When voting no is not enough: Legislative brawling and obstruction in Korea

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March 16, 2023

Abstract

Although legislative brawling is a common occurrence—with 365 cases reported across the world between 1990 and 2018—we have a limited understanding of why members of representative bodies engage in violence. Does the lack of institutionalization or violent nature of some legislators cause such behavior? This paper argues that legislators with intense policy preferences engage in costly actions, such as brawling and obstruction, as a means of signaling their policy commitment. To validate this claim, this article examines legislators' participation in legislative brawling and filibusters in Korea before and after the adoption of a filibuster procedure. Extreme members were found to engage in brawling before the adoption while they engaged in filibusters after adoption. This transformation of brawlers into filibusterers suggests that legislative brawling does not necessarily indicate weak institutionalization or a violent nature of some legislators but rather a desire by legislators to signal their policy commitments.

In 2011, as the National Assembly of Korea debated a motion to ratify the U.S.-Korea Free Trade Agreement, an opposition member threw tear gas into the chamber. This incident drew national attention and public condemnation, resulting in a resolution to censure the member. Legislative brawls, as this type of physical violence in a legislature is known, can be costly for both the legislature and the legislators who engage in such behavior. Despite the costs, there were 365 cases of legislative brawls across the world between 1990 and 2018 (Schmoll and Ting 2022). This raises the question, why do legislators resort to physical violence to block unwanted legislation, rather than simply voting against it and accepting the outcome? Given the importance of peaceful resolution of policy differences in a democracy, it is crucial to understand the motivations behind members of a representative body who employ violent strategies.

Studies have shown that legislatures with certain institutional characteristics, such as those in new democracies or fragmented legislatures, are more prone to experiencing legislative brawling (Gandrud, 2016; Schmoll and Ting, 2022). While these institution-level accounts can explain why certain legislatures may be more susceptible to legislative brawling, they do not provide insight into the motivations of individual legislators who engage in such behavior. To address this gap in understanding, this article applies a signaling theory of obstruction (Baum and Koger, 2008; Koger, 2010; Patty, 2016; and Wawro and Schickler, 2006) to legislative brawling. This theory posits that legislators engage in costly obstructive behavior in order to signal their policy commitment. While the idea that legislative brawling serves as a public display of commitment is not new (Johnson, 2013; Shukan, 2013; Spray, 2013), previous studies have not explored why certain legislators may be more likely to engage in brawling than others within a legislature. While legislative brawling is often carried out by a group of legislators, some individuals within the legislature engage in this behavior more actively and frequently than

others. The signaling theory posits that legislators with strong policy positions are more likely to engage in legislative brawling than those with more moderate preferences. This is because voting against legislation alone does not adequately signal the intensity of their preferences.

However, there is an alternative explanation for this phenomenon. Simply put, legislators with extreme views may engage in brawling because of personality traits or personal backgrounds that push them to seek violent solutions. For example, Shukan (2013) found that legislators with prior experience in security or police forces were more likely to engage in brawling in the Ukrainian parliament than other legislators. In other words, ideologically extreme views may not be driving aggressive behavior; rather, preexisting violent tendencies may make legislators more inclined to adopt extreme views and violent behavior.

To assess the competing theories, signaling strategies versus violent dispositions, this study examines legislators' participation in legislative brawling and filibusters in the National Assembly of Korea. The Korean Assembly is an ideal case to investigate the role of legislative brawling, not only because it has had a reputation for being one of the most violent legislatures, but also because its procedural reform in 2012 presents an opportunity to test these theories. Before the reform in 2012, the minority in the legislature had few tools for obstruction other than brawling. However, the 2012 reform instituted a filibuster procedure that has since allowed legislators to demonstrate their policy commitment in a peaceful manner. This case thus allows for an evaluation of whether extreme legislators were attempting to send a signal or whether they were simply inclined to use violence. If the signaling theory is correct, we should observe legislators engaging in brawls mostly before the adoption of the filibuster when a peaceful tool for obstruction, and thus for signaling policy commitments, was not available to them. On the

other hand, if the violent disposition theory has merit, we should see legislators who resorted to violence before the procedural reform continuing to resort to violence afterward.

This study finds that minority members with extreme preferences were more inclined to participate in legislative brawling before the implementation of procedural reform. However, after the procedural reform, the same types of legislators were more inclined to engage in filibusters. This transformation of brawlers into filibusterers suggests that legislative brawling does not necessarily indicate a lack of institutionalization or a violent disposition among legislators, but rather a desire to communicate their intense policy commitments. This finding supports the predictions of the signaling theory and provides further insight into the motivations behind legislators' participation in legislative brawling.

Signaling Theory of Legislative Brawling

In order to understand the individual motivations behind legislative brawling, this paper applies a signaling theory of obstruction (Baum and Koger, 2008; Koger, 2010; Patty, 2016; Wawro and Schickler, 2006) to legislative brawling. While brawling and obstruction may seem distinct, there are significant similarities that warrant examination through the same theoretical framework.

To be sure, procedural obstruction is generally considered a legitimate strategic option in democratic legislatures, whereas brawling is widely—and rightly—seen as an unacceptable form of aggressive behavior. But setting aside the important normative distinctions, both obstruction and brawling share a key limitation: they are ineffective means for achieving policy objectives. Obstruction, for instance, is typically ineffective in preventing the passage of legislation by a unified majority, unless the chamber has a procedural mechanism that grants the minority significant power, such as a supermajority requirement for cloture in the U.S. Senate. Without

such procedures, obstruction typically results in delay rather than complete blockage. Similarly, legislative brawls are also ineffective when faced with a unified majority. These brawls typically occur when negotiations between the majority and minority have failed and the majority is still intent on passing legislation. Instead of simply voting against the legislation, the minority opts to physically demonstrate their opposition by engaging in a fight. Such fights may temporarily delay the passage of legislation, but they are unlikely to achieve the apparent goal of blocking unwanted legislation.

Although both obstruction and brawling offer legislators only limited policy victories, they do give legislators something else: policy credibility. This is because both behaviors are costly to those who engage in them. Engaging in prolonged obstructionist tactics, such as continuously speaking for hours on the floor of a chamber, can be physically taxing and may result in opportunity costs, such as missing important legislative activities or campaign events. Similarly, brawling can also prove costly, as it can result in physical harm to the brawler, negative media portrayal, and even censure or expulsion by one's colleagues.

The similarities between obstruction and brawling make them suitable candidates for credible signals in a signaling game. According to the signaling game theory, an action can serve as a credible signal when it is both ineffective and costly. The classic labor market signaling model proposed by Spence (1973) posits that employers use a job candidate's level of education as a credible signal for their productivity or skill level, despite education not necessarily increasing an individual's productivity. The cost of obtaining education, such as the effort required to complete a degree, is higher for individuals with lower productivity levels. Therefore, unskilled individuals are less likely to attain higher levels of education. Conversely, for

with lower productivity levels. Knowing this, employers, who cannot observe a candidate's skill level, use the candidate's education level as a credible signal for their skill level. Thus, job candidates with higher skill levels have an incentive to achieve higher levels of education, despite the additional cost and ineffectiveness in increasing their skill level.

The application of the signaling model to the politics of legislative obstruction, as proposed by Patty (2016), posits that constituents or policy advocates can be viewed as employers in the labor market while legislators can be viewed as the job candidates. Indeed, where job candidates have varying levels of skills, legislators have varying levels of policy commitments. And where job candidates with a higher level of skill must gain additional education to send a credible signal, legislators with a higher level of policy commitment must take costly actions, even if they do not necessarily achieve the desired policy outcome, in order to signal their commitment to their constituents. Both obstruction and brawling can serve this purpose, as they are typically ineffective in blocking unwanted legislation, yet costly. However, legislators with a lower level of policy commitment may view the cost of obstruction or brawling as too high, since such intense behavior may be inconsistent with their moderate stance and reputation.

But unlike the labor market, where individual skill sets largely drive signaling decisions, the legislative arena faces exogenous pressures and influences that further differentiate the incentives that extreme and moderate legislators have for engaging in costly activities. Specifically, legislators with the strongest policy convictions often represent (or at least seek out the support of) the strongest partisan supporters. Because such supporters are most inclined to endorse costly legislative action, such as brawling and the use of hardball procedural tactics, extreme legislators have electoral incentives to engage in costly signaling (Batto and Beaulieu,

2020; Smith and Park, 2013). Conversely, moderate legislators often represent weak partisans or ideologically diverse constituents who, collectively, are unlikely to approve of highly confrontational strategies (Batto and Beaulieu, 2020). Therefore, moderate legislators have electoral incentives to avoid brawling and obstructionism. This difference in target audiences creates an additional incentive for extreme and moderate legislators to adopt different approaches to brawling.

Several examples suggest that legislators, in a variety of legislative arenas, have readily used obstructive tactics and brawling as costly signals (although legislators who have used obstructive tactics may not have resorted to brawling, and vice versa). Filibustering in the US Senate—especially in the 19th and early 20th centuries, in which legislators were required to hold the floor and exert themselves physically for long hours to block motions—provides a costly demonstration of a senator's policy commitment (Baum and Koger, 2008; Koger, 2010; and Wawro and Schickler, 2006). In particular, it has long been a tool for the minority to reveal the intensity of its preferences to constituents and the majority. Meanwhile, in the Taiwanese legislature, legislators have resorted to brawling to upend legislative proceedings and thereby obstruct. While most voters in Taiwan have disapproved of legislative brawling, strong supporters of the minority party have often responded positively to such behavior (Batto and Beaulieu, 2020). In short, both obstruction and brawling are weapons of the weak, of the legislative minority, used as a last resort to prevent the majority from enjoying key policy victories.

This last point is crucial because it suggests that not all minority members will be equally motivated to engage in costly signaling, whatever its form. But this is especially the case for brawling since it is such a high-risk strategy—raising the possibility of censure or expulsion—

with a very low probability of success. Indeed, if obstructive tactics, such as filibustering are available, presumably legislators will have little incentive to start or participate in floor brawls. Why engage in the costliest form of signaling when a somewhat less costly form will produce the same political and policy results? We should expect, then, that extreme legislators, especially those in the minority with the strongest incentives to demonstrate their policy commitments, will only engage in brawls when nonviolent procedural obstruction is unavailable to them.

Admittedly, as noted above, previous research suggests an alternative explanation may account for legislative brawls: the violent dispositions of some legislators, especially those with extreme or unusually intense policy preferences. For example, previous research by Shukan (2013) has shown that legislators with prior experience in security forces, police work, and post-Soviet business, where mafia violence was prevalent, were more likely to engage in brawling within the Ukrainian parliament. Additionally, in Weimar Germany, the Nazis were known to frequently use violence on the parliamentary floor (Loewenberg, 1971). Thus, the observation that legislators with extreme preferences are more likely to engage in legislative brawling does not necessarily prove that brawls serve as a signal of their policy commitment. This alternative explanation offers an important challenge to the signaling theories of legislative behavior, suggesting that further empirical work is needed to understand why some legislators turn to violence. The remaining sections of this study explore the merits of these dueling explanations.

Research Design and Data

In order to test the hypotheses presented in the previous section, we need a case in which the behavior of legislators can be compared when peaceful tools of obstruction are and are not available. The procedural reform of the National Assembly of Korea in 2012 provides a suitable

opportunity for this purpose. Before the reform, the minority in the legislature had limited options for obstruction other than resorting to brawling. However, the reform introduced a filibuster procedure, which enabled legislators to signal their policy commitments through peaceful means. This case study thus allows us to examine whether extreme legislators engage in brawling (when a peaceful tool for signaling is not available) and obstruction (when such a tool is available), or whether they persistently engage in brawling regardless of the procedural tools available. Furthermore, the National Assembly of Korea is a crucial case to study the role of legislative brawling, given its reputation as one of the most "unruly parliaments" (Keating, 2009; Ramnarayan, 2009). Investigating such an unruly legislature and seeing whether procedural reform can reduce instances of chamber violence may provide valuable insights for other legislatures facing similar issues.

Procedures of the National Assembly of Korea

Despite its reputation as one of the most violent legislatures, the governing principle of the legislature since the country's democratization in 1987 has been the norm of consensus. Legislative agenda and selection of committee chairs are set through negotiations between the majority party and minority party (Jeon 2011b; Sohn and Ka 2008). However, before the procedural reform in 2012, the majority party also had the ability to force a vote even when the minority party opposed it. The Speaker of the legislature, usually a member of the majority party, had the power to dislodge a bill from legislative committees and force a vote. This discharge power stripped the minority of the opportunity to provide any input on the bill. In fact, when bills were dislodged by the Speaker, 90% of these bills were given only one day before the vote took place (Jeon 2011a). Consequently, when the majority used this power, the minority had almost

no means to obstruct bills pushed by the majority. Not surprisingly, most bills that became sources of legislative brawls were bills pushed by the majority using this power (Jeon 2011b).

The procedural reform, which was adopted in the last session of the 18th Assembly (2008-2012), limits the use of the Speaker's discharge power to national emergencies and allows for the use of legislative filibusters (among other procedural changes). The key feature of the filibuster procedure is that it permits legislators to speak continuously on the floor. Filibustering members must remain standing on the chamber floor and speak about matters directly relevant to the legislative issue in question. A legislator who sits down, leaves the chamber, or speaks about non-germane concerns loses the floor. Filibustering is thus costly. But it is not a particularly effective means for blocking unwanted legislation. Although the procedure requires 3/5 of the legislators to invoke a cloture, the majority does not need to have a successful cloture to pass the bill. This is because the procedure also requires the bill under a filibuster to be put to a vote immediately in the next legislative session. Legislative sessions in the Korean Assembly are not continuous. The majority in the legislature can decide when a legislative session will be scheduled and how long it will last (except for the regular legislative session usually in the fall each year, which is guaranteed by the constitution). Therefore, the majority can hold a very short legislative session to debate a controversial bill that is likely to be filibustered, knowing that the bill under the filibuster will be brought up for a vote in the next legislative session. This procedural arrangement all but renders the filibuster a symbolic exercise. Indeed, no bill has failed to pass due to a filibuster since the adoption of the procedure.

Despite this shortcoming, minority members have used the filibuster on some controversial bills in 2016, 2019, and 2020. Why do they use this procedure despite its costs and ineffectiveness? Presumably, the costliness and ineffectiveness of the filibuster make it a suitable

candidate for a costly signal, as posited by the signaling theory. To repeat a key expectation, extreme legislators in the minority are likely to use nonviolent obstructionism as soon as such tools become procedurally available to them.

In the Korean electoral system, where most members are elected from districts by plurality rule,¹ extreme legislators are likely to send signals to strong partisan supporters or faction leaders. In the early 2000s, after the retirement of powerful party leaders who had exerted tremendous control over their party's candidate selections and campaign funds, major parties changed their nomination rules (Gil and Lee 2009; Hellmann 2014). These new rules have allowed party activists and the general public to input their opinions in the nomination process, although the degree to which they have been able to affect the nomination varies by party and year (Gil and Lee 2009). Furthermore, party leaders have often been divided, resulting in increased importance of factions within parties (Shim and Kim 2006).

Given the multiplication of principals (i.e., groups that can affect legislators' reelection) and the fluidity of nomination rules, it is difficult to pinpoint the target audience of each legislator a priori. Instead, legislators are likely to choose their target audience based on their ideological, factional, and constituent interests. As Fenno (1978) suggests, legislators have multiple groups of supporters, and legislators rely on different groups of supporters. Similarly, legislators in the Korean Assembly since the early 2000s have likely been sending signals not only to party leaders but also to voters. Specifically, extreme legislators are likely targeting

¹To be precise, it is a mixed-member system in which a small number of legislators are elected from party lists, while most legislators are elected from districts based on the winner-takes-all rule.

extreme voters, activists, or faction leaders, while moderate legislators are likely targeting moderate voters, activists, or faction leaders.

Data and Measurement

Legislative brawling and obstruction in two Assemblies before and after the procedural reform in 2012—that is, 17th (2004-2008), 18th (2008-2012), 19th (2012-2016), and 20th (2016-2020) Assemblies—are examined to test the hypotheses presented in the previous section. In the legislature, there are two major parties—the conservative party and the center-left or liberal party—and a small number of minor parties. The center-left party was the majority party in the 17th and 20th Assemblies, while the conservative party was the majority party in the 18th and 19th Assemblies. This variation allows us to eliminate partian differences as possible sources of variation in the outcome variable. Since both parties held the minority position before and after the reform, they could start brawls and use obstruction with equal frequency. Therefore, a party-specific explanation in which one side uses brawling and the other uses obstruction is unlikely if we observe the transformation of brawlers into filibusters in both parties.

The theory predicts that extreme members of the minority party are more likely to engage in legislative brawling in the two Assemblies prior to the reform, while the same members are expected to have engaged in filibusters in the two Assemblies after the reform. Identifying participants in filibusters is relatively straightforward, as this information is recorded in the minutes of the floor. However, identifying participants in legislative brawling is more challenging. Typically, a group of legislators will block the entrance to the chamber, committee meeting rooms, or the podium of the floor. Some will actively use physical force, while others may join this blockage passively. Thus, treating all participants equally can obscure the intensity of their participation in brawling. To address this issue, this study relies on resolutions to censure

a member for violent behavior to identify legislators who engaged in brawling. Members can be censured for various reasons, such as the use of unparliamentary language, insults to other members, corrupt acts, and assault on other members. Thus, a member is considered to have participated in brawling only when the legislator became the target of censure for assaults upon other members, disrupting parliamentary affairs by physical force, or vandalizing the floor or committee meeting rooms. Relying on censure resolutions to identify brawlers has the advantage of focusing on legislators who send strong signals, as censure resolutions are more likely to target legislators who led the violence or who committed intense violence, rather than passive participants or bystanders. Indeed, examples of legislators who have been the targets of censure for brawling include a member who used a hammer to open the entrance to a committee meeting room, and another member who threw teargas into the chamber.

One potential issue with relying on censure resolutions as a measure of legislative brawling is that they may be used for political purposes rather than reflecting actual behavior. For instance, they might be used to publicly shame extreme members of opposition parties. To address this concern, the study compares the results based on censure resolutions filed for brawling to those filed for other reasons. If the use of censure resolutions is driven by political calculations, we should see similar factors affecting the use of censure resolutions for brawling and those for other reasons. However, if censure resolutions accurately reflect the behavior we are trying to measure, we should observe that the factors affecting the use of censure resolutions for brawling and those for other behaviors differ. Specifically, if censure resolutions for brawling are targeted at more extreme members, while other censure resolutions are not, we can be confident that there is no systematic bias in the use of censure resolutions.

Figure 1 presents the data of the total number of censure resolutions for both brawling and other reasons. The data show a comparable upward trend for both categories until the 18th Assembly. However, after the reform was implemented in 2012, there was a significant drop in the number of censure resolutions for brawling, reaching zero, while the number of censure resolutions for other reasons continued to rise.² This suggests that the reform has effectively decreased instances of brawling, contradicting the violent disposition theory.



Figure 1. Number of Censure Resolutions

² Note that censure resolutions filed against committee chairs or the speaker for advancing legislation despite opposition from the minority and/or for conducting meetings in an "unfair" manner have been excluded from the category of censure resolutions for reasons other than brawling. This is because these resolutions were submitted by minority members as retaliation for incidents of brawling. Thus, they do not reflect brawling, but they are connected to brawling.

Participation in filibustering in the 19th and 20th Assemblies is measured by the total minutes a member spoke during a filibuster. This is considered a more accurate measure of signaling, as speaking for 10 minutes and 10 hours displays different degrees of commitment. Speaking for 10 minutes is hardly a costly signal. In the 19th Assembly, 38 members spoke for a total of 192 hours. In the 20th Assembly, 28 members spoke for a total of 76 hours.

Finally, policy preference of a member is measured by applying an ideal point estimation technique to all legislative votes in each Assembly. This is used as a proxy for measuring a member's preference on specific policies, as it is not feasible to do so without a large number of issue-specific votes or survey responses. However, the fact that the bills that were the sources of legislative brawling tended to be highly ideological issues (Hong and Lee 2011; Jeon 2011b) justifies using a measure of general ideology, as legislators are likely to fight harder over ideological issues rather than distributive or parochial issues.

The general ideology of a member is estimated by applying an item-response-theorymodel (Clinton et. al 2004) to all non-unanimous votes in each Assembly.³ The validity of this measure was checked by comparing the estimated ideologies of well-known legislators. The measure was able to distinguish key differences across parties and within parties. A large number represents a conservative ideology.

Analysis

Figure 2 illustrates the distribution of the estimated ideology of minority members and the location of those who engaged in brawling or filibustering. During the 17th Assembly, when

³ Alternatively, W-NOMINATE was used. The results are similar. See the online appendix.



Figure 2. Distribution of Minority Ideology and Participants in Brawling and Filibustering

Notes. The density represents the distribution of minority member ideology. The dotted bars symbolize the position of minority members who were involved in brawling (17th and 18th Assemblies) or filibustering (19th and 20th Assemblies). The height of the dotted bars in the bottom panels represents the length of the filibuster for each member who participated, with the values rescaled to fit within the bounds of the figure.

the center-left party was in the majority, more conservative minority members tended to participate in brawling, with one moderate member being the exception, who was located to the left of the mode of the distribution. In the 18th Assembly, when the conservative party was in the majority, more liberal minority members were inclined towards brawling. The 19th Assembly, with the conservative party in the majority, saw more liberal minority members participating in filibustering and speaking longer, as evidenced by the height of the dotted bars. The minutes spoken by each member during a filibuster have been rescaled to fit within the figure. During the 20th Assembly, when the center-left party was in the majority, conservative minority members were more likely to participate in the filibuster and speak for longer periods. In sum, the figure demonstrates that extreme minority members were more likely to be involved in brawling or filibustering. Next, a regression analysis is conducted to determine if these relationships persist after accounting for any potential confounding factors.

Legislative brawling

Since the dependent variable is the number of times a minority member was the target of a censure resolution for violent behavior, an event count model would be appropriate. However, only one member in the 17th Assembly and two members in the 18th Assembly were targets of a censure resolution more than once. Therefore, to prevent one or two members from having disproportionate influence on the estimation, logit models are used on a binary outcome variable, i.e., being a target of a censure resolution or not.⁴

In addition to the main independent variable of a member's ideology, a number of control variables have been included in the regression analysis to account for any possible confounding factors. The first is the seniority of the member, as more senior members may have a stronger connection with their voters and thus less incentive to signal their preferences. Additionally, an indicator variable is included to distinguish between members elected through the proportional representation (PR) system, who may have stronger incentives to reveal their preferences than those elected from districts because they are elected without having to campaign in a specific electoral jurisdiction. The vote margin from the previous election is also included as a control, as members with a smaller margin may be less likely to participate in brawling due to the potential

⁴ Using event count models does not change the results. See the online appendix.

for their districts to be swing districts. Finally, an indicator variable is included for members elected from their party's regional stronghold. Although the influence of regionalism in elections has decreased over time, it still plays a role in Korean party politics (Heo and Stockton 2005; Lee and Lee 2015). Specifically, the conservative party tends to receive strong support from the Southeast region of the country, while the center-left party tends to receive strong support from the he Southwest region of the country. Therefore, members elected from a regional stronghold may have a stronger incentive to seek support from strong partisan supporters and, as a result, may be more likely to adopt extreme ideologies and engage in brawling.

Regression results are presented in Table 1. Since members elected through the PR system do not have designated districts, two separate models have been estimated. The first model includes an indicator variable for PR members, while district-related variables are omitted. In the second model, the indicator variable for PR members is omitted and district-related variables are included.

The results of Models 1, 2, 5, and 6 indicate that extreme members were more likely to engage in legislative brawling. In the 17th Assembly, when the center-left party was the majority party, conservative minority members were found to be more likely to participate in brawling and be the target of censure, although the significance of the ideology variable decreases when district variables are included in Model 2.⁵ Similarly, in the 18th Assembly, when the

⁵ The moderate member who participated in brawling in the 17th Assembly (as identified in the top left panel of Figure 2) was an influential observation. Omitting this member led to the ideology variable achieving statistical significance at the 95% level in both models. See the online appendix.

	17 th Assembly (2004-2008)				18 th Assembly (2008-2012)				
	Censure for	Censure for brawling Censu		sure for other reasons Censure for l		brawling	Censure for	for other reasons	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	
Intercept	-3.56***	-2.29**	-1.26	-1.05	-3.94***	-4.58***	-3.49***	-3.61**	
	(0.98)	(1.12)	(0.84)	(1.00)	(1.47)	(1.69)	(1.19)	(1.47)	
Ideology (conservatism)	3.58**	3.50	0.81	0.01	-2.69***	-2.83***	-0.55	-0.58	
	(1.78)	(2.34)	(1.69)	(1.92)	(0.85)	(1.00)	(0.84)	(1.09)	
Seniority	0.38	0.34	-0.78	-0.81	0.25	0.28	0.30	0.42	
	(0.4)	(0.42)	(0.54)	(0.54)	(0.53)	(0.51)	(0.41)	(0.49)	
PR	1.57*		-0.26		-2.09		-0.10		
	(0.85)		(0.86)		(1.67)		(1.23)		
Vote margin		-0.04		0.00		0.01		0.01	
		(0.05)		(0.03)		(0.03)		(0.05)	
Stronghold		-1.79		-0.28		0.94		-1.12	
		(1.22)		(0.8)		(1.77)		(2.21)	
AIC	71.3	48.9	76	64.4	44	40.5	52.1	52.1	
Classification rate (%)	92.6	94.7	92.6	92.9	93.8	93.8	92.7	93.8	
Ν	136	113	136	113	96	76	96	76	

Table 1. Models of Being a Target of Censure in the 17th and 18th Assemblies

Logit Models. Two-tailed Tests. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1. PR = Proportional Representation.

conservative party was the majority party, liberal minority members were found to be more likely to engage in brawling and be the target of censure.

However, these extreme members were no more likely than other members to be the target of censure for other reasons, as indicated by Models 3, 4, 7, and 8. This finding suggests that censure resolutions were not systematically used for political purposes. Instead, it indicates that censure resolutions reflected the actual behavior of these members. In fact, this is consistent with observed patterns, as censure resolutions against brawlers were often filed in response to negative public opinion towards the chaos and violence in the legislature. Without any actions against brawling members, the entire legislature would be perceived as condoning such behavior. For example, when an opposition member threw a teargas canister into the chamber to block the ratification of the U.S.-Korea Free Trade Agreement, the media called for the punishment of the legislator before a censure resolution was proposed against the member.

Filibustering

Having established that extreme members were most likely to engage in legislative brawling, the next step is to investigate whether the same type of members were most likely to engage in filibustering after the procedural reform of 2012. To this end, Zero-Inflated Poisson (ZIP) models are employed to analyze the total minutes spoken by a minority member during a filibuster in each Assembly. ZIP models are used to account for the high number of zeroes in the dependent variable, by assuming that there are two processes: first, a binary choice of whether or not to participate in filibustering and, second, a choice of how long to participate in filibustering

once the decision to participate has been made.⁶ The same independent variables are used to explain the amount of time a participant spoke during a filibuster. For the binary choice, the member's ideology is used as the sole independent variable. However, including all independent variables in both the Poisson and binary processes does not change the results, as can be seen in the online appendix.

The results in Table 2 are consistent with the expectation that extreme members are more likely to participate in filibustering after the filibuster procedure was introduced. In the 19th Assembly (Models 9 and 10), when the conservative party was the majority party, liberal minority members were more likely to speak for longer periods of time during the filibuster. Similarly, in the 20th Assembly (Models 13 and 14), when the center-left party was the majority party, conservative minority members were more likely to speak for longer periods of time during the filibuster. Additionally, the results of the binary process also support this expectation. In the 19th Assembly, the positive coefficient for the ideology variable indicates that liberal minority members were more likely to participate in the filibuster than other members were.⁷ Conversely, in the 20th Assembly, the negative coefficient for the ideology variable indicates that other members were.

⁶ Tobit models were also estimated to account for censoring at 0. The results are similar. See the online appendix.

⁷ Note that the binary process estimates the probability of not participating in filibustering, represented by 0, as the dependent variable and not 1.

	19 th Assembly (2012-2016)				20 th Assembly (2016-2020)			
	Filibu	ustering	Censure for	other reasons	Filibustering		Censure for other reasons	
	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16
	(Poisson)	(Poisson)			(Poisson)	(Poisson)		
Intercept	5.5***	5.65***	-3.54***	-3.75***	5.35***	5.34***	-1.96***	-1.78**
	(0.03)	(0.04)	(0.99)	(1.18)	(0.05)	(0.06)	(0.63)	(0.72)
Ideology (conservatism)	-0.81***	-0.63***	-0.74	-0.96	0.72***	0.67***	1.40*	1.21
	(0.03)	(0.05)	(0.89)	(1.11)	(0.05)	(0.06)	(0.8)	(0.9)
Seniority	-0.05***	-0.01	0.26	0.31	-0.05**	-0.04**	0.00	0.07
	(0.01)	(0.01)	(0.35)	(0.37)	(0.02)	(0.02)	(0.22)	(0.22)
PR	-0.25***		1.11		-0.48***		0.51	
	(0.03)		(0.90)		(0.05)		(0.71)	
Vote margin		-0.01***		0.01		0.00		-0.05*
		(0.00)		(0.04)		(0.01)		(0.03)
Stronghold		-0.46***		-0.72		-0.12*		0.72
		(0.06)		(1.42)		(0.06)		(0.62)
	(Binary)	(Binary)			(Binary)	(Binary)		
Intercept	1.58***	1.64***			2.43***	2.50***		
	(0.28)	(0.29)			(0.37)	(0.40)		
Ideology (Conservatism)	2.14***	1.29*			-1.59*	-0.90		
	(0.57)	(0.72)			(0.94)	(1.09)		
Log-Likelihood or AIC	-1716.47	-1166.99	75.2	54.7	-174.148	-103.264	114	94.4
Classification rate (%)			92.4	92.4			84	82.4
Ν	132	107	132	107	125	105	125	105

Table 2. Models of Filibustering and Being a Target of Censure in the 19th and 20th Assemblies

Models 11, 12, 15 and 16 are Logit models. Models 9, 10, 13, and 14 are zero-inflated Poisson models. "Poisson" represents model estimates for the Poisson process. "Binary" represents model estimates for the binary process. Two-tailed Tests. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1. PR = Proportional Representation.

Table 2 also presents the estimates of logit models for being a target of censure (Models 11, 12, 15, and 16). Notably, there were no censure resolutions for brawling in the 19th and 20th Assemblies, as there were no brawling incidents in these assemblies. However, it is important to examine whether there were any changes in the way censure resolutions were used in order to compare the results before and after the procedural reform. That is, we need to determine whether the decrease in the number of censure resolutions for brawling is a result of the decrease in brawling incidents or a systematic change in the use of censure resolutions in general. If we observe that the dynamics of censure resolutions for reasons other than brawling have not changed, we can be confident in attributing the change in the censure resolutions for reasons other than brawling serve as a control group in this analysis. In fact, these resolutions serve as an appropriate control group because the two types of censure resolutions showed equal trends before the adoption of the procedural reform (see Figure 1).

The analysis of these censure resolutions is important for another reason. The introduction of the filibuster procedure may not be the only factor influencing legislators' behavior since 2012. For example, the chamber may have become more ideologically polarized (Lee and Lee 2015), which could have increased the importance of ideology in explaining legislative behavior across the board. If this is the case, it becomes difficult to determine whether the significance of ideology in explaining filibustering is due to the signaling by extreme members or due to the increased importance of ideology in all legislative behaviors. To account for this possibility, the results of the logit models for being a target of censure are reported alongside the filibuster models in Table 2, enabling a comparison with the results in Table 1.

The results of these logit models suggest that there is no significant association between ideology and the chance of being a target of censure in the 19th and 20th Assemblies. This finding supports the conclusion that the significance of ideology in explaining filibustering is not a result of an increased importance of ideology in the legislature overall. Consequently, it lends credibility to the argument that extreme legislators have participated in filibustering as a means of signaling their policy commitment. Additionally, the finding that the dynamics affecting the use of censure resolutions for reasons other than brawling have not changed much between Tables 1 and 2, while no member became a target for censure for brawling after the reform, adds to the confidence that the reform helped to transform brawlers into filibusters.

Additional Evidence: Moderates and Anti-Brawling Commitment

So far, we have focused on extreme members and their use of brawling and filibustering as tools for signaling their intense preferences. However, there is a flip side to this theory that can be utilized to gain more leverage. As discussed in the theory section, moderate members are unlikely to signal their preferences using brawling because the cost of brawling is too high for them. This is due to two reasons: first, their moderate policy stances may not be consistent with intense behavior such as brawling. Second, moderate members are more likely to seek support from moderate voters, supporters, or factional leaders, and these moderate supporters are less likely to approve such violent behavior (Batto and Beaulieu, 2020). Therefore, if legislative brawling becomes a salient issue and moderate voters have a strong interest in more orderly lawmaking, we can expect that moderate legislators will feel the need to demonstrate their commitment to more orderly lawmaking.

The Korean Assembly in the late 2000s provides an opportunity to investigate this hypothesis, as the frequency and intensity of legislative brawling during that time were at an all-

time high. When the conservative party gained control of the presidency and legislature in 2008, after 10 years of the center-left party's control of the presidency, the conservative party was determined to pass several partisan priorities. This effort met with strong resistance from the minority party, resulting in frequent and intense legislative brawling. The salience of these confrontations is reflected in the coverage of legislative brawling by newspapers, with the number of newspaper articles mentioning legislative brawl rising dramatically from 2008 and peaking in 2011 (see the online appendix). Additionally, the use of violent tools, such as teargas, hammers, and chainsaws, also occurred between 2008 and 2012. Therefore, the issue of legislative brawling was a nationally important issue towards the end of the 2000s, and pressure from moderate voters to reform legislative procedures was significant, eventually leading to the procedural reform in 2012.

Indeed, when the majority party pushed through the budget bill in December 2010, causing another legislative brawl, public opinion was so negative that 22 members of the majority party pledged that they would not participate in any legislative brawls and that they would not seek re-election if they broke this pledge (Han-Kook newspaper, December 16, 2010). It was not just cheap talk, as they formed a caucus called "Caucus to Reform the Assembly" and demanded a procedural reform. Their demand included limiting the use of the Speaker's discharge power to national emergencies and introducing a filibuster procedure, which were all included in the procedural reform bill adopted in 2012. This provides an opportunity to test the expectation that moderate legislators will demonstrate their commitment to orderly lawmaking when legislative brawling itself becomes a salient issue. We can expect that moderate members were likely to join the caucus and make a commitment against brawling. The same set of independent variables is used to explain whether a member made a pledge not to engage in

brawling and joined the caucus. Instead of the regional stronghold variable, an indicator variable for members from districts in Seoul—the capital of the country—and the surrounding Gyeonggi province is included to account for the fact that several members from Seoul and Gyeonggi province joined the caucus due to strong anti-brawling opinion in these regions (Park 2012; Hankyoreh newspaper, December 16, 2010).

The results presented in Table 3 provide empirical support for the expectation that moderate members were increasingly likely to make a pledge against brawling as the saliency of legislative brawling increased. The negative coefficient for ideology in the models indicates that moderately conservative members of the conservative party were most likely to make the pledge and join the caucus to reform the Assembly.

	Model 17	Model 18
Intercept	0.47	-0.18
	(1.05)	(1.18)
Ideology (conservatism)	-1.43*	-1.55**
	(0.74)	(0.76)
Seniority	-0.36	-0.34
	(0.25)	(0.27)
PR	-2.05*	
	(1.07)	
Vote margin		0.00
		(0.02)
Seoul/Gyeonggi		1.18**
		(0.58)
AIC	133.1	120.4
Classification rate (%)	87.8	85.8
Ν	181	148

Table 3. Models for Anti-Brawling Pledge

Logit Models. Two-tailed Tests. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1. PR = Proportional Representation.

Conclusion

In 2016, the National Assembly of Korea witnessed its first filibuster since the country's democratization in 1987. During the filibuster, a legislator with a reputation for using physical force and who had been a target of censure three times said,

I feel ashamed that I have fought countless times over the past 8 years, but because of this filibuster procedure, I can say what I want to say here as much as I want, as long as my physical strength supports me. ... If we hadn't had this procedure, my own honesty, sense of justice, straightforwardness, impatience, perseverance, principle, all of these things would have forced me ... I would have had a physical fight with the opposition lawmakers, or I would have been grabbed by the collar, and because of that, I would have been subject to punishments again (Minutes of the floor, February 23, 2016, p. 456).

The authenticity of this statement is supported by the findings presented in this article, which indicate that legislators with a strong commitment were more likely to engage in legislative brawling when tools of obstruction were not available, and in filibustering when it was introduced. He did not engage in brawling because he was violent in nature or had no respect for institutions, but because there were few institutional devices available for him to demonstrate his commitment. This statement also reveals that legislators were fully aware of the costs of their actions, such as damage to their reputation and the possibility of punishment, but engaged in them anyway in order to demonstrate their policy commitment.

Although the Korean Assembly is just one case, it is significant given its reputation as one of the most violent legislatures. However, thanks to the adoption of non-violent tools of obstruction, it has seen a significant decrease in legislative brawls. This transformation was a

result of legislators being able to credibly demonstrate their commitment without resorting to physical violence. The filibuster procedure, despite its ineffectiveness in blocking unwanted legislation and the cost for those participating in the filibuster, has been found to be effective in preventing legislative brawls.

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Online Appendix

	17 th Assembly (2004-2008)						
	Censure for b	rawling	Censure for ot	her reasons			
	Model 1	Model 2	Model 3	Model 4			
Intercept	-3.59***	-2.25*	-1.27	-1.06			
	(1.08)	(1.3)	(0.84)	(0.99)			
Ideology (conservatism)	4.82**	5.74**	0.80	-0.01			
	(2.00)	(2.85)	(1.69)	(1.92)			
Seniority	0.26	0.17	-0.77	-0.8			
	(0.47)	(0.5)	(0.54)	(0.54)			
PR	1.61*		-0.26				
	(0.88)		(0.86)				
Vote margin		-0.04		0.00			
		(0.05)		(0.03)			
Stronghold		-1.62		-0.29			
		(1.3)		(0.8)			
AIC	63.22	42.4	75.97	64.36			
Ν	135	112	135	112			

Table S1: Replication of Table 1 Dropping an Influential Observation in the 17th Assembly

	19 th Assembly (2012-2016)	20 th Assembly (2016-2020)			
	Model 9	Model 10	Model 13	Model 14		
Poisson Process						
Intercept	5.5***	5.65***	5.35***	5.34***		
	(0.03)	(0.04)	(0.05)	(0.06)		
Ideology (conservatism)	-0.81***	-0.63***	0.72***	0.67***		
	(0.03)	(0.05)	(0.05)	(0.06)		
Seniority	-0.05***	-0.01	-0.05**	-0.04**		
	(0.01)	(0.01)	(0.02)	(0.02)		
PR	-0.25***		-0.48***			
	(0.03)		(0.05)			
Vote margin		-0.01***		0		
		(0)		(0)		
Stronghold		-0.46***		-0.12*		
		(0.06)		(0.06)		
Binary Process						
Intercept	1.48***	1.47**	2.4***	2.69***		
	(0.56)	(0.65)	(0.8)	(0.94)		
Ideology (conservatism)	1.48**	1.24*	-1.54	-0.7		
	(0.62)	(0.74)	(0.97)	(1.11)		
Seniority	0.09	0.05	0.11	0.1		
	(0.23)	(0.23)	(0.3)	(0.29)		
PR	-1.11*		-1.03			
	(0.57)		(0.78)			
Vote margin		0		0		
		(0.02)		(0.03)		
Stronghold		-0.05		-0.63		
		(0.73)		(0.83)		
Log-Likelihood	-1714.05	-1166.94	-172.725	-102.73		
Ν	132	107	125	105		

 Table S2: Alternative Specifications for Table 2

 $\overline{\text{Zero-inflated Poisson Models. Two-tailed Tests. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1. PR} = Proportional Representation.$

	19'	^h Assembly	20	th Assembly
	Model 9	Model 10	Model 13	Model 14
Log(scale)	5.93***	6.12***	5.87***	6.03***
	(0.14)	(0.18)	(0.25)	(0.3)
Intercept	-323.03**	-382**	-459.4**	-621.7**
	(126.69)	(184.03)	(181.56)	(272.6)
Ideology (conservatism)	-393.9***	-384.41**	278.05*	199.82
	(124.61)	(191.8)	(165.24)	(209.57)
Seniority	-21.92	-16.58	-25.02	-23.98
	(46.58)	(57.37)	(51.35)	(60.65)
PR	190.19		149.15	
	(118.98)		(150.54)	
Vote margin		-1.49		1.16
		(5.65)		(6.14)
Regional Stronghold		-23.6		121.55
		(185.92)		(172.75)
log-likelihood	-303.1	-188.7	-120.1	-86.58
Ν	132	107	125	105

Table S3: Alternative Models for Table 2 (Tobit Models)

Tobit Models. Two-tailed Tests. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1. PR = Proportional Representation.

	17 th Assembly (2004-2008)				18 th Assembly (2008-2012)				
	Censure for brawling Censure f		Censure for	other reasons Censure for brawling			Censure for other reasons		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	
Intercept	-6.21**	-7.93*	-1.75	-0.37	-5.43***	-6.54***	-4.19***	-4.19**	
	(2.93)	(4.26)	(2.54)	(2.67)	(1.75)	(2.24)	(1.42)	(1.69)	
Ideology (conservatism)	3.74	7.52^{1}	0.70	-0.87	-6.53***	-7.11***	-2.09	-1.91	
	(3.43)	(5.28)	(3.17)	(3.53)	(1.99)	(2.48)	(1.71)	(2.12)	
Seniority	0.25	0.35	-0.83	-0.85	0.24	0.33	0.38	0.48	
	(0.39)	(0.43)	(0.54)	(0.54)	(0.54)	(0.51)	(0.42)	(0.49)	
PR	1.47*		-0.28		-1.98		-0.18		
	(0.83)		(0.87)		(1.61)		(1.24)		
Vote margin		-0.05		0		0		0.01	
		(0.05)		(0.03)		(0.04)		(0.05)	
Stronghold		-1.81		-0.21		1.38		-1.1	
		(1.2)		(0.8)		(1.87)		(2.2)	
AIC	74.56	49.31	76.05	64.24	42.25	38.67	50.96	44.6	
Ν	137	114	137	114	95	75	95	75	

Table S4: Replication of Table 1 with W-NOMINATE measure

Logit Models. Two-tailed Tests. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1. PR = Proportional Representation.

¹This coefficient becomes significant at the 90% level when the influential observation is dropped.

	19 th Assembly (2012-2016)				20 th Assembly (2016-2020)			
	Filib	ustering	Censure for	other reasons	Filibu	ustering	Censure for	other reasons
	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16
	(Poisson)	(Poisson)			(Poisson)	(Poisson)		
Intercept	5.52***	5.67***	-3.54***	-3.82***	4.89***	4.88***	-2.56***	-2.35**
	(0.03)	(0.04)	(0.98)	(1.18)	(0.06)	(0.08)	(0.88)	(0.97)
Ideology (conservatism)	-1.12***	-0.84***	-1.26	-1.79	1.15***	1.15***	1.78	1.64
	(0.04)	(0.07)	(1.29)	(1.64)	(0.08)	(0.1)	(1.22)	(1.38)
Seniority	-0.04***	0	0.27	0.34	-0.04**	-0.04*	-0.02	0.06
	(0.01)	(0.01)	(0.35)	(0.38)	(0.02)	(0.02)	(0.22)	(0.22)
PR	-0.22***		1.03		-0.49***		0.51	
	(0.03)		(0.91)		(0.05)		(0.71)	
Vote margin		-0.01***		0.01		0.01*		-0.04*
		(0)		(0.04)		(0)		(0.03)
Stronghold		-0.45***		-0.71		-0.14**		0.72
		(0.06)		(1.41)		(0.06)		(0.62)
	(Binary)	(Binary)			(Binary)	(Binary)		
Intercept	1.48***	1.59***			3.28***	2.93***		
	(0.26)	(0.27)			(0.82)	(0.91)		
Ideology (conservatism)	3.15***	2.21**			-2.29	-1.21		
	(0.79)	(1.03)			(1.44)	(1.68)		
Log-Likelihood or AIC	-1729.82	-1166.41	74.91	54.21	-172.21	-98.99	114.66	94.71
Ν	132	107	132	107	124	104	124	104

Table S5: Replication of Table 2 with W-NOMINATE measure

Zero-inflated Poisson Models. Two-tailed Tests. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1. PR = Proportional Representation.



Figure S1. Number of Major Newspaper Articles Mentioning Legislative Brawls.

Sources: Based on seven major newspapers: Kyung-Hyang Shinmoon, Kook-Min Ilbo, Seoul Shinmoon, Segye Ilbo, Joongang Ilbo, Hankyerye Shinmoon, and Han-Kook Inbo.



Figure S2. Replication of Figure 2 with W-NOMINATE measure.

Notes. The dotted bars symbolize the position of minority members who were involved in brawling (17th and 18th Assemblies) or filibustering (19th and 20th Assemblies). The height of the dotted bars in the bottom panels represents the duration of the filibuster for each member who participated, with the values rescaled to fit within the bounds of the figure.