A Bridge to Somewhere: Mapping State and Congressional Ideology on a Cross-Institutional Common Space*

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Abstract

Two major problems exist in applying ideal point estimation technique to state legislatures. First, there has been a scarcity of available longitudinal roll call data. Second, even where such data exists, scaling ideal points within a single state suffers from a basic defect. No comparisons can be made across institutions, whether to other state legislatures or to the US Congress. Our project is a solution to both of these dilemmas. We use a new comparative data set of state legislative roll calls beginning in the mid-1990s to generate ideal points for legislators. We then take advantage of the fact that state legislators sometimes go on to serve in Congress to create a common ideological scale between Congress and the various legislatures. These "bridge actors" are similar in concept to members of the House who go on to serve in the Senate, thereby providing the "glue" necessary to scale the House and Senate together. We have successfully prototyped this approach for California, Pennsylvania, Michigan, and Florida. Using these bridge actors, we create a new state-federal common space of ideology. We use this common space to address important topics in the literature.

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1 Introduction

Following the seminal contribution of Poole and Rosenthal (1985, 1991, 1997), the estimation of legislative "ideal points" has become an active and influential cottage industry in political science. In addition to being quantities of interest in their own right, ideal point estimates have become essential ingredients in studies of legislative politics grounded in spatial voting models.[1] More recently, Bayesian item response theory models have come to complement the Poole-Rosenthal NOMINATE algorithm, bringing their own characteristic advantages (Jackman 2000; Martin and Quinn 2002; Clinton, Jackman and Rivers 2004; Jackman 2004).

Scholars followed by applying ideal point analysis to comparative contexts (Poole and Rosenthal 2001). In the last half decade, scholars have begun estimating ideal points for state legislatures. A crucial limitation of existing state ideal point estimates, however, is that they cannot be compared across states or with Congress because each ideological space is defined solely *within* a single-state.

In this paper, we develop a method for estimating ideal points of multiple state legislatures and Congress in a single, comparable true common space. Our method exploits the voting records of so-called bridge actors–legislators who graduate from a state legislature to Congress–to produce a universal spatial map for state and Congressional politics. We illustrate the use of our new universal scores to explore several questions of longstanding interest to scholars of state politics.

The paper proceeds as follows. The next section describes previous efforts to measure state-level ideology using ideal point estimates and other methods. Next we describe our methodology and data. We then present our major results. We analyze the dimensionality of state legislative politics, use our new spatial map to address issues of partisan polarization, a macro view of state legislative ideology, and assess the relationship between state legislatures and their associated Congressional delegations. The concluding section evaluates the advantages and limitations of our approach relative to earlier work in this area and describes our agenda for future research.

2 Literature

A large literature in state politics seeks to understand the relationships between the ideology of citizens, the ideology of their elected representatives, and the ideological orientation of result-

[1] See Poole (2005) for an introduction and survey of the field.

ing state policies. Erikson, McIver and Wright (1987); Erikson, Wright and McIver (1993) [EWM] were among the first to attempt to estimate the ideology of citizens and government officials within states. They use massive pooled CBS News/New York Times polling data to estimate the partisanship and liberalism of state public opinion. In addition, they produce a measure of party elite liberalism based on surveys of congressional candidates, state legislators, county party chairpersons, and party convention delegates. EWM conclude that the link between party control and policy outcomes is mediated by public opinion. Specifically, they contend that both parties will tend to be more liberal in states where the electorate is more liberal, making it difficult to isolate the effects of party control on policy outcomes across states. Only after controlling for state public opinion are significant effects of party control evident.[2]

Such data is important but limited by its inherently cross-sectional nature. Berry et al. (1998) were the first to produce annual estimates of citizen and government ideology for all 50 states, for the period 1960 to 1993. Their estimates of citizen ideology are based on interest group ratings of members of Congress representing the state. Their estimates of government ideology are also based on the interest group scores for the state's Congressional delegation, derived separately by party and weighted to reflect the distribution of partisan control in the state legislative and executive branches. Berry and his coauthors show that their measure of citizen ideology is highly correlated with the EWM measure of public opinion liberalism.

A notable limitation of both the Berry et al. (1998) and the Erikson, Wright and McIver (1993) measures of government ideology is that they pertain to the state government writ large. They can tell us nothing about the ideology of individual legislators or the distribution of preferences more broadly. In addition, neither approach yields ideological measures for the state government that can be meaningfully compared with standard Congressional measures of ideology. In the Berry et al. framework, the ideology of state officials is inferred from the voting behavior of Congressional representatives, meaning that differences between state legislators and the Congressional delegation are assumed away. We show that state delegations and state legislatures have some substantively meaningful differences. Meanwhile, the EWM measure relies on idiosyncratic surveys of state and local officials, which have no obvious counterpart at the Congressional level [3]

Within the last few years, several scholars have estimated "ideal points" of state legislators by

[2]Originally developed as cross-sectional measures, the authors have recently produced longitudinal estimates of state opinion liberalism and public partisanship-though not party elite ideology-from 1977 to 2003 (Erikson, Wright and McIver 2006).

[3]Since the same survey is given across states, cross-state comparisons of partisan elites are obviously valid.

using roll call data to produce NOMINATE scores following Poole and Rosenthal (1991). Aldrich and Battista (2002) produce NOMINATE scores for eleven state legislatures in the late 1990s to investigate party polarization and committee representativeness. Gerber and Lewis (2004) generate NOMINATE scores for the California state legislature. McCarty, Poole and Rosenthal (2006) used NOMINATE scores to estimate polarization measures for five states. Kousser, Lewis and Masket (2007) estimated NOMINATE scores for California Assembly members to investigate whether legislators changed their voting behavior after the 2002 gubernatorial recall election. Bertelli and Jr. (2004) create NOMINATE scores for the Arizona House and Senate from 1995 to 2002 to examine the effects of single-member versus multi-member districts on legislator extremism. Finally, Wright has assembled roll-call data for all states in 1999-2000 (Wright 2007) and produced a comprehensive set of within-state NOMINATE scores. With a series of coauthors, Wright uses state roll call data to explore the extent to which legislative politics is one-dimensional (Wright and Winburn 2003; Wright and Clark 2005) and the effects of parties on the structure of roll call voting (Wright and Schaffner 2002).

Relative to the government ideology measures of Berry et al. (1998) and Erikson, Wright and McIver (1993), the ideal point approach has the advantage of providing estimates of the ideological positions of individual legislators. Moreover, preference estimates are based on the actual behavior of state legislators rather than assumed correlations with the state's Congressional delegation.

Two principal difficulties exist. First, access to data on state legislative roll calls is sparse, to say to the least. Worse, existing state-level ideal point analyses have been conducted one state at a time. Because the latent ideological dimensions estimated by NOMINATE need not be on the same scale for separate roll call matrices, the existing ideological scores are not directly comparable across states. Nor, for that matter, can existing state-level NOMINATE scores be directly compared with Congressional scores. In the remainder of this paper, we propose a method for estimating NOMINATE scores on a common dimension across states and Congress, and present preliminary comparative analyses using these new scores.

3 Methodology

The need for comparable preference estimates across political institutions is hardly new. The existing literature includes, for example, efforts to produce common ideological scales for the US House and Senate (Poole and Rosenthal 1997; Groseclose, Levitt and Snyder 1999), for presidents

and Congress (McCarty and Poole 1995), for presidents, senators, and Supreme Court justices (Bailey and Chang 2001; Bailey, Kamoie and Maltzman 2005), and for Supreme Court and Court of Appeals justices (Epstein et al. 2005). Indeed, connecting overlapping generations of political actors within a single institution over time presents similar challenges of estimating comparable ideal points for actors whose choices are not observed simultaneously (Poole and Rosenthal 1997; Martin and Quinn 2002). To our knowledge, however, no one has attempted to put multiple state legislatures onto a common ideological map using ideal point techniques.

All of the efforts to place multiple institutions in a common space rely, in varying ways, on bridge actors. These are political actors who make choices that can be construed as votes in more than one institutional setting. Common examples of bridge actors include members of Congress who serve multiple terms, members who migrate from the House to the Senate, solicitor generals who advocate for one side in front of the Supreme Court, and presidents who express views on congressional bills. In the present exercise, we rely on bridge actors to make three types of connections within and between institutions: first, those who serve multiple sessions in the state legislature and Congress connect institutions longitudinally, second, those who move from the lower to the upper chamber of a state legislature connect those two institutions, and third, those politicians who "graduate" from a state legislature to Congress connect the state and national ideological maps. Although we never observe a bridge actor who serves in more than one state legislature, we are nevertheless able to place all the states on a unified spatial map through their common connection to Congress.

Gerber and Lewis (2004) is the sole example of placing a state legislature on a common scale with Congress. They do for a single state, California, by using interest group ratings of US Representatives and state Assembly and Senate legislators for 1993-1994 as the bridges. Specifically, phantom legislators that stand for the League of Conservation Voters, the Chamber of Commerce, and the AFL-CIO are constructed based on the votes that underlie their respective ratings.[4] While innovative, using interest group rating may be problematic. Interest groups choose votes to score in a nonrandom fashion, and longitudinal and cross-chamber comparability is not always assured (Groseclose, Levitt and Snyder 1999), as groups may shift and stretch their scales. Finally, Gerber and Lewis do not tie other states besides California on a common space.

Poole (2005) (chapter 6) provides an overview of methods for estimating a common spatial map across institutions using bridge actors. He suggests two approaches. The first, which we

[4]Interestingly, they also put voters on the same space through scaling ballots of Los Angeles County voters, treating their voting decisions on initiatives as "votes."

call "linear mapping," extracts spatial maps for the two institutions separately and then connects them by regressing the two sets of coordinates for the bridge actors. The latter, which we call "pooled scaling," combines the roll call matrices across institutions into one large matrix, using bridge actors as the "glue," and executes the scaling simultaneously for all the legislators. In principle, the two methods should produce largely similar results.

3.1 Mapping and Scaling

For this paper, we adopt both approaches, but for different purposes. The latter we apply to create within-state scores, as well as for state-House comparisons. We begin by pooling roll call voting decisions by state legislators across the entire time period and for both chambers. Thus, the data matrix includes rows for each state legislator had ever served anywhere or anytime in the legislature. The columns include all votes taken over the entire time period in both chambers. Votes are marked as missing if the legislator was not present in a chamber.

Two types of bridge actors are present. First, legislators who serve in more than one session facilitate longitudinal comparisons. These represent the vast majority of all legislators. Second, legislators who serve in both state Assembly and Senate facilitate cross-chamber comparisons. We scale this pooled bichamber "legislature" using NOMINATE to create within-state common space scores.

We repeat the exercise for the US House of Representatives for the 105th through the 109th Congress (1996-2006). We scale within-House scores across time. We now have two separate scores, one for the a given state, and another for Congress.

Next, we pool the state voting data with roll call data from the House. The relevant bridge actors here are those that served and voted in either state legislative chamber, and then went on to serve in the House. Again, we use NOMINATE to scale this pooled "legislature" to create comparable trichamber state-House common space scores.

Finally, we use linear mapping to translate within-state, bichamber scores to all-state comparable Congressional common space. We do so by regressing the within-House scores of each state's bridge legislators on their within-state scores, using bivariate OLS. We repeat this mapping for each state. Finally, we use the estimated coefficients from each regression to create predicted congressional common space scores for the non-bridge legislators in each state. Since all "predicted" scores are now on the same scale, they can be directly compared across states.

In addition to the methods developed by Poole, we also experiment with a one dimensional

Bayesian item response model (Jackman 2000; Martin and Quinn 2002; Clinton, Jackman and Rivers 2004; Jackman 2004) based on Markov Chain Monte Carlo (MCMC) methods.[5] Due to various considerations, we have left out these results from the paper. However, estimates of ideal points via both methods correlate extremely highly, confirming suspicions that both scaling techniques yield similar results in data-rich environments.

4 Data

Wright (2007) has collected roll call data on all 50 states, but only for 1999 and 2000. This leaves us with too few bridge actors to generate common space scores. This is because sparse Congressional turnover of incumbents means relatively fewer opportunities for ambitious state legislators to "graduate" to the House (much less the Senate, Obama notwithstanding). We need a long enough record of votes to collect some minimal amount of bridge actors to make our methodology work.

Consequently, our state roll call data is from Lewis and Masket (2004) for CA and McCarty (2007) for all other states McCarty's data gathering project has been ongoing for four years. The state legislative journals of all 50 states for approximately the past decade have been either downloaded or requested from the responsible state agencies. These journals, often thousands of pages in length, were laboriously disassembled, photocopied, and scanned. These scans were recognized using optical character recognition (OCR) software. Finally, a set of data-mining scripts were written in Perl that extracted the roll call information from the data files. Since each state's journals were unique, a high fixed cost is paid to program these scripts (though the variable cost of including more years is typically far lower). Difficulties also included OCR scanning mistakes that occur in high absolute frequency in spite of 98% recognition rates.

Data on more than half of the US states are currently in some level of being processed, in the sense of roll call data being generated. In this paper, we analyze data from four of these states: California, Michigan, Pennsylvania, and Florida. These states were chosen for their population of bridge actors, but a nice bonus is that they are geographically diverse. At the time of this writing, five more states await analysis with completed roll call data, but we do not present their results here. These are Colorado, Missouri, New Jersey, Texas, and Virginia. Following Poole (2005), we excluded near-unanimous roll calls where the minority was less than three percent. Table 1 describes the roll call data and presence of bridge actors across states.

[5] See also Bafumi et al. (2005) for a discussion of the practical issues involved in this estimation strategy.

	Start Year	End Year	Roll Calls	Legislators	Bridges
CA	93	04	241	3000	14
FL	96	05	334	2198	9
PA	96	04	342	1881	8
MI	96	02	307	4736	8

Table 1: *State Data Description*

5 Scaling

We begin by showing the results of estimating within-state bichamber scores and congressional common space scores for each state. These were estimated using W-NOMINATE with one and two dimensions (Poole et al. 2007) and with a Bayesian item-response model (Jackman 2007) in one dimension.

5.1 Fits and Dimensionality

The overall fit of the within-state, bichamber scaling procedure was very good, as shown in Table 2. Classification with one dimension ranged from 88.2% for PA to 93.7% for CA. Average proportionate reduction in error (APRE), which measures the improvement in classification relative to a less naive null, ranges from 53% for PA to 76.3% for CA. These fit statistics are very comparable to those for the US House (1996-2006), which are 89.8% and 69.6%, respectively.

These results comport nicely with previous estimates in the literature. The results for CA, for example, hew quite closely to Gerber and Lewis (2004) results of 89.7% correct classification and a 67% reduction in error for the first dimension. The improvement in fit over their results is a consequence of including far more data (1993-2004 for CA, and 1996-2006 for the House).

Poole and Rosenthal (1991, 1997) famously found that Congress showed low ideological dimensionality. One dominant dimension consistently present over the course of American history is traditionally conceptualized as liberalism-conservatism. A second dimension occasionally appears, but in recent history has receded into insignificance. Such a finding has been echoed in diverse institutional settings, overseas and in the United States (Poole and Rosenthal 2001).

There is reason to suspect that there may be more than one dimension present in the American states. The policy issues in conflict at the state level may well load onto other dimensions given state heterogeneity. For example, consider urban-rural conflict in states with dominant

central cities: the Chicago-downstate conflict in Illinois[6], or the New York City-upstate conflict in New York. Or the intrastate conflict between state natives and out-of-state migrants in rapidly growing states like Florida and Nevada. Even if one dimension accounts for nearly all political conflict in any given state, that dimension may be different across the states. An urban-rural divide may be dominant in some states, an Anglo-Hispanic dimension in another, and so forth.

On the other hand, we may expect that the dominant left-right dimension explains nearly all of political conflict in state legislatures. State parties are increasingly organizational and ideological franchises of the national parties. Though historically heterogenous across states, they have drifted into ideologically distinct camps in recent times (McCarty, Poole and Rosenthal 2006; Erikson, Wright and McIver 2006). Wright and Schaffner (2002) found evidence in the comparison between Nebraska and Kansas that low dimensionality is the consequence of a two-party electoral system.

Ultimately, the question of dimensionality is an empirical one. The empirical tools we use to assess dimensionality include skree plots and observations of fit improvement when numbers of dimensions are increased. Skree plots graphically summarize the sizes of the eigenvalues from a NOMINATE scaling. Rules of thumb for inferring dimensionality from such plots include looking for an "elbow" where subsequent dimensions show rapidly diminishing eigenvalues.[7]

The calculated skree plots are shown in Figure 1. These confirm the presence of a single dominant dimension, but appear to indicate the potentiality of additional dimensions. Are these additional dimension mere noise? It appears they are, as shown in Figures 2 and 3. The improvements in classification going from one to two dimensions are modest across the board, averaging less than half a percent across the four states. The mean APRE improvement is 1.7%, even less than that for the US House. If additional dimensions were present, such improvements would be considerably larger.

We also show the fits for the merged, trichamber "legislature" of state House, Senate, and US House. Since the majority of the combined data are US legislators and US roll calls, it is no surprise that the fit statistics exist in a narrow range: between 89.5% (MI and PA) and 90.5% classification (CA), and between 69.7% (CA) and 68.2% (PA).

We can plot the calculated one and two dimension NOMINATE scores in a unit circle (which

[6]Though much of downstate Illinois is Republican, there are several highly Democratic counties bordering Missouri.

[7]For multiple examples of skree plots, see Click for Poole Web Page One on Keith Poole's Voteview site. Also see Click for Poole Web Page Two for an extended discussion on dimensionality in the context of the Supreme Court.

	Class% 1	Class% 2	Cla2-Cla1	APRE 1	APRE 2	AP2-AP1
CA	93.7	93.9	0.2	76.3	77.2	0.9
FL	90.6	91.0	0.4	63.9	65.6	1.7
PA	88.2	88.9	0.7	53.0	55.7	2.7
MI	91.0	91.5	0.5	70.5	72.1	1.6
US	89.8	90.6	0.8	69.6	72.1	2.5

Table 2: *Intrastate Fit Statistics. US House included for comparison.*

	Class% 1	Class% 2	Cla2-Cla1	APRE 1	APRE 2	AP2-AP1
CA	90.5	91.8	1.3	69.7	73.8	4.1
FL	89.7	90.5	0.8	69.1	71.4	2.3
PA	89.5	90.2	0.7	68.2	70.5	2.3
MI	89.5	90.5	1.0	68.8	71.7	2.9
US	89.8	90.6	0.8	69.6	72.1	2.5

Table 3: *Trichamber Fit Statistics. US House included for comparison.*

emphasizes the constraints on NOMINATE coordinates). Figure 2 shows the estimated within-state bichamber scores for each legislator in the state over the time period. Similarly, Figure 3 shows estimated common-space trichamber scores for each legislator (state-only, House-only, and bridge) over the merged time period. Republicans and Democrats are plotted separately in both figures.

A few things can be pointed out. First, notice the presence of blank space between the parties, and the fact that its size appears to vary across the states. Second, states differ in the proportion of "misplaced" partisans also appear closer to the median of the opposite party. These two indicators may be interpreted as within-state party polarization.

Finally, our results show that the combined "trichamber" scores correlate very highly with House-only scores. This is shown graphically in Figure 4. These plots show that pooled scaling, at least at the level of individual states and Congress together, does not damage the preference estimates. A lack of correlation would be very difficult to interpret.

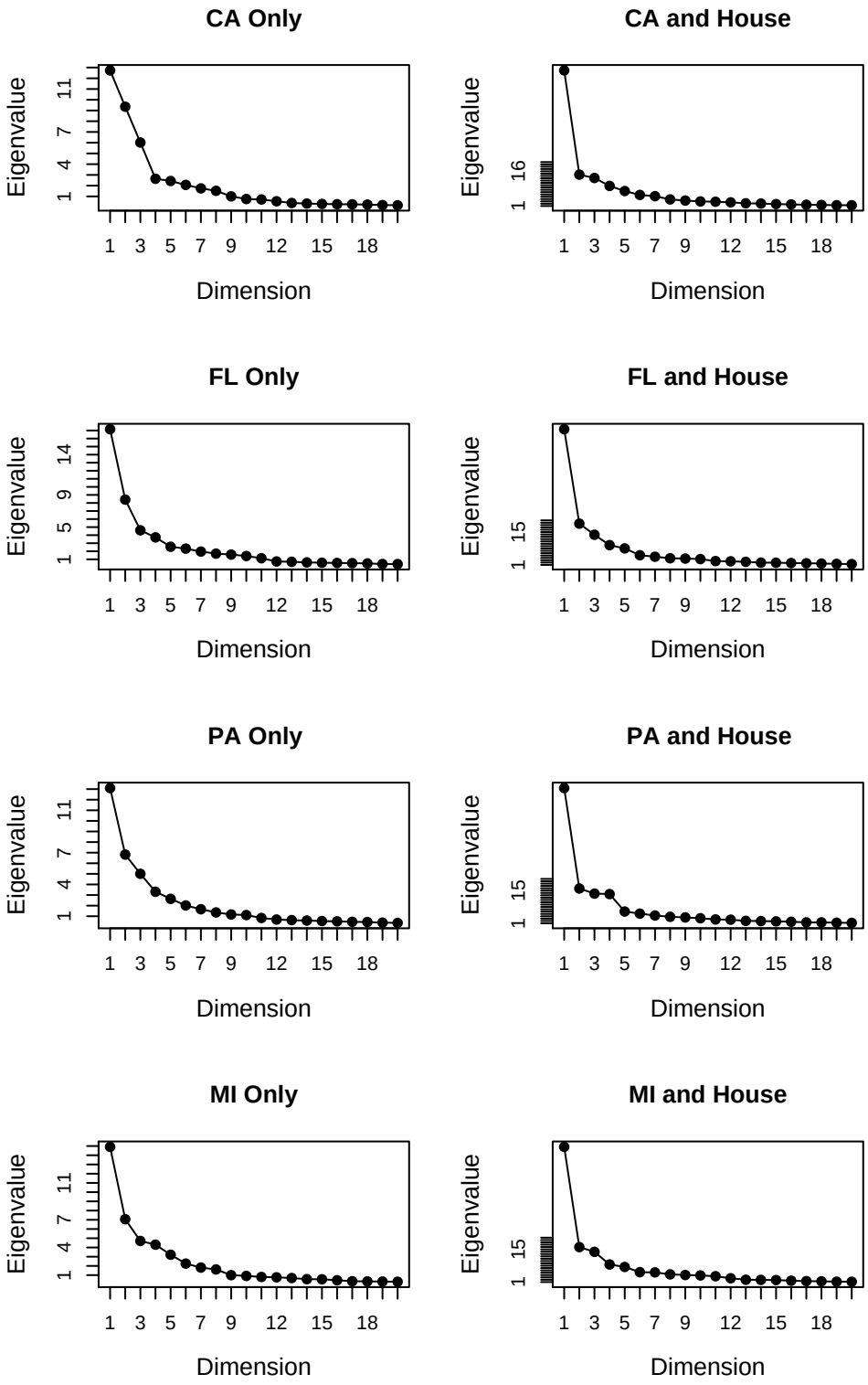

Figure 1: *Skree plots, 4 states.*

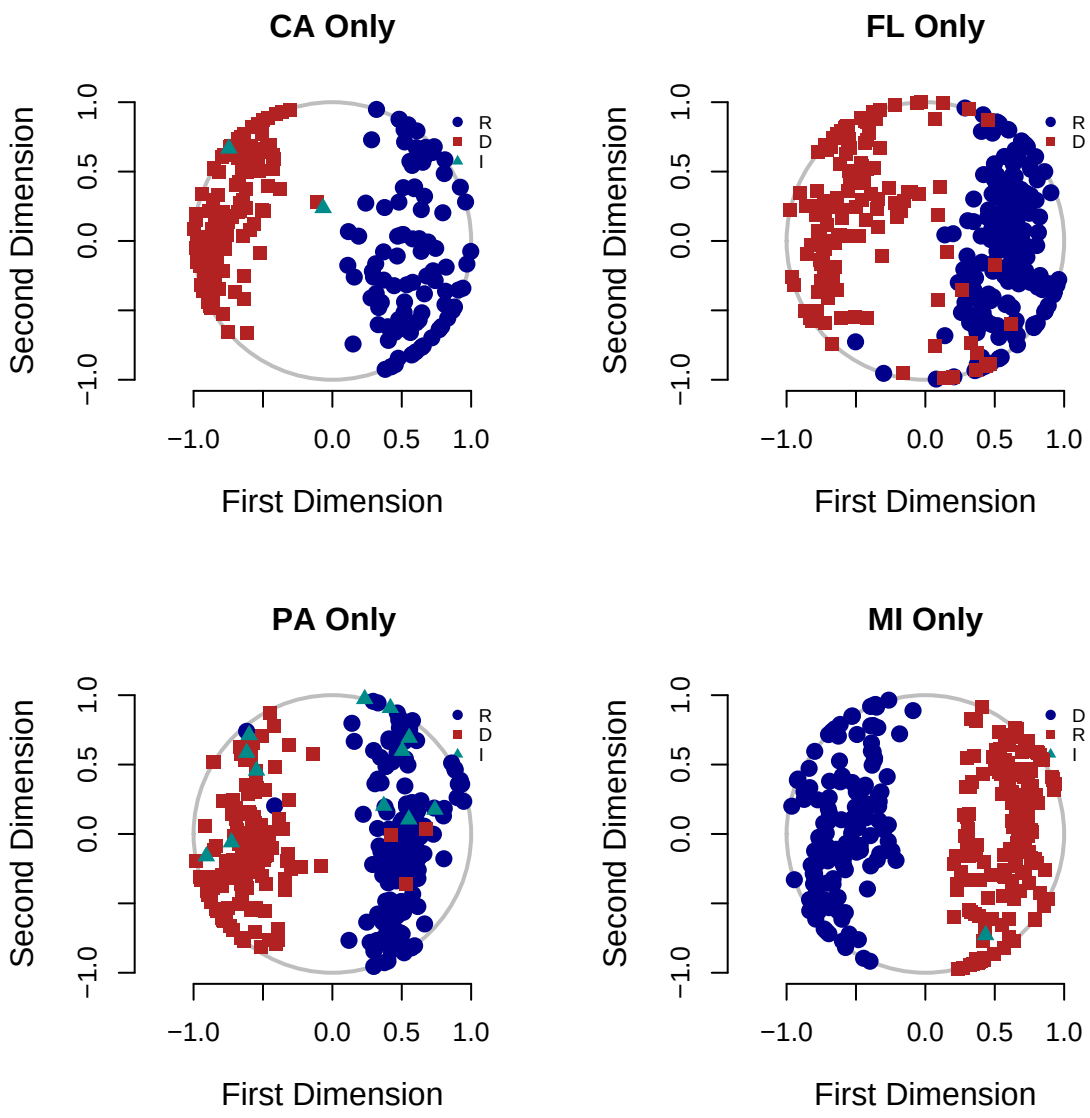

Figure 2: *Two dimension bichamber NOMINATE plots for state legislatures only. Apologies for violating red-blue norms.*

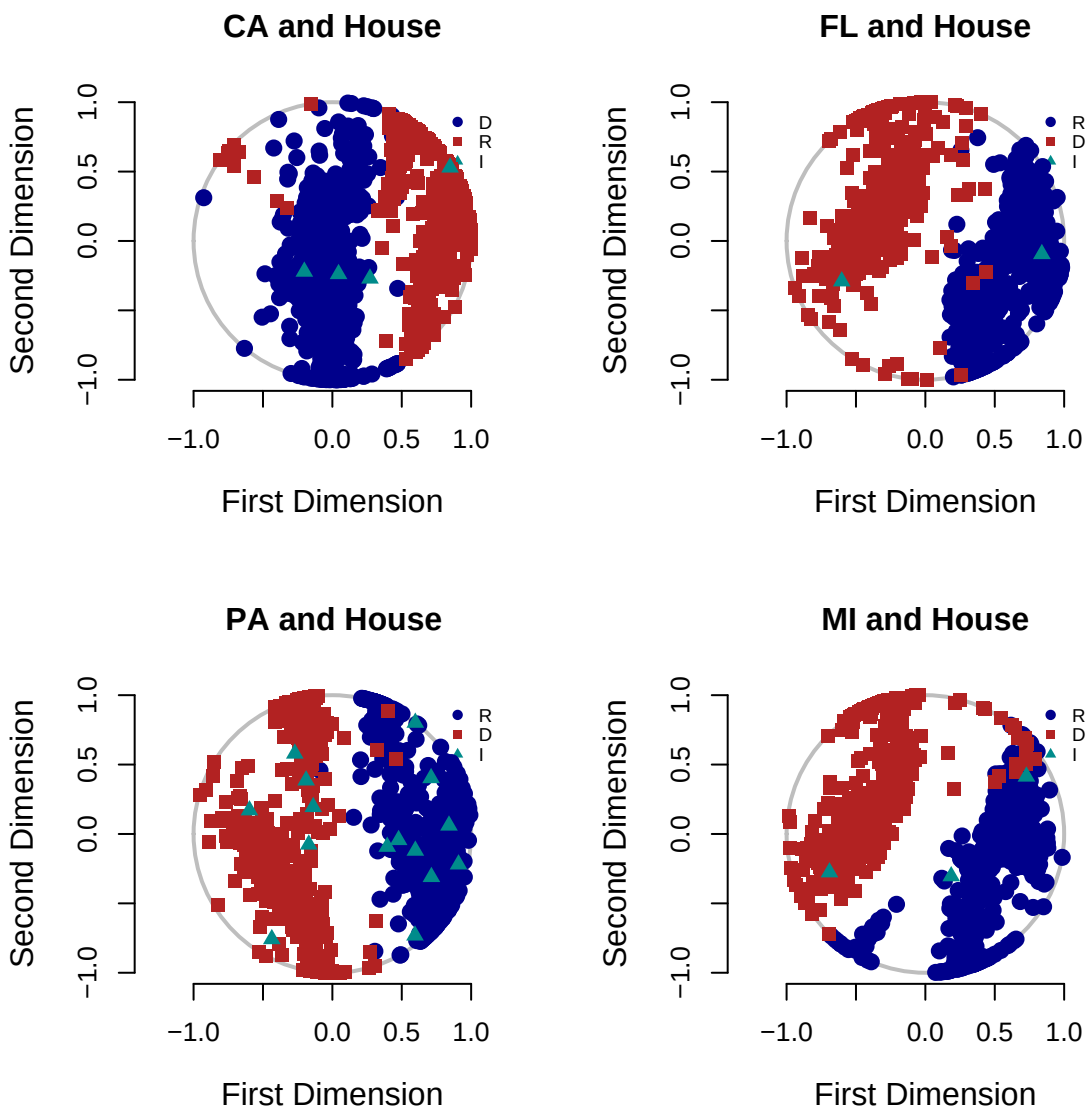

Figure 3: *Two dimension trichamber NOMINATE plots for state legislatures pooled with the US House, 105th-109th Congress. Apologies for violating red-blue norms.*

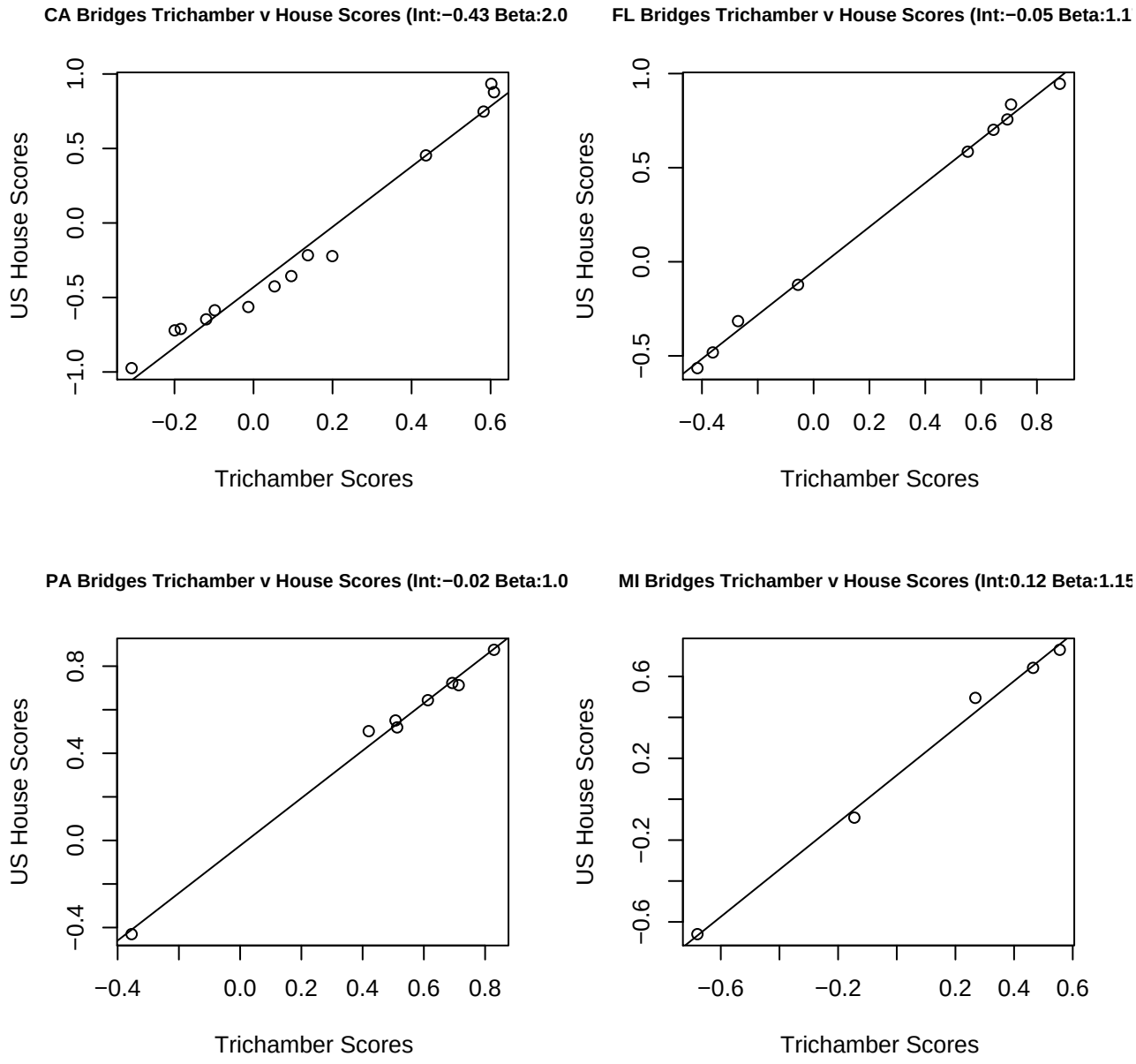

Figure 4: *Bridge actors' trichamber common space scores plotted against House-only NOMINATE scores. Pooled scaling of three chambers generates preference scores that do not do violence to the estimates of scores from Congress alone.*

5.2 Linear Mapping

Since the first dimension so dominates all others, we (temporarily) drop further analysis of the other dimensions. We regress the US House scores for our bridge actors in each state on their bichamber, within-state scores. The results are shown in Figure 5. The two scores line up almost perfectly (correlations are above 0.97 for each state). This indicates that more conservative (liberal) bridge legislators in the states are more conservative (liberal) in the House, too.

These regressions produce a set of intercept and slope coefficients mapping scores from bichamber space to congressional common space. These coefficients are used to generate predicted scores for the non-bridge legislators from each state. These predicted scores in common space are plotted as density curves in Figure 6.

Now, for the first time, we can directly compare the results from different states with each other, as well as with the US House. We do so first by comparing the range of ideological preferences in each institutional setting. The US House is constrained by the NOMINATE procedure to lie in the (-1,1) range. Unlike scaled scores, predicted scores can range beyond the (-1,1) range of NOMINATE. Therefore, California's and Michigan's most conservative Republicans are quite conservative indeed by congressional standards, reaching out as far as 1.5 on the first dimension. In contrast, Florida and Pennsylvania have ideological ranges that look more like that of Congress.

Second, we compare medians of each state's bichamber "legislature." The congressional median is at 0.5, understandable as the House was dominated by Republicans over the course of 1996-2006. Florida, Michigan, and Pennsylvania also have moderately conservative institutional medians over their respective time periods, while California has a moderately liberal median. These results are echoed in a comparison of the four states' medians with averaged measures of state government from Berry et al. (1998) in Figure 7. Of course, a scatterplot with four points should be interpreted with the proverbial salt. In particular, California's absence would show a far different slope. More liberal states are needed to avoid relying on California to anchor the comparison. Still, a lower observed correlation of these four would be cause for concern.

Third, we can compare the party medians. Michigan's Republicans stick out by being extremely conservative, while the other states' Republicans mirror the House. Democrats are far more diverse, ranging from less liberal in Pennsylvania and Michigan to most liberal in California. Florida sticks out again, and looks most like a microcosm of the US House, with identical Democratic and Republican medians.

Fourth, we can say something about partisan polarization which has become such a hot topic in American politics (McCarty, Poole and Rosenthal 2006). The baseline remark, of course, is that preferences are distributed bimodally. Beyond this simple fact, what more can we say?

One way to compare polarization across institutional settings is to check the distance between party medians. Pennsylvania's party medians are closest together, California's are furthest apart, and Florida's look like the US House.

Another way is to check the amount of overlap between the parties. That is, what percentage of Republicans (Democrats) are more liberal (conservative) than the most conservative (liberal) Democrat (Republican)? As we have well understood since the rise of ideal point analysis 15 years ago, parties are highly polarized in Congress in recent years, with negligible amount of overlap in the House. California, with its highly partisan legislature also shows no overlap, as does Michigan. Pennsylvania and Florida, on the other hand, show remarkable degrees of overlap. In sum, partisan polarization appears strongest in California, somewhat less so in Michigan, less still in Florida, and least of all in Pennsylvania.

Finally, the shapes of the partisan preference distributions is interesting, and tells us something about party cohesion. Pennsylvania's less polarized legislature is also marked by more internal partisan cohesion (note the relative thinness of the density curves), while Michigan and Florida's have have considerably wider distributions.

Another interesting exercise is the comparison of state congressional delegations to the state legislatures themselves. We have good reason to expect that the distributions of these two sets of preferences are not independent. First, both are anchored by state public opinion (Erikson, Wright and McIver 1993). Second, as the presence of bridge actors so prominently outlines, members of Congress are drawn from a pool of state elites that also supply state legislators.

Figure 8 shows the results of the comparison that, by and large, bear out these expectations but with some noteworthy exceptions. Party medians between legislatures and delegations look fairly similar, except for Michigan Republicans and Pennsylvania Democrats who are somewhat more conservative than their US delegation partisan counterparts. We find that state delegations to the US House are more polarized than the legislatures of states they come from for Pennsylvania and Florida but for Michigan and California.

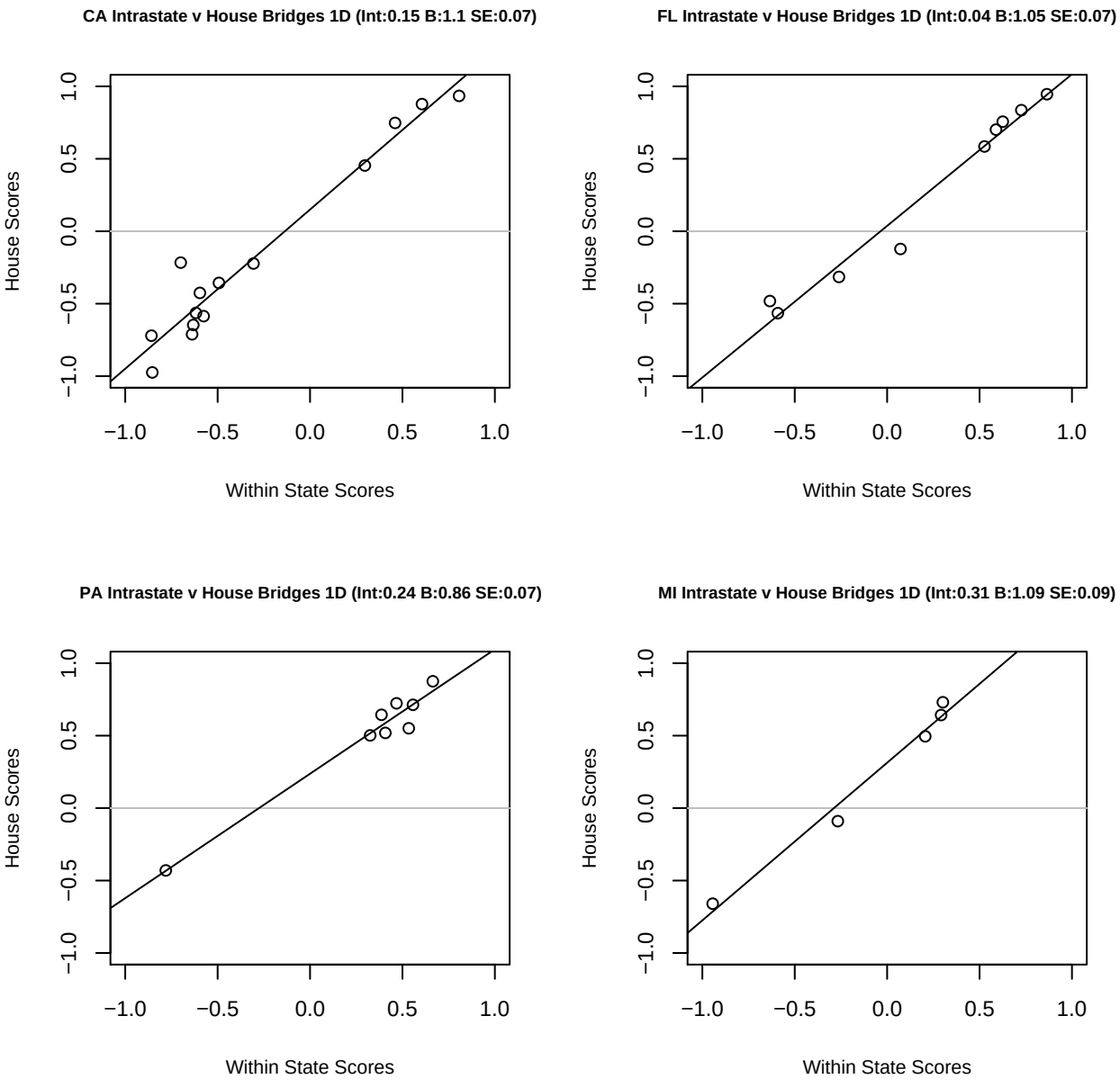

Figure 5: *Linear mapping consists of regressing state bridge legislator US House scores on their within-state bichamber scores. Conservative state bridge actors are also conservative in the House.*

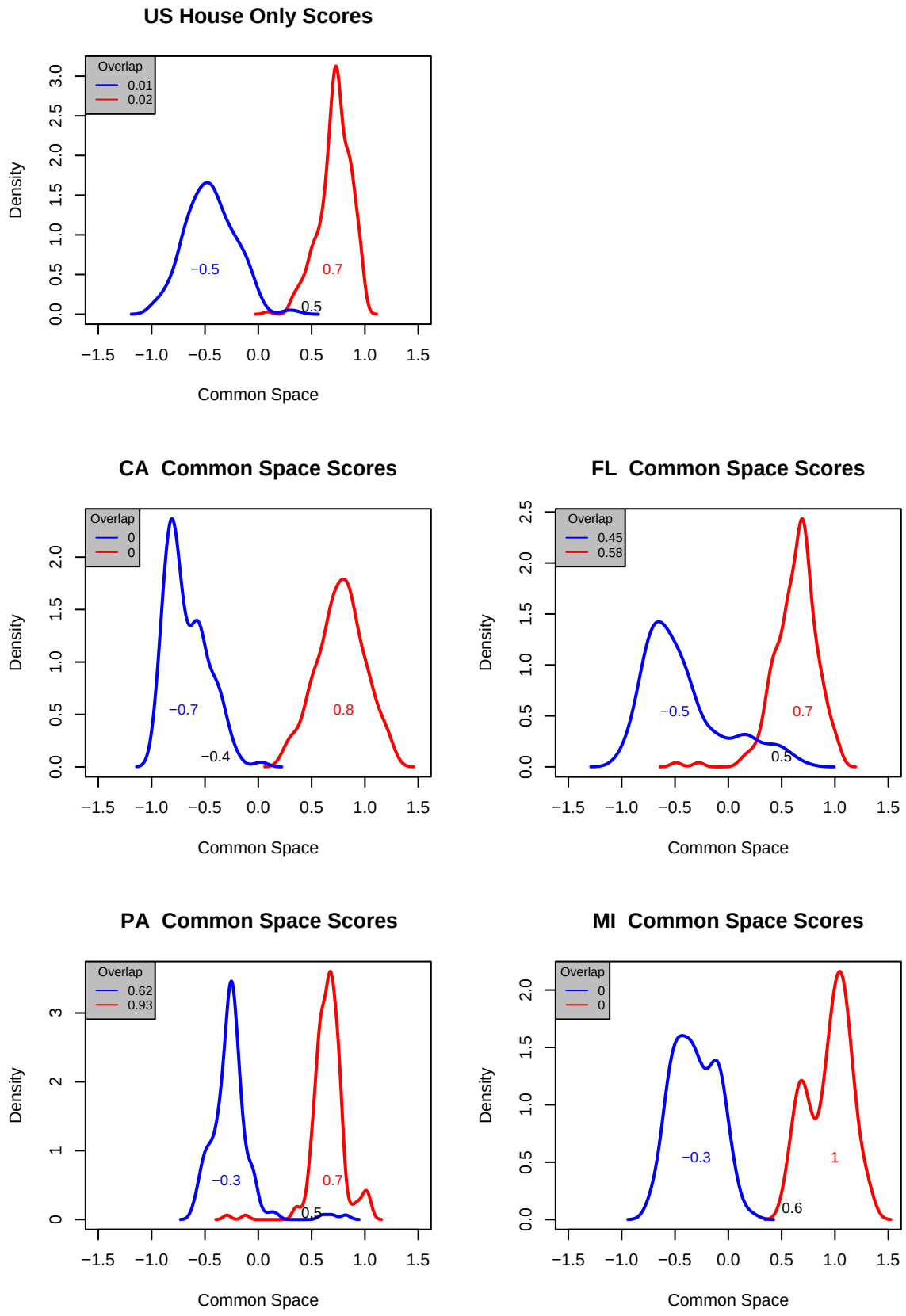

Figure 6: *Estimated congressional common space scores for four states compared with scores for the US House, 1996-2006. Colored numbers under density plot indicate party medians (red are Republicans), the black number on the x-axis is the bichamber median. Party overlap statistics are reported in the legend.*

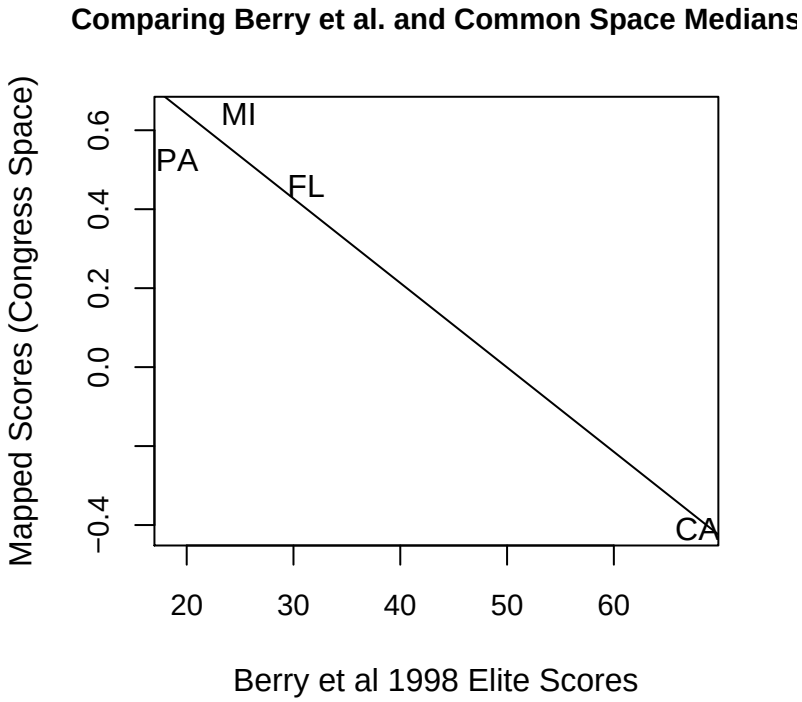

Figure 7: *Comparison of Berry et al. (1998) state government ideology (averaged over 1996-2002 for comparability) and congressional common space medians of the pooled state legislators shows a nice correlation.*

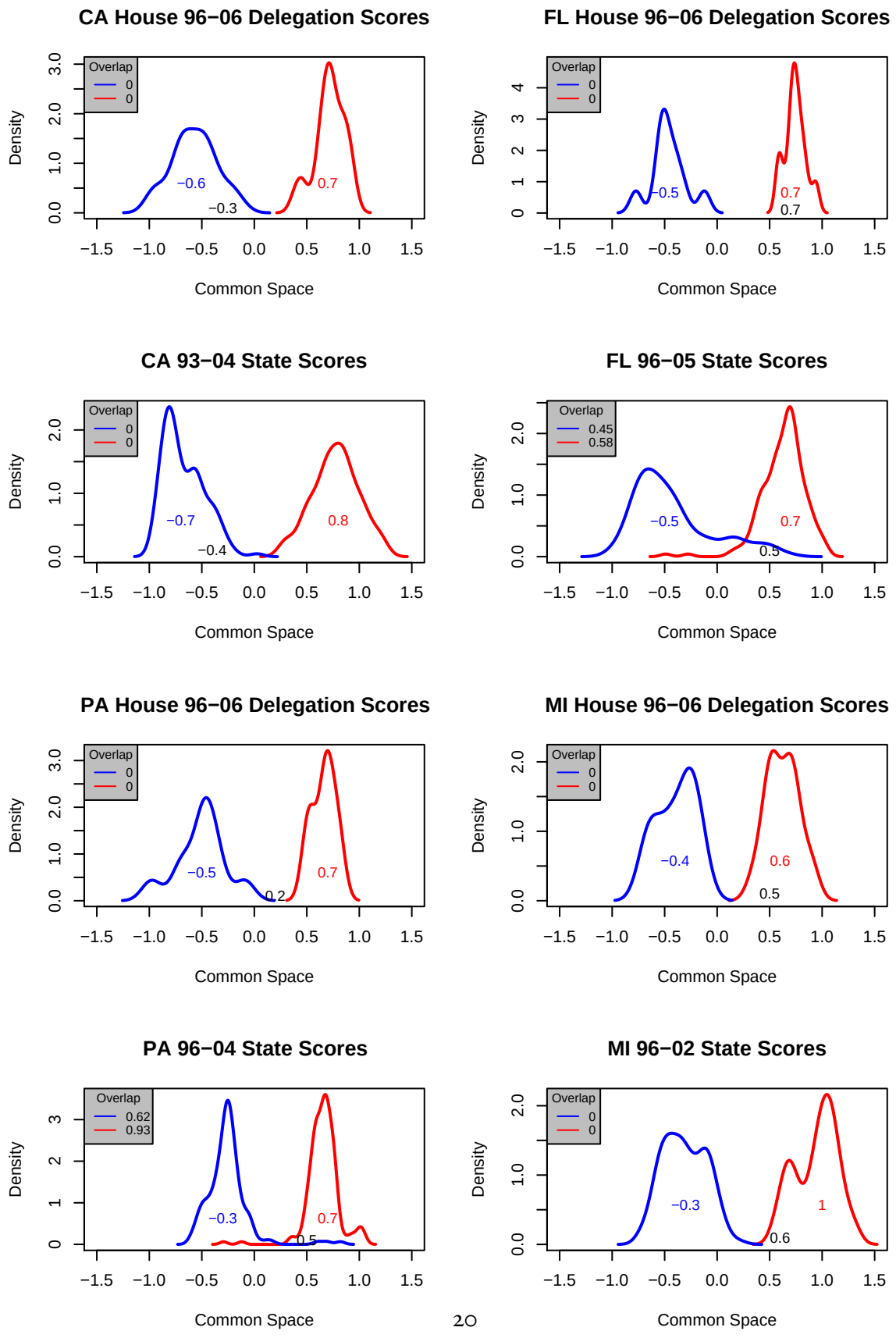

Figure 8: *Comparisons of state legislatures and state delegations to Congress on congressional common space. Colored numbers under density plot indicate party medians (red are Republicans), the black number on the x-axis is the bichamber median. Party overlap statistics are reported in the legend.*

6 Conclusion

The absence of data and the right method has prevented state politics scholars from making valid comparisons of state legislative ideological preferences. The efforts of McCarty (2007) and his team to address the first problem are featured here. Along with the recent work of Wright (2007), we have a solid footing for improving the data picture.

This paper highlights the second issue. Poole (2005) suggests two approaches for making a valid inter-institutional common space: a regression-based approach we call linear mapping, and a "big matrix" based approach we call pooled scaling. We use both to make the most efficient use of our data and computing resources.

In future iterations of this project, we plan to use the pooled scaling approach on the states herein to create a massive "super legislature" together with Congress. We will then compare the relative performance of both methods of creating common space scores.

Of course, generating results for four states is merely suggestive of a true cross-state common space. Results herein should be viewed as very tentative. We are, however, actively working on analyzing the collected roll call data of five more states: Colorado, Missouri, New Jersey, Texas, and Virginia. More states still are in more preliminary stages of roll call data collection.

Perhaps more important still is the longitudinal aspect. We choose to trade off breadth for depth in our roll call data because the core of our analysis relies on the precious few bridge legislators who "graduate" from the states to Congress. The longer time series we have in the states *and* in Congress maximizes our opportunities to collect them. The election of the 110th Congress promises a bounty of new bridges in the extra-large turnover of incumbents, which we hope to exploit in the next version of the paper.

Once we have analyzed more states, we will go on to connect our ideal point estimates for state legislatures to other data on state-level public opinion and state policy choices, in the spirit of Erikson, Wright and McIver (1993). Even further afield is bring other actors like governors and state Supreme Courts into the analysis via gubernatorial interaction with the legislature and the courts.

This paper should be viewed as an example of the dictum "compare, but carefully." State politics scholars have long compared across states while taking into account real state heterogeneity. By using what state legislatures have in common–their connections through ambitious politicians to Congress–we hope to accomplish just that.

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