

The Dynamics of Digital Mediation: The Role of Social Media Platform Algorithms in Shaping Narratives of Peace and Political Polarization in Conflict Areas

Agus Triyono

Faculty of Computer Science, Dian Nuswantoro University, Indonesia

agustriyono7@dsn.dinus.ac.id

Abstract

This study adopts a critical perspective on the role of social media platform algorithms as the primary mediators of contemporary political communication in conflict areas in Asia. The main objective is to analyze the specific mechanisms by which algorithms (including recommendation, ranking, and ad targeting functions) contribute to the amplification of polarizing narratives and the attenuation of peacebuilding narratives. The study uses Mixed Methods by combining In-Depth Interviews (N=18 peacebuilders and technology experts) and Big Digital Data Analysis (N=254,300 posts) from three case studies in Asia: the Papua Conflict, Indonesian Election Polarization, and the Rohingya Crisis. Quantitative results show that Polarization Narratives are 4 times more likely to trigger interactions and spread 6 times faster (Viral Velocity) than Peacebuilding Narratives ($p < 0.001$). Qualitative analysis identified the existence of 'systemic algorithmic bias' driven by the logic of profit, which actively replicates ideological segregation (Modularity $Q = 0.88$). This study concludes that algorithms act as 'Structural Political Mediators' that inherently hinder digital peacebuilding efforts, demanding a shift from content moderation to socially responsible technological system design reform.

Keywords: *Algorithm, Political Polarization, Social Media, Peace Narrative, Peacebuilding, Echo Chamber, Digital Governance.*

Introduction

The contemporary world is shrouded in profound contradictions: rapid interconnectivity on the one hand, and increasing political fragmentation and ideological polarization on the other. Advances in communication technology, particularly social media platforms (e.g., X, Facebook, TikTok), have radically transformed the political and social landscape. These platforms, initially touted as tools of democracy, now face sharp criticism as the main enablers of disinformation, hate

speech, and social fragmentation (Sunstein, 2017; O'Neil, 2016). This phenomenon is particularly crucial in the context of peacebuilding and regional conflict management. In Asia, with its ethnic diversity and complex history of conflict, the digital space has become a battleground for narratives that is just as important as the physical realm. Digital communication is not neutral. It is governed by a set of invisible rules—algorithms—designed to optimize user engagement, often at the expense of social cohesion and rational deliberation (Badrinathan, 2021).

Initial literature reviews often focus on media content analysis. However, this study adopts an approach that suggests that what is more dangerous is the way content is presented and distributed. Algorithms operate based on the logic of virality and personalization, which inherently favor content that evokes strong emotions, such as anger or fear (Tufekci, 2017). In the context of conflict, content that triggers polarization and reinforces stereotypes tends to gain wider and faster reach than narratives of peace. The phenomena of 'filter bubbles' and 'echo chambers', reinforced by recommendation algorithms, limit individuals' exposure to different perspectives, creating information segregation that undermines cross-group peace efforts (Pariser, 2021; Dubois & Gadam, 2021).

Empirical data shows an alarming correlation between social media penetration and increased social/political tension. The Freedom House report (2024) notes a decline in internet freedom, highlighting the failure of platforms to moderate content that incites violence in conflict-ridden countries. Although many studies describe polarization, the research gap lies in the lack of studies in Asia that explicitly link specific algorithmic designs to measurable impacts on regional peacebuilding efforts. This study aims to fill that gap by analyzing the operational mechanisms of algorithms as 'critical mediators'. This research focuses on three case studies that underscore how algorithms influence the dynamics of Region, Politics and Peace Building in Asia.

This study adopts the Critical Realist paradigm developed by Roy Bhaskar, which views social phenomena such as polarization and conflict as shaped by underlying structures, especially digital architecture and algorithms. This perspective helps reveal hidden mechanisms behind polarization in digital spaces and challenges the assumption that technology is neutral, a critique also raised by Cathy O'Neil. The study also applies critical analysis to examine power relations embedded in technological design, an approach highlighted by Tarleton Gillespie. Methodologically, the research follows an

exploratory sequential design proposed by John W. Creswell, consisting of a qualitative phase followed by a quantitative phase.

In Phase 1, qualitative in-depth interviews with practitioners and technology experts are used to identify how algorithmic systems may limit the spread of peace-oriented narratives. The findings are then used to develop hypotheses tested in Phase 2 through large-scale digital data analysis. The study analyzes three Asian cases between 2021 and 2024—the Papua conflict, polarization in Indonesian elections, and the Rohingya crisis—using data from 18 key informants and 254,300 social media posts collected from X (Twitter), CrowdTangle for Facebook, and TikTok. Analysis combines Critical Thematic Analysis with quantitative methods such as machine learning classification using BERT and Support Vector Machine, sentiment analysis, independent t-tests, and Social Network Analysis to identify echo chambers and key actors in digital discourse.

Result and Discussion

Case 1: Land Conflict and Identity Politics in Papua, Indonesia.

Tensions in Papua are exacerbated by issues of autonomy and human rights. Here, social media (especially X and TikTok) has become the main space for the spread of counter-narratives. Algorithms tend to boost short, highly emotional videos that only show the cruelty from one side. This creates two narrative 'bubbles' that are almost completely separated between users who are pro-status quo and users who are pro-separatist/pro-welfare, making it difficult for a neutral middle narrative to emerge (Wibowo & Nugroho, 2023).



Source: <https://www.cnnindonesia.com/nasional/20200923175941-20-550076/panas-dingin-konflik-papua-di-tangan-jokowi>

The Papua dataset shows a clear separation between two main network clusters: “Pro-Welfare/Autonomy” and “Pro-Security/Status-Quo.” Social Network Analysis (SNA) reveals that influencers who promote peace narratives have very low Betweenness Centrality, meaning they rarely act as bridges connecting these opposing groups. As a result, their messages mostly circulate within their own communities and rarely reach the other side. This isolation reflects Mechanism B, where algorithmic dynamics limit communication between different clusters. In addition, content format affects amplification: on TikTok—a dominant platform in the Papua discourse—short, emotionally charged videos about violence spread faster than longer text posts on X (Twitter) or Facebook, showing how the platform’s video-first design strengthens Mechanism A.

Case 2: Post-Election Political Polarization in Indonesia

Political polarization during the election period has reached an alarming point. Algorithms have been shown to systematically intensify the formation of *die-hard* supporter bases. Content that contains demonization of political opponents and *us-versus-them* narratives is more frequently suggested to users, which deepens *affective polarization* and makes post-election reconciliation more difficult (Budiyanto et al., 2022; McLeod, 2021).



Source: https://statik.tempo.co/data/2024/02/21/id_1281687/1281687_720.jpg

Data from the Indonesian election discourse shows that narrative polarization (NP) is not only driven by differences in political issues but also by intergroup hostility, commonly referred to as affective polarization. Sentiment analysis indicates that approximately 85% of NP content carries negative

sentiment, primarily focusing on demonizing political opponents—such as accusations of corruption or lack of nationalism—rather than debating policy differences, as discussed by Edson C. Tandoc Jr. and Melvin Tan. Platform algorithms tend to prioritize such negative content because it strengthens in-group solidarity through the rejection of perceived out-groups. This dynamic is further intensified by an algorithmic priming effect, in which users repeatedly exposed to hostile narratives become more likely to seek out and engage with similar content, reinforcing a self-perpetuating cycle of negativity. Statistical correlation tests demonstrate a strong relationship ($r = 0.67$) between the dominance of NP in user feeds and the intensity of negative sentiment, indicating that algorithmic recommendation systems on platforms such as Facebook and X (Twitter) can function as amplifiers of affective polarization.

Case 3: The Rohingya Crisis and Misinformation in Myanmar/Bangladesh

The Myanmar case is often cited as a tragic example of how failures in moderation and algorithmic design contribute to physical violence. An internal report (Haugen, 2021) shows that Facebook's algorithms explicitly prioritized hate speech against the Rohingya from local extremist groups because it generated high engagement, hindering international peace interventions.



Source: <https://www.cnnindonesia.com/inspirasi/20170912080626454-241080/menyingkap-akar-konflik-rohingya>

Objectives and Significance First, to critically analyze the specific mechanisms by which algorithms contribute to the amplification of polarizing narratives and the attenuation of peacebuilding narratives in conflict-affected regions in Asia. Second, to develop a conceptual

framework linking technology (algorithms), regional politics, and social impacts to inform more ethical digital intervention policies.

The Rohingya case, which occurred mostly on Facebook (CrowdTangle data), is an extreme example of algorithmic failure. **Dominance of Hate Speech:** Analysis shows that hate speech against the Rohingya (as a sub-category of NP) has the highest Viral Velocity of all data analyzed, often reaching the viral threshold in just 30 minutes. This is consistent with internal reports stating that Facebook's algorithm finds "language that easily triggers hatred" to be the most effective content for engagement. **Local Moderation Failures:** Data shows that hate speech content in local Myanmar languages (vernacular) has a much longer life span on platforms than hate speech in English. This is a direct result of Mechanism C (resource disparity), where a lack of platform investment in moderators and ML models for minority languages creates a 'safe zone' for extremists.

From a Critical Realism perspective developed by Roy Bhaskar, this study identifies hidden structures—such as profit-driven logic and ranking design in digital platforms—as the main causes of observed polarization. The mechanisms identified in the study (Mechanisms A, B, and C) represent empirical expressions of these deeper structures. This algorithmic structure is emergent, meaning it does not necessarily result from malicious intent but rather from platforms optimizing narrow engagement metrics for profit, a dynamic also discussed by Nick Srnicek. As a result, simply changing user behavior—such as encouraging people to be more rational—will not solve the problem, because the algorithmic system will continue promoting polarizing content. Therefore, the solution must be structural, focusing on changing platform design and the metrics used by algorithms.

Algorithmic bias creates an unhealthy information environment that makes peacebuilding difficult. Peacebuilders must spend limited resources—time, money, and energy—to fight a system that often works against them. At the same time, when peace narratives spread less than extreme narratives, the public may start to believe that only radical voices are legitimate. This situation weakens trust in moderate perspectives and in the institutions that try to promote them.

Another consequence is language and regional fragmentation in digital spaces. When online communities are separated into different clusters, people no longer share the same information environment. Without a common digital public space for dialogue and fact-checking, misunderstandings increase and the risk of real-world conflict can grow.

To respond to this challenge, peacebuilding organizations need new strategies that work with the logic of digital platforms. One approach is to use emotional and engaging formats—such as short videos, music, or humor—to deliver peace messages so they can spread more easily online. Organizations can also create neutral accounts that interact with different groups to build communication bridges, and advocate for fairer advertising systems that reduce costs for non-profit peace initiatives.

Finally, digital governance in Asia should move toward stronger and more responsible regulation. Platforms should adopt socially responsible algorithms that balance engagement with the public good and encourage exposure to diverse viewpoints. Governments and independent institutions should also promote transparency in algorithm design, conduct regular algorithmic audits, and support public-interest technology initiatives. These steps can help ensure that digital platforms support dialogue and peace rather than intensifying conflict.

Conclusion

This study empirically demonstrates that social media platform algorithms are an active causal factor that reinforces social fragmentation, hinders bridging social capital, and systematically suppresses the Peacebuilding Narrative in Asia. These findings call for a paradigm shift in peacebuilding and internet governance studies. The main recommendation is for top-down intervention that demands algorithm reform, ensures ranking transparency, and provides systemic incentives for pro-peace content, in order to ensure that digital spaces become facilitators of responsible dialogue.

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