POL486: Networks in International Politics

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Contents

1 Introduction to Network Analysis

1.1 Olga V. Chyzh. Network analysis in international relations. In Cameron G. Thies, editor, Handbook of International Relations, pages 158–170. Edward Elgar Publishing, 2025.

1.1.1 Networks in International Relations

Core Premise: International politics is inherently networked. Actors (states, organizations, individuals) are interconnected nodes, and their relationships (alliances, trade, conflict) are ties.

Significance of Networks:

- Membership in international clubs (e.g., NATO, EU, WTO) offers security, prestige, and economic benefits.
- Exclusion can lead to insecurity and foreign policy revisionism.
- Network embeddedness affects policy options and resource access.

Historical Context: IR scholars have long recognized the networked nature of global politics, but network analysis provided the specific tools to better align theory with empirical evidence.

Critique of Traditional IR Research:

- Network scholars criticized previous IR research, particularly the **dyadic design**, for its failure to account for interdependence among actors.
- The assumption of independence in dyadic analysis can lead to confounding bias, attributing effects to incorrect causes. For example, the US-Japan and US-South Korea relationships influence the Japan-South Korea relationship.

1.1.2 Methodological and Theoretical Contributions

Primary Contribution: Network analysis offered a way to measure previously unmeasurable concepts like system polarity, social power, and prestige. It also generated new research questions about connectivity.

Three Main Research Approaches:

- **Global Network Properties:** Studies focus on properties of the entire network, such as density of fractionalization, to explain outcomes like conflict and cooperation.
    1. **Example:** Maoz (2006) used network analysis to create a theory-informed measure of international system polarization, a concept previously hard to operationalize.
    - **Example:** Cruz, Labonne, and Querubin (2020) found that greater fractionalization (power divided among more clans) in local kinship networks in the Philippines was associated with better public goods provision.

2. **Actor Positions:** This approach analyzes the positions of individual actors within a network to understand power and influence.
    - **Brokerage/Gate-keeping Power:** Held by actors connecting otherwise discontinued clusters.
    - **Network Centrality:** Used as a proxy for concepts like country prestige (Renshon 2016) or an organization's agenda-setting power (Carpenter 2011).

3. **Overlapping Membership:** This apporach examines how overlapping memberships reinforce each other's effects.

  - **Example:** Parkisnon (2013) showed that sustaining an insurgency depends on the overlap between military networks and personal networks (kinship, friendship).
  - **Example:** Eldredge and Shannon (2022) found that countries with high membership overlap in inter-governmental organizations are more likely to object to each other's human rights treaty reservations.

1.1.3 The Debate and Normalization of Network Analysis in IR

The 'Us-vs-Them' Debate: Early proponents of network analysis adopted a provocative framing, creating divisions within IR.

Points of Resistance: Critics argued that the traditional dyadic approach had not impeded major theoretical advances (e.g., the democratic peace) and that research designs should be tailored to the specific question, rather than assuming interdependence as the default.

Mainstreaming the Approach (c. 2016):

- An exchange in *International Relations Quarterly* between proponents and critics marked a key moment.
- A special issue on networks in *Journal of Peace Research* showcased the breadth of applications.
- The field of political methodology quickly welcomed and published inferential network analysis research.
- Subsequently, network research began appearing in top disciplinary journals, at major conferences, and in university curricula.

1.1.4 Current Research and Future Directions

Addressing Endogeneity: Developing tools to separate actor-level effects from network-level effects (e.g., democracy vs. clique size in trade).

Flexible Conceptualization: Re-evaluating the unit of analysis, such as treating alliances themselves as nodes to study action-reaction processes.

Expanding Scope: Applying network analysis to subnational and transnational levels, including rebel groups, NGOs, and political elites.

Social Media Data: Utilizing vast, inherently networked data from social media to study mobilization, censorship, and misinformation.

Future Directions:

- **Develop IR-Specific Theories:** Move beyond borrowing sociological theories to build network theories tailored to IR's unique actors and assumptions (e.g., anthropomorphizing states).
- **Model Hierarchical Networks:** Incorporate asymmetrical and hierarchical relationships, not just horizontal ones between equal actors.
- **Integrate Casual Inference:** Bridge network analysis with experimental and quasi-experimental methods to test network predictions more rigorously.
- **Model Co-evolution:** Better theorize and moel the endogenous relationship where actor characteristics are both a cause and an effect of their network ties.