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SOME COMPLEX ANSWERS TO THE SIMPLE QUESTION 'DO INSTITUTIONS MATTER?'

POLICY CHOICE AND POLICY CHANGE IN PRESIDENTIAL AND PARLIAMENTARY SYSTEMS

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ABSTRACT

Much current research in political science focuses on the impact which political institutions have on policy outcomes. A substantial body of this 'neo-institutional' work, often organized around the question, 'Do institutions matter?', examines differences in the performance of presidential and parliamentary systems. The conventional wisdom in the literature has been that presidential and parliamentary systems tend to select different policies and exhibit different patterns of policy change. But the key question is whether the two different kinds of institutional systems should *necessarily* be expected to choose different policies or exhibit different patterns of policy change. This paper emphasizes that one cannot draw valid inferences about the nature of policy choice and policy change in different kinds of institutional systems just by considering the institutional rules alone. Instead, if we wish to compare the nature of policy choice and policy change in the different systems, it is essential to consider the interaction between the institutional rules and the policy preferences of the individual officeholders in these systems. And what must be compared involves the sets of policy equilibria produced by each of the systems. When these policy equilibria are systematically compared across institutional systems, the results about policy choice and policy change do not always support the inference that 'institutions matter'.

KEY WORDS • parliamentary systems • policy change • political institutions • preference profiles • presidential systems

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> A close analysis of social and political phenomena often shows that causes are more complex than had at first appeared, and that that which had been deemed the main cause is active only because some inconspicuous, but not less important, condition is also present. (James Bryce, *The American Commonwealth*, 1895: 11)

1. Introduction

The impact of political institutions on the choice of public policies has become an important focus of research within political science over the past two decades. In this field of 'neo-institutionalism' (Hall and Taylor, 1996), a term coined to distinguish it from the older and largely descriptive institutional studies of the 1920s and 1930s, many different approaches have been developed for studying how institutions affect policy-making and policy choice. For example, we can identify the following distinct neo-institutional literatures:

- a comparative political processes institutionalism, which compares policy-making processes in different kinds of institutional systems (Shugart and Carey, 1992);
- a comparative public policy institutionalism, which explores the extent to which differences in public policies among nations can be ascribed to differences in the nations' institutions (Ashford, 1978, 1986; Evans et al., 1985; Immergut, 1990; Katzenstein, 1978; Steinmo, 1993);
- an historical institutionalism, which describes in detail the origins of particular public policies within one or more nations (Ashford, 1992; Skocpol, 1992, 1995; Steinmo et al., 1992);
- a policy-making capacities institutionalism, which examines the extent to which different institutional systems are capable of solving various public policy problems (Weaver and Rockman, 1993a,b,c);
- a quasi-normative institutionalism which urges adoption of particular kinds of institutional systems due to their greater stability, effectiveness or legitimacy (Linz, 1994; Linz and Valenzuela, 1994; Valenzuela, 1993); and
- a rational-choice institutionalism involving the development of rational-choice models of institutions for understanding policy choice and policy change within and across nations (Baron, 1991, 1993, 1998; Bawn, 1999; Cameron, 2000; Cox, 1984, 1987, 1990, 1994, 1997; Cowhey and McCubbins, 1995; Hammond, 1996; Hammond and Knott, 1996, 1999; Hammond and Miller, 1987; Knott and Hammond, 2000; Krehbiel, 1991, 1996, 1998; Laver and Schofield, 1990; McCarty, 2000; Miller and Hammond, 1989, 1990; Moe and Caldwell, 1994; Shepsle, 1979a,b, 1986, 1989; Tsebelis, 1995, 1999, 2000, 2002; Tsebelis and Money, 1997; Weingast, 1995).

The question motivating most of these studies is simply put: 'Do institutions matter?'. The answer is generally that institutions do indeed matter; in fact,

as Steinmo and Tolbert (1998: 183) recently put it: 'It has become nearly passé to argue that institutions matter. Virtually all political scientists readily agree to this rather innocuous statement.'

But to what extent can we really say that 'institutions matter'? Without a better understanding of two fundamental issues, it will remain unclear just how much power the institutional explanation actually has for understanding policy choice and policy change. First, we must consider precisely what it means to say that 'institutions matter'; it turns out that what 'matter' means has some significant ambiguities. Second, if the central question is 'Do institutions matter?', we must be alert to the possibility that the answer is not so much that 'Institutions always matter' but that 'Any particular institution matters under some conditions but not under others'. Determining what these conditions might be thus becomes a critical task for the new institutionalism.

The purpose of this paper is to address these fundamental issues. Our method involves the construction of simple spatial models of policy-making in presidential and parliamentary systems in which individual office-holders rationally pursue their own policy goals. We then characterize the nature of the policy choices and the policy changes which should be expected from the different kinds of institutional systems.

We begin our analysis by defining the term 'institutional system' in a simple and straightforward manner: *an 'institutional system' is a set of rules used to aggregate the preferences of the individuals in the system into the choice of a policy*. Two institutional systems are thus different if their aggregation rules are different. It does not matter, for our purposes, if the aggregation rule is formalized in a written constitution or is primarily a matter of unwritten custom.

We then argue that understanding policy choice and policy change in different institutional systems requires, as its starting point, an understanding of what policies the individual actors in each system should be expected to produce *in equilibrium*, given their policy preferences. Only by systematically comparing one system's set of policy equilibria to the sets of equilibria produced by other kinds of systems can we determine the extent to which the institutional differences among these systems actually matter. We suggest that claiming that a particular institutional system 'matters' necessarily implies a comparison between policies which the individual actors might select, in equilibrium, via that system's institutions and the policies they might select, in equilibrium, in the absence of that particular system's institutions. Unless the features of policy-making in the presence and in the absence of that system's institutions are made explicit, and the differential impacts on policy equilibria demonstrated, while controlling for the impact of

other relevant variables, an assertion that the institutional system 'matters' will have less meaning than one might desire.

There is a substantial literature involving formal rational-choice models of policy equilibria in particular institutional systems, not only in the US context (e.g. Hammond and Miller, 1987; Krehbiel, 1996) but increasingly in various kinds of parliamentary systems as well (see, e.g. Austen-Smith and Banks, 1990; Baron, 1991, 1993, 1998; Baron and Diermeier, 2001; Diermeier and Feddersen, 1998; Kalandrakis, 1999, 2000; Laver and Shepsle, 1996; and Persson et al., 1997). Somewhat surprisingly, however, there seems to be relatively little work which compares the equilibrium policies from a variety of institutional systems or which uses such equilibria to clarify differences in the nature of policy change across these systems.

Because an institutional system is a set of rules for aggregating individual preferences into a policy choice, we emphasize that understanding policy choice requires understanding the interactions between the aggregation rules and the individual preferences which are to be aggregated. Of course, rational-choice theorists almost unavoidably deal with these interactions between aggregation rules and individual preferences; the important work of Tsebelis (e.g. 1995, 2000, 2002) is perhaps the most outstanding example. Too often, however, other neo-institutionalists have drawn broad conclusions about the nature of policy choice or about changes in policy choices, just by examining the aggregation rules of different institutional systems. The possible impact of particular sets of individual preferences – that is, of the *preference profiles* – on the systems' policy choices has either been ignored or else treated so implicitly that it is difficult to discern what role differing preference profiles might have played. We develop a series of spatial models, involving the interaction of aggregation rules and preference profiles and resulting in the production of equilibrium policies, to help clarify these matters.

There is an infinite number of possible institutional systems and in this paper we develop models of just five: four parliamentary models and one presidential model. Despite this limited number of institutional systems, our results and observations give us some confidence in advancing two broad arguments about the impact of institutions on policy choice and policy change.

- First, for any two institutional systems, there always exists a preference profile which would lead the two systems to have similar or even identical policy equilibria. But for the same two systems there also usually exists a preference profile which would lead them to have different policy equilibria. For most pairs of systems, then, it appears incorrect to say that 'institutions matter' *just by themselves*. Instead, whether 'institutions

matter' appears to depend on the presence or absence of particular kinds of preference profiles.[1]

- Second, there exist conditions under which two different institutional systems will exhibit different patterns of policy change but there also exist conditions in which they will exhibit similar patterns of policy change. Indeed, some kinds of systems can be expected to exhibit several different patterns of policy change, depending on the presence of particular kinds of preference profiles and on how these preference profiles change over time.[2]

These arguments imply that the conventional wisdom about the differences in policy choice and policy change between presidential and parliamentary systems is rather misleading. Regarding policy change, for example, the multiple veto points in presidential systems are often accused of being a major reason for the policy stability – more pejoratively referred to as 'deadlock', 'gridlock' or 'stalemate' – that is sometimes observed. Some kinds of parliamentary systems, such as bicameral parliaments or unicameral parliaments with party-coalition governments, are also described as exhibiting considerable policy stability; 'immobilism' is a pejorative term sometimes used to label the policy stability in these parliamentary systems. In contrast, 'Westminster'-style parliamentary systems, in which one of the two major parties dominates a unicameral parliament (Lijphart, 1999: Ch. 2), are often considered to be more open to policy change. However, our models show that these kinds of observations obscure the patterns of policy change which should be expected from these different kinds of institutional systems.

Overall, these arguments and observations suggest to us that the question of whether 'institutions matter' requires a considerably more nuanced answer than seems to be generally recognized in the neo-institutional literature. If institutions matter for some preference profiles but not others, addressing the question of whether institutions matter requires not only that we define precisely what kinds of institutions we are considering but also that we delineate precisely the features of the preference profiles these institutions are processing. If students of institutions do not adhere to this regimen, they risk drawing misleading or incorrect inferences about the extent to which institutions do or do not matter.

1. For a related discussion of the relationships between institutions and preference profiles see Hammond (1996: 123–32). Riker (1982) makes a similar argument regarding the relationships between voting rules and preference profiles.

2. In a companion paper – see Butler and Hammond (1997) – we use computer simulations to explore the extent of similarities and differences in the patterns of policy change across presidential and parliamentary systems as the systems' preference profiles change over time.

2. Arguments about Policy Stability and Policy Change in Presidential and Parliamentary Systems

Students of institutions have long been interested in the impact of different kinds of institutional rules on policy-making and policy outcomes. There is a vast literature, beginning at least with Aristotle's *Politics* in the fourth century BC, exploring the impacts of different kinds of institutions. However, many students of institutions have slighted the impact which different kinds of preference profiles might have on policy-making and policy outcomes. For example, consider the literature on the impact of presidential and parliamentary systems on policy choice and policy change.

2.1 Policy Stability in Presidential Systems

It has long been thought that presidential (separation-of-powers) systems exhibit a particular pattern of policy-making behavior: great stability in public policies. While initially recognized by the authors of *The Federalist Papers*, the theme has been thoroughly explored only in the past five or six decades. For example, David Truman (1951: 354) observes that '[T]he bicameral organization of our typical legislature and the constitutional separation of powers operate, as they were designed, to delay or obstruct action rather than to facilitate it'. Similarly, James MacGregor Burns (1963) cites Hofstadter's classic phrase (in 1948: 9) that the Constitution was designed to be 'a harmonious system of mutual frustration' and Burns (1963: 6) further suggests that

> we still underestimate the extent to which our system was designed for deadlock and inaction. We look on the current impasse in Washington as something extraordinary rather than as the inevitable consequence of a system we accept.

James Sundquist (1968: 511) likewise argues that the overall impact of the separation-of-powers system 'can be not just to delay action in the interest of full and free debate, but to forbid action'. These observations all suggest that separation-of-powers systems make policy change less probable.

Moreover, when policy change does occur, it is said to occur only intermittently. For example, Burns (1963: 2) argues that change comes 'by fits and starts' and he continues by saying that 'historically there has been a serious lag – once a near fatal lag [the Civil War] – in the speed and effectiveness with which the national government has coped with emerging crises'. Burns (1963: 2) acknowledges that 'under extraordinary combinations of circumstances' – which he likened to storms – significant policy change is possible. Nevertheless, he also suggests (1963: 205), 'the old political patterns would reappear once the storm was gone'.

Similarly, Vogel (1993: 267) observes that in a separation-of-powers system, policy sometimes tends to move in a 'ratchetlike' fashion: changes in policy, once adopted, subsequently remain unchanged for a considerable period of time. Baumgartner and Jones (1993) likewise suggest policy-making is characterized by 'punctuated equilibria' (see Eldredge and Gould, 1972).

When periods of policy change do occur in the USA, observers often remark that they primarily occur only when there is an alignment of views – often electorally induced and thus short-lived – between Congress and the president. Political parties are commonly seen as playing the major role in bringing about these alignments. For example, Key (1964: 662) observes, when a policy change is possible, it will be in good part due to

> the fact that he [the president] and a substantial block of the Congressmen of his party stand for broadly the same program. Concurrence of view, not command, underlies their agreement.

These studies of American politics focus primarily on the impact of institutions on policy change and the impact of preferences and preference changes is discussed primarily in the context of distinctions between 'divided' and 'unified' government. Aside from recent contributions by Krehbiel (1996, 1998) and Tsebelis (1995, 1999, 2000, 2002), we can find little which explicitly discusses, with any substantial degree of sophistication or rigor, the relationship between institutions and policy preferences or the impact their interactions might have on policy choice and policy change.

2.2 Comparisons of presidential and parliamentary systems

Policy-making in presidential systems has often been contrasted to parliamentary systems. For example, Linz (1994), Valenzuela (1993) and Linz and Valenzuela (1994) find presidential government wanting in comparison to parliamentarism. Valenzuela (1993: 5), for instance, argues that

> By contrast with parliamentary governments, presidential governments have no ready solution to the political impasse that arises when a president cannot command majority support in the legislature. Often the result is debilitating governmental paralysis, an outcome that is especially likely where presidentialism coexists with a multiparty system.

Of course, some students of comparative institutions emphasize that several other variables can mediate the impact of institutions (see, e.g., Steinmo and Tolbert, 1998). Moreover, Weaver and Rockman (1993a: 38) remark that '[A]lthough institutions affect government capabilities, their effects are contingent'. In particular, they note that 'non-institutional factors' sometimes mediate the impact of institutions. For example, the characteristics of a country's electoral and party systems – see, e.g. Shugart and Carey (1992: Ch. 3) – can affect the degree of policy stability in presidential systems

by influencing the extent to which legislators will support presidential proposals. In particular, policy agreement between a president and legislators is likely to be greater in a two-party system when legislators are elected at the same time as the president (Jones, 1995) than when they are elected at different times. In fact, this kind of party-unified presidential government may fail to exhibit the kind of 'paralysis' Valenzuela (1993: 5) ascribes to presidential systems. Nonetheless, even here the categories often used in analysis – two-party versus multi-party, party-divided versus party-unified government – remain relatively crude. Moreover, how far different kinds of institutional systems actually differ with regard to policy choice and policy change remains significantly under-explored.

2.3 Summary

Although some caveats can be found (e.g. in Tsebelis, 2000, 2002), the neo-institutional literature generally seems to advance four main arguments about policy choice and policy change in presidential and parliamentary systems: (1) presidential systems have a greater bias toward policy stability than majority-party parliamentary systems; (2) policy changes are possible in presidential systems primarily when there is some degree of alignment of views between the president and the legislature; (3) when policy changes occur in presidential systems it tends to be in 'fits and starts'; and (4) on rare occasions in presidential systems, large-scale changes are possible but policy stability is usually restored soon thereafter.

However, as we demonstrate, these plausible observations are not entirely accurate characterizations of how these systems should be expected to work. The observations may even be misleading since they attribute to the *institutional rules* some characteristics that are due to an *interaction* between the rules and changes in the preference profiles under those systems. Unfortunately, we can find little in the institutional literature on US politics or on comparative institutions, which provides adequate illumination of the impact on policy choice and policy change which these interactions among political institutions and policy preferences should be expected to have. While many neo-institutional scholars would agree that the linkages between institutions and policy choice and policy change are complex and contingent, the literature lacks a satisfactory explication of the details.

Here we develop spatial models of institutions for use in addressing four of the critical questions lying at the heart of policy choice and policy change across different kinds of institutional systems:

- For each system, what is the set of equilibrium policies from which a particular policy option might be selected?

- For any pair of systems, to what extent do these sets of equilibrium policies overlap?
- For each system, what pattern or patterns of policy change can be expected?
- For any pair of systems, to what extent can these systems be expected to exhibit similar or different patterns of policy change?

3. Aggregation Rules and the Question of What 'Matter' Means

What do we mean when we say 'institutions matter'? An aggregation rule might be said to 'matter' if a policy emerges when it is present but another policy emerges if it is absent. But what is meant when we say that a particular aggregation rule is 'absent'? It could mean there is no agreed-upon aggregation rule; or it might mean there is some baseline rule such as unanimity or simple majority rule. However, none of these three possibilities is entirely satisfactory for clarifying the debate over whether 'institutions matter'.

For example, if there is no agreed-upon aggregation rule, it is not obvious what policy choice would be made. As Steinmo (1989: 501) notes about what he called the 'interests' and 'values' explanations of public policies (explanations which downplay institutional factors), these explanations 'lack an understanding of how policy preferences and interests are . . . translated into specific policy choices'. In this case, we are left without any point of comparison, hence it would be difficult to evaluate the claim that 'institutions matter'.

With unanimity as the baseline, it will often be the case that no policy (or at least no new policy) can be selected. In this case, whatever happens to be the status quo policy will continue to prevail and so the 'choice' for comparison may end up being largely an artifact of previous history.

Another possible baseline is simple majority rule (which McKelvey [1986] equates with 'institution free'). With multiple issue dimensions, it is well known that simple majority rule does not yield any equilibrium policy choice except with unlikely preference profiles (Plott, 1967) or with additional assumptions (Baron and Ferejohn, 1989). Of course, with a single-issue dimension, simple majority rule does generate an equilibrium policy – the median voter's most preferred policy (Black, 1958) – and so this median policy might plausibly serve as a baseline. However, it is also well known that simple majority rule is susceptible to agenda manipulation (McKelvey, 1976; Plott and Levine, 1978; Riker, 1986), even in one dimension, and so can generate non-median outcomes (Romer and Rosenthal, 1978). And perhaps most importantly for our purposes here, when neo-institutionalists assert 'institutions matter', they rarely have simple majority rule in mind as the basis for the implied comparison.

None of these three approaches yields a satisfactory baseline for judging whether 'institutions matter'. And in fact, when neo-institutionalists say that 'institutions matter', they generally seem to be asserting that different choices will be made when different but relatively complex rules are used to aggregate preferences. In this case, to say that 'institutions matter' requires that each complex aggregation rule be specified and that it be demonstrated, controlling for the impact of other relevant variables, that the different rules will produce significantly different choices. But even here, the claim that 'institutions matter' has two remaining ambiguities.

First, if two complex aggregation rules differ only slightly, it would be no surprise if their choices were largely the same. Thus, the claim that 'institutions matter' presumably rests on a comparison of complex aggregation rules which are considered to be substantially different from each other. While what 'substantially different' means remains difficult to define (e.g. what would be the underlying metric?), the widespread interest evident in the literature in comparing various kinds of presidential and parliamentary systems suggests that these two kinds of systems are considered different enough to warrant systematic comparison.

Second, if one aggregation rule is processing one preference profile and the other aggregation rule is processing a different preference profile, and if the resulting policy choices differ, we should not necessarily conclude that the different choices which result are due to the different aggregation rules; after all, the different choices might stem as much or more from the differences in the preference profiles. Hence, we argue that alternative complex aggregation rules can unequivocally be said to 'matter' only if the two institutional systems would still produce different choices *even when controlling for the impact of different preference profiles*.

4. To What Extent Can a Preference Profile Be Held Constant Across Two Systems?

The problem with 'controlling for the impact of different preference profiles' is that it is not entirely clear what this means conceptually (much less how to do it operationally, as in a multivariate statistical analysis). The clearest meaning can be developed for entire political systems. That is, if we had full and complete models of two different political systems, we could assume a common set of voters with a particular distribution of policy preferences, feed the policy preferences of this common set of voters through the two systems' aggregation rules, and then compare the resulting sets of policy equilibria from the two different systems. This would be the ideal way of holding constant the preference profile – in this case involving the

voters' policy preferences – when comparing the policy equilibria from the two different systems.

Unfortunately, there exist few or no formal models of any political system's entire policy-making process, beginning with the voters and ending with some policy choice. The reason is that numerous variables are involved and the relationships among all these variables, involving complex strategic interactions among the actors, are not adequately understood for most political systems of interest. At a minimum, a full and complete model of a political system would have to include such variables as (a) the electoral rules used for electing candidates to each of the offices in the system, (b) the geographical distribution of voters with particular policy preferences, both nationally and (where relevant) in each electoral district, (c) the formation of political parties both nationally and (where relevant) in each electoral district, (d) the decisions by each party about which candidates to run both nationally and (where relevant) in each electoral district, (e) the distribution of policy preferences and party affiliations of the officeholders – that is, of the legislators and any chief executive – produced by the elections, (f) the agreement by some of these elected officeholders (where relevant) to form a coalition government and (g) the interactions among the officeholders in the government which generate a final policy choice or set of policy equilibria.[3]

Due to this complexity, we will simplify our analysis in significant ways. Most importantly, we will not attempt to incorporate the voters or the electoral systems in our models. Instead, we will focus just on the elected *officeholders* who engage in policy-making. To illustrate consider two countries, #1 and #2. Each country is assumed to have a different set of officeholders (i.e. the individual politicians who hold the offices in its policy-making institutions); and each country is assumed to have a different set of aggregation rules by which these officeholders collectively make policy choices. The set of preferences of the officeholders in a country constitute the officeholders' preference profile, and the officeholders in #1 are assumed to have preferences which differ from those of the officeholders in #2. We are interested in how the interaction between a country's aggregation rules and some preference profile affects the country's policy choices.

To illustrate, consider Table 1: the rows represent the aggregation rules in each country and the columns represent their respective preference profiles. Assume we would expect to observe empirically that policy *a* will be produced in country #1 and that policy *d* will be produced in country #2.

3. For efforts to incorporate a substantial number of these factors in formal models see Kalandrakis (1999, 2000), Austen-Smith and Banks (1988), Alesina and Rosenthal (1996), Besley and Coate (1997) and Baron and Diermeier (2001).

Table 1. The Interaction of Aggregation Rules and Preference Profiles Across Systems

	Preference Profile for the Officeholders in Country #1	Preference Profile for the Officeholders in Country #2
Aggregation Rules for Country #1	Policy *a*	Policy *b*
Aggregation Rules for Country #2	Policy *c*	Policy *d*

Intuitively we would expect these two policies to be different, especially for larger differences in the countries' aggregation rules and larger differences in their officeholders' preference profiles.

The policy choices in the off-diagonal cells – policies *b* and *c* – represent counterfactuals involving what would happen if the two countries swapped officeholders. The two countries' aggregation rules would 'matter' if the policy actually chosen differs from the counterfactual predicted policy, *given that the same officeholder preference profile is processed by each set of aggregation rules*. That is, if policy *c* is different from policy *a*, and if policy *d* is different from policy *b*, then the different aggregation rules of #1 and #2 have an effect on the policy choice, controlling for the preference profile. If the same comparisons yield no differences (i.e. if policy *c* is the same as policy *a* and policy *d* is the same as policy *b*), then the differences between these two aggregation rules can be said not to matter.

We can likewise say that the preference profiles 'matter' if the policy actually chosen via one set of aggregation rules differs from the counterfactual predicted policy, *given that the same set of aggregation rules processes a different preference profile*. If the same comparisons yield no differences (i.e. if policy *b* is the same as policy *a* and policy *d* is the same as policy *c*), then the differences between these two preference profiles can be said not to matter.

In addition, all four policy choices could be different. In that case, both the aggregation rules and the preference profiles can be said to matter in understanding why these countries' policy choices are what they are.

In sum, these are the kinds of comparisons that must be made to determine whether any two institutional systems, and their associated preference profiles, actually matter. However, there are two further problems that make these comparisons less straightforward than neo-institutionalists appear to recognize.

One problem is that different institutional systems usually have different numbers of officeholders. Hence, it would not be clear what to do, for example, when transferring the officeholders' preference profile from one institutional system to another system with a smaller number of officeholders. To avoid this problem, we develop abstract institutional systems which hold constant the number of offices and thus officeholders.[4]

The second problem is more complex and does not appear easily resolvable. The officeholders have so far been assumed to be undifferentiated. However, the preference profile we are trying to hold constant across systems actually has two essential features, not one. The first feature involves the set of most-preferred policies (the 'ideal points') of the officeholders. In our models, we can take this set of most-preferred policies from the officeholders in one system and have it processed by the aggregation rules of the second system. In this sense, the first feature of the preference profile can be held constant in a plausible manner across the two systems. But before the preference profile from the first system can be processed by the second system's rules, each of the ideal points associated with the first system's officeholders must be assigned to a particular office in the second system. This *assignment process* is the second essential feature of the preference profile being transferred. Unfortunately, there does not seem to be any single 'most appropriate' method for conducting this cross-system assignment process. The reason is that if two institutional systems are different, they will not have the same offices; and the officeholders in the first system can be assigned to the offices in the second system in many different ways, all of which are equally legitimate for use in comparing the two systems. This logic suggests to us that there is no meaningful sense in which these cross-system assignments can be 'held constant'. It thus appears that we can never hold both features of a preference profile constant across two different institutional systems.

This observation is critical because our models demonstrate (see Section 6) that the different cross-system assignments that are possible can greatly affect the policy equilibria generated by a country's aggregation rules. In particular, some cross-system assignments will lead to similar policy equilibria in the two systems, while other cross-system assignments will lead to dissimilar policy equilibria, even when holding constant the set of ideal points across the two systems. It is this fact that leads us to our conclusion that institutions *just by themselves* do not necessarily 'matter': for each pair of institutional systems, there are some cross-system officeholder assignments for which changing the aggregation rules (even while holding constant the set of most-preferred policies) does change the policy equilibria and other cross-system officeholder assignments (even while holding constant the set of

4. How this problem should be handled in an empirical analysis is less clear.

most-preferred policies) for which changing the aggregation rules *does not* appreciably change the policy equilibria.

We emphasize that having to make these cross-system officeholder-to-office assignments is not unique to our level of analysis. In particular, a cross-system analysis based on full and complete models of political systems involving voters and electoral rules (as described earlier), would confront a very similar problem. Consider two electoral systems, one lacking any electoral districts (as in a nationwide proportional-representation system) and the other based entirely on electoral districts (as in a Westminster-style parliamentary system). To conduct a comparative institutional analysis, controlling for the voters' preference profile, the voters from the system lacking electoral districts would have to be assigned to electoral districts in the other system. But many different assignments of the voters from the first system to districts in the second system would be possible here, and the different assignments can be expected to lead to different outcomes. (That different voter-to-district assignments can have great political importance is directly implied by the American politics literature on gerrymandering.) Thus, this cross-system assignment problem – whether of officeholders to offices (as in our models) or of voters to districts (as in the most general models) – appears to be a *generic* one for comparative institutional analysis.

Overall, then, in our effort to determine whether any two institutional systems produce similar or different policies, we will be able to hold constant one feature of the preference profile (the set of ideal points for the officeholders in one system) but the other feature of the preference profile (the cross-system officeholder-to-office assignments) will be allowed to vary.

5. Formal Models of Policy Choice in Political Institutions

We now construct our spatial models of policy-making in five different institutional systems. We first develop four models of parliamentary systems: a party-free unicameral system, a majority-party unicameral system, a party-coalition unicameral system and a majority-party bicameral system. We then develop a model of a party-free presidential system, with a president and two legislative chambers. For each of these five systems, we deduce the set of equilibrium policies, given some set of officeholder preferences. In particular, we identify the set of policies known as the core: it contains the policies that no coalition of individual officeholders could replace with some alternative policy. If a policy is in the core, it is in political equilibrium and cannot be upset.[5]

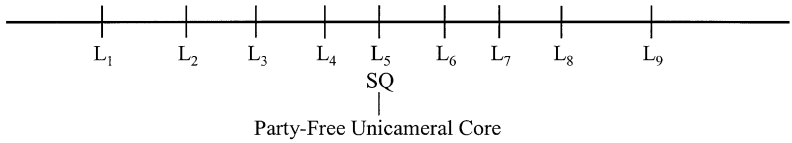
5. For a useful introduction to the logic of cores in spatial voting models see Schofield et al. (1988).

The technology of our approach is entirely standard. We assume each individual officeholder – e.g. an MP, a president, a representative, a senator – has a most-preferred position (ideal point) on a unidimensional issue space. This most-preferred position maximizes his utility. The farther some policy is from the officeholder's ideal point (either to the left or to the right), the less utility it provides. Each individual officeholder thus tries to get his political system to adopt a policy as close as possible to his ideal point. For simplicity, we also assume each officeholder's utility function is symmetrical around his ideal point. Hence, a policy lying some distance to the left of the officeholder's ideal point will yield the same utility to the officeholder as a policy lying the same distance to the right of the officeholder's ideal point. We assume there exists some status quo policy, SQ, in this unidimensional issue space. Then for each officeholder we can define a 'preferred-to' set which is the set of points that the officeholder prefers to SQ. In one dimension, this preferred-to set consists of the line from the officeholder's ideal point to SQ plus the equal-length line in the other direction from the officeholder's ideal point identifying the point that for the officeholder is equivalent in value to SQ.

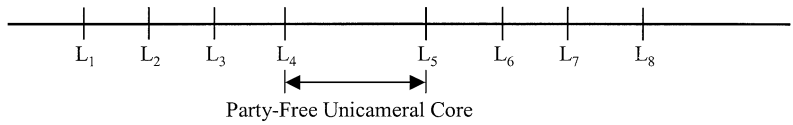
5.1 A Party-Free Unicameral Parliament

Assume that some nine-member unicameral parliament (with each member labeled L_1 through L_9 and arrayed in order from left to right) chooses policies via simple majority rule; see Figure 1a. Since there is an odd number of legislators, the policy at the median legislator's ideal point – L_5 – will be the only equilibrium choice: if SQ is anywhere to the right of L_5, L_1 through L_5 could agree to move policy leftward to L_5, and they would have the votes to do this; if SQ is anywhere to the left of L_5, L_5 through L_9 could agree to move policy rightward to L_5, and they would have the votes to do this. If SQ is exactly at L_5, L_1 through L_4 would want to move SQ to the left, while L_6 through L_9 would want to move SQ to the right but no attempt to move it will be able to gain the support of a majority – five – of the members. Thus, with a unidimensional issue space and an odd number of officeholders, the ideal point of the median legislator is the sole equilibrium policy in what we will call the *party-free unicameral core*: there exists no other policy which can defeat, via simple majority rule, a policy in this core.

When there is an even number of legislators, there is not a unique median legislator; instead, there are two median legislators, and all that can be said about the ultimate policy choice (in the absence of any further assumptions) is that it will lie in the region between (and including) the ideal points of the two median legislators. In Figure 1b, there are eight legislators, L_1 through L_8, and legislators L_4 and L_5 are the two median legislators. If SQ is to the



a. Policy choice in a unicameral parliament with no parties: odd number of legislators



b. Policy choice in a unicameral parliament with no parties: even number of legislators

Figure 1. A Party-Free Unicameral System with Odd and Even Numbers of Legislators

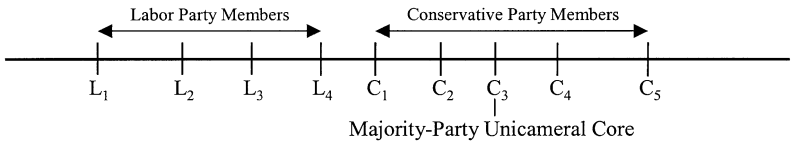
right of L_5, then the bare majority of L_1 through L_5 would want to move the policy leftward to some point on the L_4-to-L_5 line and they have the votes to do so. Similarly, if SQ is to the left of L_4, then L_4 through L_8 would want to move the policy rightward to some point on the L_4-to-L_5 line, and they have the votes to do so. However, any SQ on the L_4-to-L_5 line (including L_4 and L_5) cannot be upset. Hence, the set of policies on the L_4-to-L_5 line are the equilibrium policies in this party-free unicameral core.

We can summarize these arguments as follows:

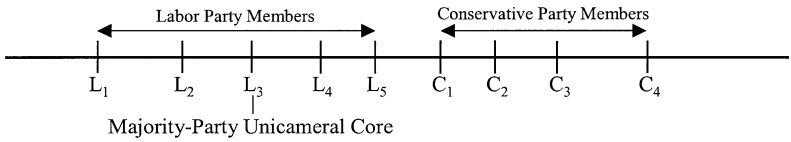
PROPOSITION 1: In a party-free unicameral legislature, the *party-free unicameral core* is located at the ideal point of the median legislator (given an odd number of legislators) or consists of the line connecting the ideal points of the two median legislators (given an even number of legislators).

5.2 A Majority-Party Unicameral Parliament

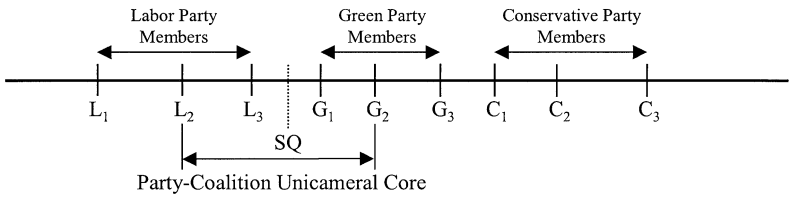
Assume now that there are nine legislators partitioned into two parties, the Labor and Conservative Parties. For this party-based system we assume each party chooses its official policy position through majority rule, that the majority party controls the legislative agenda (hence, the minority party cannot propose a motion), and that each party has sufficient discipline (via incentives which are exogenous to our model) to ensure that all party members vote for the official party position. In Figure 2a, the Labor Party could have four members, L_1 through L_4 and the Conservative Party could have five members, C_1 through C_5. As the majority, the Conservative



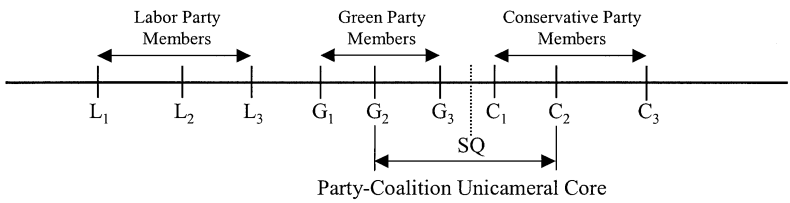
a. A two-party unicameral parliament in which the Conservatives have a majority



b. A two-party unicameral parliament in which Labor has a majority



c. A three-party unicameral parliament with a "Left" governing coalition



d. A three-party unicameral parliament with a "Right" governing coalition

Figure 2. A Unicameral Parliament with Majority-Party and Party-Coalition Systems

Party will choose a policy lying at the Party median, C_3. Hence, the ideal point of C_3 becomes the location of the *majority-party unicameral core*.[6]

If Conservative Party member C_1 is replaced in office by Labor Party member L_5, as in Figure 2b, then the Labor Party now has the parliamentary

6. While we do not explicitly incorporate any kind of prime minister in any of our parliamentary models, one could assume that in an election by the majority party members, the candidate whose ideal point is at the party median will become the prime minister (since any candidate with an ideal point not at the party median could be defeated by someone closer to or at the party median). This prime minister's ideal point will then become party policy, and since the party has a parliamentary majority, this policy at the prime minister's ideal point will become government policy as well.

majority and the ideal point of its median member, L_3, becomes the location of the majority-party unicameral core.

In general, then, we have the following:

PROPOSITION 2: In a two-party unicameral legislature, the *majority-party unicameral core* is located at the ideal point of the median member (or is the set of policies lying between, and including, the ideal points of the median members) of the majority party.[7]

5.3 A Party-Coalition Unicameral Parliament

Next consider what might happen if these nine legislators are partitioned into three parties – the Labor, Conservative and Green Parties – each of which has three members.[8] Assume also that legislators from the Green Party have ideal points lying between those of the Labor and Conservative parties. Institutionally, assume that a coalition government can be formed between any two contiguous parties (e.g. Labor and Green or Green and

7. It is interesting to note that alternative assumptions here could lead to a rather different – and substantially larger – majority-party unicameral core. For example, if the Conservative Party has only a bare majority, as in Figure 2A, if the party in opposition will always vote against a Government proposal, and if at least one member of the Conservative Party – such as C_1, the Party's least conservative member – would conceivably vote against his own Party's proposal (or abstain), then the set of stable policies would be considerably larger than just C_3 and would instead extend from C_3 to C_1; without C_1's vote, some Conservative Party proposals would be defeated. Alternatively, if the Party's most conservative member, C_5, considers abstaining, then the set of stable policies would extend from C_3 to C_5; without C_5's vote, some Conservative Party proposals will again be defeated. (We are thinking here of the threats of defection faced by Prime Minister Major in the UK in 1995 and 1996 on European Union issues; such threats probably deterred the Conservative Party leadership from submitting at least some proposals to a Parliamentary vote; if so, the status quo policy on these issues must have been in equilibrium even if it was not at the party median.) The majority-party unicameral core could thus range from a single point, assuming perfect party discipline, to a whole range of policies, assuming defections and/or abstentions by majority-party members are possible. In general, the size of the core in these Westminster systems seems very sensitive to the particular assumptions made about party discipline and the parties' policy-making practices and processes. The larger the core of a Westminster system, the more the system's behavior will approximate that of a separation-of-powers system, as discussed later.

8. We are aware of the arguments in the literature – see, e.g., Taagepera and Grofman (1985) – that systems with more than two parties almost always involve more than one issue dimension. Formal models involving two or more dimensions would be needed to address this potential objection to our analysis.

Conservative),[9] that the coalition parties jointly control the agenda and each coalition party has sufficient discipline to ensure its members vote for the coalition's joint policy choice. The policy chosen by any coalition must then lie between (and include) the ideal points of the median members of the two parties. Hence, we have:

> PROPOSITION 3: In a three-party unicameral legislature, the *party-coalition unicameral core* consists of the set of policies lying between, and including, the ideal points of the median members of the two parties in the governing coalition.

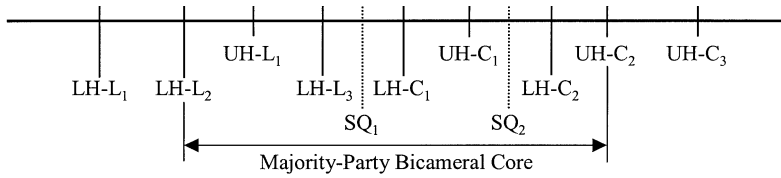
To illustrate, in Figure 2c any policy to the left of L_2 would be upset by some proposal lying in the party-coalition unicameral core; such a move would be favored by majorities of each party in the coalition. Similarly, any policy lying to the right of G_2 would likewise be upset by some proposal lying in the party-coalition unicameral core, a move which would again be favored by majorities of each party in the coalition. But no policy lying in this core could be upset. For instance, a policy at SQ in Figure 2c could not be upset by any policy to its left because all three Green Party members would vote against such a leftward move, and the policy at SQ could not be upset by any policy to its right because all three Labor Party members would vote against such a rightward move.

An alternative coalition would be for the Green Party to unite with the Conservative Party, as in Figure 2d. In this case, the party-coalition unicameral core would shift rightward, and would lie between the ideal points of G_2 and C_2. A policy at SQ in this Core could not be upset, for the same reasons as with the Labor–Green coalition.

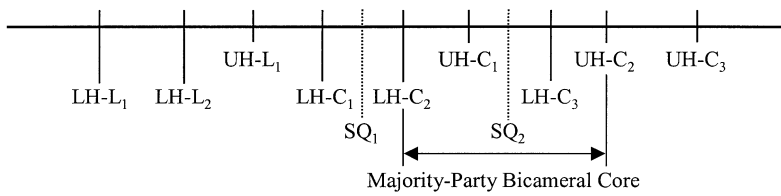
5.4 A Majority-Party Bicameral Parliament

Many parliamentary systems are bicameral, so we present a model of a majority-party bicameral system. Assume each chamber has the same two parties: Labor and Conservative. Assume each chamber works by the same kinds of institutional rules as the unicameral parliaments. Hence, the majority party in each chamber will attempt to get its median policy position adopted but a majority of each chamber must agree to any proposed change for it to be adopted. However, we do not assume that there is any

9. A coalition of extreme parties – excluding the centrist party – would produce a large core relative to a coalition between one of the extreme parties and the centrist party. But each extreme party would then have incentives to form a coalition with the centrist party rather than the other extreme party. Our assumption that the two parties in coalition are adjacent is thus in line with arguments in Axelrod (1970).



a. Divided party control of the upper and lower houses



b. Unified party control of the upper and lower houses

Figure 3. A Majority-Party Bicameral System with Divided and Unified Party Control

mechanism by which a party's official positions in the two chambers will be rendered identical; e.g. we do not assume that Labor's official position in the Upper House will be identical to its official position in the Lower House. Hence, we can state:

> PROPOSITION 4: In a two-party bicameral legislature, the *majority-party bicameral core* consists of the set of policies lying between, and including, the ideal points of the median member of the majority party in each chamber.[10]

In Figure 3a, we depict a bicameral parliament with nine members, four in the Upper House and five in the Lower House. We initially assume a divided parliamentary government, with the Conservative Party controlling the Upper House and the Labor Party controlling the Lower House: the Upper House has three Conservative MPs (UH-C_1 through UH-C_3) and one Labor MP (UH-L_1), and the Lower House has two Conservative MPs (LH-C_1 and LH-C_2) and three Labor MPs (LH-L_1 through LH-L_3).

In the Upper House the median of the majority party (the Conservatives) is UH-C_2; in the Lower House the median of the majority party (Labor) is LH-L_2. It follows that the majority-party bicameral core is the line connect-

10. If there were means by which a party's position could be made the same in *both* chambers, and if the same party controlled both chambers, then the majority-party bicameral core would be a single point at the majority party's official cross-chamber position.

ing (and including) the median members of the majority parties in each chamber; in this case, it is the line from LH-L_2 to UH-C_2. No status quo policy in this core from LH-L_2 to UH-C_2, such as SQ_1 or SQ_2 in Figure 3a, could be upset: a majority of the Conservative Party controlling the Upper House (UH-C_2 and UH-C_3) would like to move rightward from either status quo but a majority of the Labor Party controlling the Lower House (LH-L_1, LH-L_2 and LH-L_3) would like to move leftward from either status quo; thus, SQ_1 and SQ_2 are both in equilibrium.

In contrast, when the Upper and Lower Houses are both controlled by the same party the majority-party bicameral core can usually be expected to shrink due to unified control. For example, in Figure 3b we assume that the Conservative Party controls both houses: the party affiliation of LH-L_3 in Figure 3a is changed to Conservative, becoming LH-C_1, and we renumber the rest of the Conservatives in the Lower House. The majority-party bicameral core is now the line from LH-C_2 to UH-C_2. In this case of unified party control, an initial policy at SQ_1 which is in equilibrium in Figure 3a, could now be upset since a majority of the Conservative Party in each chamber would like to move rightward from it. However, an initial policy at SQ_2, which is in equilibrium in Figure 3a, would remain in equilibrium: the Conservative Party median in the Lower House (LH-C_2) is more liberal than the Conservative Party median in the Upper House (UH-C_2), and the two Party delegations would like to move in opposite directions from SQ_2.

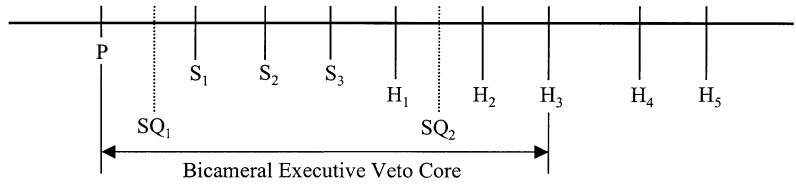
5.5 A Bicameral Executive Veto System

Our last model involves a presidential system, having a president with a veto and a bicameral legislature consisting of a House and Senate. We assume there are no disciplined parties.[11] In this system, the status quo policy can be upset whenever the president, House and Senate can all agree on some other policy; each officeholder has constitutional authority to block efforts by the other two to change policy.[12] Our goal is to determine the set of equilibrium policies in this system.[13]

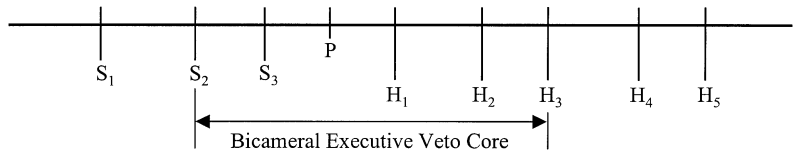
11. It would be straightforward to incorporate parties in the bicameral executive veto model, in the manner in which they were incorporated in our majority-party and party-coalition parliamentary models. We leave out this possibility because such a model would take additional space but would not add significantly to the general points we want to make.

12. We will ignore the role of the veto override here, though for details on how it could be incorporated in a spatial model, see Hammond and Miller (1987) and Hammond and Knott (1996).

13. Our model here is similar to several rational-choice models of multi-institutional policy-making that have been developed elsewhere; see, e.g., Hammond and Miller (1987), Hammond and Knott (1996), Ferejohn and Shipan (1989, 1990) and Krehbiel (1996, 1998).



a. A Bicameral Executive Veto Core from a president, three senators, and five representatives



b. A Bicameral Executive Veto Core with a different location for the president

Figure 4. A Bicameral Executive Veto System

Consider a bicameral executive-veto system with nine actors: a president, three senators and five representatives, as in Figure 4a. The president's ideal point is at P, S_2 is the median senator, and H_3 is the median House member; these are the critical ideal points in determining the location and size of the *bicameral executive veto core*. The core here extends from P to H_3. Consider a status quo policy at SQ_1. Although both chambers could pass a resolution moving policy rightward from SQ_1, the President would veto such a move. Similarly, consider a status quo policy at SQ_2, which lies between S_2 and H_3. A presidential proposal to move policy leftward from SQ_2 would be rejected by a House majority. Hence, SQ_1 and SQ_2 are both in equilibrium.

If P lies outside the set of points connecting the chamber medians, as in Figure 4a, the president will be one of the pivotal actors in defining the boundaries of the core here. But if P lies between the chamber medians, these chamber medians will be the two pivotal actors in defining the boundaries of the Core; see Figure 4b.

In general, then, we can state the following:

PROPOSITION 5: In a party-free bicameral executive-veto system, the *bicameral executive veto core* consists of the set of policies lying between, and including, the ideal points of the median individuals in the two 'outside' institutions.

5.6 Simplifying the Depictions of the Parliamentary and Presidential Cores

Note that for all five of our models, depiction of their respective cores can be

simplified. To identify the set of equilibrium policies in any system, only the ideal points of the pivotal members need be shown, and Propositions 1 through 5 define who these pivotal members are.

Note also that determining the sizes of the five cores can be simplified in the same manner. When there is just one pivotal member (as can happen with the majority-party unicameral core), the core will always be just a single point. But when there are two or more pivotal actors (or potentially pivotal actors), the size of the core is simply the length of the line connecting the two 'outside' pivotal actors. If these two 'outside' pivotal actors are close together, the core will be small; if these two 'outside' pivotal actors are far apart, the core will be large.

This completes the presentation of our models of parliamentary and presidential institutions. We can now use these models to explore the complexities of the argument that 'institutions matter'.

6. 'Static' Comparisons of Parliamentary and Presidential Systems

We make two kinds of comparisons among our parliamentary and presidential models. In this section, we compare the nature of the policy equilibria produced in each of the models, given fixed and unchanging individual preferences (though the officeholder-to-office assignments do vary); we call these our 'static' comparisons of the equilibria. In the section which follows (Section 7), we will compare what happens to these policy equilibria, and the resulting policy choices, as preference profiles change; we call these our 'dynamic' comparisons of the equilibria.

For our static comparisons, our goal is to determine whether the equilibria – the cores – for each pair of systems will *necessarily* overlap. If the equilibria necessarily overlap, this means that the two systems have the potential to produce similar or even identical policies. If the equilibria do not necessarily overlap, this means that the two systems have the potential to produce different policies.

We have three different reasons for focusing on whether two systems' cores necessarily *overlap* rather than on whether the two system's policy choices are the same. First, since the particular policy chosen by a system will simply be a point on a continuous line, for most pairs of institutional systems the likelihood that the two systems would select precisely the same point is essentially zero (even when holding the preference profile constant). By this particular measure, institutional rule systems would always matter since they would

always produce dissimilar policies. For our purposes here this measure is too fine-grained.[14]

Second, what *particular* equilibrium policy a system has chosen will sometimes depend in part on a prior series of exogenous events which are largely irrelevant to what we are interested in here. In particular, what the current policy is will be, in part, a function of what the *previous* status quo policy happened to be. For the static comparisons, we would not want our conclusions to be contaminated by previous history.[15]

Third, and most importantly, whether two systems have overlapping cores is vital because each system's core contains all the possible policies that could be in equilibrium in the system. Hence, if it can be proved that two systems produce necessarily overlapping cores, then the two systems could potentially produce the same policy in equilibrium. And if it could be proved that the two systems have cores that could not possibly overlap, then the two systems cannot produce the same policy in equilibrium. In either case, the result suggests that it is the institutional rules that are paramount. But if it turns out that there is *no* necessary relationship between the cores of the two systems, and so any overlap between the two cores is primarily a function of the preference profile (and assignment rules) being considered, then institutions *just by themselves* do not necessarily matter.

For these reasons, then, we will focus our efforts on determining whether any two systems produce cores that necessarily overlap, while holding the preference profile constant. Proving that for a particular pair of systems there exists no necessary relationship between their cores merely requires demonstrating that (1) under some preference profile the cores of the two systems overlap; and that (2) under some other preference profile the cores of the two systems do not overlap. If both components cannot be demonstrated, then some necessary relationship (presumably based on the rules of the systems) would exist.

The first part of the proof (that for some preference profiles the cores of the two systems can overlap) can be easily demonstrated for any pair of systems: if all officeholders share the same ideal point, then the only equilibrium policy is also at their common ideal point. This holds regardless of the rules processing this preference profile: simple majority rule and unanimity,

14. One solution to this problem is to develop an interval measure of 'how close' the two system's policies are to each other. These 'closeness' measures are especially easy to develop in computer-simulation work, and we have already used them in other work in this project (see Butler and Hammond, 1997). Given our approach here, though, it is not clear how to develop a useful and meaningful 'closeness' measure.

15. The role of history will be examined in Section 8.

at the extremes, would produce the same (and thus overlapping) cores.[16] The second part of the proof (that for some preference profile the cores of two systems do not overlap) is more difficult to satisfy and must be demonstrated on a case-by-case basis. There are 10 possible pairs of our five systems, and in our Appendix we demonstrate (see Figures A1 through A8) the possibility of non-overlapping cores for nine of the 10 pairs of our five institutional systems.

For the tenth pair, however, a necessary relationship can be demonstrated:

PROPOSITION 6: The party-free unicameral core is necessarily a subset of, and thus necessarily overlaps, the bicameral executive veto core.

The reason the bicameral executive veto core always includes the party-free unicameral core stems from the following logic. To simplify presentation of our argument, we assume an odd number of members in the institutional system as a whole, though the basic logic holds when there is an even number of members as well.

Given an odd number of members overall, recall that the party-free unicameral core (labeled the 'PFU core') is the median member of the institutional system. And recall that for the PFU system, there is (by definition) no policy outside the PFU core that can gain majority support against a policy inside the PFU Core.

Next we convert one member of the overall institutional system into the president. This leaves an even number of legislators to be apportioned among the House and Senate, and we further assume (also for simplicity) that this results in an odd number of members for both the House and Senate.

Now assume (contrary to the Proposition) that the PFU Core is not in the bicameral executive veto core (the 'BEV core' here). In particular, assume that the PFU core lies to the right of the BEV core; see Figure 5 for an illustration. Since the PFU core is assumed to lie to the right of the BEV core, this means that there exists some policy inside the BEV core which the median member of the House, the median member of the Senate and the president all prefer to the policy in the PFU core. For example, see the preferred-to sets of the median representative, the president and the median senator: these preferred-to sets all overlap in the portion of W_S(PFU core) which lies inside the BEV core.

This means in turn that *to the left* of the PFU core lies at least a bare majority of the House (the median House member plus all members to his left), at least a bare majority of the Senate (the median Senate member plus all members to his left), plus the president. Note that these members sum to

16. In the original version of this paper – see Hammond and Butler (1996) – we demonstrated via a series of examples that overlapping cores could be produced for all possible pairs of systems even when the members do not all have the same ideal points. That is, unanimity is not required for cores from different systems to overlap.

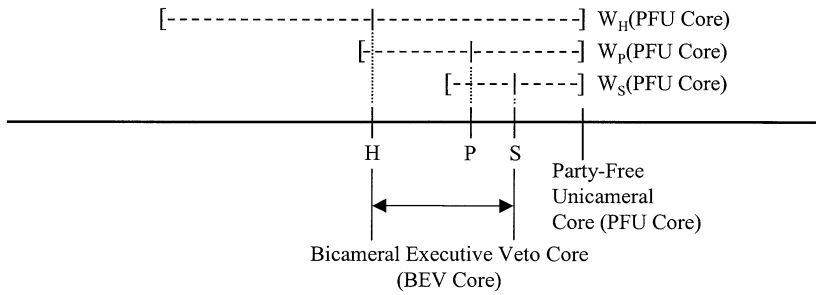


Figure 5. Comparing the Party-Free Unicameral Core and the Bicameral Executive Veto Core: Illustration for Proof-By-Contradiction of Proposition 12

more than a bare majority of the overall institutional system. But this reveals a contradiction: we have just concluded that more than a bare majority of the overall number of members lies to the left of the PFU core but the key characteristic of the PFU core is that it is the overall median, which means that the members to the left of this overall median *do not comprise a bare majority* (given an odd number of members overall); thus, the overall median cannot lie to the right of the BEV core. (Nor, by an identical argument, can the overall median lie to the left of the BEV core.) Hence, the PFU core – the overall median – must lie *inside* the BEV core, which is what Proposition 6 asserts.

6.1 Discussion

We make two summary observations about our results in this section. First, and most importantly, *there are almost no necessary relationships among the cores of the five different systems*. Only for the PFU core and the BEV core is there a logically necessary relationship: the PFU core must always overlap (in this case, must always be a subset of) the BEV core, *no matter what preference profile is used or what officeholder-to-office assignments are made*. But for all other pairs of systems, the systems' cores will overlap given some preference profiles (and assignments) and will not overlap given other preference profiles (and assignments). In other words, what is driving the relationships between the cores of these pairs of systems is *not* just the logic of the systems' aggregation rules. Instead, what is driving the relationships between the cores of these systems is the nature of the officeholders' preferences and the officeholder-to-office assignments. *Hence, any generalizations about whether the policies selected by one institutional system will systematically differ from the policies selected by another system will depend on what officeholder preferences and what officeholder-to-office assignments are considered*. This finding about the central importance of the preference profile and assignments for almost all pairs of systems thus provides critical support for our argument

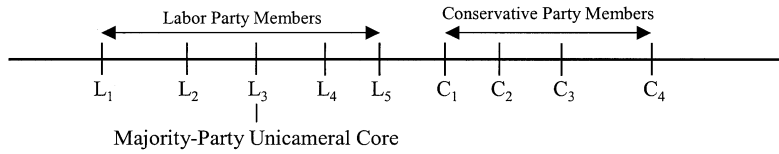
that the neo-institutional research enterprise must consider more than just the aggregation rules.[17]

Second, an interesting and quite unexpected result emerges from our 10 paired comparisons. As noted in our discussion of Table 1 in Section 4, one possible meaning of the assertion that 'institutions matter' is that, holding constant some preference profile, a change from one set of aggregation rules to another will lead to a change in policy. Note this assertion specifies nothing about what the initial and final systems are. This means that nothing is specified about the *direction* of institutional change. But it turns out that the direction of change – what the initial system is and what the final system is – can greatly affect our conclusion as to whether 'institutions matter'.

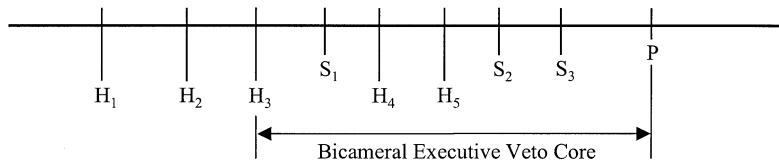
Consider those cases in which the core of one system can be a point (as with the party-free and majority-party cores) and especially in those cases in which this point is a subset of the core of another system that is a line (as with the party-coalition, majority-party bicameral and the BEV cores). For example, in Figure 6a, since the majority-party unicameral core at L_3 is a subset of the BEV core in Figure 6b, a change from the BEV system to the majority-party system will usually lead to a change in policy. The reason is that almost none of the policies in the BEV core (in Figure 6b) coincide with the majority-party unicameral core (in Figure 6a); only the policy at H_3 in Figure 6b coincides with the majority-party unicameral core of L_3 in Figure 6a. In *all* other cases, a shift from the BEV system to the majority-party system will lead to a change in policy. For example, *every* SQ lying to the right of H_3 in Figure 6b will be upset by a change to the majority-party unicameral system; that is, every possible SQ to the right of L_3 in Figure 6a would be upset by some proposal to replace it with a policy at L_3. Only a policy initially at H_3 in the BEV core, which is the same as L_3 in the majority-party unicameral core, would be invulnerable to upset by this change from the BEV system to the majority-party system.

However, a change in the other direction – from the majority-party unicameral system to the bicameral executive veto system – will not lead to any change in policy at all. The reason is simply that the equilibrium policy in the majority-party unicameral system (L_3 in Figure 6a) is also one of the equilibrium policies in the BEV system (the H_3P line in Figure 6b); hence, there is no coalition in the second system which would upset the equilibrium policy adopted by the first.

17. This general line of argument also suggests that the full and complete models of political systems, involving the voters and the electoral rules, would be subject to the same relationships: any generalizations about whether the policies selected by one institutional system will systematically differ from the policies selected by another system will depend on what voter preferences and what voter-to-electoral-district assignments are considered.



a. A Majority-Party Unicameral Core



b. A Bicameral Executive Veto Core

Figure 6. Comparing the Majority-Party Unicameral Core and the Bicameral Executive Veto Core

In other words, there can exist a rather unusual asymmetry involving the *direction* of change in institutional rule systems: it almost always matters if we change from a BEV system to a majority-party system but it does not matter at all if we change from a majority-party system to a BEV system. We generalize this interesting and unexpected finding as follows:

PROPOSITION 7: When the core of one institutional system is a subset of the core of another institutional system for a given preference profile, the direction of institutional change matters: a change from the system with the subset core to the system with the superset core would cause no policy change; a change from the system with the superset core to the system with the subset core can cause a policy change. (The smaller the subset core is relative to the superset core, the more likely a change from the superset-core system to the subset-core system will cause a change in policy.)

To our knowledge comparative neo-institutionalists have never previously noted that the *direction* of institutional change can matter in this kind of fashion.

7. 'Dynamic' Comparisons of Parliamentary and Presidential Systems

In the previous section we compared sets of equilibrium policies to see if particular pairs of systems produced similar or different sets of equilibrium

policies. These comparisons across systems were *static*, in the sense that they involved ideal points which did not change over time. In this section we allow the officeholders' policy preferences to change, in order to determine whether the patterns of policy change differ systematically across these same five institutional systems. Thus, the comparisons we make in this section are *dynamic* in nature.

When we say that preferences are allowed to change, this will be taken to mean that the ideal points of some or all of the individual actors change location, perhaps due to changes in the officeholders' beliefs about what is good policy, a change in their constituents' desires or the replacement of some officeholders by other officeholders via an election. For our purposes, the specific causes of change in the officeholders' ideal points is irrelevant; what matters here is simply that their ideal points do change location.

Our analysis in this section will rest on the assumption that each system begins in equilibrium; that is, the initial status quo policy, SQ, is assumed to lie in the system's core. A status quo policy for any system will then be upset *only* if the changes in ideal points change the location of the core to such an extent that SQ is left outside the core and so becomes vulnerable to upset under the system's rules.

7.1 Intersecting Win-sets and Policy Change

To conduct our analysis, we must first describe what policy is chosen to replace a status quo policy that is no longer in equilibrium. Our previous analysis demonstrated what the core would be for each institutional system, given a particular preference profile. However, the core *by itself* does not tell us what particular policy will be chosen unless the core contains only a single policy. We now show how the location of SQ in relation to the core gives us a better idea of what policies might be chosen in equilibrium. Our discussion here will focus on the BEV system but an extension to the other four systems should be obvious and straightforward.

The set of points which any possible majority of the members of the House (or Senate) prefer to a point such as SQ is the *win-set* of that point. This is the collective version of the preferred-to set. Thus, the set of points which any possible House majority prefers to SQ is $W_H(SQ)$; the set of points which any possible Senate majority prefers to SQ is $W_S(SQ)$; and the set of points which the president prefers to SQ is $W_P(SQ)$. Note that the president's 'win-set' of SQ is identical to her preferred-to set of SQ. For our unidimensional models, it is important to realize that $W_H(SQ)$ and $W_S(SQ)$ can each be determined simply by drawing the preferred-to sets of the median members of their respective institutions.

When some SQ lies inside the BEV Core, there will be no segment of the issue dimension which the $W_H(SQ)$, $W_S(SQ)$ and $W_P(SQ)$ win-sets will

all overlap; technically, this means that their *set intersection* – that is, $W_H(SQ) \cap W_S(SQ) \cap W_P(SQ)$ – will be empty. In this case, SQ could not be upset. In Figure 4a, SQ_1 and SQ_2 are examples: both of these possible status quo policies are in equilibrium.

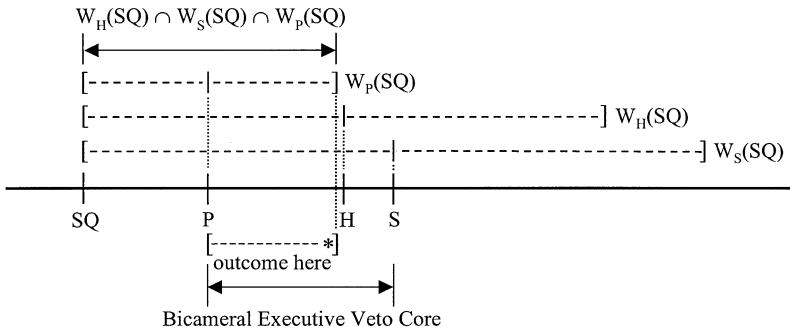
In contrast, when SQ falls outside the BEV core, it is vulnerable to upset by a coalition of the House, Senate and president. The set of points which all three institutional actors prefer to SQ is the set intersection of their respective win-sets of SQ. In Figure 7a, $W_H(SQ) \cap W_S(SQ) \cap W_P(SQ)$ is the set intersection of their win-sets. This set intersection is the set of policies which (1) each pivotal actor prefers over SQ and which (2) all three pivotal actors mutually prefer to SQ. Any new policy must fall inside this set intersection, which is their area of mutual agreement. Furthermore, when SQ lies outside the BEV core, only part of their area of mutual agreement will overlap this core; this means that policies in the part of the set intersection which lies outside this core will remain vulnerable. Hence, we would expect the final outcome to lie only in the part of the set intersection that also overlaps the core. Technically, we are suggesting that the outcome would lie inside $\{W_H(SQ) \cap W_S(SQ) \cap W_P(SQ)\} \cap$ Core; this region is indicated by the bracketed line [——] labeled 'outcome here' in Figure 7a.

In general, the institutional actor whose ideal point is closest to SQ will most constrain the set of policies which are better than SQ for all three actors. For example, in Figure 7a the president's ideal point is closest to SQ, hence it is her win-set, $W_P(SQ)$, which most constrains any policy change. We can thus simplify this particular case by noting that the final policy choice would lie inside $W_P(SQ) \cap$ Core which, as already noted, is the 'outcome here' region. The other pivotal actors would agree that any such policy is preferred over SQ but could not convince the president to accept a new SQ that is closer to their own ideal points.

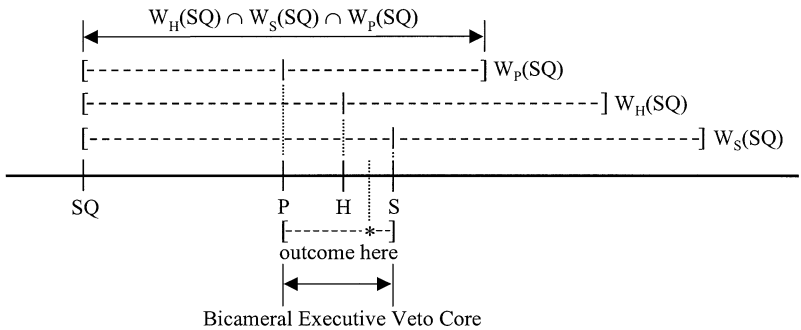
In sum, our general argument is that if SQ is in the core, then SQ is in equilibrium (and will be the predicted policy); but if SQ is not in the core, the predicted policy will fall in the region defined by the intersection of the core and the win-set of the actor in the core (either the president or the median member of one chamber) whose ideal point is closest to SQ.

When SQ is sufficiently distant from the BEV core, the entire core may lie inside $W_H(SQ) \cap W_S(SQ) \cap W_P(SQ)$, as shown Figure 7b. In this case, all our model can say is that the ultimate outcome will lie somewhere in this core.[18] (A more specific theory of House–Senate–President bargaining

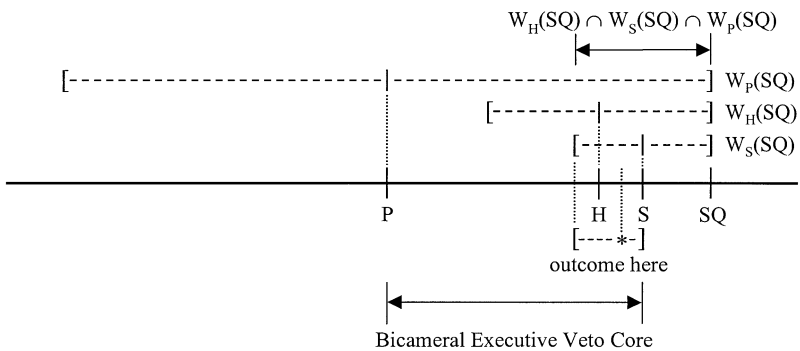
18. Thus our model is limited in that it specifies only a *region* – such as $W_P(SQ) \cap$ Core in Figure 7a – in which the outcome will be located. Our model will rarely predict that some *particular* point in the core will be adopted, hence there will always be room for exogenous factors to play a role in determining the final choice.



a. The set of policies which are better than SQ for the president, House, and Senate



b. Any policy in this Bicameral Executive Veto Core could be selected



c. How the House and Senate might set the president's agenda

Figure 7. What Proposals Can Replace a Vulnerable Status Quo?

would be needed to narrow down the prediction of what policy they would collectively choose.)

For our illustrations in this section we will also need to designate some *particular* outcome that the three actors select from the set of possible outcomes in the 'outcome-here' region. One convenient approach is to rely on the constitutional fact that the House and Senate have the joint authority to act as agenda-setter for the president. So when SQ lies outside the BEV core, we will further assume that the House and Senate will select a policy in the core which the President would approve (i.e. it must be better than SQ for the president) but which is also as close as possible to a point which is halfway between the House and Senate ideal points. This represents a kind of 'split-the-difference' strategy for the House and Senate.

For example, in Figure 7c, the agenda-control assumption is that the House and Senate medians will agree on a bill halfway between their ideal points. The location of this compromise bill in the diagram is indicated by the asterisk inside the 'outcome here' region: this compromise bill at * lies inside both $W_H(SQ)$ and $W_S(SQ)$, and since the bill also lies inside the president's win-set, $W_P(SQ)$, the president would sign it into law. The asterisks in Figures 7a and 7b indicate what point would be chosen in these diagrams.

7.2 Patterns of Policy Change for an Institutional System with a Point-Core

We can now present an analysis of policy change in our institutional systems. We begin by noting that in a unidimensional setting, any system's core will be either a *point* (as is the case with the party-free and majority-party unicameral systems, with an odd number of members in the chamber or majority party respectively) or a *line* (as is usually the case with the party-coalition, majority-party bicameral and BEV systems). Our analysis involves what happens to the status quo as preferences change in a 'point-core' system in comparison to a system producing a 'line-core'.

The modes of behavior of any system producing a point-core are easy to describe. On the one hand, since a point-core is located at the ideal point of the overall median member (for the PFU system) or is located at the ideal point of the majority-party median member (for the majority-party unicameral system), if this median member's ideal point changes location, the status quo policy will be rendered vulnerable to upset, hence the MPs will vote to move SQ from this previous location to the location of the new core. On the other hand, if the ideal point of the median MP stays the same from one time period to the next, then the core will also stay the same; this means that SQ's location will stay the same because SQ will remain invulnerable. In general, then, the status quo policy will closely 'track' the location of

a point-core: if the median MP moves, so will SQ, and if the median MP does not move, neither will SQ.

Even though the status quo policy closely 'tracks' changes in a point-core, it does not follow that what happens to the status quo policy is necessarily predictable because the location of the median member, and so the core's location, could change in many different and unpredictable ways from period to period: the location could stay the same, it could oscillate back and forth, it could move slowly but steadily in one direction, it could move in one direction in just one or two big jumps, and so forth. Our observation is simply that, when the core is just a point, the location of the status quo policy will closely track the core's location whenever and however the core's location changes.

7.3 Patterns of Policy Change for an Institutional System with a Line-Core

In contrast, for an institutional system which produces a line-core, the location of the status quo policy will not necessarily exhibit the kind of tracking behavior expected from a system which produces a point-core. To be sure, for a line-core scarcely larger than a point-core, SQ will still track the location of the core rather closely; there will be little difference from the behavior of a point-core system. But the bigger the line-core is, the greater the possible difference between the changes in the location of the core and any changes in the location of SQ. What is interesting is the fact that while there are conditions in which the tracking behavior of a large line-core will be very similar to that of a point-core, there are also conditions in which the line-core will exhibit little or no tracking behavior at all.

For a line-core we need to describe only a handful of basic modes of policy change; many other more complex patterns of policy change could be constructed out of the basic elements we describe here. For each of our examples, we will compare what happens with a point-core (we use the majority-party unicameral core) to what happens with a line-core (we use the BEV core) when individual preferences change from period to period. For simplicity, it may be easiest to think of an entire profile – that is, an entire set of office-holder ideal points – as moving in some direction, though all that actually matters is that the core is moving in that direction. We will label the patterns in terms of what happens to policy in the BEV system.

PATTERN 1: No change in the policy of a line-core system, despite repeated movements in the preference profile.

First consider a case in which the preference profile moves rightward from period 1 to period 2 to period 3; see Figure 8. When the majority-party unicameral system produces a point-core, the status quo policy will follow the

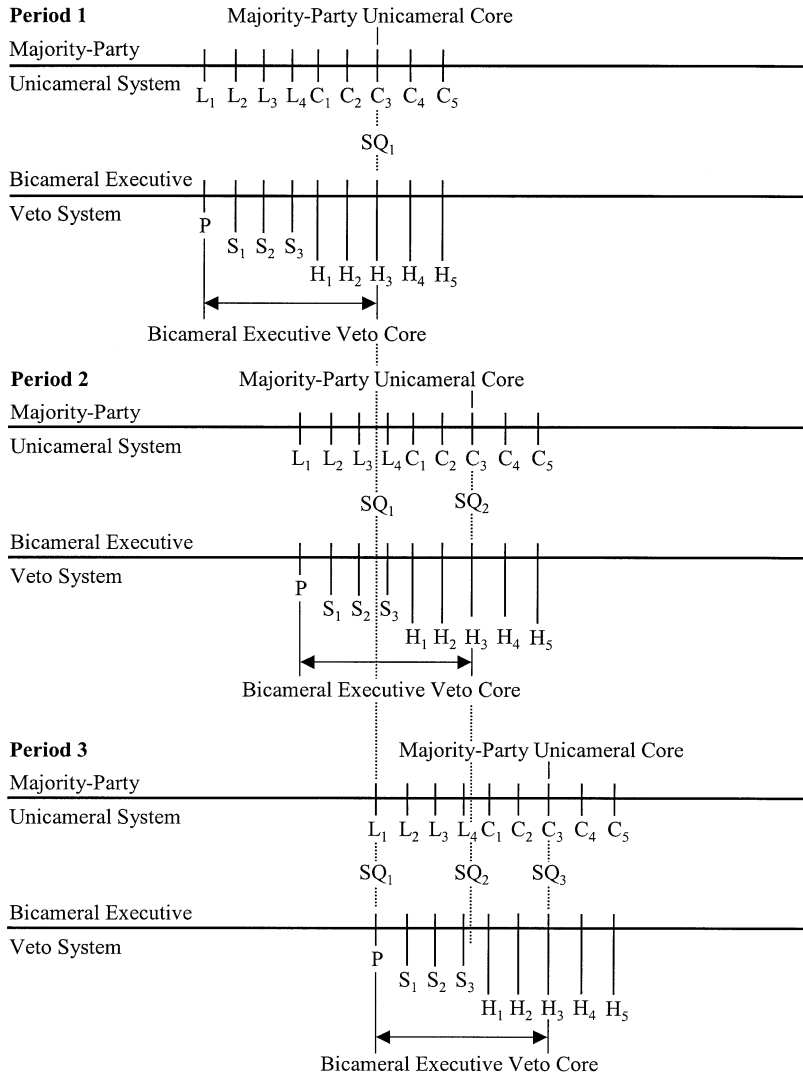


Figure 8. Policy Stability in a Line-Core System Despite a Changing Preference Profile

majority-party unicameral core rightward. For example, when the Conservative Party median at C_3 moves rightward from period 1 to 2, the initial status quo in period 1, SQ_1, becomes vulnerable to upset and is replaced in period 2 by a new policy, SQ_2, at the new location of the Party median, C_3. And when the Conservative Party median at C_3 moves farther rightward from period 2

to 3, SQ_2 becomes vulnerable to upset and is replaced by a new policy, SQ_3, at the location of the new Party median. In this way, policy choice closely tracks the changes in the location of the point-core.

In contrast, consider the BEV system in Figure 8. Since the period 1 status quo, SQ_1, is starting out at the right-hand edge of the BEV core, and since this core is moving rightward, we can say that SQ_1 is starting out at the 'leading' edge of the core. But while this core moves rightward from period 1 to 2, SQ_1 remains inside the core in period 2 *and so it cannot be upset*. Similarly, when this core moves rightward from period 2 to period 3, it again happens that SQ_1 remains inside the core *and so it still cannot be upset*.

The result is that by the end of the period 3, policy in the majority-party unicameral system has moved rightward all the way to the location of SQ_3 but policy in the BEV system remains at SQ_1. Only if the preference profile continues to move rightward (e.g. in some period 4, which is not shown) would the initial status quo policy, SQ_1, which is now at the 'trailing' edge of the BEV core, finally become vulnerable to upset. Thus, up through period 3, the systems producing a point-core and a line-core exhibit rather different modes of policy change: with a point-core, policy moves steadily rightward, while with a line-core, policy does not change at all.

PATTERN 2: Policy changes steadily in the line-core system, due to repeated movements in the preference profile.

Next consider a case in which the starting conditions are essentially the same as before but now the preference profile moves leftward instead of rightward from period 1 to 2 to 3; see Figure 9. As the profile moves leftward from period 1 to 2 to 3, the status quo policy in the majority-party unicameral system, located at the majority-party unicameral core, will move steadily leftward as well, from SQ_1 to SQ_{2MPUS} to SQ_{3MPUS}; the 'MPUS' in the subscripts refers to the 'Majority-Party Unicameral System'. (The behavior of policy in the MPU system here is essentially the same as in Figure 8 except that the movement is in the opposite direction.)

For the BEV system in Figure 9, however, because the profile is now moving leftward, we see that the initial status quo policy at SQ_1 starts out at the 'trailing' edge of the BEV core rather than at its 'leading' edge, as in Figure 8. As a result, when the core moves leftward from period 1 to 2, SQ_1 is immediately left outside the core and so becomes vulnerable to upset. In period 2, SQ_1 would thus be replaced by SQ_{2BEVS} inside the core; and this particular SQ_{2BEVS} represents the split-the-difference bill which the House and Senate would send to the president (who would sign it since it is better for her than SQ_1). As the core moves leftward again in period 3, SQ_{2BEVS} would be replaced by SQ_{3BEVS} in turn. In this case, then, the BEV system behaves in a manner which is rather similar to the MPUS: while the

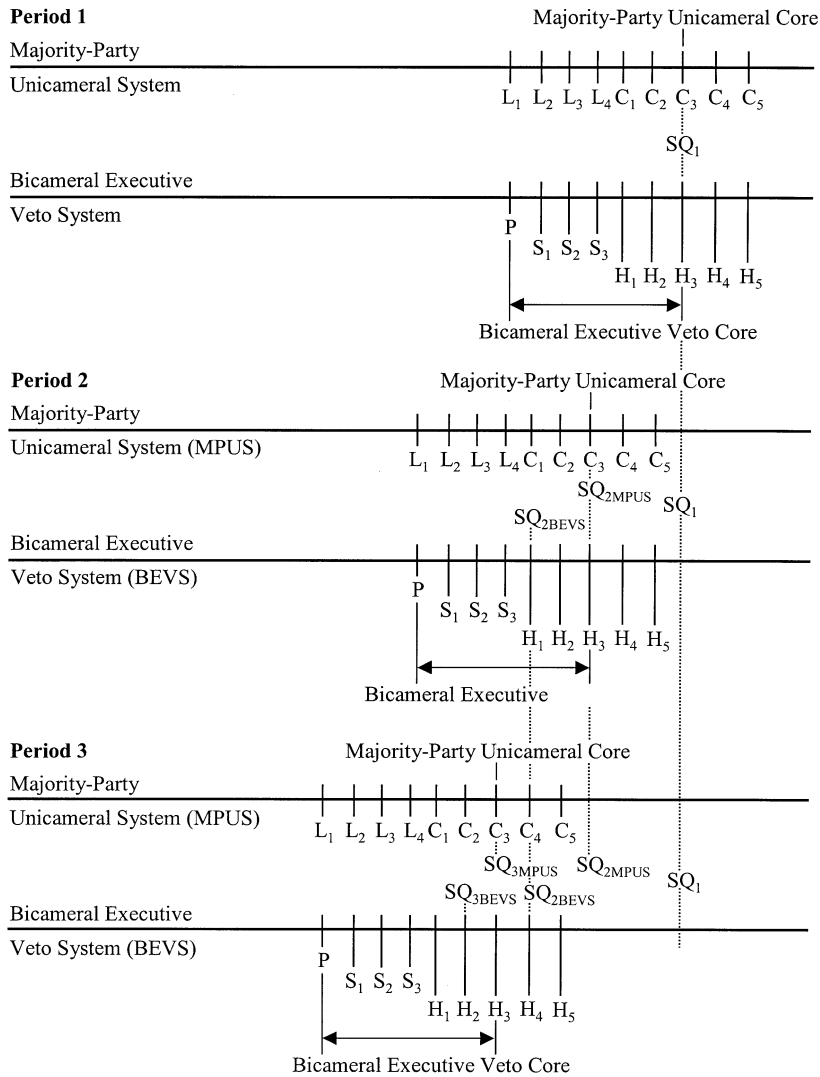


Figure 9. Policy Changes in a Line-Core System, Given a Changing Preference Profile

final policies are not necessarily identical (compare SQ_{2MPUS} with SQ_{2BEVS}, and SQ_{3MPUS} with SQ_{3BEVS}), policy is moving steadily leftward for each system as the preference profile moves steadily leftward.

These first two cases thus yield the following:

PROPOSITION 8: The pattern of policy change in a system with a line-core depends on where in the line-core the initial status quo is located, given

some direction of change in the preference profile. If the status quo begins at the 'leading' edge of a large line-core, then it can take several periods for the status quo policy to be upset. In contrast, if the initial status quo policy begins at the 'trailing' edge of a large line-core, then this status quo policy may become vulnerable to upset at the first change in the line-core's location.

PROPOSITION 9: When the status quo policy begins at the 'leading' edge of a line-core, the smaller the change in the line-core each period, the greater the number of periods before policy will begin to change (holding constant the size of the line-core).

PROPOSITION 10: When the status quo policy begins at the 'leading' edge of a line-core, the larger the line-core, the greater the number of periods before policy will begin to change (holding constant how much the line-core changes from period to period).

The second case here thus suggests that the conventional wisdom about policy change in presidential systems is not entirely correct. The conventional wisdom about policy change in a presidential system is illustrated by the first case, in which a changing profile over several periods has no impact on policy choice. But the stability of policy for the BEV system in the first case depends not only on the fact that there are several veto points (i.e. the House, Senate and president) creating the large line-core *but also on the fact that the status quo policy starts out at the leading edge of the BEV core*. If the initial status quo policy were instead at the trailing edge of this core, as in the second case, then policy change could easily occur in an incremental, step-by-step fashion (as with the majority-party unicameral system). Thus, the conventional wisdom about policy change in presidential systems is seriously incomplete.

PATTERN 3: Policy oscillates back and forth in the line-core system as the preference profile oscillates back and forth.

Consider a case in which the preference profile oscillates back and forth from period 1 to 2 to 3; see Figure 10. With the majority-party system, this oscillation in the profile will move the location of the majority-party core back and forth, which means in turn that the status quo policy will oscillate back and forth, moving rightward from SQ_1 in period 1 to SQ_{2MPUS} in period 2, and then back leftward to SQ_{3MPUS} in period 3.

A similar pattern can appear with the BEV system. The status quo policy starts out at SQ_1 in period 1. In period 2 the preference profile shifts rightward so far that SQ_1 is outside the new BEV core, hence it can be replaced

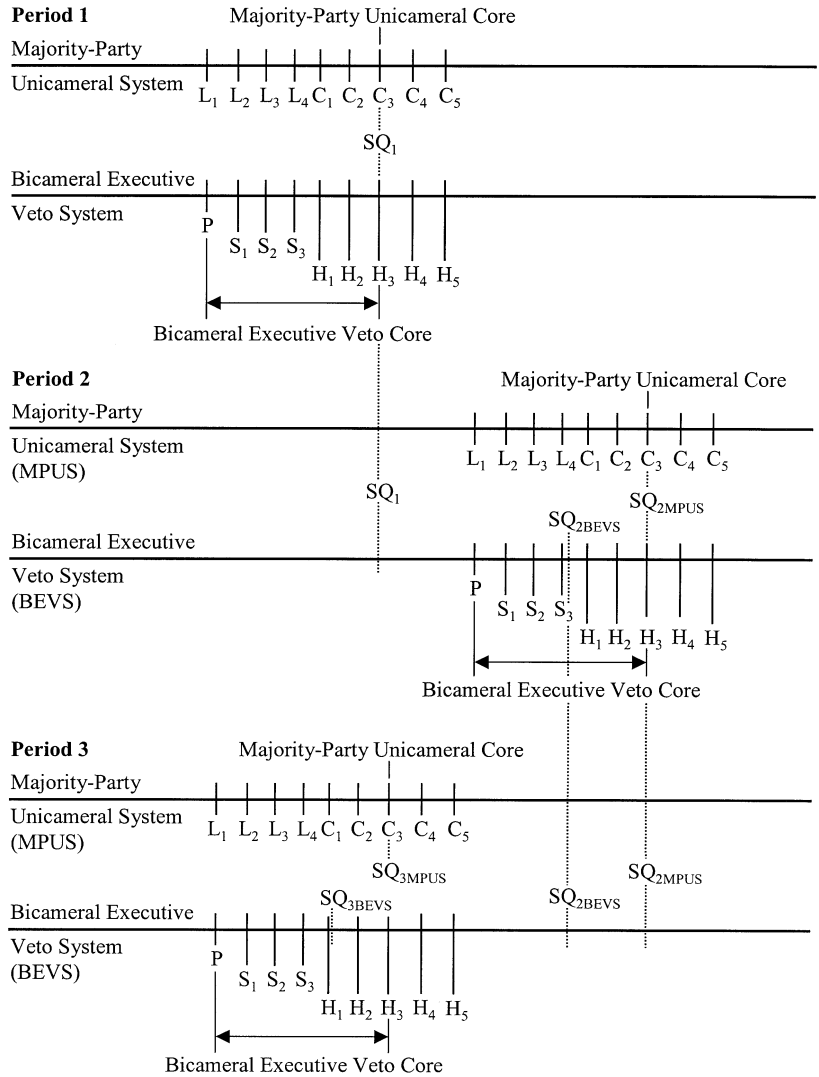


Figure 10. Policy Oscillates as the Preference Profile Oscillates

by a new policy such as SQ_{2BEVS}. (The president's preferred-to set of SQ_1 is the limiting factor for how far to the right policy can be moved here.) In period 3, the core returns to its location in period 1, moving back leftward so far that SQ_{2BEVS} is outside the core and thus vulnerable to upset; hence, it is replaced by a new policy such as SQ_{3BEVS}.

However, if the preference profile had shifted back and forth by a smaller amount, or if the BEV core were larger than assumed in the illustration, then SQ_1 might have remained inside the BEV core in each time period. Hence, policy would not have been changed, despite the oscillations of the core.

In general, then, we have:

PROPOSITION 11: When the line-core oscillates back and forth, the line-core will have to move back and forth by more than its width from one period to the next in order for the status quo policy to be upset in each period. If the line-core moves back and forth by less than the line-core's width, the system with the line-core might yield no policy changes at all from period to period. In contrast, policy in the system with a point-core will always oscillate back and forth as the point-core oscillates back and forth.

And it is also the case that:

PROPOSITION 12: The larger the line-core is, the larger will have to be the oscillations in the preference profile, and thus in the core, to allow policy changes; the smaller the line-core is, the smaller will have to be the oscillations in the preference profile, and thus in the core, to allow policy changes.

7.4 Summary

Whether a line-core system and a point-core system will exhibit different patterns of policy change depends on the interaction among several variables: how big the line-core is, what direction the line-core is moving, how much the line-core changes in each period and how close the initial status quo policy is to the line-core's leading or trailing edges. Under some combinations of these variables, these two systems can be expected to behave rather differently, just as the conventional wisdom would have us believe; however, under other combinations of these variables, they can behave rather similarly. Hence, we again conclude that considering institutional rules alone provides an inadequate guide to the behavior of any given system. Instead, the changes in the preference profile are a critical element of the story about the influence of institutions on policy change.

8. When Does 'History' Matter?

In the historical neo-institutionalist literature it is sometimes argued that 'history' has an impact on policy outcomes. That is, it is argued that the previous history of an issue affects the policy outcomes that are adopted by

current institutions. An alternative language that has been used (more often in the recent literature of economic history) is to argue that the 'path' of current policy change is dependent on the previous 'path' of policy changes; policy change is said to be 'path dependent' rather than 'path independent' (Liebowitz and Margolis, 1995; Pierson, 2000).

Let us assume that the term 'history' refers to the changes in policy which precede the periods of current interest, and which therefore account for the location of the current status quo. The question we ask is this: Do the many different policies that might have become the status quo affect the outcomes predicted by the current policy-making processes?

To address this question we will construct a multi-period example involving a BEV system (or any other system producing a line-core); see Figure 11. We assume that there is a relatively large BEV core, and we assume that 'history' could have generated either one of two distinct status quo policies, labeled SQ′ and SQ″, which are located near the opposite ends of the core in period 1. Now assume that the core moves steadily rightward from period to period due to changes in the preference profile. Note that in period 1, SQ′ is near the trailing edge of the core and that SQ″ is near the leading edge of the core. In period 2, SQ′ is outside the core, and we assume that it is replaced by a policy at * inside the core.[19] For convenience, we relabel this policy at * as the new SQ′. Note that SQ′ and SQ″ are still distinct, though they are now closer together. In period 3, the core has again moved to the right, leaving SQ′ outside the core, and so it is again replaced by a policy at * inside the core; this new policy at * is again relabeled SQ′. Note that SQ′ and SQ″ are still distinct, though they are now even closer together. In Period 4, the core has moved to the right yet again, leaving SQ′ outside the core, and it is again replaced by a policy at * inside the core; this new policy at * is again relabeled SQ′. Note that SQ′ and SQ″ are now identical, and for all time periods which follow, such as Period 5, SQ′ and SQ″ now travel together; that is, they have become the same policy *regardless of their previous history*.

In contrast, for any system producing a point-core (e.g. an MPU core, in which the majority party has an odd number of members), the small core would mean that SQ′ and SQ″ could not have remained distinct for this long; after the first period, any two different initial status quo policies would have been replaced by the same policy.

Hence, our general response to the question, 'When does ''history'' matter?', is the following:

19. Recall our earlier assumption, discussed at the beginning of Section 7, that the House and Senate will agree on a policy as close as possible to one which 'splits the difference' between what the House median and Senate median would most prefer but which the president would also approve.

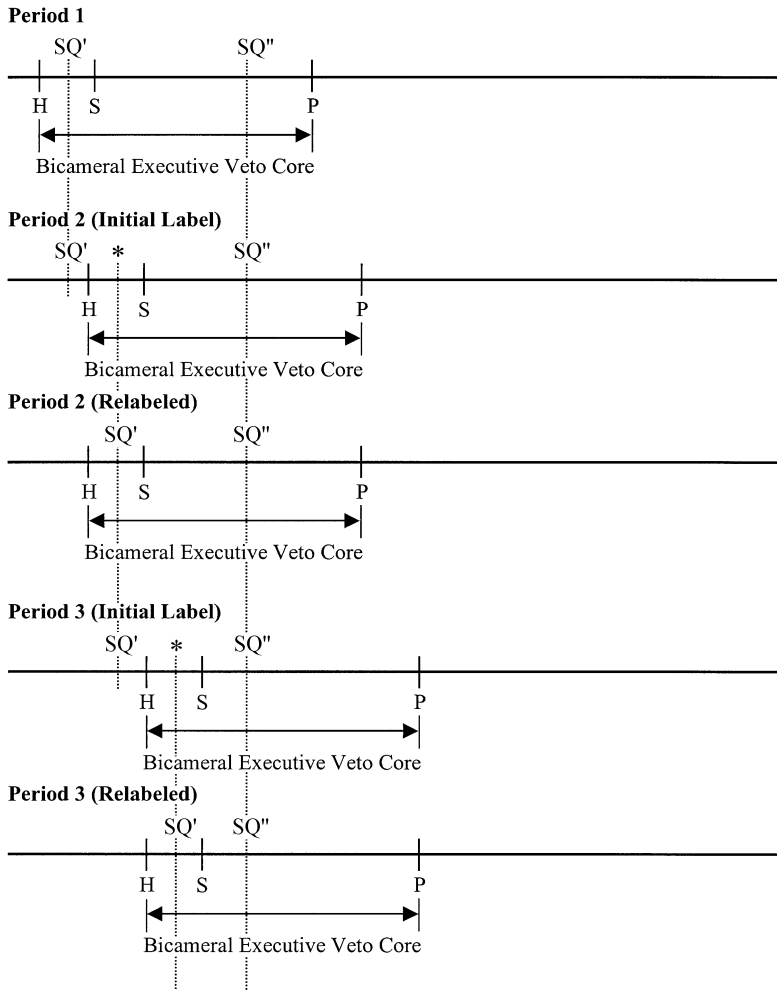
PROPOSITION 13: Whether 'history' matters depends on an interaction among the institutional rules, the preference profile of the individuals in the institutions, the resulting size of the core, any changes in the location of this core and the location of the initial status quo policy. In particular, the larger the core is, and the more it remains large over time, the more it is possible for 'history' to matter, in the sense that different possible locations for an initial status quo policy can be sustained over some period of time, despite changes in the preference profile. In contrast, the smaller the core is, the less 'history' matters: differences among the possible initial status quo policies will more quickly be eliminated.

Note that it is possible for a system which normally produces a large line-core to produce a small line-core on occasion, perhaps due to some electoral revolution momentarily placing all branches of government under the control of a unified and homogeneous party. This momentary shrinkage in the line-core's size can become a kind of evolutionary 'bottleneck', which thereafter reduces the variations in policy that would otherwise have been possible (due to the different initial status quo policies which earlier history might have produced). Except for the impact of the transitory bottleneck, history 'would have mattered' for the future policy choices of this line-care system.

9. Conclusions

Contrary to the general argument of the neo-institutional research enterprise as it has developed over the past two decades, *institutional rule systems do not necessarily matter*. In our 'static' comparisons, we observe that the core from one institutional system will overlap the core from another institutional system for some preference profiles (including the officeholder-to-office assignments) but not for other preference profiles (and officeholder-to-office assignments). And in our 'dynamic' comparisons, we observe that two different institutional systems may exhibit similar patterns of policy change for some preference profiles (and for some changes in these profiles) but different patterns of policy change for other preference profiles (and for other changes in these profiles). Our answer to the question – 'institutions matter?' – is thus an equivocal and contingent one. Institutional rule systems remain a critical part of the neo-institutional story, of course, but they are not the whole story. In general, it is the *interaction* of institutional rule systems, preference profiles and assignment rules that must be the focus of scholarly attention.

We acknowledge that our five models are far simpler representations of various kinds of institutional systems than specialists in these different kinds of systems might consider adequate. For our purposes, however, the



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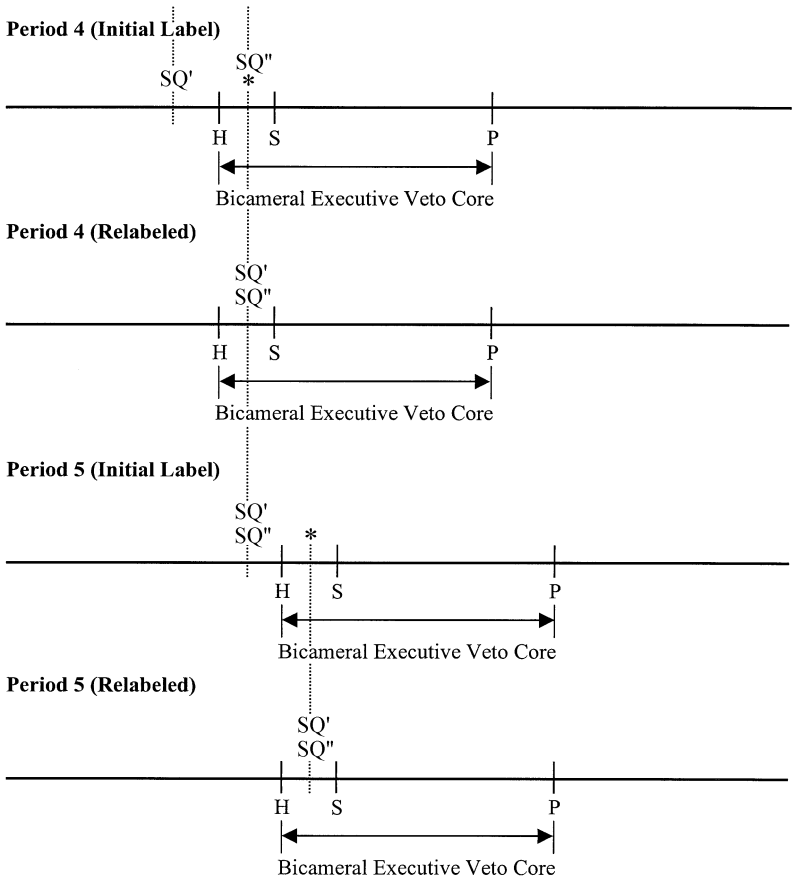


Figure 11. How the Interaction of Institutions and Preference Profiles Affects Whether History Matters

key issue is not whether our models are 'adequate' representations of various kinds of institutional systems; the key issue is whether more complete models would lead to conclusions substantially different from those reached here.

Of course, we would expect more complete models in a multi-dimensional setting to produce sets of equilibria differing in size, shape and location from the sets of equilibria derived here. And more complete models would likely have to use other theoretical techniques (such as non-cooperative game theory) entailing different kinds of equilibrium concepts. But whatever the particular details of the models, we feel reasonably confident that for any particular pair of institutions there exist some preference profiles (including

the cross-system officeholder-to-office assignment practices) for which the institutions will produce overlapping sets of equilibria and other preference profiles (and assignment practices) for which the institutions will produce non-overlapping sets of equilibria. We also expect that our general observations about the basic importance of 'line-cores' versus 'point-cores', about the direction of change in the cores, and about the location of the status quo policy within any of these cores – whether it is at a 'leading' or a 'trailing' edge – would re-emerge in a multi-dimensional setting as well.

In an institutionally-oriented comparative politics, then, to demonstrate empirically that 'institutions matter' requires that we must somehow control for the impact of the different preference profiles which two different institutional systems may face; again recall our discussion of Table 1. If we were to compare two different institutional systems without taking the preference profiles into account, it might happen that the two systems would produce different outcomes simply because they are facing different preference profiles. If we do not control for the differences in preference profiles, we might attribute the differences in outcomes solely to the differences in the institutional rules, when in fact the differences in outcomes might be due as much to the differences in the preference profiles. Or it might happen that the two systems will produce similar outcomes simply due to some features of the preference profiles they are facing. Again, if we do not control for the particular features of the preference profiles, we might attribute the similarities in outcomes solely to some similarities in the institutional rules (despite the fact that the institutional rules are not identical), when in fact the similarities in outcomes might be due as much to the particular features of the preference profiles. In either case, we may get biased empirical results regarding the impact of institutional rules because the impact of preference profiles was not taken into account.

Unfortunately, it is one thing to urge that in some empirical investigation we should 'control for the impact of the different preference profiles which two different institutional systems might face', and it is another thing entirely to know how to control for the impact of these profiles in a rigorous and theoretically meaningful sense. This is a problem for which we currently see no obvious solution.

One possible extension of our current line of research involves an analysis of the characteristics of the preference profiles, including the officeholder-to-office assignment rules, for which the sets of equilibria from any pair of systems will and will not overlap. Many of the propositions in this current paper are very general but very weak, in the sense that they assert only that a variety of different things can happen in principle, as aggregation rules change and as officeholder-to-office assignments change. But it is important theoretically to know the characteristics of the preference profiles

(and assignment rules) for which each of the different things that *can* happen will *necessarily* happen.

But even these kinds of results, if ultimately derived, could not tell us how 'likely', in some sense, the various kinds of preference profiles will be, either in some theoretical sense or in real-world settings. What we would then need to know may be: for any pair of institutional systems, what proportion of all possible (or empirically plausible) preference profiles and assignment rules will lead to substantial overlap of their sets of equilibria, and what proportion of these preference profiles and assignment rules will lead to little or no overlap of their sets of equilibria? This kind of question can be addressed through computer simulation techniques. This could yield at least some general sense of how likely it is that any two systems will choose similar policies and exhibit similar modes of policy change (see, e.g., Butler and Hammond, 1997, for an initial effort along these lines). For example, it might be instructive to know, for any pair of institutional systems, whether 'almost all' preference profiles and assignment rules lead to disjoint sets of equilibria (and thus that for 'only a few' preference profiles would the equilibria overlap).

In our view, theoretical advances like these are critical to the comparative neo-institutionalist research enterprise. Until substantial progress is made on this kind of research agenda, we are inclined to believe that empirical results from cross-national tests of neo-institutional theories are not to be trusted because it is not yet known how to include the necessary controls on the preference profiles and assignment rules.

APPENDIX

In this section we demonstrate that the cores from nine pairs of systems do not necessarily overlap. Each of the following examples shows non-overlap even though the sets of ideal points being 'processed' by each system in a pair are identical.

1. Examples of Non-Overlap between a Party-Free Unicameral Core and a Majority-Party Unicameral Core

Figure A1 shows an example of non-overlap when each system has an odd number of officeholders. The party-free unicameral core is located at the overall median (which is C_1 here), while the majority-party unicameral core is located at the median of the majority party (which is C_3 in the Conservative Party here).[20]

20. It is interesting to note that in the majority-party unicameral system, if the majority party expands so much that it contains *all* the members of the legislature, the majority-party unicameral core would become identical to (and thus would necessarily overlap) the party-free unicameral core.

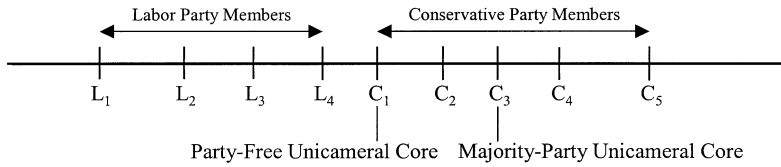


Figure A1. Non-Overlap between the Party-Free and Majority-Party Unicameral Cores

2. Example of Non-Overlap between a Party-Free Unicameral Core and a Party-Coalition Unicameral Core

Figure A2 shows an example of non-overlap between the party-free unicameral core and the party-coalition unicameral core, given an even number of officeholders. The party-free unicameral core is the G_5-to-G_6 line (these are the two overall median members). With the party-coalition unicameral system, there is just one Labor Party member, L_1, and Green Party member G_4 is one of the two median members of that party; hence, the party-coalition unicameral core is the L_1-to-G_4 line. Note that these two lines do not overlap.

3. Example of Non-Overlap between a Party-Free Unicameral Core and a Majority-Party Bicameral Core

Figure A3a shows an example of non-overlap between the party-free unicameral core and the majority-party bicameral core. For the party-free unicameral system, there are 10 officeholders, and so the party-free unicameral core is the line connecting the two median members, who are the members labeled LH-C_1 and LH-C_2. For the majority-party bicameral system, there is one member of the Upper House, UH-C_1, and nine members of the Lower House; of these nine members in the Lower House, four are members of the Labor Party (LH-L_1 through LH-L_4) and five are members of the Conservative Party (LH-C_1 through LH-C_5). Hence, the majority-party bicameral core connects the median member of the majority party in the

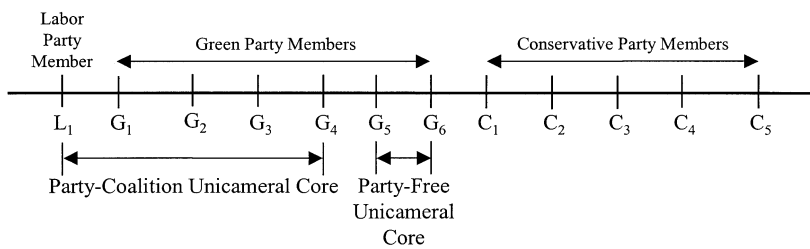
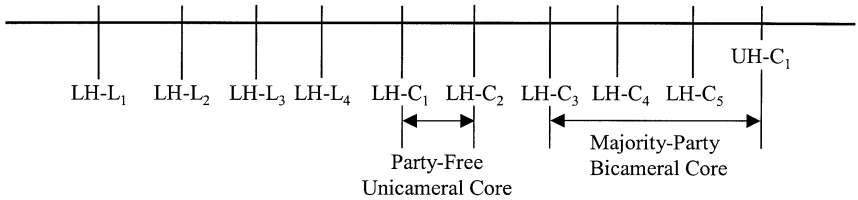
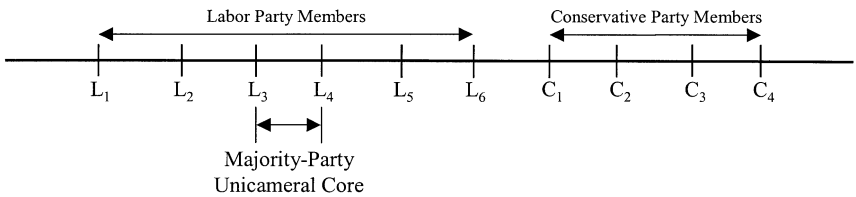


Figure A2. Non-Overlap between the Party-Free and Party-Coalition Unicameral Cores



a. Non-overlap between the Party-Free Unicameral Core and the Majority-Party Bicameral Core



b. Non-overlap between the Majority-Party Unicameral Core and the Majority-Party Bicameral Core

Figure A3. Comparing the Party-Free Unicameral Core, the Majority-Party Bicameral Core, and the Majority-Party Unicameral Core

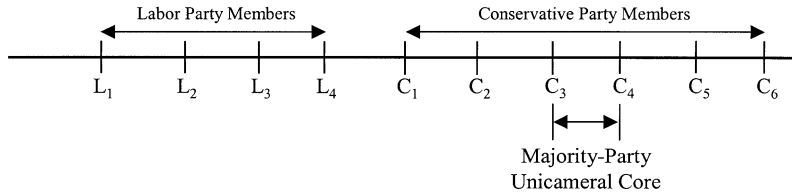
Upper House (this is UH-C_1) with the median member of the majority party in the Lower House (this is LH-C_3); hence, the majority-party bicameral core here is the line segment from LH-C_3 to UH-C_1. Note that these two lines do not overlap.

4. Example of Non-Overlap between a Majority-Party Unicameral Core and a Majority-Party Bicameral Core

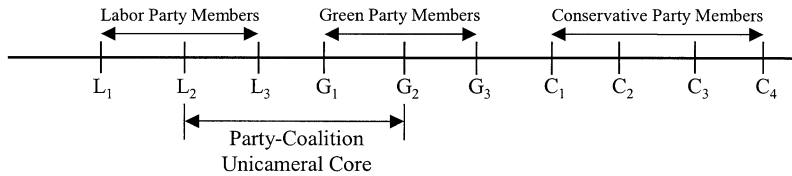
Figure A3a shows a majority-party unicameral system with 10 officeholders. There is a Labor Party and a Conservative Party, and the Labor Party has six members, and so has the majority. Hence, the majority-party unicameral core is the line connecting the two median members of this majority party; it is the L_3-to-L_4 line. Note that this majority-party unicameral core in Figure A3b does not overlap the majority-party unicameral core in Figure A3a.

5. Example of Non-Overlap between a Majority-Party Unicameral Core and a Party-Coalition Unicameral Core

Figure A4a shows a majority-party unicameral system with 10 officeholders. There is a Labor Party and a Conservative Party, and the Conservative Party has six members and so has the majority. Hence, the majority-party unicameral core is the line connecting the two median members of this majority party; it is the C_3-to-C_4 line. Figure A4b shows a party-coalition unicameral system with 10 officeholders and



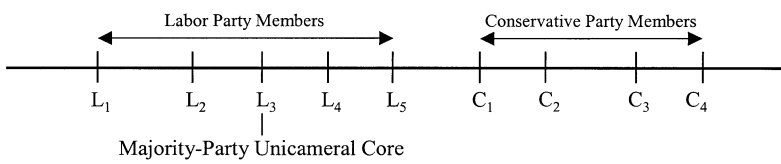
a. A Majority-Party Unicameral Core



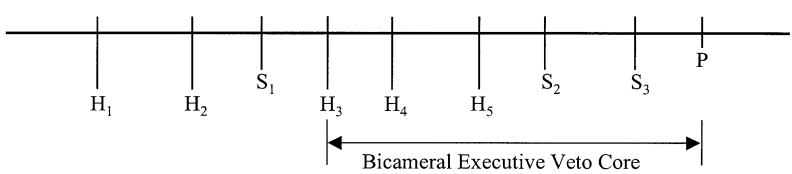
b. A Party-Coalition Unicameral Core

Figure A4. Non-Overlap between a Majority-Party Unicameral Core and a Party-Coalition Unicameral Core

three parties – the Labor, Green and Conservative Parties. There is a six-member coalition between the Labor and Green Parties here, so the party-coalition unicameral core is the line connecting the median members of the two parties in the coalition; since L_2 is the median Labor Party member and G_2 is the median Green Party member, the core is the L_2-to-G_2 line. Note that these two cores – the C_3-to-C_4 line and the L_2-to-G_2 line – do not overlap.



a. A Majority-Party Unicameral Core



b. A Bicameral Executive Veto Core

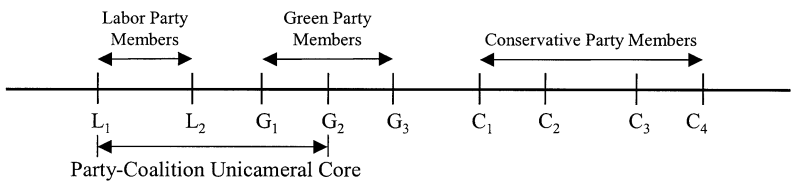
Figure A5. Non-Overlap between a Majority-Party Unicameral Core and a Bicameral Executive Veto Core

6. Example of Non-Overlap between a Majority-Party Unicameral Core and a Bicameral Executive Veto Core

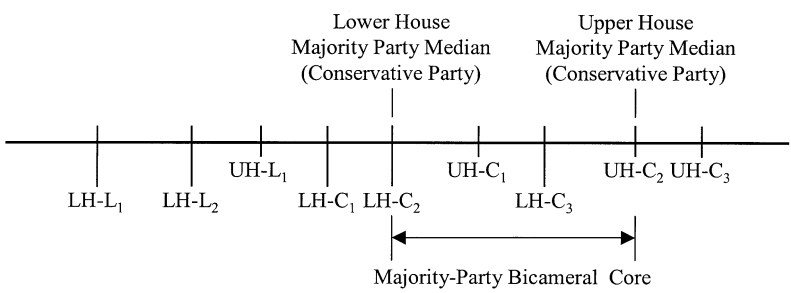
Figure A5a shows a majority-party unicameral system with nine officeholders and two parties – the Labor and Conservative Parties. The Labor Party has five members and so has the majority; its median member is L_3, and so the policy at L_3 is the majority-party unicameral core. Figure A5b shows a bicameral executive veto system with nine officeholders – a president (P), three Senate members (S_1 through S_3) and five House members (H_1 through H_5). The BEV core here is the line connecting the median House member, H_3, to the president at P, so it is the H_3-to-P line. Note that these two cores – L_3 in Figure A5a and the H_3-to-P line in Figure A5b – do not overlap.

7. Example of Non-Overlap between a Party-Coalition Unicameral Core and a Majority-Party Bicameral Core

Figure A6a shows a party-coalition unicameral system with nine officeholders and three parties – the Labor, Green and Conservative Parties. There is a five-member coalition between the Labor Party and the Green Party: the Labor Party has two members, L_1 and L_2, and the Green Party has three members, G_1 through G_3. So the party-coalition unicameral core is the line connecting the lefthand median member of the Labor Party, L_1, to the median member of the Green Party, G_2; it



a. A Party-Coalition Unicameral Core



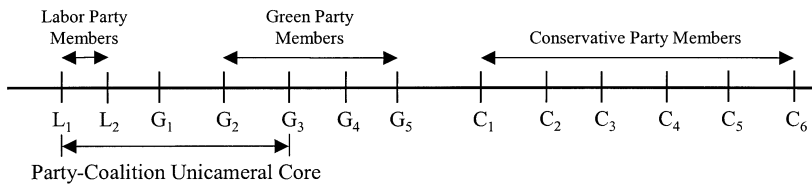
b. A Majority-Party Bicameral Core

Figure A6. Non-Overlap between a Party-Coalition Unicameral Core and a Majority-Party Bicameral Core

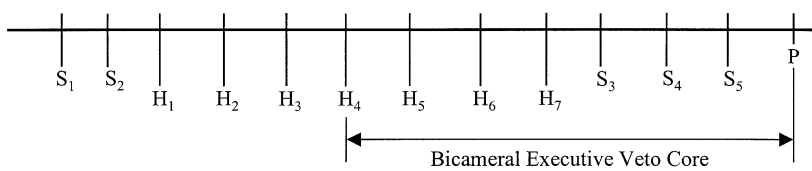
is the L_1-to-G_2 line. Figure A6b shows a majority-party bicameral system. There are four members of the Upper House who are located in the Labor and Conservative Parties: there is one Labor Party member, UH-L_1, and three Conservative Party members, UH-C_1 through UH-C_3; the median member of the majority party here is thus UH-C_2. There are five members of the Lower House; two are members of the Labor Party (LH-L_1 and LH-L_2) and three are members of the Conservative Party (LH-C_1 through LH-C_3); the median member of the majority party here is thus LH-C_2. The majority-party bicameral core connects the median member of the majority party in the Lower House (this is LH-C_2) with the median member of the majority party in the Upper House (this is UH-C_2); hence, the majority-party bicameral core here is the LH-C_2-to-UH-C_2 line. Note that these two lines – the L_1-to-G_2 line in Figure A6a and the line segment from LH-C_2 to UH-C_2 in Figure A6b – do not overlap.

8. Example of Non-Overlap between a Party-Coalition Unicameral Core and a Bicameral Executive Veto Core

Figure A7a shows a party-coalition unicameral system with 13 officeholders and three parties – the Labor, Green and Conservative Parties. There is a seven-member coalition between the Labor Party and the Green Party: the Labor Party has two members, L_1 and L_2, and the Green Party has five members, G_1 through G_5. So the party-coalition unicameral core is the line connecting the lefthand median member of the Labor Party, L_1, to the median member of the Green Party, G_3; it is the L_1-to-G_3 line. Figure A7b shows a BEV system with 13 officeholders – a president (P), five Senate members (S_1 through S_5) and seven House members (H_1 through H_7). The BEV core here is the line connecting the median House member,



a. A Party-Coalition Unicameral Core



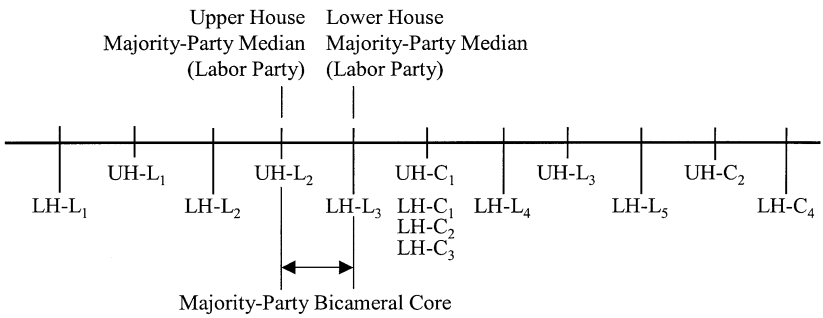
b. A Bicameral Executive Veto Core

Figure A7. Non-Overlap between a Party-Coalition Unicameral Core and a Bicameral Executive Veto Core

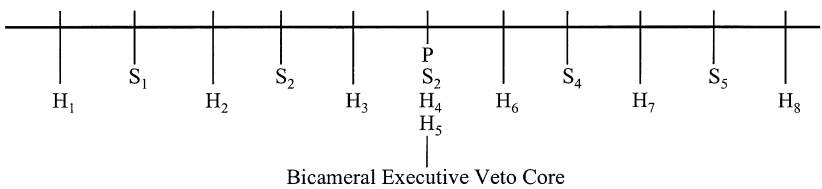
H_4, to the president at P, so it is the H_4-to-P line. Note that these two cores – the L_1-to-G_3 line in Figure A7a and the H_4-to-P line in Figure A7b – do not overlap.

9. Example of Non-Overlap between a Majority-Party Bicameral Core and a Bicameral Executive Veto Core

Figure A8a shows a majority-party bicameral system with 14 officeholders. There are five members of the Upper House, located in the Labor and Conservative Parties: three are Labor Party members, UH-L_1 through UH-L_3, and two are Conservative Party members, UH-C_1 and UH-C_2; the median member of the majority party here is thus UH-L_2. There are nine members of the Lower House; five are members of the Labor Party (LH-L_1 through LH-L_5) and four are members of the Conservative Party (LH-C_1 through LH-C_4); the median member of the majority party here is thus LH-L_3. The majority-party bicameral core connects the median member of the majority party in the Upper House (this is UH-L_2) with the median member of the majority party in the Lower House (this is LH-L_3); hence, the majority-party bicameral core here is the line segment from UH-L_2 to LH-L_3. Figure A8b shows a BEV system with 14 officeholders – a president (P), five Senate members (S_1 through S_5) and eight House members (H_1 through H_8). In this diagram, the president at P, the median House members (H_4 and H_5) and the median Senate member (S_3) are all located at the same point, hence the BEV Core here is the point at P. Note that these two cores – the line segment from UH-L_2 to LH-L_3 in Figure A8a and the point at P in Figure A8b – do not overlap.



a. A Majority-Party Bicameral Core



b. A Bicameral Executive Veto Core

Figure A8. Non-Overlap between a Majority-Party Bicameral Core and a Bicameral Executive Veto Core

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