Network Analysis of Political Discourse during the Nepalese Maoist Insurgency (1996–2006)

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Abstract

This study presents a mathematical network analysis of political discourse and decision-making during the Nepalese Maoist insurgency (1996–2006). Using a curated dataset of key political actors, events, and their relationships, we construct a directed network representing agreements and disagreements among actors and concepts. For our initial dataset, we focus on the Royal Proclamation of 2002 and analyse the statements from different political figures and their implications during and following the discourse. We apply graph-theoretic measures such as centrality, modularity, and eigenvector analysis to quantify influence, detect clusters, and examine structural patterns in political interactions. Our results reveal distinct alliances and oppositions within the insurgency, highlighting the role of central actors in shaping the course of conflict and negotiation. This work demonstrates how network modeling and quantitative metrics can provide novel insights into the dynamics of political conflict, bridging historical analysis with rigorous computational and mathematical methods.

1 Introduction

The Maoist insurgency in Nepal (1996–2006) was not merely a military confrontation but also a battle of ideas, words, and narratives. The insurgents and the state alike relied on carefully constructed language to frame their positions, mobilize supporters, and delegitimize opponents. Terms like People's War, feudalism, and reactionarism were not neutral descriptors but ideological tools that structured political thought. This paper situates such linguistic choices within the broader framework of discourse analysis, showing how words created realities as much as they described them. More uniquely, mathematical approaches such as network analysis, spectral analysis, and community detection provide a systematic way to trace how concepts were linked, circulated, and re-signified across texts such as the Royal Proclamation and Maoist manifestos. The goal is not simply to map words, but to uncover the architecture of thought they produced and the communities they influenced.

To understand how language became central to the Maoist insurgency, it is necessary to situate the conflict within Nepal's longer history of political struggle. For most of its modern era, Nepal was governed under systems that concentrated power in the monarchy and limited avenues for popular participation. The codification of the Muluki Ain in 1854 served as a legal and social blueprint that reinforced hierarchical structures, embedding caste-based stratification into state practice [1]. Under the century-long Rana oligarchy (1846–1951), constitutionalism was sidelined, and the discourse of governance remained tied to hereditary rule rather than participatory politics. Attempts at reform, such as the Government of Nepal Constitution Act of 1948, were short-lived, with royal and elite interests curtailing broader democratic development [2]. These early episodes established a pattern in which appeals to national unity and tradition were often mobilized as reactionary responses to popular demands, producing what later came to be described in Maoist discourse as reactionarism.

The decades following the Rana downfall illustrated both the possibilities and limitations of Nepal's constitutional experiments. The Interim Government of Nepal Act (1951) and the Royal Constitution of 1959 created frameworks for electoral democracy, but these gains were repeatedly

undermined by royal interventions. In 1960, King Mahendra dismissed the elected government and inaugurated the Panchayat system, a **partyless democracy** in name but effectively an authoritarian order that centralized authority in the crown. The official rhetoric of the Panchayat drew heavily on the language of reactionary nationalism, portraying political pluralism as foreign, destabilizing, and contrary to Nepal's unity [3]. At the same time, the socio-economic order of the Panchayat years remained deeply feudal. Land reform was partial and uneven, rural elites retained dominance, and marginalized groups were excluded from both land ownership and political representation [4]. This intertwining of reactionary nationalism and feudal socio-economic structures created a political environment where calls for equality and justice could easily be framed as revolutionary rather than reformist.

The 1990 People's Movement temporarily transformed this trajectory. Mass mobilization, led jointly by the Nepali Congress, communist parties, and civil society, forced the monarchy to accept a constitutional settlement that legalized political parties and established a multiparty parliamentary system. Yet this democratic opening quickly revealed structural weaknesses. Successive governments were plagued by corruption, factionalism, and weak institutional capacity. Disillusionment grew as promises of equality, land reform, and inclusive governance remained unfulfilled. Pamphlets and underground writings from the early 1990s reflect a growing anger at what was termed the nonperformance of the democratic system [2]. By 1996, the Communist Party of Nepal (Maoist) capitalized on this discontent by issuing its 40-point demand, which explicitly tied Nepal's persistent inequalities to feudalism and denounced the monarchy's reliance on reactionary nationalism as a rhetorical tool for silencing dissent. The ultimatum declared that, should these demands remain unmet, the party would initiate a People's War. When negotiations failed, this language of feudal oppression and reactionary nationalism became a decade-long insurgency.

2 Methodology

The methodological approach for this study combines qualitative discourse analysis with quantitative network methods, allowing for both interpretive sensitivity to language and formal mathematical treatment of textual relationships. The process can be divided into three distinct stages: data collection, coding and preprocessing, and network construction with subsequent mathematical analysis.

2.1 Data Collection

Primary and secondary textual materials were gathered to represent key moments and ideological discourses within the Maoist insurgency in Nepal (1996–2006). These texts included political speeches, royal proclamations, party manifestos, and pamphlets, as well as relevant journalistic accounts and archival materials. A criterion-based sampling strategy was employed: texts were included if they were deemed historically crucial to the trajectory of the insurgency or particularly influential in shaping public perception. High-resolution scans were processed using Optical Character Recognition (OCR) tool to generate machine-readable text from almost all of the available Nepali text which were not digital. This ensured a consistent corpus for analysis across the sources.

2.2 Coding and Preprocessing

To identify recurring discursive themes, a structured coding protocol was developed. An instruction list was designed for coders, specifying how to recognize and label political concepts. This protocol emphasized semantic accuracy and contextual sensitivity, ensuring that coders did not isolate words mechanically but instead interpreted them in relation to their discursive function within the text. After inter-coder reliability checks, these codes were compiled to create a set of discursive entities and relationships.

2.3 Network Construction and Mathematical Analysis

Using the coded data, a network model was constructed in which nodes represent political concepts or ideological entities, and edges represent explicit or implicit associations within the text. The resulting network captures the structural interdependence of political language in the conflict. Once constructed, the network was analyzed using a combination of graph-theoretic and spectral methods:

- **Graphical Analysis:** Standard metrics such as degree centrality, betweenness centrality, and clustering coefficients were calculated to identify which concepts served as hubs or mediators within the discourse. This allowed us to distinguish dominant discursive anchors from peripheral but symbolically important terms.
- **Spectral Analysis:** Eigenvalues and eigenvectors of the adjacency and Laplacian matrices were computed to assess global connectivity, robustness, and community structure.
- **Community Detection:** The Louvain modularity algorithm was applied to detect clusters of concepts that co-occurred with high frequency. These clusters highlighted distinct ideological groupings, such as discourses of revolutionary struggle versus those of monarchical legitimacy.

3 Data Interpretation and Findings

The data gathered through OCR and curated archival sources was systematically organized into a network of key political concepts, actors, and events associated with the Maoist insurgency. Once the network was constructed according to the coder instruction list, it was analyzed using standard network science tools. This process allowed for the identification of recurring themes and relationships across texts that might otherwise remain hidden in a purely qualitative analysis. By transforming textual material into a relational structure, the project treated language as a set of interacting components rather than isolated statements. The methodological choice to use OCR

for digitization and coding for consistency was especially important given the fragmented nature of Nepal's historical records.

3.1 Preliminary Observations

The network exhibited clusters of concepts that tended to group around themes such as state authority, revolutionary ideology, and public mobilization. This reflects the tendency of political language during the insurgency to link together discourses of legitimacy, sovereignty, and struggle. Closer inspection suggests that these clusters were not random but reflected historically significant divisions in Nepal's political imagination.

Certain nodes appeared centrally positioned, suggesting that some ideas or actors consistently acted as bridges between otherwise distinct domains of political discourse. While the specific terms cannot be disclosed here, the finding aligns with the expectation that mobilizing rhetoric often relies on recurring symbolic anchors and concepts.

Spectral analysis provided structural insight into how tightly connected or fragmented the discourse was. The general pattern indicated that while the discourse network was dense in some areas, there were also identifiable fault lines where ideological or political contradictions surfaced. Dense regions of the network captured moments of discursive consensus, where ideas reinforced each other and produced a coherent ideological narrative.

Community detection (via the Louvain method) suggested the existence of sub-communities within the larger discourse, possibly corresponding to different strands of political messaging: state-oriented, insurgency-oriented, and civil society–oriented. The identification of these sub-communities highlights how the discourse, like a political campaign, might have been strategically segmented to address different audiences.

3.2 Interpretive Value

These observations suggest that the insurgency-era discourse was not monolithic but instead strategically segmented, with overlaps that enabled cross-appeal to different audiences. The use of

mathematical and graphical approaches made it possible to move beyond purely qualitative readings of texts, highlighting structural tendencies in how political language operated. The broader interpretive value lies in showing how language functioned simultaneously as a weapon and as a bridge. Through the different interpretive network ideas, we can see network fragmentations which suggests that the Maoist insurgency did not rely solely on physical violence but also on the careful construction of narratives that could rally the disenfranchised, challenge the monarchy, and appeal to international audiences. Similar ideas were franchised in the state discourse among the government and the Royal Palace. Mathematical modeling allowed these rhetorical strategies to be visualized as networks of meaning, underscoring how certain terms carried outsized weight in the struggle for legitimacy.

4 Discussion and Further Works

The approach taken in this study demonstrates how computational and network-based methods can complement traditional qualitative analysis in the study of political discourse. By transforming textual material into relational structures, the methodology allowed for systematic exploration of the relationships among key concepts, actors, and events. This process emphasizes the potential of hybrid approaches to uncover patterns in large textual datasets that might be difficult to detect through reading alone.

Political discourse during periods of conflict often exhibits strategic segmentation, with language crafted to appeal to specific audiences, mobilize support, or contest legitimacy. While the present report does not present specific findings, the methods used illustrate that network-based analysis can make such structural and relational features of discourse visible, offering a perspective that is distinct from conventional textual analysis. These methods also provide opportunities to explore how discourse might evolve over time, and how different groups might construct, contest, or reinforce key ideas. Future work could involve applying similar techniques to broader corpora, integrating temporal analysis, or combining computational approaches with sentiment or thematic

modeling to better understand how political language functions in contexts of social change.

This report provides a foundation for more detailed investigation, and several avenues for further work are apparent. Subsequent research could expand the corpus to include additional archival sources, media reports, and oral histories, allowing for a richer and more nuanced network representation. Advanced computational techniques, such as dynamic network analysis or temporal modeling, could reveal how discourse evolved over time and in response to key political events. Additionally, integrating sentiment analysis or topic modeling could help quantify the emotional and thematic weight of specific concepts, providing complementary insight alongside network metrics. By pursuing these directions, we can deepen understanding of how language shapes political mobilization and societal change, while maintaining the analytical rigor necessary for both historical and comparative studies.

Finally, the insights from this report suggest broader applicability. The network-based approach to discourse analysis could be used to study other historical or contemporary conflicts, particularly those in which symbolic and ideological battles are as consequential as physical confrontations. By identifying central concepts, clusters, and fault lines, researchers can better understand how political meaning is generated, contested, and mobilized within societies facing instability or systemic change.

5 Conclusion

This report presents a methodological framework for analyzing political discourse during the Nepalese Maoist insurgency using a combination of archival research, structured coding, and network-based computational techniques. By treating language as a relational system rather than isolated statements, the study illustrates the potential of hybrid approaches to reveal structural patterns in complex political texts. While specific results are not disclosed in this report, the methodology demonstrates how quantitative metrics can complement traditional qualitative analysis, offering new perspectives on how political concepts, actors, and events interact within discursive

networks. The work highlights the value of systematically examining political language to understand broader processes of mobilization, legitimacy, and ideological contestation. The approach is particularly well-suited for historical contexts in which power, narrative, and persuasion intersect, providing a framework that can be applied to other cases of political conflict or social change.

References

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