# Social Status and Role Analysis of Palin's Email Network

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### **Motivation and Significance**

- Studying social status and the corresponding social roles in a personal email network can help understand complex interaction patterns in a social network.
- The availability of Sarah Palin's email corpus presents such an opportunity in an email network.

### **Data Preparation**

Step1: Conversion from scanned email exchanges (images) to a text corpus.

Step 2: Name Entity Resolution

Step 3: Email Network Reconstruction

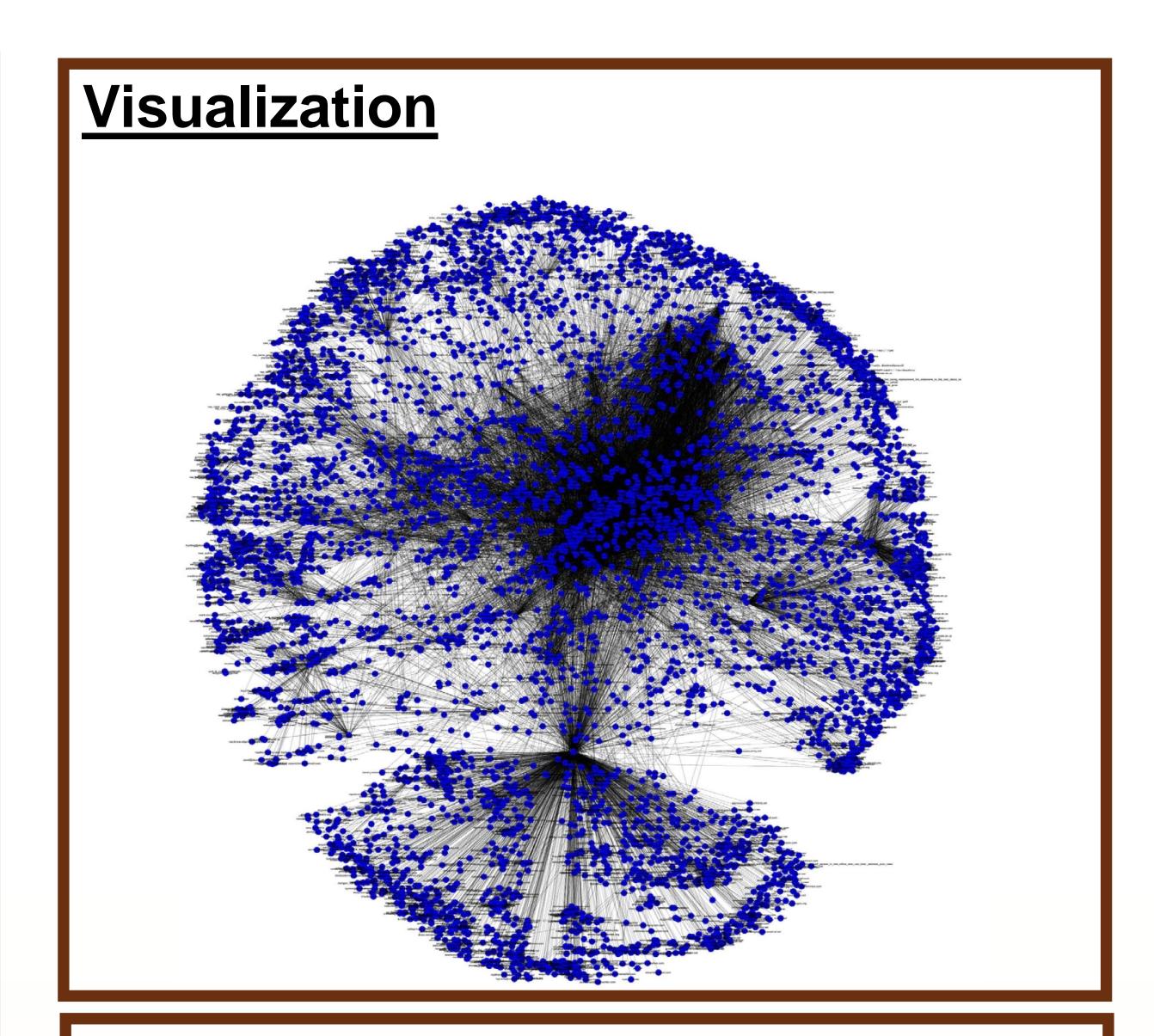
※ This dataset is available upon request. Please contact the first author.

## **Social Status and Role Analysis**

- To explore complex social relations of Sarah Palin in her social network, we employ a "knock-out" technique in the experiment.
- Most of the nodes (84.9%) and unique links (72.2%) still exist in the biggest component.
- The clustering coefficient even increases without Palin, which demonstrates that she had a robust structure of supporting staff.
- The removal of Sarah Palin significantly improve the understanding of her email network.

Table 1: Networks With & Without Sarah Palin

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	With Palin	Without Palin
# of Nodes	4446	4445
Biggest Component	4446	3773
$\#  ext{ of Edges}$	59589	22177
Clustering Coefficient	0.146	0.171
Network Centralization	0.220	0.072



### Conclusion

- We employ text analytical tools to reconstruct Palin's email network.
- We provide a preliminary study of Palin's social status and social role in the network.

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