The Item Veto, the Single Subject Rule, and Legislative-Executive Bargaining: A Randomized Experiment

Adam R. Brown

Department of Political Science

Brigham Young University

Last update: May 9, 2014

Prepared for presentation at the 2014 State Politics and Policy Conference, held at Indiana University in Bloomington, May 15-17, 2014.

Please check with the author for an updated version should you be seized with a desire to cite this paper.

Comments welcome: brown@byu.edu

Abstract

Theoretical models show that the item veto can have potentially large effects. These effects may be difficult to detect in observational research, however, because the mere presence of item veto power may cause a legislature to preemptively adapt its proposals sufficiently to avoid provoking an actual veto. Moreover, even states that lack an item veto often have other constitutional features (e.g. the single subject rule) that produce observationally equivalent effects, rendering state-to-state observational analysis problematic. This article employs spatial modeling and randomized experimentation to estimate the item veto's potentially large effects. Participants played the role of legislature in a simple two-dimensional bargaining game, with some participants assigned to an item veto condition or single subject rule condition and others assigned to a control (package veto) condition. The results suggest a potentially large effect for the item veto and for the single subject rule.

Previous versions of this paper benefited from comments by members of BYU's Center for the Study of Elections and Democracy and by participants in the 2014 conference of the Midwest Political Science Association. Justin Chang provided research assistance.

State governors vary in their powers (Dometrius 1979, 1987; Ferguson 2003; Kousser and Phillips 2012; Rosenthal 2012) and state legislatures vary in their resources (Mooney 2009; Squire 1992, 2007; Squire and Moncrief 2010), creating executive-legislative bargaining contexts that vary widely from state to state. Though every state's political institutions superficially resemble the American national institutions, these state-to-state variations create rich opportunities to study how seemingly minor institutional differences might influence the executive-legislative balance of power. The item veto, found in 44 states¹, stands apart as one of the most intriguing institutional innovations—and one of the most difficult to assess.

Much of this difficulty stems from the subtle mechanisms connecting the veto powers to policy outcomes. Like many institutional features, veto powers of any sort exert their influence early in the policy process. Legislators facing a stronger governor may propose less ambitious legislation (Kiewiet and McCubbins 1988; Schap 2006); stronger governors, in turn, may propose more ambitious agendas in their State of the State addresses.² As a result, package veto power and item veto power may exert tremendous influence on policy outcomes even if they are seldom used; the mere possibility of a package or item veto influences the type of legislation proposed. Though this dynamic does not imply that governors will never find occasion to exercise their veto powers (Cameron 2001), it does imply that observational studies will tend to underestimate any sort of veto's effect on policy outcomes—perhaps dramatically. The problem is compounded when comparing one type of veto (the item veto) to another (the package veto).

_

¹ The Council of State Governments (Wall 2013, Table 4.4) reports that 9 governors have item veto authority in all bills and 35 governors have item veto authority on appropriations bills only. The 9 with authority in all bills are Alabama, Delaware, Hawaii, Illinois, Maryland, Massachusetts, New York, Washington, and Wyoming. The 6 states lacking any item veto are Indiana, Nevada, New Hampshire, North Carolina, Rhode Island, and Vermont.

² Though researchers have not looked for a link between the item veto and the governor's agenda, there is research showing that that governors strategically modify the breadth and depth of their policy agendas in response to other political factors, including divided government, personal popularity, and partisanship (Kousser and Phillips 2012; Rosenthal 2012).

Perhaps these considerations explain why observational studies of the item veto have generally drawn pessimistic conclusions. Observational studies have employed several clever analytic approaches, including surveys and of political insiders (Abney and Lauth 1997 and 1998), interviews with former governors and their staff (Rosenthal 2012), single-state case studies (Gosling 1986; Thompson and Boyd 1994), analysis of governors' success in achieving their policy agendas (Kousser and Phillips 2012, 208-210; Rosenthal 2012), and—most frequently—multistate studies of aggregate state budget sizes (Abrams and Dougan 1986; Berch 1992; Holtz-Eakin 1998; Kousser and Phillips 2012, 202-208; Nice 1988; Reese 1997). Studies focused on the overall size of the state budget have consistently found little or no effect for the item veto. Those few studies that have considered whether the item veto aids governors in pursuing their specific policy agenda—the question motivating the present analysis—have produced mixed results (Gosling 1986; Kousser and Phillips 2012; Rosenthal 2012).

These mixed results stand at odds with expectations. Theoretical models of the item veto suggest that it can have dramatic effects on legislative-executive bargaining, at least under "select circumstances" when legislative and gubernatorial ideal points fall into certain arrangements (Carter and Schap 1990). Simulations based on elected officials' estimated ideal points suggest that those "select circumstances" may arise frequently (Brown 2012). Still, the item veto's effects will be difficult to observe empirically if legislatures and governors strategically adapt the ambitiousness of their proposals in response to the institutional environment.

Moreover, observational studies have almost entirely ignored a confounding feature found in 41 state constitutions: The single subject rule.³ For reasons explained below, this rule has effects on

_

³ The National Conference of State Legislatures reports that 40 states have an explicit single subject rule or germaneness requirement in their state constitutions; in the 41st state, Mississippi, the constitution implies but does not explicitly state such a requirement. The remaining 9 states are Arkansas, Connecticut, Maine, Massachusetts, New Hampshire, North Carolina, Ohio, Rhode Island, and Vermont. Beyond constitutional provisions, NCSL reports that legislative rules in "over

legislative-executive bargaining that may be observationally equivalent to the effects of the item veto.⁴ Observational studies that compare item veto states to a control group of package veto states have not considered whether their control states—that is, the package veto states—have a single subject rule.⁵ If, as is usually the case, they do have such a rule, then the "control" group is no control at all, further biasing observational studies toward underestimating the item veto's effects.

This article seeks to skirt these difficulties by pursuing a different analytic approach. Using randomized experimentation, this article explores how item vetoes and single subject rules change how participants engage in legislative-executive bargaining situations. These experiments allow for careful measurement of how people bargain under different constitutional rules. No experiment can replace observational research, of course, nor should it. But the findings reported below suggest a broader role of the item veto than observational research has generally supposed. The findings also draw attention to the importance of the single subject rule, a widespread constitutional provision that has largely escaped scholarly attention.

Theory and Predictions

We begin with a simple model of the package veto, since any model of the item veto must inherently draw some comparison to the package veto. Models of the package veto generally assume

three-fourths" of legislative chambers impose germaneness requirements on amendments, though requirements found only in internal legislative rules, could conceivably be suspended. See (as of May 7, 2014) http://www.ncsl.org/research/about-state-legislatures/germaneness-requirements.aspx.

⁴ Most scholarship about the item veto has emphasized its possible role as a pork-reducing institution, hence the abundance of studies asking whether item veto states produce smaller budgets than package veto states. As noted previously, however, this article explores how the item veto (and single subject rule) affect the legislative-executive balance of power when it comes to setting state policy. As such, the term "item veto" as applied here is understood to refer to a power to strike individual provisions from any legislation, not just from appropriations bills. Although most governors have item veto authority only over appropriations, many governors do enjoy a policy item veto as well. It is this sort of item veto—the policy item veto—that has effects observationally equivalent to the single subject rule.

⁵ Making matters worse, only one observational study (Kousser and Phillips 2012, 203) has considered another, more pressing confounding factor: Legislative professionalism. All professionalized legislatures (and some citizen legislatures) face a governor with an item veto; every governor lacking an item veto faces a citizen or "hybrid" legislature.

a unidimensional liberal-conservative policy space. In Figure 1's illustration of this scenario, the governor's ideal point (G) lies to the ideological right of the status quo policy (SQ). Point g` marks a position equally far from G as SQ is, but in the opposite direction. With reasonable assumptions⁶, we would expect the governor to favor any legislative proposal between SQ and g` (designated by the dashed line). We would expect the governor to veto any proposal outside this range, as such a proposal would leave the governor worse off than the status quo. Foreseeing these possible outcomes, legislators would adapt their proposals sufficiently to avoid provoking a (package) veto. The governor's (package) veto power prevents the legislature from moving policy outside the range demarcated by SQ and g`.

[Figure 1]

If a legislature chose to bundle two distinct policy proposals into a single bill, then bargaining would move into a two-dimensional space. Figure 2 depicts this scenario, with issue x and issue y represented respectively by the horizontal and vertical axes. Once again, point G marks the governor's ideal point, while point SQ marks the status quo policy's position in ideological space. We can draw a circle with G at its center and SQ on its perimeter. Any legislative proposal inside this circle would be closer to the governor's ideal point than the status quo and would therefore receive the governor's approval. Any proposal outside this circle would leave the governor worse off than the status quo and

⁶ Models of the package veto have generally assumed the following: A unitary governor; a unitary legislature; symmetrical, single-peaked preferences contingent only on policy outcomes; complete information about each player's preferences and the location of the status quo; a non-iterative two-step game (proposal and veto); and a unidimensional issue space. These are roughly the assumptions employed by Kiewiet and McCubbins (1985 and 1988) in their classic models of the package veto, which were based on Romer and Rosenthal's (1978) earlier setter model. Subsequent work has shown that not all these assumptions are strictly necessary. Matthews (1989) shows that rhetoric and veto threats can compensate for incomplete information; Ingberman and Yao (1991) add a third stage to the model by allowing the governor to make a costly veto threat; and Cameron (2001) added a third player (the veto override pivot) and iterative play to show that vetoes might occur for strategic reasons in hopes of influencing future bargaining rounds. In these and other variants on the basic model, the core insight remains: Vetoes are a conditional tool that can be used to reign in an extreme legislature but not to prod a moderate one. The present article maintains the original assumptions with the important exception of unidimensionality.

would therefore provoke a veto. Once again, we would expect legislators to adapt their proposals sufficiently to avoid provoking a veto. The governor's (package) veto power prevents the legislature from moving policy outside the circle.

[Figure 2]

Consider, though, how different the result would be if issues x and y had been handled in two separate bills rather than in a single bill. If issue x were handled alone, the governor would veto any proposal that would move policy outside the range demarcated by points g_x and sq_x ; if issue y were handled alone, the governor would veto any proposal that would move policy outside the range demarcated by points g_y and sq_y . Together, these two ranges combine to form the shaded rectangle shown in Figure 2. When issues x and y are handled jointly, as discussed in the previous paragraph, the governor's veto power prevents the legislature from enacting a proposal outside the large circle; when issues x and y are handled separately, however, the governor's veto power prevents the legislature from enacting (cumulative) proposals outside the shaded rectangle.

In the absence of an item veto, it is not difficult to imagine circumstances where a legislative body might bundle multiple proposals together to effect a policy change that might otherwise be hard to pass. For example, a legislature might combine programmatic public policy (issue x) with particularistic pork (issue y). Ronald Reagan famously vetoed a 1987 highway bill because of its 152 pork projects, saying, "I haven't seen so much lard since I handed out blue ribbons at the Iowa State Fair." Or a legislature might combine must-pass legislation (issue x) with a minor provision the executive opposes (issue y). In 2007, George Bush vetoed a major defense bill (HR 1585) over a minor provision that could have hampered his Iraq policy; under similar circumstances, Barack Obama signed HR 4310 in January 2013 while issuing a scathing statement criticizing parts of the bill that he wished he could excise.

At this point the item veto becomes relevant. The item veto's primary effect on executive-legislative bargaining is to produce the same outcome when issues are bundled into a single bill as when they are addressed in separate bills. To see why this is true, refer again to Figure 2. If the legislature sends a single bill that bundles issue x with issue y, an item veto allows the governor to respond as if issue x and issue y had been placed into separate bills. Stated simply, an item veto allows the governor to contain policy movement within the shaded rectangle, whereas a package veto allows the governor to contain policy only within the larger circle (Carter and Schap 1990; Brown 2012). When a governor has item veto power, the legislature must moderate its proposals so that they fall inside the shaded rectangle; when a governor has mere package veto power, the legislature need only moderate its proposals so that they fall inside the larger circle.

We arrive at our first two hypotheses. The first has reference to the end result of the legislative-executive bargaining process, regardless of the mechanism. The second emphasizes the mechanism, suggesting that legislators' preemptive moderation of their proposals should make actual use of any sort of veto uncommon.

H1: Enacted legislation will produce policy outcomes more favorable to the governor (and less favorable to the legislature) when the governor has item veto power instead of simple package veto power.

H2: Legislatures will make less aggressive proposals when faced with a governor who has item veto power instead of simple package veto power.

⁷ For the item veto to have much real world impact, then, it must be true that the legislature's ideal point (L) frequently aligns with G and SQ in such a manner that there is a large distance between the edge of the rectangle and the edge of the square, with L located well outside of the rectangle. Though Carter and Schap (1990) conjectured that these "select circumstances" would arise rarely, Brown (2012) runs simulations on elected officials' DW-NOMINATE scores and finds that this arrangement may well arise frequently.

The discussion thus far has focused on the item veto. However, a single subject rule would likewise result in issues x and y remaining within the shaded rectangle rather than within the broader circle, but by a different mechanism. While an item veto empowers the governor to break apart issues x and y after they have been passed, a single subject rule prevents a legislature from bundling them together in the first place. States that ignore constitutional single subject rules risk finding their legislation struck down in court, and state courts are often vigorous in their defense of such rules. As such, the single subject rule and the item veto can both be seen foremost as dimensionality-reducing institutions that can separate multidimensional bills (such as omnibus bills or logrolls) into their various unidimensional components. In some ways, then, the single subject rule and the item veto are interchangeable (Townsend 1985). We arrive at three additional hypotheses. The first two mirror H1 and H2.

H3: Enacted legislation will produce policy outcomes more favorable to the governor (and less favorable to the legislature) when the legislature is constrained by a single subject rule.

H4: Legislatures will make less aggressive proposals when constrained by a single subject rule.

H5: The single subject rule and the item veto will produce similar policy outcomes.

Experimental Design

The two considerations noted earlier make these hypotheses difficult to test via observational research. First, many states that lack an item veto compensate with a single subject rule, which is

⁸ See Gilbert (2006) for a thorough cataloging of single subject jurisprudence in the states. A few cases suffice to illustrate the claim that courts often read these rules strictly. Louisiana's courts struck down a constitutional amendment banning same-sex marriage because the legislature had written it to include both marriage and civil unions, seen by the court as two distinct subjects. The Illinois Supreme Court dismissed a weapons charge against a defendant because the underlying statute dealt with drugs, gangs, guns, and other matters all in a single bill—a violation of the single subject rule. In total, Gilbert (2006, 820) identifies 8,252 cases litigated in state courts that have raised single subject claims since this rule was first adopted (by New Jersey in 1844, followed rapidly by other states). In general, Gilbert finds that courts routinely interpret single subject rules so narrowly as to complicate typical legislative strategies.

predicted to have observationally similar effects. As such, observational studies may struggle to find a true "control" group. Second, bills that emerge from the legislative process will already have taken the executive's item veto power (or lack of it) into account before reaching the governor's desk. Legislators preemptively adapt their proposals to avoid an item or package veto"; going a step further, even the governor's initial policy proposals will have already taken her institutional leverage into account. One useful tactic found in some observational studies is to measure how many proposals mentioned in a governor's "state of the state" address eventually get enacted into law, comparing item veto states to package veto states. The most careful application of this tactic concluded that the item veto has minimal influence (Kousser and Phillips 2012, 209-210). However, this tactic requires the curious assumption that governors develop their agendas without regard for the institutional environment—that is, one must assume that gubernatorial agendas arise exogenously. Evidence suggests otherwise: "Most governors, most often, calculate what is politically possible before they commit to a policy agenda... What they ask for in the first place depends in part, and sometimes large part, on what they think they can get" (Rosenthal 2012, 112; see also Kousser and Phillips 2012, 84-91).

Surprisingly few studies have asked how the item veto influences the governor's policy success, and additional observational research can only help. But as an alternative approach to assessing the item veto's potential impact, the present study relies on randomized experimentation. In May 2014, 802 American adults were recruited via Amazon's Mechanical Turk service to participate online in a randomized experiment. MTurk panels are admittedly a convenience sample—one that is more male, more liberal, more educated, and younger than the nation as a whole. Still, experiments conducted on

-

⁹ Whether legislators adapt their proposals because they have complete information about the governor's ideal point (as in Kiewiet and McCubbins 1985, 1988) or in response to a veto threat or other rhetoric (as in Matthews 1989 and Ingberman and Yao 1991) is irrelevant here.

MTurk samples generally produce the same conclusions as experiments conducted on representative samples (Berinsky et al. 2012).¹⁰

In this particular experiment, all participants played the role of the legislature. Some participants made proposals to an executive equipped only with a package veto; others made proposals to an executive equipped with an item veto; others made proposals under a single subject rule (to a governor equipped with a package veto). The governor accepted or rejected legislative proposals based on automated decision rules detailed below, though its decision came after a brief lag to give the appearance of a human opponent. Subjects randomly assigned to a "veto threat" condition received a warning if they submitted an unacceptable proposal, with one opportunity to amend their proposal. Table 1 shows how many participants were assigned to each condition.¹¹

[Table 1]

Participants began by watching a brief instructional video tailored to the specific condition they were assigned to. Participants were then asked to play six brief rounds of a simple bargaining game. To distract from the study's purpose, the instructions avoided political terminology such as the words "legislature," "governor," or "veto." Participants were instead told that the game involved working with their business partner (the governor) to find a new location for their shared office (the policy). Each participant was shown a simple two-dimensional map that included the business's current location (the status quo policy), the participant's home (the legislature's ideal point), and the partner's home (the governor's ideal point). Participants in the package veto condition or item veto condition were asked to click on the map and drag the office to propose a new location, then click a "Make Proposal" button to request the partner's decision. Participants in the single subject condition

¹⁰ Participant demographics and a complete copy of the experimental protocol are available in a supplemental appendix.

¹¹ Veto threats were never combined with the single subject condition because they made the participant interface unwieldy.

made their proposal in two steps; first they made a north-south proposal (and received their partner's decision), then they made an east-west proposal (and received another decision). Participants in all conditions were informed that each player would receive points at the end of each round based on how much closer the new office was to each home when compared to the old office location; if the partner rejected the proposal entirely, neither player earned points. Players were incentivized with bonus money to earn a high score.¹²

Figure 3 depicts the map as it appeared to participants. The upper-left (green) icon is the participant's house (legislature's ideal point); the lower-left (orange) icon is the partner's house (governor's ideal point); and the upper-right (blue/red) icon is the office. The red icon marks the status quo location; the participant could drag the blue icon around the screen to make a proposal. Panel (a) shows the game at start; panel (b) shows the game after a proposal has been made. The faint icons at the upper-left and center-right in Panel (b) are unique to the item veto condition; they were used to help participants see where the office would be built if their partner exercised an item veto. To make the game easier to play, scoreboards below the map (not shown here) updated in real time as players dragged the office around the map. These scoreboards showed how many points each player would receive under each of the partner's possible decision options.

[Figure 3]

The partner (governor) followed a simple decision rule when deciding whether to exercise a veto: She chose whichever option gave her the highest utility. In the package veto condition, the

¹² All participants earned \$0.75 for their time. Participants were told they would earn a \$0.25 bonus if their performance indicated that they made an earnest effort to score points. The overwhelming majority of participants earned this bonus, which was awarded using a simple algorithm that checked (roughly) whether the participant had made each proposal in the correct direction. One downside of this approach is that participants may have been more generous with their partner than necessary to avoid provoking a veto and losing the bonus.

¹³ See the supplemental appendix for a screenshot of these scoreboards.

partner accepted any proposal that gave her positive points. In the item veto condition, the partner exercised an item veto if doing so awarded more utility than a package veto. In the single subject condition's first stage, the partner accepted north-south proposals that awarded any positive utility; in the second stage, the partner accepted east-west proposals if they left her better off than at the end of the first stage.¹⁴

A pilot study tried manipulating the partner's aggressiveness, so that some partners would exercise vetoes even against proposals that granted her a modest utility gain, even though doing so required foregoing a (small) gain. ¹⁵ Because participants are typically more generous to their partner than thin rationality would predict, however, this heightened aggressiveness had little effect on the results. Even in the high aggressiveness condition, few respondents offered so little utility to their partner that they provoked a veto. ¹⁶ This veto aggressiveness condition was therefore excluded from the experiment's final wave.

Participants played six separate rounds of the game. The arrangement of ideal points in each round was pre-determined, not random. Rounds 1 and 6 used identical configurations of ideal points, but with the map mirror-imaged to obscure this fact from participants. Rounds 1 and 6 were constructed in a manner that the item veto and single subject rule were predicted to have no effect. In terms of Figure 2, these two rounds placed the participant's (legislature's) ideal point within the

¹⁴ If the partner rejected the first stage proposal, then the second stage reversion point was the original status quo. If the partner accepted the first stage proposal, then the second stage reversion point was the first stage proposal.

¹⁵ The pilot was fielded to 1,001 MTurk respondents in March 2014. It included the aggressiveness condition discussed here but excluded the single subject condition and the veto threat condition. The only two conditions included in both the pilot wave and the final wave were the non-threat package veto condition and the non-threat item veto condition. For these two conditions, the results were nearly indistinguishable across waves. Complete results from the pilot wave are available from the author upon request.

¹⁶ Experimental tests of the ultimatum game, which is closely related to the present experiment's package veto condition, routinely find this sort of generosity. Though thin rationality predicts that ultimatum game proposers will keep as much of the pie for themselves as possible, proposers routinely make generous offers to responders. The lengthy experimental literature on this game begins with Güth et al (1982). A meta-analysis finds that proposers are more generous when they are inexperienced or when the pie is smaller (Oosterbeek et al 2004).

shaded rectangle, allowing the participant to propose his exact ideal point without fear of any sort of veto. The remaining rounds placed the participant's ideal point outside the shaded rectangle; the farther the participant's ideal point was from the rectangle, the larger the predicted effect of the item veto or single subject rule. Broadly speaking, the item veto was expected to have a large effect in rounds 2 and 5, a modest effect in round 4, and a small effect in round 3. (Detailed predictions are available in a supplemental appendix.)

Results

Figures 4 and 5 provide an initial visual glance at the results. These figures depict the final two rounds of the game. The letters within each figure show the position of the participant's (legislature's) ideal point, L; the partner's (governor's) ideal point, G; and the status quo, SQ. They also show where a utility maximizing legislature would make its proposal under the package veto (P) condition as opposed to the item veto or single subject conditions (U). For example, Round 5 started with L at (50,350), G at (150,50), and SQ at (350,140). The participant's ideal proposal under the package veto condition was (80,255); the ideal proposal under other conditions was (50,140). These coordinates were constant in Round 5 regardless of experimental conditions.

[Figures 4 and 5]

Each figure contains a series of heatmaps. Each figure's left panel shows where participants tended to place their proposals; each figure's right panel shows where the outcome tended to be after the partner had accepted or rejected the proposal. Round 5 was designed so that the item veto and single subject rule would have large expected effects, hence the large distance between P and U. Round 6 was designed so that these conditions would have no predicted effect; P, L, and U are located at the same point.

A casual examination of Figure 4 provides support for all four hypotheses. Looking at the left panel, proposals clearly drift away from P and toward U in the item veto and single subject conditions, consistent with H2 and H4. Looking at the right panel, we can see that the difference grows even starker once the partner has exercised her veto authority, consistent with H1 and H3. Consistent with H5, it is difficult to discern any meaningful difference between the item veto and the single subject rule conditions. In Figure 5 (depicting Round 6), by contrast, when the game was explicitly designed to make any sort of veto power impotent, it is difficult to observe any meaningful differences among the various heatmaps.

Tables 2 and 3 summarize the results of the game more formally, with results from the veto threat condition shown in Table 3 and results from the non-threat condition in Table 2. Treatment effects are measured by calculating the average score earned by players in a treatment (item veto or single subject rule) condition as a percentage of the average score earned by players in the control (package veto) condition. The table depicts how each treatment influenced each player's proposed utility—that is, the score each player would receive if the participant's score were accepted as-is—as well as each player's actual utility—that is, the score each player received after the partner (governor) chose whether to exercise a package or item veto. The table also shows how frequently vetoes were actually exercised.

[Tables 2 and 3]

_

¹⁷ The stark differences between the left and right panels reflect the lack of veto threats; participants were inexperienced with the game and provoked far more vetoes than would be expected in a real political environment. If these heatmaps were based on participants assigned to the veto threat condition, the visual difference between the left and right panels would be slightly less stark, though still readily apparent.

¹⁸ Because of the study's large number of participants, all the effects that are large enough to be of substantive interest (that is, effects larger than a few percentage points) are generally also statistically significant.

Consistent with H1 and H3, participants (legislators) generally earned fewer points (and their governor-partners earned more points) in the treatment conditions than in the control conditions. This is especially true in Rounds 2 through 6, when the treatments were expected to matter the most. Whether participants were assigned to a veto threat condition appears to have made little difference in this case.

H1 and H3 make predictions only about the actual utility received by each player after the veto has been exercised. H2 and H4 predict that actual vetoes will be rare as a result of legislators in the treatment conditions preemptively making weaker proposals. Visual examination of the heatmaps (such as Figure 4) seems to support this hypothesis. (Heatmaps for all rounds and conditions are available in a supplemental appendix.) However, the statistics in Tables 2 and 3 tell a more ambiguous story. For those assigned to the veto threat condition (Table 3), there is indeed evidence for H2. Participants in this condition did seem to moderate their proposals in most rounds, expecting less utility for themselves and offering more to their partner than in the control condition. Participants assigned to the non-threat condition (Table 2) showed less of this behavior. To some extent, they actually seem to do the opposite, as if they were digging in their heels in frustration over their partner's power. Perhaps the implication is that communication with the governor's office plays a critical role in legislative-executive bargaining. When governors communicate their views on pending legislation to legislators, legislators adapt their proposals to avoid a veto; when governors sit silently in their office waiting patiently for legislation magically to appear, legislators flounder and make selfish proposals. In the real world, of course, governors routinely communicate their agenda and views to legislators

¹⁹ Round 3 stands as a notable exception, but this may reflect its unique arrangement of ideal points, which demanded (in all conditions) a proposal close to the governor's ideal point.

(Rosenthal 2012). As such, the dispute between Table 2 and Table 3 should probably be resolved in favor of Table 3, which lends support to H2.

As for H5, the single subject rule does have broadly similar effects as the item veto on each player's proposed and actual utility. In all six rounds, both treatments had similar effects on L's utility, and in most rounds, both treatments also had similar effects on G's utility. Detailed results tables that go far beyond those included here are available in the supplemental appendix. The supplement also includes heatmaps for each round.

Discussion

Every year, American governors issue dozens of item vetoes; moreover, countless bills are preemptively adapted to avoid an item veto. Sitting in Washington, U.S. Presidents have craved this authority; Congress even voted in 1996 to grant the President this authority, though the Supreme Court invalidated the attempt. Despite the item veto's prevalence and popularity, however, few studies have examined its effect on legislative-executive bargaining. Instead, most studies of the item veto have looked only at the item veto's effect on aggregate budget sizes—an important question to address, but only one part of the item veto puzzle.

This article pursued an experimental approach in hopes of better understanding the item veto's effect on legislative-executive bargaining. These experiments suggest that item vetoes can empower governors significantly by forcing legislatures to moderate their proposals more extensively than under a package veto. Participants assigned to the item veto condition often found it complicated, which led them to overreach in their proposals and provoke frequent item vetoes. But when item vetoes were preceded by a warning from the governor and a chance to amend the proposal before sending a final proposal, participants began to adapt to the item veto condition and propose policies that satisfied

both players. The implication for real-world legislative-executive bargaining is that item vetoes may have profound effects on policy outcomes even if they are seldom exercised as long a governors are shrewd enough to convey their intentions to legislators—and they surely are.

This article also considered the single subject rule, a constitutional provision found in 41 states. Legal scholars long ago conjectured that the single subject rule might have a similar effect on legislative-executive bargaining as the item veto (Townsend 1985). The experiments reported here confirm that conjecture. Participants restricted by the single subject rule produced similar policies as participants facing an item veto.

These two findings may explain why observational research has struggled to find much effect for the item veto. First, item vetoes exert their effect subtly by inducing legislators to moderate their proposals (and, presumably, by leading the governor to set a more aggressive agenda); as such, studies that ask whether the item veto boosts the governor's policy success rate may not find much, since governors in package veto states might make less ambitious proposals to begin with. Second, single subject rules can have the same effect as item vetoes. Because most states have either a single subject rule or an item veto—if not both—it can be difficult or impossible to find a true comparison case when studying these institutions observationally.

References

- Abney, Glenn, and Thomas P. Lauth. 1997. The item veto and fiscal responsibility. *Journal of Politics* 59: 882-892.
- Abney, Glenn, and Thomas P. Lauth. 1998. The end of executive dominance in state appropriations. *Public Administration Review* 58:388–94.
- Abrams, Burton A., and William R. Dougan. 1986. The effects of constitutional restraints on governmental spending. *Public Choice* 49 (2): 101-116.
- Berch, Neil. 1992. The item veto in the states: An analysis of the effects over time. *Social Science Journal* 29 (3): 335-346.
- Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2012. Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis* 20:351-368.
- Brown, Adam R. 2012. The item veto's sting. State Politics and Policy Quarterly 12 (June): 183-203.
- Cameron, Charles M. 2001. Veto bargaining: Presidents and the politics of negative power. Cambridge: Cambridge University Press.
- Carter, John R., and David Schap. 1990. Line-item veto, where is thy sting? *Journal of Economic Perspectives* 4(2): 103-118.
- Dometrius, Nelson C. 1979. Measuring gubernatorial power. Journal of Politics 41 (May): 589-610.
- Dometrius, Nelson C. 1987. Changing gubernatorial power: The measure vs. reality. Western Political Quarterly 40 (June): 319-328.
- Ferguson, Margaret Robertson. 2003. Chief executive success in the legislative arena. *State Politics and Policy Quarterly* 3 (summer): 158-182.
- Gilbert, Michael D. 2006. Single subject rules and the legislative process. *University of Pittsburgh Law Review* 67 (4): 803-870.
- Gosling, James J. 1986. Wisconsin item-veto lessons. Public Administration Review 46 (4): 292-300.
- Güth, Werner, Rolf Schmittberger, and Bernd Schwarze. 1982. An experimental analysis of ultimatum bargaining. *Journal of Economic Behavior and Organization* (3): 367-388.
- Holtz-Eakin, Douglas. 1988. The line-item veto and public sector budgets. *Journal of Public Economics* 36:269–92.
- Ingberman, Daniel E., and Dennis A. Yao. 1991. Presidential commitment and the veto. *American Journal of Political Science* 35 (May): 357-389.
- Kiewiet, D. Roderick, and Mathew D. McCubbins. 1985. Appropriations decisions as a bilateral bargaining game between president and Congress. *Legislative Studies Quarterly* 10 (May): 181-201.

- Kiewiet, D. Roderick, and Mathew D. McCubbins. 1988. Presidential influence on Congressional appropriations decisions. *American Journal of Political Science* 32 (August): 713-736.
- Kousser, Thad, and Justin H. Phillips. 2012. The power of American governors: Winning on budgets and losing on policy. Cambridge: Cambridge University Press.
- Matthews, Steven A. 1989. Veto threats: Rhetoric in a bargaining game. *Quarterly Journal of Economics* 104 (May): 347-369.
- Mooney, Christopher Z. 2009. Term limits as a boon to legislative scholarship: A review. *State Politics and Policy Quarterly* 9 (summer): 204-228.
- Nice, David C. 1988. The item veto expenditure restraint. *Journal of Politics* 50:487–99.
- Oosterbeek, Hessel, Randolph Sloof, and Gijs van de Kuilen. 2004. Cultural differences in ultimatum game experiments: Evidence from a meta-analysis. *Experimental Economics* 7 (2): 171-188.
- Reese, Catherine C. 1997. The line-item veto in practice in ten southern states. *Public Administration Review* 57 (6): 510-516.
- Romer, Thomas, and Howard Rosenthal. 1978. Political resource allocation, controlled agendas, and the status quo. *Public Choice* 33:27-43.
- Rosenthal, Alan. 2012. The best job in politics: Exploring how governors succeed as policy leaders. Washington: Congressional Quarterly Press.
- Schap, David. 2006. Line item veto: Lessons from the literature. In *The Elgar Companion to Public Economics: Empirical Public Economics*, Attiat F. Ott and Richard J. Cebula, eds. Northampton, MA: Edward Elgar.
- Squire, Peverill. 1992. Legislative professionalism and membership diversity in state legislatures. Legislative Studies Quarterly 17: 69-79.
- Squire, Peverill. 2007. Measuring state legislative professionalism: The Squire index revisited. *State Politics and Policy Quarterly* 7 (summer): 211-227.
- Squire, Peverill, and Gary Moncrief. 2010. State legislatures today: Politics under the domes. Boston: Longman.
- Thompson, Pat, and Steven R. Boyd. 1994. Use of the item veto in Texas, 1940-1990. *State and Local Government Review* 26 (winter): 38-45.
- Townsend, Nancy J. 1985. Single subject restrictions as an alternative to the line-item veto. *Notre Dame Journal of Law, Ethics, & Public Policy* 1 (2): 227–58.
- Wall, Audrey S. 2013. The book of the states: 2013. Lexington, KY: Council of State Governments.

Table 1: Participants per Condition

	Without veto threats	With veto threats
Package veto	161	160
Item veto	162	159
Single subject rule	160	

Table 2: Results (Without Veto Threats)

	Round	Round	Round	Round	Round	Round
	1	2	3	4	5	6
Effect of item veto on utility						
Effect on L's proposed utility	-1%	-11%	20%	-8%	8%	-5%
Effect on L's actual utility	-1%	-38%	1%	-15%	-17%	-4%
Effect on G's proposed utility	-4%	-3%	-71%	-5%	-35%	-12%
Effect on G's actual utility	-4%	22%	0%	3%	12%	-12%
Effect of single subject on utility						
Effect on L's proposed utility	-7%	-28%	37%	-20%	11%	-6%
Effect on L's actual utility	-7%	-39%	-8%	-24%	-17%	-6%
Effect on G's proposed utility	-3%	16%	-134%	10%	-46%	1%
Effect on G's actual utility	-3%	26%	-27%	15%	0%	1%
Decision (package veto condition)						
Accept	100%	100%	89%	100%	99%	100%
Reject	0%	0%	11%	0%	1%	0%
Decision (item veto condition)						
Accept	100%	27%	48%	68%	40%	99%
Item veto	0%	73%	48%	32%	60%	1%
Reject	0%	0%	5%	0%	1%	0%
Decision (single subject condition)						
Accept both	99%	46%	13%	79%	21%	100%
Accept one	1%	54%	75%	21%	78%	0%
Reject both	0%	0%	12%	0%	1%	0%

Table 3: Results (With Veto Threats)

	Round	Round	Round	Round	Round	Round
	1	2	3	4	5	6
Effect of item veto on utility						
Effect on L's proposed utility	-4%	-24%	13%	-12%	0%	-5%
Effect on L's actual utility	-4%	-38%	0%	-14%	-16%	-5%
Effect on G's proposed utility	-2%	9%	-41%	9%	-9%	-1%
Effect on G's actual utility	-2%	22%	10%	11%	20%	-1%
·						
Decision (package veto condition)						
Accept	100%	100%	94%	100%	100%	100%
Reject	0%	0%	6%	0%	0%	0%
Decision (item veto condition)						
Accept	100%	55%	50%	87%	58%	99%
Item veto	0%	45%	49%	13%	42%	1%
Reject	0%	0%	1%	0%	0%	0%

Figure 1: The Package Veto Bargaining Context

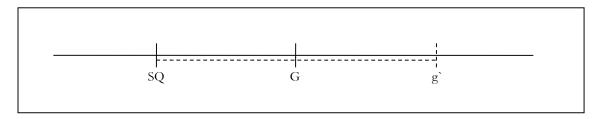


Figure 2: The Item Veto Bargaining Context

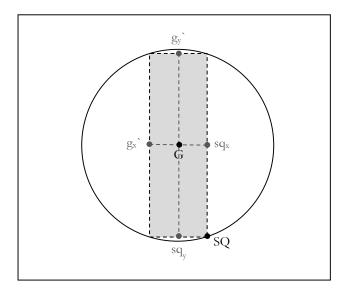
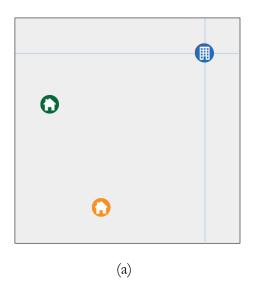
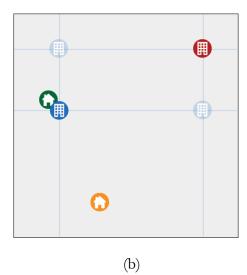


Figure 3: Participant Interface





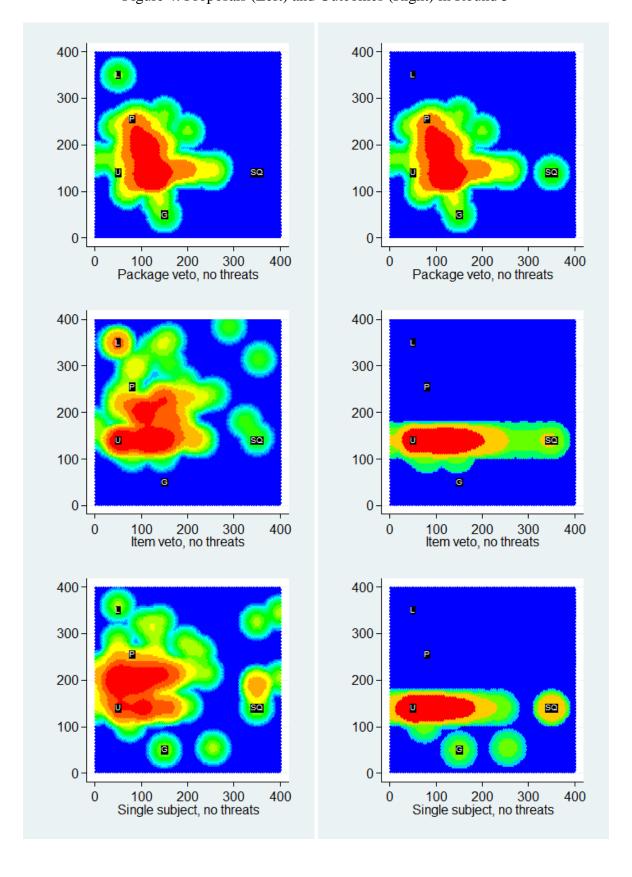


Figure 4: Proposals (Left) and Outcomes (Right) in Round 5

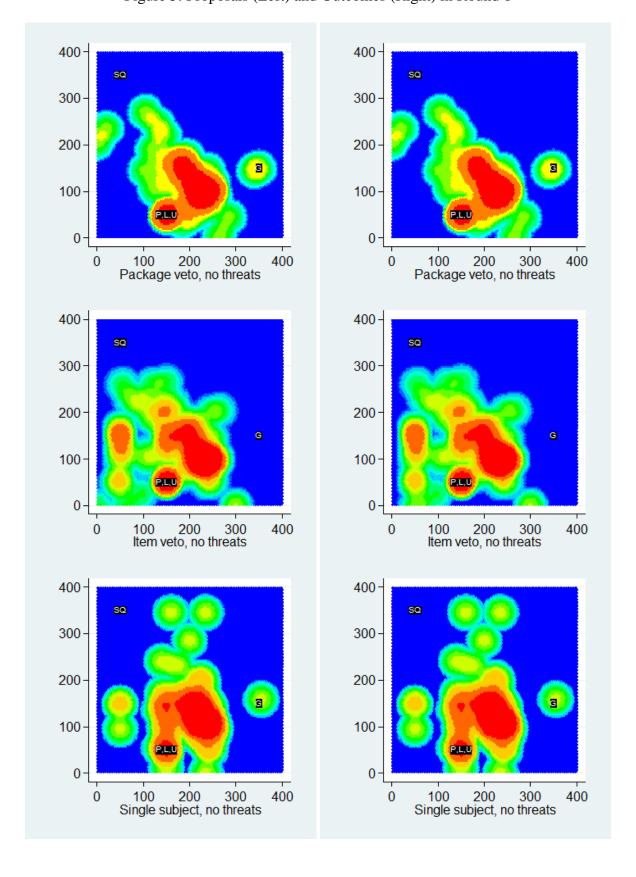


Figure 5: Proposals (Left) and Outcomes (Right) in Round 6

Supplemental appendix

This document contains additional materials that, though not critical to understanding the main document, may be of interest to some readers. Those wishing to explore the data further are invited to contact the author for replication data.

Table A1 presents a demographic profile of respondents, demonstrating that treatment groups are reasonably balanced across several demographic indicators.

Tables A2 and A3 present detailed results from the experiment. Table A2 reports results when the governor cannot issue a veto threat; Table A3 reports results when the governor can issue a veto threat. Because veto threats were allowed only under the package veto and item veto conditions—not under the single subject rule condition—Table A3 is somewhat shorter than Table A2.

Figures A1 through A6 use heatmaps to display the proposed and actual outcomes of each round. There is a separate heatmap for each of the experiment's five conditions. The heatmaps contain labels marking the position of the participant's (i.e. legislator's) ideal point (L), the governor's ideal point (G), and the status quo (SQ). The heatmaps also label the theoretically expected proposal under the package veto condition (P) and under the unidimensional (U) conditions (that is, the item veto condition and the single subject rule condition). These expected proposals, P and U, assume the legislature makes a proposal that maximizes the legislature's utility gain while giving the governor only enough utility to avoid any type of veto. Because respondents typically failed to figure out that the computer-controlled governor would veto only to avoid a utility loss, participants generally made more generous proposals than expected.

Following the figures is a reprint of the experiment's script. Those wishing to participate in the experiment (in beta test mode) may follow this link:

http://adambrown.info/mturk_experiments/2014-item-bargaining-game/0-beta-test

Table A1: Profile of Respondents

	All	Group 1	Group 2	Group 3	Group 4	Group 5
Item veto?		No	Yes	No	Yes	No
Veto threats?		No	No	Yes	Yes	No
Single subject rule?		No	No	No	No	Yes
Number of respondents	802	161	162	160	159	160
Percent receiving bonus	98%	97%	98%	97%	99%	99%
Gender						
Male	59%	57%	62%	58%	60%	57%
Female	41%	43%	38%	43%	40%	43%
Average age	32	33	31	31	32	32
Partisanship						
Democrat	57%	51%	57%	67%	50%	62%
Independent	25%	28%	26%	17%	30%	24%
Republican	12%	15%	13%	10%	13%	7%
Other or not sure	6%	6%	4%	6%	8%	6%
Education						
Less than high school	1%	0%	1%	1%	3%	0%
High school diploma	13%	12%	14%	11%	14%	11%
Some college	40%	41%	37%	44%	40%	36%
Four-year degree	37%	36%	39%	37%	31%	39%
Graduate degree	10%	11%	9%	8%	11%	14%

Table A2: Experimental Results (Without Veto Threats)

	Round	Round	Round	Round	Round	Round
L's raw utility gain (package veto)	1	2	3	4	5	6
Expected gain	316	262	190	242	266	316
Average proposed gain	215	130	128	141	164	226
Average actual gain	215	130	105	141	162	226
Tiverage actual guin	213	130	100	111	102	220
L's raw utility gain (item veto)						
Expected gain	316	92	142	142	156	316
Average proposed gain	212	116	153	130	177	216
Average actual gain	212	81	106	120	135	216
L's raw utility gain (single subject)						
Expected gain	316	92	142	142	156	316
Average proposed gain	200	93	175	113	182	213
Average actual gain	200	79	96	106	135	213
G's raw utility gain (package veto)						
Expected gain	137	11	0	51	2	137
Average proposed gain	226	133	52	143	97	204
Average actual gain	226	133	56	143	97	204
.						
G's raw utility gain (item veto)	4.05	4.40		4.46	0.4	4.05
Expected gain	137	163	0	146	84	137
Average proposed gain	217	129	15	136	63	178
Average actual gain	217	162	56	148	109	179
G's raw utility gain (single subject)						
Expected gain	137	163	0	146	84	137
Average proposed gain	220	155	-18	157	52	205
Average actual gain	220	168	41	165	98	205
Average actual gain	220	100	71	103	70	203
Effect of item veto on L's utility						
Effect on L's proposed utility	-1%	-11%	20%	-8%	8%	-5%
Effect on L's actual utility	-1%	-38%	1%	-15%	-17%	-4%
anest on a constant arms,	1,0	20,0	1,0	10,0	1170	1,5
Effect of item veto on G's utility						
Effect on G's proposed utility	-4%	-3%	-71%	-5%	-35%	-12%
Effect on G's actual utility	-4%	22%	0%	3%	12%	-12%
•						
Effect of single subject on L's utility						
Effect on L's proposed utility	-7%	-28%	37%	-20%	11%	-6%
Effect on L's actual utility	-7%	-39%	-8%	-24%	-17%	-6%
Effect of single subject on G's utility	•••	4 40 /	40.407	4007	4 40 /	401
Effect on G's proposed utility	-3%	16%	-134%	10%	-46%	1%
Effect on G's actual utility	-3%	26%	-27%	15%	0%	1%

	Round	Round	Round	Round	Round	Round
	1	2	3	4	5	6
Decision (package veto condition)						
Accept	100%	100%	89%	100%	99%	100%
Reject	0%	0%	11%	0%	1%	0%
Decision (item veto condition)						
Accept	100%	27%	48%	68%	40%	99%
Item veto	0%	73%	48%	32%	60%	1%
Reject	0%	0%	5%	0%	1%	0%
Decision (single subject condition)						
Accept both	99%	46%	13%	79%	21%	100%
Accept one	1%	54%	75%	21%	78%	0%
Reject both	0%	0%	12%	0%	1%	0%

Table A3: Experimental Results (With Veto Threats)

	Round	Round	Round	Round	Round	Round
	1	2	3	4	5	6
L's raw utility gain (package veto)						
Expected gain	316	262	190	242	266	316
Average proposed gain	213	126	126	135	164	224
Average actual gain	213	126	114	135	164	224
L's raw utility gain (item veto)	• • •	0.5				• • •
Expected gain	316	92	142	142	156	316
Average proposed gain	204	97	143	119	164	213
Average actual gain	204	78	113	116	138	213
G's raw utility gain (package veto)						
Expected gain	137	11	0	51	2	137
Average proposed gain	223	135	53	143	91	198
Average actual gain	223	135	56	143	91	198
G's raw utility gain (item veto)						
Expected gain	137	163	0	146	84	137
Average proposed gain	219	147	31	155	83	196
Average actual gain	219	165	61	159	110	196
Effect of item veto on L's utility						
Effect on L's proposed utility	-4%	-24%	13%	-12%	0%	-5%
Effect on L's actual utility	-4%	-38%	0%	-14%	-16%	-5%
Effect of item veto on G's utility						
Effect on G's proposed utility	-2%	9%	-41%	9%	-9%	-1%
Effect on G's actual utility	-2%	22%	10%	11%	20%	-1%
Decision (package veto condition)						
Accept	100%	100%	94%	100%	100%	100%
Reject	0%	0%	6%	0%	0%	0%
Reject	070	070	070	070	070	070
Decision (item veto condition)						
Accept	100%	55%	50%	87%	58%	99%
Item veto	0%	45%	49%	13%	42%	1%
Reject	0%	0%	1%	0%	0%	0%

Figure A1: Proposals (Left) and Outcomes (Right) for Round 1

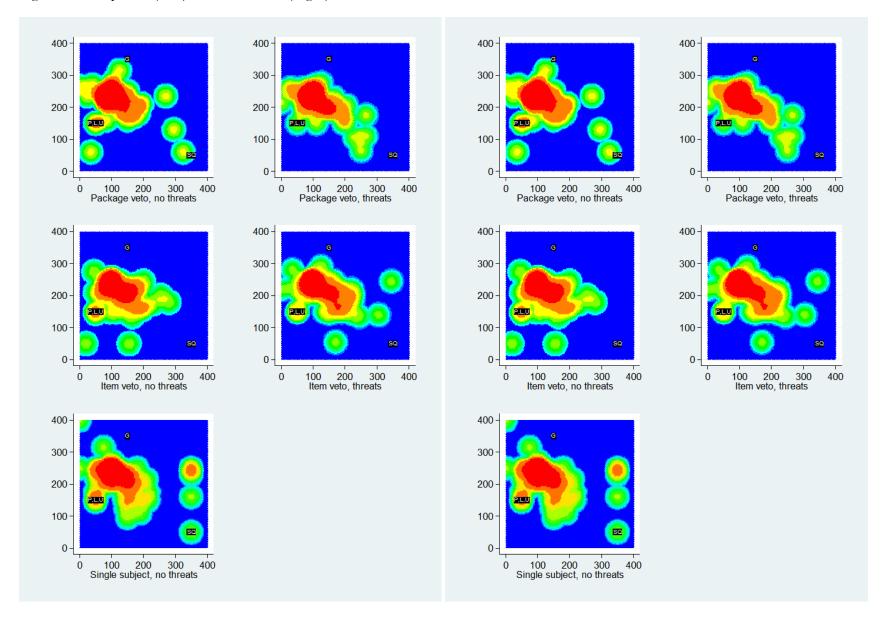


Figure A2: Proposals (Left) and Outcomes (Right) for Round 2

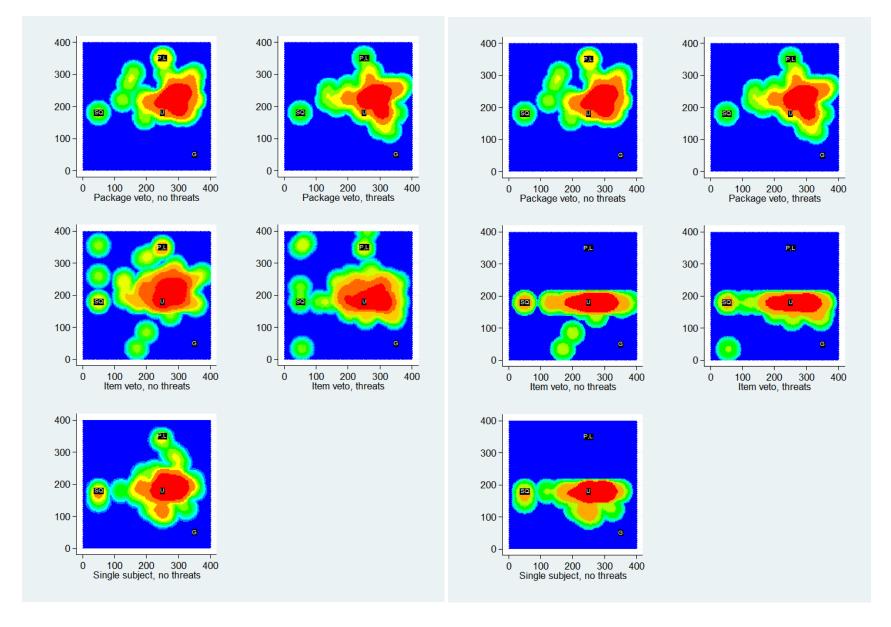


Figure A3: Proposals (Left) and Outcomes (Right) for Round 3

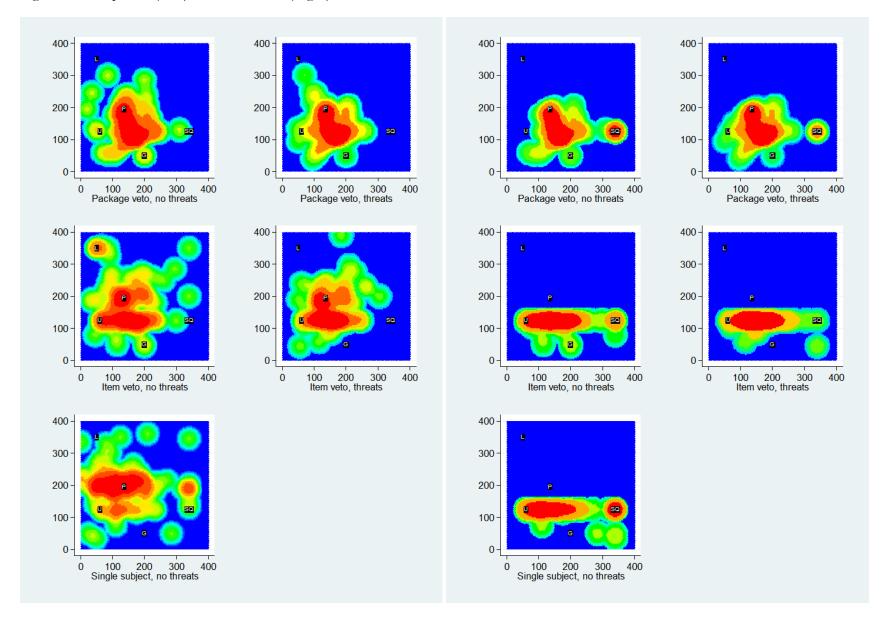


Figure A4: Proposals (Left) and Outcomes (Right) for Round 4

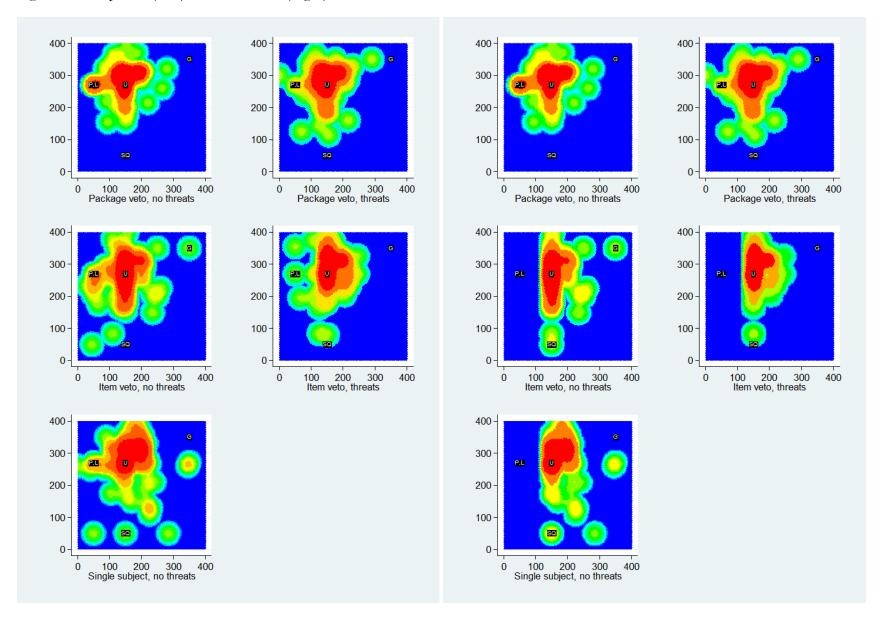


Figure A5: Proposals (Left) and Outcomes (Right) for Round 5

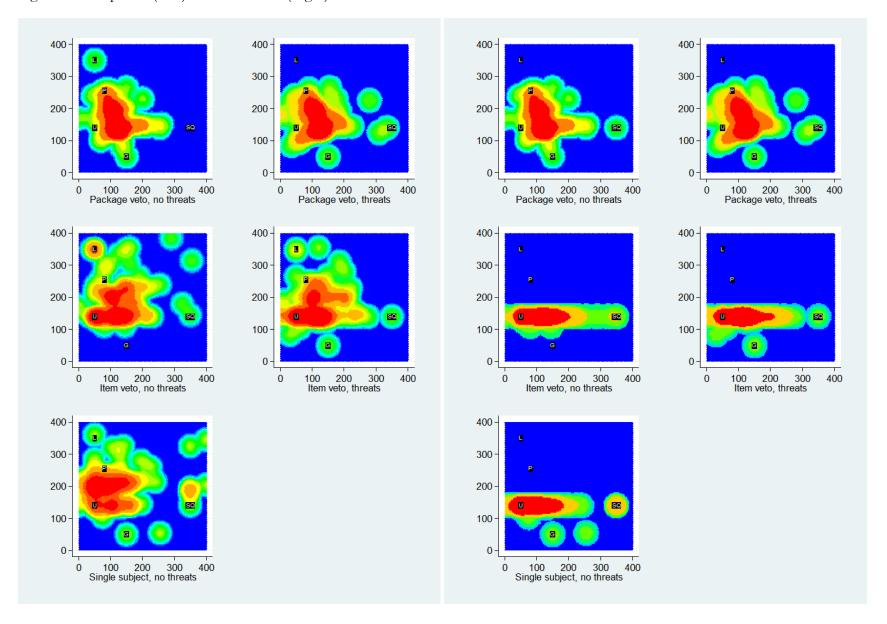
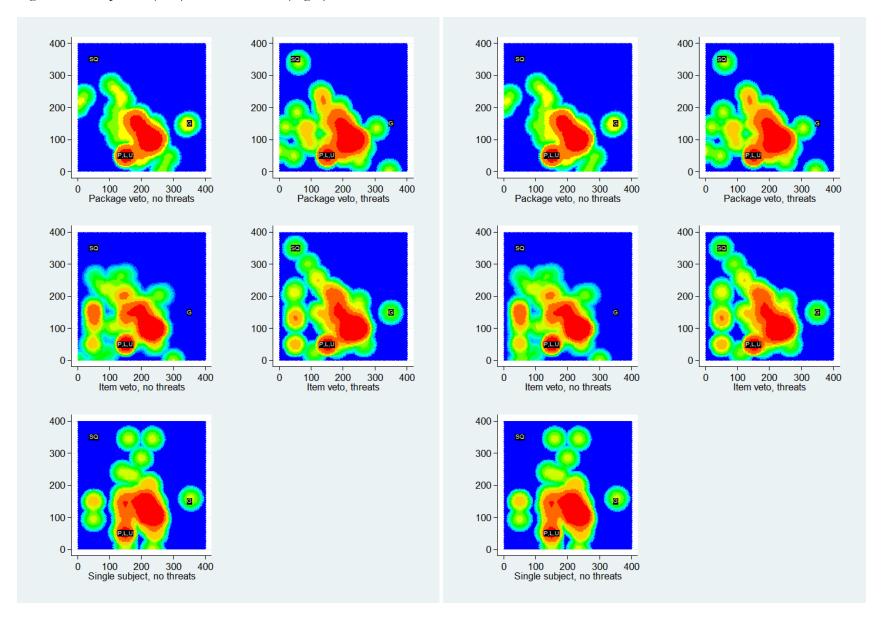


Figure A6: Proposals (Left) and Outcomes (Right) for Round 6



Experimental protocol

The following pages contain screenshots from the experiment. The language below would have varied slightly depending on experimental conditions.

Welcome!

We are researching a new game concept and need playtesters. Most people need only 6-8 minutes to finish. We will allow you up to 20 minutes just in case.

To participate, you need the following:

- A pointing device, such as a mouse. Touch screens will not work.
- Speakers (turn them on). You will need to watch a brief instructional video.
- A tall enough display screen that you can see this entire page at once (without scrolling).
- · Do not use your brower's "back" button

You can return this HIT at any time if you decide not to participate. You may participate only once.

About this research

This is academic research. The lead researcher is Adam Brown, an assistant professor at Brigham Young University, who can be contacted at brown@byu.edu. We will not collect any personally identifiable information about you, nor will we contact you again in the future.

This research does not expose participants to meaningful risks beyond those inherent in using a computer. If you have questions about your rights as a research participant you may contact the university's Institutional Review Board (IRB) at (801) 422-1461 or irb@byu.edu or write to IRB Administrator, A-285 ASB, Brigham Young University, Provo, UT 84602.

Continue »

Compensation

We will ask you to play 6 brief rounds of the game. All participants who make a sincere effort at all 6 rounds will receive \$0.75. We will not reject your HIT unless it is obvious you made little or no effort to participate in good faith.

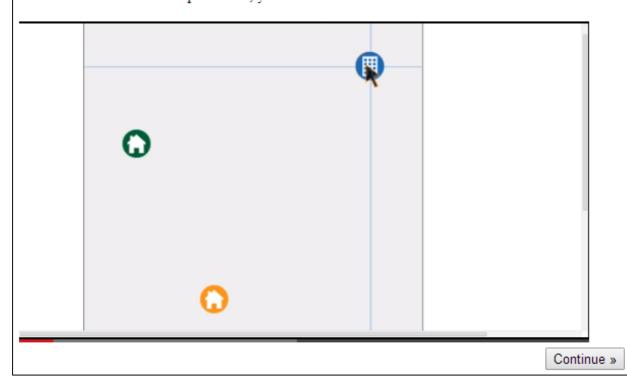
Bonuses

We expect that most participants will qualify for an additional \$0.25 bonus. You will lose this bonus only if your performance leaves us thinking you were not trying very hard to maximize your score.

Continue »

Instructions

Please watch this brief instructional video. We will ask some simple questions on the next screen to ensure you understood the instructions. If you find yourself unable view the video or answer the questions, you will need to return this HIT.



This page contains an embedded instructional video lasting roughly 2 minutes. There were three versions of the video depending on whether users were in a package veto, item veto, or single subject condition. Instructional videos may be viewed at these links:

http://youtu.be/S1A9o3ALuDQ (package veto) or http://youtu.be/vDwG3Pxh48E (item veto) or http://youtu.be/li2OhKqNHAA (single subject rule)

Following is a rough transcript of the video:

Imagine you and a partner own a business together. [show picture of the game map] The business is located here [show on map]. You live here, in the green house, and your partner lives here, in the orange house. You are both interested in shortening your commute time by finding a new office location. The business is small and the map is wide open, so you could move the business anywhere.

You and your partner have a process that you've agreed on for selecting a new location. This is what the two of you came up with:

You will be responsible for proposing a new location. To make your proposal, simply grab the office with your mouse and drag it anywhere you please. You can even put it in your own house or in your partner's house or anywhere else in the map. [Demonstrate on screen]

[THIS PARAGRAPH FOR SINGLE SUBJECT CONDITION ONLY] But you need to make your proposal in two steps. You'll start by proposing how far north or south to move the office. Then, you'll click this "make proposal" button. At that point, your partner will decide whether to accept or reject your proposed north-south movement. Then, you'll propose how far east or west to move the office, and once again, you'll click this "make proposal" button.

[THIS PARAGRAPH FOR NON SINGLE SUBJECT CONDITIONS] When you're done, you'll click this "make proposal" button. At that point, your partner will decide whether to accept or reject your proposed location. It's that easy: You propose a location, and your partner decides whether to accept or reject it.

If your partner accepts [SINGLE SUBJECT CONDITION: one or both parts of] your proposal, then each of you receives points based on how much closer the new office is to each of your homes compared to the old office location. If your partner rejects your [SINGLE SUBJECT CONDITION: entire] proposal, then the office will remain in its original location and neither of you will receive any points at all.

[THIS PARAGRAPH FOR ITEM VETO CONDITION ONLY] But there's a catch: Your partner can also choose to accept only the north-south dimension of your proposal, or your partner can choose to accept only the east-west dimension of your proposal. So if you make a proposal here [show on map], for example, and your partner chooses to accept only the north-south dimension, then you would build your new office over here [show on map].

To make this easier, there is a scoreboard below the map that will update as you move the office around. Your possible score appears on the left, next to the green house icon, and your partner's score appears on the right, next to the orange house icon. Each partner's highest scoring outcome will appear in green, though you have no guarantee that your partner will actually choose that outcome.

Were you able to see and hear the entire instructional video?	
O Yes	
O No	
What will be your role in the game?	
Find a new job	
 Propose a new business location 	
Recruit a business partner	
Decide where to build my house	
Which participants will earn a bonus?	
Those who score in the top 10%	
Those who score in the top 25%	
Those who score in the top 50%	
 All participants who make a serious effort to score well 	
If there are questions you cannot answer, please return this HIT.	
	Continue »

Respondents who failed to answer all three questions correctly were removed from the study.

Round 1 of 6. Use your mouse to drag the office wherever you like. Click "Make Proposal" when you are ready for your partner to evaluate your proposed location. If your partner accepts your proposal 0 Your score Partner's score If your partner accepts only your east-west proposal O Your score If your partner accepts only your north-south proposal O Your score If your partner rejects your proposal Your score Partner's score Make proposal

This image depicts the game in the item veto condition. In the other conditions, two of the four rows below the image—those dealing with the east-west or north-south proposal—would not have appeared. Respondents played six rounds of the game. Within each round, all respondents saw the same starting configuration if homes and office location regardless of treatment condition.

To help us analyze the results of this study, please tell us a few things about	yourself.
Are you male or female?	
Male	
O Female	
What is the highest level of education you have completed?	
Less than high school	
High school diploma	
Some college	
Four-year college degree	
Advanced degree (Masters, doctorate, JD, etc)	
Do you consider yourself a Democrat, a Republican, or something else?	
Strong Republican	
Republican	
 Independent, leaning Republican 	
Independent	
 Independent, leaning Democratic 	
Democrat	
Strong Democrat	
Another party	
In what year were you born? Please write it here:	
	Continue »

Thank you!

Thank you for your participation. Copy the confirmation code below and paste it into the Mechanical Turk HIT. We will process HITs (and determine which participants qualified for the bonus) when the study closes in a few days.

Your confirmation code:

1121-51ecc

Thank you again for your participation.