

Information Operations Analysis of NATO Trident Juncture Exercise 2018

RESEARCH QUESTION

How can we characterize information operations surrounding NATO TRJE 2018?

CONTEXT

- ✓ The Trident Juncture Exercises are a **large-scale military event** symbolizing NATO's commitment to **international security**
- ✓ Events of such scale trigger concerns about **online disinformation**
- ✓ We aim to **empirically characterize information operations** targeting public opinions about NATO TRJE 2018
- ✓ We focus on a Twitter dataset of **236,809 tweets** collected from October 22 to November 13

TOPICS

- ✓ We optimally detected **4 topics**:
 - ❖ **NATO Trident Juncture (70%)**
- primary NATO messaging, solidarity
 - ❖ **Collision of Helge Ingstad (3%)**
- frigate crash, NATO incompetence
 - ❖ **World Politics (6%)**
- international relations, conspiracies
 - ❖ **Opportunistic Marketing (21%)**
- piggyback on NATO hashtags

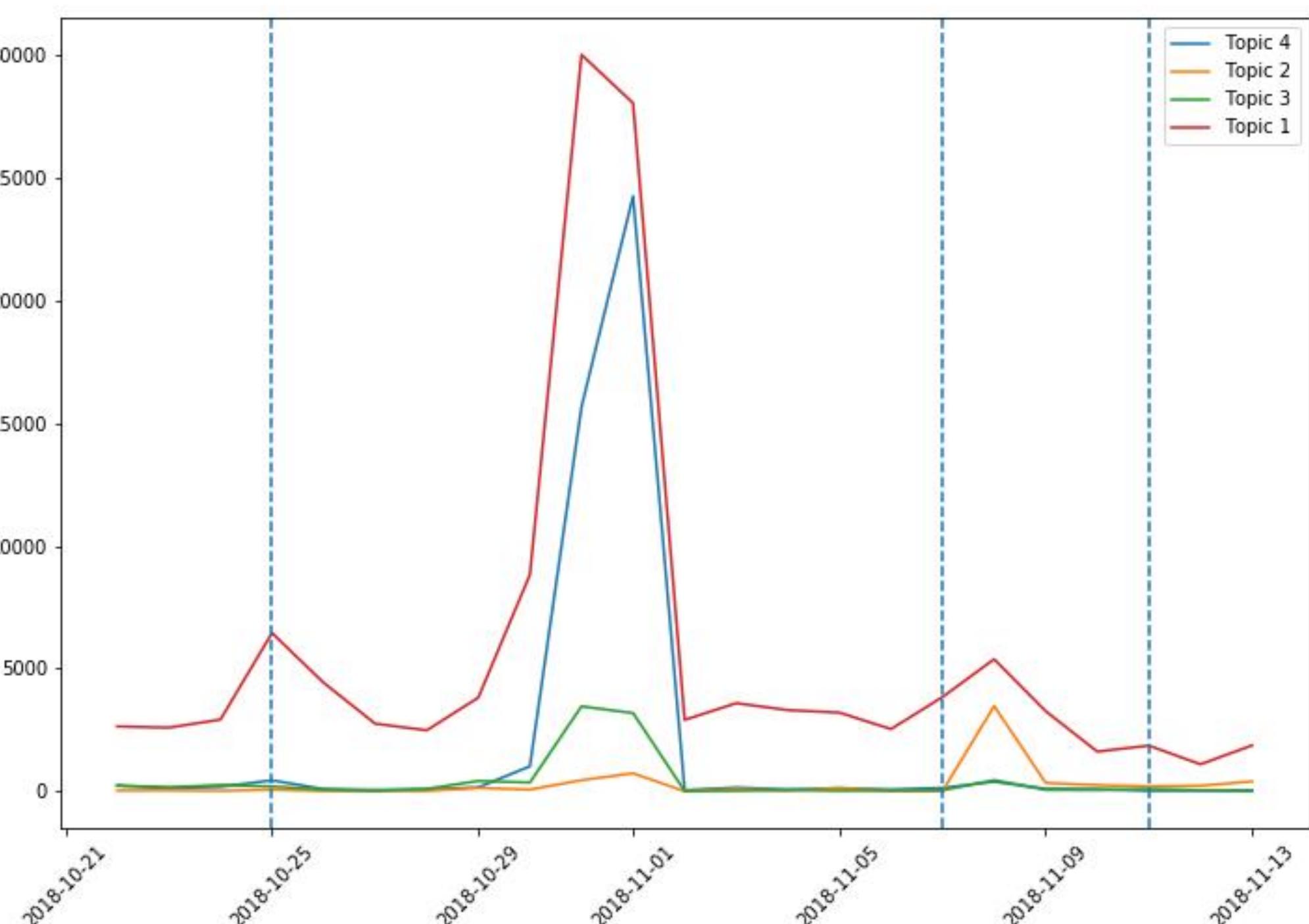


Figure 2. Diffusion of topics over time.

METHODS: AN INTEROPERABLE PIPELINE

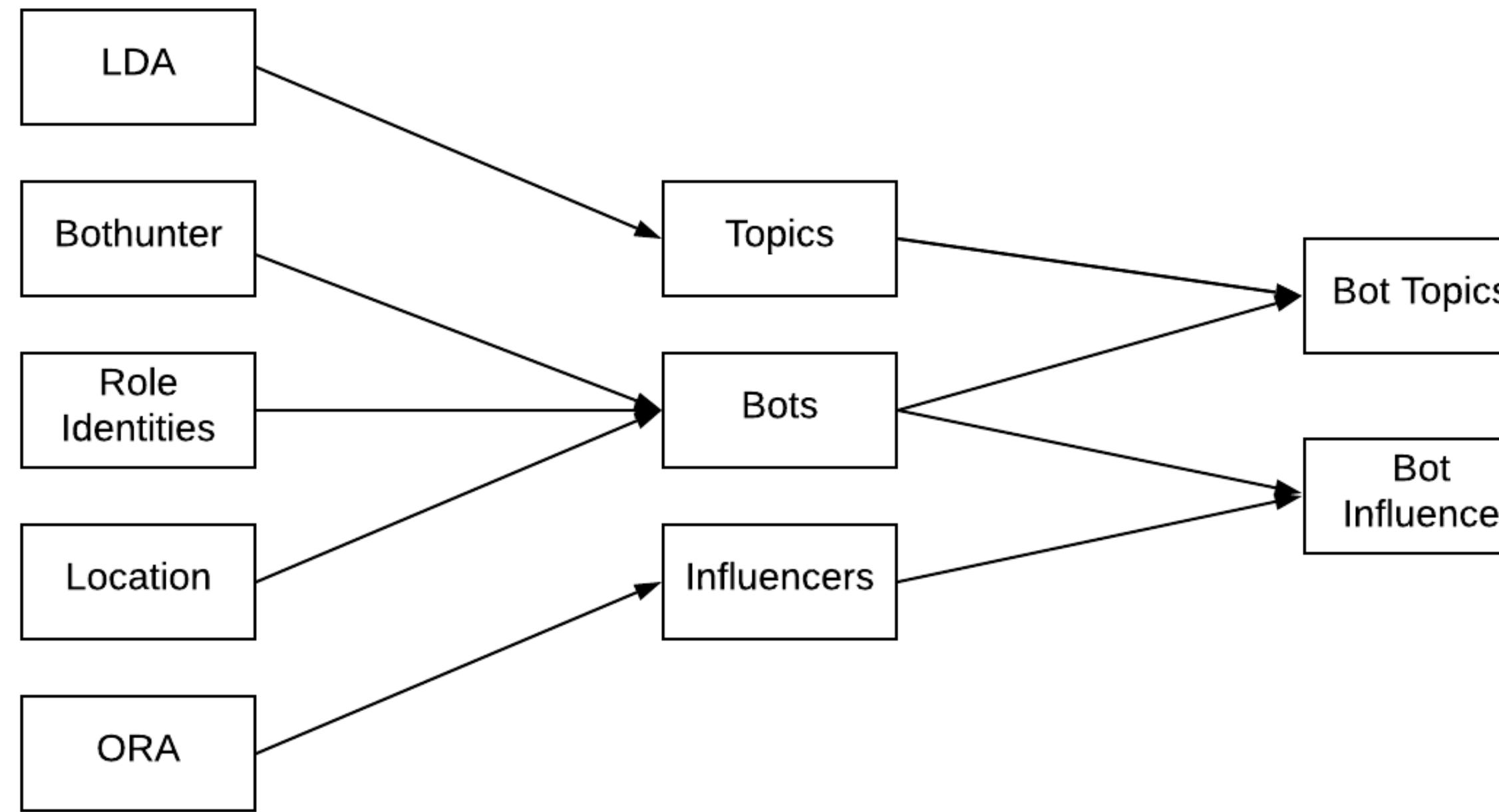


Figure 1. Interoperable pipeline.

WHO ARE THEY?

- ✓ BotHunter
- ✓ Role Identity Algorithm
- ✓ Location Prediction

WHAT ARE THEY SAYING?

- ✓ Latent Dirichlet Allocation

HOW DO THEY IMPACT THE CONVERSATION?

- ✓ ORA: Dynamic network analysis

RESULTS

BOTS

- ✓ Using a 60% threshold, we detected 24,868 unique bots (**30.49% of users** in dataset)
- ✓ By removing special actors using the role identity algorithm, **10,072 bots remain (12.35% of users in dataset)**
- ✓ Majority of bots were detected in **the US, the UK, Norway, Russia, and Spain**
- ✓ **Bots drove discussion of the collision of the Helge Ingstad (31.97%)**, but also engaged NATO (25.63%) and world politics (20.30%)

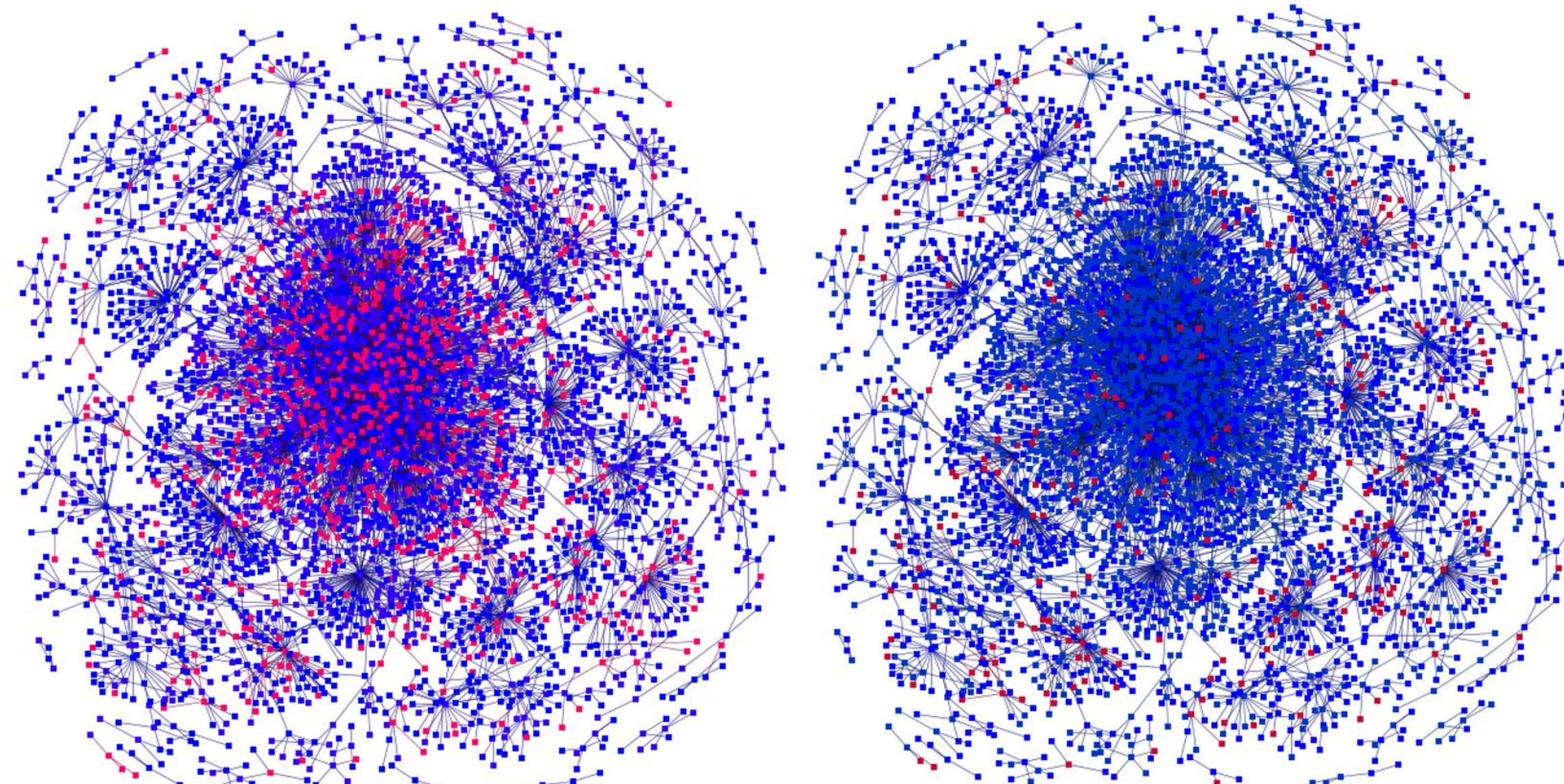


Figure 3. Estimates of bot activity.

INFLUENCERS

- ✓ We focused on the influence of Sputnik-affiliated accounts to **assess Russian activity and its success**
- ✓ Promoted anti-NATO stories about violence of NATO troops and aggravation of local conflicts
- ✓ Featured considerably larger proportion of bots than the rest of the conversation (41%)
- ✓ Little influence (max average 20 retweets), especially relative to NATO (between 6 and 300x less influence)

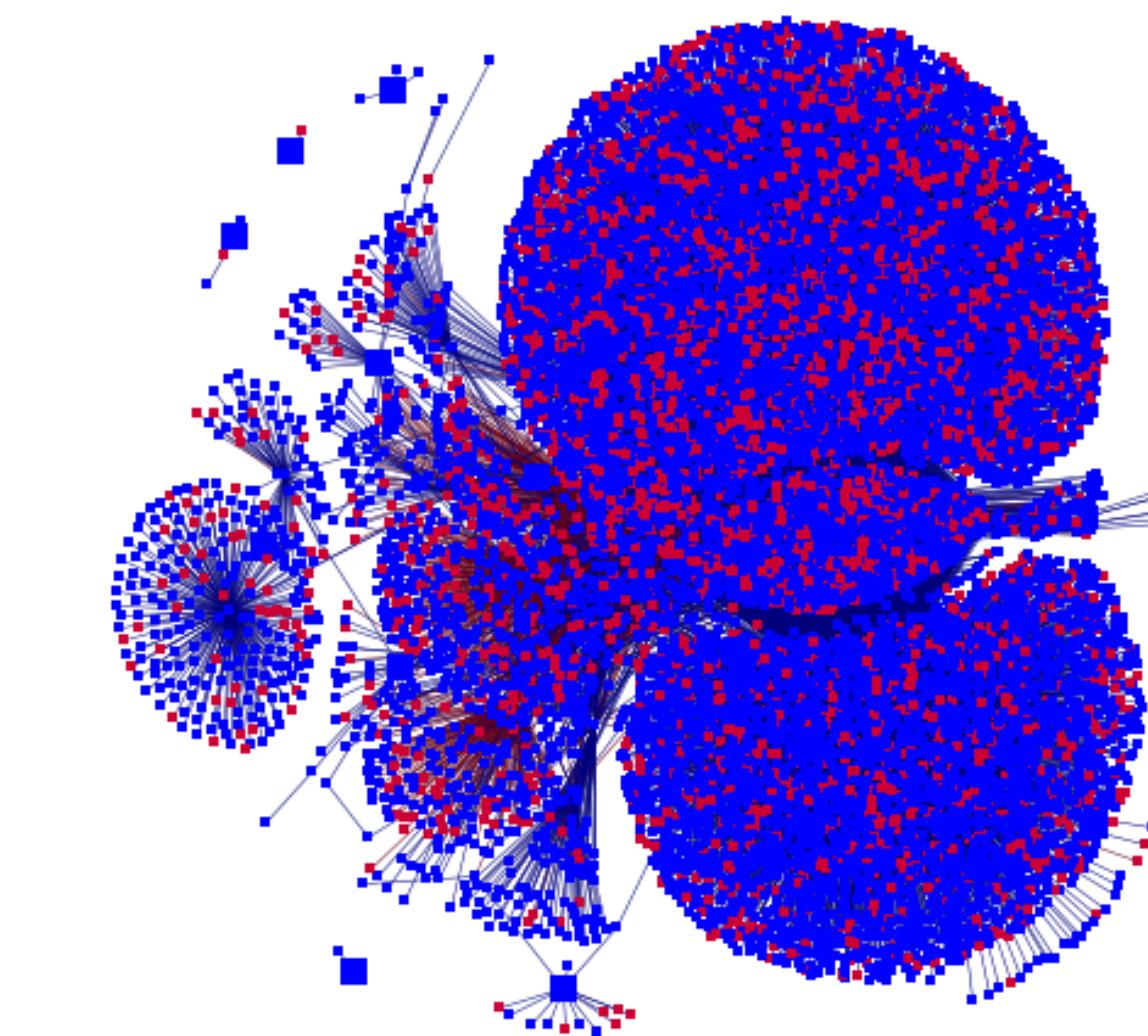


Figure 4. Sputnik subnetwork.

DISCUSSION

- ✓ Official **NATO messages dominated the Twitter conversation** surrounding the NATO TRJE 2018 in both quantity and influence
- ✓ **Russian activity was detected but its impact was not substantial**, especially in comparison to NATO messages
- ✓ Significant bot activity was detected especially **surrounding key NATO members and Russia**
- ✓ This work illustrates the **value of interoperable pipelines for triangulating insights** in examining information operations

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