated by Krippendorff’s alpha (Hayes and Krippendorff 2007), is 0.80.

Please refer to the Appendix for other details of our data collection, retweet network construction, tweet sampling, and tweet coding. Code and anonymized data are available at https://github.com/ECANET-research/finnish-nato.

Appendix

Data collection

Two of the authors who are experts on Finnish politics developed a list of keywords related to the Finnish NATO discussion: liittoutua, liittoutumaton, liittoutumattomana, liittoutumattomuuden, liittoutumattomuus, liittoutuminen, liittoutumisen, nato, nato-kumppani, nato-kumppanien, nato-kumppanit, nato-kumppanuus,
How the Russian invasion of Ukraine depolarized the Finnish NATO discussion

Xia et al.

nato-yhteistyö, nato-yhteistyön, nato-yhteistyössä, nato-yhteistyöitä, naton, natoon, natossa, natosta, puolustusliiton, puolustusliitto, puolustusliitosta, puolustusliittoon, sotilasliiton, sotilasliitosta, sotilasliitto, sotilasliittoon, suominaaton, natojäsenyyttä, natojäsenyyden, nato-trolli, nato-trollit, nato-trollien, nato-trollaajat, nato-trollaajien, nato-kiima, nato-kiiman, nato-kiimalijailat, nato-kiimalijoiden, natoteatteri, natoteatteria, and natoteatterista. Then, from Twitter API v2 (Twitter 2022), we collected all Finnish tweets that contain any of these keywords from Dec 30, 2021 to Mar 30, 2022. This gives us 320,407 tweet records in total. The tweet IDs are available at https://github.com/ECANET-research/finnish-nato.

Retweet network construction

We divided the timeline into two-week periods before Feb 24 and one-week periods after Feb 24, in consideration of the asymmetric activity level before and after the Russian invasion of Ukraine. For each period, we constructed a retweet network of users, where a directed link of weight \( w \) connects user A to user B if A retweeted B \( w \) times within the period. We used retweet records (not including quote retweets) for constructing the user networks, as retweet is a relatively certain indicator of endorsement-based connection (Metaxas et al. 2015). The anonymized networks are available at https://github.com/ECANET-research/finnish-nato. Following prior work (Garimella et al. 2018; Chen et al. 2021), we used only the largest connected component of each network for subsequent analysis and plotting. We also removed the self-loops in the networks.

We mainly focused our analysis on four periods: before (Feb 10 to Feb 23, 31,399 total tweets, 12,891 retweets), right-after (Feb 24 to Mar 2, 81,433 total tweets, 39,936 retweets), 1-week-after (Mar 3 to Mar 9, 49,585 total tweets, 23,365 retweets), and 4-weeks-after (Mar 24 to Mar 30, 20,792 total tweets, 9,103 retweets). The largest connected component of the retweet network contains 3,836 users and 10,774 links in the before period, 8,986 users and 32,454 links in the right-after period, 6,173 users and 19,309 links in the 1-week-after period, and 3,383 users and 7,598 links in the 4-weeks-after period.

Tweet sampling

For each group and each period, we sampled tweets from those that got retweeted at least once in the group in the period. In the before period, 1,800 tweets got retweeted at least once in the pro-NATO group, 221 tweets got retweeted at least once in the left anti-NATO group, and 416 tweets got retweeted at least once in the conspiracy anti-NATO group. The numbers are 4,188/343/1,118 in the right-after period, 2,698/257/779 in the 1-week-after period, and 1,022/88/481 in the 4-weeks-after period for respectively the pro, left anti, and conspiracy anti group. To preferentially sample tweets that were popular within the group, we set the sampling probability of each tweet proportional to its number of in-group retweets in the period.

Tweets with unclear stance

In our tweet stance coding, a tweet is labeled “unclear” if it does not explicitly express a positive or negative attitude toward NATO. Thus, the label “unclear” does not necessarily imply an ambiguous attitude toward NATO, but rather that the tweet does not clearly indicate any attitude. For example, tweets labeled “unclear” are often reactions to what was currently taking place in the Ukraine war or in the Finnish NATO policy process.

More specifically in the pro-NATO group, many tweets were labeled “pro” in the earlier periods because they were advocating for two citizen initiatives that were pro-NATO; but later on, these initiatives became irrelevant because the needed signatures (50,000 at the minimum) were collected, and the NATO policy process moved on. Thus in later periods, many clearly pro-NATO tweets disappeared from the pro-NATO group and, for example, many tweets condemning Russia’s actions in Ukraine took their place. The latter are often labeled “unclear” as they are less clearly in favor of NATO, even though such a stance might be implicit. In general, the increase of tweets with unclear stance does not suggest that the group moved toward an ambiguous stance on NATO.

Political parties in Finland

Finland has a multiparty political system with coalition governments. In our study, we focus on the six main parties in Finland, each with over 10 members in the current Finnish Parliament: the Left Alliance (Left),
the Social Democratic Party (SDP), the Green League (Green), the Centre Party (Centre), the National
Coalition Party (Coalition), and the Finns Party (Finns). The parties are ordered by political leaning from
left to right.

Presumably, the multiparty system in Finland plays a non-negligible role in shaping the polarization
dynamics we observe in the NATO discussion. Specifically, the level of polarization in the system before the
invasion might not have been as extreme as in other two-party systems, and therefore it might be easier to
depolarize from that state. Also, parties that are closer to the Left Alliance in political leaning but already
moved to the pro-NATO side before the invasion (e.g., SDP, Green, Centre) might have served as a mediator
that connects the Left Alliance to the pro-NATO group, especially considering that the Left Alliance was in
a coalition government with the Social Democratic Party, the Green League, and the Centre Party during
the time of the invasion.

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