SCM
Studies in Communication and Media

EXTENDED ABSTRACT

Knowledge-sociological Telegram Analysis. Introducing a network-oriented procedure for collecting and analysing social media communication

Wissenssoziologische Telegram-Analyse. Einführung eines netzwerkorientierten Verfahrens zur Erhebung und Analyse der Social-Media-Kommunikation

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EXTENDED ABSTRACT

1. Introduction

The manner in which knowledge is produced, disseminated, and contested has undergone a significant transformation with the advent of social media platforms like Telegram. In contrast to conventional platforms, Telegram facilitates decentralized and predominantly unmoderated communication, thereby fostering the emergence of alternative epistemic communities. However, existing research methods are inadequate for systematically capturing and analyzing these knowledge dynamics. Prior studies have focused on pre-selected Telegram channels (Bader et al., 2023; Müller, 2022; Schulze et al., 2022), which facilitates clear classification but overlooks Telegram's dynamic and continuously evolving network structures (Crossley, 2010; Nooraie et al., 2018). While automated data collection through web crawlers (Nobari et al., 2017) and Telegram API queries (Baumgartner et al., 2020; Urman & Katz, 2020; Zehring & Domahidi, 2023) enable large-scale data extraction, these methods are constrained by changing channel names, API restrictions, and the challenge of identifying cross-network interactions. This limited scope yields fragmented datasets that fail to accurately represent community dynamics, power structures, or the influence of discourse across the platform. Consequently, there remains a need for a comprehensive and adaptive methodology that systematically integrates network and discourse analysis while addressing Telegram's dynamic nature. To address this shortcoming, this study introduces the Knowledge-Sociological Telegram Analysis (KTA), which overcomes these limitations by combining reflexive data collection, automated content and network analysis, and hermeneutic discourse interpretation. This significant advancement in methodological approaches enables researchers to integrate organic network mapping with interpretive discourse analysis across large-scale datasets. The KTA method is characterized by its capacity to reflexively follow referral logics and network evolution, thereby capturing organic structures and enabling more representative analyses.

2. Theoretical foundations

KTA combines network theory (Jansen, 2006), the sociology of knowledge (Berger & Luckmann, 1969), and discourse analysis (Keller, 2011) to analyze the unique dynamics of Telegram. Whilst social network analysis employs interaction patterns to map network structures (Gamper, 2020), the referral logics of Telegram, driven by user forwarding rather than algorithms (Zannettou et al., 2017), necessitate a relational lens to trace content dissemination. Concurrently, Berger and Luckmann's social constructionism provides the theoretical framework for our analysis of knowledge hierarchies, while Keller's discourse analysis offers a lens to interpret how narratives attain legitimacy through network structures.

While prior research has examined Telegram networks (Bader et al., 2023; Caiani et al., 2012; Urman & Katz, 2020), the interplay between network structure and discourse formation remains under-explored. This study aims to address this gap by proposing an integrative method that combines network metrics with interpretative discourse analysis. This approach enables a comprehensive investigation of Telegram networks.

3. Methodological design

KTA is a mixed-methods approach to the systematic investigation of knowledge production and dissemination on Telegram. It is structured in three phases:

1. *Reflexive data collection:* A snowball sampling procedure is applied to expand the dataset beyond a predefined selection of channels iteratively. This method ensures that organic community interactions and dynamic referral logics are captured rather than artificially constrained. The collection of data is achieved by integrating web crawlers and Telegram's API, thus addressing challenges such as the variability of channel names and API rate limits (Baumgartner et al., 2020; Zehring & Domahidi, 2023). The method also incorporates predefined inclusion criteria (e.g., minimum forwarding frequency, linguistic markers) to filter noise while ensuring dataset relevance. Telegram's structure – comprising private chats, public channels, groups, and threaded comments – was taken into account to ensure nuanced data mapping.
2. *Automated content and network analysis:* The employment of Natural Language Processing (NLP) techniques (e.g., spaCy, NLTK) facilitates the identification of thematic clusters and the tracking of discourse intensity over time. Concurrently, network analysis applies metrics such as eigenvector centrality (to identify influential nodes) and betweenness centrality (to detect mediators in the network) (Gamper, 2020; Jansen, 2006). Community detection algorithms (e.g., the Louvain method) reveal distinct discourse clusters, shedding light on ideological groupings (Burt, 2004). Thematic clustering identified six key communities, including those focused on conspiracy theories, spirituality, pandemic dissent, pro-Russian propaganda, direct democracy activism, and alternative media.
3. *Knowledge-sociological discourse analysis:* The final phase employs hermeneutic discourse analysis to contextualize findings from automated analyses. Building upon Keller's (2011) seminar work, this phase explores the construction, legitimization, and dissemination of narratives, with a particular focus on their relationship to network structures. This phase operationalizes the concept of discourse arenas, identifying key speakers and their positions within the networked knowledge environment.

4. Empirical application: Ukraine war discourse in German-speaking Telegram networks

To illustrate the utility of the KTA, the framework was applied to analyze discourse surrounding the Ukraine War within a corpus of German-speaking Telegram channels. Initially, 33 channels were selected for their well-documented political and ideological orientation. These channels then served as the basis for an iterative snowball sampling process. This process ultimately produced a dataset comprising approximately 8,000 channels, over 21 million messages, and nearly 730,000 inter-channel forwarding events.

Within this dataset, a targeted subset of channels and messages specifically addressing the Ukraine War was identified using a curated keyword list. Automated content analysis revealed that the onset of the war was accompanied by a significant surge in message volume and a corresponding increase in thematic concentration on war-related vocabulary. Network analysis revealed a fragmented structure dominated by four central nodes (likely state-backed), which accounted for 22.8% of forwards in the Ukraine War subset (659,673 messages). These nodes, identified via eigenvector centrality (measuring influence) and betweenness centrality (measuring mediation), functioned as hubs for disseminating pro-Russian narratives.

In-depth discourse analysis of a representative sample of 5,500 messages further clarified that the narratives coalesce around four main themes:

1. *Legitimization of Russian actions:* Russian forces are portrayed as "liberators," with narratives stressing precision in military operations and humanitarian efforts, including the rescue of civilians.
2. *Demonization of Ukrainian forces:* Ukrainian soldiers are frequently described in highly negative terms, with portrayals that emphasize violence and disorder.
3. *Polarized political framing:* The discourse constructs a binary opposition by portraying Western actors, especially NATO and mainstream media, as manipulative and complicit, thereby delegitimizing alternative narratives.
4. *Personification of leadership:* A strong personality cult surrounds Vladimir Putin, positioning him as a decisive and strategic leader, in sharp contrast to the delegitimized portrayal of Ukrainian leadership.

These findings indicate that the discourse on Telegram concerning the Ukraine War is not only quantitatively significant, with clear surges in activity and forwarding patterns, but also qualitatively distinct, reflecting tightly organized narrative clusters that reinforce pro-Russian viewpoints. The precise mapping of influential nodes and thematic content demonstrates the KTA framework's capacity to reveal both structural and ideological dimensions of online communication, offering empirical depth to studies of networked knowledge production.

5. Implications and future directions

The present study identifies a critical methodological gap in the existing literature, which is addressed by the KTA. In contrast to static channel analyses, the KTA's iterative sampling captures the evolving networks of Telegram, while

mixed-methods integration quantifies power dynamics. From a research perspective, this enables systematic studies of decentralized knowledge production; from a policy perspective, it identifies strategic nodes (e.g., state-linked hubs) to counter disinformation by providing a data-driven basis for regulatory decisions, content moderation strategies, and resource allocation in combating extremist influence. Theoretically, it advances understanding of how network structures mediate epistemic authority in digital publics.

Implications for future research include the potential to apply the framework in cross-platform studies, longitudinal analyses, and diverse contexts beyond the study of political extremism. For policymakers, a deeper understanding of how influential nodes shape and propagate dominant narratives could inform strategies to counteract the spread of extremist or state-influenced content. The KTA framework could be further applied to cross-linguistic studies and hybrid regimes, and the exploration of platform interconnectivity could offer new insights into digital knowledge ecologies. In conclusion, the KTA framework offers a replicable and integrative approach that enhances our understanding of how decentralized online spaces function as dynamic arenas of knowledge production and contestation.

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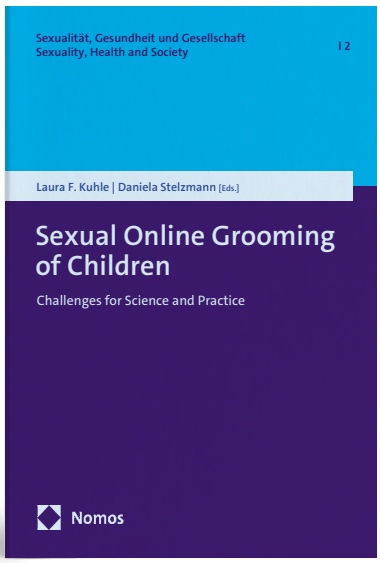
Sexual Online Grooming

Implications for Prevention and Practice



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Sexual grooming has always been an integral part of the sexual victimisation of children. Even before the advent of the Internet, it was described as a deliberate process of preparing a child for sexual abuse. With the digital age, Sexual Online Grooming (SOG) has gained increasing significance. This book provides a comprehensive analysis of the phenomenon, examines the characteristics of both affected children and offenders, and explores strategies for prevention and law enforcement. Furthermore, it discusses scientific and practical implications, offering an in-depth understanding of SOG and the challenges it presents in the digital sphere.

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