

Why So Much Stability?: Majority Voting, Legislative Institutions, and Gordon Tullock

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March 2010

Gordon Tullock, in a memorable characterization of Arrow's Impossibility Theorem, began an important early paper on majority rule with the observation that "a phantom has stalked the classrooms and seminars of economics and political science for nearly fifteen years." (Tullock, 1967, 256) Majority rule, in Tullock's view, was not nearly as badly behaved as students of social choice had come to believe; his objective in 1967 was "to exorcise the phantom...by showing that it is insubstantial."

Although Tullock misunderstood Arrow's Theorem and the nature of equilibrium, in our view, his project was classic Tullock – neither the first nor the last word on an important idea, but a seminal one. Tullock was one of the first to extend the paper-and-pencil spatial arguments on majority rule of Duncan Black (Black, 1958; Black and Newing, 1951), mainly through simple geometric representations and carefully selected examples. The strength of Tullock's methodology lay not in its generality or rigor but rather in its ability to capture and portray powerful intuitions – a foundation on which to build a more general appreciation of majority rule. Some might read his 1967 paper as having presciently anticipated the results of the mathematically general papers of

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McKelvey (1976, 1979) and Schofield (1978); he certainly set the stage for these major intellectual forays.

Tullock again animated scholars in 1981 with his famous paper asking, “Why so much stability?” This paper focused more carefully on one of the themes of his 1967 paper: in the presence of general theorems about cyclical preferences, why did we observe so much stability in the world? In particular, what explains the absence of voting cycles in real world legislatures and committees? Existing work provided no explanation. Tullock’s intellectual agenda-setting helped moved the field to provide an answer.

In the present paper we will try to fit Tullock’s contribution into the scholarship of the time (Part I), but then go on to trace the flood of research that followed his contributions that provides answers to his fundamental question (Part II – late 1970s and early 1980s; and Part III – late 1980s through the present). Tullock failed in his stated purpose: Arrow’s Theorem has not been exorcised. But today we are the beneficiaries of a much more nuanced understanding of majority rule as well as a finer appreciation of the ways in which majority rule is embedded in institutional arrangements, in part because of Tullock’s important initiatives.

1. Social Choice and Majority Rule: The Early Years (to the mid-1970s)

We can hardly do justice to the flood of social choice-theoretic analyses of majority rule of the first several decades post-Arrow, much less the last half

century. Early summaries of this literature are found in Murakami (1968), Sen (1970), Pattanaik (1971), and Fishburn (1973). Perusing some of these volumes, what is clear to us in this literature is that it is mainly about the possibility and consequences of aggregating weak orderings under a variety of mathematical conditions via a q -majority rule (q being the minimal cardinality of a decisive coalition). These exercises are abstract, mathematical, and ungrounded in substantive context. They are benchmark models. They fascinated the mathematically inclined for their own sake, but many social scientists, Tullock among them, were frustrated by the absence of any substantive grounding. What did these exercises in logic have to tell us about real committees, real legislatures, and real collective choice? The answer to this question awaited contributions from those that had some experience with and interest in the empirical world.

A second feature of social choice theory that did not sit well with the more empirically inclined is the normative character of these analyses. Students of politics for whom the rational pursuit of objectives was the engine of analysis were decidedly less interested in desiderata claims for features of social choice processes, since such claims are simply uninformative about how individuals *actually* behave in social settings and what collective outcomes *actually* were produced there.

A third feature of social choice theory, at least as initially posed, is its non-strategic nature. Individuals in Arrow's formulation sincerely pursue their preferences in q -majority voting. Indeed, it was precisely this feature that

McKelvey (1976, 1979) exploited in demonstrating the capacity of a strategic agenda setter to extract all of the advantage from sincere voters in a majority-rule setting. Strategic behavior dramatically affects outcomes in many settings. Shepsle and Weingast (1984a), for example, showed that, in majority decision-making contexts in which *all* agents are strategic, an agenda setter continued to enjoy disproportionate advantage, but not nearly as extreme as that documented by McKelvey.

Sincere preference revelation may roughly obtain in large- n elections, where the probability of any individual being pivotal is infinitesimal, but this is mooted by the empirical fact that most large- n elections do not entail pairwise comparisons as its procedural practice. (And, when there are more than two candidates in a plurality-rule, large- n contest for a single office, most votes are collected by the top two vote-getters, as supporters of less advantaged candidates desert their first choices and vote strategically for the “lesser of evils.” See Riker 1982, Palfrey 1989) In committees and legislatures, on the other hand, where pairwise voting is the norm, strategic motion-making and voting must be part of the story.

Duncan Black (1958) made the most important political innovation in the early years.. He demonstrated (later generalized with his colleague R.A. Newing – see revised edition of 1998) that there is something special about decision contexts that “scale.” If the set of alternatives on offer can be arrayed along a single dimension in a manner that induces *single-peaked preferences* among the agents, then majority rule yields an equilibrium outcome at the ideal point of the

median voter. For spatial models of greater dimensionality, however, only knife-edge conditions yield a majority rule equilibrium (Plott, 1967). So, Arrow's phantom is harmless in some specialized domains, but still haunts universal domains.

2. Why So Much Stability? Initial answers (Late 1970s through early 1980s)

Several milestones occurred next. Tullock's (1981) asking, "why so much stability?" framed the principal question of this middle period. Following up his 1967 work, this paper squarely faced the obvious discrepancy between the set of results from the social choice era emphasizing preference cycles and instability with the obvious stability shown by most legislatures. Contra Arrow, McKelvey, et.al., legislatures did not appear to generate endless voting cycles, even in the presence of preference cycles.

The answer came in the form of two key ideas – *universalism* and *structure-induced equilibrium*. The two of us, individually (Shepsle, 1979, 1986; Weingast, 1979) and collectively (Shepsle and Weingast 1981a,b, 1982, 1984a,b; 1987), and others (Denzau and MacKay 1983, Kramer 1972) began a project of embedding social-choice and game-theoretic ideas into the analysis of real (multidimensional) legislative settings. These works demonstrated a new logic of stability.

Weingast's 1979 insight about universalism was inspired by the fact that constant-sum majority-rule games have an empty core. For any division of the spoils – as in the classic game of distributive politics – there are other divisions

preferred by decisive coalitions. Any such play results in an arbitrary outcome, dependent on idiosyncratic factors like a time limit, or random recognition to make proposals, or rules on amendments (e.g., closed rule). Consider an n -person legislature, where the n agents are symmetric in their endowments and authority. Each has a program worth b to her district and which costs c , $b > c$. The total cost for all funded projects is borne equally by all districts (whether receiving a project or not). An idea prevailing at the time was that minimal winning coalitions (MWC) would form to pass their projects and programs (Buchanan and Tullock 1962, Riker 1962), and only theirs. That is, a bare majority of legislators would form a coalition, excluding all others. For members in the MWC, the payoff as n grows large is approximately $b - c/2$ (each member captures all of the benefits from his or her project and pays $1/n$ of the costs of the $(n+1)/2$ projects being built). Of course, no member could be assured of being in the MWC that forms. Assuming each MWC is equally likely, the expected payoffs to member i converges to $(b-c)/2$ as n grows large.

Weingast reasoned that intelligent agents would seek out *ex ante* arrangements to improve on this. In doing so, he produced a rational basis for the observance of a *norm* – namely, to agree *ex ante* to divide things up evenly instead of playing out the coalitional in-fighting. A norm of universalism – building a project for all members – yielded higher expected payoffs than playing the minimum winning coalition game with its uncertainty. The payoffs under universalism are $b-c$ to each legislator, which exceeds the expected payoffs under minimum winning coalitions, $(b-c)/2$. (See also Noiu and Ordeshook 1985

and Shepsle and Weingast, 1981b.) The commitment to rationality-based norms is one answer to the Tullock challenge – Arrow’s phantom is still alive and well, but rational agents can respond *institutionally* to the unstable social choice processes it implies.

Shepsle’s approach (Shepsle 1979, extended in Shepsle and Weingast 1981a) incorporated not only norms, but also all manner of other institutional features and arrangements. He was inspired by an off-the-cuff comment made by Charles Plott at a 1976 conference to the effect that once an institution’s rule for preference aggregation is specified, that’s all one needs to know. In the case of the US Congress, Plott opined, we know how it works via application of either Black’s Median Voter Theorem or Arrow’s Impossibility Theorem. But the way in which a collectivity goes about its business is not foreordained. The U.S. Constitution, for example, is relatively silent about how the House and Senate must organize their respective affairs. Indeed, it charges each chamber with creating its own body of rules. Institutional arrangements are a complex mix of participation rules, agenda rules, and voting rules and, most important of all, they are *endogenous*. The social choice theoretic obsession with preference aggregation – what Shepsle called *preference-induced equilibrium* – had, in light of Arrow’s result, produced a dead end. But because preference aggregation is only part of the story, there may be a way forward by examining other institutional features with the view that, in combination, they may produce a *structure-induced equilibrium*.

In 1978, Romer and Rosenthal produced one of the most famous models of a structure-induced equilibrium in their *agenda-setter model*. They observed that the alternatives on offer do not simply fall from the firmament (a point also made by McKelvey, 1976). Associated with a collective choice situation is some mechanism for specifying how alternatives arise to be voted on. Romer and Rosenthal note that in many institutional contexts provision is made for setting the agenda, and this often takes the concrete form of an agenda setter or an agenda committee. In the Oregon school district millage referendums that interested them, for example, a district school board proposed a millage rate that was then voted up or down by voters in the district. If up, then the rate was implemented on assessed property in the next fiscal year; if down then a constitutionally specified reversion rate prevailed. They showed that, with agenda power and an exogenous reversion, an agenda setter had significant power to determine the result, and this result was not the ideal point of the median voter that Black identified in an agenda-free setting. This result, and those by Shepsle, provided another answer to Tullock's challenge – institutional features over and above the rule of preference aggregation could induce equilibrium, mitigating the effects of Arrow's phantom.

Norms, structure, and agenda power, in short, provided three aspects of collective choice that potentially induce equilibrium outcomes in majority-rule settings. These *political* elements of the decision setting do not rid the world of Arrow's phantom, but rather demonstrate how its effect can be restrained by institutional features. The central insight of this middle era's work is

straightforward. It assumes the existence of preference cycles (Arrow's and McKelvey's point), but demonstrates that structure and institutions can limit the degree to which, in any particular legislative or committee setting, outcomes exhibit voting cycles. Put simply, a distinction between preference cycles and their manifestation as actual voting cycles needs to be made. Institutions induce stability by preventing endless voting cycles, even when social *preferences* are cyclic. Although many outcomes exist that command a majority against the final outcome, given the institutional rules, they cannot arise for a vote.

3. What We Have Learned in the Later Years (Mid-1980 through the present)

The next three decades have been especially productive in developing structural and procedural features of real collective choice. We focus here on several empirically inspired aspects of legislative choice – partisan thinking, sequential thinking, structural thinking, and the new separation of powers.

Partisan Thinking. In most of the world's legislatures, legislative agents arrive with partisan branding. They are not independent agents free to engage in free-ranging coalition building. Rather, they come with a partisan attachment, valuable in the electoral arena. Individual party member always face temptations to defect from the path partisanship prescribes; but mitigating forces also exist – namely, the value of the partisan label – that discourage such defection. In the absence of such mitigating forces, Krehbiel's (1993) "where's the party?" query has real power. His claim, interpreted in this way, is that the alleged partisan

voting cohesion that is observed in real legislators is simply another instance of “birds of a feather flocking together”: Krehbiel showed that many of the phenomena then adduced by others as evidence for the effects of parties on legislative voting could also arise in the absence of any pressure from parties but where members sorted by preferences and labels. Thus, if most Democrats in the United States are on the left and most Republicans are on the right, we should observe a large number of votes in which a majority of Democrats oppose a majority of Republicans. But this has little to do with party pressure and all to do with member preferences. Attributing a causal effect of partisan cohesion to party may therefore be spurious; it reflects, instead, a selection effect, namely that agents who share policy preferences in common happen also to share the same partisan brand. But, if there are indeed partisan-branding pressures, then more than preference homogeneity is at work in producing voting coherence among kindred spirits with shared policy preferences.

Since majorities possess extraordinary authority and advantage, being part of the majority party or coalition is valuable to the legislators comprising it. What form might such advantages take? Cox and McCubbins (2005) emphasize a number of features, but one in particular stands out. The majority party controls *plenary time*. The Speaker and Majority Leader in the US House, the Majority Leader in the US Senate, and the government in most parliamentary democracies decide, with very few constraints, what business will be taken up by the legislative assembly. As a consequence the majority will devote this scarce resource to matters of partisan consequence on the one hand, and to matters on

which it believes it can prevail on the other. The minority is limited to whatever it can tease out of the situation as a result of its ability to block, delay, or embarrass the majority. (And, in parliamentary regimes, a motion of no confidence in the majority is normally privileged.)

In the context of social choice theory, the allocation of plenary time is a horse of a different color from simply assuming a set X of alternatives from which an outcome will be chosen. The majority selects a subset $X' \subset X$, and the selection is done by a representative agent (leader) of the majority. In one sense this looks like an embellishment of Romer and Rosenthal (1978) agenda power. In another sense, however, it is more elaborate. This is because X can be sorted into *jurisdictions* with choices by the full legislature made jurisdictionally. Then control over plenary time means that the majority controls which jurisdictions the full chamber will deliberate on, as well as determining which alternatives within designated jurisdictions are in order. Health care, for example, may be allocated substantial plenary time, while tort reform or debt reduction is allocated none. Majority parties with different preferences are likely to allocate plenary time in different ways.

A second advantage possessed by the majority entails control over legislative subunits. In U.S.-style legislatures these are legislative committees. In parliamentary regimes control over ministries is crucial. We take this up below, but for now we simply note that subunits produce the raw material (elements of the set X if you like) from which topics for full legislature deliberation are selected. The majority party (coalition) dominates these subunits, though there are

temptations within the majority to defect to minority positions, as well as temptations for minority members to cooperate with the majority; partisanship is not determinate. Again, what stands out is the fact that pre-existing coalitions, generated primarily in an altogether different arena (elections), exploit institutional arrangements; in so doing, the location of the pivotal agent(s) is shifted. In one-dimensional settings, for example, party medians (in the full caucus and in legislative subunits) come into play with the potential to present pivotal chamber agents with *faits accomplis* (e.g., take-it-or-leave-it offers).

Sequential Thinking. Social choice-theoretic thinking about legislative choice focuses on equilibrium, not on the dynamic path by which it is achieved. The latter is the leverage provided by a game-theoretic formulation. Baron and Ferejohn (1989), in the *locus classicus* of this genre, take up the legislative choice of how to allocation pork barrel projects – a “divide-the-dollar” game – insisting that all agents exhibit sequential rationality as they move through the various stages by which a proposal is considered.

Theirs is an abstract treatment of this topic, so it is rather spartan when it comes to empirical realities. All legislators have views on how to divide the dollar and, in particular, prefer to obtain more of the dollar for themselves to less. Parliamentary realities, however, temper their behavior. The presiding officer (randomly) selects one legislator to put forward a proposal. What he or she proposes will depend on what happens next. It is assumed that information is complete – that all legislators know each other’s preferences and “what happens next,” i.e., they know the game form. If the proposal must be voted upon directly

(the so-called *closed rule regime* in which amendments to a proposal are not in order), then it is commonly known that a successful proposal will be implemented and a failed proposal will invite a new proposal (though only a discounted amount of the dollar is then available, and it is assumed no further rounds are in order after that). A proposal-maker thus must offer $(n-1)/2$ other legislators at least as much as they expect if the proposal were defeated and a subsequent round were necessary. If the latter, then whoever is recognized to make the next (and last) proposal must only offer $(n-1)/2$ others a vanishingly small amount (since if this latter proposal fails, the dollar is not distributed at all). That is, a potential recipient of an initial offer expects δ/n if this proposal fails – a $1/n$ chance of a discounted amount (δ) of the dollar. Returning to the first stage, the proposer must offer δ/n to $(n-1)/2$ others in an initial proposal to obtain their votes, enabling the proposer to capture $1 - (n-1)\delta/2n$, an amount that tends toward $1 - \delta/2$ as n grows large. Without going into details, if the *open-rule regime* is in effect (amendments are in order so that a randomly recognized legislator may either move an amendment to the initial proposal or may move to take a vote on the proposal on the floor immediately), then the initial proposal-maker must take on board not only what might happen if the proposal is defeated (as she did under the closed rule) but also the prospect of amendments from the floor. This diminished agenda power means that the proposer cannot capture as large an agenda-setting premium as under the closed rule.

Sequential thinking, as noted above, takes us beyond static equilibrium ideas to the actual processes of collective choice. Arrow's phantom still lurks in

the background – majority preferences are cyclical, especially in the distributive politics realm. But particular procedures that unfold in a sequence place limits on social comparisons and so prevent endless voting cycles and concomitant instability. A particular distribution of the dollar, for example, so long as a majority coalition prefers it to “what comes next,” will emerge as an equilibrium, *even though there are other distributions of the dollar that are majority-preferred to it*. The “trick” here, and still another response to Tullock’s worry about Arrow’s phantom, is that institutional arrangements restrict the alternatives against which a particular proposal must measure up. In effect, Arrow’s Theorem may be “irrelevant” in contexts in which his axiom of completeness in the social preference relation is mooted by sequential procedures. The suspension of completeness is especially evident in a consideration of the structure of collective choice, the topic we examine next.

Structural Thinking. In the last thirty years a good deal of work has sought to enrich the institutional context in which social choice takes place by building institutional features and structure into their work. Tullock’s intuition holds that, contra Arrow, outcomes are likely to be centrist, and if there is any Arrowian cycling at all it will entail local cycles at the center of the cloud of ideal points. Unfortunately, this intuition runs into trouble in light of recent work. We have already seen, for example, that distinguishing between those who build the agenda (e.g., Romer and Rosenthal’s setter) and those who vote among the items proposed yields outcomes that need not be centrist in any sense. The agenda setter can extract all the rents from her advantageous structural position

by proposing the alternative she likes most, subject to the constraint that some decisive coalition prefers her proposal to the reversion outcome that results if it is rejected.

Of course, if the agenda setter is relatively centrist, then so, too, will be the outcome; but if the agenda setter is extreme, she can drag the final result some distance away from the center of mass of ideal points. To explain centrist outcomes, then, we cannot simply dismiss Arrow's phantom. Nor is it good enough to claim, without demonstration, that majorities by their very nature will pull things toward the center of the distribution of ideal points. In order to provide a full account of a centrist outcome, it is necessary to incorporate all the structural elements of the decision context and demonstrate how best-responses "all the way down" result in a centrist outcome. In the context of the simple distinction we have made between voters and an agenda setter, for example, one must have a theory of why the agenda setter is, herself, centrist.

One stream of research has emphasized non-centrist outcomes resulting from a division and specialization of decision making – a decentralized arrangement in which subsets of agents have disproportionate influence over subsets of dimensions defining the multidimensional space of choice (Shepsle and Weingast, 1981a). Committees, that is, have jurisdiction over a portfolio of policy dimensions that confers agenda power on them. In some settings, *they* are Romer and Rosenthal jurisdiction-specific setters. If, as has been the case historically for the House Ways and Means Committee, a committee is representative of the full legislature, so that its median on any dimension in its

jurisdiction is roughly the same as the chamber's median on that dimension, then it is likely to be the case that, even as this committee's members seek to extract maximal rents, it nevertheless produces relatively centrist proposals. If, on the other hand, the committee is composed of "outliers" – members whose preferences are extreme relative to the chamber – then they are in a position through adept agenda setting to pull policy in a direction they prefer.

Why, one might ask, would a chamber empowered to create its own rules of procedure and structure choose an arrangement in which the latter possibility was likely? Why, that is, would committees composed of outliers exist? There are two responses (see Shepsle and Weingast, 1987).

First, the decentralization of agenda power may be part of a giant logroll. As Weingast and Marshall (1988) point out, legislators are endowed with one vote on each roll call taken on the floor. And, presumably, they are equally positioned to make proposals if the legislative chamber operates exclusively as a committee of the whole with no decentralized structure. But, legislators come with differing individual talents, personal priorities, and constituency interests that vary in intensity across areas of public policy. They might all benefit from a reallocation of this constitutionally prescribed equality of endowments – giving each member disproportionate influence in those policy areas toward which their talents, priorities, and constituency interests predispose them in exchange for reduced influence in areas of lesser importance. Given the constitutional inflexibility to reallocate votes, an alternative way forward is to give legislators

unequal agenda power – more in areas of greater significance to them and less in other areas.

A second response requires us to distinguish between the incidence of election returns on the chamber and its effect on committee composition. We should first note that, with a few exceptions, the partisan composition of a committee in the United States House of Representatives is approximately that of the full chamber. If the Democrats hold 55% of the chamber seats in the House, then they ordinarily get approximately 55% of the seats on the Armed Services Committee. Ordinarily, the size of the committee is negotiated between the majority and minority leaders so as to accommodate their respective memberships. Suppose an election occurs that reduces the Democratic majority to 52%, *but* none of its members on the Armed Services Committee loses (better yet, only some of its centrist/liberal members lose). The reduced size of the Democratic majority means it is eligible for a smaller proportion of seats on Armed Services. If none of its current members have lost, and if by virtue of seniority rules they have a property right to the committee seats they held in the previous Congress, then this is usually accommodated by increasing the committee size and giving the new seats disproportionately to the minority whose chamber proportion has increased. These changes render the ideological complexion of the committee more conservative (toward the Republican caucus's preferences); this result will be so *a fortiori* if the Democratic loss on the committee is disproportionately from among liberals. Elections therefore induce

changes in the partisan delegations on a committee making them atypical of the party in the full chamber.

A committee system empowering subsets of legislators to make proposals on the one hand, and to block those they don't like from being considered by the full chamber on the other, is a structural element that surely affects equilibrium outcomes in the legislative process. Such committee systems contain the possibility for non-centrist outcomes, contrary to Tullock's intuition, because pivotal agents on the relevant committee join the pivot in the full chamber in influencing the final disposition of a bill. This form of reasoning is actually more general and appears in the literature under the rubric of *pivotal politics* (Brady and Volden 1998, Krehbiel, 1998), another application of structure-induced equilibria.

Most of the work on pivotal politics assumes a one-dimensional spatial context (though some of the reasoning contained in this work may extend in part to multidimensional settings). In this world, at the end of the day the chamber median must prefer the (possibly perfected) proposal to the status quo. But in the separation-of-powers regime in the US, there is a tri-cameral arrangement – a House with median legislator ideal point h_M , a Senate with median legislator ideal point s_M , and a president with ideal point p . Calling $Q = \{h_M, s_M, p\}$ and the status quo x_0 , a sufficient condition for equilibrium – *gridlock* in common parlance – is, with some abuse of notation, that $x_0 \in [\min Q, \max Q]$. If the status quo lies in the interior of this interval, then at least one agent with veto power wants policy to shift leftward and one wants it to shift rightward. If it is at one of the endpoints,

then a veto agent doesn't want it to change at all. The status quo, consequently, is in equilibrium just as much as in the simple world of the Median Voter Theorem where forces for change are exactly balanced at the group's median ideal point.

Krehbiel elaborates this even further to bring it more in line with structural arrangements in the US. In the Senate, there are two cloture pivots – s_{41} and s_{60} . Any rightward movement of the status quo can be blocked by the former (along with her forty more extreme colleagues), and any leftward movement by the latter and his. Finally, there is the two-thirds pivot, endowed with power by the constitutional requirement of a two-thirds majority to override a presidential veto, who must approve a change in the status quo despite the blocking power of the president. Putting all these together, Krehbiel defines a *gridlock interval* – the set of status quo points against which legislative effort for change is ineffectual. All of this structure – the kind of structure that characterizes many legislative bodies (if not in exact detail) – produces equilibrium possibilities, indeed non-centrist equilibrium possibilities.

Integration of all three features. Recent work has also integrated two or more of these features – parties, sequence, and structure. This work elaborates on the same themes, namely that in combination, parties, sequence, and structure induce stability of outcomes.

Consider two examples. In the first, Diermeier and Feddersen (1998) provide a model of party cohesion in legislatures. Prior to this time, scholars had argued that institutions (control of nominations, of funds for campaigning, and of rewards in the legislature; Mayhew 1974) or elections (e.g., brand names in

elections; Cox and McCubbins 1993) produced party coherence. Diermeier and Feddersen proposed an elegant alternative that relied on an institution in most European parliaments, namely, the vote of no confidence. This institution grants the leadership the power to designate votes on certain proposals as essential to their program. This designation transforms the vote from one merely on the proposal to a joint product of a vote on the issue plus a vote on whether the government stands or falls. The second component changes the calculus of the vote for legislators: instead of “merely” deciding whether they prefer the proposal or the status quo, legislators must also decide whether they’re better off with the present government in place than with the lottery of a new election and a new government. As long as the government makes members of the coalition better off than the expected alternative, members of the parties forming the coalition will vote in favor of the proposal, while those in the opposition will vote against. Even without brand names or centralized control over nominations, co-partisans will vote together.

Cox and McCubbins’s (2006) negative agenda power model provides the second example. In this model, the majority party leadership holds gatekeeping power, the power to keep issues from coming up for a vote. Assuming that any vote moves the outcome from the status quo to the median voter’s ideal point, Cox and McCubbins show that negative agenda power allows the majority party leadership to make a majority of its party better off at the expense of the minority. Specifically, the leadership prevents a vote on a proposal to change any status quo lying between the floor median and the reflection of the floor median around

the majority party median. All such votes will, by changing the status quo, make a majority of the majority party worse off. Cox and McCubbins provide considerable empirical work supporting this model.

Both these works combine elements of parties, sequence, and structure to produce richer models of legislative behavior. A host of other works fit in this category, including; Laver and Schofield (1998) and Laver and Shepsle (1996) on parliamentary systems; Tsebelis 2002 on veto institutions, Tsebelis and Money (1997) on bicameralism.

The new separation of powers. The insights developed in the late 1980s and early 1990s produced a new way of thinking about American and comparative politics sometimes known as the “new separation of powers” approach (DeFigueiredo, Jacobi, and Weingast 2006). Scholars branched out from legislatures, in particular, Congress, to study how many institutions interacted, including Congress, the courts, the president, and the bureaucracy. A key insight in this literature is that the institutions cannot be studied in isolation from each other; that the strategic considerations of how actors in one institution makes decisions based on how it will affect actors in other institutions implies that behavior (e.g., legislative behavior or presidential behavior) differs than under the older, “silo” approach that considered actors in one institution in isolation from others. The new separation of powers literature has exploded in recent years.

Space only permits does consideration of one example, followed by a list of some representative papers and books. Consider the presidency. Traditional

approaches to this subject (e.g., Neustadt 1960) treated the president in isolation. Methodologically, this posed a problem: what did the president maximize? And subject to what constraints? The lack of consensus on these issues hindered modeling. Further, the traditional approach of studying the president emphasized case studies. Given 100s, perhaps 1000s of relevant variables, these scholars faced an overwhelming degrees of freedom problem: the number of variables always exceeded the number of cases. Sixty years of case studies have added up to few general testable propositions and almost no systematic data analysis (DeFigueiredo, Jacobi, and Weingast 2006).

Scholars using the new separation of powers approach introduced a dramatic new way of thinking about the presidency that solved both methodological problems: First, the president was embedded in a political framework of other actors, typically the Congress, and so was constrained in his effect on outcomes; second, scholars studied something the president did again and again, such as whether to veto a bill passed by Congress; or whom to appoint to a regulatory agency or the courts. Kiewiet and McCubbins 1988 and Cameron 1996 produced new theories of presidential vetos; while McCarty 2004, Cameron Cover and Segal 1990 provided new models about presidential appointments. The new models led to testable predictions that afforded empirical tests, producing systematic support for the new approach. (See Cameron 2006 for a survey of this literature.)

The new separation of powers approach has similarly produced new insights in a range of other topics. On the bureaucracy, see Eskridge and

Ferejohn (1992), Ferejohn and Shipan (1990), Epstein and O'Halloran (1999), Huber and Shipan (2002), McNollgast (1999), and Moe (1985). On the courts, see Caldeira, Wright and Zorn (1999), Cohen and Spitzer 1993, Gely and Spiller (1992), Marks (1988) and McCubbins and Rodriguez (2006).

4. Conclusions

We have hardly scratched the surface of more than half a century of research following on Arrow's famous theorem and Tullock's intuitive critique. The theorem is valid; it is a theorem after all. It is not always true in particular empirical settings because the domain of preferences is restricted (Black's famous insight generalized by Sen). More importantly, the work we have described in these pages helps us understand why social choice theorems are inadequate models of legislative and committee behavior. The key distinction separates two aspects of these theorems. The first is preference cycles, which Arrow, McKelvey, et al show exist in virtually all spatial settings with two or more dimensions; the second is voting cycles – whether a particular institution exhibits disequilibrium and the lack of stability in outcomes. The import of parties, sequence, structure, and the new separation of powers is that these features of legislative or committee voting may prevent voting cycles even in the presence of preference cycles.

Tullock's intuition stimulated serious intellectual inquiry in order to sort out whether centrist equilibria are true of many empirical circumstances – they are – and, more importantly, why or why not. In the last several decades of positive

political theory, stimulated by the Arrow-Tullock dialectic, scholars have sought a more discerning analysis of political institutions. The new approach provides an answer to Tullock's fundamental question, "why so much stability?" Preference cycles are ubiquitous, but voting cycles are not. Institutions constrain behavior in ways that prevent endless voting cycles even in the presence of cyclical preferences.

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