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When the Court Has a Party, How Many "Friends" Show Up? a Note on the Statistical Distribution of Amicus Brief Filings

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WHEN THE COURT HAS A PARTY, HOW MANY "FRIENDS" SHOW UP? A NOTE ON THE STATISTICAL DISTRIBUTION OF AMICUS BRIEF FILINGS

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I. INTRODUCTION

Amicus briefs have been a significant subject of empirical research.[1] Researchers have also used the number of amicus briefs filed in a case as a measure of the case's importance.[2] Lawyers also have reason to be interested in amicus briefs, which have gone from being exceptional to being the norm in Supreme Court cases.[3] This study addresses some basic questions about amicus filings: what is the distribution of this measure of case importance? How does it relate to other measures of importance such as a case's citation rates?

Because this study is an outgrowth of a previous one,[4] it may be helpful to begin with a summary of the previous re-

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1. *See, e.g.*, Joseph D. Kearney and Thomas W. Merrill, *The Influence of Amicus Curiae Briefs on the Supreme Court*, 148 U. PA. L. REV. 743 (2000); Lee Epstein, *Interest Group Litigation During the Rehnquist Court Era*, 9 J. L. & Pol. 639 (1993); Donald R. Songer and Reginald S. Sheehan, *Interest Group Success in the Courts: Amicus Participation in the Supreme Court*, 46 POL. RES. Q. 339 (1993).

2. THOMAS G. HANSFORD & JAMES F. SPRIGGS II THE POLITICS OF PRECEDENT ON THE U.S. SUPREME COURT 62–63 (2006)(using amicus filings as a measure of political salience); FORREST MALTZMAN, JAMES F. SPRIGGS II, & PAUL J. WAHLBECK, CRAFTING LAW ON THE SUPREME COURT: THE COLLEGIAL GAME (2000); Timothy R. Johnson, James F. Spriggs II, and Pual J. Wahlbeck, *Passing and Strategic Voting on the U.S. Supreme Court*, 39 LAW. & SOC'Y. REV. 349, 363 (2005).

3. Epstein, *supra* note 1, at 645 (graph showing that since the end of the Warren Court era, the proportion of cases with amicus briefs has roughly doubled).

4. Daniel A. Farber, *Earthquakes and Tremors in Statutory Interpretation: An Empirical Study of the Dynamics of Interpretation*, 89 MINN. L. REV. 848 (2005).

search. In that study, using citation data for the Supreme Court's 1984 and 1990 Terms, I examined patterns of citation frequency in order to test three models:

- Under the first model, the extent of an opinion's contribution to the law (and thereby its influence) is determined by a host of independent factors. This model produces a bell-shaped distribution of "step lengths," ranging from baby to giant steps. The data did not support this model.
- Under the second model, judges have bounded rationality and strong attachments to existing rules, leading them to take "baby steps" most of the time but occasional "giant steps" when continued adherence to an existing norm proves untenable. In empirical studies by various social scientists, this kind of model has been found to produce frequency distributions that are roughly normal but have a characteristic known as "leptokurtosis." The data also failed to support this model: the degree of leptokurtosis was much too high, so that the curves were far from the normal distribution.
- The third model stems from complexity theory (also known as chaos theory or fractal geometry.) This type of model applies to many dynamic processes—for example, it fits the frequency distribution of earthquakes. This model was supported by the data, explaining most of the variance in the data (with R^2 over .80 for both of the Terms I studied)[5]

The current study tests these models (along with one additional one) in the context of amicus brief filings.

During the earlier study I became intrigued by the apparent divergences between the number of times a case was cited in later court rulings versus other citations (primarily law reviews). A regression analysis[6] showed that my impression was correct. Although an increase in the number of case citations did predict

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5. *Id.* at 865, 867. The findings were consistent with an earlier study, David G. Post and Michael B. Eisen, *How Long is the Coastline of the Law? Thoughts on the Fractural Nature of Legal Systems*, 29 J. LEGAL STUD. 545 (2000).

6. For readers who are unfamiliar with regression analysis, the Russell Sage Foundation has published several helpful handbooks for social science students in its series "Quantitative Applications in the Social Sciences." *See* MICHAEL LEWIS-BECK, APPLIED REGRESSION: AN INTRODUCTION (1980); CHRISTOPHER ACHEN, INTERPRETING AND USING REGRESSION (1982); LARRY SCHROEDER, DAVID SJODQUIST, & PAULA STEPHAN, UNDERSTANDING REGRESSION ANALYSIS: AN INTRODUCTORY GUIDE (1986).

a higher average number of noncase citations, almost none of the variance was explained (with an R^2 of only .07).[7] When I divided the ten most heavily cited cases into two groups, based on the proportion of judicial versus non-judicial citations, the difference between the groups was striking. Of the five cases most frequently cited by courts, all but one dealt with a procedural issue, and the exception dealt with ERISA preemption.[8] The five cases most frequently cited in law reviewers involved more socially salient issues such as discrimination.[9] In short, the courts seemed most keenly interested in procedure, while the commentators were drawn to cases with quasi-constitutional overtones.[10]

The two primary results of the current study regarding the frequency distribution of amicus briefs are as follows. First, a power law distribution does provide improved fit (over linear regression), but less strikingly than for citation frequencies. An exponential distribution is a slightly better fit and might well be preferred. Both distributions leave significant unexplained variance. The broader implication is that the number of briefs filed in a case probably depends on a fairly complex set of frictions and feedback loops. It is plausible to assume that the same probably holds true of other types of efforts to influence government decisionmakers (i.e., lobbying).

Second, amicus brief filings are unrelated to the number of federal appellate citations received by an opinion, but are mod-

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7. Although weak, the positive relationship was genuine. The X coefficient was significant at the 2.5% level.

8. The five cases were FMC Corp v. Holliday, 498 U.S. 52 (1990) (ERISA preemption); Irwin v. Dept. of Veterans Affairs, 498 U.S. 89 (1990) (statute of limitations in Title VII case against federal government); Grogan v. Garner, 498 U.S. 279(1991) (burden of proof in certain bankruptcy procedures) (the most highly cited statutory case of the Term!); McCleskey v. Zant, 499 U.S. 467 (1991) (habeas procedure); Carnival Cruise Lines, Inc. v. Shute, 499 U.S. 585 (1991) (whether a forum selection clause violated a maritime statute).

9. The five cases were EEOC v. Arabian American Oil Co., 499 U.S. 244 (1991) (application of Title VII on foreign soil); Gilmer v. Interstate/Johnson Lane Corp, 500 U.S. 20 (1991) (enforceability of agreement to arbitrate discrimination claim); Rust v. Sullivan, 500 U.S. 173 (1991) (abortion counseling restriction); Feist Publications, Inc. v. Rural Telephone Serv. Co. Inc., 499 U.S. 340 (1991) (application of statutory and constitutional requirements of originality in copyright case); Gregory v. Ashcroft, 501 U.S. 452 (1991) (implications of state sovereignty for interpretation of civil rights law).

10. In this study, rather than using total judicial citations, I studied appellate citations, so the results are not directly comparable. In fact, it turns out that appellate citations have a greater correlation with law review citations, at least in this sample (R^2 = .49). It also appears that amicus brief filings are an indicator of how often the Supreme Court itself will later cite a decision. *See* JAMES H. FOWLER ET AL., NETWORK ANALYSIS AND THE LAW: MEASURING THE LEGAL IMPORTANCE OF SUPREME COURT PRECEDENTS 35 (2006) (on file with author).

estly related to the number of law review citations. We should be cautious about using any one of these measures as the sole gauge of an opinion's importance. There seem to be distinct dimensions of case importance, an issue that deserves further investigation in its own right.

I. POSSIBLE MODELS

We do not have a systematic understanding of the process that leads to the filing of amicus briefs.[11] A 1993 study revealed several important factors. First, many amici are repeat players.[12] Second, surveys of amici suggest that the most important factor is the perceived relevance of the case to the organization's goals, followed by the quality of the case as a legal vehicle.[13] Third, filing an amicus brief is costly – ranging from $8,000 to about $20,000. The average organization surveyed had an interest in about sixteen cases; for half the organizations, participating in that number of cases would have exceeded the organization's entire litigation budget.[14] Fourth, economic interest groups filed an increasing share of the amicus briefs.[15]

We also know that individual organizations do not make filing decisions in a vacuum. State governments have formed a network that results in concerted filing activities:

> During the 1990 Term, for example, in cases in which at least one state filed a friend-of-the-court brief, the average number of other states participating was 15.7. In only three cases did a state participate as amicus curiae without the support of others.[16]

Or consider the following advice to lawyers with cases before the Supreme Court: "[i]n today's world, effective representation of

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11. This paper focuses on amicus briefs that are filed on the merits of the case. Filing at the cert. stage seems to be less frequent but is strongly associated with the Court's likelihood of taking the case. See Gregory A. Caldeira and John R. Wright, *Organized Interests and Agenda Setting in the U.S. Supreme Court*, 82 AM. POL. SCI. REV. 1109 (1988).

12. Epstein, *supra* note 3, at 660. Experienced lawyers tend to have more success before the Court. See Kevin T. McGuire, *Repeat Players in the Supreme Court: The Role of Experienced Lawyers in Litigation Success*, 57 J. POL. 187 (2001). Kearney and Merrill, *supra* note 1, at 749, report a similar finding for amicus briefs.

13. Epstein, *supra* note 1, at 660.

14. *Id.* at 661.

15. *Id.* at 680.

16. Epstein, *supra* note 1, at 671. Note, however, that the "participation" of other states does not necessarily track the number of amicus briefs: they may simply join as additional amici on a brief rather than filing their own.

your client requires that you at least seriously explore the possibility of enlisting persuasive amicus support on your client's behalf."[17]

One obvious motive for filing an amicus brief is to influence the result in a case. It is unclear how effective briefs actually are in this regard, particularly if we exclude those filed by the Solicitor General on behalf of the United States. The authors of the most recent and thorough empirical study report that "amicus briefs supporting respondents enjoy higher success rates than do amicus briefs supporting petitioners; that small disparities of one or two briefs for one side with no briefs on the other side may translate into higher success rates but larger disparities do not . . . ."[18] Notably, the number of cases filed tends to be similar on both sides of the case.[19] A final relevant fact: the Court itself does not serve a gatekeeper function; it routinely approves filing of briefs in cases where the parties themselves fail to consent.

In the absence of a strong theory for predicting filing, we may turn to more general models as a source of guidance. One possibility is that the number of amicus briefs filed in a given case is more or less random—that is, that it is the product of unrelated factors operating in different directions, which happen to balance out one way or another in a particular case. Trying to identify and measure these various factors would be difficult. But, it turns out, we may be able to identify this kind of randomness without specifying the causal links. A basic theorem of mathematical statistics links this form of randomness with the famous bell-shaped, normal distribution. More precisely, the central limit theorem states that "the sum of a large number of independent random variables will be approximately normally distributed almost regardless of their individual distributions; any random variable which can be regarded as the sum of a large number of small, independent contributions is thus likely to follow the normal distribution approximately."[20]

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17. Bruce J. Ennis, *Symposium on Supreme Court Advocacy: Effective Amicus Briefs*, 33 CATH. U. L. REV. 603 (1984). Similarly, Judge Posner remarks that the "vast majority of amicus curiae briefs are filed by allies of litigants and duplicate the arguments made in the litigants' briefs." Rayan v. Commodity Futures Trading Com'n, 125 F.3d 1062, 1063 (7th Cir. 1997). A 1997 review requires disclosure of whether counsel for a party authored any part of an amicus brief and also requires disclosure of financial contributions toward producing the brief. Kearney and Merrill, *supra* note 1, at 766.

18. Kearney and Merrill, *supra* note 1, at 749.

19. *Id.* at 822. The authors suggest that there may be a kind of arms race, in which amici file simply to counter filings on the other side. Id. at 821.

20. M.G. BULMER, PRINCIPLES OF STATISTICS 109 (2d ed. 1967, 1979 corrected re-

We could not expect an exact correspondence between citation data and the normal distribution, if only because the normal distribution requires an infinite domain in both directions while the number of citations to an opinion cannot be a negative number. In assessing deviations from normality, a few parameters are especially useful. For later reference, here is a list:

Central Tendency	The mean, the median, and the mode of a normal distribution are the same.
Skew	A normal curve is symmetrical rather than being skewed in either direction. Symmetry is measured by the skew parameter, which is zero for the normal distribution.
Kurtosis	Kurtosis measures whether a curve is flattened out or unusually peaked, compared with the normal distribution. Kurtosis for the normal distribution is sometimes given as 3.[21] However, my software used a different formula, for which the normal distribution comes out at zero.

Leptokurtosis in data has an important implication for decisionmaking.[22] Change data from human institutions have, in comparison to the Gaussian (normal) distribution, an excess of cases in the central peak, an excess of cases in the tails of the distribution, but a paucity of cases in the "shoulders," the area between the central peak and the tails. In terms of amicus briefs, the idea would be that most briefs get some average amount of attention from interested groups that results in filings, but there may be a tendency for attention to snowball once a case begins getting attention. The snowballing effect can lead to distribution tails that follow the third model (discussed below).

Another variant of the second model leads to an exponential distribution. In this model, cognitive and institutional factors function only as a source of friction, essentially impeding the reaction of decisionmakers to relevant information.[23] The hy-

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print). For a sketch of one proof, see id. at 115–16.

21. *See id.* at 61–65, 111.

22. The literature is surveyed in Bryan D. Jones and Frank R. Baumgartner, *A Model of Choice for Public Policy*, 15 J. PUB. ADMIN. RES. & THEORY 325 (2005).

23. Bryan D. Jones, Frank R. Baumgartner, Christian Breunig et al., *Are Political*

pothesis is that the number of cases with N + 1 amicus briefs is a fixed fraction of the number of cases with N briefs. This results in a distribution having the form $y = be^{-ax}$. Apart from friction, this might also reflect a diffusion process. For example, there could be a core group whose members tend to be the first to decide to file in a case, information leaks out from this group to a larger group whose members then must decide to file; if they do, the information then leaks out to another group.

The third model entered the law review literature in an innovative study of judicial citations by David Post and Michael Eisen.[24] They speculated that law may have the same branching properties that generate certain fractal geometric objects, because each legal issue can potentially sprout sub-issues, which in turn can sprout sub-sub-issues, etc.[25] Post and Eisen explained how such fractal branching is associated with power law distributions, in which frequency varies as some power *n* of a basic parameter. Such distributions are "produced at the boundary between order and disorder, at the 'edge of chaos.'"[26] Power law distributions are "well nigh ubiquitous in a wide variety of physical, biological, and social systems."[27] Post and Eisen cited examples involving meteorology, demographics, biodiversity, and medicine—as well as the example I have chosen as emblematic, earthquake sizes.[28] Based on a very large sample of New York Court of Appeals cases and another sample of Seventh Circuit decisions, they find a good fit with their hypothesized power law (especially for the New York data).[29]

Systems Poised between the "Order" of Friction and the "Chaos" of Urgency? Public Budgeting in Comparative Perspective. http://www.policyagendas.org/pdf/BudgetsAre Paretian2.pdf (October 2006).

24. Post and Eisen, *supra* note 5.

25. *Id.* at 553–59.

26. *Id.* at 568.

27. *Id.* at 569.

28. *Id.* at 569 n.569. For other examples, see Pablo Marquet, *Of Predators, Prey, and Power Laws*, 295 SCIENCE 2229 (2002) (referring to the "vast number of biological power laws"); Thomas Bak, *Power-Law Distributions and the Federal Judiciary*, 46 JURISMETRICS 139 (Winter 2006) (number of court filings per district follow power law distributions).

29. Post & Eisen *supra* note 5, at 571–83.

II. DATA ANALYSIS

I randomly chose a Term between the Rehnquist-era Term in my first study and Rehnquist's departure from the Court.[30] The term selected was the 1997 Term. In addition to Rehnquist, the Court consisted of Justices Stevens , O'Connor, Scalia, Thomas, Kennedy, Ginsburg, Breyer, and Souter. Table 1 gives some statistics about the the individual Justices and their cases.

Table 1
Characteristics of Assigned Cases

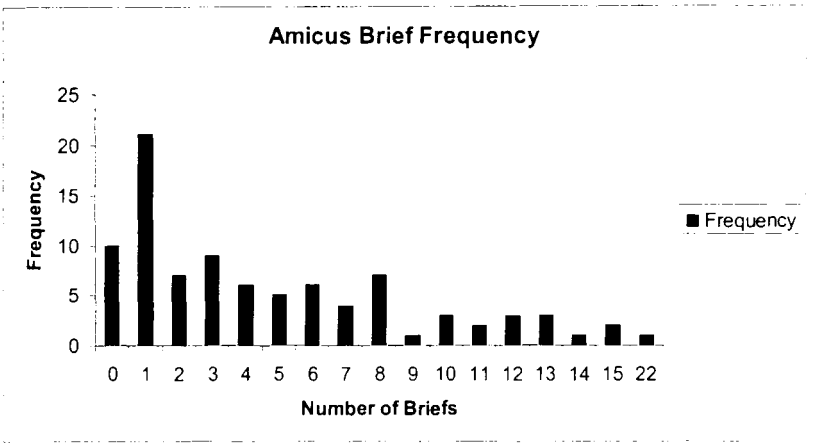
Justice	Average amicus briefs per assigned case	Average total number cites per assigned case
Stevens	4	326
O'Connor	7	365
Scalia	5	682
Thomas	7	219
Kennedy	5	707
Ginsburg	3	184
Breyer	2	522
Souter	4	661
Rehnquist	6	524

These figures suggest some interesting patterns. The four most conservative Justices (Rehnquist, Scalia, Thomas, Kennedy) averaged 5.75 amicus briefs per assigned case, compared with 7.0 for Justice O'Connor (the Court's swing voter), and 3.25 for the Court's remaining, more liberal Justices. This suggests the possibility that having a high number of amicus briefs is correlated with the tendency of the Chief Justice to assign cases to allies or swing voters he wishes to cultivate.[31]

30. The reason for considering only later Terms was simply to make the study more current.

31. Conservatives also had somewhat more total cites per opinion (an average of 533) than liberals (averaging 423). This supports the idea that citation counts do indeed relate to a case's significance, assuming that the Chief Justice assigns the most significant opinions to his allies. One could improve on this result by separating out those cases where the Chief was in the minority, so the assignment would be made by the senior Jus-

Figure 1



The situation becomes more interesting when we look at the overall distribution of amicus briefs, which is illustrated in Figure 1. Figure 1 looks nothing like a normal distribution. As table 2 demonstrates, this visual impression is correct: the distribution has significant leptokurtosis and skew. But the statistics are less useful in distinguishing between the remaining three models. The kurtosis and skew seem low enough to be consistent with the bounded rationality assumptions of model 2. Since model 2 has been successfully used elsewhere to denote the attention given agenda items, it might well fit here.

tice in the majority (probably Stevens in those cases).

Table 2
Distribution of Amicus Briefs per Case

Mean	4.758241758
Standard Error	0.474332809
Median	3
Mode	1
Standard Deviation	4.524846613
Sample Variance	20.47423687
Kurtosis	1.319868246
Skewness	1.199535843
Range	22
Minimum	0
Maximum	22
Sum	433
Count	91

I then did a series of regressions to extract further information from the data. I first ran a linear regression of the number of cases with a given number of amicus briefs against that number (i.e., frequency against number of briefs per case). The R^2 was a respectable .51, meaning that about half the variance in the frequency was explained. I then regressed the log of the frequency against the number of amicus briefs, improving the R^2 to .71. This provided some support for the exponential model. Finally, I regressed the log of the number of briefs against the log of the frequency, with comparable results (a slightly lower R^2 of .68).

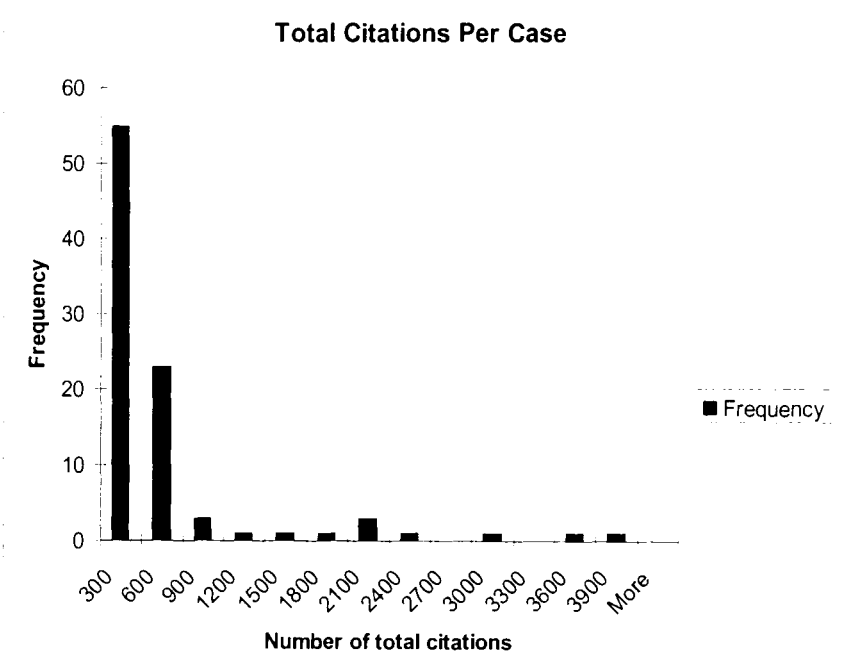
On the whole, this data for amicus briefs does not fit the power law model that seems to apply generally to citations. We can think of the exponential model and power law model as being in a sense sequential: first we take the log of one variable and see how much explanatory power we gain (the exponential model) and then we also take the log of the other variable (the power law variable).[32] Geometrically, we are squeezing the linear graph first along the y-axis and then along the x-axis. It turns

32. I should mention a small technical problem: the cases that had zero briefs. The logarithm of zero is undefined. I tried two different ways of dealing with this problem. The first was to add one to the number of briefs and then take logs. It occurred to me that this could cause distortions, so I also tried doing the regression while excluding the cases that had no amicus briefs. The differences in results between the two approaches were not significant.

out that there's a substantial increase of explanatory power in the first stop (with R^2 rising by .2) but then a slight loss with the second stop (with R^2 declining by .03). Thus, the distinctive geometric feature of the power law seems irrelevant.

The inappropriateness of the power law model is also suggested by comparing the distribution of amicus briefs with the characteristics of the distribution of citations. Figure 2 shows the frequency distribution for "total citations" for the 1997 Term.

Figure 2



This figure starts with a very high peak, drops off very quickly, but then has a very long right tail that drops off very slowly. As shown in Table 3 descriptive statistics for the total citations were also quite different from those for the amicus briefs, with much higher skew and kurtosis.

Table 3
Distribution of Total Citations Per Case

Mean	469.307692
Standard Error	72.8371973
Median	235
Mode	223
Standard Deviation	694.822578
Sample Variance	482778.415
Kurtosis	8.92234187
Skewness	2.95104786
Range	3629
Minimum	15
Maximum	3644
Sum	42707
Count	91

The upshot is that Model 2 (friction and diffusion) looks the strongest for amicus filings, although Model 3 cannot be definitely rejected. In the hope of getting a better grasp on the situation, I ran an additional series of regressions of the number of amicus briefs in a case versus various citation counts for that case. There's no reason to expect a linear relationship here, so instead of using the raw scores, I regressed the ranks of the numbers (that is, a case might be counted as being 30th in terms of number of amicus briefs, 20th in number of law review cites, etc.)

The results were intriguing. Ranking in terms of appellate cites was essentially unrelated to ranking in terms of number of amicus briefs (R^2 = .03, so almost none of the variance was explained, and the x coefficient was .2, meaning that moving up one rank produced an average increase of only .2 ranks.)[33] Thus,

33. Given this result, it is no surprise that amicus brief rank was also weakly related to total cites, with an R^2 of .12 and an x coefficient of .39.)

the number of amicus briefs filed in a case predicts very little about the case's total number of citations.

The regressions using law review citations were more noteworthy. When regressing law review citation rank against amicus rank, the R^2 was .299 (meaning almost a third of the variance was explained) and the x coefficient was .6 (meaning that moving up one rank in the amicus brief ranking caused an average move of .6 up in the law review citation ranking). As a check, I decided to go ahead and do a linear regression of the absolute numbers (number of amicus filings in a case versus number of law review cites for the case. The R^2 sank to .16 (so the relationship apparently is not very linear after all). Nevertheless, the x coefficient was 16.3, significant at well below the .001 level, meaning that adding one amicus brief results in roughly sixteen additional law review cites.

My prior study suggested that law review citations were often connected with measures of societal relevance, as opposed to the more procedural issues that tend to provoke attention the most often from appellate courts. The relationship between amicus filings and law review citations provides some supporting evidence. It also suggests, however, that amicus filings also involve important factors that are unrelated to the factors which legal academics find significant about a judicial decision.

III. INTERPRETING THE DATA

Beyond the statistical data, an examination of some individual cases may help round out the picture. Table 4 lists the six cases with the highest number of amicus briefs, along with their other characteristics.

Table 4
Cases with the Most Amicus Briefs

JUSTICE	CITATION	CASE NAME	AMICUS BRIEFS	FED APP CT CITES	LAW REV CITES	TOTAL CITES
O'Connor	522 U.S. 3	*State Oil Co. v. Khan*	13	236	313	549
Kennedy	523 U.S. 666	*Arkansas Educ. Television Com'n v. Forbes*	15	132	316	448
Thomas	524 U.S .103	*Cass County, Minn. v. Leech Lake Band of Chippewa Indians*	15	15	43	58
Ginsburg	523 U.S. 360	*United States v. U.S. Shoe Corp.*	13	26	38	64
Rehnquist	524 U.S. 156	*Phillips v. Washington Legal Foundation*	22	81	221	302
Rehnquist	522 U.S. 136	*General Elec. Co. v. Joiner*	14	979	612	1591

Briefly, here is what the cases were about and a description of the amici:

Phillips v. Washington Legal Foundation[34] was a challenge to state financing for legal aid. The specific claim is that the diversion of interest from lawyers' client accounts to finance the program was a taking.[35] The Court upheld the claim but there was a remand to determine the amount of compensation, if any. The amici were public interest groups (conservative and liberal), state governments, and representatives of the bench and bar. Notably, the Solicitor General filed an amicus brief.

Arkansas Educ. Television Com'n v. Forbes[36] was a First Amendment case, in which a third-party candidate complained that a public T.V. station had excluded him from a candidates'

34. 524 U.S. 156 (1998).

35. An additional wrinkle is that under federal law, neither the lawyers nor the clients could themselves earn interest on accounts of this type. To my mind, this makes the takings claim far-fetched, but a majority of the Justices obviously took a different view.

36. 523 U.S. 666 (1998).

debate it was broadcasting. He lost. Some amici were public interests groups like the ACLU; most were government organizations (including the FCC) or broadcasters.

Cass County, Minn. v. Leech Lake Band of Chippewa Indians[37] involved the claimed immunity of certain Indian reservation lands from state taxation. Nearly all the amici were, not surprisingly, either Indian tribes or state and local governments.

United States v. U.S. Shoe Corp.[38] involved the constitutionality of a harbor maintenance tax under the Export-Import Clause, as obscure a constitutional issue as one can imagine. Nearly all the amici were from shipping interests. The tax was struck down.

State Oil Co. v. Khan[39] was a notable antitrust case. Overruling precedent, the Court held that a maximum price term in a franchise contract was not per se illegal. The United States filed on one side; thirty-three states filed on the other. There were other non-aligned filers, and a few briefs were filed by franchisee representatives. The large majority of the briefs, however, were filed by firms or trade associations on the franchisor side of the case.

General Elec. Co. v. Joiner[40] involved the trial judge's power to exclude "unreliable" expert testimony, a matter of great importance to the torts bar. Amici included trial lawers' associations, the United States, representatives of the medical profession like the AMA, and a few public interest groups, but many represented industry interests. The Chamber of Commerce and National Association of Manufacturers filed, as well as trade associations and members of the pharmaceutical and chemical industries. In line with the observation in my previous paper, this procedural case was the only one to receive a large number of citations by courts.

Perhaps the most obvious finding is that amicus filings tend to come in clumps. There is the "relevant industry" clump, the "public interest" clump, and the governmental clump. In part, this may simply be a matter of whose interests are affected – the universe of interests affected directly by Supreme Court opinions may be quite lumpy. It may also represent, however, the operation of networks among certain groups or their lawyers,

37. 524 U.S. 103 (1998).
38. 523 U.S. 360 (1998).
39. 522 U.S. 3 (1997).
40. 522 U.S. 136 (1997).

which could either operate through a concerted effort or merely by diffusing information. Whatever its cause, this clumping apparently does not have any relationship to how often cases are cited by lower courts. The three cases that got significant law review attention were on subjects commonly encountered by law students and relatively popular with law reviews: constitutional law, evidence, and antitrust.[41]

For comparison purposes, I then took a look at the cases in which only one amicus brief had been filed. The amici in those cases included the ACLU, the United States (twice), the Commissioner of Social Security, one state and one group of twenty-two states, the National Association of Criminal Defense Lawyers (four times), a foundation devoted to sentencing reform, and the car manufacturer's trade association (once). In strong contrast to the top five cases, where industry filings were frequent and tended to come in clusters, industry took little interest in these cases.

Whether an entity files an amicus brief depends on attention (do organizational decisionmakers take notice of a case?) and interests (does the benefit of filing outweigh the cost?). The two are interrelated, since organizations presumably are more likely to pay attention to cases that affect their interests strongly. There also seem to be a somewhat limited universe of potential filers, consisting of major business entities and associations, legal organizations, governments (particularly the United States); and public interest associations. The interests of other groups – such as criminal defendants and crime victims, consumers, taxpayers, non-unionized workers, and the general public – are represented only to the extent that one of these large organizations chooses to do so. Many of these organizations have overlapping interests, so attention may be an important factor in determining which ones participate.

One might expect that there might be a damping effect, that is, that if an entity is aware that other briefs will be filed, there is less marginal benefit from adding its own brief. This does not seem evident from the data. For example, the presence of other briefs from of chemical and pharmaceutical companies in *Joiner* did not seem to deter additional filings, although it seems doubtful that the additional briefs added anything of great substance.

41. The average number of law review cites for all 1997 Term cases was 150.6.

The exponential fit (suggestive of friction or diffusion mechanisms) was slightly better than the power law fit (suggestive of positive feedback). Both fit the data fairly well, though not as well as the power law typically fits citation data. It is possible that some combination of the two might be more successful, with friction dominating below a certain threshold and then positive feedback taking over.

It is not difficult to imagine friction or diffusion mechanisms. The individuals who have final authority in an organization over the decision to file may have bounded rationality, using one or two factors to make the decision. Over time, these factors change as experience builds up about their suitability, and at any given time, decisionmakers in different organizations may be at different stages of this process.

Organizational issues may also present barriers to filing; the default choice is not to file and competition for scarce funds may make it difficult to get authorization. Outside of the universe of frequent Supreme Court players, information about the importance of the case may spread with difficulty, affecting the likelihood that non-frequent filers will enter the game. We might learn more about these mechanism with a statistical study focusing on filers rather than cases. In other words, it would be very useful to investigate how many organizations file a specific number of briefs. The study would probably have to continue over more than one Term to get a sense of the distribution at the left end of the distribution,

Feedback mechanisms between organizations are also easy to imagine. Filings by other organizations (either allies or opponents) may make a case more salient for decisionmakers. The attendant publicity might also attract attention from entities that do not normally follow the Court closely, such as organizational members, who may wonder why *their* organization has failed to take part in a case when so many others have done so. Filings on one side may lead to more opposing filings in order to avoid an imbalance, which in turn prompt responsive filings on the first side. On the other hand, filings by allies (especially in cases that do not have high salience) may reduce the likelihood that an organization will file, since the case is already "covered."

As noted at the beginning of this paper, some researchers have used amicus filings as a measure of the importance of an opinion. The amount of feedback, negative and positive, in the filing decision at least introduces a great deal of noise in this measure. Moreover, it is far from clear, even apart from the

noise, what the number of briefs tells us about the importance of a case. Perhaps it should not be too surprising that the number of briefs is unrelated to the number of judicial citations of a Supreme Court opinion. The cases that have the most citations are those that are relevant in later litigation involving large numbers of litigants; collective action problems may prevent such large groups from mobilizing. The relationship between amicus briefs and law review citations is stronger but still modest; at least the two measures seem to point in the same direction. Since these measures are (to say the least) not highly correlated, we should think twice before relying on any single statistic as a measure of case importance.

For those who are interested more broadly in governmental processes, the results should also be interesting. Filing an amicus brief is an effort to influence a government decisionmaker; hence, a form of lobbying. Admittedly, it differs from other lobbying in its formality and more importantly, in the inability to offer the decisionmaker any benefits in return for support. Nevertheless, the results do suggest that the intensity of lobbying on any specific issue is not a simple function of the underlying alignment of interests, but also involves an interplay of cognitive, institutional, and information factors. In this regard, it would be interesting to know how the number of organizations that provide congressional testimony is distributed across bills (presumably adjusting for the size of the legislation itself).

To return to the question posed in the title: when the Supreme Court has a party (in the form of an argued case), how many "friends" come to the event? The best we can say at this point is that the answer depends on the case and may involve a number of frictional forces as well as feedback effects.

APPENDIX: DATA FOR THE 1997 TERM

CITATION[42]	CASE NAME	AMICUS BRIEFS[43]	FED APP CT CITES[44]	L. REV CITES[45]	TOTAL CITATIONS[46]
524 US 417	*Clinton v. City of New York*	7	108	471	579
524 U.S. 184	*Bryan v. U.S.*	2	139	84	223
523 U.S. 574	*Crawford-El v. Britton*	4	682	144	826
523 U.S. 517	*U.S. v. Estate of Romani*	0	34	58	92
523 U.S. 420	*Miller v. Albright*	1	66	203	269
523 U.S. 135	*Quality King Distributors, Inc. v. L'anza Research Intern., Inc.*	10	29	142	171
522 U.S. 252	*Rogers v. U.S.*	0	9	7	16
522 U.S. 118	*Kalina v. Fletcher*	6	375	60	435
524 U.S. 721	*Monge v. California*	7	104	112	216
524 U.S. 498	*Eastern Enters. v. Apfel*	13	196	361	557

42. Signed Opinions for the 1997 Term of the U.S. Supreme Court were identified using a terms and connectors search of U.S. Supreme Court Cases which was restricted by date (10/1997-7/1998) and restricted by field (Justice Stevens, Justice O'Connor, etc.)

43. Amicus briefs were tabulated using information in a list of documents that appears at the end of each case in Westlaw. The number of amicus briefs for each entry was tabulated by counting the number of westlaw documents in which "amicus" or "amici" appeared in the description.

44. Federal Appellate Court Citations were tabulated using the "cites" tab in LexisNexis. Tabulation includes U.S. Supreme Court, 1st-11th Circuits, Federal Circuit, Federal Circuit Court of Appeals, and D.C. Circuit.

45. Law Review Citations were tabulated by using the "Unrestricted Shepard's Summary" in LexisNexis.

46. Total was tabulated by taking the sum of Federal Appellate Court Citations and Law Review Citations.

524 U.S. 569	*Nat'l Endowment for the Arts v. Finley*	11	113	382	495
524 U.S. 274	*Gebster v. Lago Vista Ind. Sch. Dist.*	7	256	357	613
523 U.S. 491	*California v. Deep Sea Research, Inc.*	9	49	101	150
523 U.S. 213	*Cohen v. de la Cruz*	1	285	60	345
522 U.S. 329	*South Dakota v. Yankton Sioux Tribe*	10	49	97	146
522 U.S. 287	*Lunding v. New York Tax Appeals Tribunal*	0	7	43	50
522 U.S. 156	*City of Chicago v. International College of Surgeons*	3	458	72	530
522 U.S. 3	*State Oil Co. v. Khan*	13	236	313	549
524 U.S. 206	*Pennsylvania Dept. of Corrections v. Yeskey*	12	314	204	518
524 U.S. 214	*American Tel. and Tel. Co. v. Central Office Telephone, Inc.*	2	144	48	192
523 U.S. 653	*Textron Lycoming Reciprocating Engine Div., Avco Corp. v. United Auto. Aerospace, Agri. Implement Workers of America, Intern. Union,*	0	76	15	91

523 U.S. 382	*Atlantic Mut. Ins. Co. v. C.I.R.*	2	23	24	47
523 U.S. 296	*Texas v. U.S.*	2	178	15	193
523 U.S. 75	*Oncale v. Sundowner Offshore Svcs, Inc.*	8	1526	797	2323
523 U.S. 83	*Steel Co. v. Citizens for a Better Environ.*	12	1614	409	2023
523 U.S. 1	*Spencer v. Kemna*	1	895	71	966
522 U.S. 398	*Brogan v. U.S.*	1	68	143	211
522 U.S. 359	*Allentown Mack Sales and Svc., Inc. v. NLRB*	6	168	91	259
524 U.S. 742	*Burlington Industries, Inc. v. Ellerth*	8	2520	862	3382
524 U.S. 624	*Bragdon v. Abbott*	1	763	676	1439
524 U.S. 308	*Caron v. U.S.*	0	90	27	117
524 U.S. 236	*Hohn v. U.S.*	4	113	82	195
523 U.S. 751	*Kiowa Tribe of Oklahoma v. Manuf. Tech., Inc.*	11	103	132	235
523 U.S. 666	*Arkansas Educ. Television Com'n v. Forbes*	15	132	316	448
523 U.S. 538	*Calderon v. Thompson*	3	369	110	479
523 U.S. 392	*Campbell v. Louisiana*	1	57	72	129
522 U.S. 422	*Oubre v. Entergy Operations, Inc.*	5	127	65	192
522 U.S. 52	*Salinas v. U.S.*	1	327	129	456
524 U.S. 775	*Faragher v. City of Boca Raton*	8	2808	836	3644
524 U.S. 666	*U.S. v. Balsys*	1	42	157	199

524 U.S. 74	*Geissal v. Moore Medical Corp.*	3	24	16	40
524 U.S. 51	*United States v. Bestfoods*	4	278	197	475
523 U.S. 833	*County of Sacramento v. Lewis*	10	1540	400	1940
523 U.S. 767	*New Jersey v. New York*	3	17	36	53
523 U.S. 410	*Beach v. Ocwen Federal Bank*	3	65	20	85
523 U.S. 26	*Lexecon Inc. v. Milberg Weiss Bershad Hynes & Lerach*	8	149	122	271
522 U.S. 211	*Fidelity Financial Svcs., Inc. v. Fink*	1	43	21	64
522 U.S. 67	*Foster v. Love*	0	9	37	46
524 U.S. 321	*U.S. v Bajakajian*	1	235	228	463
524 U.S. 357	*Pennsylvania Bd. Of Probation and Parole v. Scott*	8	58	106	164
524 U.S. 88	*Hopkins v. Reeves*	4	58	37	95
524 U.S .103	*Cass County, Minn. v. Leech Lake Band of Chippewa Indians*	15	15	43	58
524 U.S. 116	*Dooley v. Korean Air Lines Co., Ltd.*	1	20	41	61
523 U.S. 303	*U.S. v. Scheffer*	6	290	165	455
523 U.S. 340	*Feltner v. Columbia Pictures Television, Inc.*	5	107	102	209
523 U.S. 44	*Bogan v. Scott-Harris*	4	242	56	298
522 U.S. 479	*Nat'l Credit Union Admin. V. First Nat'l Bank & Trust Co.*	7	124	112	236

522 U.S. 520	*Alaska v. Native Village of Venetie Tribal Govt.*	12	24	129	153
524 U.S. 1	*United States v. Cabrales*	1	72	27	99
523 U.S. 866	*Air Line Pilos Ass'n v. Miller*	3	43	32	75
523 U.S. 696	*Montana v. Crow Tribe of Indians*	5	2	13	15
523 U.S. 360	*United States v. U.S. Shoe Corp.*	13	26	38	64
523 U.S. 57	*Kawaauhau v. Geiger*	1	657	64	721
522 U.S. 448	*Regions Hosp. v. Shalalala*	0	83	24	107
522 U.S. 470	*Rivet v. Regions Bank of Louisiana*	0	388	55	443
522 U.S. 222	*Baker by Thomas v. General Motors Corp.*	6	105	184	289
522 U.S. 192	*Bay Area Laundry & Dry Cleaning Pension Trust Fund v. Ferbar Corp. of Cal. Inc.*	8	53	9	62
522 U.S. 75	*Jefferson v. City of Tarrant, Ala.*	0	14	17	31
522 U.S. 23	*Bates v. U.S.*	1	75	48	123
524 U.S .381	*Wisconsin Dept. of Corrections v. Schacht*	1	363	75	438
524 U.S. 266	*Forney v. Apfel*	1	44	6	50
524 U.S. 125	*Muscarello v. U.S.*	1	344	130	474
524 U.S. 11	*Federal Election Com'n v. Akins*	5	145	158	303
523 U.S. 726	*Ohio Forestry Ass'n, Inc. v. Sierra Club*	5	243	134	377

523 U.S. 511	*Edwards v. U.S.*	1	208	52	260
523 U.S. 224	*Almendarez-Torres v. U.S.*	1	2497	332	2829
523 U.S. 155	*Lewis v. U.S.*	1	30	30	60
523 U.S. 185	*Gray v. Maryland*	4	196	61	257
522 U.S. 87	*Trest v. Cain*	2	140	34	174
524 U.S .399	*Swidler & Berlin v. U.S.*	6	116	257	373
524 U.S. 156	*Phillips v. Washington Legal Foundation*	22	81	221	302
524 U.S. 38	*United States v. Beggerly*	0	131	28	159
523 U.S. 740	*Calderon v. Ashmus*	2	164	51	215
523 U.S. 614	*Bousley v. U.S.*	3	1898	118	2016
523 U.S. 637	*Stewart v. Martinez-Villareal*	8	304	78	382
523 U.S. 272	*Ohio Adult Parole Authority v. Woodard*	6	103	120	223
523 U.S. 65	*United States v. Ramirez*	3	117	57	174
522 U.S. 262	*LaChance v. Erickson*	1	43	37	80
522 U.S. 269	*Buchanan v. Angelone*	2	160	110	270
522 U.S. 136	*General Elec. Co. v. Joiner*	14	979	612	1591
522 U.S. 93	*Hudson v. U.S.*	3	227	278	U

Total was tabulated by taking the sum of Federal Appellate Court Citations and Law Review Citations.