INTERNATIONAL MIGRATION NETWORK

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The international migration network analyzes the migration of people across borders and helps us correlate this movement with various social, economic, environmental and cultural factors.

In our network, nodes represented countries, and links represented people migrating from one country to another. We found that the degree distribution of this network followed power law, and the network was scale-free, meaning that few countries had the most movement of immigrants.

Our primary focus was on the analysis of the impact of global events on this network and how communities developed over time.

We analyzed the network's assortativity and found it was weak disassortative. We observed that in recent times religious disputes have been a major factor in forming two different communities in Africa over time, while some communities (like the US, UK, and Canada and economic powerhouse of Asia(India, China, Japan) or some European countries along with their past African colonies) remained constant over time.

Contrary to a strong disassortative network where developed countries(high-degree nodes) interacted with less developed countries(low-degree nodes), we saw that global events like economic crises and wars increased interaction between low-degree nodes, thus decreasing the overall disassortativity of the network. We also noticed that with time this network is becoming more interconnected.

Overall, the results of this analysis helped us in understand how we could predict the stability of the world(in terms of events like wars) by observing the disassortativity of the network and how migration of people across different countries developed over time.