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Clio Andris
David Lee
Christian E. Gunning
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Authors: Clio Andris[a,b] , David Lee[b] , Christian E. Gunning[c,] John A. Selden[d] and Marcus J. Hamilton[ace]

[a] Santa Fe Institute, 1399 Hyde Park Rd. Santa Fe, NM 87501
[b] Department of Urban Studies and Planning, Massachusetts Institute of Technology, 9-209, 77 Massachusetts Avenue, Cambridge, MA 02139
[c] Department of Biology, University of New Mexico, 167 Castetter Hall, University of New Mexico, Albuquerque, NM 87131
[d] United States Senate Budget Committee, 624 Dirksen Office Building, Washington, DC 20510
[e]Department of Anthropology, University of New Mexico, Anthropology 1, Albuquerque, NM 87131

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Abstract

It is widely believed among politicians and the public that partisanship in the U.S. Congress is at an historic high, culminating in the government shutdown of fall 2013. Here, we examine the history of (non-)cooperation in the U.S. Congress using data from roll call votes in the U.S. House of Representatives, 1949-2012. For each year, we focus on the number of cooperating pairs of representatives within and across political parties and show that cooperation was common in the past but is rare today. We also show that despite short-term fluctuations, partisanship, or non-cooperation, in the U.S. Congress has been increasing exponentially for over 60 years and shows no sign of slowing or reversing. Moreover, the data suggest that American voters have been electing increasingly partisan, non-cooperating representatives at a local level which has resulted in declining measures of Congressional productivity.

I. Introduction

Americans today are represented by political figures who struggle to cooperate across party lines. The United States is comprised of 435 congressional districts represented predominantly by one of two political parties, Democratic and Republican. When members of opposite parties refuse to cooperate, Congress loses its ability to resolve problems resulting in an inability to enact legislation [1]. Arguably, partisanship in the US House of Representatives is currently at the highest ever and the government shutdown of September, 2013 is a direct manifestation of this level of non-cooperation. Cooperative bipartisan ties have declined

in step with the rise of partisanship over the past sixty years and, currently, cooperation is in the hands of very few members of Congress despite possible collaboration on issues of interest to legislators from both parties, such as aging populations, natural resource management, or veterans' affairs [2].

It may not be surprising that cooperation has decreased. The risk of straying from the platform of one's party in order to cooperate can result in rejection by a member's party and faithful party constituents [3, 4]. As a result, party affiliation, instead of individual ideology, shapes how particular issues are framed and voted upon [5, 6]. For example, members of Congress who switch parties tend to alter their voting behavior significantly pre- to post-switch, which should not occur if policy and ideology remain constant [7]. Other potential deterrents to cooperation and possible causes of partisanship include wealth distribution [8]; redistricting [9]; activist activity at primary elections [10]; changes in Congressional procedural rules [11]; Southern political realignment [12]; and the rise of the 24-hour news cycle and other new forms of media, combined with increasing political bias in reporting [13].

It is also difficult to gauge the lack of relating with one another across party lines. Methods that examine partisanship explore the role of each individual in a feature space, or by using an "indexing" method that assigns each representative a numeric value corresponding to how intensely their activity reflects Republican or Democratic behavior [14, 15]. These numbers are useful for comparing one specific Congress but cannot be compared across Congresses, nor do they reveal the collaborations that exist despite partisanship. Social networks where representatives are connected by similar committee memberships [16-20] or by a high number of roll call vote agreements have been successfully used to show affiliations and even predict a member's re-election success.

We examine a network of representatives [as in 16-20], but with a specific focus on the individual links between representatives, as quantified by similar or dissimilar voting records (see section 4), not, for example, the entire network structure. Our method is innovative in that it does not involve a subjective combination of variables or feature reduction, which often results in a loss of fidelity and requires subjective decisions. Our method also avoids the indexing of each legislator on a spectrum of political persuasions, a method subject to the same loss of fidelity because it reduces many features to a linear scale of strength of party affiliation.

In the next section, we examine the dynamics of increasing and decreasing likelihood of cross-party "friendships" between individual legislators (as defined by high roll-call voting agreements, as in [19, 21]). We then find which representatives and constituencies dominate across-the-aisle cooperation that 4 promotes legislative productivity [1] today. Next, we discuss the productivity implication of growing partisanship

and conclude with a discussion.

II. Results

The agreement rates of cross-party (CP) pairs (comprising one Democrat and one Republican) and same-party (SP) pairs (comprising two Democrats *or* two Republicans) were most similar in the 91st Congress, during the Nixon Administration (Fig. 1). The distributions of votes between SP and CP pairs are most different in the past two decades, owing in part to a galvanizing movement first led by Speaker Newt Gingrich (R-GA) [22]. The average number of agreements for CP pairs is typically lower than SP pairs, with maximum separation during the 104th Congress, and minimum separation in the 91st Congress, echoing [7]. In fact, in the 91st Congress, the average number of CP votes is 90% of the value of the average number of SP agreements; in the 112th Congress the average number of CP votes drops to 35% the value of SP agreements. From 1949 until 1969, there had been only a moderate difference in the CP and SP vote distribution, during which the disparity peaked from 1961-67; thereafter the distributions began to converge, before diverging again in 1983 during the Reagan Administration. Since 1983, SP and CP pairs have steadily bifurcated until firmly becoming a bimodal distribution. There has been scant overlap between the two distributions since 2003, during the George W. Bush Administration continuing through the Obama Presidency.

We also examine the distributions of SP and CP vote agreement *rates*. Here we label the threshold value as the crossing point between CP and SP agreement distributions. For instance, the 109st Congress threshold value is at 766 agreements (Table 1, graphically visible in Fig. 1). Although the value itself depends largely on the overall number of roll-call votes during a given Congress, it signifies that any random pair who exhibits this number of agreements is equally likely to be a cross-party or same-party pair. To the right of the threshold (i.e. more agreements), a random pair is more likely to be of the same party; to the left, from opposite parties.

Cooperator Pairs The number of CP pairs above the threshold value, called "cooperators," has decreased significantly in recent years. The number of cooperator pairs ranges from 181 in the 110th Congress (2007-08) to 12,921 cooperator pairs in the 93rd Congress (1973-74) (see Table 1). Under this definition, cooperation was at its highest between the 90-96th Congresses (1967-1979), with values almost always over 10,000. Notably, this period is considered one of the most tumultuous in modern American history, coinciding with the Vietnam War, university riots, Watergate, separate resignations of the Vice President and President, the Iran hostage crisis, and the assassinations of Martin Luther King Jr., and Robert F. Kennedy. Conversely, the 107th-111th Congresses (2001-2010) had fewer than 1,500 cooperator pairs. The fewest pairs are found in consecutive Congresses during the G.W. Bush Administration: there were 455 cooperator pairs from 2003-04 and 280 cooperator pairs from

2005-06 (Table 1). Cooperator pairs have rebounded from this minimum, at 1371 and 1508, since the beginning of the Obama Administration in 2009. When normalized by the number of possible CP pairs in a given Congress, we see that the probability of any CP pair agreeing above the threshold peaked at 13.4% during the 96st Congress, whereas in the 107th-109th Congresses this probability fell to between 0.2% and 0.5% (Table 1). Today, only 1% of any possible CP pair agrees enough to rival the steadfast solidarity seen in SP pairs.

Moreover, the average number of disagreements on roll call votes between CP pairs is increasing exponentially (Fig. 2A). An exponential growth model in the form of $y = c_0 e^{\alpha t}$ exhibits a fit ($F_{31} = 236.22$, $\alpha = 0.05$, $R^2 = 0.88$, $p < 0.0001$) that indicates that bipartisanship/non-cooperation has been increasing at an annual rate of about 5% over the last 60 years. This increase is worrisome because this trajectory of increased dissent in voting behavior spans 60 years, thus cannot be considered a product of recent political decisions (such as the emergence of the Southern Democrats or the Republican Tea Party Group). Alternatively, these types of groups and events may have *emerged* from the growing shift away from cooperation. The increase is exponential, meaning that there is no empirical evidence that the increase in partisanship is slowing, and even if so, the process of reverting to cooperation may be lengthy.

Cooperator Behavior The number of individual representatives present in a cooperator pair has not scaled predictably with the decline in cooperator pairs; the decline in the number of cooperator pairs (Fig. 2B) has been steady, while the number of members who participate in a cooperator pair (Fig. 2C) has dropped sharply. Before 2000, there were about 350-425 unique cooperators participating in a cooperator pair (except for the 104th Congress). Since the 107th Congress, post-2000, Congresses fall into a vertical axis trend, where a decrease in the total number of cooperator pairs coincides with a sharp decline in unique cooperators. For instance, the 107th, 111th and 112th Congresses have similar numbers of cooperator pairs as those of the 103rd and 105th Congresses (ranging approx. 1300–1600). Yet, in the 105th and 103rd Congresses, nearly all representatives participated in the cooperator pairs, whereas in the more recent years, fewer cooperators are present, indicating that most of the cooperation has fallen into fewer hands.

Super-cooperators

A single representative's activity as a percentage of all cooperator pairs ranged from 0 to 3% before the 102nd Congress. In the 102nd Congress we find that some representatives are present in a higher majority of CP pairs (Fig. 2D). "Super-cooperators" such as Rep. Ralph Hall (D-TX) guide 48% of all cooperator pairs (see S1 for list of super-cooperators). Rep. Hall, a senior Democrat from rural North Texas (largest city: Sherman), singlehandedly drove nearly half of all cross-aisle partnerships by agreeing on past the threshold with 220 of the 230 Republicans in the 108th Congress (Table S1). Similarly, Rep. Dan Boren (D-OK), whose Oklahoma district (largest city: Muskogee) shares a border with Rep. Hall, contributed to 42% of all cooperator pairs in the

109th session, by partnering with 119 different Republicans. Rep. Robert Cramer (D-AL) and Rep. Boren, in sum, appeared in 71.4% of all cooperator pairs in the 109th Congress. Seven representatives were responsible for 98.3% of all cooperation in the 110th Congress (Table S1).

Most super-cooperators are Democrats who hail from Texas (12 appearances), Mississippi (7), Alabama (5), Louisiana, Indiana (4 appearances each), Georgia, Kentucky, Oklahoma, Ohio, Pennsylvania and Virginia (3 each). The 104th Congress (1995-1996) had the most super-cooperators (13), all of whom were Democrats, mostly from Southern states, as described in [22]. Republican super-cooperator appearances are mostly limited to: New York (10), New Jersey (5) and Maryland (4), largely in suburban areas outside New York City and Washington, D.C. This trend may be shifting, as preliminary results from the 113th Congress show that the majority of super-cooperators are Republican representatives from New York and New Jersey.

Congressional Productivity We measure Congressional productivity in three ways (Fig. 3): the total number of bills introduced per session (Fig. 3*A*); the total number of bills passed per session (Fig. 3*B*); and the ratio of the number of bills passed to bills introduced per session (Fig. 3*C*). Both the number of bills introduced and the number of bills passed increase exponentially with the number of cooperative pairs in Congress. Interestingly, the number of bills introduced increases faster than the number of bills passed with the number of cooperative pairs, and so the ratio of these two quantities is significantly negative. Therefore, the productivity of Congress (as measured by the ratio of the number of bills passed to those introduced) decreases exponentially with the rise of partisanship. However, non-cooperation has a greater impact on the number of bills introduced, a measure of the innovation of Congress, rather than the number of bills passed. We discuss this point further below.

III. Discussion

Our analysis shows that the current Congressional environment is so divided that cooperation across parties, a practice that was once quite prevalent, is now all but non-existent. When cooperation occurs today it is limited to a very few representatives. Instead, party alliance seems to be the defining feature of a U.S. Congressperson's roll call voting record. Importantly, however, the data show that level of Congressional non-cooperation is not simply a recent phenomenon but has been increasing exponentially for over 60 years, and implying that non-cooperation breeds more non-cooperation, multiplicatively. Therefore, while it is incorrect to say that recent divisive political figures such as Cheney, Delay, Rumsfeld, Bush, Pelosi, the Kennedys and Clintons, are responsible for increasing partisanship, they have actively contributed to it because those are the types of people the system selects. In addition, this exponential increase in non-cooperation shows no indication of slowing down, let alone reversing, and so while Congress has steadily

become more non-cooperative over the latter half of the 20th century, this trend seems likely to continue in the near future.

But why is this pattern of increasing partisanship emerging so strongly? There are complex interactions that drive decision-making and pair-wise relationships in the House of Representatives. These could include representing constituents and local interests, while maintaining one's own sense of ethics and orthopraxy as a representative to a unique constituency. They may also include social interactions such as sponsoring bills, interacting with lobbyists, creating trust networks for communication, sharing ideas, garnering support for initiatives, and negotiating provisions. Our results suggest that following one's party agenda is now either collinear with the above considerations or is considered a higher priority.

This increase in non-cooperation leads to an interesting electoral paradox. The data show that US voting public has been selecting increasingly partisan representatives for 60 years, but at the same time public opinion of the U.S. Congress has been steadily declining. Around 1960 Congressional approval rates were in the 60th percentile, and today Congressional approval is in the 10th percentile [23]. This suggests that the voting public cast their ballots on a local basis for increasingly partisan representatives whom they view as best representing their increasingly partisan concerns. But by selecting such representatives locally they are increasingly unable to cooperate at a national Congressional level. As such, this suggests that any fundamental reversal of increasing non-cooperation requires, over time, either a change in local ideological perspectives (resulting in a selective shift to more non-partisan representatives), or a fundamental change in how the electorate votes (from concerns focused on local issues to concerns focused on global effectiveness).

Our data also show that this increase in Congressional non-cooperation correlates significantly with a decrease in Congressional productivity, as measured by the percentage of bills passed that are introduced for consideration in a given Congress [23]. Interestingly, the data show that this decrease in efficiency is driven not only by a change in the number of total bills passed, but also by a significant decrease in the number of bills introduced. This pattern suggests that increasing non-cooperation stifles Congressional motivation to innovate. This may be due to several factors. For example, it may be the case that representatives from opposing parties simply do not want to work together as there is less common ground to agree on. Or perhaps, in an increasingly non-cooperative environment, representatives see less incentive to expend time and effort on legislation that will require bipartisan support.

IV. Materials and Methods

Network: We use data from the U.S. House of Representatives from 1949 (commencement of the 81st Congress) to 2012 (adjournment of 112nd Congress) (see Table 1). Data for roll call vote results is provided by [24]

as in [25]. In a roll call vote, a representative chooses whether to respond (‘yay’/‘nay’) or abstain from voting on a bill or motion. Substantive roll call votes are proposed actions, bills and legislation regarding topics such as veterans’ benefits and health insurance. Procedural roll call votes reflect votes on the organization and timing of the agenda [24]. We do not discriminate between these types although unanimous votes are excluded from the data set. For all *B(n,2)* possible pairs of representatives in a given Congress, we count the number of roll call votes where they voted the same way. We tally an agreement when a pair votes either ‘yay’/’yay’ or ‘nay’/’nay’. For example, Congressman A has voted similarly with Congressman B 5 times more often than with Congressman C in a session, giving the A-B relationship 5 times the weight of A-C. The result is a *B(n,2)* –cell, weighted, undirected graph of pair-wise relationships between representatives. Each pair is classified as either “same-party” (SP) if they are members of the same political party, or “cross-party” (CP) if one representative is Republican and the other Democrat. Independents are rare and are included as CP with all other non-Independents. Independents are not listed as super-cooperators due to their tendency to be in a cross party pair with the majority of Congress. Representative absences are discarded. Abstentions are relatively rare, and are counted as nays. Agreements are not normalized by total possible votes or any another factor.

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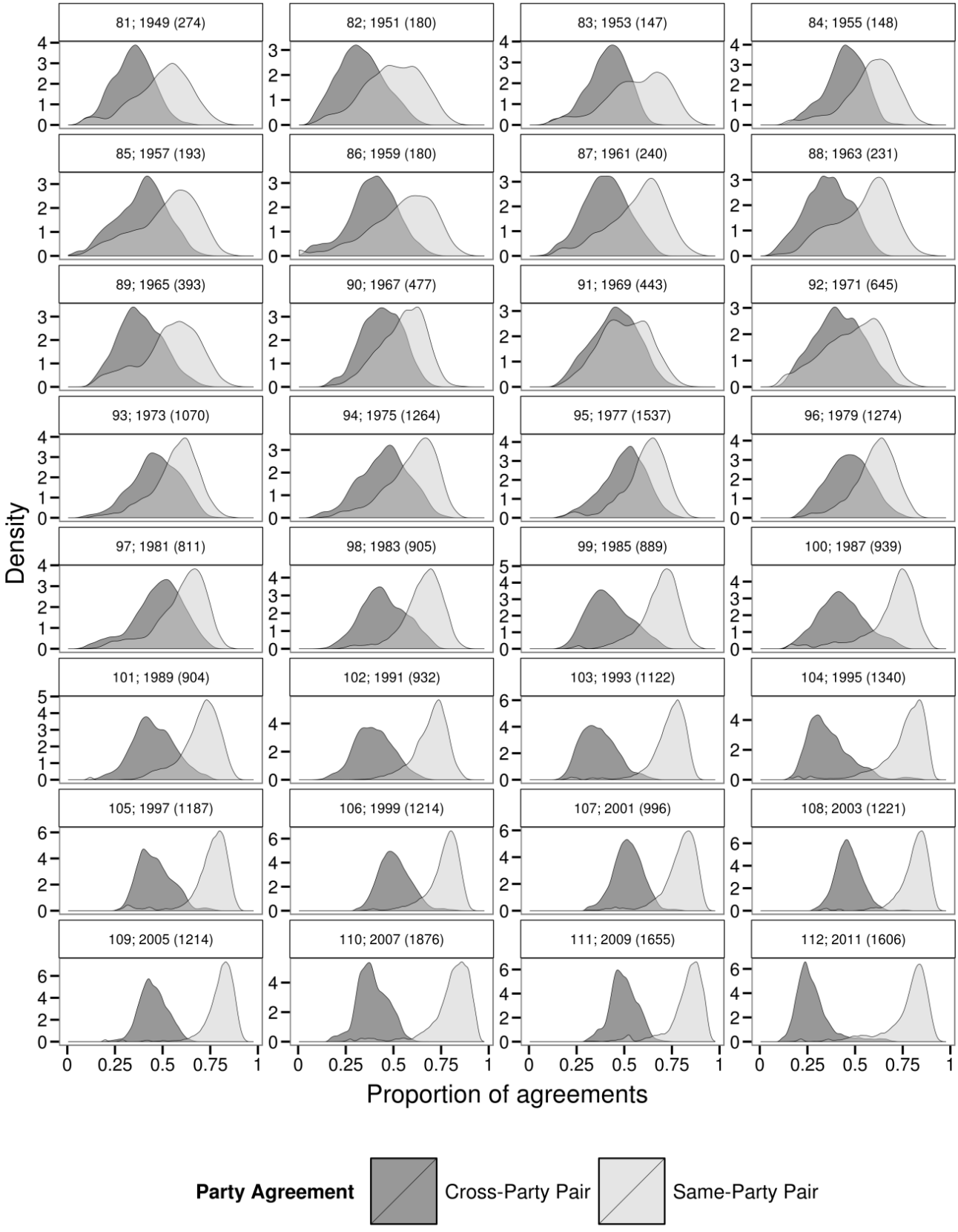
81; 1949 (274)
82; 1951 (180)
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89; 1965 (393)
90; 1967 (477)
91; 1969 (443)
92; 1971 (645)
93; 1973 (1070)
94; 1975 (1264)
95; 1977 (1537)
96; 1979 (1274)
97; 1981 (811)
98; 1983 (905)
99; 1985 (889)
100; 1987 (939)
101; 1989 (904)
102; 1991 (932)
103; 1993 (1122)
104; 1995 (1340)
105; 1997 (1187)
106; 1999 (1214)
107; 2001 (996)
108; 2003 (1221)
109; 2005 (1214)
110; 2007 (1876)
111; 2009 (1655)
112; 2011 (1606)
Density
Proportion of agreements
Party Agreement
Cross-Party Pair
Same-Party Pair

Fig. 1: Probability density functions of the number of roll call vote agreements between pairs of the same-party (SP) and those pairs of cross-party (CP) pair 1950-2012. The plots show the steady divergence of CPs and SP agreement rates over time. Above each distribution is the Congress number (81-112), followed by the year the Congress commenced, and the number of total roll call votes during the two sessions of each Congress. Pairs with few agreements (below the local minima of a consistently- increasing CP distribution), including representatives from Washington D.C., Puerto Rico are removed.

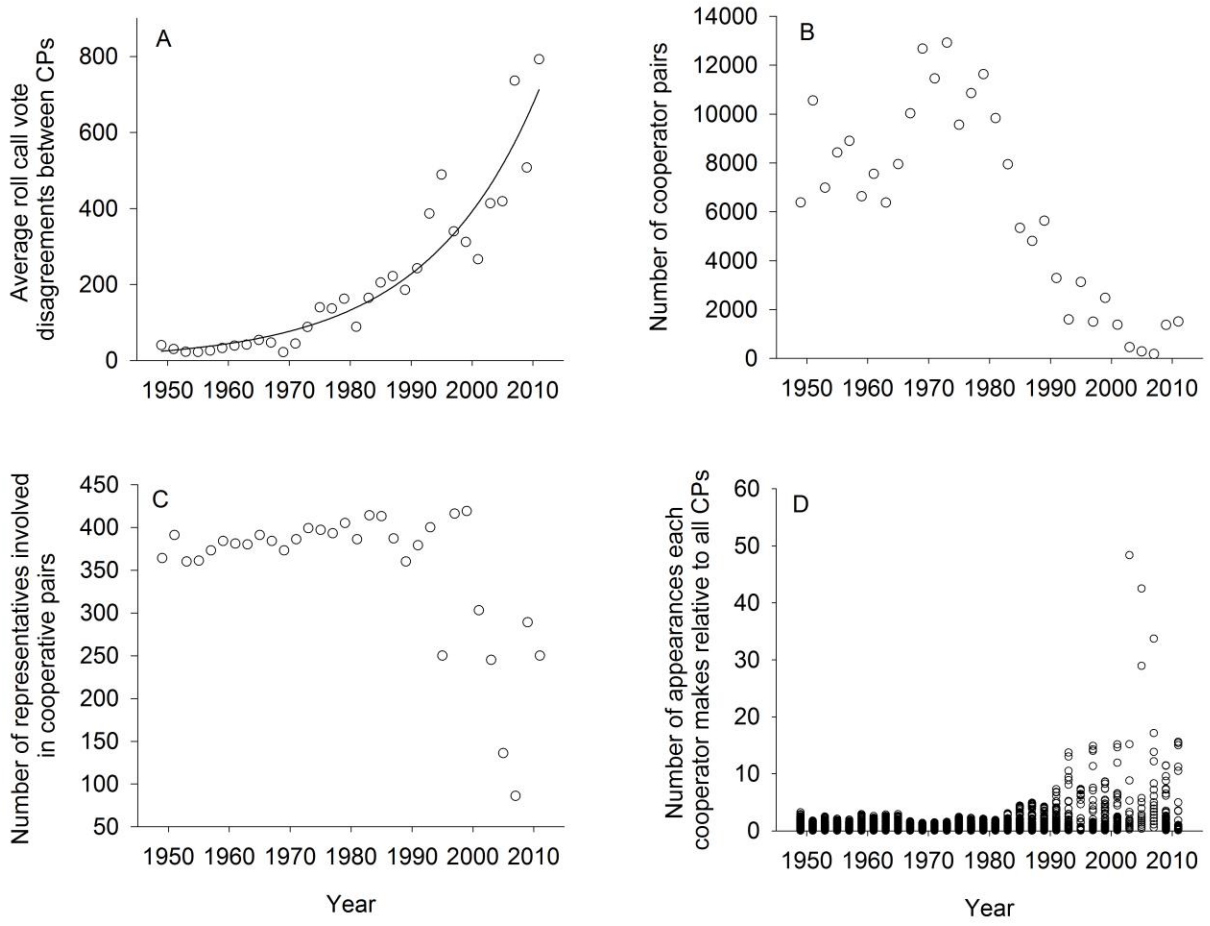

Fig.2. Four plots of Congressional non-cooperation through time shown as: (*A*) Average roll call vote disagreements between CPs as a function of time. (*B*) The number of cooperator pairs over time. (*C*) Number of representatives involved in cooperative pairs over time. (*D*) The number of appearances each cooperator makes relative to all CPs over time.

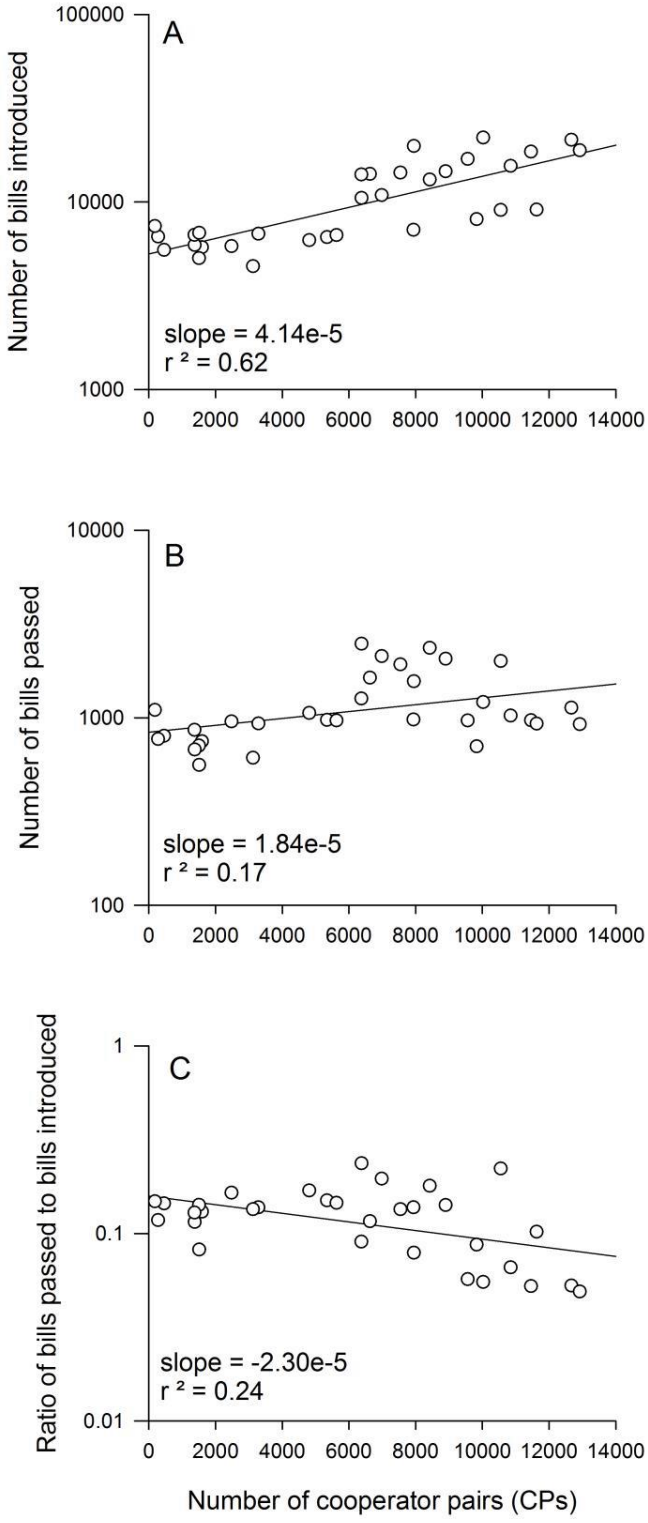

Fig. 3. Three plots of congressional productivity as a function of congressional cooperation show a correlation with: (*A*) The number of bills introduced during a session. (*B*) The number of bills passed. (*C*) The ratio of bills passed to those introduced. Solid lines indicate exponential fits. (Data source [23]).

Table 1: Summary statistics of congressional representatives and voting records

Number of Representatives, Starting Year, and Number of Votes for Each Congress					Average Agreements for Different Types of Pairs				Cross-Party Pair Behavior based on Threshold Value (where Probability Distributions Meet)	
Congress	Starting Year	Demo-crats	Republic-ans	Total Votes	Cross-Party Pairs	D-D Pair	R-R Pair	Thresh-old Value	Cross Party Pairs Above the Threshold (Cooperators)	Probability of a CP pair Appearing Above the Threshold
81	1949	269	176	274	90.7	131.0	130.6	124	6383	0.067
82	1951	241	207	180	56.6	80.9	92.3	76	10552	0.106
83	1953	219	221	147	59.4	72.6	91.4	77	6985	0.072
84	1955	236	204	148	64.6	87.9	86.1	80	8427	0.088
85	1957	241	203	193	75.9	101.4	102.5	99	8903	0.091
86	1959	287	159	180	69.9	101.3	103.7	93	6633	0.073
87	1961	273	176	240	93.4	129.0	135.4	125	7548	0.079
88	1963	261	182	231	85.0	123.6	129.4	117	6376	0.067
89	1965	301	142	393	155.9	202.3	216.8	200	7949	0.093
90	1967	251	188	477	211.8	243.8	274.0	257	10029	0.106
91	1969	250	199	443	192.6	214.1	215.1	241	12672	0.127
92	1971	258	187	645	280.5	313.6	336.0	340	11458	0.119
93	1973	248	195	1070	502.1	589.7	590.5	595	12921	0.134
94	1975	294	148	1264	583.5	714.1	732.2	712	9560	0.110
95	1977	293	146	1537	766.4	872.3	934.0	889	10850	0.127
96	1979	280	160	1274	581.1	717.1	769.7	690	11631	0.130
97	1981	246	196	811	395.3	472.2	495.1	482	9830	0.102
98	1983	274	168	905	411.3	578.0	573.2	518	7939	0.086
99	1985	257	182	889	375.0	593.3	566.3	508	5337	0.057
100	1987	263	179	939	409.2	652.3	609.1	563	4807	0.051
101	1989	265	178	904	403.3	609.2	568.2	537	5630	0.060
102	1991	271	170	932	369.3	629.3	593.5	516	3283	0.036
103	1993	261	180	1122	407.1	792.4	794.7	612	1591	0.017
104	1995	207	231	1340	481.2	862.2	1078.1	763	3122	0.033
105	1997	211	232	1187	516.6	813.8	898.3	747	1501	0.015
106	1999	211	225	1214	605.3	903.0	930.6	786	2477	0.026
107	2001	213	226	996	499.4	748.6	782.3	659	1374	0.014
108	2003	208	230	1221	554.0	942.1	992.7	781	455	0.005
109	2005	202	236	1214	533.3	956.0	948.0	766	280	0.003
110	2007	242	205	1876	695.6	1487.3	1376.1	1122	181	0.002
111	2009	261	182	1655	799.4	1336.8	1276.8	1094	1371	0.014
112	2011	200	244	1606	425.3	1137.1	1297.9	838	1508	0.015

Supplementary Material

Table S1 "Super-Cooperators" in Cross Party (Cooperator) Pairs, Ordered by Percentage of Appearances

Congress	Representative	Total CP Pairs above Threshold (Cooperators) in the Congress	Representative's Appearances	Appearances as a Percentage of all CP Cooperator Pairs in the Congress
108	Rep. Ralph Hall [D-TX-4]	455	220	48.351648
109	Rep. Dan Boren [D-OK-2]	280	119	42.5
110	Rep. Christopher Smith [R-NJ-4]	181	61	33.701657
113	Rep. Jim Matheson [D-UT-4]	521	172	33.013436
109	Rep. Robert Cramer [D-AL-5]	280	81	28.928571
110	Rep. Frank LoBiondo [R-NJ-2]	181	31	17.127072
112	Rep. Jim Matheson [D-UT-2]	1508	235	15.583554
112	Rep. Dan Boren [D-OK-2]	1508	235	15.583554
112	Rep. Mike Ross [D-AR-4]	1508	232	15.384615
108	Rep. Robert Cramer [D-AL-5]	455	69	15.164835
108	Rep. Kenneth Lucas [D-KY-4]	455	69	15.164835
107	Rep. Ralph Hall [D-TX-4]	1374	208	15.138282
112	Rep. Collin Peterson [D-MN-7]	1508	226	14.986737
105	Rep. James Traficant [D-OH-17]	1501	223	14.856762
107	Rep. Kenneth Lucas [D-KY-4]	1374	201	14.628821
105	Rep. Ralph Hall [D-TX-4]	1501	214	14.257162
105	Rep. Virgil Goode [D-VA-5]	1501	210	13.990673
110	Rep. John Barrow [D-GA-12]	181	25	13.812155
103	Rep. Benjamin Gilman [R-NY-20]	1591	218	13.702074
103	Rep. Constance Morella [R-MD-8]	1591	207	13.010685
110	Rep. Joe Donnelly [D-IN-2]	181	22	12.154696
107	Rep. Robert Cramer [D-AL-5]	1374	164	11.935953
111	Rep. Walter Minnick [D-ID-1]	1371	157	11.451495
111	Rep. Bobby Bright [D-AL-2]	1371	156	11.378556
105	Rep. George Miller [R-CA-7]	1501	170	11.325783
112	Rep. Jason Altmire [D-PA-4]	1508	169	11.206897
113	Rep. Michael G. Grimm [R-NY-11]	521	56	10.74856
103	Rep. Gene Taylor [D-MS-5]	1591	167	10.496543
112	Rep. John Barrow [D-GA-12]	1508	158	10.477454
113	Rep. Jon Runyan [R-NJ-3]	521	50	9.596929
111	Rep. Parker Griffith [R-AL-5]	1371	131	9.555069
103	Rep. Ralph Hall [D-TX-4]	1591	149	9.365179
113	Rep. Peter T. King [R-NY-2]	521	47	9.021113
103	Rep. Charles Stenholm [D-TX-17]	1591	141	8.862351
108	Rep. Rodney Alexander [D-LA-5]	455	40	8.791209
111	Rep. Harry Mitchell [D-AZ-5]	1371	120	8.752735
106	Rep. Virgil Goode [D-VA-5]	2477	214	8.639483
106	Rep. James Traficant [D-OH-17]	2477	212	8.55874

110	Rep. Baron Hill [D-IN-9]	181	15	8.287293
106	Rep. Ralph Hall [D-TX-4]	2477	204	8.235769
103	Rep. William Tauzin [D-LA-3]	1591	128	8.045255
113	Rep. Frank LoBiondo [R-NJ-2]	521	41	7.869482
105	Rep. Gene Taylor [D-MS-5]	1501	113	7.528314
106	Rep. Kenneth Lucas [D-KY-4]	2477	183	7.387969
111	Rep. Travis Childers [D-MS-1]	1371	101	7.366885
106	Rep. George Miller [R-CA-7]	2477	182	7.347598
104	Rep. Ralph Hall [D-TX-4]	3122	228	7.303011
104	Rep. William Tauzin [D-LA-3]	3122	228	7.303011
104	Rep. Michael Parker [D-MS-4]	3122	228	7.303011
104	Rep. Nathan Deal [D-GA-9]	3122	228	7.303011
104	Rep. Gregory Laughlin [D-TX-14]	3122	228	7.303011
102	Rep. Benjamin Gilman [R-NY-22]	3283	239	7.279927
111	Rep. Gene Taylor [D-MS-4]	1371	99	7.221007
104	Rep. Preston Geren [D-TX-12]	3122	225	7.206919
110	Rep. Jason Altmire [D-PA-4]	181	13	7.18232
104	Rep. Gillespie Montgomery [D-MS-3]	3122	222	7.110826
105	Rep. Charles Stenholm [D-TX-17]	1501	106	7.061959
104	Rep. William Brewster [D-OK-3]	3122	220	7.046765
102	Rep. Frank Horton [R-NY-29]	3283	223	6.792568
102	Rep. Sherwood Boehlert [R-NY-25]	3283	221	6.731648
102	Rep. Sedgwick Green [R-NY-15]	3283	220	6.701188
107	Rep. Charles Stenholm [D-TX-17]	1374	90	6.550218
111	Rep. Glenn Nye [D-VA-2]	1371	89	6.491612
107	Rep. Ike Skelton [D-MO-4]	1374	89	6.477438
104	Rep. Charles Stenholm [D-TX-17]	3122	201	6.438181
113	Rep. Rodney P. Frelinghuysen [R-NJ-11]	521	33	6.333973
104	Rep. Gary Condit [D-CA-18]	3122	196	6.278027
107	Rep. Constance Morella [R-MD-8]	1374	85	6.186317
104	Rep. Gene Taylor [D-MS-5]	3122	192	6.149904
111	Rep. Frank Kratovil [D-MD-1]	1371	84	6.126915
110	Rep. Brad Ellsworth [D-IN-8]	181	11	6.077348
102	Rep. Constance Morella [R-MD-8]	3283	199	6.061529
107	Rep. Tim Holden [D-PA-6]	1374	80	5.822416
113	Rep. Tom Cole [R-OK-4]	521	30	5.758157
109	Rep. Collin Peterson [D-MN-7]	280	16	5.714286
104	Rep. James Traficant [D-OH-17]	3122	169	5.413197
104	Rep. James Hayes [D-LA-7]	3122	169	5.413197
106	Rep. Constance Morella [R-MD-8]	2477	134	5.40977
113	Rep. Collin Peterson [D-MN-7]	521	28	5.37428
105	Rep. Robert Cramer [D-AL-5]	1501	80	5.32978
108	Rep. James Leach [R-IA-2]	455	24	5.274725
106	Rep. Michael Forbes [R-NY-1]	2477	130	5.248284
103	Rep. Sherwood Boehlert [R-NY-23]	1591	83	5.216845
102	Rep. Hamilton Fish [R-NY-21]	3283	169	5.147731

103	Rep. Earl Hutto [D-FL-1]	1591	81	5.091138
109	Rep. Lincoln Davis [D-TN-4]	280	14	5