Bypassing the legislature: how direct democracy affects substantive and symbolic representation

James Allen Rydberg

University of Iowa

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BYPASSING THE LEGISLATURE: HOW DIRECT DEMOCRACY AFFECTS SUBSTANTIVE AND SYMBOLIC REPRESENTATION

by

James Allen Rydberg

An Abstract

Of a thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Political Science in the Graduate College of The University of Iowa

July 2010

Thesis Supervisor: Associate Professor Frederick J. Boehmke
ABSTRACT

At the heart of democracy is representation: the process of having a select few speak for the many. This process of representation is mediated by our political institutions, the rules and structures of the political process, which are constantly evolving. During the progressive era near the turn of the twentieth century, the United States experienced a series of critical institutional changes including women’s suffrage, the direct election of senators, and in some states, the establishment of direct democracy. This last change allows citizens to directly pass legislation, entirely bypassing the legislative process.

Within the context of direct democracy, this project reexamines a very basic question: why do voters vote? I argue that the initiative process alters the set of factors that voters depend upon for the selection legislators. With the initiative, voters are able to bypass the legislature entirely. The use of the initiative gives voters a way to “correct” policy mistakes due to biased legislators. Since they can fix these problems *ex post*, they have a great incentive to concentrate *ex ante* on the personal characteristics of candidates. I model the tradeoffs faced by voters in their selection of candidates, and most importantly, how direct legislation affects those tradeoffs.

The first hypothesis states that voters in initiative states will alter their voting calculus by diminishing the role played by policy. This is demonstrated empirically in four different ways (chapter 5). First, voters are less likely to vote ‘correctly’ in states with the initiative (Lau et al. 2008). The ‘voting correctly’ model is the ability of voters to ‘correctly’ select a candidate the best represents that voter’s policy positions. Second, voters engage in less ‘economic voting’ (Bali and Davis 2007). Third, voters are more likely to select women as their representatives (Boehmke, et al. 2009). There is a re-occurring pattern in how, why, and under what conditions men are favored over women. Men are viewed as better decision makers, while women are stylistically more open to
their constituents and are favored for their perceived trustworthiness and honesty. Absent concern for policies, men are no longer rewarded for their perceived advantage in decision making, and voters will reward women for their perceived openness, honesty, and trustworthiness. Lastly, the incumbency advantage is strengthened in initiative states (Bali and Davis 2007). An increased incumbency advantage, in which those who hold office are more likely to win their next election, demonstrates diminished policy voting through constituent servicing.

The second hypothesis states that voters will select candidates for their personal characteristics. I evaluate this in two ways. First (chapter 3), as voters are expected to select candidates for their honesty, trustworthiness, and integrity, elected officials in initiative states ought to be less susceptible to corruption. The second type are facial characteristics (chapter 4). I demonstrate that voters in initiative states are more sensitive to the personal attractiveness of elected officials, but voters in initiative states are less sensitive to how competent the officials look.

The third hypothesis verifies that legislators’ policy positions in initiative states are more representative of their constituents’ demand. I first demonstrate the need for a new approach to the measurement of representation, as well as how this can be accomplished (chapter 6). I then test this method with replications of previous research and a new, and more extensive, dataset (chapter 7).

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CERTIFICATE OF APPROVAL

PH.D. THESIS

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James Allen Rydberg

has been approved by the Examining Committee for the thesis requirement for the Doctor of Philosophy degree in Political Science at the July 2010 graduation.

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Douglas Dion

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Michael S. Lewis-Beck

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Caroline Tolbert

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Dan Kovenock
To Whitney
We are your principals, and you our agents; it is a truth which you cannot but acknowledge. For if you or any other shall assume or exercise any power that is not derived from our trust and choice thereunto, that power is no less than usurpation and an oppression from which we expect to be freed, in whomsoever we find it.

Richard Overton
A remonstrance of many thousand citizens, 1646

[It ought to be the happiness and glory of a representative to live in the strictest union, the closest correspondence, and the most unreserved communication with his constituents. Their wishes ought to have great weight with him; their opinion, high respect; their business, unremitted attention. It is his duty to sacrifice his repose, his pleasures, his satisfactions, to theirs; and above all, ever, and in all cases, to prefer their interest to his own. But his unbiassed opinion, his mature judgment, his enlightened conscience, he ought not to sacrifice to you, to any man, or to any set of men living. These he does not derive from your pleasure; no, nor from the law and the constitution. They are a trust from Providence, for the abuse of which he is deeply answerable. Your representative owes you, not his industry only, but his judgment; and he betrays, instead of serving you, if he sacrifices it to your opinion.

Edmund Burke
Speech to the Electors of Bristol, 1774
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ABSTRACT

At the heart of democracy is representation: the process of having a select few speak for the many. This process of representation is mediated by our political institutions, the rules and structures of the political process, which are constantly evolving. During the progressive era near the turn of the twentieth century, the United States experienced a series of critical institutional changes including women’s suffrage, the direct election of senators, and in some states, the establishment of direct democracy. This last change allows citizens to directly pass legislation, entirely bypassing the legislative process.

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CHAPTER 1: INTRODUCTION

Direct democracy is a radical institution. Loved and loathed simultaneously by those on the left and the right, its one resounding truth is its unpredictability. Initially pushed by the radical left to break the connection between corporate interests and legislatures, the process now often requires millions of dollars to get an initiative on the ballot, has been embraced by corporate interests, and is even a tool for sitting legislators to advance their agenda and career. Yet leftist, anti-incumbent grassroots organizations are simultaneously succeeding at the game.

Fear abounds from all corners; the initiative will restrict minority rights, sell state policy to the highest bidder, permit amateurish drunken democracy, or undermine the legislature. Despite the fear, often contradictory, the initiative remains popular among voters, politicians, as well as citizen and economic interest groups. Loved and loathed, yet still unknown.

What is known is that the initiative has the potential to thoroughly reshape the political environment. Virtually coterminous with term-limits, the initiative has also boosted campaign finance reform, and brought tax and expenditure limitations. Turnout, trust and knowledge are thought to increase along with the size and diversity of interest groups; all the while the threat of bypassing the legislature through the initiative brings policy closer the constituent demand. Sometimes a subtle ‘gun behind the door;’ and sometimes a sledgehammer, direct democracy is a radical institution.

Even without a reorientation of contemporary politics, direct democracy is a clear departure from the last three hundred years of representative democracy. Elected assemblies are the central linkage to the policy-making process. Whether or not these representatives insulate the citizenry from public policy or give voice to their demands, citizens in twenty-four states can now bypass that institution. We now have elected
officials to select public policy while citizens have the ability to bypass those they elect. With the initiative, public policy has multiple parents. The very purpose, or role, of legislators is questionable; and citizens must still march into the voting booth and make sense of it all.

This dissertation posits that this change in the citizens’ relationship with the elected officials is a foundational re-orientation of the political system. From how, and why, citizens vote; the type of legislator likely to be selected co-exist with the initiative; the type of policy a legislature under threat of circumvention will select; these are all foundational questions. Perhaps most importantly, these are all inter-related questions.

Representation
Any democratic political system must determine the process through which the populace translates their collective will into policy. Almost universally, democracy has become synonymous with representative democracy: the public does not directly select policy but selects those who do. The level of separation between the populace and policy is not haphazard, but is instead regulated by the design of the institutions undergirding that relationship. The most fundamental institution is periodic elections. The view that democratic “governments are representative because they are elected” (Manin et al 1999, 29) is far from a simple concept. Understanding the process culminating in American representative democracy permits us to understand the changes we can expect when we permit this institution to be bypassed.

Historical Foundations
To our ancient progenitors of democracy, elections were viewed as imperfect forms of democracy. Aristotle believed that selection of officials through election was
akin to children choosing bright and shiny baubles. The alternative advocated by Aristotle, and implemented in the earliest Athenian democracies was selection by lot. Although there was no terminology akin to ‘representation,’ there was a strong desire to make the individuals making up the governmental apparatus to be as similar as the general populace as possible. This necessitated a transparent and equal process. Their solution, taking the ‘machinery’ of politics quite literally, was the use of the pinakion and the kleroterion.

The pinakion was the identity card of all possible officials. This (wooden or stone) slab was placed into the kleroterion. Colored balls were randomized and dropped on the slate of multiple pinakion. The color of ball that landed on an individual’s pinakion would determine if that person is selected from the slate of candidates. This was a system believed to have a much stronger basis for the claim of equality. Although elections throughout dominate the modern conception of representation, juries are randomly selected, as are Swiss election observers and leaders of the Old Amish Order.

Roman appropriation of Greek practices continued the early forms of separation of powers and checks and balances, but introduced a broad concept of representation. Initially a legal concept for the making of contracts, repreaesentare was “to make present.” This legal concept was quickly extended to the aesthetic: Repraesentatio was the reproduction of mental images. Actors were representing their characters like a work of art was a token representing something larger.

This form of representation carried two distinct concepts which may not seem immediately important, but are critical to later models of representation. The first
conceptual form of representation was mimesis. This is the faithful reproduction of what is signified: mimicry or imitation. In this approach, the goal of a portrait of an individual is meant to replicate exactly what the person looked like. Conversely, symbolic representation conveys ideas for which the object is a mere medium.

This Roman concept of representation entered the political sphere through Christian tradition. Quintus Septimius Florens Tertullianus (Tertullian) developed the idea of the trinity, a set or interrelated representational relationships. Just as the Father represented the Son, and Jesus represented his body with bread; the church became “a single and more significant entity…[which stood] for the many scattered and less important entities that make it up” (Vieira and Runciman 2008, 9). This took the form of a recognizably institutional relationship through Pope Gregory the first.

In a letter to all bishops throughout Sicily, Pope Gregory I imbues an individual with representational role, a delegate.

[W]e should commit all things to one and the same person; and that, where we cannot be present ourselves, our authority should be represented through him to whom we send our instructions. Wherefore, with the help of God, we have appointed Peter, subdeacon of our See, our delegate in the province of Sicily. (Gregory I, trans Schaff 1985)

This concept of delegation formed the basis behind ambassadors who acted as plenipotentiaries, or an individual had the “full powers” of those they represented. From a modern conception, however, this representational relationship is “backwards.” The foundational actor imbuing another with representational power is the Pope, and his representative is delegated to the constituents. Although this ‘backward’ relationship became standard in other contexts, it was once again within the Church that we see the first reversal of this ordering.
The Conciliar movement of the 14’th century argued that “the unity of the church resulted from the corporate association of its members, not from its subordination to a single papal head. The pope’s authority was therefore partly ministerial – it was delegated to him by the congregation of the faithful” (Vieira and Runciman 2007, 13). This fundamental reversal explicitly demanded that authority required consent, decisions should be made through an elected assembly, and lastly, “that the council could act as a kind of microcosm of the entire Christian community, with its diversity of members reflecting the different parts and classes of the wider church” (Vieira and Runciman 2007, 14).

The struggle for the reversal of the representational relationship was also central to the English Civil War. Although feudal England had small self-determining towns with juries and courts, parliament (a national institution) was involved in the creation of national policy. The vague term ‘involved’ indicates the contested role of parliament vis-à-vis the king. Initially, parliament existed for translating the decision of the king back to the people; way to publicize policy and elicit consent. As parliament began to make demands of the Charles I, he decided to rule without parliament. From 1629-1640, Parliament was simply never called (Vieira and Runciman 2007).

The return of Parliament, in 1640, reignited the contest between the King and Parliament. Henry Parker, a Parliamentarian propagandist, explained the conflict:

In this contestation between regal and parliamentary power… it is requisite to consider … the efficient and final causes and the means by which they are supported. The King attributeth the original of his royalty to God and the law, making no mention of the grant, consent or trust of man therein, but the truth is, God is no more the author of regal than of aristocratical power, nor of supreme than of subordinate command. Nay, … Power is originally inherent in the people, and it is nothing else but that might and vigor which such or such a society of men contains in itself, and when by such or such a law of common consent and agreement it is derived into such and such hands, God confirms that law. And so man is the
free and voluntary author, the law is the instrument, and God is the
establisher of both (Parker 1642).

This language clearly influences the American parallel that all school children are
familiar with: “We hold these truths to be self-evident, that…governments are instituted
among men, deriving their just powers from the consent of the governed.” Sovereignty
lies with the people; a direct reversal of the ‘backwards’ representation of Kings and
Popes. While sovereignty lies with the people, the implementation of these rights is
constrained by intermediary institutions.

Competing Conceptions of Representation

These intermediary institutions of *representative* democracy determines to what
degree, and in what manner, this ethereal sovereignty takes shape.

**Substantive versus Descriptive Representation**

Substantive representation can generally be considered the baseline model of
representation. Under the view that the purposive of government is to establish public
policy, substantive representation is the degree to which the policy created by
government reflects the policies demanded by the citizenry.

If substantive representation is the baseline model, descriptive representation is
the dominant alternative view. In its most basic form, descriptive representation is a call
for legislatures to represent the diversity of its constituents’ race, gender, class, age,
education etc. The justification can be instrumental with the background goal being
superior substantive representation, or descriptive representation can be sought for as an
intrinsic benefit.

In pursuit of increased descriptive representation, the most visible mechanism is
the design of majority-minority districts. While it is clear that such districts do increase
the number of minorities elected to office, the degree to which this facilitates substantive

Despite widespread questions regarding the effects on substantive representation, support remains strong among African Americans (Smith 1990; Swain 1993). Beyond simple support, similar racial identification is thought to increase communication and trust for governmental officials (Gay 2002, Mansbridge 1999). Again, even if there is no effect in the relationship or support among government officials, it may be the case that increased minority representation is an inextricable step towards greater equality (Cain 1992, Kousser 1993).

While race dominates the question of descriptive representation in the United States, gender is a close second. Although discussed in greater detail in chapter four, the general outline of gender as descriptive representation has to same two twin principles: gender parity may increase representation of policies favored by women, and gender parity may be an end sought in itself.

In the pursuit of women’s suffrage, Susan B. Anthony argued that the political interests of women were weakened by virtue of their inability to hold elected officials
accountable. Upon a failed strike by woman collar launders, Susan B. Anthony compares the failed strike to a previous successful strike by male bricklayers. Although the women fully controlled their industry, and the striking men were a small proportion for their industry,

“In the case of the bricklayers, no editor, either Democrat or Republican, would have accepted the proffer of a bribe, because he would have known that if he denounced or ridiculed those men, not only they but all the trades union men of the city at the next election would vote solidly against the nominees advocated by that editor. If those collar laundry women had been voters, they would have held, in that little city of Troy, the ‘balance of political power’” (Susan B. Anthony 1870, 141).

Beyond the nineteenth amendment, a key difficulty with regard to gender is the difficulty of establishing institutional designs to affect female representation. Outside the United States, Parliamentary systems facilitate gender quotas in party lists. Currently, over forty countries have implemented gender quotas and major parties have done the same in more than fifty countries (Dahlerup and Freidenvall 2005).

Delegate versus Trustee

While the above division between substantive and descriptive representation is probably the largest current divide, the manner through which what constitutes substantive representation is probably the oldest. The initial ‘backward’ form of representation, which did not emerge from the people, certainly was not a delegative form of representation. There were, however, elements of a trusteeship. Most centrally, the every existence of the king/pope/leviathan was the existential foundation of the nation. England could not exist without the king, just as the Church had to link to God without the pope. In these cases, the actor that provided meaning to the collective did so

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1 Sometimes referred to as mandate versus independence.
simply through their existence. Once the representational relationship was reverse, action was needed. How the ideal action is chosen lies at the heart of the divide between a delegate model and a trusteeship model.

For delegates, their role is to faithfully select the policy that would have been selected by their agent (their constituents). In the strictest sense, any deviation on the part of the agent form the instruction of the principal is a representational failure; they have failed to make their principal ‘present again.’ This extreme view is just one end of the continuum.

A more moderate position might be that he may exercise some discretion, but must consult [their] constituents before doing anything new or controversial, and then do as they wish or resign [their] post. A still less extreme position might be that the representative may act as [they] think his constituents would want, unless or until [they] receive instructions from them, and then [they] must obey. Very close to the independence position would be the argument that the representative must do as [they] think best, except insofar as [they] are bound by campaign promises or an election platform. At the other extreme is the idea of complete independence, that constituents have no right even to exact campaign promises; once a [person] is elected [they] must be completely free to use [their] own judgment (Pitkin 1967, 146, gender paraphrased).

While it’s not hard to envision that the inevitable position is a reconciliation between these two extremes, the positions can be quite hostile. To advocates of a delegate model, they claim that action taken independent of the demands of their constituents is simply not representation. On the face of it, if the decisions are not a function of the principal, that decision cannot be considered a method to make that principal ‘present again.

Conversely, advocates of a trustee model do not consider delegates to be representatives. If “the real action was taken directly by the state’s voters; no one was acting for them. If they had mailed in their decision, surely one would not say that the envelope that brought it represented them?” (Pitkin 1967, 151-152).
Returning to the original Roman views of representation, the delegate model is following a representational model of mimesis; faithful replication of what the sign (agent) signifies (constituent views). To Burke, this aesthetic interpretation was fundamental.

Burke, the quintessential advocate of a trusteeship, considered representation to be akin to poetry: the representative, like the poet, reveals a deeper truth that was is written on the page. The imitative arts only bring attention to their failure of replication.

Burke, felt that deliberation was an important political act.

[Government and legislation are matters of reason and judgment, and not of inclination; and what sort of reason is that, in which the determination precedes the discussion; in which one set of men deliberate, and another decide; and where those who form the conclusion are perhaps three hundred miles distant from those who hear the arguments? (Burke 1774)

Dyadic versus Collective Representation

The presumptive model discussed so far has assumed to follow some sort of principal agent model as a one-to-one relationship.

This dyadic perspective (i.e., one legislator and one constituency) is surely important, but it is not the only way of approaching representation. Specifically, a long and equally valid tradition exists that views representation in terms of institutions collectively representing a people. Within this tradition the central question would be whether Congress as an institution represented the American people, not whether each member of Congress represented his or her particular district (Weissberg 1978).

Similarly, Burke advocated representation through sympathy, a factor not bounded by representation. Burke’s concept of ‘virtual representation’ was able to represent the interests of those well beyond his district.

“parliament is a deliberative assembly of one nation, with one interest, that of the whole; where, not local purposes, not local prejudices, ought to guide, but the general good, resulting from the general reason of the whole. You choose a member indeed; but when you have chosen him, he is not member of Bristol, but he is a
member of parliament. If the local constituent should have an interest, or should form an hasty opinion, evidently opposite to the real good of the rest of the community, the member for that place ought to be as far, as any other, from any endeavour to give it effect.” (Burke 1774)

While Burke is claiming this role as an individual, as Schattschneider famously noted: “[modern democracy is unthinkable save in terms of the parties" (1942, 1). Hurley (1989) similarly identifies parties as a solution to the representational problem. According to Hurley:

Partisan representation is a variant of the notion of collective representation suggested by Weissberg (1978). Collective representation suggests that institutions may represent the mass public more accurately than legislators represent districts. Partisan representation shifts the focus away from how well institutions represent the public or how well legislators represent districts to how well the parties in Congress represent their rank-and-file identifiers. An individual legislator may not be able to represent accurately the opinions of a district that is heterogeneous, but the parties in Congress can and may respond to the distribution of opinion among their identifiers in the electorate. In this way district minorities receive representation (Hurley 1989, 242).

Substantive versus Symbolic Representation

While substantive representation is typically juxtaposed with descriptive representation, as discussed above, for the theory that will follow, I believe that symbolic representation is a better counterpoint. While descriptive representation has the advantage of being familiar to many; descriptive representation is both inaccurate and incomplete as a counterpoint to substantive representation.

Descriptive representation is inaccurately juxtaposed to substantive representation because descriptive representation straddles symbolic and substantive representation. Mentioned previously as the difference between instrumental and intrinsic justifications; descriptive representative is often (it not typically) a means towards substantive
representation. John Adams if often quoted in defense of descriptive representation. He says that a representative assembly “should be in miniature an exact portrait of the people at large.” He continues, however, by saying: “It should think, feel, reason, and act like them” (Adams 1776). The first sentence is a declaration about how a legislature should be constituted; the second is about how the assembly should act. This directly contradicts the symbolic role: “We distinguish practical activity rationally direct toward bring about ‘real’ goals, on the one hand, from expressive, symbolic actions, on the other. It is precisely insofar as the actions of the head of state are merely ceremonial that we consider him a symbol” (Pitkin 1967, 102). The intrinsic aspects of descriptive representation, when insulated from the spillover (or instrumental) aspect, is an entirely symbolic factor. As such, it is a better counterpoint to substantive representation.

Descriptive representation is also incomplete. A symbolic leader calls forth emotional loyalties and identification in his followers, the same irrational and affective elements produced by flags and hymns and marching bands. And, of course, representation seen in this light need have little or nothing to do with accurate reflection of the popular will, or with enacting laws desired by the people (Pitkin 1967, 106).

This role is certainly most often filled by the head of state; an individual whose very existence carries the essence of a nation. Such a position, however, is not limited to the head of state. Symbolic representation exists in all levels of government (as well as beyond government), but there are different assumptions regarding the proper type of symbolism.

Elections, as the process through which certain individuals are selected to rise above others, always convey some form of a merit badge; a provision of honors.
There is no logical reason why elections must be understood as a part of a relationship of accountability or ‘agency.’ A group of people might understand elections as a means of selecting or conferring honor on the best or most distinguished person… the voters have no expectation whatsoever that the elected official has a responsibility to act on behalf of the electorate… The election might be understood simply as a declaration of who in the group most deserves the honor of political authority. As a logical claim this is simply true. Empirically, Mark Kishlansky’s (1986) account of parliamentary elections in early modern England suggests that something like this actually occurred, and Max Weber (1982, 1112-1130) had earlier claimed that premodern elections were about the acclamation and recognition of charisma, rather than the selection of a delegate or agent. Echoes of this view can also be found in the “Michigan model” of elections, which sees votes as affirmations of warm feelings for a candidate (Campbell et al. 1960). (Fearon 1999, 57-58)

While Fearon does not specify why voters may be in a position of selecting representatives for purely non-policy reasons, his connection to the American Voter literature provides some justification to invert our assumption that symbolic voting should be restricted to the head of state (President in this context). Presidential voting is a high information environment which makes it easier for voters to base their decision on policy. State legislative contests, conversely, are elections for which there is considerably less policy discussion. In such a low information environment voters shift away from complicated issue voting (Lupia, 1994; Popkin 1991; Sniderman, Brody, and Tetlock 1991; Kahn and Kenney 1999; Goren 1997; Abramowitz 1995; Westlye 1991; Fiske and Taylor 1991; Simon 1976; Gronke 2000). This will be explored further in the ‘voting behavior’ section and in the ‘theory of substitution’ section.

Direct Democracy

Introduction

The linkage between popular will, and determination of public policy, varies across a wide spectrum. Comparing Hobbes’ Leviathan versus selection by lot in Athenian democracy demonstrates extreme differences in the ordering of politics. In the
time of the founding, Rousseau was the counterbalance to Hobbes. Ironically, both feared intermediary political bodies, but for diametrically opposite reasons. According to Rousseau “The instant a People gives itself Representatives, it ceases to be free; it ceases to be” (1997, 115). Conversely, Hobbes demanded no restraint on the sovereign. So while Rousseau was trying to ban the theatre because passive observation of actors was a surrendering of the audiences’ will to the actors; Hobbes demand complete submission. Not surprisingly, then, Rousseau saw “no tolerable mean between the most austere Democracy and the most complete Hobbism” (Rousseau 1997, 270).

Thomas Paine coined the term representative democracy which became the general basis for the Constitution. Although there were numerous institutional factors to insulate elected officials from the citizenry, the subsequent 200 years saw a slow erosion of these institutions. A key example is the rise of direct democracy in the American states. Citizens developed the ability to recall elected officials, legislative referenda became regularized, and most importantly, in almost half the states, constituents can now use the initiative process to bypass their elected officials to directly establish policy.

Origins

In the beginning the initiative was widely seen as the province of political cranks and irresponsible radicals. Early proponents of the initiative were almost invariably on the far left of the American political spectrum, beyond where either major political party dared or even desired to treat. The first political party to endorse the initiative and referendum was the Socialist Labor party… Direct legislation began as the handmaiden of economic radicalism (Ellis 2002, 26).

As the process was mainstreamed, it quickly spread across states and use quickly jumped. In 1912 Oregon voters found themselves with twenty-eight different pieces of legislation to vote on. Despite this quick surge in use and adoption by states, use began a clear and consistent decline for the next fifty years, bottoming out in the 1960’s.
Although twenty states adopted the initiative before 1920, it was not until usage dropped to minimal levels that more states adopted it. Since use has began to rise after the 1960’s, adoption has again ceased (with the exception of Mississippi, but Mississippi has extensive barriers to usage).

By the 1990’s initiative usage surpassed its previous peak eighty years previous. After a mid-century of decline, the initiative process regained, and strikingly surpassed all previous experience with the initiative. Interest group spending skyrocketed, citizen attention was focused, and even elected officials jumped on the bandwagon. The initiative was back with a vengeance.

Effects

Policy

The quintessential prediction with regard to the initiative process is how it will affect policy outcomes. The original progressive and populist advocates of direct democracy believed that the ability of citizens to bypass their legislature would break legislative dependencies on big business. Either through an initiative, or the threat thereof, policy would have to return to more like what the citizens want.

Studies looking into whether or not the initiative succeeds it making policy more responsive to constituent demand are extensive and conflicted. As the theory of substitution depends upon this convergent effect, this literature is discussed further in chapter six. Chapter seven, however, replicates the work of previous critics of the convergent effect and is able to reverse their findings. With confirmation of previous findings that the initiative does breed convergence, reversal of the findings of the critics, and a new (and larger) study finding convergent effects; I feel comfortable saying that the initiative does act as a ‘gun behind the door.’
Educative

A newer vein of research also returns to classic arguments for the initiative based upon the ‘educative effects,’ or positive externalities. These include changes in the attitudes, behaviors and institutions. Most fundamentally, the initiative has been found to increase turnout (Smith 2001; Lacey 2005; Tolbert, Grummel, and Smith 2001; Tolbert and Smith 2005), interest (Mendelsohn and Cutler 2000), engagement, as well as knowledge (Tolbert, McNeal, and Smith 2003; Smith and Tolbert 2004; Smith 2002). This increased vibrancy within the political environment is also observed through increased citizen interest groups (Boehmke 2002, 2005; Gerber 1999).

Electoral

A small, but quite relevant, set of literature identifies spillover effects between the initiative process and the electoral realm (Nicholson 2005, Campbell and Monson 2008; Smith, DeSantis, and Kassel 2006; Bowler, Segura, and Nicholson 2006). Nicholson (2005) identifies the process through agenda setting: initiative campaigns bring attention and focus concern to a specific issue. This issue, when salient, provides a lens through which candidates are viewed. Pete Wilson, for example, used anti-immigrant and ‘tough on crime’ initiatives to bolster his electoral campaign. Prior to these initiatives, he was not exceptionally popular, and was unlikely to win the election. With these highly salient initiatives, however, voters stepped into the ballot box primed to consider these issues. Immigration and crime are classic splinter issues for Democrats; while Democrats are generally advantaged in California, in these two issues, Republicans are favored. Therefore, voters primed to consider issues advantaging Republicans are quite likely to continue this priming function in the selection of candidates. Whoever determines what the battle is fought over has already won.
This relationship ‘went national’ with the 2004 re-election of George Bush in combination with a series of gay marriage bans (Donovan, Tolbert, and Smith 2008).

It should be noted that while Nicholson (2005) and Smith & Tolbert (2010) find that issues can spillover into the electoral stage, this is not the same as issues, qua issues, becoming more important. As the theory in the next section argues; issues, qua issues, are less important in initiative states. That is compatible with the specific individual issue of the day (Nicholson 2008) affecting vote choice for candidates.

**Theory of Substitution**

Burden indicates that one reason we are not fully able to satisfy our representative demands is because

Voters are only permitted to choose candidates, not policies. A candidate represents a bundle of policies, many of which are inconsistent, not well formed, or unknown to voters. With only two candidates to choose from in most elections, voters will not find a candidate with whom they agree on every issue…The ballot is just too crude an instrument to send finely tuned messages on desired policies (Burden 2007, 6).

What happens, then, when voters do not have to select candidates as a bundle? What happens when voters simultaneously select representatives and public policy on the same ballot? The theory of substitution posits that the ability to bypass the legislature to directly select public policy radically alters the representational relationship.

First, issue voting among the citizenry decreases. Fearon’s hypothetical situation in which voters select candidates with complete disregard for any policy implications was only a thought experiment. With direct, as opposed to representative democracy, we can see a basis for Fearon’s hypothetical situation. By taking the reins of the policy-making process from legislators, by bypassing their legislatures, voters need not invest the time and energy in issue voting for candidates. Instead, voters ought to be more sensitive to the symbolic, or non-policy, characteristics of candidates.
This different selection criterion theoretically begins a series of effects. Candidates respond to the change in demand by collectively altering the supply: if voters demand candidates for greater non-policy characteristics, candidates will return in kind. Candidates with the demanded characteristics will be more likely to run for office, competitive campaigns will filter those not meeting the demands, and incumbents will alter their behavior to meet these demands.

The changes in characteristics are varied but simple. Within the set of all possible factors affecting voting behavior, those based upon policy, or acting only as a cue for policy, will become less important. Those factors not based on policy will become more important.

Second, the policies implemented by the legislature will change. The initiative process allows voter to bypass the legislature to directly select policy. This ability, the ‘gun behind the door,’ induces the legislature to set policy in line with constituent demand. It is this realignment of policy, which is independent of the genuine policy positions of the legislators, that frees voters from the need to engage in issue voting. Therefore, the theory of substitution demands evidence that the initiative process does act as the ‘gun behind the door.’ Although the relevant literature will be disused later, this requirement, that the initiative breeds more responsive policy is far from uncontested.

While the theory of substitution posits a fairly radical change in the political structure of initiative states, a re-orientation not considered in academic literature, there hints of these effects in the popular press. According to David Frohnayer, former president of the University of Oregon as well as former state attorney general, “initiative ballots totally overshadow legislative elections, [they] usurp the role of the legislature and governor in managing the ledger of state government. It especially diminishes the role of the legislature as the central instrument of government” (reported in: Broder 2000,
Similarly, Hans Linde, a former Oregon Supreme Court Justice claims that “when legislators are relatively anonymous and term-limited, they cannot display any leadership profile of their own. In states like ours, the major policy changes are now made by initiative. The only thing left for the legislature are the marginal adjustments that are of more interest to the lobbyists than to the citizens” (reported in: Broder 2000, 204).

Placing this usurpation, or circumvention, in the broader context of state politics indicates that the theory of substitution provides a third type of effects of the initiative. Direct democracy entails superior policy responsiveness, has positive externalities, but also alters how voters consider candidates.

**Preview**

The goal of this dissertation is to tie the diverse, but inter-related, changes from the initiative together. Fundamentally, the ability to bypass the legislature alters the calculus voters use in the selection of their representatives. The role of the representatives changes from a policy-making delegate in pursuit of substantive representation to a symbolic role.

Chapter two presents a formal theoretic model of the theory of substitution and lays out multiple avenues for empirical tests. The model predicts that the initiative entails substitution in voting behavior from pursuit of substantive representation (issue voting) to pursuit of symbolic representation. This diminished concern for policy is balanced by greater concern for such symbolic characteristics as the honesty and integrity of candidates, what the candidate looks like, or what the candidate has done for the voter outside of the legislative arena.

Chapter three is the first empirical test. Given the prediction of increased voter concern for the integrity of candidates, this chapter tests the proclivity toward political corruption. Theoretically, the initiative ought to decrease the number of convictions for
political corruption. The data is political corruption convictions as prosecuted by the Federal Government. This provides an exogenous, and uniform, measure of corruption in the American States.

In chapter four I test for voting effects with regard to the facial characteristics of candidates. The appearance of a candidate can be evaluated as an intrinsic preference or as a cue for behavior in office. The expectation is that voters in initiative states exhibit greater sensitivity to candidates’ personal attractiveness (a symbolic, or non-policy factor), but diminished concern for how competent candidates look (a policy cue). This data comes from experimental ratings of real candidate pictures.

In chapter five I seek to explain multiple puzzles in the literature. First, Boehmke et al. (N.D.) find that states with the initiative elect significantly more women to office. This finding, robust to a strenuous series of controls, is difficult to explain. A diverse set of literature, however, makes it clear that the dominant reason that women are under-represented in public office is due to actual, or perceived, differences in their representational style. Certain attributes of women are appreciated by constituents. Women are considered more honest and trustworthy, and do a better job communicating with their constituencies. Voters, however, view men as better policy-makers. Female candidates, whether as a function of gender differences or to cope with societal bias, are more likely to spend time on constituent servicing, and are half as likely as men to consider themselves delegates. Through bias as well as behavior, women exhibit attributes that are more likely to succeed in an environment de-emphasizes the policy-making process. The success of women in initiative states, therefore, provides evidence for the theory of substitution. Similarly an unexplained puzzle by Lau et al. (2009) indicates significantly diminished ‘correct’ voting, or the ability to select candidates with policy-profiles most similar to the voter, in initiative states. This is a direct implication of
the theory: voters are not selecting candidates for their policy positions by virtue of the fact they can bypass the legislature. Lastly, Bali and Davis (2005) find that economic voting (a form of policy voting) is diminished, and that incumbents have higher re-election rates. Incumbents are advantaged in non-policy ways (constituent services, name recognition, and campaign skill) and even slightly disadvantaged in the policy realm (a constraining policy record). Diminishing the importance of policy thereby is expected to increase the incumbency advantage; just as found by Bali and Davis.

In the last two chapters I demonstrate that the initiative leads to better policy representation. As this is a highly contested claim, chapter six lays out a new approach to measuring representation. I demonstrate that representation should not be measured by changes in the mean policy outcomes, but should instead be a convergence toward the observed mean. I.e. it is the variance of the conditional mean that demonstrates the level of policy responsiveness. This approach is applied to a series of previous authors’ data that finds no increase in representation due to the initiative. In addition to reversing those findings, I demonstrate greater responsiveness with a new dataset spanning more than thirty years.
CHAPTER 2: A MODEL OF REPRESENTATIONAL SUBSTITUTION

Introduction
The founders of the American political established a political system that balanced democratic instincts against democratic fears. The sovereignty of the citizenry was countered with a heavy dose of institutional insulation: the Electoral College, indirect election of Senators and presidential nomination of Supreme Court members. While these original institutions were designed to insulate law-makers from their constituents, in the last hundred years, there has been a growing belief that there ought to be a stronger connection between citizens and their officials.

This was a driving force behind both the Populist and Progressive movements of the early twentieth century. Through direct democracy, members of these movements sought to put policy-making power directly in the hands of the citizenry. The Populist movement pursued direct democracy as a means to supplant state legislatures, while the Progressive movement sought only to influence, or even support, sitting legislatures. While direct democracy comes in many forms, the initiative process uniquely allows constituents to bypass their elected officials and directly establish public policy. In the twenty-four states that have this process, use of the initiative has increased drastically in the past two decades. This growing use should theoretically empower the “vox populi”, through inducing greater legislative responsiveness to constituent demands.

Empirical examinations of this question, while not perfect, largely confirm the belief that policy is more responsive when the initiative is available to voters (Gerber 1996, 1999, Arceneaux 2002, and Hug 2001, 2004, Matsusaka 2004). This is, however,
far from universal (Lascher et. al 1996 and Camobreco 1998 find null results, while Burden 2005 finds mixed results depending on policy area).

This chapter returns to the underlying process through which the initiative is meant to make legislatures more responsive. I demonstrate that an unanticipated effect of the initiative is a change in voting behavior: voters respond to their ability to directly affect policy by shifting their considerations in the voting booth away from candidates’ policy positions and towards the quality of candidates. As voters seek candidates that represent their policy positions as well as exhibit high-quality personal characteristics, an exogenous satisfaction of policy demands allows substitution toward personal qualities in voting behavior.

In the following sections I first review a canonical model of the initiative & policy convergence (Romer & Rosenthal 1979, Gerber 1996), present an extension of the model in which legislators are still candidates and the median voter is selecting their legislature, and then I discuss the potential empirical implications of the model.

**Legislative Response to the Threat of Popular Initiatives**

Gerber’s 1996 model acts as the baseline of legislative behavior in the face of the initiative process. Like Romer and Rosenthal (1979), Gerber posits that the initiative allows interest groups to directly compete with state legislatures for policy outcomes. Without the initiative, a legislature faces only the generic constraint of electoral prospects to induce them to pass the policies preferred by the median voter. In the presence of the initiative process, a legislature anticipates an interest group’s initiative proposal and passes policies to pre-empt that initiative. When the initiative does change the outcome of
policy, this policy is always better for the median voter and the proposing interest group, but worse for the legislature.

The model has three actors: the Legislature (L), Proposers (P) of initiatives, and the Median Voter (V) of a state.\(^2\) The legislature is a unitary actor with an ideal policy determined by its own internal preference aggregation function, which may or may not be the median voter of the legislature. The proposer of initiatives is an interest group; some organized entity with policy preferences able to expend the time and energy needed to propose and push an initiative to fruition.

Each actor has an ideal policy, but only the proposer has a potential cost to their action. If the proposer chooses not to accept the legislature’s proposal at L*, and instead proposes an initiative, they must pay the costs (C) associated with their counter proposal of l*. Such costs predictably vary by state: the number of signatures required to put an initiative on the ballot, geography requirements for signatures, the timeframe in which this process must be completed, or the types of initiatives permitted (Bowler and Donovan 2004).

So while the monetary costs of the initiative process can be high, this form of cost should have little effect on the number of initiatives, or the degree to which the initiative process is incorporated into a states politics. The baseline monetary cost, independent of institutional design, will vary across states with the size of the state and cost of living, but the availability of cash (through the number of people, and the dollar per person) would

\(^2\) There is a key to the model parameters in the Table 2.1.
similarly vary. So although it may cost two million dollars to collect a sufficient number of signatures in California, this amount is a function of the amount of people the policy affects and the availability of cash in California. The type of variation that matters is the institutional barriers that make it increasingly difficult to put an initiative on the ballot in certain states.

The sequence of action is as follows: the legislature selects a policy $L^*$, the proposer decides whether or not to propose an initiative, and where the policy of that initiative should be located ($l^*$). If $P$ does propose an initiative, then the median voter either votes for the initiative at $l^*$ or accepts the legislature’s policy ($L^*$). The legislature anticipates the outcome of this process, and sets $L^*$ at a point that is best for themselves given the predictable actions of the other actors. This process forms the basis of the equilibrium concept used herein: sub-game perfect equilibrium. Each actor determines their optimum strategy assuming that all following actors will do the same. Optimal actions, then, are derived through backward induction. This begins at the last of the four nodes: the decision calculus of the voter.

The decision on the part of the voter is trivial: they select whichever of $L^*$ or $l^*$ that is closer to their ideal policy. The proposer faces a more complicated decision following from two factors. First, the proposed initiative must result in a utility greater than $L^*$ after the cost of the process is taken into account. Second, this proposed initiative must be preferred by voters over the legislature’s policy. The options available to the proposer are the result of the preference ordering among the three actors; the key factor is which actor’s ideal point is central relative to the others. Intuitively, with three actors
competing to bring policy closer to their ideal, the two extreme actors are competing with one another to provide the best option for the central actor. The structure of this competition, then, privileges the central actor.

Consider the outcome when the legislature is the middle actor. If the legislature enacts their ideal policy, the proposer has no valid response given that any initiative must be preferred by the median voter. In this case, when the legislature’s ideal point is between the median voter and the proposer, an initiative preferred by the median voter over the legislature’s policy would be even worse for the proposer than accepting the legislature’s ideal point. This preference ordering leaves the legislature unconstrained, and therefore the initiative has no effect.

Second, when the proposer is the ideological centrist, the resulting policy outcome is somewhere between the legislature and the proposer’s ideal point. If there is no cost to proposing the initiative, the proposer would be able to successfully propose their own ideal point, and therefore the legislature’s best option is to avoid the rebuke of the initiative by setting $L^*$ to $l^*$. If, however, the initiative is costly, the legislature can extract concessions from the proposer. When the cost of the initiative is greater than the difference in the proposer’s utility from $L^*$ and $l^*$, then the legislature can enact their own ideal point. Although any policy position proposed by P would be selected by the median voter, the high cost of the initiative would outweigh any gain. If, however, the cost of the initiative is less than the difference in the proposer’s utility from $L^*$ and their ideal point, the legislature must anticipate and pre-empt a credible threat from P to propose an initiative at P’s ideal point. In this case, the legislature only needs to change its policy
enough to make the proposer indifferent between the legislature’s policy and the cost it would take to move that policy to the proposer’s ideal point. Therefore, with a moderate proposer, policy will remain at the legislature’s ideal point when the cost to the initiative is sufficiently high, but will converge toward the proposer’s ideal point as that cost decreases.

The last arrangement is when the median voter’s ideal policy is central relative to the legislature and the proposer. With a costless initiative, the legislature must set policy directly at the median voter’s ideal point. To do otherwise would allow P to propose an initiative somewhere between V and P. As the cost of the initiative increases, the legislature is able to take advantage of this by keeping the implemented policy closer to its ideal point.

All together, the result is that the presence of the initiative process brings policy closer to the position of the median voter with two exceptions: when the only interest group able to propose an initiative is on the other side of the legislature compared to the median voter (centrist legislature), or when a proposer faces a cost sufficiently high that they would prefer to accept the legislature’s ideal point. In all other cases, the initiative makes policy more similar to what the median voter and the proposing interest group would like, but to the detriment of the legislature.
Legislators as Candidates: the extension
My extension to the model considers the effects of the initiative on the initial selection stage when the legislator\(^3\) is still a candidate. Given that initiative provides an avenue to circumvent the legislature in the policy-making process, the characteristics demanded of candidates ought to be different. In the extreme, in which the initiative has made the legislature’s policy-making ability superfluous, it would not be reasonable to maintain the belief that voters are selecting candidates for their policy positions. This model permits substitution of personal characteristics in place of policy positioning for candidates. Therefore, the first additional element stemming from incorporation of a selection stage is the quality of the candidate. As discussed in the introduction, the quality of a candidate goes by many names, but what is both relevant and important is that these quality factors are not a function of the policy position of the candidate.

The second change with the incorporation of the campaign (selection stage) is imperfect information. Unlike the later policy competition stage in which policy positions are actually established in the legislature, or put on an actual ballot by the proposer, candidates’ claims of their policy positions or quality levels are far from perfect revelations. These claims by candidates indicating future behavior are cheap talk with a questionable relation to actual behavior in the future. While the policy sub-game’s

\(^3\) Gerber’s model is about the legislature which behaves like a unitary actor. Carrying this unitary actor assumption into the selection stage is akin to considering the legislature a solitary actor; i.e. a single person instead of the result of an aggregation process. Conversely, this model could be considered being carried out in multiple identical districts.
assumption of perfect information is justified in those later stages of policy making\textsuperscript{4}, this assumption is not tenable with regard to candidate selection. Instead, voters are likely to only have a vague sense of candidates’ genuine policy positions and personal qualities. This is certainly true given that these state legislative elections are low information environments to begin with.

Given this imperfect information, the median voter is modeled as having two actions. First, they choose a “research strategy” in which they choose to observe either a candidate’s actual policy position or a candidate’s actual quality. Second, they select the candidate that is preferred given the information they now possess and the anticipated convergent effect of the initiative process.

The result is three additional actions preceding the initiative sub-game discussed previously: nature provides candidates with certain policy positions and quality levels, the median voter chooses which characteristic they will observe, and then the median voter selects a candidate. Figure two is the extensive game form. The equilibrium concept is sub-game perfect Nash, and so the following section will determine the equilibrium behavior through backward induction outlining the actions and utilities in reverse order.

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\textsuperscript{4} It may be argued that voters also have imperfect information about the interest group just as they have imperfect information about candidates. There are two reasons this is not the case. First, interest groups do not have the incentives to misrepresent their position. Misrepresenting their position is certainly possible, but there is no singular focus like the Median Voter that they must capture. Second, the model is largely robust to minor changes in the position of the interest group. The exact position of the interest group affects the exact amount of the convergent effect, but this position can vary widely and the convergent effect will still be present. It is the position ordering that matters and this is unlikely to change without large changes in the position of the interest group.
Of some note is that this model presumes there is always a potential initiative-proposing interest group on the opposite side of the political spectrum as the legislature. In other words, wherever the legislature and median voter are located, there is always at least one interest group that makes the median voter the central actor. At most, this assumes one extreme interest group on both sides of the spectrum. As the effect of the initiative process is uni-directional, meaning that it either has no effect or makes policy better for the median voter, violation of this assumption only diminishes, and never reverses, the conclusions below.

The first action is the selection of the policy positions and level of quality (valence) of the two candidates. The level of the candidates’ quality and their policy positions are both randomly drawn from a uniform distribution. Quality ranges between zero and one, but the policy positions range from negative one to positive one. The leftist candidate is bounded between negative one and zero, and the right candidate is bounded between zero and positive one. The distance between the median voter (at zero) and the two candidates, then, functionally follows the same distribution as quality.

Once nature determines the policy position and level of quality of the candidates, the voter determines which of these characteristics they observe. Upon observation of these characteristics, the voter selects the better of the two candidates, and that candidate becomes the legislature. The policy position of the candidate therefore becomes the policy position of the legislature, and this position is the starting point for the game between the legislature and the interest group.
Given that quality and policy are drawn from the same distribution and are equally weighted, without the initiative, this model posits that voters are indifferent between these two factors. With the introduction of the initiative, however, the game between the legislature and the interest group will eliminate extremely bad policies but will not affect the personal characteristics (quality/valence) of the legislators. Therefore, this model will demonstrate that the elimination of bad policies will make the selection of high quality candidates a comparatively better approach to voting than the selection of candidates for their policy positions.

**Backwards Induction**

Stage 7: Median Voter’s Policy Choice

The last stage of the game presents the Median Voter with the choice between the legislature’s proposed policy of \( L^* \) or the interest group’s proposal of \( l^* \). While the Median Voter’s choice is a simple selection of the closest policy, this selection acts as a critical constraint to the possible policy positions available to the legislature and the interest group. Without loss of generalization I center the policy space on the median voter at zero. This simplifies the mathematics. In this stage, this normalization means that the Median Voter simply selects the policy with the lowest absolute value.

\[
\text{Stage 7: Outcome policy} = \min\{|L^*|, |l^*|\}
\]

Depending on how these assumptions are relaxed, the baseline proclivity toward issue or symbolic voting will change, but the comparative static remains the same. Only an elimination of the concern for non-policy factors would eliminate the results of this model, and no variation of these assumptions will reverse the model.
Stage 6: Interest Group’s Policy Proposal Position
The interest group will set $l^*$ as close to their ideal point as possible subject to the constraint imposed by stage 7. This constraint, $|l^*| < |L^*|$, entails that $l^*$ will exactly reflect the Legislature’s policy distance from the Median Voter on the other side of the Median Voter. This is the interest group minimizing the distance from their ideal point subject to that position being closer to the median voter than that of the Legislature’s policy. This position, $V + (V - L^*)$, reverts to a simple $-L^*$ in a policy space normalized such that $V=0$, i.e. it is the reflection of the legislature’s policy on the other side of the median voter. The distance between $l^*$ and $L^*$ is $2|L^*|$. 

Stage 6: $l^* = -L^*$

Stage 5: Interest Group Decides to Propose Initiative or Not
The ideal position for the interest group to propose an initiative is only acted upon if that positioning increases the interest group’s utility when the cost of the initiative is considered. That is, the utility gain to the interest group by getting $l^*$, instead of settling with $L^*$, must sufficiently compensate for the cost of proposing the initiative ($C$). As illustrated in Figure 3, this utility gain is $2|L^*|$. Therefore, when $C > 2|L^*|$, or cost is greater than gain, the interest group would expend more by pursuing the initiative than they would gain by achieving it.

Stage 5: Propose Initiative IFF $C < 2|L^*|$

---

6 This position makes the Median Voter indifferent between the two proposals. Ties go to the last one to set the policy position.
Stage 4: Legislature Sets Policy

Ignoring the consideration of cost, the Legislature is in a very straight-forward competition with the Interest Group to propose a policy favored by the Median Voter. With a costless initiative, the only sub-game perfect equilibrium outcome is perfect convergence to the position of the Median Voter ($L^* = V = 0$). Any other proposal by the Legislature would allow the Interest Group to invert that position and select $-L^*$ which would make the Legislature worse off by the amount $2|L^*|$. Inclusion of the cost of the initiative, however, provides room for the Legislature to consume their advantage of moving first. The Legislature’s optimal action is to pre-empt an initiative by setting $L^*$ so that $2|L^*| = C$. This position, $-.5C$, is the indifference point for the Interest Group when deciding between proposing an initiative and accepting $L^*$. This position keeps policy as close to the Legislature’s ideal point while simultaneously pre-empting a counter proposal by the Interest Group.

**Stage 4: $L^* = -.5C$**

Stage 3: Voter Selects Candidate Type

At this stage the Median Voter has already chosen to observe either the candidates’ policy positions or their quality levels. Therefore, there are two separate choices:

1. Having observed the candidates’ policy positions, the Median Voter can select the more moderate or more extreme candidate.
2. Having observed the candidates’ quality, the Median Voter can select the higher-quality or the lower-quality candidate.
For the latter choice, the dominant action is trivial. Since the quality level has no effect on the rest of the game tree and is uncorrelated to the policy position, there are no strategic elements to the choice: the Median Voter’s selection of the high-quality candidate is strictly\(^7\) preferred over selection of the low-quality candidate. Since quality acts as a simple additive term to the voters’ utility, to select the low-quality candidate is nothing but a direct loss in utility.

With regard to policy selection, however, a strategic choice to select an extreme legislature in order to spur an initiative closer to the Median Voter seems plausible, but is inaccurate. An extreme legislature only uniquely spurs an initiative if that extreme legislature was more extreme then \(|.5C|\) and the moderate legislature was not. In that case, it is only the extreme legislature that spurs an initiative, but the moderate legislature would be better for the median voter by virtue of being less than \(|.5C|\). Conversely, when both possible legislatures are more extreme than \(|.5C|\), then the median voter would be indifferent between the two candidates. Therefore, the choice of the moderate legislature is weakly preferred. Legislatures with ideal points more extreme than \(|.5C|\), will be induced to select their policy at that critical value of \(|.5C|\). If, however, by selecting the moderate candidate the Median Voter can get a legislature with an ideal point less than \(|.5C|\), then the Legislature will propose their genuine ideal point as \(L^*\), the Interest Group will forgo proposing an alternative, and the Median Voter will be better off. As such,

\[^7\text{A continuous distribution of quality levels makes the probability of a tie zero, but we can similarly presume that in the case of a tie, the voter votes randomly among these candidates that they are unable to make distinctions about.}\]
selection of a moderate Legislature either has no effect (when both candidates are more extreme than -.5C) or makes the Median Voter better off (when at least one of the candidates is more moderate than .5C).

The following table lays out the possible choices, how those choices translate into utility, and what the outcome utility will be given those choices. In the case that policy is observed (first two columns), the voter has the secondary choice to either select the extreme or moderate candidate. Similarly, when quality is observed (last two columns) the voter has the secondary choice to select the low quality candidate or the high quality candidate. The utility resulting from these choices are given in the first two rows, and summed in the last row.

The utility of selecting the extreme candidate, then, is to maximize the policy divergence that is possible given the position of the candidates. The utility of policy divergence is maximized at zero (the median voter prefers the candidates with a policy position of zero and receives decreased utility for every step of divergence), and so utility is a decreasing (negative) function of policy. The selection of the extreme candidate is the selection of the maximum of two uniformly distributed positions, while the selection of the moderate candidate is the selection of the minimum of the two possible positions. The utility function for policy is negative, and the selection process determines if the voter receives maximal or a minimal policy divergence.

Given that a voter has chosen to observe policy, their expected utility from the quality of the candidates does not have the maximum or minimum operator. They are left with the simple expected value from a uniform distribution. Conversely, then, when the
voter observes quality, the voter can maximize their utility through the selection of the high quality candidate, or minimize utility with the low quality candidate. The selection of the quality of the candidate does not affect the policy outcome.

The arrows below the table indicate which action will be taken. In this case, that decision is after the decision of observing policy or quality, and so the decision is only about extreme versus moderate candidates, and separately, low versus high quality candidates. Proofs of the calculations are in the appendix.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>-MAX{</td>
<td>P_D</td>
</tr>
<tr>
<td>-2/3 + 1/2 &lt; -1/3 + 1/2</td>
<td>-1/2 + 1/3 &lt; -1/2 + 2/3</td>
</tr>
<tr>
<td>-2/3 &lt; -1/3</td>
<td>1/3 &lt; 2/3</td>
</tr>
</tbody>
</table>

If |P_D| = |P_R| or Q_D = Q_R then the Median Voter is indifferent between the extreme versus moderate candidate or low-quality versus high quality candidate. With a continuous probability space this occurs with probability zero, but I will say they randomize equally between the two choices. Therefore, without the initiative, selection of the moderate or high quality candidate is weakly preferred. In expectation (proofs are in the appendix), the difference is quite clear.

<table>
<thead>
<tr>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>-MIN{.5C, (MAX{</td>
</tr>
<tr>
<td>-MIN{.5C, (MAX{</td>
</tr>
</tbody>
</table>

The Median Voter is indifferent between selecting the extreme or moderate candidate when .5C < MIN{|P_D|, |P_R|}, i.e. both candidates are more extreme than the
most extreme policy position possible given the presence of the initiative process. Note that this occurrence becomes increasingly likely as the cost of the initiative converges to zero. This exemplifies the general theory: as the initiative becomes costless, legislative policy-making becomes irrelevant. When one or more candidate is less extreme than the initiative-induced policy position, utility is maximized by selecting that candidate. Overall, selection of the moderate candidate is only weakly preferred in the presence of the initiative because the initiative establishes a ‘zone of safety’ in which extreme policies are transformed into moderate policies. Given this (possibly large) area in which policy outcome is the same, the importance of selecting moderate candidates is diminished.

**Quality**

\[-\text{MIN}\{.5C, \ E(|P_W|)\} + \text{MIN}\{Q_D, Q_R\} < -\text{MIN}\{.5C, \ E(|P_W|)\} + \text{MAX}\{Q_D, Q_R\} + 1/3 < 2/3\]

If \(Q_D = Q_R\) then the Median Voter is indifferent. Although this occurs with probability zero, selection of the high quality candidate is weakly preferred. In expectation, it is strictly better to select the high quality versus low quality candidate given that quality was observed.

**Stage 3: Median Voter Votes for the Moderate or High-Quality Candidate**

(indifferent to policy positions when both candidates are more extreme than .5C and the initiative is present)
Stage 2: Voter Selects Candidate Characteristic to Observe
Without the initiative process facilitating ex-post amendments to the policy positions of elected officials, the decision of which characteristic the Median Voter selects to be revealed is a function of the Median Voter’s differential valuation and expected values of the candidates’ quality & policy position. With equality in expected positions and valuation of quality & policy (as is the baseline model presented herein) the Median Voter in a non-initiative state would be indifferent between observing quality or policy. With the initiative, however, this model predicts that the ex-post circumvention of legislators for policy-making entails ex-ante substitution of observing policy for observing quality. The initiative offers an avenue to affect policy after the election that is missing for the quality element of candidates. Upon election, the voters are stuck with whatever qualities are present in the winning candidate. With policy, on the other hand, the policy position of the winning candidate does not simply become the outcome policy position. With the ability to enact policy outside of the legislative arena, the Median Voter has greater tolerance for candidates with extreme policies since those policies are functionally amended after the election.

**Observing Policy vs. Observing Quality without the initiative**

\[-\min\{|P_D|, |P_R|\} + E(Q_W) = -E(|P_W|) + \max\{Q_D, Q_R\}\]

\[-\frac{1}{3} + \frac{1}{2} = -\frac{1}{2} + \frac{2}{3}\]

\[1 = 1\]

Without the initiative, the Median Voter is indifferent between observing policy positions or quality levels.
This is not the case in the presence of the initiative. The differential element is illustrated in figure AA. This graph shows the utility to the Median Voter (vertical axis) as a function of quality (dashed line), policy without the initiative (blue line), and policy with the initiative (red line). As quality (dashed line) and policy without the initiative (blue line) track each other exactly, the Median Voter is indifferent towards the two. In initiative states, the area between the red line and dashed line indicates the difference in expected utility between observing quality and policy. As the initiative becomes more costly, and the critical value at which an initiative limits the extremity of policy becomes greater, the red line converges with the blue line. This makes intuitive sense: as the initiative becomes excessively costly, the actors in that state will behave more like they are in a state without the initiative entirely.

**Observing Policy vs. Observing Quality**

\[-\text{MIN}\{.5C, |P_D|, |P_R|\} + E(Q_W) \leq -\text{MIN}\{.5C, E(|P_W|)\} + \text{MAX}\{Q_D, Q_R\}\]

\[-\text{MIN}\{.5C, |P_D|, |P_R|\} + 1/2 \leq -\text{MIN}\{.5C, E(|P_W|)\} + 2/3\]

\[-\frac{c}{2} + \frac{c^2}{4} - \frac{c^3}{24} + \frac{1}{2} \leq -\frac{c}{2} + \frac{c^2}{8} + \frac{2}{3}\]

\[-\frac{c^2}{8} - \frac{c^3}{24} \leq \frac{1}{6}\]

As the above inequality is not obvious, Figure 3.4 graphs the function. Observing policy is always results in worse outcomes except for when the cost of the initiative is maximized (at two) which is akin to the initiative not being available.

This inequality is the fundamental finding of the model. The initiative provides protection from policy divergence, and voters can increase their utility by relying on that
protection and choosing to observe candidate quality instead of policy. This differential gain of substitution toward quality is moderated by the cost of the initiative. In the presence of the initiative it is always better to observe quality, with the single exception of when the cost of the initiative is at its maximum. In that case, which is equivalent to non-initiative states, voters are indifferent.

Stage 2: Median Voter Observes Quality in Initiative State (is indifferent in non-initiative states)

Stage 1: Nature Selects Candidate Policy Positions & Quality

For simplicity, I model the policy positions of candidates and their quality levels as being equally likely to exist at every value. While using a uniform distribution makes the utility representations straightforward, the results do not depend upon this modeling choice. To replace the uniform distribution with a normal distribution around the Median Voter (as imperfect Downsian convergence or an Achen (1977) selection model would predict) would simply reduce the probability that an unobserved candidate’s policy was beyond the critical value in which the initiative matters. This reduction of the difference in expected utility does not alter the comparative static, however. In an initiative state, selecting to observe quality still weakly dominates revealing policy positions. If, conversely, policy convergence toward the median from extremist parties is a costly act; and policy positions are therefore more likely to be extremist, observing quality instead of policy is still simply weakly preferred, but the probability that the median voter is indifferent would diminish.
**Review of Equilibrium Behavior**

The preceding stages demonstrated that the sub-game perfect Nash equilibrium in an initiative state is the following.

1. Voter observes the quality (valence) of the candidates.
2. Voter selects the high quality candidate.
3. The selected candidate, now the legislature, sets a policy less extreme than |.5C|
4. The interest group does not propose an initiative.

In a state without the initiative:

1. Voter is indifferent between observing the quality or policy position of the candidates.
2. Having observed quality or policy, the voter selects the high quality or more moderate of the candidates.
3. The selected candidate, now the legislature, sets policy at its ideal policy point as determined by nature.

**Model Conclusion**

The fundamental proposition of the model stems from the difference in expected utility between initiative states and non-initiative states for observing a candidate’s policy position or their quality. As the initiative establishes a boundary for utility loss stemming from policy divergence; a boundary that is absent with regard to the personal characteristics of legislators (quality), *voters in initiative states ought to research the quality of their candidates instead of their policy positions*. This proposition (from stage 2) is followed by the weakly preferred choice to select the high-quality candidate (stage 3). Together, these establish the basis for a corollary finding: *legislators in initiative states are of better quality than their non-initiative state counterparts.*
The proof of this is straightforward. In non-initiative states the median voter is indifferent between observing policy or quality (stage 2), and when they observe quality they will select the high-quality candidate (stage 5). In initiative states, however, the equilibrium behavior is for the median voter to always observe quality and then proceed to select the high quality candidate. Consistently selecting the high-quality candidate results in higher quality candidates than the expected value resulting from mixing between the high-quality candidate and the unknown quality candidate.

Precisely, the median voter in the non-initiative states is indifferent between observing quality and accepting an unknown quality (but moderate) candidate. Their expected value for quality is the high-quality candidate half the time, and the unknown quality candidate the other half of the time. In the initiative state, however, they are expected to observe and select the high-quality candidate with probability one.

\[
\frac{1}{2}(\text{MAX}\{V_D, V_R\}) + \frac{1}{2}(\text{E}(V_W)) < \text{MAX}\{V_D, V_R\}
\]

\[
\frac{1}{2}(\text{E}(V_W)) < \frac{1}{2}(\text{MAX}\{V_D, V_R\})
\]

\[
\text{E}(V_W) < \text{MAX}\{V_D, V_R\}
\]

**Empirical Implications and Conclusion**

At its core, this theory is quite simple: voters have two sets of considerations when voting for candidates (policy & quality); and exogenous satisfaction of policy diminishes the need to expend the opportunity costs to satisfy their policy demands in the selection stage. This entails two different categories of hypotheses: voting behavior (hypothesis one) and legislator characteristics (hypothesis two).
Hypothesis one: Voters in initiative states will base their votes more heavily upon the quality of candidates relative to the policy positions of the candidates.

Hypothesis two: Legislators in initiative states are of better quality.

Hypothesis three: The initiative process makes policy output more representative of constituent demand.

While the design of our political institutional arrangements is vital to translate underlying normative conceptions of democracy into practice, the analyses of the effects of these institutions are often not straightforward. While the extant literature on the initiative has looked at numerous different effects, there is often little agreement. This lack of agreement is likely the result of the seemingly incoherent effects that institutional change can create. To change the ‘rules of the game’ is to initiate a complex set of reactions. This dissertation grapples with this by returning to the basic questions: What is the role of the representative? Why do voters vote? What does the initiative do? When those basic questions and answers are formalized into one mathematical model, the seemingly chaotic effects are brought under rein.

In this case, full examination of the process requires analyses of how the institutional process affects competition between interest groups and legislatures over public policy. The context that interest groups operate within, however, is affected by voters balancing their demands for substantive and descriptive-symbolic representation. While the empirical analysis of this substitution is just beginning, the effects are as surprising as they are diverse.8 Unexpected and diverse findings both lead credence to a causal interpretation.

---

8 Unexpected and diverse findings both lead credence to a causal interpretation.
and “correct voting” are explained; seemingly unrelated findings by other scholars on
descriptive representation contribute additional empirical evidence, and novel studies on
the facial characteristics and corruption add further confirmatory evidence. All together,
this package of diverse findings and methods provides credible evidence that the
initiative provides an institutional impetus for substitution away from substantive
representation to symbolic and descriptive representation.

Such a finding provides a new explanation for previous assumptions. Voting
based upon “thin-slice” judgment of candidates is typically viewed as the lowest form of
voting; a function of lack of education, awareness, or sophistication. In this case, the
selection of candidates for their non-policy, and therefore putatively unimportant,
characteristics is sensitive to the process through which policy is determined. Therefore,
behavior previously relegated to the residual categories of analysis, barely considered
worth of analysis, is shown to be a function of the most fundamental processes to the
political order.

This similarly speaks more broadly to our collective considerations of the
American voter. Whereas it can be easy to dismiss this form of behavior, a charitable
approach⁹ to the analysis of the American voter is shown to provide a more rich and
accurate model.

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⁹ Almost always a good idea.
Lastly, while symbolic representation such as facial characteristics may not seem important, as the next chapter demonstrates, this class of characteristics bridges the mundane as well as the important.
Table 2-1 Model Key

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Range</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>Legislature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>Proposer (Interest Group)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Voter (median)</td>
<td>0 = ideal point</td>
<td>Normalized to zero</td>
</tr>
<tr>
<td>L*</td>
<td>Policy of the Legislature</td>
<td>[-1,0]</td>
<td></td>
</tr>
<tr>
<td>P*</td>
<td>Policy of the Proposer</td>
<td>[0,1]</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Cost to the Proposer of proposing an initiative</td>
<td>[0,2]</td>
<td>Signature/geography requirements to get on ballot; timeframe restrictions</td>
</tr>
<tr>
<td>P_D, P_R, P_W</td>
<td>Policy or Quality of the Democrat, Republican, or Winner</td>
<td>~U(-1,0)</td>
<td>D &amp; R are arbitrary labels, Winner implies coin toss between the two</td>
</tr>
</tbody>
</table>
Table 2-2 Chapter List of Empirical Implications

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Empirics</th>
<th>Description</th>
<th>Representation</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 2: Characteristics</td>
<td>Political Corruption</td>
<td>Convictions</td>
<td>Symbolic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Descriptive Rep</td>
<td>Gender</td>
<td>Descriptive</td>
<td>5</td>
</tr>
<tr>
<td>Hypothesis 1: Behavior</td>
<td>Attractiveness</td>
<td>Facial Characteristics</td>
<td>Symbolic</td>
<td>4</td>
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<td></td>
<td>Competence</td>
<td>Substantive</td>
<td>4</td>
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<td></td>
<td>Economic Voting</td>
<td>Re-election Factors</td>
<td>Substantive</td>
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<tr>
<td></td>
<td>Voting Correctly</td>
<td>Voting Congruence</td>
<td>Substantive</td>
<td>5</td>
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<td>Hypothesis 3: Policy</td>
<td>Public Opinion &amp; Public Policy</td>
<td>Measurement</td>
<td>Substantive</td>
<td>6</td>
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<tr>
<td></td>
<td></td>
<td>Policy Congruence</td>
<td>Substantive</td>
<td>7</td>
</tr>
</tbody>
</table>
Fig. 1. Extensive Form Game

LEGISLATURE PROPOSER VOTER
Figure 2-2 Full Extensive Game Form

1) **Nature** chooses Valence and Policy for both candidates

2) **Voter** observes either policy positions or quality levels

3) **Voter** selects the candidate

4) **Legislator** announces proposal

5) **Interest Group** decides to propose initiative

6) **Interest Group** announces proposal

7) **Voter** votes on initiative

*This initiative (policy) subgame is repeated for each observation/selection node: Extreme policy, moderate policy, high valence and low valence*
Figure 2-3 Initiative Subgame Spatial Model

\[ l^* = -L^* \]
Figure 2-4 Expected Utility for Valence and Policy (Initiative and Non-Initiative)

Max Valence
Min Policy Distance

Min Valence
Max Policy Distance

Valence

Policy (No Initiative State)

Extreme policy permitted given cost of initiative
Figure 2-5 Difference in Utility Given Cost of the Initiative

Expected Utility of Observing Quality or Policy
in the presence of the initiative

- Observe Quality
- Observe Policy
- Difference

Utility

Cost of Initiative
CHAPTER 3: POLITICAL CORRUPTION

“Ambition must be made to counteract ambition... It may be a reflection on human nature, that such devices should be necessary to control the abuses of government. But what is government itself, but the greatest of all reflections on human nature?”

-James Madison, Federalist 51

“Corruption and democracy represent antithetical forces, one embodying the ideal of curbing corruption; the other threatening to undermine the very meaning and existence of democracy itself.”

-Morris and Blake 2009

Introduction

The theory of substitution from the previous chapter predicts that the presence of direct democracy will alter voting calculations toward voting for personal characteristics instead of issue-voting. As voters are able to satisfy their policy demands through the initiative, or at least receive protection against very bad policy, it becomes less important to select candidates for their policy positions. Instead, voters are expected to be more concerned about the quality of the candidates they elect. One aspect of this is the honesty or trustworthiness of the candidates.

Political corruption, in which elected officials pursue their own benefit to the detriment of their constituents, accesses a characteristic of elected officials that is both salient to voters and independent of policy positioning. If the voting calculation of voters shifts away from policy, and towards the personal, then voters’ selection of less corruptible (more honest) candidates will be reflected in the number of (federal) convictions for political corruption.
Defining Corruption

Corruption among government officials is a pre-eminent theoretical and practical concern to a wide set of literatures. In ancient history the earliest political theorists grappled with how to establish a political system in which the governing body would pursue the collective good. The theoretical concerns these ancient theorists dealt with are paralleled by modern concern for endemic corruption within developing democracies. Even in established democracies, corruption is a reoccurring phenomenon undermining trust in the political system (Canache and Allison 2003, Kite & Sarles 2006, McCann & Dominguez 1998, Little & Herrara 1996, Mishler & Rose 2001, Morris 1991, and Subero 2004). As corruption is a topic bridging different cultures, times, contexts, and fields of study, the definition of the meaning of corruption has been similarly diverse.

What was considered corruption to Plato certainly differs from the consideration of Madison or Transparency International. Initially, there are clear differences over what constitutes corruption across time. In the United States, contemporary examples of corruption typically come to light only after long investigations to ferret out clandestine monetary exchanges, or are the result of nuanced violations of power. The investigation of Illinois Governor Rod Blagojevich, for example, began with the use of wiretaps a year into his administration. This investigation lasted five years despite extensive wiretaps and cooperating witnesses. While the Blagojevich scandal exposed a complicated network of individuals to obfuscate impropriety on the part of the governor, the fall of Charles Rangel from the chairmanship of the powerful House Ways and Means Committee is indicative of the subtleties involved in modern corruption charges. While the charges
against Rangel are varied, “Rangel himself called for the ethics inquiry last year following disclosures that he used congressional letterhead to solicit money for an educational charity named after him” (National Journal, February 17, 2009). While such behavior is clearly in violation of House ethics rules, relative to the actions of some early American politicians, Charles Rangel is not in the ballpark of what they would consider corrupt.

One early example is a member of the “Great Triumvirate” of the American Senate. Daniel Webster, who served Massachusetts in the U.S. Senate from 1827 to 1841, was named one of the Senate’s five “Most Outstanding” members in 1959. Over a hundred years before his selection to represent the best of the American Senators, Webster was selling his vote. In the early nineteenth century, the Federal Government deposited its funds in one bank chartered for that purpose. As with all charters of this type, the bank was granted an exceedingly profitable monopoly through an action that was overwhelmingly costless to the government. In 1833 the Second Bank of the United States was approaching the end of its first charter. Andrew Jackson’s opposition to a National Bank made this the pre-eminent issue of the period. Upon Jackson’s re-election under the banner of opposition to the National Bank, Congress was the deciding actor between Jackson and the president of the Bank of the United States, Nicholas Biddle. At the height of the conflict, Daniel Webster wrote the following letter to Nicholas Biddle (this is the entire letter).

10 Webster was selected by a five-member committee of Senators led by freshman Senator Ted Kennedy. This was two years after his “Profiles in Courage” won the Pulitzer Prize.
Sir. Since I have arrived here I have had an application to be concerned professionally against the Bank which I have declined of course, although I believe my retainer has not been renewed, or refreshed, as usual. If it be wished that my relation to the Bank should be continued, it may be well to send me the usual retainers.

-Daniel Webster to Biddle, Washington, Dec 21 1833.

Even if we believe that exchanges of this sort still happen today, the openness of such a demand is unheard of.

George Washington Plunkitt belongs in his own category of corrupt officials. Plunkitt was a well-known boss of machine politics in New York City, but is now remembered for this full-throated defense of Tammany Hall. In addition to his belief that the system of patronage in Tammany Hall was the quintessential form of representative democracy (to be discussed further later), Plunkitt made a distinction between honest and dishonest graft. Under the claim that his graft was honest, Plunkitt felt entirely free to admit that “many of our men have grown rich in politics. I have myself. I’ve made a big fortune out of the game, and I’m gettin’ richer every day.” He explains the process as well:

My party’s in power in the city, and it’s goin’ to undertake a lot of public improvements. Well, I’m tipped off, say, that they’re going to lay out a new park at a certain place... I go to that place and I buy up all the land I can in the neighborhood... I sell at my own price later on and drop some more money in the bank... I haven’t confined myself to land; anything that pays is in my line.

While the actions of Webster and Plunkitt surely demonstrate changing standards in our conception of corruption, Plunkitt’s defense demonstrates one of the problems of determining exactly what corruption is: sometimes ‘corruption’ is legal.

[M]ost politicians who are accused of robbin’ the city get rich the same way.
They didn’t steal a dollar from the city treasury. They just seen their opportunities and took them. That is why, when a reform administration comes in and spends a half million dollars in tryin’ to find the public robberies they talked about in the campaign, they don’t find them.

The books are always all right. The money in the city treasury is all right. Everything is all right. Of course, by modern standards and laws, everything was not ‘all right.’

Although “[d]efining corruption is certainly one of the banes of scholars” (Lancaster & Montinola 1997, 188), the legal distinction offers a useful bright-line. While many are driven by normative concerns to include actions permissible under the law (Johnston 2005, Brown & Cloke 2004, 2005), this makes it exceedingly difficult to establish a bright-line. Consider the definition of Transparency International: “Transparency International (TI) has chosen a clear and focused definition of the term: Corruption is operationally defined as the abuse of entrusted power for private gain.” Despite their claim to use a “clear and focused definition,” the normative term ‘abuse’ is a poor approach to definition. ‘Use’ of entrusted power for private gain is acceptable, but ‘ab’use is corruption. The definition depends entirely on the prefix of the term, i.e. determining when use is abuse. This normative definition is found in canonical definitions by Rogow and Laswell (1970), Morris (1991), Rose-Ackerman (1999), and Berg, Hahn, and Schmidhauser (1976). 11

Conversely, the legal concept provides a straightforward set of standards with the added benefit of a legal apparatus in place to make determinations regarding what

11 Berg, Hahn, and Schmidhauser (1976) exclusively are in pursuit of a normative conception of corruption.
constitutes a violation of the law. This apparatus also makes the corrupt acts visible through investigation and prosecution. Therefore, by using a legal standard of corruption, the process of definition, operationalization, investigation, and even data collection are taken out of the hands of the analyst.

Causes and Solutions

A strong dose of inevitability is present in one of the preferred factors considered in the study of corruption: there is simply a culture of corruption in a certain country, region, or people (Peters & Welch 1978, Johnston 1983, and Fisman & Miguel 2006), or the cause is "sown in the nature of man" (Madison 1787). Predictably, there are three basic approaches: decrease the demand for corruption, decrease the 'supply' of corruption, increase the probability of detection, or increase the punishment.

The standard explanation for demand for corruption is low wages. Low salaries increase the comparative gain for graft, bribery etc, (Heidenheimer 1990, Van Rijckeghem & Weder 2001, Becker & Stigler 1974, Mookherjee & Png 1995, di Tella & Schargrodsky 2003) and make officials willing to take greater risks. Although many agree that this is a cause, inelasticity in the demand for greater wages results in a wage structure that is perpetually too low in all realistic levels of wages. In other words, the amount bureaucrats require to forgo corruption is too great a price.

Decreasing the supply of corruption is similarly difficult. If societal demand for corruption is assumed to be constant, demand can still be reduced for each individual official by duplicating the role of those officials. This introduces competition into the market of corruption which minimizes the demand, and therefore value, to each official.
Restricting the power of officials similarly decreases demand for their corrupt acts. As discussed previously in the context of the Second U.S. Bank, the power by officials to grant charters was a quintessential route to corruption.

The factors thought to increase the probability of detection are quite diverse. One of the difficulties of political corruption is that the actor is in the public glare, but the level of this glare is not the same in all places. The income and education levels of the populace (Meier & Holbrook 1992, Glaeser & Saks 2006, Goel & Nelson 1998, Adserà et al. 2003, and Boylan & Long 2003) are quite typically thought to prevent corruption. Income and education of the populace is typically thought to be indicative of an increased ability to detect corruption. Kitschelt (2000), argues that these findings are the result of the greater immediate needs of the poor and uneducated, and these needs can be better satisfied through patronage than public goods. This orientation permits corruption in exchange for the benefits of a clientalistic relationship. If income and education are indicative of an increased ability of the populace to detect corruption, this is more directly captured by measures of political engagement (Maxwell & Winters 2004).\textsuperscript{12} These factors, while variable, are not well amenable to manipulation.

Lastly, we can increase the punishment for corruption. In domestic politics, the extreme penalty for any action is typically the loss of office. The extreme ‘punishment’ for policy shirking, for example, is the failure to win re-election. Political corruption, on the other hand, already risks far more severe consequences. Even without successful

\textsuperscript{12} Meier & Holbrook capture this with measurements of voter turnout, competition, and campaign finance reporting requirements.
prosecution, investigations or intonation of corruption can affect electoral prospects (Peters & Welch 1980, Ragsdale & Cook 1987, Krasno & Green 1988), and convictions entail heavy fines and prison time. Although impossible to positively identify the rate of corruption that is successfully prosecuted, given the combination of a position that is designed to be in the public’s eye with multiple layers of prosecutorial bodies, political corruption is not a crime structured to have a low probability of detection. Given the protections that exist against corruption and the fact that corruption still exists, it is not surprising how often corruption is considered inevitable and omnipresent (Klitgaard 1988). Although ratcheting up punishments is simplistically attractive, it is certainly a questionable approach. As one consequence of corruption is loss of office, however, term limits would theoretically increase corruption due to end-period effects (Becker & Stigler 1974). When an official is about to be term-limited out of office, loss of office is no longer a viable punishment. Therefore, term limits offer one test to the punitive model.

**Corruption and Representation**

In the American context, Madison’s call that “ambition must be made to counteract ambition,” inaugurated the long-standing pessimistic approach to political corruption. This view, that the cause is “sown in the nature of man”\(^{13}\) and that government reflects this nature is a fairly uncontroversial view to modern analysts. Whereas the institutional approach is attractive, the simplicity of unvarying human nature ought to at least give some pause.

\(^{13}\) From Federalist X.
Preceding this acceptance of human nature by two thousand years, Plato linked the character of governing officials to the political system within which they act. Just as there are five forms of city, “there must also be five forms of the individual soul” (Plato 1992, 215). Whereas Madison accepts a degradation of human character, Plato’s ideal political system is led by ideal individuals. The philosopher-kings are the best among us, the vanguard of the human condition. While Plato’s connection between the political and personal constitution is as much spiritual as it is causal, the model presented in the previous chapter provides a middle ground. This theory posits that institutional design can facilitate greater discrimination through which ideal leaders, unhindered by base policy concerns, are more likely to be selected to lead.

This electoral aspect is generally ignored in the literature due to its invariance. The standard electoral model of substantive representation consists of two elements to ensure accountability: the initial selection of a representative, and periodic elections. What is overwhelmingly absent in the literature on corruption is inclusion of the first prong of representation: selection. In effect, we are witnessing the election of proto-criminals and then considering how to prevent their criminal acts. The theory presented here seeks to demonstrate that voters are able to make better selections when given the proper incentives. Specifically, when voters are not forced to bundle a candidate’s policy positions and personal characteristics in the same basket, these voters will be increasingly

14 A good example of current models of selection effects comes from Besley & McLaren (1993). They find that there are certain wage levels in which only dishonest actors will seek the position.
able to select-out candidates more likely to be corrupt. I test this theory using Federal convictions for political corruption.

**Hypothesis:** The initiative decreases corruption.

**Empirics**

The Department of Justice’s Public Integrity Section prosecutes political corruption. Following the previous discussion on the definition of corruption, by using actual prosecutions I have a consistent standard of what constitutes corruption, and I do not have to observe each corrupt act myself. Similarly, it is critical that these convictions are by the Federal Government. This provides a universal definition and enforcement. This is of primary importance to avoid the possibility that state-level convictions would actually be inversely associated with corruption. I.e., if corrupt states do not prosecute corruption due to their corruption, observable state-level indicators of corruption would be indicative diminished unobservable state-level corruption. Prosecution by the Federal Government, however, is exogenous to the corruption within a state and provides a uniform prosecutorial process (identical internal norms, promotion, pay and resources). Studies of corruption within the United States typically use this measure, while internationally comparative studies usually use elite surveys.\(^{15}\)

\(^{15}\) Internationally there is obviously no equivalent of an overarching body capable of such enforcement so there is no real alternative, but there is some disagreement as to which is best with in the United States. Boylan & Long (2003) argue against the use of convictions in favor of survey based indicators (their survey is the only state-level survey on corruption I am aware of), while Alt & Lassen (2008) find no difference between the two.
Initially, these data demonstrate that political corruption varies considerably more between states than within states. With 50 states over 32 years (1600 total observations) the between-state standard deviation (17.42) is more than four units greater than the within-state standard deviation (13.01). This pattern indicates that states maintain some base-line level of corruption in spite of repeated demonstrations of the ability to hold elected officials accountable through criminal prosecution. This implies there is some consistent element within states that leads to repeated selection of officials willing and able to seek personal gain from their office.

Overall, the test of the model is if the initiative (or high use of the initiative) decreases the number of Federal convictions. The available data is for years between 1976 and 2007. A difference of means t-test implies rejection of the null hypothesis (p = .087). This marginally insignificant bivariate test, however is robust to a wide variety of multivariate tests. As the dependent variable is the count of convictions within a state-year, this variable is distinctly not normal. The count of convictions is constrained to be non-negative and the data are strongly skewed to the right (skewness statistic = 2.54). Fifteen percent of the state-years have zero convictions (240 state years), fifty percent of the observations have less than seven convictions, but five percent of the observations have more than 61 convictions (with a maximum of 155 convictions in New York in 1985).

The histogram of convictions (Figure 3-1) gives some indication of this skew, but the normal probability plot (Figure 3-2) clearly demonstrates extreme divergence from the expectations of normality in the unconditional mean.
Therefore, it is important to estimate the multivariate model in such a way that can account for the possible non-normality of the conditional mean of the count data. The Poisson distribution is the standard model for count data, yet this distribution assumes that the variance is equal to the mean. A negative binomial model (Cameron and Trivedi 1998; Long 1997) will guard against the effects of over dispersion, or, more importantly, allows us to test for violation of the equidispersion assumption.

Table 3-1 summarizes the variables along with descriptive statistics. The key independent variables is an indicator variable for the presence of the initiative and the number of initiatives on the ballot. The initiative indicator variable conflates all initiative states and is therefore a very poor indication of the effect of the initiative. This variable treats Mississippi or Illinois as the same as California or Washington. These former states technically have the initiative, but due to multiple limitations and barriers (i.e. high ‘cost’) the initiative is almost never used. In this time period Illinois has had one initiative on the ballot and Mississippi has twice had a single initiative on the ballot. By comparison, Washington and California usually have at least one initiative on the ballot. In fact, in fifty percent of these years California has had three or more initiatives, and in a quarter of the observations has had nine or more initiatives (California had 18 initiatives on the ballot in both 1988 and 1990). In 1988 California citizens mandated that the state budget must include funding for OSHA enforcement (prop 97), that a portion of the budget is dedicated to education spending (prop 98), and increased cigarette taxes (prop 99). These are indicative of the nature in which the initiative process is a regularize element of the policy-making environment. Although some initiatives are significant anti-
legislature initiatives like term-limits; sometimes citizens just want more taxes on cigarettes.

To differentiate between states that have integrated the initiative process into their state political system, and those for which the legislature has no fear of being bypassed through the initiative, I use the number of initiatives on the ballot as a better measure of the strength of the initiative process.16

It should be noted that one should take some care in the interpretation of both the number of initiatives and the cost of the initiative. The interpretation of these variables is like a special kind interaction. The presence of the initiative (a dummy variable) does not moderate the effect of number of initiatives, but it is necessary for the effect to exist. Interpreted in the framework of an interaction, when the initiative is not present, the effect of the number of initiatives is non-probabilistically zero. When the initiative is present, the variable for the number of initiatives is identical to the interactive term; the notion of constitutive and interactive terms has no meaning. The coefficient for the number of initiatives only exists, and only has a variance, when the initiative is present. Given the lack of an ‘interactive term’ (or conversely the lack of a constitutive term, whichever the reader prefers), the variance of the number of initiatives is found simply through the standard error of the coefficient for number of initiatives. This is the same for the variance of the effect of the initiative.

16 The last robustness check in this chapter also uses a measure of the cost of the initiative. This measures the ‘cost’ of the initiative through the difficulty of getting an initiative on the ballot as well as how insulated a legislature is from the initiative process (can the legislature, for example, overturn an initiative?).
Still, care must be taken to interpret these two terms correctly substantively. With no initiative, the coefficient for this dummy is ‘turned off’ and there is no intercept shift. With the initiative present, one much look at the combined effect. The coefficient on the initiative shifts the intercept, and the coefficient for the number of initiatives provides a new slope. This becomes vital when they have opposite signs. In that case the intercept shift from the initiative is positive, and the slope from the number of initiatives is negative; there must be a realistic number of initiatives to counteract the increased conditional mean among that group of states. I.e. if it requires eighteen initiatives to counteract a positive intercept shift, the realistic effect of the initiative is positive (overwhelmed by the intercept shift).

To control for differences in the size of a state, I include both the population of the state and the number of state employees (measured by the ‘census of governments’). This recognizes differences in the expected number of corruption convictions for large states like California (median convictions = 75) or New York (median convictions = 76) versus small states like North Dakota (median convictions = 2) or Alaska (median convictions = 2). Even if Alaska and North Dakota were exceedingly corrupt, the sheer number of opportunities for corruption would make it difficult to capture the number of convictions we would observe for ‘clean’ large states.

As ideology is a standard explanation for many political behaviors, it is possible that the ideology of a state may explain variation in the states proclivity towards corruption. Although it is often claimed that ideology does not significantly vary over time (Erikson et al. 1993), Berry et a. (1998) provide a time-variant SPI (State Political
Ideology) variable that measures the ideological position of a state before 1976 through 2004.

The political activeness of a state measures the capability of a state to monitor their elected officials. There are a series of related measures of this sort. The most basic measure of political activity is turnout. Low turnout may indicate weak competition or an apathetic populace which would be unable to properly sanction corruption. Therefore, I include the proportion of citizens (Voting Age Population) who turned out to vote in the previous presidential election. I also include the proportion of a state’s citizens that performed volunteer work in the previous year (data is from the Current Population Survey). This is a more costly activity that also captures the strength of community ties and social capital (Fukuyama 2000, Putnam 2001). This is similarly captured by the education levels of a state and the racial diversity of a state (from the Census Bureau). Education is measured as simply the proportion of citizens with a high school education or greater, but racial diversity is measured through a normalized Herfindahl index of racial groups.

The Herfindahl index is a widely used formula to measure the degree of homogeneity in a system. In this case the index is measure the racial homogeneity. A diverse state (like California) has multiple racial groups approaching equality in numbers and therefore has a low index of homogeneity; while states like New Hampshire and Vermont have very high concentration of one race, and therefore has a very high Herfindahl index. The data for this index comes from the Census Bureau, but their inclusion of racial categories has increased over time. As more racial categories are
included in the Census, this introduces artificial ‘breaks’ in the trend lines over time, and these breaks are not the same in all places. The inclusion of new racial categories changes the value of the index for the states that have people of that race, but does not affect other states which do not have people of that race. Therefore, I normalize the index to smooth the trend over those breaks. This normalization accounts for the possible number of racial groups and bounds the index between zero and one.

Lastly, there are competing institutional factors that may affect the number of convictions. Legislative professionalism (Squire 2007) and the impact of term limits affect (respectively) the type of individual likely to be elected and the circumstances of the future lying ahead of the state legislators. The resources available to legislators, the degree to which they are ‘sometime’ legislators, and length of the shadow of the future should all matter.

Results

Table 3-2 shows the results of the multivariate negative-binomial estimation. There are four models with an increasing number of covariates. The first column, with three independent variables, is the minimalist realistic model. In the other models I increase the number of variables in groups determined by data availability. Inclusion of ideology, turnout, legislative professionalism, term limits, and the Herfindahl index of

\[17\] Dropping either the initiative indicator or the ballot count actually does not change the substantive results. The presence of the initiative and count of ballots consistently decreases the number of convictions.
race only eliminates three years of data, while the final inclusion of the volunteer rate restricts the analysis to three years.

Despite the systematic expansion of independent variables, and the following reduction in available years of data, the results are consistent. While the simple presence of the initiative has no effect on the number of convictions, the number of initiatives on the ballot consistently decreases the number of convictions for corruption. Overall, with average levels of initiatives on the ballot, the number of corruption convictions is cut in half.

Although many of the control variables do not affect the number of convictions, when there are statistically significant results, they are consistently in the expected direction. Racial homogeneity, higher education levels, and higher volunteer rates all decrease the number of convictions.

Lastly, it should be noted that these findings are robust to a series of variations in model specifications. In the specification presented below I cluster the standard error by state, but in other models I:

4. Use conditional “fixed effects,” unconditional fixed effects, and random effects.

\[ \text{\footnotesize 18 I have 80 different specifications available upon request.} \]

\[ \text{\footnotesize 19 Fixed effects using Stata’s fixed effect option with \texttt{xtnbreg} applies conditional fixed effects only to the dispersion parameter. Unconditional fixed effects are simple dummies for each individual state entered as independent variables.} \]

\[ \text{\footnotesize 20 Hausman test strongly indicates that fixed effects are preferred.} \]
5. Include a lag of the dependent variable\textsuperscript{21} as well as a varying number of lags of the number of initiatives.

6. Poisson instead of Negative Binomial

The results consistently indicate that the number of initiatives on the ballot decrease the number of convictions. These robustness checks incorporate both strenuous tests in the form of fixed effects and a lagged dependent variable, but also intuitive checks in the form of varying lags of the independent variable.

One last change to the model specification is the addition of a cost measure of the initiative. Bowler and Donovan (2004) calculate two measures: the difficulty of qualification and the degree to which the state legislature is insulated from the initiative. The difficulty of qualification is a direct measure of the cost of the initiative as discussed in chapter two, but the insulation factor functions quite similarly. These measures are both inverted from the original data so that high numbers are indicative of easier initiatives and less legislative insulation.

These measures have the advantage of being a direct measure of the cost of the initiative, but have two disadvantages. First, the measures do not vary. Second, they are not readily observable to the public. So while these cost factors are the largest

\textsuperscript{21} An admittedly improper approach given the structure of Poisson-based estimators (Brandt and Williams 2001), yet an intuitively desirable approach.
determinant in initiative use, it is the actual initiatives proposed that voters see. Despite the possible limitations, these are overwhelmingly capturing the same concern. To test the effect of the cost of the initiative, I include nine additional specifications. I use the second specification from the previous model as the baseline, then add both ease of qualification and insulation (inverted), then include each measure separately, an additive index of the two, that same set without the number of initiatives, and then the additive index included with the number of initiatives on the ballot. The sign is consistently in the correct direction, but the number of initiatives is the dominant mechanism.

Conclusion
The theory of substitution argues that the initiative process makes voters select candidates for a different set of reasons. Instead of being concerned about the policy positions of candidates, voters will instead select candidates for their non-policy characteristics such as honesty, trustworthiness, or integrity. Some of these factors are easy to observe, such as how the candidates physically appear, yet others, like a candidate’s proclivity toward corruption, are clearly not readily observable.

In this chapter, I have demonstrated that the initiative process correlates with reduced levels of corruption in a state. In addition to strenuous robustness checks to the validity of this correlation, I have used a measure of corruption exogenous to the state’s political system, and follow this test of corruption with more readily observable personal

22 The qualification difficulty explains about 25% of the variation of initiative use. Comparatively, ideological divergence between legislators and citizens explains less than 1% of the variance of initiative use.
characteristics of candidates: their personal attractiveness and the degree to which those individuals look competent.
Table 3-1 Summary Statistics for Model of Corruption

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Convictions</td>
<td>Convictions for political corruption by the Public Integrity Section of the Department of Justice.</td>
<td>14.97</td>
<td>21.61</td>
<td>0</td>
<td>155</td>
</tr>
<tr>
<td>Number of Initiatives</td>
<td>Number of Initiatives that appeared on the ballot on that year or the last election. Mean etc. provided for initiative states.</td>
<td>1.37</td>
<td>2.48</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Ease of Qualification</td>
<td>Inverted Bowler &amp; Donovan (2004) index; higher numbers indicate lower cost to get initiative on ballot</td>
<td>3.12</td>
<td>1.39</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Insulation Index</td>
<td>Inverted Bowler &amp; Donovan index; higher numbers are less gov’t insulation from initiative</td>
<td>4.21</td>
<td>1.92</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Initiative State</td>
<td>Indicates presence of initiative</td>
<td>0.47</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>State Population</td>
<td>Log of population/10K</td>
<td>5.75</td>
<td>1.01</td>
<td>3.68</td>
<td>8.20</td>
</tr>
<tr>
<td>Citizen Ideology (Berry)</td>
<td>See Berry (1998)</td>
<td>47.09</td>
<td>15.17</td>
<td>8.45</td>
<td>95.83</td>
</tr>
<tr>
<td>Turnout (VAP)</td>
<td>Voting Age Population from previous Presidential election.</td>
<td>54.58</td>
<td>7.33</td>
<td>36.51</td>
<td>73.87</td>
</tr>
<tr>
<td>Legislative Prof (Squire)</td>
<td>See Squire (2007)</td>
<td>0.20</td>
<td>0.12</td>
<td>0.02</td>
<td>0.66</td>
</tr>
<tr>
<td>Term Limits (impact)</td>
<td>Term limits indicator</td>
<td>0.06</td>
<td>0.25</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Herfindahl Index</td>
<td>Where r is the proportion of the population of race i. This corrects for distortions generated by changes in the coding of race by the census.</td>
<td>0.62</td>
<td>0.20</td>
<td>0.16</td>
<td>0.98</td>
</tr>
<tr>
<td>Education (% &gt; HS)</td>
<td>Current Population Survey</td>
<td>0.79</td>
<td>0.04</td>
<td>0.67</td>
<td>0.88</td>
</tr>
<tr>
<td>State Employees</td>
<td>Census of Governments</td>
<td>9.79</td>
<td>8.15</td>
<td>1.22</td>
<td>47.96</td>
</tr>
<tr>
<td>Volunteer Rate</td>
<td>Volunteer supplemental from the Current Population Survey</td>
<td>0.31</td>
<td>0.06</td>
<td>0.17</td>
<td>0.50</td>
</tr>
<tr>
<td>Year</td>
<td>Counter: Year-1976</td>
<td>15.50</td>
<td>9.24</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Year Squared</td>
<td>Above counter squared.</td>
<td>325.50</td>
<td>296.27</td>
<td>0</td>
<td>961</td>
</tr>
</tbody>
</table>
Table 3-2 Negative Binomial – Number of Corruption Convictions

<table>
<thead>
<tr>
<th></th>
<th>Number of Initiatives</th>
<th>Initiative State</th>
<th>State Population</th>
<th>Citizen Ideology (Berry)</th>
<th>Turnout (VAP)</th>
<th>Legislative Prof (Squire)</th>
<th>Term Limits (impact)</th>
<th>Herfindahl Index (normalized)</th>
<th>Education (% &gt; than HS)</th>
<th>State Employees</th>
<th>Volunteer Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.051**</td>
<td>-0.062***</td>
<td>-0.084***</td>
<td>-0.099*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-6.218***</td>
<td>0.043</td>
<td>-4.420***</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.021)</td>
<td>(0.021)</td>
<td>(0.052)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1.888)</td>
<td>(0.030)</td>
<td>(1.620)</td>
</tr>
<tr>
<td>Initiative State</td>
<td>-0.029</td>
<td>-0.006</td>
<td>0.293**</td>
<td>0.098</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.221</td>
<td>-0.211</td>
<td>-0.797</td>
</tr>
<tr>
<td></td>
<td>(0.123)</td>
<td>(0.137)</td>
<td>(0.146)</td>
<td>(0.218)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.891)</td>
<td>(0.210)</td>
<td>(1.010)</td>
</tr>
<tr>
<td>State Population</td>
<td>1.005***</td>
<td>0.887***</td>
<td>0.684***</td>
<td>0.529**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.648</td>
<td>0.057*</td>
<td>0.527</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.079)</td>
<td>(0.187)</td>
<td>(0.216)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.502)</td>
<td>(0.508)</td>
<td>(0.508)</td>
</tr>
<tr>
<td>Citizen Ideology (Berry)</td>
<td>-0.004</td>
<td>0.003</td>
<td>-0.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.221</td>
<td>0.057*</td>
<td>0.527</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.005)</td>
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Table 3-3 Negative Binomial – Number of Corruption Convictions (Init Cost)

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Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1
Figure 3-1 Histogram - Political Corruption Convictions

Political Corruption Convictions
1976-2007

Number of Convictions

Frequency

1976-2007
Figure 3-2 Normal Probability Plot - Convictions
Figure 3-3 Predicted Number of Convictions (from column 2 of table 3-2)
CHAPTER 4: FACIAL CHARACTERISTICS

Like Plato’s cave-dwellers, some voters glimpse only flickering shadows of these objects, especially if they are complicated issues of policy.

-Lewis-Beck et al. 2008

Introduction
The image of the voter selecting candidates for their policy advocacy and past performance is often considered a normatively desirable model of voting behavior. For those voters squinting at flickering shadows, who are far from rare, the set of options they have to fill the gaps in their knowledge are extensive. Candidates are complex. They “possess a variety of characteristics that are indirectly linked to specific issues (i.e., their partisan affiliation) or largely unrelated to policies (i.e., their personal traits, such as honesty, intelligence, and the like). Such characteristics are often more salient and immediately discernible than are the details of a candidate’s stands on policy” (Lewis-Beck et al. 2008, 162). Although these personal traits are sometimes relegated to a second-tier status relative to direct policy concerns, they vary in important ways. The previous chapter considered personal traits such as honesty and integrity. Those considerations, while clearly non-policy, would still be considered a normatively valid concern for the study of politics. This chapter, however, turns to a different set of personal characteristics which are probably not as normatively desirable factors as a candidate’s honesty or integrity: the looks of a candidate.

As voting factors move further from the ideal of policy voting, they typically become more simple and more a function of affect. As candidates are human, one aspect
that they are judged for is their personal appearance. While few seriously consider the
looks of a legislator to be of any significance, the very insignificance of the factor can
provide insight into the decision-making process of voters, and the relationship of their
decision calculi to the design of electoral institutions.

The theory of substitution posits that non-policy characteristics will become more
important factors in the selection of candidates when the initiative is available. Voters’
belief in the policy aspects of candidates are less important by virtue of the fact that direct
democracy can fill in for that part of a candidate’s ‘bundle’ of characteristics. A factor
like the attractiveness of a candidate, however, is not affected by a legislature’s
interaction with interest groups. If voters care about the attractiveness of their elected
officials, the electoral stage is the only avenue they have to affect this. When policy can
be fixed after the electoral stage, voters would be sacrificing the opportunity to have their
cake and eat it too.

Appearance
Like selection of more honest/trustworthy (less corrupt) candidates, the
appearance of a candidate is another form of symbolic representation. While appearance
is often speculated as a factor in candidate selection (Jacobson 1989, Squire 1992, Squire
& Smith 1996), actual measurement is atypical, but not non-existent (see Spezio et al.
Todorov 2007, Antonakis & Dalgas 2009 for examples). These researchers have
consistently found that, with nothing more than a picture, respondents will select winners
of real elections at rates significantly above 50%.
This dissertation extends these basic findings regarding attractiveness and vote choice by demonstrating that this sort of voting behavior is affected by the design of political institutions. This dissertation is thought to be the first to posit that this effect is influenced by institutional design.

Attractiveness and competence are the common theme in the previous studies, and this chapter follows suit. As the model predicts that voters in initiative states will substitute away from policy concerns and towards symbolic factors, there should be a different effect on attractiveness and competence. Voters in initiative states should be more sensitive to attractiveness, but less sensitive to competence (an indicator of substantive abilities).

Spezio et al. (2008) generously provided their data of ratings of legislative candidates, which just needed the addition of contextual data. This study asked sixty-five undergraduates at CalTech to select which one of two candidate-images is more attractive and which one is more competent. A grey-scale picture of a candidate was shown to the respondent for one second, followed by a pause, followed by a one second flash of the candidate, and two seconds with the pictures side-by-side. After four seconds of cumulative viewing of the pictures, the respondents were asked to select one of the two candidates. These were actual candidates in races against one another in the 2006 Congressional mid-term elections. The experiment took place before the election so that the electoral returns would not contaminate the selection, and all images were unfamiliar to the respondents, and the order in which the images were shown to the respondent was randomized.
Results
Perhaps surprisingly, it turns out that voters are consistently more likely to select
the less attractive candidate. It is probably the case that voters are voting for those
candidates who look like them\textsuperscript{23}, not like supermodels. If it is the case that political
candidates are, as a class, more attractive than the general populace,\textsuperscript{24} then selecting the
less attractive of the two candidates has echoes of a populist tone. Just as Plato predicted
that the political system will determine the type of leaders we have, it’s possible that a
direct democracy entails a more democratized appearance. Although the direction of
preference is not what was expected, the theory is about degree, not direction.

Given the prior expectation that voters would select the more attractive of two
candidates, it is quite possible that the process through which a party’s candidates are
being selected is also following that presumption. Voters are being given too attractive of
candidates as choices, and their selection of the more ‘normal looking’ candidate
translates into a negative effect of attractiveness.

\textsuperscript{23} Note that researchers at the Stanford Political Communication Lab find that (male)
subjects prefer candidates whose images were partially morphed with the subject’s
own image. Bailenson et. al N.D. “Transformed Facial Similarity as a Political Cue:
A Preliminary Investigation”

\textsuperscript{24} A proposition for which I have no data, nor am I aware of any empirical studies
comparing political candidates versus the general population.
So while being the more attractive of two candidates decreases the probability of
election by about 8%,25 the effect is amplified in initiative states and attenuated in non-
initiative states. This makes sense given the theory: voters in these initiative states need
not be concerned about policy and are instead more sensitive to how attractive candidates
are.

Conversely, competence increases the probability of election for all candidates.
This follows conventional wisdom. It makes sense that voters have a proclivity to vote
for those whose ‘thin-slice’ judgment implies they would be well suited for the policy-
making process. Again, however, there is a different effect in initiative and non-initiative
states. This effect is stronger (and statistically significant) in non-initiative states (where
voters depend entirely on those candidate/legislators for their policy), but not statistically
significant for initiative states. The substantive effect of both factors are graphed in
figure 4-1.

Robustness Check
A further discriminating test of the theory can be found in the background of the
candidates. The initiative process should certainly affect candidates running for state
office, but the effect on candidates for national office is less clear. On the one hand, the

25 Note that the attractiveness ‘rating’ is a dichotomous selection of two candidates.
Therefore, it would be erroneous to draw the conclusion that the ideal strategy for
candidates is to be as less attractive as possible. Although more data is needed to be
certain, I find it quite plausible that voters have a certain look they want from their
elected officials, but candidates are off the mark in trying to accomplish this,
however, as they believe voters demand more attractiveness than they actually do.
Those that are nearer to the ideal, then, are typically the less attractive of the pair.
initiative process only applies to state policy, and therefore the substitution effect only (directly) applies to state issues and candidates. While voters in California, for example, can select their state legislators for non-policy reasons due to the fact they are more likely to get their policy demands no matter who is elected, that logic does not apply to their candidates for the U.S. Senate. On the other hand, there are likely to be spillover effects. Nicholson (2005) included numerous tests of the question as to whether or not voters were able to make distinctions between levels of election. Nicholson found that voters were unable to make this distinction, and they would vote for candidates for policy issues that were inapplicable to the office they were running for.

In this case, that inability to make distinctions between levels of office is initially confirmed by the finding that votes for candidates running for national office are affected by state institutions. In other words, an institution that is structurally constrained to only directly affect state issues has spillover effects to candidate races for national office. At the same time, these races are not the same. Some of these races consist of two candidates that have never set forth in the state legislature, while others consist of two candidates coming directly from the state legislature (and a mix of the two).

Given the institutional effect in these races is spillover from the state legislative race, the question becomes which type of race is expected to be more affected by the spillover. It may be the case that candidates having already served in the state legislature have already been vetted for their non-policy characteristics, and therefore the issue will be nullified when two candidates of this history run against each other. Conversely, it may be the case that candidates with a history of a state legislative race will have
momentum in the types of factors they campaign on, as well as the factors they consider important to criticize their opponent for.

While the evidence for such momentum between campaigns is sparse, I argue that the latter explanation, that races with candidates with a history of state legislative races will behave more like state legislative races is the correct one. There are three reasons for this.

First, Sellers (1998) finds that candidates are more likely to emphasize issues in their campaign that they have built a record on. Given the theory of substitution from chapter three, these candidates from the state legislature of an initiative state are more likely to have developed campaign positions around their personality while eschewing policy. Having been in office under a system that doesn’t reward policy, they are not going to have developed as complete a policy profile. Sellers finds that campaign messages not in line with their record lack credibility. These candidates, therefore, would be unlikely to be able to convince voters that they ought to be elected for their policy-making abilities.

Second, Fenno (1978) argues that ‘home styles’ exhibit strong continuity overtime. Fenno engages in a ‘soak and poke’ method to learn how legislators portray themselves to their constituents. This is an exploration of message, style, and relationship with constituents. The finding that these home styles are insulated from change parallels the view that style of state legislators are similarly likely to maintain the style they developed in a previous race.
Third, Druckman et al. (2004) demonstrate that candidates pursue reinforcement strategies when balancing emphasis of issues or image. Given the inability of campaigns to persuade voters, they instead seek to prime voters by reinforcing factors that they are already favored for. Using Nixon’s 1972 race as a case study, they find that due to his weak image he substituted his campaign message toward issues. In the case of state legislators and the initiative then, the parallel expectation is that candidates with a successful history of focusing on personality will seek to do so again. Therefore, an institution directly affecting the state policy-making process should have its greatest effect on state legislators, or, those with a campaign history for the state legislature.

To test this, I coded the political history of the candidates selected by the Spezio et al. team to determine if they had served in their state legislature. Given the dyadic nature of the data, in which each observation is a pair of candidates, there are three types of contests: dual state legislative history, mixed state legislative history, and no state legislative history. The effect of the initiative should be strongest for races with a dual state legislative history and weakest (or non-existent) for races with no state legislative history. This robustness check is of initiative states, so the candidates from non-initiative states are excluded.

The results are as expected for attractiveness. The race in which neither candidate has a background in a state legislature behaves like a non-initiative state race, while a race with both candidates hailing from the state legislature amplifies the previous finding. The mixed case is properly between the other two.
The results are the same for competence. Voters in non-initiate states reward competent-looking candidates, while voters in initiative states don’t seem to care at all: a pattern that bears out when extended to the candidates’ political background.

**Conclusion**

The question as to how much information voters have (and use) in the selection of candidates is a perennial question. Simplistic voting calculi, like selecting candidates for their looks, are the quintessential methods of a Homer Simpson voter. Despite this, the degree to which voters turn to the facial characteristics of candidates yields evidence for a clear pattern in which state institutional design can affect the degree to which voters depend on these calculations. This reminds us that behavior typically believed to reflect ignorance can just as easily shed light on complex processes.

In this case, there are multiple layers of evidence for substitutionary voting behavior stemming from varying degrees of sensitivity to candidates’ facial characteristics. First, voters in initiative states are more sensitive to the attractiveness of candidates. This finding follows quite directly from the claim that these voters are decreasing their policy-voting in light of the belief that they can satisfy their policy demands through the initiative. Conversely, these same voters who are increasingly sensitive to the attractiveness of candidates, are less sensitive to how competent a candidate looks. Again, if voters in initiative states are not selecting these candidates to act as their policy-makers, then there is less reason to be concerned about their competence.
While it is often disconcerting to draw inferences from a simple sub-sample of data, when we look further into the legislative history of these candidates the findings are even stronger. While it is questionable as to if there are spill-over effects between state-level institutions and national races, the legislative history of these candidates provides a mechanism to condition these spill-over effects. Those candidates who have never served in the state’s legislature seem to be insulated from the institutions of the state. Candidates with a background in the state legislature have previous campaign experience in that system, have been selected by voters under this calculus, and have developed their records while facing incentives determined in the presence of the initiative. Previous research indicates that these candidates are quite likely to pursue reinforcement strategies by continuing their previous approach. This effect is amplified in campaigns in which both candidates have a history in the state legislature. In these campaigns it is even less likely that one of the candidates can make policy an issue in the campaign given their own past practices.

Lastly, it should be noted how facial characteristics differ from corruption convictions. In the previous test of the theory of substitution, the evidence for increased ‘personal voting’ was found in decreased convictions for political corruption in initiative states. Although honesty and integrity is something that voters surely care about, their ability to observe such factors is questionable. In that case, voters are likely to depend on intermediary providers of this information or secondary signals. The most obvious possibility is that candidates are less able to connect with voters on policy issues, and therefore they must make claims regarding their own integrity as well as monitor the
honesty of their opponents. In the former case, the intermediary mechanism is self-enforcement: once a candidate runs under a banner of honesty and integrity, violations of these promises are especially self-destructive. In the latter case, the intermediary mechanism is external enforcement. Just as a candidate in an initiative state may find it difficult to gain traction for themselves on policy issues, they will similarly find it difficult to attack their opponents for policy issues. The alternative is vigilance in monitoring one’s opponent.

What a candidate looks like, conversely, requires about as close to zero information as is possible. These are thin-slice affective judgments which do not require more than a single second to create. The question is less if voters can learn this information, but instead if it matters: how do facial characteristics factor into the larger questions of voting behavior? While we know that how a candidate looks does matter, we now know that the degree to which it matters can provide crucial insight into the relationship between institutional design, voting behavior, and the role of legislators in the relationship with constituents.
Figure 4-1 Effect of Candidate Attractiveness & Competence

Effect of Candidate Attractiveness & Competence on Election Prospects

Change in Pr. of victory (change, min/max)

-2
-1
-0
0
1
2
Attractiveness Non-Initiativ St
Attractiveness Initiative St
Competence Non-Init St
Competence Initiative St

Figure 4-2 Effect of Candidate Attractiveness by Legislative History

Effect of Candidate Attractiveness on Election Prospects
by candidate history

Change in Pr of victory (changep min/max)

- All Candidates (non-init st)
- No State Background
- Mixed Background
- All Candidates have State Legislative Background

Figure 4-3 Effect of Candidate Competence by Legislative History

Effect of Candidate Competence on Election Prospects
by candidate history

<table>
<thead>
<tr>
<th>Change in Pr of victory (changenorm/min/max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Candidates (non-init st)</td>
</tr>
<tr>
<td>No State Background</td>
</tr>
<tr>
<td>All Candidates have State Legislative Background</td>
</tr>
<tr>
<td>All Candidates</td>
</tr>
<tr>
<td>Mixed Background</td>
</tr>
</tbody>
</table>

Table 4-1 Attractiveness and Vote Choice

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>Non-Initiative</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractive</td>
<td>-0.505***</td>
<td>-0.317**</td>
<td>-0.647***</td>
</tr>
<tr>
<td></td>
<td>(0.107)</td>
<td>(0.155)</td>
<td>(0.139)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.623***</td>
<td>-0.412***</td>
<td>-0.752***</td>
</tr>
<tr>
<td></td>
<td>(0.044)</td>
<td>(0.069)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>Observations</td>
<td>1938</td>
<td>712</td>
<td>1226</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses  *** p<0.01, ** p<0.05, * p<0.1
Table 4-2 Competence and Vote Choice

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>Non-Initiative</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent</td>
<td>0.354***</td>
<td>0.626***</td>
<td>0.148</td>
</tr>
<tr>
<td></td>
<td>(0.104)</td>
<td>(0.177)</td>
<td>(0.145)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.033***</td>
<td>-0.898***</td>
<td>-1.109***</td>
</tr>
<tr>
<td></td>
<td>(0.055)</td>
<td>(0.102)</td>
<td>(0.072)</td>
</tr>
<tr>
<td>Observations</td>
<td>1938</td>
<td>712</td>
<td>1226</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses  *** p<0.01, ** p<0.05, * p<0.1
Table 4-3 Attractiveness and Vote Choice by Legislative History

<table>
<thead>
<tr>
<th></th>
<th>No state legislative background</th>
<th>Mixed state legislative background</th>
<th>Dual state legislative background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractive</td>
<td>-0.403</td>
<td>-0.702***</td>
<td>-0.694***</td>
</tr>
<tr>
<td></td>
<td>(0.281)</td>
<td>(0.217)</td>
<td>(0.216)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.932***</td>
<td>-0.812***</td>
<td>0.309***</td>
</tr>
<tr>
<td></td>
<td>(0.116)</td>
<td>(0.077)</td>
<td>(0.101)</td>
</tr>
<tr>
<td>Observations</td>
<td>258</td>
<td>516</td>
<td>258</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses  *** p<0.01, ** p<0.05, * p<0.1
Table 4-4 Competence and Vote Choice by Legislative History

<table>
<thead>
<tr>
<th></th>
<th>No state legislative background</th>
<th>Mixed state legislative background</th>
<th>Dual state legislative background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent</td>
<td>0.794*** (0.310)</td>
<td>0.270 (0.205)</td>
<td>-0.410 (0.279)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.609*** (0.211)</td>
<td>-1.228*** (0.102)</td>
<td>0.172 (0.129)</td>
</tr>
<tr>
<td>Observations</td>
<td>258</td>
<td>516</td>
<td>258</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1
CHAPTER 5: PUZZLES

Introduction

Just at the considerations voters use in the selection of candidates is diverse and varied, so too is the literature on voting behavior. Less extensive, but of critical importance for this study, are those studies that examine how voting decisions and candidate characteristics vary as a function of direct democracy. This chapter turns to this existing literature not for review or background, but to use the extant findings as evidence for the theory of substitution. The findings are the product of authors written and published independent of (and prior) to the theory presented herein. Of critical importance, however, is that the theory developed for the project was similarly developed in isolation from the empirical findings. This precludes two ever-present possibilities. First, it precludes the possibility that the theory was developed to fit the data; and second, it precludes the possibility that the data (or more likely, the modeling choices) was manipulated to fit the theory.

There are four findings that directly follow from the theory: descriptive representation (gender), voting ‘correctly,’ economic voting, and the incumbency advantage. Very briefly, the first demonstrates a robust finding that the gender make-up of state legislators is consistently closer to parity in initiative states. The voting ‘correctly’ model indicates that individual voters are better able to select candidates whose policy is more similar to their own when this voting decision is made in isolation

26 Minor exception being Boehmke et al.
of direct democracy. I.e. voters seem to shirk policy consideration in the presence of
direct democracy. Similarly, the economic voting findings indicate that voters in direct
democracy states do not punish their legislators for economic failure. This is logically
matched by an increased incumbency advantage in initiative states: while incumbent
legislators build personal relations and reputations with their constituents, they are also
bound by their voting record. As the theory predicts, voters in direct democracy states are
less concerned about this policy aspect, and incumbents therefore are relieved of that
burden.

**Descriptive Representation**

Descriptive representation is the canonical alternative to substantive
representation. It is a concept that is as studied as it is debated. While a fundamental
question is often in regards to the spillover effects between descriptive and substantive
representation; i.e. does representation based upon *standing* for someone translate into
*acting* for them (Pitkin 1967)? In this case, the theory from chapter two argues that
through satisfaction of policy independent of legislators, voters will have a greater
proclivity to pursue symbolic (or personal) characteristics of candidates. Descriptive
representation, in terms of gender, is one form of this. A fundamental question then
becomes do voters actually want women candidates by virtue of their gender? This is far
from a simple question.

Initially, it should be noted that the wider set of literature on descriptive
representation generally finds ambiguous and highly conditional effects (Gay 2002;
Preuhs 2008; Hero and Tolbert 1995; Griffin and Keene 2006). So while on the one hand,
there is certainly evidence that their gender hurts the electoral prospects of women (Fox & Smith 1998; Sanbonmatusu 2002; Sanbonmatsu 2006) this is far from a straightforward story. The countering set of literature that gender has a limited effect on electoral prospects (Ondercin and Welch 2005; Darcy and Schramm 1977) may condition this claim on the probability of running (Seltzer, Newman, and Leighton 1997), party effects (Koch 2000; McDermott 1997; Sanbonmatsu and Dolan 2008; Fox and Smith 1998; Lawless 2004), the types of issues that are salient (Lawless 2004), a disappearing generational effect (Rosenthal 1995) or the gender of the voter (Rosenthal 1995). Of course, conditional effects have a silver lining for the electoral prospects for women. There are wide segments of the population willing, and often comparatively favorable, to voting for women. While likely to be inflated due to a social desirability bias, over 90% of Americans say they would vote for their party’s female nominee if she was qualified for the job (Streb, Burrell, Frederick, and Genovese 2008). Similarly, surveys of elites have shown a strong demand for more women in office (Chaney and Fevre 2002).

While the nature of the gender gap is unclear, a simple rejection of female candidates on the part of the voters is vastly overly simplistic. In addition to simply failing as a truth-seeking exercise, absent an understanding of the mechanism through which men are over-represented, it is not possible to understand the mechanisms through which the bias can be alleviated. In this case, the theory of substitutionary voting behavior posits a very specific mechanism which could alleviate the under-representation of women even in the presence of widespread sexism.
The claim that voters would be more likely to select women for legislative office when the importance of personal characteristics is increased may seem paradoxical in light of systematic under-selection of women. If the independent effect of gender is to decrease electoral support, then it seems that placing increased importance on the personal characteristics of candidates (like gender) would further hurt the electoral prospects of women. This, however, is a gross oversimplification of the basis for the under-representation of women. In taking a closer look at the process through which women are evaluated for electoral office it becomes clear that, to the degree that policy considerations are eschewed, women ought to experience a relatively more favorable electoral environment.

The Foundations of Female Under-Representation

The evidence that female candidates face some form of an uphill battle on the electoral stage is widespread. The reasoning behind this fact is far less simple, but it is critical to understand if we are to learn how institutional structures may affect the rate at which women are elected to office. Understanding the dilemmas that women face in seeking political office requires exploring how women are evaluated within a broader patriarchal context. While a full exploration is well beyond the scope of this project, there is one central distinction that is critical: “misogyny is not the same as simple male political dominance” (Gilmore 2001, 13).

[Patriarchal traditionalism] is a matter of defining women’s proper place and social status within a broader constellation of political beliefs; [cultural misogyny] is a specifically emotive sensibility that feeds off phobias, terrors, and fantasies, regardless of women’s position in the social structure. The ideology of male chauvinism is
a political dogma regarding decisions about the proportionality of
civil rights and power between the sexes; misogyny, although
having political ramifications, is essentially an affective or
psychological phenomenon based on passion, not thought. Visceral
and irrational, it has no formal political program or position other
than to denounce and harm women. Misogynists are
“essentialists,” positing a stereotypical “essence” in women, a
basic, immutable, and evil nature allowing for no individual
variation (Gilmore 2001, 13-14).
So while a patriarchal value-belief structure includes a series of misogynistic
aspects, there is a non-misogynistic side which, while quite possibly equally anti-woman
in effect, is not premised upon simple hatred. Instead, “patriarchal traditionalism” (as
termed by Tinder 1997) is a series of interrelated considerations regarding the abilities of,
and roles for, women. While these value-beliefs are not surprisingly far from ideal, it
would not be accurate to call them strictly negative.

“Women are perceived to be kind, compassionate, sensitive, understanding,
honest and trustworthy, whereas men are viewed as strong, tough, experienced and
knowledgeable” (Bystrom 2008, 61). This sort of dichotomy is a re-occurring theme in
the study of gender spanning multiple eras and cultures. The liberal feminist response of
rejecting these differences as a patriarchal imposition is most clearly juxtaposed by
difference feminists (Gilligan 1982; Irigary and Whitford 1991). Although a debate, or
even a full exposition, of these schools of thought is well beyond this project, the
perspective of difference feminism is of special importance in light of the preference
ordering of these gender-based values and the theory re-valuing effects of the theory of
substitution.

27 After all: “The ruling ideas of each age have ever been the ideas of its ruling class”
(Marx and Engels 1848).
Difference feminism posits that:

The human race is divided into *two genres* which ensure its production and reproduction. Trying to suppress sexual differences is to invite a genocide more radical than any destruction that has ever existed in History. What is important, on the other hand, is defining the values of belonging to a sex-specific *genre*. What is indispensable is elaborating a culture of the sexual which does not yet exist, whilst respecting both *genres*. Because of the historical time gaps between the gynocratic, matriarchal, patriarchal and phallocratic eras, we are in a sexual position which is bound up with generation and not with *genre* as sex. This means that, within the family, women must be mothers and men must be fathers, but that we have no positive and ethical values that allow two sexes of the same generation to form a creative, and not simply procreative, human couple. One of the major obstacles to the creation and recognition of such values is the more or less cover hold patriarchal and phallocratic roles have had on the whole of our civilization for centuries. It is social justice, pure and simple, to balance out the power of one sex over the other by giving, or restoring, cultural values to female sexuality. (Irigary and Whitford 1991, 32).

The goal then is not the amelioration of sexual differences, but a re-valuation of these differences. It is the patriarchal *values*, which only embrace the masculine side of sex differences that is the problem. Polling data indicate that this is exactly the problem for female candidates.

In a survey reported in Bystrom (2008), 51% of respondents believed that a man would do a better job in a crisis and in making difficult decisions, but women were favored for trustworthiness and honesty. What makes this of special importance is the value that the respondents placed on these different factors. Consistently, the respondents valued the characteristics favoring the male candidates to the detriment of the women candidates. Along the lines of difference feminism, the way forward is a re-balancing of these valuations. While social movements of all stripes have struggled with such goals, the theory of substitution provides a (very problematic) institutional mechanism to move...
toward the reconciliation of these values. Quite simply, if direct democracy can diminish
the importance voters place on the decision-making abilities of legislators (as that power
is partially removed from legislators and put in the hands of voters), and substitute that
for non-policy oriented characteristics in which there is a gender gap in favor of women,
this provides a comparative electoral advantage to women.28

Feminine Representation?
A consistent finding regarding the role of female representatives is the issues they
focus on. While the reasoning is as speculative as it is various, women fairly consistently
gravitate to issue areas in health, women’s rights, children, and education (Diamond
1977; Barrett 1995; Reingold 2000; Boles 2001; Fridkin and Woodall 2005; Garcia
Bedolla, Tate, and Wong 2005 Carroll and Taylor 1989a; Thomas and Welch 1991;
Thomas 1994; Saint Germain 1989; Thomas 1991; Tamerius 1995; Bratton and Haynie
1999; Carroll 2001; Swers 2002; Wolbrecht 2002; Bratton 2002, 2005; Gerrity et al.
2007). To the degree to which these issue areas are undervalued, decreasing the
importance of policy would comparatively raise the electoral prospects of women.

If, on the other hand, this provides a niche in which women have a policy
advantage, decreasing the importance of policy would comparatively hurt the electoral
prospects of women. It turns out, however, that despite a greater focus on these issues,

28 Even more directly, 31% of respondents believed that a man would manage the
economy better. As will be discussed later, the relationship between economic
performance and voting is diminished in initiative states. I.e., economic performance
is a less important factor for voters in initiative states. This is itself indicative of
substitutionary behavior on the part of voters, but also provides an additional basis for
a relative electoral advantage for women in initiative states.
women are not especially good at getting these issues actually passed (Saint Germain 1989; Thomas 1994; Tolbert and Steuernagel 2001; Weldon 2004; Bratton and Haynie 1999; Bratton 2005; Diamond 1977), and final policy resolutions may turn out to actually be reflective of male demands (Schumaker and Burn 1988). Similarly, the voting behavior women in legislators looks little different than men (Barnello 1999; Gehlen 1977; Mezey 1978a, 1978b; Tamerius 1995; Reingold 2000; Wolbrecht 2002; Donahue 1997). Those differences that are found are usually restricted to Republican women (Welch 1985; Thomas 1989; Burrell 1994; Vega and Firestone 1995; Dolan 1997; Swers 2002), and differences by party swamps differences by gender (Poole and Zeigler 1985).

Where there is a difference in the representation provided by women is with style (Chaney and Fevre 2002). These stylistic differences occur both with relations with constituents as well as within legislative bodies. Within legislatures, Kathlene (1994) studied committee hearings and found different conversational dynamics. Female leaders would use their position to be more inclusive of all participants instead of directing the hearings. Findings of consensus-seeking over control-seeking behavior has also been found by numerous scholars (Kathlene 1994; Rosenthal 1998; Whicker and Jewell 1998; Jewell and Whicker 1994).

With regard to direct relations with constituents, Mansbridge (1999) argues that communication is better when constituents and representatives are of the same gender. This is reflected in a consistent finding the women are more likely to engage in constituent servicing (Diamond 1977; Bers 1978; Mezey 1978c; Flammang 1985; Thomas 1992; Richardson & freeman 1995).
The previous evidence should make it clear that while there are a set of disadvantages that women face in seeking political office, these disadvantages can unexpectedly become advantages. These biases, generally stemming from patriarchal value-beliefs, do not simply translate into anti-woman voting patterns. Although women are consistently not valued for their policy characteristics, the silver-lining is that they are consistently preferred for their personal characteristics. In a political system in which the importance of policy characteristics is diminished, women therefore find themselves relatively advantaged. Whereas men are no longer able to depend on biases favoring their policy-making prerogatives, women have gravitated toward representational styles that thrive in an environment with diminished concern for policy implementation. If voters use direct democracy to take the reins of the policy-making process, these voters can be expected to ignore the policy aspects of candidates and instead select candidates for their honesty, trustworthiness, or constituent servicing; realms in which women are advantaged.

Women and the Initiative
Empirical evaluation confirms the claim that there ought to be more women in office in initiative states. As far as I am aware, there is one study that explicitly looks at the selection of women as an effect of the initiative process. Boehmke et al. (N.D.) find that the presence, as well as heavy use of the initiative, substantially increases the number of women elected to office between 1976 and 2008.
The data comes from the Center for American Women and Politics (2009). Over this time period there is consistently a greater proportion of state legislators that are women.

In addition to what appears to be a uniform intercept shift between initiative and non-initiative states (see Figure 6.1), this difference grows with increased use of the initiative, and is robust to a series of controls.

In addition to the number of women elected to office, the presence (and use) of the initiative also increases the number of women running for office.

**Voting Correctly**

While the non-policy factors of corruption, attractiveness, and descriptive representation were correctly predicted to be more important in initiative states; there are three additional policy factors that should be less important in initiative states. The first policy oriented factor was how competent a candidate looked; the last three consist of a model of voting “correctly,” economic voting, and the incumbency advantage.\(^{29}\)

Evidence for these findings comes from previous studies by different authors, all of which explicitly label these findings inexplicable puzzles.

The first puzzle comes from Lau et al. (2008). In this paper the authors revisit their previous “voting correctly” model with new data from the ANES. This survey data is used to estimate the voters’ policy position, which then is combined with estimated

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\(^{29}\) The incumbency advantage is a policy oriented factor in a negative sense. A negative aspect of the incumbency advantage is that those incumbents are constrained a policy record. Eliminate that disadvantage, i.e. eliminate policy, and those incumbents are left with the advantageous aspects of the incumbency advantage.
policy positions of candidates. To the degree that voters select candidates with policy profiles similar to their own, they are considered to have voted ‘correctly.’ In effect, then, the degree to which voters vote correctly is the degree to which they translate their policy positions into candidate selection.

Unsurprisingly, older, attentive and educated voters are more able to translate their personal policy position into a “correct” vote, in the sense that they are better able to select the candidate that is ideologically closer to them. The results do indicate a reassuringly high degree of sophisticated voting.

The puzzle arises, however, with inclusion of direct democracy in the model.

The most interesting effect involves the interaction of education and the number of referenda on a state’s ballot. Education has a positive effect on the probability of a correct vote in states where there are no referenda on the ballot—about a 10% increase. The effect of education is still positive, albeit cut in half, at mean levels of state referenda. But as we move toward the upper end of number of referenda on the ballot (e.g., states like California), the effect of education actually reverses quite strongly so that the most educated have a 45% lower probability of voting correctly than the least educated.

This puzzle, however, is exactly what is predicted by the theory of substitution.

When voters have the option of bypassing the legislature, their votes will be less dependent upon the policy position of candidates. Voters are substituting the personal for the policy in their voting behavior.

As the Basinger and Lavine (2005) point out, “conceptualization” (Campbell et al. 1960), “sophistication” (Luskin 1987), “awareness” (Zaller 1992), “knowledge” (Delli Carpini and Keeter 1996), or education (Carmines and Stimson 1980; Sniderman, Brody, and Tetlock 1991), are not independent of context. In addition to innate, or exogenous,
cognitive resources, there is variation in the “motivation to acquire and use available information.”

The voter’s cognitive calculus involves a trade-off between conflicting goals: accuracy requires voters to make decisions that correctly reflect their substantive values; efficiency requires voters to make decisions without expending too much cognitive effort. (Basinger and Lavine 2005, 169).

In this case, the evidence is fairly clear that the initiative process diminishes the “motivation to acquire and use” information on the policy positions of candidates. “Voters who find one shortcut to be especially reliable might choose to ignore readily available and diagnostic information, such as candidate ideology, if they do not perceive it as valuable in raising their confidence in a decision” (Basinger and Lavine 2005, 169).

Some may object that these voters are acting as cognitive misers when choosing to investigate the policy positions of candidates, and yet are able to comprehend the wider structure of substitution. Voters unable to select the candidate with a policy profile most similar to their own should putatively not be capable of recognizing that this investigation into policy position is not critical.

First, it should be noted how deeply ingrained direct democracy is in some states. States like California, Oregon and Washington have extensive experience with past initiatives, fully expect more in the future, and voters are quite able to identify leading advocates of specific initiatives. As quoted previously, David Frohnayer, former president of the University of Oregon as well as former state attorney general, claims that “initiative ballots totally overshadow legislative elections (reported in: Broder 2000, 202). Similarly, in a survey as to what motivated voters to turnout in 1996, 51% identified the initiatives on the ballot versus 36% who claimed it was the presidential election (Broder 2000).
Second, elites can subsidize the ‘information.’ While information is not exactly the correct phrase, the point is the same. Due to the presence of the initiative, the media has less reason to examine (or report) the policies of candidates, and their endorsements are likely to follow their reporting. Similarly, candidates themselves have an incentive to reinforce substitution. In debates, it becomes easier to deflect criticism for policy or bypass the issue all together. Just like national office can deflect questions by claiming the policy is a question for the states, officials in initiative states can say they want the voters to decide directly. Even if the majority of voters are unable to recognize that the initiative permits bypassing the legislature for policy, some will. Even a small comparative advantage stemming from the emphasis of non-policy factors can snowball. As candidates emphasize personal factors, voters and the media return in kind, and candidates begin to reinforce this strategy.

Three, voters want to vote for non-policy factors. Given the difficulty of issue voting, the presence of the initiative removes a barrier to a default position. In a low-information voting environment, voters want to vote on their affective considerations. With this natural pull, it doesn’t require information to relieve themselves from unnecessary work.

Lastly, it’s not really a complicated tradeoff. Candidates and initiatives exist in the same campaign and are seen on the same ballot. A person to select in one column, and a policy to select in another: if the voter is selecting policies on the right-hand column, it would be odd to believe that these do not affect one another.

**Economic Voting**

The next puzzle comes from Bali and Davis’ (2007) “One More Piece to Make Us Puzzle: The Initiative Process and Legislators’ Reelection Chances.” Economic voting, in which the vote for a candidate is dependent on the state of the economy, provides a great
test for the more general phenomenon of policy voting. While the majority of policies are positional, in the sense that the electoral competition is about the selection and advocacy of a certain policy position, the economy is a valence issue (Stokes, 1963; Ansolabehere & Snyder, 2000; Aragones & Palfrey, 2002) meaning all (realistic) constituents hold the same opinion: the more the better. The economy has a parallel advantage in the sense that it is the quintessential issue. Many issues come and go, are highly contestable, or effect people only indirectly. The economy is unwavering and is as directly felt by constituents as it is easy to understand.30

Economic voting, then, acts as a great measure of how well voters hold their elected officials accountable for their policy performance. In the case that direct democracy causes voters to take responsibility for policy themselves, and absolve legislators for their policy performance, then economic voting ought to be diminished in states with the initiative. Quite simply, this is what Bali and Davis (2007) find.

As the economic conditions go from worst to best, or from 0 to 1, the electoral chances of a legislator of the same party as the president improve by 14.8 percentage points without the initiative, and by only 8.5 percentage points with the initiative... (W)hen the legislator is of the opposite party of the president. In this case, as economic conditions improve, the legislators' reelection chances decrease, but the decrease is again steeper for those without the initiative process, by around 4 percentage points (Bali and Davis 2007)

If voters are identifying two routes to policy-making, and substituting between the two, diminished punishment for disliked policies is a direct corollary of the voter’s re-

30 For more broad reviews, see Lewis-Beck and Stegmaier (2007, 2008).
focus onto the personal characteristics of candidates. The initiative places greater responsibility for the policy arena on the shoulders of voters, and relieves that responsibility from elected officials. So while the initiative may be indicative of discontent, the initiative also provides an opportunity to circumvent the legislature and diminish the need to punish legislators at the ballot box for policy failures. Voters are taking responsibility for policy themselves, and are more concerned with the symbolic roles that legislators play.

**Incumbency Advantage**

Due to the strong belief that use of the initiative signals discontent with the legislature, Bali and Davis (2007) expected that heavy use of the initiative would correlate with poor electoral prospects for incumbents. If the legislature was doing its job properly, the initiative would not be needed. Contrary to this strong expectation, Bali and Davis discover that use of the initiative correlates to a higher probability of re-election for incumbents.

Like the effect of the initiative on the election of women, the expected effect of the initiative on incumbency requires an understanding of the nature of the incumbency advantage. Previous analysis of the incumbency advantage finds that the effect has two elements: selection effects, and institutional effects.

Selection effects imply that those candidates who successfully become legislators have demonstrated superior campaign abilities. This revelation indicates that they are of a higher quality (Levitt and Wolfram 1997) and indicates a greater likelihood of being able to repeat their victories. Therefore, even if there is no advantage stemming from office, it
is likely that legislators will still be more likely to return to office than the typical challenger.

Institutional effects stem from the resources available exclusively to those in office. There are two avenues through which legislators can use their office to affect their electoral position; one consistently increases the probability of re-election, the other is difficult to successfully leverage and is often a detriment to re-election.

The first factor is constituent servicing. Constituent services is widely believed to be the primary cause of the incumbency advantage (Cain et al. 1987).

An argument similar to the theory of substitution is made by Fiorina (1989). Fiorina argues that legislators (Members of Congress in his argument) have an incentive to shirk effective policy-making because they receive greater electoral advantage through constituent services vis-à-vis the bureaucracy. In a very simple sense, this provides further evidence of the relationship on constituent service and the incumbency advantage. More importantly, however, Fiorina is hinting at institutionally induced substitutionary behavior on the part of lawmakers as a function of diminished electoral responsibility for policy. “If, over time, an increasing number of U.S. representatives are devoting increasing resources to constituency service, then at the district level we would expect that increasing numbers of voters think of their congressman less as a policymaker than as an ombudsman” (Fiorina 1977, 180).

First, the electoral connection is weak with regard to policy because all legislatures create policy collectively while legislators are evaluated individually. The lack of ability to claim credit on policy, or being forced to share blame for poor policy,
makes legislators seek an alternative route for credit claiming. This is done through constituent services in dealing with the bureaucracy.

This theory has the added advantage of being able to explain the dynamic nature of the incumbency advantage at the national level: as the welfare state expands throughout the post New Deal era, and thereby the size of the bureaucracy, this expands the ombudsman role of Members of Congress. These legislatures rationally respond by increasing their constituent services and are rewarded by greater electoral returns which is observed in the phenomenon of the “vanishing marginals.”

The second factor exclusive to legislators affecting their re-election probabilities is the development of a policy record. While many legislators run on a record of accomplishment, this dimension is hard to successfully leverage due to its diverse nature. Challengers are able to pick and choose issues, craft policy positions as dictated by the political winds, and find the worst elements of an incumbent’s record. Although incumbents are certainly mentioning their successful policy decisions, or their general proclivity to select good public policy, the challenger is able to select from among all policies and only focus on the bad. A variety of political psychology literature indicates that negative criticism receives greater attention by voters (the media as well, but for different reasons) than praise. Incumbents are bound by their record; a constraint not shared by challengers. This constraint stemming from past behavior also affects future campaign strategy. Campaigns based upon a reversal of policies, or pursuit of policies the incumbent failed to pursue in the past, lack credibility (Sellers 1998).
This structure, in which policy factors hurt incumbents but the non-policy factors help the incumbent, means that the theory of substitution predicts a greater incumbency advantage in initiative states. Where voters are able to take policy into their own hands, it is non-policy factors like constituency services which become more important. This is one type of non-policy consideration that is exclusive to incumbents, and therefore incumbents can be expected to do better in initiative states if there is a substitution effect.

This, it should be noted, is built upon the broader puzzle articulated by Bali and Davis (2007). Each time an initiative is passed, it is functionally a rebuke of the legislature. This implies a strong negative view on incumbents, and so the most direct expected effect of the initiative should be a drop in the re-election rate of incumbents. Given a direct rebuke of the legislature in the realm of policy, we should be searching for an explanation that can’t rectify the contradictory findings. The theory of substitution can do so.

Conclusion

The theory of substitution posits a fairly radical revision in the politics of a state. Fortunately, that also means the implications are similarly varied. The first two empirical chapters demonstrated this change in very different ways. The first, corruption, is highly salient but difficult to observe. The second, facial characteristics, is quite easy to observe, but of little substantive significance. This chapter mixes this variation between those previous extremes. In descending order; gender, incumbency, economic performance, and general ideology vary in how observable they are to voters.

Additionally, replication of previous findings provides the opportunity to eliminate concerns of biased modeling choices and data mining. While there are always
potential problems with any model or test, it is my hope that the consistency of these multiple findings will provide confirmation for the theory.
Figure 5-1 Women as a Proportion of State Legislators, 1975-2008
Figure 5-2 Direct Democracy and Voting Correctly

![Graph showing Direct Democracy and Voting Correctly]
Table 5-1 Negative Binomial Count of Female Legislatures

<table>
<thead>
<tr>
<th>Initiative State</th>
<th>0.205**</th>
<th>0.167*</th>
<th>0.170*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(0.090)</td>
<td>(0.093)</td>
<td>(0.092)</td>
</tr>
<tr>
<td>Number of Initiatives</td>
<td>0.022**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Non-economic Initiatives</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td></td>
<td></td>
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<tr>
<td>Number of Economic Initiatives</td>
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<tr>
<td></td>
<td>(0.019)</td>
<td></td>
<td></td>
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<tr>
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<td>-0.718</td>
<td>-0.708</td>
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<td>(0.439)</td>
<td>(0.445)</td>
<td>(0.448)</td>
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<td>0.921**</td>
<td>0.918**</td>
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<td></td>
<td>(0.442)</td>
<td>(0.443)</td>
<td>(0.445)</td>
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<tr>
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<td>0.045</td>
</tr>
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<td>(0.082)</td>
<td>(0.084)</td>
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<td>(9.683)</td>
<td>(10.313)</td>
<td>(10.509)</td>
</tr>
<tr>
<td>Real Personal Income</td>
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<td>0.024**</td>
<td>0.024**</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.012)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Citizen Ideology</td>
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<td>-1.243</td>
<td>-1.214</td>
</tr>
<tr>
<td></td>
<td>(3.032)</td>
<td>(3.117)</td>
<td>(3.109)</td>
</tr>
<tr>
<td>Fundamentalist Religion (%)</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.005)</td>
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<td>-0.300**</td>
<td>-0.299**</td>
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<tr>
<td></td>
<td>(0.139)</td>
<td>(0.142)</td>
<td>(0.143)</td>
</tr>
<tr>
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<td>0.144**</td>
<td>0.144**</td>
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<tr>
<td></td>
<td>(0.029)</td>
<td>(0.032)</td>
<td>(0.032)</td>
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<td>Time - Squared</td>
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<td>-0.001**</td>
<td>-0.001**</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Total elected officials (logged)</td>
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<td>1.165**</td>
<td>1.165**</td>
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<tr>
<td></td>
<td>(0.123)</td>
<td>(0.118)</td>
<td>(0.118)</td>
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<td>(0.814)</td>
<td>(0.813)</td>
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<td>-2.690**</td>
<td>-2.688**</td>
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<tr>
<td></td>
<td>(0.201)</td>
<td>(0.207)</td>
<td>(0.206)</td>
</tr>
</tbody>
</table>

| Observations | 614 | 573 | 573 |
| Log-Likelihood | -2100.59 | -1940.90 | -1941.20 |

Standard errors in parenthesis, clustered by state
* Indicates p<.10; ** indicates p < .05 (two tailed)
Table 5-2 Negative Binomial Count of Female Candidates

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<th>Estimate 1</th>
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<td>0.069</td>
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<tr>
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<td>(0.090)</td>
<td>(0.091)</td>
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<tr>
<td>Number of Initiatives</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.021**</td>
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</tr>
<tr>
<td></td>
<td>(0.006)</td>
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<td></td>
</tr>
<tr>
<td>Number of Economic Initiatives</td>
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</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td></td>
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</tr>
<tr>
<td>Number of Non-economic Initiatives</td>
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<td>(0.008)</td>
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<td>Legislative Professionalism</td>
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<td>(0.423)</td>
<td>(0.405)</td>
<td>(0.398)</td>
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<td>(0.483)</td>
<td>(0.395)</td>
<td>(0.394)</td>
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<tr>
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<td>(7.838)</td>
<td>(7.902)</td>
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<td>0.021**</td>
<td>0.020**</td>
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<td>(0.010)</td>
<td>(0.010)</td>
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<tr>
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<td>-0.003</td>
<td>-0.003</td>
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<td>(0.003)</td>
<td>(0.004)</td>
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<td>Southern state</td>
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<td>-0.323**</td>
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<td>(0.136)</td>
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<td>(0.166)</td>
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<td>(0.232)</td>
</tr>
<tr>
<td>Time - Squared</td>
<td>-0.000</td>
<td>-0.001</td>
<td>-0.000</td>
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<td>(0.001)</td>
<td>(0.002)</td>
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<tr>
<td>Total elected officials (logged)</td>
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<td>1.178**</td>
<td>1.184**</td>
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<td></td>
<td>(0.114)</td>
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<tr>
<td>constant</td>
<td>-1.309</td>
<td>-3.554</td>
<td>-2.610</td>
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<td></td>
<td>(4.827)</td>
<td>(6.757)</td>
<td>(6.791)</td>
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<td>-2.947**</td>
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<tr>
<td></td>
<td>(0.210)</td>
<td>(0.236)</td>
<td>(0.237)</td>
</tr>
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</table>

Observations: 246, 205, 205
Log-Likelihood: -983.46, -814.37, -813.02

Standard errors in parenthesis, clustered by state
* Indicates p<.10; ** indicates p < .05 (two tailed tests)
CHAPTER 6: MEASURING REPRESENTATION

Introduction
The proposition that voters respond to the initiative process by shifting their voting calculus toward the non-policy aspects of candidates depends on the belief that the initiative can rectify policy. It should be noted that I say it depends on the belief of greater responsiveness. It may be possible that voters wrongly shift their voting patterns in response to an institution that has no effect, and this possibility should not be ignored. Even if the initiative process has no policy effects, the voters observe a campaign process, and voting options, of two distinct types. The first consists of traditional candidates acting as a basket of policy positions and personality. The second is a set of policy propositions put directly to a vote. Even if this second type does not discernibly alter the policy output of a state, it may very well alter voting behavior. A secondary campaign and voting option that is exclusive to policy may re-order the voters’ conceptualization of the candidate.

If, however, the initiative diminishes policy voting without actually altering policy outputs, such a process is hardly charitable to the rationality of the voter. A more stable process of substitution would exist if the initiative process actually affected policy output by bringing policy closer to the median voter. In that case, our belief that voters are reorienting their voting behavior toward selecting candidates for non-policy reasons would be more credible. This causal process would also moderate concern regarding the cognitive ability of the voters. With actual policy outputs being changed, elites in the form of the media and candidates, who clearly have greater informational and cognitive
resources, would have an incentive to alter the informational environment to encourage such substitution in voting behavior.

The question as to whether or not the initiative process makes policy more representative of a state’s median voter is a well-studied question (Romer & Rosenthal 1979, Gerber 1996, 1999, Matsusaka 2005, Burden 2005, Arceneaux 2002, Camobreco 1998, Hug 2001, 2001, Lascher et al. 1996, Pippen et al. 2002, Bowler & Donovan 2004, Lax & Phillips 2009, Monogan et al. 2009). Although a slight majority of this research claims that the initiative does make policy more responsive to constituent demand, these studies have also started a debate regarding the proper approach to model the effect of the initiative on policy responsiveness. How we ought to measure representation is too often ignored, but is a crucial aspect of the debate as to whether or not the initiative produces superior responsiveness. Absent a proper method to measure the concept of representation the conclusions of this research is unclear at best.

This chapter demonstrates a theoretically and empirically improved method for measuring representation. This method permits evaluation of the effect of the initiative on the responsiveness of elected officials. The first section reviews the central methodological critique by Matsusaka (2001) and the findings giving rise to that critique. The second section extends a basic formal model of the initiative process (Gerber 1996) in order to derive a more theoretically sound method of empirical evaluation. The third section explicates the statistical method derived in the previous section and the fourth section demonstrates validity via simulation.
Findings and Methodological Critique

Over the past two decades, widespread theoretical arguments have concluded that the initiative ought to entail greater convergence between citizens and their representatives. Since Romer and Rosenthal (1979) the dominant explanation for the initiative bringing closer representation has been competition. Gerber (1996, 1999) formally models this process: the availability of the initiative allows an interest group to compete with the legislature for votes of the citizenry. Matsusaka and McCarty (2001) phrase this as the end of the legislature’s monopoly over policy due to the entrance of a competitor: the citizen. The competition breeds Downsian convergence toward the median voter.

Matsusaka (2005) follows Kalt and Zupan (1990) in the assumption that the median voter hypothesis breaks down due to free riders in monitoring and disciplining legislators. As elected officials putatively have the option to either accurately represent their constituents, or vote according to their own ideology; constituents must be able to both monitor the behavior of the officials, and discipline any observed shirking. The breakdown of monitoring and discipline provides elected officials leeway to consume their own ideological preferences. The initiative ameliorates this dilemma by stripping issues from the hands of politicians. By restricting the number of issues that are ‘bundled’ into a politician, citizens are then better able to monitor and punish their officials.

Without the initiative, policies are bundled within each individual politician as well as log-rolled within the legislature. Bundled politicians and legislative log-rolls both facilitate policy passage that would be impossible if proposed individually. The initiative
provides the clarity needed to strengthen constituent monitoring, and breaks apart policy so that the electoral significance of the median voter is strengthened.

From a quite different school of thought, there are the ‘educative’ effects of direct democracy. This thread of research has found that direct democracy increases voter turnout, causes individuals to pursue more information, and breeds political discussion on the issues (Tolbert, Grummel, & Smith, 2001; Bowler & Donovan, 2002a; Bowler & Donovan, 2002b; Smith & Tolbert, 2004; Tolbert & Smith, 2005). Such effects ought to empower the citizenry to ‘tighten the reins’ on their elected officials.

Representatives are educated by direct democracy as well. Burden (2004) theorizes that one reason a legislature without the initiative is not optimally responsive is because it is unable to discern public opinion. The initiative provides a new avenue for citizens to provide information to their representatives. A parallel process is the effect that the initiative process has on the number and type of interest groups. Boehmke (2002, 2005) demonstrates a reinforcing effect of direct legislation through the increase of interest groups; an increase centered on the strengthening of underrepresented citizen groups.

All these explanations conclude with the same claim: the presence of the initiative ought to make public policy more responsive to constituents. How this should be measured is hotly debated. Responsiveness is not the direct effect of the initiative on policy, but the moderating effect of the initiative between constituent opinion and policy. This framework has predictably led to an interaction between the initiative and public opinion:
\[ G = \alpha + \beta_I I + \beta_P P + \beta_{IP} IP + \beta_X X + \epsilon \]

Where G is an observed policy indicator (presence of death penalty or level of education spending for example), I is a dummy for the presence of the initiative process, P is a preference indicator of the populace (e.g. level of support for the death penalty, demand for education spending or a general ideology indicator), IP is an interaction, and X a vector of controls. This method, with minor variants, is used by Arceneaux (2002), Bowler & Donovan (2004), Camobreco (1998), Burden (2004), Gerber (1996, 1999), Hug (2004), Lascher et al. (1996). This approach is criticized by Matsusaka (2001).

Matsusaka points out that the differential slopes of this model are lacking a fundamental meaning. Put simply, a higher slope does not indicate greater responsiveness; this higher slope may in fact be too high. Matsusaka claims that responsiveness is measured by which of the slope coefficients is more like the true, but unfortunately unknown, mapping function (slope) between constituent opinion and government policy. Without knowledge of this true relationship, however, empirical estimation does not meaningfully carry into theoretical significance.

This critique is a critical challenge to the study of representation. Even with the best public opinion data, and perfect knowledge of public policy, analysts are unable to demonstrate that any set of political institutions entails better or worse representation. At best, we can demonstrate that two systems provide a different quality of representation.

The next section returns to the theoretical data generating process in order to derive a process to better estimate the effect of a convergence inducing institution. Of
central importance is the claim that, when we return to the underlying data generating process, we actually know more about the mapping between constituent preferences and representative positions than is often thought.

**The Formal Model**

This dissertation looks to an early formal model (Gerber 1996) which is well accepted in the literature. This single dimensional sequential game has three actors: the median member of the state legislator (L), the median voter of the state (V), and a ‘proposer’ which I will consider an interest group (IG). Preferences are single-peaked and monotonically decreasing with distance from their ideal policy outcome, and all players act with complete information. The legislator acts first by choosing a policy position, followed by the interest group deciding whether or not to propose an initiative, and a popular vote between the status quo and that initiative (if it is proposed). If the initiative has no cost, then the predicted effect would be perfect convergence between the legislature and the median voter. To the degree that the initiative process is costly to the interest group, then there will be some degree of slack between constituents and representatives.

In the presence of the initiative, the legislature must anticipate the response of the interest group and voters above and beyond what is typical. The initiative provides the voters with the last move in the policy making sequence, and policy positions therefore must respond to the preferences of the median voter. As legislators without the initiative have all their characteristics bundled into a single entity, the threat of electoral
punishment for individual policy divergence is questionable. With the initiative, voters are able to target specific policies to rectify the work of the legislature.

Figure 6-1 is the extensive game form. This is the same as the initiative subgame presented previously in chapter two. In equilibrium, L will set policy as close to the V as needed to pre-empt an initiative from the interest group. This results in policy that is either unchanged or closer to the ideal point of the median voter.\footnote{Extensive proofs can be found in chapter three.}

As we consider how this relationship would be estimated statistically, first consider the relationship between constituent demands and public policy in the absence of the initiative. Achen (1977, 1978) makes it clear that the expected baseline for comparison, in which representatives face no constraints at all, is not the absence of any relationship between constituents and representatives. In this minimalist relationship, in which the electoral connection is entirely absent, representatives are, at worst, randomly drawn from the population of voters they represent. Therefore, when legislatures implement their preferred policy while ignoring their constituents, there is still a clear relationship between citizen preferences and state policy when viewed across multiple legislatures. Policy will, on average, accurately reflect constituent demands.

Figure 6-2 illustrates the baseline distribution of all legislative ideal points relative to their district’s median voters. Although all districts certainly have different medians, figure 6-2 is the distribution of legislatures around the set of medians centered
to the same point. While the legislature could theoretically be on a far extreme of the political spectrum relative to their median voter, such a positioning is unlikely and the use of a normal distribution follows from that likelihood.

If we consider the initiative to be the only constraining institution, this is the baseline relationship between the median voter and the legislature’s policy that would be expected in one of four conditions:

1. There is no initiative process in the state.
2. There is no interest group (proposer) in the state.
3. The cost of the initiative is at such a level that no initiative is a credible threat to the legislature.
4. The ability of the legislature to modify the initiatives passed by the voters is of such a degree that they need not modify their behavior to prevent initiatives they do not favor (Bowler & Donovan, 2004).

The first condition is of central importance. The other three are unlikely to exist to this extreme degree, and should instead simply moderate the effect of the initiative. I.e. it is the presence of the initiative process that plays a driving role in instilling greater representative responsiveness, the other factors moderate that effect.

Figure 6-3 introduces an interest group in the presence of the initiative process. An interest group in an initiative state changes two types of legislatures: those on the opposite side of the median voter as the IG, and those more extreme than the interest

32 Figures 6-2-6.5 are all ‘centered,’ or conditioned upon different values of citizen ideology (x dimension). Figures 6-6 and 6-7 show the same function as an uncentered version.
group. In the case of the former, these legislatures on the opposite side of the median voter relative to the IG converge toward the median in Downsian competition. Similarly, legislatures more extreme than the IG but on the same side of the median voter also are forced to compete for support of the median voter. In this case, however, convergence is to the interest group’s ideal point. Under the assumption of perfect information, the induced equilibrium does not require the process of the legislature being rebuked by an initiative to actually take place. Given basic foresight, legislatures will, in equilibrium, pass legislation between the median voter and the IG without initiatives being proposed.

Legislatures located between the median voter and the interest group are unaffected by the initiative (Gerber’s case 2). Given the IG’s extremity relative to the median voter, threats of an initiative are not credible to these moderate legislatures.

Lastly, note the slack present to the left of the median voter and to the right of the IG. As the cost of the initiative, and the ability of the legislature to overturn initiatives increase, so will the slack in the model. In figure 6-2 this slack means more legislatures producing policy to the left of the median voter and to the right of the interest group. When these two conditioning factors are both zero there should be no laws to the left of the median voter or to the right of the interest group.

This dynamic is of course symmetric around the median voter. Figure 6-4 shows the same relationships on the other side of the median voter, but with an interest group closer to the median voter. With costless initiatives that the legislature is unable to amend or overturn, policy divergence form the median voter is bounded by the distance of the interest group to the median voter.
While the intention of these figures is simply to re-specify Gerber’s 1996 model as a baseline framework that few would contest, the basic conclusion of this chapter should be increasingly clear: given the symmetric nature of convergence, the aggregate effect of the initiative process is to reduce the variance around the policies demanded by constituents. This is shown in Figure 6-5.

This figure is showing the effect of symmetric truncation. This truncation (i.e., bounding of divergence) ought to be measured solely through the estimate of the variance, not the conditional mean. Fortunately, truncated distributions are a well studied phenomenon due to their use in selection models (Heckman 1979). The model of the theorized data generating process predicts points of truncation resulting from initiative-introduced competition for policy. As seen in figures 6-3.-6-4, there are truncation points from the left (a) and from the right (b). The resulting expected value is found through the Mills Ratio (Patel 1996):

\[
E(X|a < X < b) = \mu + \frac{\phi\left(\frac{a - \mu}{\sigma}\right) - \phi\left(\frac{b - \mu}{\sigma}\right)}{\Phi\left(\frac{b - \mu}{\sigma}\right) - \Phi\left(\frac{a - \mu}{\sigma}\right)} \sigma
\]

Note that when

\[
a - \mu = -(b - \mu)
\]

i.e., a and b are symmetric around \( \mu \), then the expected value of X converges on \( \mu \).

This is equivalent to saying that the conditional mean of Y is unaffected by the truncation parameters, and beta is therefore an unbiased estimate of Y when truncation is symmetric.
Figure 6-8 graphs the effect on (bias) through simultaneous variation in the truncation values, and presents the same graph from two different angles. On the left-hand portion, the point closest to the reader is the point at which both truncation points are very low. This means the right truncation parameter, which varies from zero to four standard deviations above the mean, is at its lowest value of zero; and the left truncation point is at its lowest value of four standard deviations below the mean. At this point, in which the left (negative) side of the distribution is virtually unaffected, but the right hand side (greater than zero) is eliminated, the bias is negative .8. I.e., the expected value of the negative numbers of a standard normal distribution is negative .8.

The line across the graph in which the two sides are equidistant from $\mu$ is the white section in the middle of the range. The right-hand graph is turned so that the reader can see this straight line which runs almost straight through this paper. It is this line that demonstrates that $\mu$ is unbiased given symmetric truncation.

The formula for the variance is (Patel 1996):

$$Var(X|a < X < b) = \sigma^2 \left[ 1 + \frac{\frac{a - \mu}{\sigma} \phi\left(\frac{a - \mu}{\sigma}\right) - \frac{b - \mu}{\sigma} \phi\left(\frac{b - \mu}{\sigma}\right)}{\Phi\left(\frac{b - \mu}{\sigma}\right) - \Phi\left(\frac{a - \mu}{\sigma}\right)} - \left(\frac{\phi\left(\frac{a - \mu}{\sigma}\right) - \phi\left(\frac{b - \mu}{\sigma}\right)}{\Phi\left(\frac{b - \mu}{\sigma}\right) - \Phi\left(\frac{a - \mu}{\sigma}\right)}\right)^2\right]$$

As this is far from obvious, figure 6-9 graphs the result. This shows the monotonic relationship between the truncation values and the OLS estimate of sigma.

These graphs also indicate a fair amount of robustness against the violation of symmetry. First consider the left-hand side of the left graph (figure 6-8). This area
indicates a lack of constraints; a standard normal distribution around the conditional mean. The relative flatness in that area is akin to relative insulation from disturbance in the conditional mean. A random walk starting from an unconstrained distribution is as likely to increase the mean as it is to decrease the mean, yet the change in variance is strictly negative. This difference between balancing means, and strictly decreasing variance, suggests that the variance effects will dominate changes in mu. Similarly, the area where changes in the mean are most easily observed (strong, symmetric truncation), is where the variance has already bottomed out and would be unmistakable, while mu may still be unaffected; just highly sensitive.

So while Matsusaka (2001) is concerned that we do not know the proper slope coefficient, and therefore we do not know which of the two slopes is closer to the truth, this analysis demonstrates that a naïve estimate of this slope is an unbiased estimate of the true slope coefficient. The quality of representation, then, is not about the value of the slope but the degree to which legislators are constrained to implement policy as demanded by their constituents. That quantity of interest is the variation around the conditional mean of the estimate.

**Measuring Representation**
Matsusaka (2001) rightly claims that we could create a dependent variable based upon the sum of squared error, only if we could measure the desired policy directly. He clarifies “directly” as meaning one of two possibilities: either the topic is simple and straightforward like a dichotomous preference for (against) the death penalty; or the preferences of the public are directly evaluated (such as asking how many dollars we
should spend per pupil). In both of these cases we know the exact level of divergence between public preferences and government policy. Matsusaka believes that it is largely absurd to collect public opinion data on something akin to exact spending levels, and so the only viable policy indicators are those that are dichotomous. This is currently the dominant solution.

Although the use of differential slopes for a dichotomous variable slopes is well accepted, and this paper concurs with that approach, the reasoning is vastly different. Typically, it is said that a dichotomous variable is acceptable because we can generate information on constituent opinion that directly translates into policy. In other words, the mapping function is known a priori. This allows a simple congruence measure between constituents and policy. The model presented herein leads to the same conclusion, but through a different approach. Instead of the simplicity of the mapping function, this model argues that what is unique about a dichotomous policy indicator is that there can be no over-representation. The elimination of the over-representation comes through the bounded nature of the policy indicator. This boundary converts the greater variance (which this paper posits to be the basic indicator of poor representation) into a smaller coefficient. Therefore, a higher coefficient is indicative of better representation, but only because of the bounded nature of the dependent variable which makes that coefficient indicative of reduced variance.33

33 A simulated comparison easily demonstrates this. When a linear model is estimated through OLS, increased variance around the conditional mean has no effect on the coefficients. This is indicative of the fact that it is incorrect to estimate divergence between policy and constituent through slope estimates. When the simulated policy
When the dependent variable is continuous, or more accurately, the dependent variable has no realistic boundaries that would transform variance attenuation into coefficient amplification, then the variance must be explicitly modeled independent of the slope coefficient.

Analyzing the variance could be done in three different ways. First, lower variance around the estimate will be seen in a higher $R^2$ or Root Mean Squared Errors (RMSE) when samples are split. This approach has two problems. First, this would re-introduce the “Achen problem,” (1990) in which extra variance in the independent variable will artificially increase these indicators. Second, this approach is exceedingly difficult to include controls or make comparisons between institutions. Each factor thought to increase responsiveness (theorized institutional effect or a-theoretic control) would necessitate a new split in the samples. A continuous moderating variable would call for a number of splits in the sample equal to the values observed of that independent variable.

The second way is to use (squared) residuals to measure the variance around the estimate. This would entail regressing policy on constituent demand, saving and squaring the residuals, and using those residuals as a dependent variable for a second stage multivariate regression with the theorized institutional factors and controls as the independent variables. While such an approach does permit multivariate estimation, the sequential structure does not accurately estimate slope coefficients in light of modified space is dichotomized, however, increased variance in the conditional mean (poorer representation) results in smaller coefficients.
standard errors, and vice-versa. These two factors need to be estimated simultaneously. Although rarely done, OLS theoretically provides the means for such a dual estimate (Franklin 2005).

Although OLS estimates are typically substantively interpreted as a single parameter model of coefficients, the second parameter (sigma) can be more than a nuisance parameter. In the modified equation below, $z$ is a vector of estimable factors (with a constant $-\gamma$) affecting the variance. As the initiative has no theoretical reason to affect the conditional mean of $y$, but should instead affect the variance around that estimate, differential estimates of the coefficient have little theoretical importance. The initiative, or other factors thought to induce convergence, should be estimated through sigma, not beta. Maximizing this function provides a direct test of initiatives constricting legislative outputs closer to the demand function of their constituents. This also has the benefit of exceedingly easy incorporation of proper multivariate controls of variance.

$$f(y_i \mid x_i) \sim \frac{1}{\sqrt{2\pi e^{z_i\gamma}}} e^{\frac{1}{2} \left[ \frac{(y_i-x_i\beta)^2}{e^{z_i\gamma}} \right]}$$

All together, this approach provides a theoretically and empirically sound test (which is also more general) to determine if direct democracy brings state policy closer to that of constituent demands. We can map differing scales onto one another, determine the level of divergence, and empirically evaluate the factors that affect divergence in the face
of proper multivariate controls. This method is applied in the next chapter by replicating previous research and testing the theory on a next set of data.

**Conclusion**

This chapter set out with two tasks in mind: (1) explicate the problems of measuring responsiveness through changes in slopes estimates, and (2) derive an alternative specification that tests the theorized proposition.

The first goal, already well articulated by Matsusaka, was reiterated by returning to the theorized data generating process. This not only demonstrates that slope estimates should be interpreted as an unbiased constituent demand function, but also reveals the solution: that it is the *variance* around the demand function that indicates the level of responsiveness to constituent preferences. Estimation of this variance (goal 2) is fairly straightforward. A slight modification of the basic OLS estimator allows parameterized estimates of variance. By exploiting the simultaneous estimation of beta & sigma, we can find and compare changes in variance across different slopes even while including controls for different institutional designs.
Figure 6-1 Initiative Subgame

1) **Legislator** announces proposal

2) **Interest Group** decides to propose initiative

3) **Interest Group** announces proposal

4) **Voter** votes on initiative
Figure 6-2 Distribution of Legislative Ideal Points

PDF of the legislatures’ ideal point

Voter
Figure 6-3 Distribution of Induced Legislative Ideal Points (Left Truncation)

PDF of the legislatures’ induced ideal point
Figure 6-4 Distribution of Induced Legislative Ideal Points (Right Truncation)

PDF of the legislatures’ induced ideal point
Figure 6-5 Convergent Effect of the Initiative
Figure 6-6 Uncentered Constituent & Legislative Ideal Points

Distribution of Legislative Ideal Points

Voter

State 1 State 2 State 3 State 4
Figure 6-7 Uncentered Constituent & Legislative Ideal Points
Figure 6-8 Effects of Truncation on Bias of Conditional Mean (two views)
Figure 6-9 Effects of Truncation on Conditional Variance
Introduction

From Plato through the Federalist papers and contemporary campaigns, substantive representation, or the degree to which elected officials select and implement policies as demanded by their constituents, is a perennial issue of concern. While the normative question as to whether or not policy *ought* to be responsive to the mass public may be a question for another time, whatever position one takes will eventually necessitate evaluation of policy responsiveness. In this case, the movement toward direct democracy in the early twentieth century United States was largely based upon demand for greater responsiveness.

In addition to intrinsic interest in the degree to which elected officials faithfully translate constituent demand into policy, as well as in addition to testing a long-lasting question on the effect of the initiative process; the theory of substitution (presented in chapter two) depends upon this convergent effect. If there is a convergent effect of the initiative, and policy output is more representative of constituents due to a process outside the selection or representatives, then the reasoning behind the selection of representatives ought to be different.

As discussed in the previous chapter, however, the process through which we can measure, and therefore model, representation is an open question. Absent that, we are floundering in the dark. The previous chapter, however, presented a theoretical approach to meet this challenge. Therefore, this chapter will demonstrate that the initiative does
induce policy that is more representative of the constituents they represent. In an attempt to avoid simply adding another finding to a pile of previously contested findings, I will begin by replicating previous work that found the initiative had no effect.

**Replications**

**Discussion**

The well-known quote that the initiative acts as a “gun behind the door” to induce policy convergence toward the median voter has been well tested, but with little agreement in the results. To expand my contribution beyond simply adding to the count of articles finding a convergent effect, I have a three step process. First, I demonstrated that the theory should be tested through a different approach (previous chapter); second, I apply the method to previous research; and third, test the theory on a much larger dataset using measures of general ideology, not ad hoc policies.

The standard approach in the literature is to use shifting slopes, or different mapping relationships between public opinion and public policy. The presumption is that a higher coefficient is a better relationship. Initially, of course, this should be a questionable approach given that their presumed perfect relationship would be an infinite slope; a silly conjecture. Instead I demonstrate that policy representation is better when that policy is constrained toward the median voter: a process in which policy output that is too low is made higher, and policy output that is too high is made lower. I.e. our understanding of what is occurring should be observed through truncation of policy outcome. This does not affect the conditional mean of public policy, i.e., slope shifts, but
instead affects the conditional variance. I presented the processes through that can be estimated in the previous chapter.

Replication provides a strenuous test of the theory by acting as a constraint against ad hoc selection of policies as well as selective reporting of results. As there are countless policies, available in dozens of years that can be related to innumerable state political ideology variables; regardless of the true effect of the initiative on responsiveness, it would be simple to generate results on either side of this debate. Replication instead accepts the data selection of the critics and bounds the analysis to a pre-determined set of policies and years.

Similarly, the extended new test of this question uses one of the only long-running measure of state political ideology (which guards against the selection of strategically selected years), a measure that measures the ideology of both a state government and of the citizens (which guards against strategic selection of policy outputs), and is a general measure of ideology (which guards against ad hoc findings).

Arceneaux
The first replication is Arceneaux’s (2002) piece that distinguishes between a general ideological demand function and a topic specific indicator of constituent preferences. Using the basic interactive dummy approach, Arceneaux finds confirming results both for the distinction between general and specific policy demands, as well as the effect of the initiative through the interaction. Table 7-1 shows an exact replication of Arceneaux’s findings next to the same full model specification with a parameterized variance estimate.
The coefficients of the two models are indistinguishable, but the standard errors in the second model are uniformly smaller. While simultaneously estimation of the variance creates a better model fit overall, the real importance is the parameter estimates on the variance part of the equation. The second column is simply the exact replication with an added indicator variable in the variance equation. This finds, as expected, that the initiative shrinks the variance around the estimated relationship between ideology and public policy. The third column attempts the same replication while replacing the indicator variable for the initiative with the number of initiatives in 2002. The replication is very similar substantively, but does not include the interaction effects. These interaction effects have little to no theoretical meaning, do not affect the variance estimates which do have theoretical meaning, but also prevent the model from converging when they are included.

In addition to the presence of the initiative leading to greater convergence, differentiating states by the number of initiatives also finds that a higher number of initiatives leads to better convergence between constituent ideology and policy. This is a better test of the theory as it distinguishes between states with regular use of the initiative (like California) from states with rare or non-existent use (like Mississippi).

Although I was unable to perfectly replicate the data\textsuperscript{34}, as there are no differences of any significance, I consider this replication to be satisfactory as a baseline test.

Unfortunately, the effect of the initiative on the variance of the estimate is not as clear in this case. Bolded are the three (out of 9) models where it looks as though initiatives might be having an effect on the variance (two-tailed \textit{p} ~< .12). Given the small-\textit{n} of 47 and two-tailed level of significance, it is reasonable to consider the finding to be at least of some interest. I chose educational expenses to test the specification of the model. In sequential models I drop the interaction term, drop the intercept shift from initiatives, and then add a south dummy to the variance estimate. While these changes had no effect on the variance decrease provided by initiatives; the coefficient was always negative and the \textit{p} values were consistently about .1.

Although consideration of the other evidence may lead to acceptance of a \textit{p}-value about .1 (it is a one-tailed hypothesis afterall), the dependent variable of Education Expenses was selected as it made the best case for the effect of the initiative. Considering the full set of possible policy areas makes a reversal of the Lascher conclusions quite dubious. At the same time, the data for this test is quite limited.

\textbf{Burden}

The last replication also has the limitation of one year’s worth of data, but provides clearer results. This last replication is of Burden’s (2005) “Institutions and Policy Representation in the States.” While this piece has multiple policy areas: abortion, abortion,

\textsuperscript{34} Much thanks to Michael Hagen for taking the time to dig up data from over a decade ago.
death penalty, and a general policy index, it is only the policy index dependent variable that is continuous, so this is the only replicated regression. Burden concludes that the discharge petition leads to greater policy responsiveness, as indicated by a statistically significant positive interaction term, but that the initiative has no effect. The methodological critique in the previous chapter, however, questions the interpretation of the statistical finding. Fundamentally, it may be the case that this positive interaction term indicates that the discharge petition skews the mapping function (slope) between constituent ideology and public policy away from, not toward, the ideal relationship. To imply that a positive coefficient of a higher value is always better representation necessarily assumes that the perfect slope is infinity.

The alternative posits that public policy will sometimes be too conservative, and sometimes too liberal. Absent strong reason to thing that public policy is biased in a certain direction, a naïve estimate of the mapping function will, on average, be correct. The real indicator of superior representation is that public policy within a class of states (like initiative states) has less variation around the estimated policy demanded by the constituents. Using this approach, the replication of Burden finds that the initiative does lead to superior policy representation. This finding is robust to different models of the relationship between ideology and policy, as well as inclusion of controls for other representation inducing institutions.

The first column of table 7-5 replicates the first column of Burden’s third table. The following columns vary the control variables included in the variance equation (bolded), as well as the model specification for the slope estimates. Consistently across
all specifications, the presence of the initiative shrinks the variance (negative coefficient) around the conditional mean of the estimated public opinion. This, as previously discussed, indicates that the initiative entails superior policy representation.

The Arceneaux replication confirmed an interaction-based finding that the initiative leads to better policy responsiveness. The replication of Burden’s findings, conversely, reveals a robust reversal of the finding that the initiative does not have a convergent effect. These all, however, have severe data limitations. One single year, generating forty-seven (or forty-eight) observations, makes it quite difficult to claim the test is conclusive. What is needed is a test not limited to a single year or haphazard policy areas. The next section provides that test.

**An original test**

This final test has three elements that are atypical. First, the Berry et al. (1998) data provides a long trend. Second, constituent ideology as well as state government ideology is measured. Third, the measures are aggregates of general ideology. Such aggregation is more theoretically meaningful, less susceptible to idiosyncratic effects, and provides a more conservative test.

Constituent ideology is measured through the ideology (ADA scores) of national representatives weighted by their vote margin. This uses the well understood Congressional arena to determine starting ideology points, and how states vote for (against) those individuals provides information about the ideology of the citizens of a state. State government ideology, on the other hand, is derived through interest group ratings of the state governments.
The first two columns use the interaction method for differential slopes. The third model (consisting of two columns) in table 7-6 shows the simultaneous estimation of the slope and variance estimates. As predicted by the theorized data generating process, the effects of population, legislative professionalism, and racial diversity have distinct effects. All three “matter” but it is only racial diversity that affects the conditional mean. Upon controlling for a host of other factors, most notably citizen ideology of course, large and small states do not differ in the ideology of their governments. Similarly, legislative professionalism does not affect mean governmental ideology. These factors do, however, both affect the variance around those estimates. Populous states are more likely to be heterogeneous and send more conflicted signals to their representatives (Przeworski, Stokes, & Manin, 1999), similar to racial diversity. These both increase the variance around the relationship between constituent preferences and public policy. Legislative professionalism, conversely, provides a greater ability for representatives to respond to constituent demands, and this is reflected by a negative coefficient indicating greater convergence (Maestas 2000 also finds that legislative professionalism leads to greater policy convergence). While legislative professionalism and population only affect responsiveness (variance), racial diversity affects both responsiveness and the conditional mean of governmental ideology. States with greater racial diversity are more liberal.

What is most important, however, is the effect of ballot measures on representation. Quite simply, there is a slight (insignificant) drop for those states with the initiative, but a strong effect from the number of initiatives on the ballot. Note that the intercept shift from the initiative dummy treats California the same as Mississippi. The
number of issues on the ballot captures the costs and restrictions that vary by state. Although the negative coefficient indicates reduced variation around the relationship between constituents and representatives, i.e. greater responsiveness, this impact is substantively much smaller than the effect of time, population, racial diversity, or legislative professionalism. It should be noted, however, that the initiative is something that is fairly easy to modify. States without it can introduce it, and states with heavy restrictions can relax those restrictions. By comparison, racial diversity and population size are exogenous.

**Conclusion**

This chapter set out to demonstrate that the initiative breeds policy convergence between representatives and their constituents. This was done through replication of previous studies and a new test with thirty years worth of data. While the replication does not uniformly indicate greater convergence as a result of the initiative, the evidence is quite strong. The new test diverged from previous approaches of looking at individual topics in singular years. Using Berry et. al’s index of citizen and government ideology over 32 years, I am able to conclude that the initiative brings convergence between policy and preferences.

This initially speaks to the ongoing debate on the effect of the initiative on representation. Hearkening back to the early suggestion that the initiative can act as the ‘gun behind the door,’ these findings indicate that direct democracy strengthens the relationship between elected officials and their constituents. While such findings speaks to a series of normative questions in the study of democracy, it may be even more
important to have gained a firm foothold in the methodology through which we negotiate these broader questions
Table 7-1 Arcenaux Replication - Naral abortion index

<table>
<thead>
<tr>
<th></th>
<th>Arcenaux Replication</th>
<th>Parameterized variance (number of initiatives)</th>
</tr>
</thead>
<tbody>
<tr>
<td>gss abortion attitudes</td>
<td>-33.67** (11.88)</td>
<td>-39.76** (9.49)</td>
</tr>
<tr>
<td>EWM Ideology</td>
<td>1.67** (0.48)</td>
<td>1.52** (0.46)</td>
</tr>
<tr>
<td>percent fundamentalists</td>
<td>-0.17 (0.40)</td>
<td>-0.23 (0.32)</td>
</tr>
<tr>
<td>percent female legislators</td>
<td>-1.33* (0.64)</td>
<td>-0.78 (0.50)</td>
</tr>
<tr>
<td>divided government</td>
<td>0.73 (0.50)</td>
<td>0.94* (0.42)</td>
</tr>
<tr>
<td>initiative/referendum</td>
<td>127.94 (69.10)</td>
<td>114.72* (52.21)</td>
</tr>
<tr>
<td>Abortion attitudes X initiative</td>
<td>-34.15* (16.54)</td>
<td>-30.91* (12.41)</td>
</tr>
<tr>
<td>Ideology X initiative</td>
<td>-0.72 (0.98)</td>
<td>-0.63 (0.85)</td>
</tr>
<tr>
<td>Number of Initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>201.67** (51.72)</td>
<td>215.04** (41.46)</td>
</tr>
<tr>
<td>Variance: Initiatives</td>
<td></td>
<td>-7.14* (3.46)</td>
</tr>
<tr>
<td>Variance: Number of initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance: constant</td>
<td></td>
<td>15.30** (2.13)</td>
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<tr>
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<tr>
<td>R-squared</td>
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<tr>
<td>Prob &gt; chi2</td>
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</table>

* significant at 5%; ** significant at 1%
Table 7-2 Lascher et al. Replication

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<th>Consumer Policy</th>
<th>Criminal Justice</th>
<th>Education Expenses</th>
<th>ERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS Grad</td>
<td>5.860**</td>
<td>0.188*</td>
<td>2.094</td>
<td>0.909</td>
<td>0.120*</td>
</tr>
<tr>
<td></td>
<td>(1.42)</td>
<td>(0.08)</td>
<td>(3.39)</td>
<td>(0.71)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Income</td>
<td>0.006</td>
<td>0</td>
<td>0.012</td>
<td>0.017**</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.00)</td>
<td>(0.03)</td>
<td>(0.01)</td>
<td>0</td>
</tr>
<tr>
<td>Urban</td>
<td>0.049</td>
<td>0.03</td>
<td>0.45</td>
<td>-0.105</td>
<td>-0.045**</td>
</tr>
<tr>
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<td>(0.43)</td>
<td>(0.03)</td>
<td>(1.04)</td>
<td>(0.22)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Liberal Opinions</td>
<td>6.895**</td>
<td>0.134</td>
<td>7.097</td>
<td>4.403**</td>
<td>0.205**</td>
</tr>
<tr>
<td></td>
<td>(1.72)</td>
<td>(0.10)</td>
<td>(4.12)</td>
<td>(0.86)</td>
<td>(0.06)</td>
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<td>Initiative</td>
<td>-66.176</td>
<td>0.829</td>
<td>-29.346</td>
<td>-36.146*</td>
<td>-1.774</td>
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<tr>
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<td>(34.71)</td>
<td>(2.07)</td>
<td>(83.02)</td>
<td>(17.24)</td>
<td>(1.26)</td>
</tr>
<tr>
<td>Init X Lib. Op.</td>
<td>-4.133</td>
<td>0.095</td>
<td>-2.204</td>
<td>-2.231*</td>
<td>-0.004</td>
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<td>(2.07)</td>
<td>(0.12)</td>
<td>(4.96)</td>
<td>(1.03)</td>
<td>(0.08)</td>
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<tr>
<td>Constant</td>
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<td>-18.433</td>
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<td>(97.77)</td>
<td>(5.82)</td>
<td>(233.88)</td>
<td>(48.56)</td>
<td>(3.55)</td>
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</table>

Observations: 47
R-squared: 0.68

Standard errors in parentheses
* significant at 5%; ** significant at 1%
Table 7.2 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Gambling</th>
<th>Medicaid</th>
<th>Tax Progressivity</th>
<th>Policy Liberalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS Grad</td>
<td>1.264</td>
<td>0.412</td>
<td>0.22</td>
<td>0.038**</td>
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<td>(3.08)</td>
<td>(0.38)</td>
<td>(0.12)</td>
<td>(0.01)</td>
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<tr>
<td>Income</td>
<td>0.009</td>
<td>-0.001</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>0.00</td>
</tr>
<tr>
<td>Urban</td>
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<td>0.092</td>
<td>0</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.94)</td>
<td>(0.12)</td>
<td>(0.04)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Liberal Opinions</td>
<td>20.771**</td>
<td>1.758**</td>
<td>0.337*</td>
<td>0.104**</td>
</tr>
<tr>
<td></td>
<td>(3.74)</td>
<td>(0.46)</td>
<td>(0.14)</td>
<td>(0.02)</td>
</tr>
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<td>Init</td>
<td>-51.544</td>
<td>-9.796</td>
<td>-2.83</td>
<td>-0.469</td>
</tr>
<tr>
<td></td>
<td>(75.34)</td>
<td>(9.33)</td>
<td>(2.82)</td>
<td>(0.33)</td>
</tr>
<tr>
<td>Init X Lib. Op.</td>
<td>-6.747</td>
<td>-0.587</td>
<td>-0.096</td>
<td>-0.024</td>
</tr>
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<td></td>
<td>(4.50)</td>
<td>(0.56)</td>
<td>(0.17)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Constant</td>
<td>379.383</td>
<td>128.065**</td>
<td>-8.786</td>
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<td>(212.24)</td>
<td>(26.27)</td>
<td>(7.95)</td>
<td>(0.94)</td>
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<tr>
<td>Observations</td>
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<td>47</td>
<td>47</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.64</td>
<td>0.48</td>
<td>0.32</td>
<td>0.79</td>
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</table>

Standard errors in parentheses
* significant at 5%; ** significant at 1%
Table 7-3 Parameterized Variance of Lascher et al.

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<th></th>
<th>AFDC</th>
<th>Consumer Policy</th>
<th>Criminal Justice</th>
<th>Education Expenses</th>
<th>ERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS Grad</td>
<td>5.944*</td>
<td>0.173*</td>
<td>1.478</td>
<td>1.063</td>
<td>0.122**</td>
</tr>
<tr>
<td></td>
<td>(1.152)</td>
<td>(0.085)</td>
<td>(3.207)</td>
<td>(0.592)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Income</td>
<td>0.006</td>
<td>0</td>
<td>0.02</td>
<td>0.018**</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td>(0.001)</td>
<td>(0.026)</td>
<td>(0.004)</td>
<td>(0)</td>
</tr>
<tr>
<td>Urban</td>
<td>0.041</td>
<td>0.017</td>
<td>0.215</td>
<td>-0.243</td>
<td>-0.046**</td>
</tr>
<tr>
<td></td>
<td>(0.388)</td>
<td>(0.025)</td>
<td>(1.063)</td>
<td>(0.181)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Liberal Opinions</td>
<td>6.955**</td>
<td>0.129</td>
<td>6.795</td>
<td>4.493**</td>
<td>0.205**</td>
</tr>
<tr>
<td></td>
<td>(1.951)</td>
<td>(0.078)</td>
<td>(3.761)</td>
<td>(0.874)</td>
<td>(0.071)</td>
</tr>
<tr>
<td>Init</td>
<td>-66.566</td>
<td>0.911</td>
<td>-26.166</td>
<td>-36.822*</td>
<td>-1.788</td>
</tr>
<tr>
<td></td>
<td>(35.938)</td>
<td>(1.812)</td>
<td>(70.586)</td>
<td>(15.443)</td>
<td>(0.948)</td>
</tr>
<tr>
<td>Init X Lib. Op.</td>
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<td>0.1</td>
<td>-2.078</td>
<td>-2.200*</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(2.199)</td>
<td>(0.096)</td>
<td>(4.444)</td>
<td>(0.942)</td>
<td>(0.062)</td>
</tr>
<tr>
<td>Constant</td>
<td>-103.783</td>
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<td>-41.578</td>
<td>89.654*</td>
<td>-0.828</td>
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<tr>
<td></td>
<td>(85.265)</td>
<td>(4.24)</td>
<td>(245.25)</td>
<td>(42.772)</td>
<td>(3.201)</td>
</tr>
<tr>
<td><strong>Variance: Initiative</strong></td>
<td>2.395</td>
<td>1.063</td>
<td><strong>36.825</strong></td>
<td><strong>-8.909</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.317)</td>
<td>(0.691)</td>
<td>(19.757)</td>
<td>(5.195)</td>
<td>(0.312)</td>
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<tr>
<td><strong>Variance: Constant</strong></td>
<td>45.881**</td>
<td>2.282**</td>
<td>94.531**</td>
<td>27.064**</td>
<td>1.811**</td>
</tr>
<tr>
<td></td>
<td>(6.359)</td>
<td>(0.348)</td>
<td>(11.382)</td>
<td>(4.466)</td>
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<td>47</td>
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<td>47</td>
<td>47</td>
<td>47</td>
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</table>

* significant at 5%; ** significant at 1%
Table 7-3 (continued)

<table>
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<tr>
<th></th>
<th>Gambling</th>
<th>Medicaid</th>
<th>Tax Progressivity</th>
<th>Policy Liberalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS Grad</td>
<td>1.169</td>
<td>0.408</td>
<td>0.221*</td>
<td>0.038**</td>
</tr>
<tr>
<td></td>
<td>(2.816)</td>
<td>(0.426)</td>
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<td>(0.012)</td>
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<tr>
<td>Income</td>
<td>0.007</td>
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<td>0</td>
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<tr>
<td></td>
<td>(0.017)</td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0)</td>
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<td>-0.001</td>
<td>0.001</td>
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<td>(0.865)</td>
<td>(0.143)</td>
<td>(0.039)</td>
<td>(0.005)</td>
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<td><strong>Variance: Initiative</strong></td>
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<td><strong>(18.349)</strong></td>
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<td>(0.086)</td>
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<td><strong>Variance: Constant</strong></td>
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<td>12.432**</td>
<td>3.661**</td>
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<tr>
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<td>(0.058)</td>
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</tbody>
</table>

* significant at 5%; ** significant at 1%
Table 7-4 Parameterized Variance - Education Expenses

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.063</td>
<td>1.048</td>
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<td>HS Grad</td>
<td>(0.592)</td>
<td>(0.621)</td>
<td>(0.581)</td>
<td>(0.632)</td>
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<td>0.019**</td>
<td>0.017**</td>
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<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.005)</td>
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<td>Urban</td>
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<td>-0.248</td>
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<td>(0.181)</td>
<td>(0.184)</td>
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<td>4.493**</td>
<td>2.908**</td>
<td>2.969**</td>
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<td>(0.874)</td>
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<td>(0.942)</td>
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<td></td>
<td></td>
</tr>
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<td>(43.970)</td>
<td>(43.689)</td>
<td>(43.248)</td>
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<td>(5.195)</td>
<td>(5.981)</td>
<td>(6.068)</td>
<td>(5.440)</td>
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<td>(4.466)</td>
<td>(4.468)</td>
<td>(4.592)</td>
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</table>

Standard errors in parentheses
* significant at 5%; ** significant at 1%
Table 7-5 Burden Replication - DV: Policy Liberalism

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Bolded variables are sigma coefficients
Table 7-6 Parameterize Variance Model of Constituent-Government Linkage

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Standard errors in parentheses *** p ≤ 0.01, ** p < 0.05, *p < 0.1
Table 7-7 Parameterize Variance Model of Constituent-Gov’t Linkage (Init Cost)

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**Variance**

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**Notes:**
- * indicates significance at the 0.10 level.
- ** indicates significance at the 0.05 level.
- *** indicates significance at the 0.01 level.
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<td>*** p&lt;0.01, ** p&lt;0.05, * p&lt;0.1</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
CHAPTER 8: CONCLUSION

“The great faith in the initiative and referendum among the Progressives – and the fear of the devices among conservatives – is an example of the great store placed on forms and procedures by Americans. It is true that they constitute machinery which can be used in the public interest, but there must be somebody to operate the machinery before it is of any use.”

V.O. Key and Winston W. Crouch (1939)

While loved and loathed, the full effects of the initiative process are still unclear. This dissertation sought to grapple with the complex and inter-related effects by returning to basics questions: what, in the most basic sense, does the initiative do? What do representatives do? Why do voters vote the way that they do? Through these straightforward questions, I place the diverse and seemingly unpredictable effects of the initiative within a unitary framework of substitution: the ability of voters to bypass their legislature in pursuit of substantive representation entails substitution in voting behavior towards the selection of candidates who better facilitate symbolic representation.

While straightforward, the implications are diverse. Diminished issue voting means that voters do not select candidates for their policy profiles (correct voting), do not punish incumbents for poor economic performance, are less concerned about how competent candidates look, and reward women for their perceived role as trustees. Conversely, increased non-policy voting means that voters are more concerned about the integrity of candidates, more interested in the constituent services provided by women and incumbents, and are more sensitive to the attractiveness of candidates. While it is by all means possible that each finding is flawed, the diversity and consistency of the findings lend credence toward genuine substitutionary effects.
Normative Evaluation

Normatively, these findings are certainly a mixed bag. While policy decisions may be more in synch with constituent demand, this leaves professional policy-makers, those individuals who have dedicated their lives to the betterment of their communities, cities, states and nation; facing increased constraints in doing what they feel is right. By constraining, or bypassing, the legislature, Policies created through deliberation, compromise and study are replaced by votes after a 150 word summary and a yard sign.

Initially, this indicates the possibility that policy outcomes will be worse in states with the initiative. While such a proposition is beyond the scope of this dissertation, the findings of this project certainly speak to some of the core, if not broad, questions on the initiative.

Constraints imposed by the will of the people ought never be disrespected, but neither should we consider every initiative to reflect the considered view of the populace. While voters may be able to select the better of two options most of the time, this simple choice is not necessarily reflective of actual demands. A population of any significant size will always be conflicted to some degree. Deliberative institutions, made up of representatives of the people, with unlimited policy-making options, is inherently better able to negotiate how that conflict translates into policy (Haskell 2001).

Similarly, there is the reoccurring concern that voters are unable to make informed decisions in their votes on initiative policies. While voters are generally thought to have limited information, cognitive resources, or political sophistication (Lippmann 1922; Campbell et al. 1960; Key 1961; Converse 1962; Converse 1964; Luskin 1990; Page and Shapiro 1992; Zaller 1992; Delli Carpini and Keeter 1995) representative democracy provides insulation against such failures. Still, most analysts believe the outcome of the vote accurately reflects how an informed populace would vote. First, the
law of large numbers implies that ‘wrong’ votes will be balanced by wrongly cast ‘correct’ votes, thereby balancing out uniformed voters. Informed voters then will typically prevail, and prevail with increasing probability as the number of voters increase (Page and Shapiro 1992; Erikson, MacKuen, and Stimson 2002; Popkin 1991). Second, voters have a series of cues available which subsidize the cost of gathering the needed information (Lupia 1992, 1994), which results in generally correct votes (Bowler and Donovan 1998; Banducci 1998).

While voters may be making the right choice for the singular vote, this does not mean that the outcome of the initiative process is an accurate indication of actual demand. Voters will always demand a tax cut, just as they will always demand better roads and classrooms. These demands are well justified. How these countering demands are met, however, is a conflict not well suited to the initiative process (Dyck 2006). The ballot box is not well suited to balancing multiple issues, and initiatives are therefore rightly bound to a single issue (Waters 2003), but that constraint is not well suited to effective policy-making. “Ballot measures induce what I call dissociated choices: choices that individuals make by considering policies independently and out of their legislative budgetary context (Dyck 2006).” Still, the view of dedicated legislators working tirelessly for the betterment of their communities is certainly an ideal that is not always met.

Future Research

The theory of substitution has the advantage of providing virtually limitless empirical implications for further study. The broadest set of implications comes through the personal characteristics of legislators. I have examined integrity, attractiveness, perceived competence, and gender. Further possibilities include race, quality of voice,
complexity of speaking style, height of candidates, proclivity to scandal, educational background, or historical connections to their community.

Similarly, we ought to expect to see changes in a variety of approaches to campaigning and legislating. The message of the campaign should be more personal, and legislators should focus more on constituent services be less concerned about their role as a delegate.

As discussed in the normative implications, questions of policy effects remain. It is unclear if the initiative, while bringing greater policy responsiveness, brings better policy overall. Does bypassing the legislature replace competent experts with less able voters.

This analysis can also be directly exported to other counties with the initiative. Conversely, other institutions may have similar effects. Less professionalized legislatures paired with a powerful governor, for example, ought to behave in a similar manner.

The initiative is a radical, and beautiful, idea. Individual voters taking the reins of the policy-making process; taking responsibility for their government and stepping out of the shadows of their legislature is a sight to behold. Throughout time we have feared that governments will fall toward corruption and abuse, “but what is government itself, but the greatest of all reflections on human nature?”
APPENDIX: PROOFS

There are three types of quantities to be derived: expectation of random value from a uniform distribution, expectation of a selected min/max value from a uniform distribution, and expectation of a complex evaluation. Note: $x_1, x_2$ iid $U(0,1)$

<table>
<thead>
<tr>
<th>Original</th>
<th>Reduced Form</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$E(Q_W)$</td>
<td>$E(x)$</td>
<td>1/2</td>
</tr>
<tr>
<td>$E(P_W)$</td>
<td>$E(x)$</td>
<td>1/2</td>
</tr>
<tr>
<td>$\text{MAX}{</td>
<td>P_D</td>
<td>,</td>
</tr>
<tr>
<td>$\text{MAX}{Q_D, Q_R}$</td>
<td>$\text{MAX}{x_1, x_2}$</td>
<td>2/3</td>
</tr>
<tr>
<td>$\text{MIN}{</td>
<td>P_D</td>
<td>,</td>
</tr>
<tr>
<td>$\text{MIN}{Q_D, Q_R}$</td>
<td>$\text{MIN}{x_1, x_2}$</td>
<td>1/3</td>
</tr>
<tr>
<td>$\text{MIN}{.5C,</td>
<td>P_D</td>
<td>,</td>
</tr>
<tr>
<td>$\text{MIN}{.5C, E(</td>
<td>P_W</td>
<td>)}$</td>
</tr>
<tr>
<td>$\text{MIN}{.5C, (\text{MAX}{</td>
<td>P_D</td>
<td>,</td>
</tr>
</tbody>
</table>

**Expectation of random value from a uniform distribution**

$x \sim U(0,1)$

$$\int_0^1 xf(x)dx = \int_0^1 xdx = \frac{1}{2}$$
Expectation of a selected min/max value from a uniform distribution:

$$E[\text{MIN}\{x_1, x_2\}]$$

\[
\begin{align*}
\text{MIN:} & \\
& \int_0^1 \left[ x_1 \int_0^{x_1} x_2 \frac{1}{x_1} dx_2 + (1 - x_1) \int_0^{x_1} x_1 \frac{1}{1 - x_1} dx_2 \right] f(x_1) dx_1 \\
& \int_0^1 \left[ \int_0^{x_1} x_2 dx_2 + \int_0^{x_1} x_1 dx_2 \right] dx_1 \\
& \int_0^1 \left[ \frac{x_2^2}{2} \bigg|_0^{x_1} + x_1 x_2 \bigg|_0^{x_1} \right] dx_1 \\
& \int_0^1 \left[ \frac{x_1^2}{2} + x_1 - x_1^2 \right] dx_1 \\
& \frac{x_1^3}{6} + \frac{x_1^2}{2} - \frac{x_1^3}{3} \bigg|_0^1 \\
& \frac{1}{6} + \frac{1}{2} - \frac{1}{3} \\
& = \frac{1}{3}
\end{align*}
\]
\[
\text{MAX: } E[\text{MAX}\{x_1, x_2\}] \\
\int_0^1 \left( (1 - x_1) \int_{x_1}^1 x_2 \frac{1}{1 - x_1} \, dx_2 \right) + x_1 \left( \int_0^1 x_1 \frac{1}{x_1} \, dx_2 \right) f(x_1) \, dx_1 \\
\int_0^1 \left[ \int_{x_1}^1 x_2 \, dx_2 + \int_0^{x_1} x_1 \, dx_2 \right] \, dx_1 \\
\int_0^1 \left[ \frac{x_2^2}{2} \bigg|_{x_1}^{1} + x_1 x_2 \bigg|_{0}^{x_1} \right] \, dx_1 \\
\int_0^1 \left[ \frac{1}{2} - \frac{x_1^2}{2} + x_1^2 \right] \, dx_1 \\
\left[ \frac{1}{2} x_1 - \frac{x_1^3}{6} + \frac{x_1^3}{3} \right] \bigg|_{0}^{1} \\
\frac{1}{2} - \frac{1}{6} + \frac{1}{3} \\
\frac{2}{3}
\]
\( \text{MIN}\{.5C, x_1, x_2\} \)

There are four sections to this:

1. \( C/2 < (x_1, x_2) \)
2. \( x_1 < C/2 < x_2 \)
3. \( x_2 < C/2 < x_1 \)
4. \( (x_1, x_2) < C/2 \)

The entire expected utility is the sum of the probability of being in one of those categories times the expected utility of those categories after conditioning the distributions within the category.

\[
1. \left[ \frac{c}{2} \left( \frac{1 - c}{2} \right) \left( 1 - \frac{c}{2} \right) \right] + \\
2. \left[ \left( \frac{c}{2} \left( 1 - \frac{c}{2} \right) \right) \int_0^{c/2} x_1 \frac{1}{c} dx_1 \right] + \\
3. \left[ \left( 1 - \frac{c}{2} \right) \int_0^{c/2} x_2 \frac{1}{c} dx_2 \right]
\]
\[ \left( \frac{c}{2} \right)^2 \int_0^{\frac{x_i}{c}} x_2 \frac{1}{x_1} dx_2 + \left( 1 - \frac{x_i}{c} \right)^2 \int_{\frac{x_i}{c}}^{\frac{c}{2}} \frac{1}{x_1} \left( \frac{c}{2} - x_1 \right) dx_2 \left( \frac{1}{c} \right) \frac{dx_1}{2} \]

Result (work shown below):

\[
\begin{bmatrix}
\frac{c}{2} - \frac{c^2}{8} + \frac{c^3}{24} \\
\frac{c^2}{8} - \frac{c^3}{16}
\end{bmatrix}
+ \begin{bmatrix}
\frac{c^2}{8} - \frac{c^3}{16} \\
\frac{c^3}{24}
\end{bmatrix}
+ \begin{bmatrix}
\frac{c^2}{8} - \frac{c^3}{16} \\
\frac{c^3}{24}
\end{bmatrix}
+ \begin{bmatrix}
\frac{c^3}{24}
\end{bmatrix}
\]

\[
= \frac{c}{2} - \frac{c^2}{8} + \frac{c^3}{24}
+ \frac{c^2}{8} - \frac{c^3}{16}
+ \frac{c^2}{8} - \frac{c^3}{16}
+ \frac{c^3}{24}
\]

\[
= \frac{c}{2} - \frac{c^2}{4} + \frac{c^3}{24}
\]
1. \[
\left[ \frac{c}{2} \left( \frac{1-c}{2} \right) \left( \frac{1-c}{2} \right) \right] \\
= \left[ \frac{c}{2} - \frac{c^2}{2} + \frac{c^3}{8} \right]
\]

2. \[
\left[ \left( \frac{c}{2} \left( \frac{1-c}{2} \right) \right) \left[ x_1 \left( \frac{1}{\frac{c}{2}} \right) \right] \right] \\
= \left( 1 - \frac{c}{2} \right) \int_0^\frac{c}{2} x_1 dx_1 \\
= \left( 1 - \frac{c}{2} \right) \left. \left( \frac{x_1^2}{2} \right) \right|_0^{\frac{c}{2}} \\
= \left( 1 - \frac{c}{2} \right) \left( \frac{c^2}{4} \right) \\
= \left( \frac{c^2}{8} - \frac{c^3}{16} \right)
\]

3. \[
\left[ \left( \frac{1-c}{2} \right) \left( \frac{c}{2} \right) \left[ x_2 \left( \frac{1}{\frac{c}{2}} \right) \right] \right] \\
= \left( 1 - \frac{c}{2} \right) \int_0^\frac{c}{2} x_2 dx_2 \\
= \left( 1 - \frac{c}{2} \right) \left. \left( \frac{x_2^2}{2} \right) \right|_0^{\frac{c}{2}} \\
= \left( 1 - \frac{c}{2} \right) \left( \frac{c^2}{8} \right) \\
= \left( \frac{c^2}{8} - \frac{c^3}{16} \right)
4. \[
\left( \frac{c}{2} \right)^2 \int_0^c \left[ \frac{x_1}{c} \left( \int_0^{x_1} \frac{1}{x_1} \, dx_2 \right) + \left( 1 - \frac{x_1}{c} \right) \left( \frac{1}{x_1} \int_{x_1}^{c} \frac{1}{x_2 - x_1} \, dx_2 \right) \right] \frac{1}{c} \, dx_1
\]
\[
= \left( \frac{c}{2} \right)^2 \int_0^c \left[ \frac{x_1}{c} \left( \int_0^{x_1} \frac{1}{x_1} \, dx_2 \right) + \left( 1 - \frac{x_1}{c} \right) \left( \frac{1}{x_1} \int_{x_1}^{c} \frac{1}{x_2 - x_1} \, dx_2 \right) \right] \frac{1}{c} \, dx_1
\]
\[
= \left( \frac{c}{2} \right)^2 \int_0^c \left[ \frac{x_1}{c} \left( \int_0^{x_1} \frac{1}{x_1} \, dx_2 \right) + \left( 1 - \frac{x_1}{c} \right) \left( \frac{1}{x_1} \int_{x_1}^{c} \frac{1}{x_2 - x_1} \, dx_2 \right) \right] \frac{1}{c} \, dx_1
\]
\[
= \left( \frac{c}{2} \right)^2 \int_0^c \left[ \frac{x_1}{c} \left( \int_0^{x_1} \frac{1}{x_1} \, dx_2 \right) + \left( 1 - \frac{x_1}{c} \right) \left( \frac{1}{x_1} \int_{x_1}^{c} \frac{1}{x_2 - x_1} \, dx_2 \right) \right] \frac{1}{c} \, dx_1
\]
\[
= \left( \frac{c}{2} \right)^2 \int_0^c \left[ \frac{x_1}{c} \left( \int_0^{x_1} \frac{1}{x_1} \, dx_2 \right) + \left( 1 - \frac{x_1}{c} \right) \left( \frac{1}{x_1} \int_{x_1}^{c} \frac{1}{x_2 - x_1} \, dx_2 \right) \right] \frac{1}{c} \, dx_1
\]
\[
= \left( \frac{c}{2} \right)^2 \int_0^c \left[ \frac{x_1}{c} \left( \int_0^{x_1} \frac{1}{x_1} \, dx_2 \right) + \left( 1 - \frac{x_1}{c} \right) \left( \frac{1}{x_1} \int_{x_1}^{c} \frac{1}{x_2 - x_1} \, dx_2 \right) \right] \frac{1}{c} \, dx_1
\]
\[
= \frac{c}{2} \left[ x_1^2 + x_1 - \frac{x_1^2}{c} \right] dx_1
\]
\[
= \frac{c}{2} \left[ x_1^2 + x_1 - \frac{x_1^2}{c} \right] dx_1
\]
\[
= \left( \frac{c}{2} \right)^3 + \left( \frac{c}{2} \right)^3 - \left( \frac{c}{2} \right)^3
\]
\[
= \left( \frac{c}{2} \right)^3 + \left( \frac{c}{2} \right)^3 - \left( \frac{c}{2} \right)^3
\]
\[
= \frac{c^3}{6} + \frac{c^3}{4} - \frac{c^3}{6} = \frac{c^3}{4} - \frac{c^3}{4} = \frac{c^3}{24} + \frac{c^3}{24} - \frac{c^3}{24} = \frac{c^3}{24}
\]
\[ \text{MIN}\{.5C, E(x)\} \]

\[
\left( \frac{c}{2} \right) \left( 1 - \frac{c}{2} \right) + \left( \frac{c}{2} \right) \int_0^{\frac{c}{2}} x \frac{1}{c} \, dx
\]

\[ = \left( \frac{c}{2} - \frac{c^2}{4} \right) + \int_0^{\frac{c}{2}} x \, dx \]

\[ = \left( \frac{c}{2} - \frac{c^2}{4} \right) + \left. \frac{x^2}{2} \right|_0^{\frac{c}{2}} \]

\[ = \left( \frac{c}{2} - \frac{c^2}{4} \right) + \frac{\left( \frac{c}{2} \right)^2}{2} \]

\[ = \frac{c}{2} \left( 1 - \frac{c^2}{2} \right) \]

\[ = \frac{c}{2} - \frac{c^2}{8} \]
**MIN{.5C, MAX{x₁, x₂}}**

There are four sections to this:

1. \(C/2 < (x₁, x₂)\)
2. \(x₁ < C/2 < x₂\)
3. \(x₂ < C/2 < x₁\)
4. \((x₁, x₂) < C/2\)

The entire expected utility is the sum of the probability of being in one of those categories times the expected utility of those categories after conditioning the distributions within the category.

\[
\begin{align*}
1. & \quad \left[ \frac{c}{2} \left( \frac{1}{2} - \frac{c}{2} \right) \left( \frac{1}{2} - \frac{c}{2} \right) \right] + \\
2. & \quad \left[ \left( \frac{c}{2} \right) \left( \frac{c}{2} \right) \left( 1 - \frac{c}{2} \right) \right] + \\
3. & \quad \left[ \left( \frac{c}{2} \right) \left( \frac{c}{2} \right) \left( 1 - \frac{c}{2} \right) \right] + \\
4. & \quad \left[ \left( \frac{c}{2} \right)^2 \left[ \left( 1 - \frac{x₁}{c} \right)^\frac{c}{2} \right] \int \frac{1}{c - x₁} \, dx₂ + \left( \frac{x₁ - x₂}{c - x₂} \right) \int \frac{1}{c - x₁} \, dx₂ \right] \left[ \frac{1}{c - x₁} \right]
\end{align*}
\]

Result (work for #4 shown below):

\[
\begin{align*}
& \left[ \frac{c}{2} - \frac{c^2}{2} + \frac{c^3}{8} \right] + \left[ \frac{c^2}{4} - \frac{c^3}{8} \right] + \left[ \frac{c^2}{4} - \frac{c^3}{8} \right] + 
\end{align*}
\]
4. 

\[
\left( \frac{c}{2} \right) \int_0^c \left[ \left( 1 - \frac{x_1}{c} \right) \left( \int_{x_1}^{c/2} x_2 \frac{1}{c} \, dx_2 \right) + \frac{x_1}{c} \left( \int_{x_2}^{c/2} \frac{1}{c - x_2} \, dx_1 \right) \right] \frac{1}{c} \, dx_1 
\]

\[
\int_0^1 \left[ (1 - x_1) \left( \int_{x_1}^1 x_2 \frac{1}{1 - x_1} \, dx_2 \right) + x_1 \left( \int_0^{x_1} \frac{1}{x_1} \, dx_2 \right) \right] f(x_1) \, dx_1 
\]
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