Project Summary

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My project explores the how social scientists quantify and model what they are attempting to study. Working under John Padgett, I will take his Medici network data and analyze it using some different methods. I will use the blockmodeling procedure he used in his Robust Action AJS article but for earlier data set than examined in that at study. Instead, my work will describe the political networks of the 1300's, which correlates with his current work on economic banking emergence at the same time period. This methodology focuses on pattern recognition in network relationships and overall social structure. I will also do a network study of his marriage data for the entire 200 year relevant time period. Some of his conclusions in the Robust Action article center around the Medici exploiting structural holes in the marriage-neighborhood network. Hopefully my analysis can further support this claim and yield insights into the political and economic consequences of the structure of the marriage network.

More generally, I am interested in looking at scaling aspects of political and social organizations. The analysis with Padgett will hopefully be a jumping off point for investigating scaling structure in the social world. In biology, scaling indicates important controlling agents, attachment systems or limiting factors. Extending this to social organizations would be very interesting and useful in understanding structural mechanisms. Currently, there are similar investigations into scaling in the size of cities relative to the power they need. I will examine likely sources of social scaling; my initial ideas are the size and funding of political and governmental organizations. I hope to develop the tools I use in the Medici analysis to examine the network of campaign finance donations which I believe will exhibit temporally emerging preferential attachment