American Politics Research

The Social Utility of Informal Institutions: Caucuses as Networks in the 110th U.S. House of Representatives

Jennifer Nicoll Victor and Nils Ringe

The online version of this article can be found at:

Published by:
$SAGE

http://www.sagepublications.com

Additional services and information for *American Politics Research* can be found at:

Email Alerts: http://apr.sagepub.com/cgi/alerts

Subscriptions: http://apr.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations http://apr.sagepub.com/cgi/content/refs/37/5/742

The Social Utility of Informal Institutions

Caucuses as Networks in the 110th U.S. House of Representatives

Jennifer Nicoll Victor
University of Pittsburgh, Pennsylvania
Nils Ringe
University of Wisconsin, Madison

This article challenges the existing state-of-knowledge about legislative caucuses by arguing that the caucus system reflects and reinforces formal organizing institutions, such as parties and committees, rather than counterbalancing them. We argue that legislators engage in the caucus system to maximize the social utility of their relationships. Using a social network framework, we develop and test hypotheses that seek to ascertain the types of legislators that assume elevated positions in the caucus network. We collect data on the complete population of caucuses and their members from the first session of the 110th U.S. House of Representatives and conduct social network analyses to find evidence that the caucus system supports the hierarchical structure of existing formal institutions.

Keywords: *U.S. Congress; legislative organization; social networks; caucuses; legislative institutions*

In this study, we challenge the existing literature on caucuses in the U.S. Congress by arguing that the caucus system mirrors the formal organizing institutions, such as parties and committees rather than acting as a

742

structural counterbalance to these institutions. Our argument focuses on caucuses as *social* institutions that provide legislators with the opportunity to interact with colleagues who might share interests, concerns, or who might help them advance their position in the institution. Our study differs from prior studies on caucuses in two primary ways. First, while prior research conveys caucuses as institutions that help legislators at a structural disadvantage (such as junior members), we view the caucus system as a mirror of existing formal institutions that provide power to those who are leaders, more senior, or electorally safe. Second, we collect data on the complete population of caucuses and their members, which allows us to engage in a social network analysis of the caucus system. We can thus discern whether those at a structural or social disadvantage effectively use the caucus system to counteract this disadvantage and we find no support for the conventional wisdom. Rather, much like parties and committees, caucuses help those with power to maintain power and may provide no additional network advantage to legislators who are looking for a way to improve their status in the Congress.

Existing literature suggests that the caucus system, as an informal institution within the Congress, benefits those legislators who find themselves relatively disadvantaged within the formal legislative structure (see especially Ainsworth & Akins 1997; Hammond 1998). In other words, the caucus system constitutes an alternative institutional framework within which rank-and-file members, junior legislators, preferences outliers, and other actors in formally weak positions can build their reputations in the legislature and gain influence on policymaking processes and outcomes.

Our conception of the caucus system as a social network challenges this view. We consider the caucus system to be an informal institution that allows legislators to build and maintain relationships within the House. Not all relationships are created equal, however, and being associated with some colleagues is more valuable to individual members than others. Therefore, legislators engage in the caucus system in an effort to maximize the social utility of their relationships. They achieve this goal by associating themselves with those actors who are already powerful within the formal institutional structure, because being connected to a party or committee leader, or to a senior colleague, is more valuable than being linked to just another rank-and-file member. As a result, we expect the caucus system not to serve as an alternative institutional structure used primarily by formally disadvantaged members of the House to counterbalance their structural weaknesses, but to constitute an informal institutional framework that

replicates and reinforces the formal distribution of power and influence within the legislature. The analysis of the caucus network in the 110th Congress supports our alternative view of the purpose of caucuses. We show that formally powerful players, such as legislative leaders, senior members, and legislators who are electorally safe, are both more connected and more central within the caucus network.

Our study goes beyond previous research on caucuses in the Congress in theoretical, methodological, and empirical terms. Theoretically, the existing literature does not consider the inherent social nature of caucuses, whereas our article is built on the contention that research on legislative organization should account for the social relationships between legislators as much as the characteristics of individuals. In methodological terms, using social network analysis allows us to test the validity of existing accounts of caucuses in the House of Representatives beyond what traditional qualitative and quantitative methods have to offer. It allows us to evaluate the received wisdom on congressional caucuses in a more extensive and refined fashion. Finally, our data set on caucus memberships is the most comprehensive one to date because we analyze legislators' self-reports of caucuses they joined, and we use this information to generate complete caucus membership lists, which are not otherwise published.

Legislatures as Social Networks

The idea that networks are inherent in politics is not new, and political scientists have incorporated the concepts of interdependence into empirical and game-theoretic models for many years. Although political scientists have hesitated to adopt the distinctly sociological method and structural analysis that have become popular in other academic disciplines, political scientists would be remiss to conclude that the basic assumptions of rational choice theory are at odds with social network analysis. Knoke (1990) has offered that game theory and social network analysis are logically compatible because they both consider actors to be interdependent. "Game theory offers perhaps the best opportunity to integrate rational political theory with the structural approach" (Knoke, 1990, p. 38). Social network analysis is becoming increasingly popular in political science, and there is intellectual and methodological room for a new paradigmatic approach.

To date, there exist a few studies that examine legislatures as social networks. Some have examined social connectedness between legislators via cosponsorship behavior. Most notably, Fowler (2006) develops a

measure of "connectedness" from bill cosponsorships that significantly predicts roll call vote choice, controlling for ideology and partisanship. In addition, Gross and Shalizi (2007) examine cosponsorship networks while accounting for the systematic clustering of observations that is inherent in network data (also see Burkett & Skvoretz, 2001). Porter, Mucha, Newman, and Warmbran (2005) study linkages between legislators via committees and demonstrate connectivity between committees based on shared membership as well as hierarchical relationships between committees in the chamber. They use this information to reveal ideological preferences that predict roll call voting behavior, independent of party or other ideological measures. Whether through cosponsoring bills or committee service, there are clearly many ways for legislators to form networks with one another, and studies are just beginning to tap the complexity and richness of these approaches (see also Carpenter, Esterling, & Lazer, 2004; Crisp, Kanthak, & Leijonhufvud, 2004; Esterling, 2007; Gimpel, Lee, & Pearson-Werkowitz, 2008; Koger, Masket, & Noel, 2009; Whiteman, 1995).

Caucuses in the Congress

In this project, we are interested in the social connections that legislators form through informal legislative organizations.[1] Most legislatures have formal means of organizing their members, most importantly through parties and committees. In addition, many legislatures have less formal organizations through which their members organize to express concern for common issues. In the U.S. Congress, for example, there are more than 400 legislative member organizations outside of the formal party caucuses, which range in topic from the well-known Congressional Black Caucus to the Minor League Baseball Caucus.[2]

The existing literature has identified three purposes of the caucus system. First, caucuses allow legislators to signal their policy preferences and priorities to their colleagues and constituents. Second, they serve as venues for the exchange of information within the legislature (Ainsworth & Akins 1997; Fiellin 1962; Stevens, Miller, & Mann, 1974; Stevens, Mullhollan, & Rundquist, 1981). Third, they allow for the coordination of legislative action outside the formal party and committee structure (Fiellin, 1962; Hammond, 1991, 1998; Hammond, Mulhollan, & Stevens, 1983, 1985; Loomis, 1981; Miller, 1990; Stevens et al., 1974; Vega, 1993).

Besides specifying these three principal functions of the caucus system, the extant literature also identifies the primary users and beneficiaries of

this informal legislative institution. As Ainsworth and Akins (1997) observe, much of the existing work on caucuses "has argued that caucuses augment the formal institutional structure of Congress by offering members a means to gain information and affect policy across conventional institutional boundaries, including those dividing committees, parties, and constituencies" (p. 408). In other words, existing research suggests that caucuses provide for an extensive, informal structure for legislative action that exists parallel to the formal institutional organization of parties and committees.

Previous work also suggests that this informal structure allows those legislators who are relatively disadvantaged in the formal institutional framework of legislative politics to counterbalance their structural weaknesses by engaging themselves in the informal political arena of the caucus network. Hammond's (1998) research, for example, argues that those who are advantaged in the formal institutional structure, such as party and committee leaders and senior legislators, are less likely to join and participate in legislative caucuses. Instead, it is junior members and those with no formal leadership position who use caucuses to advance their legislative objectives and to build their reputation and standing within the institution. Meanwhile, Ainsworth and Akins (1997) suggest that caucuses are composed of policy outliers, and that the caucus system exists to counterbalance the dominant committee system. According to this research, caucus membership is not just about signaling, information exchange, and policy coordination, but also critically about advancing individual legislators' political and policy ambitions.

Conceptualizing caucuses as a social network between legislators leads us to challenge the view of the caucus system as an alternative venue of legislative influence for disadvantaged legislators. We consider the social nature of the caucus system to be the integral reason for its existence, and we maintain that joining and participating in caucuses is about building and maintaining relationships and associations with other legislators. We also assume that some relationships are more valuable than others and that social connections to powerful political actors bear special advantages. These two basic insights compel us to question some of the key propositions of the existing literature on caucuses in the House, most importantly, the suggestion that caucuses exist to advance the interests and positions of those disadvantaged in the formal legislative structure of parties and committees.

If it were true that the caucus system exists as an alternative to the formal legislative structure, we should expect formally disadvantaged legislators to rise to "the top" of the caucus system. The people at the helm of the

caucus system should be different from those at the top of the formal legis-
lative structure. If, on the other hand, caucus membership were about leg-
islators trying to maximize the utility of their social connections, they
should seek to connect to those colleagues who are already powerful within
the formal legislative structure. If this were the case, however, we should
expect legislators in formally powerful positions to be advantaged within
the caucus system as well. According to this social network view of the
caucus system, it does not simply supplement the formal legislative struc-
ture, but it replicates and reinforces the distribution of power and influence
within it.

The existing literature is vague on what it means by disadvantaged in
legislative politics, however. We try to be more specific and conceive of
positions of advantage and disadvantage in three ways: institutionally, elec-
torally, and socially. In institutional terms, legislators in the House are
advantaged when they are senior members and when they hold positions of
leadership in the party or committee system, whereas rank-and-file and
junior members are at a relative disadvantage. Electorally, members are
advantaged when they do not live in fear of their next election, that is, when
they are electorally safe; in contrast, legislators are disadvantaged when
they are electorally vulnerable. Finally, members may be part of a socially
disadvantaged group, with important implications for their level of influ-
ence within the legislature. Evidence shows that female legislators are at a
disadvantage compared with male legislators when it comes to attaining
positions of leadership, seniority, and preferred committee assignments
(see McGlen & O'Connor, 1998, pp. 88-90). Similarly, legislators who are
racial minorities may face a disadvantage in achieving legislative goals
(Volden & Wiseman, 2007).

We conceptualize these positions of influence in the caucus system not
in terms of the formal leaderships of the various caucuses but in terms of
two principal concepts in social network analysis, centrality and connected-
ness. Centrality describes the locations of individuals in terms of how close
they are to the "center" of the action in a network, whereas connectedness
concerns the degree to which actors are well-connected within the network
(Hanneman & Riddle, 2005; operationalization details are provided below).
These measures have the advantage of providing global measures of power
and influence in the entire caucus network, rather than a disaggregated
measure of power and influence in one or a few individual caucuses. They
are preferable because it would be possible for a given legislator to hold a
leadership position in one two-person caucus, for example, while assuming
a marginal position in the caucus network as a whole.

The social network view of the caucus system suggests that disadvantaged legislators join caucuses in an effort to associate themselves with colleagues who are advantaged in the formal institutional structure of the House. By doing this, they raise both the connectedness and centrality of those actors. The advantaged members are thus the passive beneficiaries of their colleagues' efforts to maximize the social utility of their relationships in the legislature. They serve as a socially valuable "target" without having to actively pursue their elevated positions in the caucus network.

These theoretical considerations lead to the following series of hypotheses. In institutional terms,

Hypothesis 1: Legislators who are party or committee leaders should be both more connected and more central within the caucus network.
Hypothesis 2: Senior members should be both more connected and more central within the caucus network.

These hypotheses directly contradict the proposition that the caucus system constitutes an alternative avenue for legislative influence for those disadvantaged within the formal institutional structure. If this were the case, junior members and nonleaders should be both more central and connected in the caucus network.

In electoral terms, if our theorized conception of the caucus network were accurate, we should find that

Hypothesis 3: Electorally safe legislators should be both more connected and more central within the caucus network.

If, in contrast, the extant literature were correct in arguing that the caucus system exists to counterbalance the formal institutional organization of the House, we should expect electorally vulnerable legislators to assume privileged positions of high centrality and connectivity in the caucus network.

Finally, in social terms, the existing literature would expect women and members from racial minorities to be more central and connected within the caucus network. It follows from the social network view of the caucus system, however, that neither gender nor race should be associated with legislators' connectedness and centrality in the caucus network. This may appear inconsistent with the principal argument of this article at first glance, which suggests that actors who are advantaged in the formal institutional structure of the House should hold elevated positions in the caucus

system as well. Therefore, should we not expect male and Caucasian leg-
islators to be more connected and central in the caucus network? The
answer to this question is no, because the disadvantage that women and
minority legislators suffer manifests itself in institutional terms: they are
less likely to achieve positions of legislative influence and less likely to be
senior (Bratton & Haynie, 1989; Hawkesworth, 2003; Rosenthal, 2002;
Smooth, 2001; Swers, 2002). Hence, to counterbalance their structural
disadvantage, we should expect women and racial minority legislators to
maximize the utility of their relationships in the caucus system by associ-
ating themselves with colleagues who are institutionally advantaged,
regardless of their gender and race. Most of these powerful colleagues are
Caucasian males, but it is not their gender or the color of their skin as such
that makes them valuable "targets" for the socially disadvantaged. In fact,
most Caucasian males do not hold formal positions of power, which means
that it does not make sense for female and minority legislators to seek
association with just any male and/or Caucasian legislator; as a result, we
should not expect Caucasian males per se to hold privileged positions in
the caucus network.

In other words, the degree to which members of different gender or race
are targets that maximize the social utility of structurally disadvantaged
members is a purely a function of their institutional positions. Therefore,
we do not expect to find a correlation between gender and race and legisla-
tors' connectedness and centrality in the caucus network:

Hypothesis 4: Male and Caucasian legislators should be no more connected and no
more central within the caucus network than female and ethnic minority legislators.

Data

In social network analysis, it is important for researches to analyze
populations, as opposed to samples of populations, because it is mathemat-
ically uncertain what it means to take a random sample of relationships. For
that reason, we have opted to study the complete population of the first
session of the 110th Congress (2007) and its House legislative caucuses.
We have chosen the 110th Congress because it is the most recent completed
congress. Although the 110th Congress is a congress in which party control
changed power, we do not have any reason to believe that the 110th
Congress is in anyway sufficiently different from prior congresses such that
we could not generalize from these results.[3] However, determining the

population of caucuses and their members is a challenging task because there exists no comprehensive list of caucuses and their members.

The caucus data for this project come from the 2008 Winter edition of the *Congressional Yellow Book*. This directory includes descriptive entries for each member of the 110th Congress and lists the self-reported caucus memberships for each legislator. We used these data to construct a complete population of the caucuses and caucus memberships for the 110th Congress. The House Committee on Administration lists 276 "official" caucuses on their Web site. These groups have registered with the committee as official House groups that follow specific guidelines; however, hundreds more groups are known to exist. The Congressional Research Service generated a list of caucuses in the 110th Congress in the spring of 2008 and listed 394 House or joint caucuses. However, our search of self-reported caucus memberships from the *Yellow Book* survey includes 559 distinct caucuses.[4] We therefore constructed various samples of caucuses (i.e., those with more than two members, those with more than four members, those that only appear in the Congressional Research Service report, those that only appear on the House Administration Web site, etc.) and conducted all analyses on all samples. We have found no substantive differences in these results and therefore report results from the sample of caucuses that have two or more members, which includes 452 caucuses. All discussion below is about the complete membership of these 452 caucuses.

Analysis

Before we engage in the analysis of the caucus system as a social network, we are interested in legislators' proclivity to join caucuses. We conduct a negative binomial regression analysis with the number of caucuses a legislator has joined as the dependent variable. The results of this analysis are presented in Table 1.

The results of the estimation show that Democrats join more caucuses than Republicans, that legislators who have served more terms join more caucuses, that party leaders join fewer caucuses, that legislators who win their elections by a greater electoral margin join more caucuses than those who win by smaller margins, and that women and racial minority legislators join no fewer or greater number of caucuses than Caucasian males.

To facilitate the substantive interpretation of these results, we generated predicted probabilities of these results and plot their confidence intervals in Figure 1.[5] For dichotomous variables (party, leadership, female/minority),

Table 1
Negative Binomial Results

|	Number of Caucuses Joined	
	Coefficient	z
Party (1 = Republican)	−0.2226 (0.0763)	−2.92
Terms served	0.0482 (0.0083)	5.74
Electoral winning %	0.0051 (0.0017)	2.93
Leader	−0.2087 (0.059)	−3.55
Female or minority	−0.0801 (0.0478)	−1.68
Constant	2.9923 (0.1516)	19.74
N	437	
Log pseudo-likelihood	−1824.3	
$Ln(\alpha)$	−1.4014 (0.0938)	
α	0.2463 (0.0231)	

Note: Robust, Huber-White standard errors reported in parentheses; errors clustered on state.

we simply generated predicted probabilities for each value and held other variables at their mean. For continuous variables (electoral margin and seniority), we selected a series of values across the range of values at which to hold the variables, then held all other variables at their mean.

In Figure 1, we show that Democrats join, on average, 36 caucuses to Republicans' 29—a significant difference. Party and committee leaders join fewer caucuses than nonleaders—27 compared with 33, respectively. Regarding females and minorities, the figure shows that the difference between females or racial minorities and Caucasian males is insignificant (31 compared with 33, respectively). For electoral margin, we chose to hold the variable at five values across the interval from the first percentile to the 90th percentile. The figure shows that as legislators win their elections by increasing margins, they are more likely to join caucuses. Regarding seniority, we also held the variable at five values across the interval from the first to the 90th percentile. The figure shows that as members increase in seniority, they join more caucuses.

To analyze the caucus system in the House of Representatives as a social network, we have generated a relational matrix consisting of the members of the House of Representatives in which the ties between persons are determined on the basis of membership in the House caucuses (Borgatti, Everett, & Freeman, 2002). The resulting "caucus network" uses common membership in one or more caucuses as a measure of strength. In other words, we are looking at an $n \times n$ adjacency Matrix A (here: 438 × 438), representing all the caucus-based ties in a network for the 110th Congress such that a_{ij} represents

Figure 1
Predicted Number of Caucuses Joined
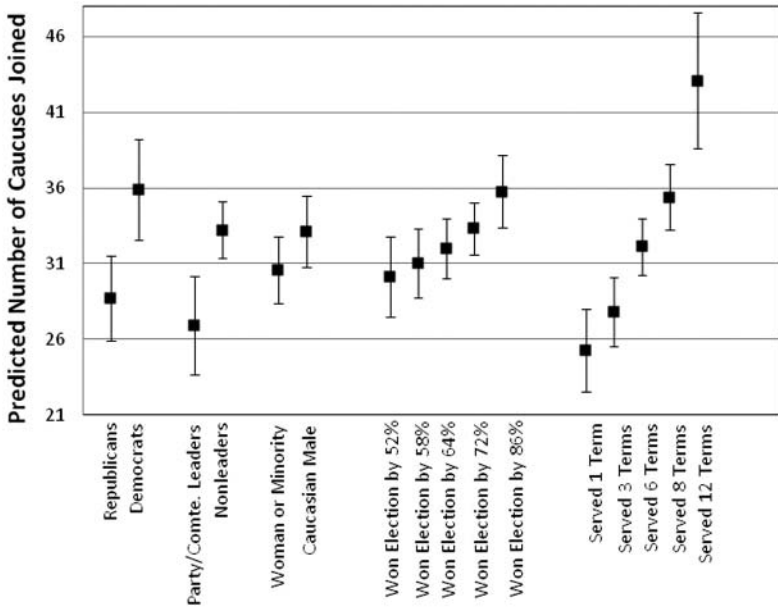
Note: Other variables held at means.

the total number of joint caucus memberships. $A_{ij} = 0$ if the ith legislator does not share membership in any caucuses with the jth legislator, and $1 \leq a_{ij} \leq 54$ if he or she does (54 is the maximum number of joint caucus memberships of any two members). Our data are undirected, or symmetric: if Actor A and Actor B are in at least one caucus together, then they are connected and we make no assumptions about the direction of their connection.

Given the large number of caucuses, and the inclination of Congressmen and Congresswomen to join a substantial number of them, it is not surprising to find that the resulting network is quite dense, as 93% of all possible ties are present. This high density makes for a great degree of "reachability": all actors can "reach" one another through the caucus network. Moreover, the great majority of them are directly connected to one another, as the average geodesic distance (describing the shortest possible "walk" from one actor to another) is 1.066. Everyone in the Congress can be reached within two or fewer steps, and most (93.4%) in one single step.

The network density for Democrats and Republicans is quite high, but higher for Democrats at 96% compared with 90% for Republicans. In other words, Democrats are more connected with each other in the caucus network than Republicans. For the two parties, we also seek to identify the number of ties that exist between network members from the same party relative to the number of ties between members who are not from the same party. The External–Internal (E-I) index takes the number of ties between members of one party to members of other parties, subtracts the number of ties between members of the same party, and divides by the total number of ties. The resulting index ranges from −1 (all ties are internal to the group) to +1 (all ties are external to the group). This index shows a prevalence of internal (92,090 or 52%) over external (85,790 or 48%) ties, yielding an E-I index of −0.04: members of the House are thus slightly more connected within their party than across parties.

To measure the level of connectedness between any two actors more comprehensively, we rely on the concept of maximum flow, which considers how many actors that are directly adjacent to Node A lead to pathways to Node B. If this number is large, A and B are more connected, because there are numerous ways for them to reach each other.[6] The maximum flow algorithm thus takes into account *all* connections between *all* actors, not just the most direct paths between actors. Maximum flow measures for Congress range from 0 to 6,766, with an average of 2026.84 (standard deviation 1107.2). The pairs of Congressmen that have the highest maximum flow scores are listed in Table 2. It is notable that these dyads are comprised exclusively of Democrats. In fact, the only Republicans that appear in the top 100 most connected dyads are Rep. English (Pennsylvania-3rd) and Rep. Wilson (South Carolina-2nd).

To get a sense of the structure of this network, we look for a series of expected relationships with respect to party, ideology, seniority, and committee service. In general, we expect that legislators who share these characteristics (e.g., same party, similar ideology, long joint service, and service on the same committees) will be more connected to one another in the caucus network. First, with respect to party we find that legislators from the same party are significantly more connected in the caucus network than pairs of legislators from different parties (maximum flow = 2078.5 vs. 1974.7, $t = -14.52$, $pr(t) = .00$).

Second, ideologically close legislators are more connected to one another in the caucus network than legislators who are ideologically distant. Using Poole–Rosenthal NOMINATE scores to measure ideological distance, we find that legislators who are less than the population mean of .54

Table 2
Dyads with Highest Maximum Flow Scores

Name	Name	Maximum Flow
Waxman, Henry A. (Democrat, California-30th)	Van Hollen, Chris (Democrat, Maryland-8th)	6766
Waxman, Henry A. (Democrat, California-30th)	McNulty, Michael R. (Democrat, New York-21st)	6766
Van Hollen, Chris (Democrat, Maryland-8th)	McNulty, Michael R. (Democrat, New York-21st)	6766
Van Hollen, Chris (Democrat, Maryland-8th)	Doggett, Lloyd (Democrat, Texas-25th)	6370
McNulty, Michael R. (Democrat, New York-21st)	Doggett, Lloyd (Democrat, Texas-25th)	6370
Waxman, Henry A. (Democrat, California-30th)	Doggett, Lloyd (Democrat, Texas-25th)	6370
McNulty, Michael R. (Democrat, New York-21st)	McDermott, James A. (Democrat, Washington-7th)	6357
Van Hollen, Chris (Democrat, Maryland-8th)	McDermott, James A. (Democrat, Washington-7th)	6357
Waxman, Henry A. (Democrat, California-30th)	McDermott, James A. (Democrat, Washington-7th)	6357
Doggett, Lloyd (Democrat, Texas-25th)	McDermott, James A. (Democrat, Washington-7th)	6357
Hinchey, Maurice D. (Democrat, New York-22nd)	McDermott, James A. (Democrat, Washington-7th)	6326
Van Hollen, Chris (Democrat, Maryland-8th)	Hinchey, Maurice D. (Democrat, New York-22nd)	6326
Hinchey, Maurice D. (Democrat, NewYork-22nd)	Doggett, Lloyd (Democrat, Texas-25th)	6326
Waxman, Henry A. (Democrat, California-30th)	Hinchey, Maurice D. (Democrat, New York-22nd)	6326
McNulty, Michael R. (Democrat, New York-21th)	Hinchey, Maurice D. (Democrat, New York-22nd)	6326
Hinchey, Maurice D. (Democrat, New York-22th)	McIntyre, Mike (Democrat, North Carolina-7th)	6323
McIntyre, Mike (Democrat, North Carolina-7th)	Doggett, Lloyd (Democrat, Texas-25th)	6323
Van Hollen, Chris (Democrat, Maryland-8th)	McIntyre, Mike (Democrat, North Carolina-7th)	6323
Waxman, Henry A. (Democrat, California-30th)	McIntyre, Mike (Democrat, North Carolina-7th)	6323
McNulty, Michael R. (Democrat, New York-21st)	McIntyre, Mike (Democrat, North Carolina-7th)	6323
McIntyre, Mike (Democrat, North Carolina-7th)	McDermott, James A. (Democrat, Washington-7th)	6323

units apart from each other ideologically are more connected to one another than legislators who are more distant (maximum flow = 2087 vs. 1964.3, $t = 17.11$, $pr(t) = .00$; Poole & Rosenthal, 2004).

Third, legislators who served more terms together are also more connected: pairs of legislators that have served more than 3.87 terms together are more connected to one another (maximum flow = 2,600) than pairs who have jointly served fewer than average terms (maximum flow = 1533.86, $t = 170$, $pr(t) = .00$). This is likely because serving more terms concurrently provides the potential for more direct social interaction.

Somewhat surprisingly, however, potential for social interaction in committee does not seem to translate into greater connectedness in the caucus network, as dyads of legislators who are on at least one committee together have an average connectedness of 2004.84, which is statistically significantly less than the average connectedness of legislators who do not serve on any committees together (2032.97, $t = 3.25$, $pr(t) = .00$). This negative effect is even more pronounced for legislators who serve on two or more committees together. Here, the average connectedness is 1907.09, which is statistically significantly less than the average connectedness score of 2028.8 for dyads of legislators who serve on one or no committees together, $t = 4.28$, $pr(t) = .00$. These findings seem to suggest that self-selection into caucuses entails greater preference coherence among caucus members than formal committee membership. However, these results may be skewed by the distribution of this variable because 78% of dyads share no committee seats. Only 20% of dyads have one committee in common, and 1.5% of dyads have two committees in common.

Another descriptive look at the network shows that three legislators are particularly closely connected: Rep. Waxman (Democrat, California-30th), Rep. Van Hollen (Democrat, Maryland-8th), and Rep. Doggett (Democrat, Texas-25th). In the jargon of social network analysis, these three form an *F* group, that is, a group of legislators who are connected to each other through particularly strong ties, which is defined as the largest number of ties that exists between any three or more actors in the whole network (52 in the case at hand). Also very closely connected to this trio is Rep. Moran (Democrat, Virginia-8th) with whom the three form a four-actor group based on 47 joint caucus memberships. Rep. Van Hollen currently serves as the Chair of the Democratic Congressional Campaign Committee, meaning his chief job is to help raise money for his colleagues—being well connected is a certain asset for this job.

These names also appear among the list of most central actors in the network, as shown in Table 3. There are several ways of measuring centrality within networks; here, we use two. First, we are interested in determining

Table 3
Most Central Legislators in the Caucus Network

Name	Normalized Degree Centrality	Normalized Eigenvector Centrality
Waxman, Henry A. (Democrat, California-30th)	29.0364	15.1477
McNulty, Michael R. (Democrat, New York-21th)	28.6719	14.7536
Van Hollen, Chris (Democrat, Maryland-8th)	28.6719	15.0483
Doggett, Lloyd (Democrat, Texas-25th)	26.9938	14.2006
McDermott, James A. (Democrat, Washington-7th)	26.9387	14.1267
Hinchey, Maurice D. (Democrat, New York-22th)	26.8074	13.8287
McIntyre, Mike (Democrat, North Carolina-7th)	26.7946	13.2458
Larsen, Rick (Democrat, Washington-2nd)	26.3455	13.5740
English, Phil (Republican, Pennsylvania-3rd)	25.8963	12.9251
Payne, Donald M. (Democrat, New Jersey-10th)	25.2310	13.2003
Pallone, Frank, Jr. (Democrat, New Jersey-6th)	25.0784	13.0256
Moore, Dennis (Democrat, Kansas-3rd)	25.0233	12.6665
Smith, Adam (Democrat, Washington-9th)	24.7521	12.6144
Wilson, Addison G. (Joe) (Republican, South Carolina-2nd)	24.1588	11.7894
Holt, Rush D. (Democrat, New Jersey-12th)	23.9893	12.4388
Capuano, Michael E. (Democrat, Massachusetts-8th)	23.7181	12.4686
Moran, James P., Jr. (Democrat, Virginia-8th)	23.3622	12.2135
Maloney, Carolyn B. (Democrat, New York-14th)	23.2562	12.1070
Abercrombie, Neil (Democrat, Hawaii-1st)	22.7307	11.6130
McGovern, Jim (Democrat, Massachusetts-3rd)	22.6714	11.8762

which actors have more ties than other actors. An actor with more ties might be considered more powerful than an actor with fewer ties, because more ties mean more avenues of access for information. For this, we use degree centrality (Proctor & Loomis, 1951; Wasserman & Faust, 1994). Our second measure, Bonacich's (1972) eigenvector centrality does not merely examine the number of connections that Member A has within the network, but also takes account of the connectedness of those actors Member A is connected with. That is, the centrality of Member A is a function of her own connections, as well as the connections of those adjacent to her.[7] Table 3 lists the 20 most central actors in the Congress network. Notably, several of the names we saw in the connectedness measures above also make it to the top of the list of most central actors (Rep. Waxman, Rep. McNulty, Rep. McIntyre, Rep. Doggett, Rep. Hinchey, Rep. McDermott, Rep. Van Hollen).

Although this social network analysis provides some intriguing insights into the caucus-based network in the House of Representatives, it has not yet addressed our expectations, laid out above, about legislators' connectedness and centrality within the caucus network. Table 4 shows the results of *T* tests we used to test our hypotheses about the social utility of participation in the caucus network.[8]

The results in Table 4 directly contradict the argument of the existing literature that the caucus system constitutes an alternative institutional structure that allows the formally disadvantaged to advance their interests and positions in the legislature. Instead, they support our expectation that the caucus system does not benefit those in structurally weak positions in the formal institutional framework of parties and committees, but that it replicates and reinforces the formal distribution of power as rank-and-file members seek to build and maintain relationships with already powerful and influential colleagues. Our institutional hypotheses concerned the relative connectedness and centrality of legislative leaders and nonleaders on the one hand, and senior and junior legislators on the other. Although we expected that leaders and more senior legislators should be both more connected and central (Hypotheses 1 and 2), the extant literature maintains that this should be the case for nonleaders and junior legislators.

The analysis confirms our expectations and undermines the propositions of previous research on caucuses in the House. First, we find that dyads where at least one member holds a leadership position have a higher average connectedness score (of 2150.34) than dyads where neither member holds such a position (1991.28).[9] Dyads where both members are party leaders, meanwhile, have an even higher connectedness score, at 2298.46, compared with a connectedness score of 2023.03 for dyads where one or neither member is a leader, $t = -9.0$, $pr(t) = .00$). In terms of centrality, we find that the 52 party and committee leaders in the population of 438 legislators are more central in the network than nonleaders. This result is only marginally statistically significant at the .075 level, however.

Second, the average connectedness for dyads where neither member has served more than the population average of 6.16 terms is 1731.7, whereas the average connectedness for dyads where at least one member has served more than 6.16 terms is 2183.28, a statistically significant difference. In other words, more senior legislators are more connected within the caucus network. This effect is even more pronounced for dyads where both members have served longer than the population mean, as the average connectedness of these pairs of Representatives is 2525.50, $t = -64.01$, $pr(t) = .00$. Senior members are also more central than junior members. The average

Table 4
***t* Tests for Hypotheses 1 through 4**

Hypothesis	Description	Variable	Mean Connectedness (maximum flow)	Bonacich's Eigenvector Centrality	t	Pr(t)	Result
1	Party/Committee Leaders are more connected	Neither member of dyad is a leader	1991.28	—	−18.55	.000	Supported
		At least one member of dyad is a leader	2150.34	—			
1	Party/Committee Leaders are more central	Party/committee Leaders	—	6.55	−1.44	.075	Supported
		Nonleaders	—	5.87			
2	Senior members are more connected	Neither member of dyad has served longer than mean terms (6.16)	1731.70	—	−61.2	.000	Supported
		At least one member of dyad has served longer than mean terms (6.16)	2183.28	—			
2	Senior members are more central	Senior members (served at least 6.16 terms)	—	6.90	−5.54	.000	Supported
		Junior members (served less than 6.16 terms)	—	5.30			
3	Electorally safe legislators are more connected	At least one member of the dyad won prior election by at least 55%	2044.24	—	−31.28	.000	Supported
		Neither member of the dyad won prior election by greater than 55%	1313.6	—			
3	Electorally safe legislators are more central	Electorally vulnerable	—	4.13	−5.28	.000	Supported
		Electorally safe	—	6.30			
4	Caucasians and males are no more connected in the network than females and minorities	Both members of the dyad are male and Caucasian	2028.47	—	0.4669	.641	Supported
		At least one member of the dyad is a female or racial minority	2025.13	—			
4	Caucasians and males are no more central in the network than females and minorities	Caucasians and males	—	5.99	0.283	.777	Supported
		Females and racial minorities (Black, Latino, Asian, Native American)	—	5.89			

758

Bonacich eigenvector centrality value for members who have been members of the House for longer than the average 6.16 terms is 6.9, compared with 5.3 for members who have served less than the average number of terms, $t = -5.54$, $pr(t) = .00$. Hypothesis 2 is supported.

Our third hypothesis concerned electoral (in)vulnerability. We hypothesized, contrary to existing literature, that electorally safe legislators would be more connected and more central in the caucus network. Our evidence shows support for this proposition. Electorally marginal members, who won their most recent elections with a vote share of 55% or less, are less connected in the network.[10] The average connectedness of dyads where neither member is marginal is 2044.24, whereas the connectedness of dyads where at least one member is marginal is 1313.6 ($t = -31.28$). If both members are marginal, their mean connectedness score is 1370.96, which is statistically less than connectedness in dyads where one or neither member is marginal (2048.66; $t = 33.6$, $pr(t) = .00$). Finally, electorally marginal members are less central in the caucus network, with an average Bonacich eigenvector centrality score of 4.13. This compares to 6.30 for members who are electorally safe. These findings suggest that marginal members do not use caucuses to improve their electoral fortunes in the future by signaling to their constituents both their policy priorities and their activism. Instead, they appear reluctant to join caucuses, which raise questions about the extent to which structurally disadvantaged legislators can use caucuses to improve their institutional positions. Perhaps, it is the case that electorally safe legislators have the luxury of spending more time in Washington, D. C., cultivating relationships with their colleagues rather than spending it in the district wooing voters. Whatever the reason, the results show that legislators with an electoral advantage have the additional advantage of being more central and more connected in the caucus network.

The evidence presented thus far shows support for our contention that institutionally and electorally disadvantaged legislators do not rise to the top of the caucus system. This leaves the question of social advantage and disadvantage. We hypothesized that there should be no correlation between gender and race and legislators' connectedness and centrality in the caucus network: male and Caucasian legislators should be no more connected and no more central within the caucus network than female and ethnic minority legislators (Hypothesis 4). This expectation is confirmed, as we find that neither gender nor race correlates with the connectedness and centrality of actors in the caucus network. Dyads that include only Caucasian males are no more connected than dyads that include at least one woman or racial minority (African American, Asian American, Latino, or Native American).

The magnitude of these connections is not large (2028.47 vs. 2025.13), and the difference is not statistically significant. Moreover, male Caucasians are no more central in the network than females or minorities. Legislators who are female or racial minorities have a centrality score of 5.89 whereas legislators who do not fall into those categories have a score of 5.99—a difference that is not statistically significant. Hence, the results again support the propositions of the social network view of the caucus system while contradicting the expectations of the existing literature, according to which legislators who are at a social disadvantage because of their gender or race use the caucus system to help them make up the difference.

In sum, the results of the analysis are supportive of the social network view of the caucus system, as our expectations with regard to leadership, seniority, electoral security, gender, and race are confirmed. The caucus network thus replicates the distribution of power in the formal legislative structure: party and committee leaders, as well as senior members and those who are electorally safe, are more central and more connected in the caucus network. We illustrate this visually for institutionally advantaged legislators in Figure 2, which shows the 82 most central actors in the network— these are actors whose eigenvector centrality is at least one standard deviation greater than the mean centrality level. However, because network graphs tend to be difficult to interpret, we have also created a simulated graph that includes 82 nodes that have the same proportion of leaders and senior members as the entire caucus network. The simulated graph can be seen as a benchmark representing what the most central actor network would look like if it did not tend to attract leaders and senior members. The size of nodes in the simulated graph represents the *average* centrality of actors in the caucus network. The node shape indicates leadership: circles are nonleaders, triangles are party and committee leaders. The node color indicates seniority: the darker the node is, the more senior the legislator is; pale or white nodes indicate legislators with low seniority.

There are several meaningful differences between the graphs that help to highlight the makeup of most central actors in the caucus network. The simulated graph includes 10 leaders (triangular nodes), whereas the actual graph of the 82 most central members includes 14. The simulated graph also includes fewer dark nodes, meaning fewer senior members. Finally, the centrality of the actors in the most central actors' network is, of course, greater than the mean population centrality of the actors in the simulated graph, as indicated by the larger size of the nodes. Ultimately, the graph demonstrates the tendency for congressional leaders and senior members to be central actors in the caucus network. The caucus system does not favor

Figure 2
Most Central Actors (real and simulated data)
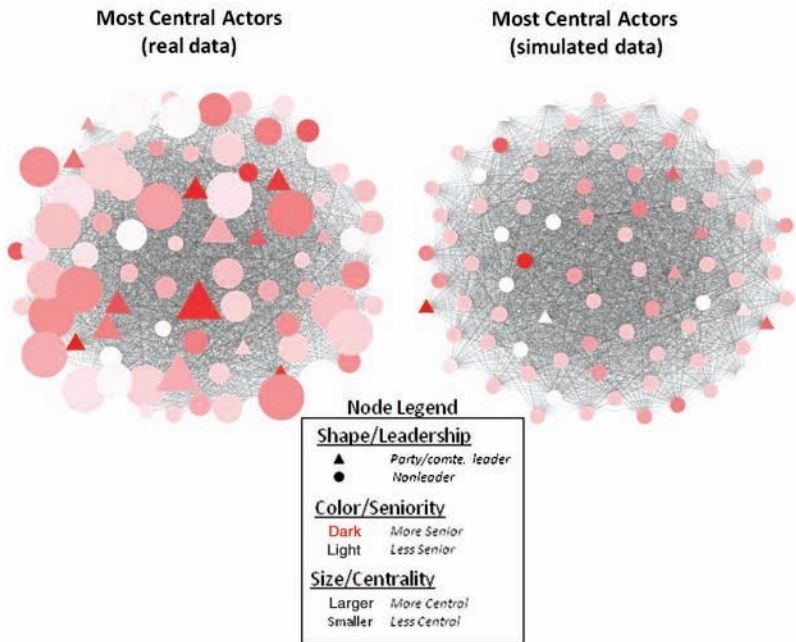
Note: The graph on the right is a benchmark simulation of 82 actors with a number of leaders (10) and senior members proportional to the entire caucus network. The radius of nodes represents average centrality for the whole network. The graph on the left represents the 82 most central actors in the actual caucus network. It shows a greater number of leaders (14), more senior members and more highly central members.

the institutionally and electorally disadvantaged, as the existing literature maintains; it bolsters the power of the powerful.

Conclusion

The contributions of this article are threefold. First, from a theoretical point of view, we conceptualize the caucus system as a social network. This deviates from previous research on informal groups in Congress, which favors individualistic explanations and disregards the role of social relations in

shaping political behavior. Our conceptualization, however, challenges the proposition that caucuses are venues for formally disadvantaged legislative actors to counterbalance their structural weakness by building their standing in the informal institutional framework of the caucus system. We maintain that participation in caucuses is about maximizing the social utility of one's relationships within the institution, which implies that legislators seek to associate themselves with colleagues in positions of formal power. As a result, the caucus system replicates and reinforces, rather than supplements and challenges, the formal distribution of power in the legislature.

From a substantive standpoint, our results support our theoretical propositions, which mean that the conventional wisdom regarding the role of caucuses in the U.S. House of Representatives is in need of revision. Our empirical analyses, using the most extensive database of caucuses and caucus membership to date, demonstrate that caucuses are not organizations used by junior representatives, rank-and-file legislators, electorally marginal members, or women and minority legislators to increase their legislative influence. Instead, our research confirms our expectation that caucuses are institutions that favor legislative leaders, senior members, and those who are electorally safe. These legislators are both more central and more connected in the caucus network. This is an important finding if caucuses fulfill their designated functions of facilitating information exchange and helping to coordinate legislative action, because the caucus system does not appear to be an alternative venue for these activities that challenges the formal legislative structure. Instead, it is a social structure that replicates the formal institutional organization by allowing structurally disadvantaged members to connect to their colleagues in formal positions of power and influence. The result is that party and committee leaders, for example, are both more central and connected in the caucus network while having to join fewer caucuses than the rank-and-file to achieve these positions of influence. They effectively serve as "magnets" for those who join caucuses to maximize the utility of their social contacts within the legislature.

In methodological terms, our article demonstrates the value of using social network analysis as a tool in investigating legislative politics and decision making. We add to the burgeoning body of literature in political science that is borrowing sophisticated social network methods from other disciplines and adopting them to help answer questions of import and interest to scholars of politics. The inherent social connectedness of politics is intuitive but nearly wholly lacking from political science discourse. It is imperative that we integrate more rigorous theory and methods into the discipline that allow us to incorporate measures of relationships between actors into models that explain political behavior and institutions.

In sum, this article provides an important update to the existing literature in legislative politics. We demonstrate that informal legislative member organizations do not provide legislators who are institutionally weak, a vantage point from which they can improve their position; rather, the same legislators that are powerful in the party and committee systems, are powerful in the caucus system. These observations raise important questions and provide a useful starting point for additional analyses. For example, under what conditions do our propositions about the social utility of caucus membership hold? Could it be that some of the patterns highlighted in previous research materialize when examining particular subsamples of caucuses (e.g., especially active, important, or visible ones)? How do the social connections we identify help shape legislative behavior and outcomes? Much remains to be asked and learned once we start conceptualizing caucuses, and legislative organizations in general, as social networks.

Notes

1. We will use the term *congressional caucus* inclusively to refer to all informal legislative member organizations, informal groups, working groups, and task forces. We do not include formal party organizations, formal party committees, standing, or ad hoc legislative committees.

2. The exact number of caucuses in the U.S. House is dynamic and varies depending on the criteria one uses to determine caucuses. The House Committee on Administration lists 276 legislative member organizations on its Web site (http://cha.house.gov/member_orgs.aspx). However, several hundred other such organizations are known to exist. The Congressional Research Service lists 394 caucuses in their report (Mansfield, 2008). The *Congressional Yellow Book* includes mentions of 559 distinct caucuses in the membership listings for individual legislators.

3. To confirm this conjecture, we analyzed the mean number of discharge petitions, days in session, and roll calls for the past 10 sessions of Congress (back to 1999). We found no statistically significant difference between the 110th Congress and these prior Congresses, with the exception of the bills introduced in the first session. The 110th Congress had an unusually high number of bills introduced in the first session (2007), which is likely due to the change in party power after the 2006 elections. However, we have no reason to believe that such increased activity would appreciably affect members' decisions to join caucuses.

4. This number surely includes some error because many legislators reported being members of groups with very similar names (e.g., the Medical Doctor's Caucus, Medical Malpractice Caucus, and the Medical Malpractice Crisis Task Force all appear in the *Yellow Book* with only one member each). We assume many of the similarly named groups are actually the same caucus but erred on the side of caution and conservatively assumed that each caucus listed by legislators was a "true" caucus—there are 108 caucuses that have one or fewer members. A caucus has zero members if it is listed in the Congressional Research Service report as existing but never appears in the *Yellow Book* as having any members.

5. Predicted probabilities were generated using "Clarify" (King, Tomz, & Wittenberg, 2000; Tomz, Wittenberg, & King, 2001).

6. The logic of this measure suggests that it is the availability of pathways between actors that makes a linkage strong, as opposed to distance or some other measure of connectedness. For example, if Member A needs to send a message to Member Z and she can only use Member C to send it, the connection between A and Z is weak. On the other hand, if A can send a message to Z via C, D, E, F, or G, then the connection between A and Z is stronger (Hanneman & Riddle, 2005).

7. For more details, also see Fowler (2006, p. 465).

8. We are unable to do a multivariate or regression analysis to test these hypotheses because the dependent variable we wish to test is a network measure. Using a measure of network centrality or connectedness as a dependent variable in a traditional regression model would violate the basic assumptions of regression and independence of observations (see Scott, 2000; Wasserman & Faust 1994). Therefore, to test these hypotheses, we have relied on descriptive network analysis and basic t tests.

9. Leaders include Speaker, Majority and Minority Leader, Majority and Minority Whip, Committee Chair, and ranking committee member.

10. We also considered a less conservative level of 60% and found substantively identical results.

References

Ainsworth, S. H., & Akins, F. (1997). The informational role of caucuses in the U.S. Congress. *American Politics Research, 25*, 407-430.

Bonacich, P. (1972). Factoring and weighing approaches to clique identification. *Journal of Mathematical Sociology, 2*, 113-120.

Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). *Ucinet 6 for Windows: Software for social network analysis*. Lexington, KY: Analytic Technologies.

Bratton, K., & Haynie, K. (1999). Agenda setting and legislative success in state legislatures: The effects of race and gender. *Journal of Politics, 61*(August), 658-679.

Burkett, T., & Skvoretz, J. (2001). *Political support networks among U.S. senators: Stability and change from 1973-1990*. Unpublished manuscript, College of Charleston, South Carolina. Retrieved May 29, 2008, from http://web1.cas.usf.edu/MAIN/include/0-1201-000/polsupportnet.pdf

Carpenter, D. P., Esterling, K. M., & Lazer, D. M. J. (2004). Friends, brokers, and transitivity: Who informs whom in Washington politics? *Journal of Politics, 66*, 224-246.

Congressional Yellow Book. (2008, Winter). Vol. 33, No. 4. New York: Leadership Directories.

Crisp, B., Kanthak, K., & Leijonhufvud, J. (2004). The reputations legislators build: With whom should representatives collaborate? *American Political Science Review, 98*, 703-716.

Esterling, K. (2007). Buying expertise: Campaign contributions and attention to policy analysis in Congressional committees. *American Political Science Review, 101*, 93-109.

Fiellin, A. (1962). The functions of informal groups in legislative institutions. *Journal of Politics, 24*, 72-91.

Fowler, J. H. (2006). Connecting the Congress: A study of cosponsorship networks. *Political Analysis, 14*, 456-487.

Gimpel, J., Lee, F. E., & Pearson-Werkowitz, S. (2008). The check is in the mail: Interdistrict funding flows in Congressional elections. *American Journal of Political Science, 52*, 373-394.

Gross, J. H., & Shalizi, C. (2007). *Cosponsorship in the U.S. Senate: A multilevel approach to detecting the subtle influence of social relational factors on legislative behavior* (Unpublished working paper). Pittsburgh, PA: Carnegie Mellon University.

Hammond, S. W. (1991). Congressional caucuses and party leaders in the house of representatives. *Political Science Quarterly, 106*, 277-294.

Hammond, S. W. (1998). *Congressional caucuses in national policy making*. Baltimore: Johns Hopkins University Press.

Hammond, S. W., Mulhollan, D. P., & Stevens, Jr, A. G. (1983). Congressional caucuses: Legislators as Lobbyists. In A. Cigler & B. A. Loomis (Eds.), *Interest group politics* (pp. 275-297). Washington, DC: Congressional Quarterly Press.

Hammond, S. W., Mulhollan, D. P., & Stevens, Jr, A. G. (1985). Informal Congressional caucuses and agenda setting. *Western Political Quarterly, 38*, 583-605.

Hanneman, R. A., & Riddle, M. (2005). *Introduction to social network methods*. Riverside: University of California. Retrieved June 21, 2009, from http://faculty.ucr.edu/~hanneman/

Hawkesworth, M. (2003). Congressional enactments of race-gender: Toward a theory of raced-gendered institutions. *American Political Science Review, 97*, 529-550.

King, G., Tomz, M., & Wittenberg, J. (2000). Making the most of statistical analyses: Improving interpretation and presentation. *American Journal of Political Science, 44*, 347-361.

Knoke, D. (1990). *Political networks: The structural perspective*. Cambridge, UK: Cambridge University Press.

Koger, G., Masket, S., & Noel, H. (2009). Partisan webs: Information exchange and party networks. *British Journal of Political Science, 39*, 633-653.

Loomis, B. A. (1981). Congressional caucuses and the politics of representation. In L. C. Dodd & B. I. Oppenheimer (Eds.), *Congress revisited* (2nd ed., pp. 204-220). Washington, DC: Congressional Quarterly Press.

Mansfield, J. W. (2008, January 16). *Political networks: The structural perspective*. Nonpublic report obtained by way of favor to the authors.

McGlen, N. E., & O'Connor, K. (1998). *Women, politics, and American society*. Upper Saddle River, NJ: Prentice Hall.

Miller, C. M. (1990). Agenda-setting by state legislative Black caucuses: Policy priorities and factors of success. *Policy Studies Review, 9*, 339-354.

Poole, K. T., & Rosenthal, H. (2004, July). *DW-NOMINATE scores with bootstrapped standard errors*. Retrieved May 19, 2008, from http://www.voteview.com

Porter, M., Mucha, P. J., Newman, M. E. J., & Warmbran, C. M. (2005). A network analysis of committees in the U.S. House of Representatives. *Proceedings of the National Academy of Sciences of the United States of America, 120*, 7057-7062.

Proctor, C. H., & Loomis, C. P. (1951). Analysis of sociometric data. In P. W. Holland & S. Leinhardt (Eds.), *Research methods in social relations* (pp. 561-586). New York: Dryden Press.

Rosenthal, C. S. (2002). *Women transforming Congress*. Norman: University of Oklahoma Press.

Scott, J. (2000). *Social network analysis: A handbook* (2nd ed.). Thousand Oaks, CA: Sage.

Smooth, W. (2001). *African American women state legislators: The impact of gender and race on legislative influence*. Unpublished doctoral dissertation, University of Maryland, Baltimore.

Stevens, A. G., Jr., Miller, A. H., & Mann, T. E. (1974). Mobilization of liberal strength in the house, 1955-1970: The democratic study group. *American Political Science Review, 68*, 667-681.

Stevens, A. G., Jr., Mullhollan, D. P., & Rundquist, P. S. (1981). U. S. Congressional structure and representation: The role of informal groups. *Legislative Studies Quarterly, 4*, 415-437.

Swers, M. (2002). *The difference women make: The policy impact of women in Congress*. Chicago: University of Chicago Press.

Tomz, M., Wittenberg, J., & King, G. (2001). CLARIFY: Software for interpreting and presenting statistical results Version 2.0. Cambridge, MA: Harvard University. Retrieved June 21, 2009, from http://gking.harvard.edu

Vega, A. (1993). Congressional informal groups as representative responsiveness. *American Review of Politics, 14*, 355-373.

Volden, C., & Wiseman, A. E. (2007, August 30-September 2). *Legislative effectiveness in Congress*. Paper presented at the 2007 annual meeting of the American Political Science Association, Chicago, IL.

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. New York: Cambridge University Press.

Whiteman, D. (1995). *Communication in Congress: Members, staff, and the search for information*. Lawrence: University of Kansas Press.

Jennifer Nicoll Victor is an assistant professor of political science at the University of Pittsburgh. Her research interests include U.S. Congress, interest groups, lobbying, and social networks. Her research has been previously published in the *American Journal of Political Science*, *P.S.: Political Science & Politics*, and *American Politics Research*.

Nils Ringe is an assistant professor of political science at the University of Wisconsin, Madison. His research interests include European Union politics, comparative legislatures, and social networks. His book, *Who Decides, and How? Preferences, Uncertainty, and Policy Choice in the European Parliament*, is forthcoming.