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Gregory Koger University of Miami, gregory.koger@gmail.com

Seth Masket University of Denver, smasket@du.edu

Hans C. Noel University of Michigan - Ann Arbor, hnoel@michigan.edu

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Koger, Gregory; Masket, Seth; and Noel, Hans C., "PARTISAN WEBS: INFORMATION EXCHANGE AND PARTY NETWORKS" (2009). *Working Papers*. Paper 4. http://opensiuc.lib.siu.edu/pn_wp/4

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PARTISAN WEBS: INFORMATION EXCHANGE AND PARTY NETWORKS

Gregory Koger University of Miami

Seth Masket University of Denver

Hans Noel Georgetown University

What is a party? We argue that the formal party apparatus is only one part of an extended network of interest groups, media, 527s, and candidates. We systematically measure a portion of this network by tracking transfers of names between political organizations. Our analysis reveals two distinct and polarized networks corresponding to a more liberal Democratic group and a more conservative Republican group. Formal party organizations, like the Democratic National Committee and the Republican National Committee, tend to receive information within their respective networks, which suggests that other groups serve to funnel information toward the formal party.

There is a curious gap in the study of political parties and interest groups. While there is a long and vibrant tradition of political science research on both parties and interest groups, we know very little about the connections between these two entities. One reason for this gulf is that we can think of parties and interest groups as competing forms of political organisations. While parties attempt to build broad, multi-dimensional coalitions, interest groups mobilise narrow slices of the electorate around a focused set of issues. Indeed, political parties may serve as the antidote for the narrow, self-serving agendas advocated by interest groups.¹ However, many interest groups choose to cooperate with one party or the other on a persistent basis, and there has been very little research on these organisational ties.

We also know little about the bonds between the political media and political parties. While Groseclose and Milyo² measure ideological bias in the media, there has been little research on organisational ties between the press and political parties. We know, for example, that the *National Review* is a conservative magazine that tends to favor Republicans over Democrats, but it will also occasionally assert its independence, criticising prominent GOP officeholders. However, we are uncertain whether the *National Review* actually cooperates with the Republican Party and its candidates to promote conservative causes.

We can better understand the scope and influence of political parties in America by studying their alliances with interest groups and media outlets. Toward this end, this exploratory study uses an innovative approach to identify links between formal party organisations and informal networks of interest groups, media, and 527s. We trace exchanges of donor and subscriber names between organisations and we use social

network analysis (SNA) to reveal the communities that drive modern politics. While SNA is a prominent technique in economics and sociology, SNA research is still rare in political science. SNA techniques are especially useful for studying political parties and interest groups since these actors are best understood as networks of cooperating allies rather than atomistic actors.³

We find that a significant number of nominally independent media outlets and interest groups exchange information with formal party organisations and ideologically similar organisations. These "extended party networks," as we call them, are starkly divided into polarised camps that funnel information to formal party organisations. Our data tentatively suggest, furthermore, that the Democratic network is larger and more integrated than the Republican network. These results suggest the value of viewing parties as social networks.

FORMAL PARTIES AND POLITICAL NETWORKS

An interesting puzzle in contemporary American politics is the escalating polarization of the nation's political parties. Recent scholarship agrees that something in politics has become polarised in the last few decades, but it is not clear just what that something is. It might be tempting to say that the party-in-government is polarised, while the party-in-the-electorate is not. But the emerging consensus is slightly more complicated. Most scholars argue that while the "elite" parties (in Congress, campaigns, and commentary) are polarised,⁴ many ordinary voters may not be.⁵ But a large slice of the most active voters are polarised.⁶ This confusion highlights the importance of understanding the size and organization of political parties.

V.O. Key⁷ famously partitioned the study of political parties into the "party in government," "party in the electorate," and "party as organisation." Some research fits nicely into one of these categories, such as work on Congressional parties,⁸ mass partisanship⁹ and party organisations.¹⁰ Some research also traces the relationships between party segments.¹¹

A notable omission from the Key trichotomy is the set of citizens who finance and staff political campaigns.¹² These activists are essential to the functioning of modern parties, yet they are not part of the formal party organisation. Beginning with James Q. Wilson's¹³ work on "amateur" Democratic clubs, political scientists have sought to measure and explain the influence of party activists.¹⁴

The Key trichotomy also omits interest groups. While we observe close interaction and co-operation between formal parties and some organized groups in everyday life,¹⁵ political scientists typically study parties and interest groups separately or even portray them as competitors. Schattscheider,¹⁶ for example, promotes parties as the antidote for excessive interest group influence in American politics. In practice, many interest groups emphatically claim they are nonpartisan, while parties deny linkages with outside groups.¹⁷

Relatedly, the Key model omits the partisan media. Early in American history, media outlets were central to party activity.¹⁸ In the era of objective journalism, the major city newspapers are independent, but opinion journalism is not. Magazines such as *The New Republic* and the *National Review* would maintain that they are at least nominally independent of party organizations. But they also consistently take sides on partisan

matters. It is an open question just how similar they are to the partisan press of an earlier era.

Party activists, interest groups and the partisan media pose a conceptual challenge for the study of parties. Unlike the party-in-government or party-as-organisation, these actors lack centralized leadership and transparent decision-making processes. Like birds in a flock, activists, interest groups and the media are autonomous but cooperating. They can pursue their common goals more effectively through co-operation, but no single actor appears to be in charge.

Parties as Networks

Our criticisms of Key's tripartite model are, then, consistent with the view of parties offered by Downs¹⁹ ("a team of men seeking to control the governing apparatus") and endorsed by Schlesinger²⁰, or by Schattschneider²¹ ("an organized attempt to gain power"). However, while these authors do emphasize that parties are a coordinated team, they do not offer a rich conception of how different party actors interact in those teams. Since political parties in the United States are not hierarchically organized, we need to think about how they manage to coordinate in the absence of such organization. If all of these elements, formal and informal, are part of the team, what makes them team members?

A solution is to conceive of parties as networks of cooperating actors. In this view, a party is broadly defined to include its candidates and officeholders; its formal apparatus; loyal donors, campaign workers, and activists; allied interest groups; and friendly media outlets. We refer to these party teams as *extended party networks* (EPNs),

which include — but are not limited to — formal party organisations such as the Democratic National Committee and the Republican National Committee. In the network approach, the defining characteristic of a party is cooperative behaviour, not formal positions. Actors "join" the party when they begin communicating with other members of the network, developing common strategies, and coordinating action to achieve shared goals.

Power in a network is potentially decentralized; unlike the hierarchical structure of formal party organisations, networks may feature several actors or factions that simultaneously cooperate to beat the opposing party and compete to shape the future of the party.²² Network members often influence each other by sending informative signals (e.g. endorsements), linking network members together, and coordinating action. Politicians and organisations attach great value to their lists of other actors—especially donors and activists—in the network, and they share these lists cautiously.

Typically, some actors exert more influence than others in a partisan network because they possess the connections and vision to coordinate collaborative effort. Just as one department in a firm may not know about the firm's overall strategy, some organisations in a party network may only know about their own connections. The key difference is that formal organisations include recognized authorities who possess the authority to enforce coordination and compliance. Without a hierarchy, more important players can only exert influence informally and indirectly.

Researchers have begun to study parties as networks. Schwartz²³ found that the Republican elites in the state of Illinois are best understood as an organisation composed of formal and informal party leaders. Similarly, Bernstein²⁴ and Doherty²⁵ found that

political consultants form part of an expanded party that is more loyal to the traditional party than to individual candidates. Cohen et al.²⁶ demonstrated that an alliance of donors and elite endorsers in each party have controlled presidential nominations since 1980. Dominguez,²⁷ meanwhile, has found evidence of a network of donors and endorsers who coordinate to promote some candidates in congressional primaries and prevent others from winning. Together, this research demonstrates the importance of studying the informal networks at the heart of modern American parties.²⁸ Each aspect of the informal networks so far studied, however, is only one part, and little research has identified connections between parties, interest groups, and the media.²⁹

In prior work on party networks, it has often been necessary to infer relationships from observable behaviour. Thus candidates who share consultants, elites who endorse the same candidates, or interest groups who share donors are assumed to be linked. This approach is necessitated by the behaviour of party officials and interest groups, who downplay the co-operation that is evident to political observers. In some cases, formal cooperation is explicitly forbidden by campaign finance regulations. If party actors do not want outsiders to know that they are cooperating, direct observation may not reveal them doing so.

We extend the network approach using an innovative data collection effort to identify links between formal party organisations, interest groups, and the media. We track transfers of vital information—the names of donors and subscribers—as a concrete measure of co-operation between political organisations. We analyze these transfers using the concepts and methods of *social network analysis* (SNA). SNA focuses on the properties of societies and the role of individuals within their social context. Thus we are

particularly interested in the relationships between political actors and the overall structure of the name-trading society. In the next section we measure the bonds between each formal party and its allies, the extent to which the allies of one party exchange information with the allies of the opposing party, which actors are more likely to provide information, and which are more likely to receive it.

The Name Game

Since communication is a defining feature of party networks, the obvious measurement strategy is to search for evidence that EPN members exchange information with politicians and formal parties. However, most interaction between parties and interest groups is unobserved by outsiders. There are no public transcripts of meetings between interest group leaders and Congressional leaders, no roll call votes for social scientists to pore over. To a significant degree, formal parties and their allies collude privately while publicly stressing their autonomy.

We identify these opaque relationships by tracking mailing list exchanges. The names of donors and subscribers are of considerable value to political actors.³⁰ Cultivating a list of people who are willing to donate to a cause can demand a great deal of time and energy. Rather than develop a list on its own, an organisation will frequently purchase such a list from a like-minded group; lists are frequently traded or sold among interest groups, magazines, formal party groups, candidate campaign committees, and other organisations. For example, donors to Howard Dean's presidential campaign would be likely to donate to other progressive candidates and causes across state lines, and whomever Dean decides to give his list to would obtain a great advantage in

fundraising. By tracking addresses as they are sold or traded we can map the links between political organisations.³¹

Our data identify which organizations are willing to engage in a limited form of cooperation with each other. They do not, regrettably, provide a full "map" of the two party networks. There are undoubtedly organizations that are strongly allied with one major party but missing from our data. Furthermore, exchanging mailing lists is just one of many possible forms of cooperation between members of a party network; for other forms of cooperation the membership and organization of party networks may change. We focus on lists exchanges because they are a traceable form of cooperation.

In typical mailing list exchanges, an organisation leases some subset of its list to another organisation or publication for a single usage in exchange for a rental fee, which varies with the size and quality of the list.³² Occasionally such exchanges will be facilitated by a list broker, who receives a fee for pairing an organisation's list with a prospective buyer. Since most exchanges are for a one-time use, the buyer cannot sell the names to yet another organisation, and no master list is ever generated.

We assume that expected profit is a necessary condition for one organisation to solicit names from another; organisations try to rent lists that will yield more donations than the cost of the mailing.³³ This is not a trivial goal – a successful "cold" direct mail solicitation will rarely secure donations from more than one or two percent of its recipients. Short term profit, however, is not the only consideration for list owners. There are several reasons that list owners might turn away a bid for their lists. First, a list owner's reputation might suffer if the list buyer is disreputable, and vice versa. For example, many organisations would refuse to share their lists with the Ku Klux Klan.

Second, a list owner may refuse an offer to avoid annoying the donors or subscribers on the list with an excessive number of unsolicited requests for donations. Third, a list owner must trust that the list recipient will not use the information to harm the owner. One possibility is that an interest group in the same niche may attempt to steal members from the list owner. A second scenario is that a list recipient may try to convince group members that their group leaders are doing a bad job or taking an incorrect issue position. The Democratic National Committee, for example, might try to convince members of the National Rifle Association that their leaders are extremists. The Republican National Committee might try to sell members of the American Association of Retired People on the idea of investing Social Security funds in the stock market. To avoid such challenges, organisation leaders have an incentive to scrutinise list-renting proposals and refuse to share information with organisations that are notorious or opposed to the owner's interests.³⁴

A weak interpretation of each name trade, then, is that it represents an economic exchange based on the list buyer's expectation that the list will generate positive net revenue. A slightly stronger interpretation is that there are two necessary conditions for each exchange: the expectation of net revenue, and mutual respect and trust. For this exploratory analysis we are largely agnostic whether "pure profit" or "profit plus politics" is the primary mechanism. However, some of our results do indicate that political kinship factors into list exchanges. Almost none of the actors we examined sold a list to a commercial, non-political enterprise. One way to distinguish these motives is to think of profit as the baseline incentive. It is then useful to imagine what the data would look like

if profit were the only motive. We could then ask how partisan exchange might change the data.

A Simple Model of Name Trading

We propose a simple economic model of name trades. Assume that both groups soliciting donations and the potential donors have ideal points in a unidimensional³⁵ policy space. Assume also that the probability of a donation, given a solicitation, is a decreasing function of the distance between the donor and the group.

We begin by claiming that each group develops its own list of names from nontrading behaviour. Most list trades are temporary – a group leases the list but does not get permanent access to it. But some donors seek out the group, and others come across solicitations that are not from traded lists. We further claim that the donors in each group's list are distributed about the group's ideal point.

Since solicitations are costly (in postage and printing), groups will not solicit donors who are far from them. Specifically, group *j* will solicit potential donor *i* if and only if

 $C_S < p_i D$

Where

 C_S is the cost of a solicitation

 p_i is the probability that donor *i* will donate to group *j*, which in turn is a decreasing function of the distance between the group *j* and donor *i*.

D is the expected donation from the potential donor.

We do not need to define the functional form of the probability to see the most important implications of the model. It defines an interval around each group that includes donors that group would like to solicit. A group will purchase a list if it overlaps this interval enough that the total expected gain from soliciting that list is greater than the cost of that list (C_{LIST}):

$$C_{LIST} < \sum_{i \in LIST} (p_i D - C)$$

This will be more likely when the group selling the list has an ideal point closer to the group buying it. So groups buy lists from their ideological neighbors.

What does this say about the nature of the social networks we will uncover when we look at name trading? First, it says that the apparent social network depends on the distribution of donors and groups. If either donors or groups are in clusters far away from one another, then groups in those clusters will trade among themselves and we will not see much across them. Alternatively, if there are donors and groups across the entire political spectrum, we should expect to see one network connected from one end to the other. Groups at the two extremes might never trade with one another, but a daisy-chain of trades would connect everyone into one network. What the distribution of donors and groups looks like is an empirical question.

The empirical answer is that donors and groups are not so polarised that they would not support any overlap. Figure 1 shows the ideological distribution of respondents in the 2004 National Election Study who say they have made a political donation. This subset of respondents is less moderate than the general population, but the distribution is not bimodal. There are potential donors, many of them, in the middle of the distribution.

[FIGURE 1 ABOUT HERE]

What about groups? It is harder to measure the ideological spread of groups, but McCarty, Poole and Rosenthal³⁶ have some evidence, using the ideological locations of

the member of Congress that political action committees donate to. The distribution of the mean ideal point of the recipients of each group's donations is not bimodal, but rather is concentrated in the middle.³⁷ Their finding echoes the legal conclusion in *McConnell v*. *FEC*, that interest groups were donating to candidates of both parties, and thus are likely not ideologically motivated.³⁸ In other words, there are at least some groups that do bridge between the two ideological clusters, at least when it comes to campaign donations. This is no doubt for strategic reasons, but it means that the groups are moderate enough that their interests might be met by the opposing party.

However, PACs and interest groups that donate to campaigns are not exactly the same as the interest groups that we discuss here. It may be that the moderate groups are disproportionately not the kinds of groups that solicit donors from the population. However, we do think it is suggestive that there are groups across the political spectrum. We also note that there are a number of groups that claim to be moderate ideologically.

Thus we feel comfortable claiming that the distribution of ideal points for donors is not extremely polarised, and we tentatively claim that it is not obviously polarised for groups. It is not necessary for the distribution to be unimodal or uniform, only that there is considerable representation across the spectrum. If so, absent any additional sorting behaviour, we might expect purely profit-motivated groups to generate a network that is connected from one end to the other by a daisy chain of donations. If not, then nametrading between groups may reflect collaboration that is difficult to explain simply in terms of preferences and financial incentives. We turn now to the practice of exchanging mailing lists.

DATA AND METHODS

Our first challenge was to collect data on information exchange between political organisations. We gave donations and subscribed to an initial sample of 50 candidates, political organisations, and publications in February 2004, using a unique name for each contribution. We then tracked subsequent solicitations to each name. The initial sample was selected to include an ideologically diverse set of party organisations, magazines, and interest groups, and (at the time) every major candidate for president. We held the address (a new post office box in Los Angeles, California) and donation size (\$25) constant; for periodicals we chose the subscription offer closest to \$25. When we received subsequent solicitations from organisations outside the initial sample, we were able to trace the unique name from its source to its recipient. For example, in February 2004 we donated \$25 to Americans for Democratic Action using a unique name; we subsequently received solicitations from America Coming Together and Project Vote Smart to the same name.

Our initial sample was like a drop in a wide pool, and our goal was to see where the ripples led. We therefore donated \$25 under unique names to each subsequent solicitor in November 2004 (110 new donations) and April 2005 (170 new donations). This "following-up" technique is known as *snowball sampling*. In the vocabulary of social network analysis, each exchange is a "directed" relationship, with one actor sending and another receiving information with no reciprocal exchange implied.³⁹

Our use of snowball sampling imposes limits on our inferences that we note below when appropriate. Essentially, comparisons between organisations in the initial sample and those in subsequent samples are complicated by the different lengths of time we observe their behaviour, and by the selection bias used for the second and third

waves. With our short time frame, we also cannot say much about the dynamics of the name-trading process.

However, our approach is appropriate for this exploratory study; since we know little about the extended party, it was appropriate to let the name-trading network reveal itself. Furthermore, the financial cost of sampling organisations puts a premium on identifying organisations that actively trade names. We simply must be cautious not to extrapolate much beyond the 2004-2005 period we have chosen. Those years included a contest for the Democratic Party nomination but no contest in the Republican Party. They included a presidential election, and the same party controlled the White House and both houses of Congress for the entire period. All of those factors might affect differences between the parties in our data. A longer time period might reveal patterns we do not observe here.

This process yielded a sample of 286 organisations in three waves. For this analysis we excluded all California-specific organisations (e.g. the *Los Angeles Times* Family Fund). Sixteen organisations—obviously all in the initial wave—exchanged no information at all. Two general patterns are worth noting. First, the network is not very dense. There were 433 connections between all the actors (or "nodes" in social network vocabulary) out of a possible 81,510. This is unsurprising since we expected that many transfers would not happen (e.g. *National Review* to the Democratic National Committee). Second, most actors tend to be primarily sources or consumers of information. Thirty organisations both gave and received information; the rest were either name sources or name takers. Only five pairs of organisations (1.17% of all ties) swapped address lists in a reciprocal relationship.

The next section analyzes our data in greater depth under the headings of polarisation and centralisation. For simplicity, we explain the details of our methods as we go rather than present the techniques and results separately. All analysis was conducted within UCINET 6 and all figures were created using the embedded NETDRAW software.⁴⁰

POLARISATION AND EXTENDED PARTIES

A threshold question is whether some interest groups and media groups cooperate primarily with the Democratic Party while others tend to work with the Republican Party. If all groups—or at least moderate groups—trade freely across the network, then we may conclude that most interest groups and media outlets are free agents who deal with both sides. If, on the other hand, we find that our political organisations are grouped into two distinct clusters with little overlap, we may infer the existence of distinct party networks. We begin our analysis with a basic measure of polarisation—the distance (number of steps) between the Democratic and Republican formal organisations—and then apply a more formal measure of the connections between party members and across the party divide.⁴¹

Let us begin with a simple question: how long are the "walks" from formal Democratic to Republican committees, and vice versa? A walk is a sequence of edges (or connections) from one node to another. For example, if the Democratic National Committee (DNC) directly shared names with the Republican National Committee (RNC), that would be a walk of length one. If the DNC shared with Greenpeace, Greenpeace shared with the National Rifle Association (NRA), and the NRA shared with the RNC, that would be a walk of length three.

As it turns out, there are no directed walks from any Democratic Party committee—the DNC, Democratic Senatorial Campaign Committee (DSCC), or Democratic Congressional Campaign Committee—to any Republican committee (RNC, National Republican Senatorial Committee (NRSC), or National Republican Congressional Committee (NRCC)). That is, there is no sequence of name exchanges from one formal party to the other. By itself, this is partial evidence of polarisation, but it also suggests the general thinness of the network.

More interestingly, the two parties seem to behave differently within their own networks: Democratic organisations are more actively involved in information exchange. Table 1 displays the number of direct connections and other walks for each party committee.

[TABLE 1 ABOUT HERE]

As Table 1 shows, the DNC is involved in 14 total exchanges while the RNC is involved in five. The DCCC received ten names to the NRCC's three. This suggests that Democratic committees are more active players in the name game.

The difference between the Democratic and Republican networks is further evident in Figure 2, which displays the egonets for each party's committees. An "egonet" is the set of contacts for a specific actor or, in this case, two sets of actors; it also shows links between these affiliated nodes. All figures are made using NETDRAW's "springembedding" algorithm with minor modifications for visibility.

[FIGURE 2A and 2B ABOUT HERE]

The Democratic egonet contains four media outlets and nine interest groups. The Republican egonet, in contrast, consists of four magazines. Again, the formal Democratic Party is involved in more transfers than its Republican counterpart.

Having found no "walks" between Democratic and Republican parties due, in part, to the Republicans' comparative lack of ties, what other measures can we use to test for partisan polarisation? A more sophisticated approach is to identify factions in the dataset. A "faction," in social networks parlance, is a collection of nodes that are more tightly connected to one another than to other nodes.⁴² To identify factions, NETDRAW software iteratively searches for a distribution of nodes among a selected number of factions to minimise the number of connections between factions and to maximise the number of connections within factions.

[FIGURE 3 ABOUT HERE]

Figure 3 illustrates the separation of political organisations into three factions, revealing the polarisation in the information-trading network. The largest faction, shown on the left as circles, is the liberal/Democratic network with 181 nodes. The next largest faction with 79 nodes is a conservative/Republican network, shown on the right as triangles. Both networks suggest a core-periphery structure, with a dense inner network of closely connected groups and a fringe of "pendants," i.e. groups with only one connection. This is partially due to the data collection process; many of the pendants are from later waves and were not observed for the entire sampling period. The number of nodes involved renders it inconvenient to label each group, but the distribution corresponds to the expectations of most observers. The Democratic network includes the formal Democratic Party; interest groups such as the Sierra Club, National Organization

for Women, and People For the American Way; publications like *The Nation*; and the 527 group America Coming Together. The Republican network includes publications like the *Weekly Standard* and *Human Events* and interest groups like Club for Growth and Focus on the Family. For clarity, some groups are put into a "fringe" faction with distinct clusters tied to *Foreign Affairs* and Howard Dean's presidential campaign.⁴³

As we expected, there are relatively few links between the Democratic and Republican networks. Just eight of 433 transfers were between groups in the two major factions. These links, moreover, are almost exclusively by media outlets that solicit readers across the divide—e.g. the *Economist*, the *Wall Street Journal*, and *Mother Jones*.⁴⁴ It is not surprising that publications were more likely to solicit customers in both networks. Subscribing to a magazine does not carry the same political weight as donating to a cause, and people interested in politics may want to read a variety of publications. Since many media actors are deeply committed to some notion of objectivity, they can offer something to consumers who generally disagree with a publication's perspective.

While some media sought customers across the spectrum, there were zero connections between the formal party organisations and members of the opposing party's network. That is, the DNC didn't solicit *Human Events* readers, and the RNC didn't solicit donors to NOW, etc. This is consistent with the claim that information-sharing is much more likely to occur within two distinct camps rather than across the spectrum. In particular, interest groups involved in name transfers seemed to trade only with formal party committees and interest groups within one party network or the other.

This impression that there are two polarised party networks can be measured more formally using the External-Internal (E-I) Index.⁴⁵ The E-I Index is simply the number of inter-faction ties minus the number of intra-faction ties, divided by the total number of ties. It varies from 1 (all ties are between factions) to -1 (all ties are within factions). The E-I Index for our three-faction network is -.953.⁴⁶ It is not surprising that the E-I index is negative since the factions were calculated to maximise intra-EPN ties, but this index score suggests almost perfect polarisation between the two EPNs. By comparison, random links between the actors in these groups would have an average E-I index of 0.048 (p < 0.001).

These results are consistent with the claim that a significant portion of the politically active citizens are divided into competing camps. If this separation is what we mean by polarisation, then it is consistent with polarisation. They may not be far from each other in ideological space – as Figure 1 shows – but they are separated into two groups, despite their closeness ideologically. This perhaps suggests we need to think about polarization in a different way, or that we should think about "separation," of the sort we have identified here, instead of "polarization." More work would be needed on mass attitudes to address this question.

Mail solicitations are targeted to those who seem likely to give some money based on their prior donations and subscriptions. Political organisations, in turn, behave as if there is not some large mass of moderate participants, but rather that there are two distinct groups. However, the sharp distinction between the two party networks and the absence of non-political groups taking names from across the ideological spectrum suggest that, in addition to the polarisation of political activists, there is an element of

organisational cleavage as well. Indeed, the fact that there are only ten organisations that fall into the nonaligned "fringe" faction suggests that there are few groups that are truly profit-seeking or politically independent in our sample.

CENTRALITY WITHIN EXTENDED PARTIES

We are also interested in the relationship between the formal party and the extended networks of allied media and interest groups. Are formal parties just "part of the gang," or are they at the apex of the party pyramid? There are multiple measures of the relative importance, or centrality, of actors within a society.⁴⁷ We begin with a simple measure of centrality by illustrating the connections within each EPN, then we describe the number of transfers by each organisation. Finally, as explained below, we estimate the centrality of major organisations, taking into account the "quality" of their trading partners.

As noted, there is a great deal of information sharing within the Democratic network. There were 318 transfers within the Democratic network, only 25 of which involved the DNC, DSCC, or DCCC. The remaining transfers connected one noncommittee member to another, with an average of 3.3 non-committee transfers per organisation within the Democratic network. While a full map of the Democratic network is difficult to display, Figure 4 depicts all organisations in the Democratic network that participated in five or more exchanges. If the formal party was the central actor in the network, we would only see ties between the party committees and other groups, like a hub and spokes. Figure 4, however, includes numerous links between noncommittee organisations. This is consistent with the claim that the "party" extends beyond its formal apparatus to include a network of interest group and media allies.

[FIGURE 4 ABOUT HERE]

Also telling is Howard Dean's complete absence from the Democratic network. At first blush, it might seem curious that the current head of the DNC was not connected to the party network in early 2004. However, given what we are attempting to measure, this is appropriate. In early 2004, Dean was a party insurgent and outsider. While he shared many ideological positions with the liberal network, he did not coordinate with it. Dean's list would have been valuable to liberal groups and other presidential candidates. But while Dean was willing to share the list with some outside businesses, he did not share names with actors in the Democratic network. This accurately places Dean outside the party network in early 2004, and captures political behaviour at odds with a purely economic rationale for list sharing. The party network in early 2004 included non-formal actors such as Americans for Democratic Action and People for the American Way, but the network did not include Dean.

While the Democratic network is dense, the Republican network is not. Figure 5 presents the entire network minus single-connection "pendants." The most prominent pattern in Figure 4 is the role of news magazines. Without their active name-sharing, the Republican network would be even smaller and less active. There were 88 transfers between non-formal party nodes within the Republican network, a mean of 2.3 per organisation.

[FIGURE 5 ABOUT HERE]

We cannot be sure if the Republican Party's relative lack of connections is a feature of the party or the period studied. Since the Democratic Party had a contested presidential nomination right at the beginning of our sample, the Democratic network

might have been simply more active for longer, and this is why we see the relationship. Alternatively, the Republican Party might be less informal, and thus rely less on the connections we are measuring.

But the connections are still present. Figure 5 is what we would expect to see in a party network, with a twist. There is the expected combination of party committees, candidates, interest groups, and conservative media. The inclusion of two alternative medicine publications, *Health & Healing* and *Mountain Home Nutritionals*, is presumably spurious and due to *Human Event's* "liberal" attitude toward name-sharing. These links suggest a profit motive for exchanging names, but the fact that there are so few such transfers also suggests an element of political co-operation in the broader network—most of the time, organisations seem to be trading names with their friends instead of selling to any available buyer. In addition, John Thune is the only Congressional candidate in Figure 5. In 2004, Thune unseated Senate minority leader Thomas Daschle (D - South Dakota) in a close, very expensive, and nationally watched contest, so his appearance in the dataset suggests that he solicited from a national base of donors with the aid of conservative magazines.

A simple measure of each organisation's centrality is its degree, or number of information transfers. In order to ensure that we are not making invalid comparisons across different waves of our sample, we focus on organisations in the initial sample and classified as part of the Democratic or Republican networks. Table 2 presents the number of names given and received for each group; the Democratic side excludes groups involved in fewer than five transfers. Both sides are organized with the most active groups toward the top of the table.

[TABLE 2 ABOUT HERE]

Eleven of the twelve most active groups in the Democratic network were primarily donors of information; they gave or sold names away, but rarely obtained names from other sources. This included both interest groups and publications. Indeed, the only interest group in this sample which was primarily a recipient of information was the National Association for the Advancement of Colored People. On the other hand, formal party organisations were more likely to act as recipients of information. The DNC received eight names and shared six, while the DCCC kept its information in-house while collecting from ten other sources. The DSCC, not shown, received one name and shared with no one. To the extent that organisations favor their friends when making transfers, this pattern suggests that Democratic Party committees have a position of prestige in the network; other groups aid the committees by sharing information.

A similar pattern occurs on the Republican side, although there are fewer cases to consider. Three magazines in the original sample were active sources of names but not major recipients of information. Like the DNC, the RNC gave and received with roughly equal frequency. The RNC, only shared with organisations tied to President Bush—the 2004 campaign and the White House. Like the DCCC, the NRCC did not share names.

While each actor's degree and propensity to share conveys a great deal of information, it is also possible to measure centrality by weighing each organisation's position within its party network. We do so using a formal measure of the proximity of each organisation to every other actor in a network known as "closeness." Specifically, we calculate the shortest path from one node to every other node, then take the reciprocal of than number as a measure of closeness.⁴⁸ Finally, we normalise this statistic by

expressing the observed closeness as a percentage of the maximum possible closeness, i.e. if every node in a party network was directly connected to each other. We calculate each actor's "in-closeness," or centrality as a receiver of names, separately from "outcloseness," or centrality as a name donor.

These results are in the right-hand columns of Table 2. They support the claim that formal party organisations are primary recipients of information within each party network. The DCCC, DNC, and Kerry campaigns ranked first, second, and third in incloseness in the Democratic network, while the RNC, Bush-Cheney campaign, and NRCC ranked first, second, and fourth in in-closeness in the Republican network. Publications ranked highest in Republican network out-closeness, while a mix of interest groups (e.g. the ACLU) and publications (*American Prospect, Nation, New Republic*) ranked highest in out-closeness among Democratic groups. These organisations were not just name sources; they shared names to organisations that were also active name-traders.

DISCUSSION

Our results suggest the existence of two major networks of ideological teammates, polarised from each other. It is no surprise that the national Democratic and Republican committees do not exchange information. However, the gap between the formal party organisations extends to the constellations of interest groups and magazines that trade information with each formal party. A simple measure of this broader polarisation is that there is no path from one formal party entity to an organisation of the opposing party. When we partitioned the name-trading actors into factions, we identified two distinct major coalitions: one liberal and Democratic and the other conservative and Republican.

It is unlikely that this polarisation is due to the divergent political views of the donor and subscriber base for the organisations in our dataset, since we saw in Figure 1 that while the most politically active Americans tend to be more polarised than their less involved counterparts, many moderates do contribute. A more likely possibility is that the groups themselves are polarised, although we have argued that there is some evidence to believe that there should be enough moderate groups to span the gap. The separation of organisations into two distinct party networks may also reflect deliberate collaboration as well as market mechanisms. We observe relatively little name-trading between moderate organisations in different networks despite the potential for profitable outreach. Further, while a few organisations—such as the Howard Dean campaign—did sell names to non-political businesses, the scarcity of name transfers to businesses also suggests that political organisations are not simply selling names to any available bidder and, instead, favor their friends.

Our data also suggest that formal party organisations tend to be information receivers within their respective networks; other media and interest groups provide the formal parties with names, while party committees are more likely to share information with candidates or to keep names for themselves.

This pattern implies that while the formal party organizations are not the entire party, they are important players in it. Membership information flows to the formal organizations, allowing them the broadest access to the donor base of the party. But it would be reasonable to conclude also that the formal organization relies on the rest of the network to mobilise and collect that information. At the very least, the access points for donors and perhaps activists to the party network appear to be decentralized.

The conception of parties as networks has implications for the direct study of the constituent elements. Some strains of interest group research place a central emphasis on the connections of interest groups to party networks, especially where a group is attached to one party and clearly not another. This work should continue. Research on the media also ought to explore the connections between journalists and party actors. Newspapers of an earlier era in the United States were explicitly partisan. We think a set of modern magazines ought to be seen that way as well.

These results should be interpreted with care. First, we should note that the extended parties we identify in this study are not complete. There are many other organisations that informed observers might categorise as affiliated with a political party (e.g. the National Federation of Independent Businesses-Republicans; AFL-CIO-Democrats) that do not appear in our dataset.⁴⁹ Our measurement of name exchanges necessarily excludes those groups that do not solicit small donors or new members from the general population. Additionally, there are important groups to which we donated, such as the National Rifle Association and MoveOn.org, that nonetheless do not appear in the dataset. This should not be interpreted as a sign that these organisations do not matter or that they do not trade names; we simply did not observe them doing it. Third, the links we find between specific organisations and the Democratic or Republican parties are often indirect. We should not be hasty to label as "partisan" specific organisations with a low number of indirect ties to parties. However, we do have more confidence the general pattern of polarisation that emerges from these indirect relationships is valid and noteworthy.

Finally, as with any exploratory work, additional research is required to validate and extend this project. It would be helpful, for example, to vary the size of initial donations or location of mailing addresses, to change the initial sample for a snowball study, or to utilise a large scale single-step survey. It would be extremely valuable to collect information on party networks over time to evaluate the stability of extended party membership and centrality over time. We hope that our effort sparks additional investigation of extended party networks.

More broadly, this article and its companion works on the network structure of political parties should prompt a reconsideration of conventional views about American political parties. What does it mean for a network party to be "strong" or "weak"? How and why do party networks change and realign? How do changes in electoral rules and governing institutions affect party networks? When we think of parties as networks of formal and informal actors, we gain a fresh perspective on the classic questions of party research.



FIGURE 1: Ideological Distribution of Donors

Source: American National Election Study 2004



Figure 2A. Egonet of Democratic Formal Party Organisations



Figure 2B. Egonet of Republican Formal Party Organisations



Figure 3. The Polarised Network: A Three Faction Depiction

The Democratic EPN is depicted as circles, the Republican EPN as triangles, and the "Other" faction is squares. Unconnected groups not shown.







Figure 5. The Extended Republican Network

Democrats	Names Given	Names Received	Republicans	Names Given	Names Received
DNC	6	8	RNC	2	3
DSCC	0	1	NRSC	0	0
DCCC	0	10	NRCC	0	3

 Table 1. List Exchanges Involving Formal Party Organisations

	Names % Received In-C		In-Clo	seness	Out-Closeness	
	Given/Received		(Rank)		(Rank)	
Democratic Party Network						
Americans for Democratic Action	29/0	0%	0	(11)	22.9	(6)
American Prospect	25/2	7%	1.6	(8)	34.4	(2)
Sierra Club	21/4	16%	2.8	(7)	18.6	(7)
People for the American Way	16/5	24%	4.9	(5)	12.7	(11)
Nation	18/2	10%	1.6	(8)	33.4	(3)
ACLU	20/0	0%	0	(11)	35.3	(1)
Amnesty International	19/0	0%	0	(11)	26.3	(5)
Democratic National Committee	6/8	57%	6.7	(2)	7.6	(14)
Common Cause	12/2	14%	1.1	(10)	13.2	(10)
Brady Campaign to Prevent Handgun Violence	16/0	0%	0	(11)	16.6	(8)
New Republic	14/0	0%	0	(11)	29.5	(4)
EMILY's List	12/1	8%	2.9	(6)	14.1	(9)
Democratic Cong. Campaign Committee	0/10	100%	7.7	(1)	0	(15)
Lieberman for President*	8/0	0%	0	(11)	9.9	(12)
Kerry for President	2/4	67%	5.5	(3)	7.6	(13)
NAACP	0/5	100%	5.2	(4)	0	(15)
Republican Party Network				. ,		. ,
Human Events	32/0	0%	0	(8)	67.4	(1)
National Review	16/2	11%	3.2	(5)	25.6	(2)
Weekly Standard	7/0	0%	0	(8)	20.3	(3)
Republican National Committee	2/3	60%	5.1	(1)	3.2	(4)
Bush/Cheney 2004	2/3	60%	5.1	(1)	3.2	(4)
National Republican Congressional Committee	0/3	100%	3.8	(4)	0	(6)
Club for Growth	0/3	100%	4.5	(3)	0	(6)
Seniors Coalition	0/1	100%	1.9	(6)	0	(6)
Washington Times Weekly	0/1	100%	1.3	(7)	0	(6)

Table 2. Information Sharing by Democratic and Republican Network Members in the Initial Sample

In-Closeness and Out-Closeness are calculated using reciprocal geodesic paths and normalized as a percentage of the maximum possible closeness. Six Democratic-connected actors involved in fewer than five transfers are omitted.

* The Lieberman campaign's low in-degree may be due to Senator Lieberman's decision to drop out of the Presidential primary race soon after our donation arrived.

² Tim Groseclose and Jeffrey Milyo, 'A Measure of Media Bias'; *Quarterly Journal of Economics*, 120(2005): 1191-1237.

³ For earlier works applying SNA to interest groups and parties, see Daniel P. Carpenter, Kevin M. Esterling and David M. J. Lazer, 'Friends, Brokers, and Transitivity: Who Informs Whom in Washington Politics?' *The Journal of Politics*, 66(2004): 224-46, Roberto M. Fernando and Roger V. Gould, "A Dilemma of State Power: Brokerage and Influence in the National Health Policy Domain." *American Journal of Sociology* 99(1994):1455-91. James H. Fowler, 'Connecting the Congress: A Study of Cosponsorship Networks'; *Political Analysis*, 14(2006a): 456-487, James H. Fowler, 'Legislative Cosponsorship Networks in the U.S. House and Senate'; *Social Networks*, 28(2006b): 454-465, Michael T. Heaney, "Brokering Health Policy:

Coalitions, Parties, and Interest Group Influence," *Journal of Health Politics, Policy and Law*, 31(2006). Thomas Koenig and Robert Gogel, "Interlocking Corporate Directorships as a Social Network." American Journal of Economics and Sociology. 40(1981): 37-50. David Knoke, *Political Networks: The Structural Perspective*, (New York: Cambridge University Press, 1990).

⁴ Jacobson, 'Explaining the Ideological Polarization of the Congressional Parties since the 1970s', Nolan McCarty, Keith T. Poole and Howard Rosenthal, *Polarized America: The Dance of Ideology and Unequal Riches* (Boston: MIT Press, 2006), Sean M. Theriault n.d. 'The Case of the Vanishing Moderates: Party Polarization in the Modern Congress', University of Texas - Austin.

⁵ Morris P. Fiorina, Samuel J. Abrams and Jeremy C. Pope, *Culture War? The Myth of a Polarized America* (New York: Pearson Longman, 2004).

¹ E. E. Schattschneider, *The Semisovereign People: A Realist's View of Democracy in America* (Fort Worth: Harcourt Brace Jovanovich College Publishers, 1960).

⁶ Alan Abramowitz and Kyle Saunders, 'Why Can't We All Just Get Along? The Reality of a Polarized America'; *The Forum*, 3(2005), Hetherington, 'Resurgent Mass Partisanship: The Role of Elite Polarization'.

⁷ V. O. Key, Jr., *Politics, Parties, and Pressure Groups* Vol. Third (New York: Thomas Y. Crowell Company, 1952).

⁸ Garv W. Cox and Mathew D. McCubbins. *Legislative Leviathan: Party Government in the House* (Berkeley: University of California Press, 1993), Gary W. Cox and Mathew D. McCubbins, Setting the Agenda : Responsible Party Government in the U.S. House of Representatives (New York: Cambridge University Press, 2005), David W. Rohde, Parties and Leaders in the Postreform House (Chicago: University of Chicago Press, 1991), Barbara Sinclair, Majority Leadership in the U.S. House (Baltimore: Johns Hopkins University Press, 1983), Barbara Sinclair, Legislators, Leaders, and Lawmaking : The U.S. House of Representatives in the Postreform Era (Baltimore: Johns Hopkins University Press, 1995). ⁹ Larry M. Bartels, 'Partisanship and Voting Behavior, 1952-1996'; American Journal of Political Science, 44(2000): 35-50, Angus Campbell, Philip E. Converse, Warren E. Miller and Donald E. Stokes, The American Voter (New York: John Wiley and Sons, 1960), Michael B. MacKuen, Robert S. Erikson and James A. Stimson, 'Macropartisanship'; American Political Science Review, 83(1989): 1125-1142. ¹⁰ John J. Coleman 'The Resurgence of Party Organization? A Dissent from the New Orthodoxy', in D. M. Shea and J. C. Green (eds) The State of the Parties, (Lanham, MD: Rowman and Littlefield, 1994), pp., Cornelius P. Cotter, James L. Gibson, John F. Bibby and Robert J. Huckshorn, Party Organizations in American Politics (New York: Praeger, 1984), David R. Mayhew, Placing Parties in American Politics (Princeton: Princeton University Press, 1986).

¹¹ Gary W. Cox, *The Efficient Secret: The Cabinet and the Development of Political Parties in Victorian England* (Cambridge: Cambridge University Press, 1987), Marc C. Hetherington, 'Resurgent Mass Partisanship: The Role of Elite Polarization'; *American Political Science Review*, 95(2001): 619-631, Gary C. Jacobson, 'Explaining the Ideological Polarization of the Congressional Parties since the 1970s'; the

annual meeting of the Midwest Political Science Association, Chicago, IL (2004), Seth Masket, *A Party by Other Means: The Rise of Informal Party Organizations in California*, Doctoral Dissertation, (Los Angeles: University of California, 2004).

¹² John Aldrich, *Why Parties?* (Chicago: University of Chicago Press, 1995).

¹³ James Q. Wilson, *The Amateur Democrat: Club Politics in Three Cities* (Chicago: University of Chicago Press, 1962).

¹⁴ E.g.: Alan Abramowitz, John McGlennon and Ronald Rapoport, 'The Party Isn't Over: Incentives for Activism in the 1980 Presidential Nominating Campaign'; The Journal of Politics, 45(1983): 1006-1015, Aldrich, Why Parties, John H. Aldrich, 'A Downsian Spatial Model with Party Activism'; American Political Science Review, 77(1983): 974-990, Thomas M. Carsey and Geoffrey C. Layman, "Conflict Extension' in American Party Politics'; Vox Pop: The Newsletter of Political Organizations and Parties, 24(2005): 1, 6, John S. Jackson III, Nathan S. Bigelow and John C. Green 'The State of Party Elites: National Convention Delegates, 1992-2000', in J. C. Green and R. Farmer (eds) The State of the Parties: 2000 and Bevond, 4th Edition, (Lanham, MD: Rowman and Littlefield, 2003), pp., John S. Jackson III, Nathan S. Bigelow and John C. Green, 'The State of the Party Elites: National Convention Delegates, 1992-2004'; the Ray C. Bliss Institute of Applied Politics Conference on the State of the Parties: 2004 and Beyond, Akron, OH (2005), Jeane J. Kirkpatrick, Warren E. Miller and Russell Sage Foundation., The New Presidential Elite: Men and Women in National Politics (New York: Russell Sage Foundation, 1976), Geoffrey C. Lavman and Thomas M. Carsey, 'Party Polarization and 'Conflict Extension' in the American Electorate'; American Journal of Political Science, 46(2002): 786-802, Gary Miller and Norman Schofield, 'Activists and Partisan Realignment in the United States'; American Political Science Review, 97(2003): 245-260, Kyle L. Saunders and Alan I. Abramowitz, 'Ideological Realignment and Active Partisans in the American Electorate'; American Politics Research, 32(2004): 285-309.

¹⁵ For example, Barbara Sinclair, in *Legislators, Leaders, and Lawmaking*, reports that Congressional party leaders work closely with allied interest groups to set the legislative agenda, whip legislators, and win votes.

¹⁶ Schattschneider, The Semisovereign People: A Realist's View of Democracy in America.

¹⁷ The Republican National Committee recently altered its website to change the designation of various non-profit, tax-exempt organisations with which it is normally associated. These groups, including the American Enterprise Institute, the Heritage Foundation, and the Leadership Institute, had been listed as "GOP Groups" but have been re-labeled as "Other Organisations." John Byrne, 'After Raw Story Article, Republican National Committee Modifies Website', *Raw Story* (January 16) 2006..

¹⁸ Jeffrey L. Pasley, *The Tyranny of Editors: Newspaper Politics in the Early American Republic*, University of Virginia Press, 2001.

Republic, University of Virginia Press, 2001,

¹⁹ Anthony Downs, An Economic Theory of Democracy (New York: Harper & Row, 1957), p. 25.

²⁰ Joseph A. Schlesinger, *Ambition and Politics: Political Careers in the United States* (Chicago: Rand McNally and Company, 1966), p. 6.

²¹ E. E. Schattschneider, *Party Government* (Westport: Greenwood Press, 1942), p. 35.

²² Richard M. Skinner, 'Do 527'S Add up to a Party? Thinking About the 'Shadows' of Politics'; *The Forum*, 3(2005): Article 5.

²³ Mildred A. Schwartz, *The Party Network: The Robust Organization of Illinois Republicans* (Madison: University of Wisconsin Press, 1990).

²⁴ Jonathan Bernstein, *The Expanded Party in American Politics*, Doctoral Dissertation, (Berkeley: University of California, 1999).

²⁵ Joseph W. Doherty, 'Organized by Competition: Candidate-Consultant Networks in California Legislative Campaigns'; the annual conference of the American Political Science Association, Washington, DC (2005). ²⁶ Marty Cohen, David Karol, Hans Noel and John Zaller, 'Beating Reform: The Resurgence of Parties in Presidential Nomination, 1980 to 2000'; Annual Meeting of the American Political Science Association, San Francisco (2001).

²⁷ Casey Byrne Knudsen Dominguez, *Before the Primary: Party Participation in Congressional Nominating Processes*, Doctoral Dissertation, (Berkeley: University of California, 2005b).

²⁸ See Jonathan Bernstein, 'Network Research, Factions, and the Next Agenda'; the Ray C. Bliss Institute of Applied Politics Conference on the State of the Parties: 2004 and Beyond, Akron, Ohio (2005).
²⁹ Party networks are mapped by analyzing the donations of party-loyal donors in Casey B. K.
Dominguez, 'Groups and the Party Coalitions: A Network Analysis of Overlapping Donor Lists'; the annual conference of the American Political Science Association, Washington, DC (2005a).

³⁰ Larry Sabato, *The Rise of Political Consultants: New Ways of Winning Elections* (New York: Basic Books, 1981).

³¹ Schlozman and Tierney conducted a similar experiment on a much smaller scale. They had a child join several organisations, and three of those groups generated mail from other organisations. The new groups were ideologically similar to the original three. For details, see Kay Lehman Schlozman and John T.

Tierney, Organized Interests and American Democracy (New York: Harper & Row, 1986).

³² Steve Kaufman, Personal Communication with Author, September 22, 2005.

³³ Some list owners may waive rental fees to aid affiliated groups, but we cannot observe such behaviour.
³⁴ Former Sen. Ben Nighthorse Campbell (R-CO) recently complained that Rep. Bob Beauprez (R-CO) was soliciting from Campbell's old donor list for his 2006 gubernatorial campaign without permission.
As Campbell said, "Part of the problem is if the word is out that they're using your list, there's a sort of subtle insinuation that you're endorsing the candidate - and I'm not" Lynn Bartels, 'Donor List Flare-Up', *Rocky Mountain News* (October 8) 2005..

³⁵ Theoretically, the argument follows in higher dimensions. Empirically, we look at a single ideological dimension.

³⁶ McCarty, Poole and Rosenthal, *Polarized America: The Dance of Ideology and Unequal Riches*. pp.
139-163. See especially Figure 5-4.

³⁷ The authors go on to show that the groups whose mean recipient is moderate are still more likely to donate to extreme members on both sides of the aisle. This, we think, is consistent with the notion that some groups view themselves as in the middle of the ideological spectrum. It is less consistent, however, with our claim that groups are unwilling to work with members from the other party. Presumably the access motive for contributions trumps party considerations at least at the campaign donation stage. ³⁸ *McConnell v. Federal Election Commission*, 540 U.S. 92 (2003), opinion of Stevens and O'Connor for the Court, at 148.

³⁹ The antonym of a directed relationship is a "symmetric" relationship, in which the relationship between two actors is necessarily equivalent for both. "Neighbor," for example, is a symmetric relationship; if A lives next door to B, then B lives next to A.

⁴⁰ This software is available at <u>http://www.analytictech.com/ucinet.htm</u>. Readers interested in learning more about social network analysis may begin with Stanley Wasserman and Katherine Faust, *Social Network Analysis: Methods and Applications* (New York: Cambridge, 1994). and Robert A. Hanneman and Mark Riddle, *Introduction to Social Network Methods* (Riverside: University of California, Riverside, 2005)..

⁴¹ There are a several other SNA techniques for studying subgroups within a society. These include a number of standards for identifying cliques that are too restrictive for our data, identifying components of a society (all our cases are either connected in one group or completely isolated), or the clustering coefficient. The clustering coefficient measures the extent to which a society is broken into smaller groups. Our data are highly clustered (.140) relative to their density (.0053). See Hanneman and Riddle, *Introduction to Social Network Methods*. esp. Chapters 8 and 11.

⁴² Hanneman and Riddle, Introduction to Social Network Methods., chapter 4.

⁴³ When we divided the nodes into four or five factions no new groups were classified into the fourth or fifth faction. When groups are classified into two factions all the points in the "Other" faction are lumped with the Republican EPN. Dean's disconnect from the rest of the Democratic network is discussed below.
⁴⁴ The transfers from Democratic EPN nodes to Republican EPN nodes were: UNICEF to Veterans of Foreign Wars, NY Review of Books to Easton Press, *New Republic* to *The Week*, and Americans United for Separation of Church and State to *Commentary* magazine. The Republican EPN to Democratic EPN transfers were *National Review* to *Mother Jones* and the *Economist*, and *Weekly Standard* to the *Economist* and *Wall Street Journal*.

⁴⁵ David Krackhardt and Robert Stern, 'Informal Networks and Organizational Crises: An Experimental Simulation'; *Social Psychology Quarterly*, 51(1988): 123-140.

⁴⁶ To calculate this statistic we ignored the direction of the ties.

⁴⁷ See Wasserman and Faust, *Social Network Analysis: Methods and Applications*. There are three basic notions of centrality: degree, closeness (i.e. being near many actors), and betweenness (being the linchpin for links between other actors) (Hanneman and Riddle, *Introduction to Social Network Methods*.). For directed data, scholars sometimes consider it "prestigious" to receive many ties and "influential" to initiate many ties. In this presentation we are agnostic about whether it is better to give than receive.

⁴⁸ Wasserman and Faust, Social Network Analysis: Methods and Applications., p. 200. We used

UCINET's "Closeness" algorithm with reciprocal geodesic distances. There are several other measures of centrality, including eigenvector centrality and power indexes, but we found them unsuited to our sparse network of directed relationships.

⁴⁹ Dominguez, 'Groups and the Party Coalitions: A Network Analysis of Overlapping Donor Lists'.