

The Effect of Electoral Rules on the Democratic Progressive Party's Performance in the 2004 and 2008 Legislative Elections in Taiwan

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Abstract: The Democratic Progressive Party (DPP) in Taiwan has increased its vote share in the past three legislative elections. Nevertheless, the 2004 and 2008 elections were widely viewed as major defeats for the party. Through an analysis of the DPP's performance in recent Legislative Yuan elections, this article considers the effects of electoral rules on election outcomes and the perception of those outcomes. In Taiwan, under both the previous Single Non-transferable Vote (SNTV) and the current Mixed Member Majoritarian (MMM) systems, the mechanical effect of how electoral rules translate votes into seats and the psychological impact this has on voter and party behavior have often dramatically influenced party electoral performance by causing vote and seat shares to diverge. This divergence also affects the perception of party electoral performance by causing outcomes not to meet expectations. In addition, this article analyzes the effects of recent changes to the electoral system in Taiwan and whether these changes structurally disadvantage the DPP.

Keywords: Taiwan, electoral systems, electoral reform, parties, perception, Duverger's Law, legislative elections, the Democratic Progressive Party

Introduction

The Democratic Progressive Party (DPP) in Taiwan has increased its vote share in each of the past three legislative elections. Nevertheless, the 2004 and 2008 contests were widely viewed –by the Taiwanese and international media, and by the party itself– as major defeats. Using the DPP’s performance in recent elections for Taiwan’s legislature as cases, this article analyzes the effects of electoral rules on party performance and election results. In Taiwan, under both the previous Single Non-transferable Vote (SNTV) and the current Mixed Member Majoritarian (MMM) systems, the mechanical effect of how electoral rules translate votes into seats and the psychological impact this has on voter and party behavior have often influenced the perception of party electoral performance by causing vote and seat shares to diverge. When vote and seat shares diverge in a noisy information environment, outcomes do not meet expectations. In addition to examining the effects of electoral rules, I consider the impact of recent changes to the electoral system in Taiwan and whether these changes structurally disadvantage the DPP, relegating it to permanent minority-party status.

The Mechanical and Psychological Effects of Electoral Rules

Duverger (1954) identified mechanical and psychological effects of electoral rules, notably single member district plurality contests. Duverger called Downs’s realization that a voter who prefers party A to B or C is “‘wasting’ his vote on A if it has no chance of winning” (Downs 1957, 48) a “psychological effect” (in Riker 1982, 762). Duverger (1954) also found a “mechanical effect,” the translation of vote share to seat share, with a positive bias to the number of seats obtained by large parties in such systems. Cox (1996) found just such a subproportional bias in elections under SNTV in

both Japan and Taiwan. Benoit (2002) pithily summarized the ‘double effect’ electoral institutions have on elections: “first in influencing the number of parties that compete and the concentration of votes they receive, and second by controlling the conversion of these parties’ votes into seats” (Benoit 2002, 39). Benoit recognized the inherent endogeneity of these dual Duvergerian effects. I argue that this endogeneity makes the outcome of elections under complicated electoral rules difficult to predict and leads to unmet expectations.

Following these authors, I define the mechanical effect as the vote to seat share conversion and the psychological effect as the consideration of and response to this mechanical effect by voters and parties *ex ante*. However, the mechanical effect is more than a simple vote to seat share formula; it is *the manner and degree to which the electoral rules allow votes to be rewarded with seats, given party strategy*. Under SNTV not only does the number of votes that a party receives in a district matter, but so does how efficiently the party allocates these votes among its candidates, as well as how accurately the party predicts the number of its candidates that its vote share can elect. Electoral rules are the context in which parties must act; they reward or punish party strategic behavior. Thus, the mechanical effect of these rules may go beyond a simple conversion of votes to seats. While under SNTV, the mechanical effect of electoral rules is complicated by the interaction of those rules with party (and voter) strategic behavior, under MMM, the mechanical effect is more simply the rewarding of the legislative seat to the candidate with a plurality of votes in a district. Although SNTV is a nearly “dead” electoral system, the theory here concerning how opaque information environments,

whether due to complicated electoral rules or changes in those rules affect the perception of election outcomes is generalizable to many complex electoral systems.

Since the mechanical effects of SNTV and MMM are markedly different, the psychological response of voters and parties should also be. Under SNTV a strong partisan voter should follow the guidance provided by the party in its effort to evenly distribute the vote among the maximum number of electable candidates. A voter with a relatively shallow partisan preference should vote for the first candidate among her preferences that she believes is not certain to win; in other words, she should make her vote count. Under MMM, expected Duvergerian mechanical effects should lead the voter to abandon all but the top two candidates in a district. Ideologically close parties should be expected to coordinate on running a single district candidate. Thus, the psychological effect under MMM is simply that suggested by Duverger's law.

The mechanical and psychological effects of SNTV rules are shown below in the case study of the 2004 Taiwan legislative election in which the DDP's performance within the electoral constraints of SNTV left it with fewer seats than it could have obtained with more efficient vote allocation and nomination procedures. The study of the 2008 election illustrates that the strong mechanical effect of the new single member district plurality system was the major cause of the DPP's widely considered terrible performance in the 2008 legislative contests. While many other factors, such as corruption scandals and weak economic performance have been cited for producing this outcome, it was the changes to the electoral rules that left the DPP with a drastically lower percentage of seats than it had won in the 2004 election. It should not be surprising that the electoral rules affected election outcomes. What is novel here is the analysis of

the role that these rules play, along with other factors such as party electoral strategy and announced expectations, in influencing perception of these outcomes. It will be shown that having achieved a less than anticipated seat share because of the effects of electoral rules, the DPP was widely perceived to have done poorly despite little variance in vote share.

Throughout the following analyses, I make the assumption that party vote share is dependent on voters' party preferences and independent of which and how many candidates are running in each party. This is a necessary simplifying assumption in order to analyze party strategic behavior under SNTV.¹ It is clear from party strategy under SNTV (such as assigning voters to candidates based on ID numbers), that parties make a similar assumption. It is possibly more problematic under MMM, where party supporters only choose one candidate and do not have the option of voting for candidates from the same party if they do not wish to vote for a district nominee for nonpartisan reasons.

The Effects of Electoral Rules

Electoral rules profoundly shape the political and party landscape; they are the context in which parties, candidates, and voters act. In addition electoral rules are the key intervening variable between voter preferences, measured by vote share, and election outcomes, measured by seat share. As Arrow (1951) showed more than a half century ago, voter preferences are imperfectly mapped by electoral rules. Electoral systems are created not to perfectly map voter preferences but in order to best benefit their creators, who may derive utility from a range of outcomes, from equality to dictatorship. Therefore electoral systems vary widely in the degree to which they cause voter preferences to diverge from election outcomes. As the crucial intervening variable

between preferences and outcomes, electoral rules influence the perception of those outcomes. The more accurately rules map preferences, the less they should affect this perception, all else equal.

Complicated electoral rules, such as SNTV, make the information environment less transparent. Changes in electoral systems initially have this same impact. This opaque information environment complicates both party and voter strategy, making elections less predictable. In short, both the psychological and mechanical effects influence the perception of election results by complicating the mapping of preferences onto outcomes. Psychological effects, strategic behavior in reaction to electoral rules by parties and voters prior to elections, cause these actors to betray their true preferences. The mechanical effect, the mathematical translation of vote share into seat share, causes outcomes to diverge from true preferences.

The Democratic Progressive Party's performance in the 2004 and 2008 elections for the Legislative Yuan, the Taiwan legislature, illustrates how electoral systems influence election outcomes. These outcomes in turn influence perception of parties, particularly the perception of their popularity and performance. These two elections were chosen not only because of the obvious strong effect of the electoral rules on the outcome, but also because of the change in electoral rules between elections, which demonstrates that such changes can also influence perception. Thus, it is the degree of clarity in the information environment that is affected by electoral rules and ultimately shapes the perception of election results.

The DPP in the 2004 Legislative Elections

Despite receiving the highest vote share, the greatest number of seats in the legislature, and more of both than in any previous legislative election, the 2004 Legislative Yuan elections were universally viewed as a defeat for the DPP. ‘Defeat’ in this sense is relative rather than purely objective; it is relative to media and party expectations and to the party’s announced goal of achieving a DPP-led majority alliance (the “Pan Green” coalition).² These were expectations and goals that the DPP had widely trumpeted prior to the election. On December 7, 2004, the *Asia Times* (Tkacik) reported, “Pollsters at the Taiwan’s Democratic Progressive Party (DPP) headquarters told Asia Times Online that they see a ‘pretty certain’ 113 seats for the DPP and its allies from the Taiwan Solidarity Union (TSU).”³ A headline in the *Taipei Times* on Dec. 6, 2004, read, “DPP Secretary-General Chang Optimistic of ‘pan-green’ Majority”. In contrast, headlines on December 12, following the election, included the *Washington Post*’s “Chen (DPP Chair and ROC President Chen Shui-bian) Dealt Setback in Taiwan Election,” and the *Taipei Time*’s “Green’s Vote Strategy a Disaster.” In a post-election internal party report, DPP Secretary-General Chang Chun-hsiung (*Taiwan News* 2004) noted that the expectation of a Pan-Green majority in the legislature “brought in a huge sense of loss from the final election results.”

Cox and Niou (1994, 222) identified three categories of error under SNTV: overnomination, undernomination and “failure to equalize the vote,” (unequally distributing vote share among candidates, what I call “vote misallocation”). Given both the party’s high expectations and disappointment in the outcome, it would seem that the DPP had overnominated candidates. However, party leaders blamed problems with vote

allocation for the worse than expected showing and particularly for the losses of several popular DPP incumbents (Cody 2004). Noted Taiwan scholar, Shelly Rigger went so far as to suggest that the DPP had actually not failed strategically:

It is true that under Taiwan's complex electoral formula, parties must have strategic dexterity to convert their popular support into commensurate representation in the legislature. But the DPP actually did well in this regard. More than three-quarters of the DPP candidates running in districts were elected. Its share of seats exceeded its vote share substantially, which means it converted its votes into seats efficiently (2005).

However, given the subproportionality of the SNTV rules (Cox 1996), the two main parties, the DPP and the KMT, should have received higher seat shares than their vote shares. This is indeed the case, as can be seen in Tables 1 and 2. If we compare the DPP's 2001 and 2004 performance in this regard, the relatively poor performance of the party in the latter election is clear. In 2001 the seat share to vote share ratio in district elections was 1.17. In 2004, it was only 1.11. In other words, had the DPP succeeded in converting votes to seats at the same rate in 2004 as they had in 2001, five additional party nominees could have been elected. The KMT's efforts, on the other hand, slightly improved from a ratio of 1.05 in 2001 to one of 1.06 in 2004.

According to Rigger, neither the DPP's own position that vote allocation errors led to the 'defeat,' nor the view of the international press that the vote was "a rebuke to President Chen and a rejection of his party and its positions" is wholly correct. She continues, "In the end, explaining the results of the December 11 election may actually be quite easy: it looks very much like other legislative elections" (2005). An analysis of the results, however, indicates that DPP strategic missteps led the media and the party itself

to view the election as a defeat. A further comparison between the DPP's performance in the 2001 and 2004 elections illustrates this point. It is important to note that what matters in analyzing the effectiveness of a party's vote allocation and nomination strategies under SNTV is the seats won (or lost) in *district* elections, not in the proportionally allocated seats.

Table 1: Legislative Yuan Election Results for the DPP

	Vote Share	District Seat Share	District Candidates	District Winners	Proportional Seats	Total Seats	Total Seat Share
2004	35.7%	39.8%	92	70	19	89	39.6%
2001	33.4%	39.2%	83	69	18	87	38.7%

Source: Central Election Commission of the Republic of China (Taiwan) and the R.O.C. Election Study Center, National Chengchi University

In a first cut at such an analysis, Table 1 disaggregates the vote and seat shares by overall district results. The data indicate the relatively weak strategic performance of the DPP in the 2004 legislative election compared to that in the 2001 election. The DPP nominated an additional nine candidates but only picked up one additional nonproportional seat. DPP vote share increased by more than two percentage points but seat share only rose roughly one half of a percent. In 2001, the DPP elected 83% of their district candidates; in 2004 they elected only 76%. Table 2 provides the results for the KMT for comparative purposes and indicates improvement in party strategy from 2001 to 2004.

Table 2: Legislative Yuan Election Results for KMT

	Vote Share	District Seat Share	District Candidates	District Winners	Proportional Seats	Total Seats	Total Seat Share
2004	32.8%	34.7%	74	61	18	79	35.1%
2001	28.6%	30.1%	97	53	15	68	30.2%

Source: Central Election Commission of the Republic of China (Taiwan) and the R.O.C. Election Study Center, National Chengchi University

The cause of the DPP's relatively poor seat share to vote share ratio was strategic errors. Table 3 shows the eight districts in which these errors cost the DPP potential legislative seats. Where the number of losing candidates is greater than one, costly overnomination has occurred when the combined total of the DPP losers was greater than that of the lowest vote total non-DPP winner. There were four districts in which overnomination cost the DPP five legislative seats (two in Taoyuan County), all else equal. Where perfect vote allocation is greater than the lowest vote total of a non-DPP winner, misallocation has occurred. In five districts vote allocation errors cost the party as many as seven total seats. In two of these districts, the party also overnominated. It should be noted, however, that there are many variables intervening between party attempts at vote allocation and voter responses. Therefore, perfect vote allocation is not possible and even with a more accurate vote allocation strategy, the party had little chance of picking up seats like that in Yunlin county, where nearly flawless vote allocation would have been required to win an additional seat. Moreover, there were four of these districts in which the lowest vote winner was a member of the TSU, so an additional victory there would not have added to Pan Green totals. Finally, there is one case of undernomination, Kaohsiung county, in which the party had enough votes for an additional nominee to have won.

To maximize seat share, the best strategy is to correct allocation errors where possible; fixing nomination errors requires nominating fewer candidates, which limits the number of winners. The DPP's highest possible total would have been achieved by winning two additional seats by correcting nominating errors (Changhua and Taichung Counties), six additional seats by correcting allocation errors, and one seat correcting

undernomination errors for a total of nine additional seats. Again, resolving allocation errors is beyond party control,⁴ while addressing undernomination is problematic as, without efficient vote allocation additional nominees can *cost* a party seats. More realistically, as noted above, five additional seats could have been won just by nominating fewer candidates in five districts. However, with expectations of a high vote share, the party nominated too many candidates per district, dividing party support and giving other parties' candidates relatively higher vote shares.

Table 3: Strategic Errors by the DPP in 2004 Legislative Elections

Electoral District	Vote (V)	C	L	V/C	Non-DPP	Error
					LVW	
Changhua County	173,735	5	2	34747	35,941	O
Kaohsiung District 2	114,064	3	1	38021	35,554*	M
Kaohsiung County	233,784	5	0	46756	33,631	U
Taichung County	225,689	6	2	37614	38,362	O
Taipei City Dist. 2	197,919	5	2	39583	33,922	O, M
					36,431*	
Taipei County Dist. 1	154,778	4	1	38694	32,204*	M
Taoyuan County	251,785	7	3	35969	32,077*	O,M
					34,012	
					38,744	
Yunlin County	101,573	3	1	33857	33,053*	M

Source: Central Election Commission of the Republic of China (Taiwan) and the R.O.C. Election Study Center, National Chengchi University

C=candidate

L=losing candidate

LVW= lowest vote winner (winners with the lowest vote totals in a district)

O=overnomination

M=vote misallocation

The five additional seats that both the earlier comparative analysis of vote to seat conversion in 2001 and 2004, as well as the above analysis of overnomination suggest the party could have won, would not have provided the DPP with a Pan-Green majority or its predicted 113 seats. Nevertheless, the seats would have meant an increase for the DPP of seven seats, rather than just two. In addition, the Pan-Green coalition would have gained

five seats more than in the previous election, rather than just one. Winning two seats was perceived as a 'loss' because the DPP performed similarly to the previous election. It had not improved, contrary to expectations and due to poor strategic performance. The KMT's relatively successful vote allocation and nomination strategies also influenced perceptions of the race's outcome. The key point is that a slightly more than four point increase over the previous election in the KMT's vote share led to a nearly five percentage point increase in the party's seat share. On the other hand, the DPP's 2.3% increase in vote share led to less than half a point increase in the party's share of seats.

Why a “defeat”?

The above case study indicates that the electoral rules of SNTV heavily influenced the election outcome as well as the perception of that outcome. In the relatively opaque information environment of SNTV, especially in districts of high magnitude where polling is likely less accurate and strategic voting common,⁵ expectations must be based partially on past performance. DPP strategy, a crucial aspect of party performance under SNTV, had been successful in the previous election. However, in this election the DPP's strategic performance faltered. Thus variation in the aptitude of party strategy via the electoral rules left the DPP with a less than expected seat share. In addition, under SNTV voters have incentives to strategically vote for candidates other than their preference if that preference is either likely to lose or likely to win by a large margin (Cox 1994). This further complicates the information environment in which both expectations and party strategy are formed, making election results less predictable. Finally, the mechanical effect of the electoral rules meant that despite an increase in district vote share of more

than 2%, the DPP actually won only one more district seat, or a one half of one percent increase.

This case study indicates that high expectations and strategic errors by the party were the two reasons that the 2004 legislative election was considered a defeat for the party. Thus, the “defeat” although largely due to the electoral rules, was partially a self-inflicted wound. In an internal party report, DPP Secretary-General Chang Chun-hsiung wrote: "society is very clear that we targeted 100 seats and a pan-green majority and *uses this standard to evaluate our performance.*" The complicated electoral rules of the SNTV system made the information environment in which party strategy and expectations develop unclear, while the mechanical effect of those rules caused vote share to diverge from seat share. Through their influence on strategy, expectations and outcomes, the electoral rules affected both the outcome of the election and the perception of that outcome.

Electoral Reform

In August 2004, a constitutional reform calling for dual-vote single member districts, in which voters separately select a preferred candidate and preferred party with party votes allocated proportionally at the national level, passed the legislature, the first step in amending the constitution. Surprisingly, given the greater proportionality of multimember districts under SNTV, the proposed amendment passed with near unanimity; in fact, it received the support of all of the members of the three smallest parties in the legislature. The reasons for this support possibly include ability of some legislators to defect to become major party candidates, popular pressure for the proposal,

and expectations by some parties of major advances in the legislative election which would take place prior to the new rules being adopted.

In May 2005 a proportional vote election for the National Assembly, the body with the power to amend the constitution, determined those who would decide whether the amendment passed. Passage seemed likely, as Duverger's Law suggests "a majority (plurality) vote on one ballot is conducive to a two-party system" (Duverger 1963, 217); the new configuration would advantage Taiwan's two largest political parties, the DPP and the KMT, who won more than 80% of the National Assembly seats. Interestingly, it was only in the weeks immediately prior to the National Assembly election that the TSU and the PFP voiced their opposition to the constitutional amendment mandating the new system that would likely lead to their extinction (Ko 2005).

The new National Assembly passed the amendment in June 2005, introducing a 'single-seat, two-vote' system, similar to the current Japanese system, and decreasing the total number of legislators from 225 to 113: 73 in single member districts, 6 in aboriginal districts still under SNTV, and 34 in a nationwide proportional party vote. Terms were increased from three to four years.⁶ Due to these electoral reforms, in the 2008 legislative election Taiwan's political parties were no longer confronted by the opaque information environment of SNTV. Now under MMM, parties simply needed to nominate the candidate expected to garner the most votes in each district.

The DPP in the 2008 Legislative Elections

Many reasons have been suggested as explaining the DPP's rout in the 2008 legislative elections; these include the interrelated factors of the rapidly falling popularity of then President Chen Shui-bian of the DPP, the weak economic situation in Taiwan,

worsening cross-Strait ties, and corruption scandals among DPP government officials and Chen's family. However, it is essential to note that the effect of these variables is limited to variance in vote share *and there has been little variance in DPP vote share over the past three elections*. In fact, DPP vote share has *increased* in each of these three contests. While the variables mentioned above undoubtedly cost DPP candidates votes, with a particularly notable decline in some southern districts that had been traditional DDP strongholds, it will be shown that the most important factor in determining the dramatic fall in DPP *seat share* was the change in electoral rules.

In the 2008 Legislative Yuan election, the DPP won 38.7% of the district vote share and 36.9% of the proportional vote share, which increased to 41.9% after the parties failing to meet the 5% threshold were removed. Table 4 shows that the DPP's vote share has increased in each legislative election since 1998. Until the 2008 election, seat share had also risen. In that year, despite the party's highest ever vote share, the seat share plummeted, from nearly 40% in 2004 to just under 24%. The DPP's constituency (district election) seat share fell to just 17.8%, a .47 seat to vote share ratio. The party won only 13 of 73 district seats, along with 14 of 34 proportional seats, for a total of 27 out of 113 legislative seats. This is the clearest indicator of the effect of the switch from SNTV to MMM on the DPP's performance; the party's share of district seats fell by more than half, despite an *increase* in vote share. When including the aboriginal seats under SNTV, the party's district seat share falls further, to just 16.5%. The party won none of the six seats in the two aboriginal districts still using SNTV rules.

The KMT won 81 seats, including 57 district seats (or 78.1% with just 53.5% of the district vote), 20 proportional seats, and 4 seats reserved for aboriginal representation.

This is a further indication of the dramatic effect of the electoral rules on the election outcome: with just over half of the votes, the KMT won nearly three fourths of the legislative seats.

Table 4: Legislative Yuan Election Results for the DPP

	Vote Share	Total Seats	Total Seat Share
2008	38.7%*	27 of 113	23.9%
2004	35.7%	89 of 225	39.6%
2001	33.4%	87 of 225	38.7%
1998	29.6 %	70 of 225	31.1%
1995	33.2%	54 of 164	32.9%

Source: Central Election Commission of the Republic of China (Taiwan) and the R.O.C. Election Study Center, National Chengchi University

*excluding aboriginal districts under SNTV; 38.2% including them

In a review of the election, Tan (2009) states that DPP constituency seat share fell marginally from 39.6% in 2004 to 38.6% in 2008, and that “Pan Green support has remained stable.” However, Tan mistakenly compares the DPP’s seat share in 2004 (39.6%), with the party’s constituency vote share (38.6%) for 2008 excluding the aboriginal districts (his 2004 figures include these districts). In actuality, the party’s constituency vote share *increased* from 35.7% to 38.2% including aboriginal districts or from 36.1% to 38.7% excluding those districts. Tan’s point is that there has not been a dramatic fall in Pan Green support; however, the DPP’s allies in the Pan-Green alliance received 8.5% of the vote in 2001 and 7.8% in 2004. In 2008 the TSU received just 3.5% of the party vote, which along with the DPP’s 36.9% gave the Pan-Greens just over 40% of the party (proportional) votes. Table 5 shows that this is a fall of 3-4% in Pan Green support from 2004. While Tan is incorrect in claiming that Pan Green support has remained stable, the point here is that this relatively small fall in Pan Green support led to

a dramatic fall in legislative seats held by the coalition, and this was due to the change in the formula by which vote shares are converted to seat shares.

Table 5: Pan Green Coalition (DPP and Taiwan Solidarity Union) 2008 Legislative Election

	Constituency Vote Share	Proportional Vote Share	Total Seats	Total Seat Share
2008	39.1%	40.4%	27 of 113	23.9%
2004	43.5%	43.5%	101 of 225	44.9%
2001	41.9%	41.9%	100 of 225	44.4%

Source: Central Election Commission of the Republic of China (Taiwan) and the R.O.C. Election Study Center, National Chengchi University

Duvergerian Effects of New Rules

The election also demonstrates the Duvergerian effects of the reform to single member district plurality contests among voters, candidates, and parties. In all but a handful of districts, candidates running under the KMT and DPP banners placed in the top two, while several legislators abandoned minor parties to run as major party candidates. Even the proportional vote was subproportional, as all but the two largest parties failed to reach the 5% threshold for proportional seats. Three members of the Non-Partisan Solidarity Union did pick up district seats, although one of these was in one of the two aboriginal districts, which each selected three legislators using SNTV rules. A PFP candidate also won a seat selected by aboriginal voters. Having lost the presidential election in 2000 due to vote-splitting among their supporters, the “Pan-Blue” coalition parties, the KMT, PFP and New Party, successfully avoided nominating more than one candidate in nearly every district; PFP and New Party candidates flew the KMT banner in the district elections. PFP candidates were also placed on the KMT party list for proportional seats.

On the Pan-Green side the TSU and the DPP failed to coordinate and candidates representing both parties split Pan-Green votes in eleven district contests. Nevertheless, it was only in Chiayi City that this cost the DPP a seat.⁷ In no other district could the combined votes of DPP and TSU candidates have beaten a Pan-Blue winner. Cooperation on proportional lists between these parties might have given the DPP the TSU's wasted 3.53% of the proportional vote. Had this been the case, the DPP would have picked up two additional proportional seats, at the expense of the KMT. However, the Pan-Blue New Party earned slightly more of the proportional vote than did the TSU; had these voters defected to the KMT (or had the New Party not run a proportional list), the Pan-Blues could also have earned two additional seats. In short, a lack of cooperation among the Pan-Greens cost the DPP at most three legislative seats.

It can be seen, therefore, that under the new MMM system, Duvergerian effects were manifested in two ways: among the Pan-Blues the expected mechanical effects of the new electoral rules induced psychological effects on smaller parties, their candidates, and their supporters, leading both to voter abandonment of minor parties and their candidates and also to cooperation through which PFP and New Party members ran as candidates of the larger KMT. This included several PFP legislators elected under the KMT proportional list. Ten of the PFP's twelve candidates ran under the KMT banner (with two aboriginals still running as PFP candidates), six in districts and four at large. In further support of Duverger's hypothesis, New Party candidates defected to the KMT to run in the single member district plurality elections, but the New Party ran a proportional list.

Among the Pan-Greens, Duvergerian mechanical effects, constraining the number of seats available to smaller parties relative to SNTV, were severe: the TSU, which had won 11% of the seats in the previous election, was shut out. Duvergerian psychological effects were indicated both by the few TSU candidates running as well as the party's very low vote share (Duverger 1954; Benoit 2002, 36). A low voter turnout has been suggested as the reason both the DPP and minor parties fared poorly in the proportional vote. This could also be indicative of Duvergerian psychological effects, which might be manifested in strategic votes for a second preference but also in the decision not to vote since one's first preference is likely constrained from victory by the electoral rules. However, while low by historical standards, turnout of just under 60% was the same as in Taiwan's previous legislative election in 2004, which had fallen dramatically from 2001 (Chen 2004). Uncertainty as to whether the TSU and other small parties could meet the 5% threshold for proportional representation may have led to strategic desertion by voters on the second (proportional party) vote.

Summary of the Effects of the Change from SNTV to MMM

In the 2004 Legislative Yuan election held under an SNTV electoral system, the DPP won 42% of the district seats with 36% of the vote.⁸ In contrast, in 2008 under the MMM system, the DPP's district vote share of over 38.7% earned the party fewer than 24% of the legislative seats. Consider the counterfactual of the 2008 legislative election being held under SNTV. Had the DPP converted its vote share to seat share at the same rate (1.11) as in 2004 –and the party was widely viewed as having done poorly in vote to seat share conversion that year- 31 district seats, 18 more seats than they did win. In other words, the party's district seat share would have risen from 17.8% to 42.4%. In

total, this would have earned the party a respectable 45 seats (40%), a figure much closer to the party's stated goal of 50. Had the DPP converted its district vote share to seat share at the same rate as in 2001 (1.17), they would have won 44.7% or 33 district seats, twenty more seats than they did win. Even at the lower 2001 ratio, the party would have earned a greater seat share than in 2004, its highest ever. If, in addition, the TSU had converted its votes to seats at .50, its approximate ratio in both 2001 and 2004, the Pan Greens would have won an additional district seat for a total of 34 district seats, or 47%.

The negative effect of the new electoral rules on the DPP's performance in the 2008 legislative election was paralleled by a positive effect on that of the KMT. This raises the question as to why the KMT was better able to take advantage of the new electoral rules. Certainly a decline in the popularity of the DPP helped KMT candidates. However, there are several other, likely more permanent reasons why this was the case. First, the KMT has a strong organizational base dating to the days of its authoritarian one party rule of the island. Under the new MMM system, this organizational advantage likely helped the party to achieve the plurality needed to win district elections. In addition, the Pan-Blue parties have always achieved a greater vote share than the Pan-Greens in legislative elections. In fact, the lowest Pan-Blue total was exactly 50% in 2004.⁹ The Duvergerian effects of single member plurality contests have led the Pan-Blue parties to unite under the KMT banner. Thus, the Pan-Blue majority is once again becoming a KMT majority.

Under SNTV, what Lijphart (1994) categorized a "semi-proportional" system, a party that could gain 30-40% of the vote in most districts (the DPP), along with a plurality in some regions (southern Taiwan), could become the largest of several competing

parties. Under MMM, such a party may be marginalized as a permanent opposition or regional party, or even surpassed in popularity by a more moderate third party if it fails to move away from its core pro-independence supporters toward the median voter in future elections.

Structural Disadvantages for the DPP under MMM

While the disadvantages of the new electoral rules on smaller parties were foreseen, claims have also been made that the new system disadvantages the DPP. These claims appear to be justified by the discussion above. However, the argument is not that the electoral rules are weighted against the DPP; it is that the newly drawn districts are. The average population in each single member district is 307,442, but the population per district varies quite dramatically. Article Four of the *Additional Articles of the Constitution of the Republic of China (Taiwan)* mandates that in the Legislative Yuan “Seventy-three members shall be elected from the Special Municipalities, counties, and cities in the free area. *At least one member shall be elected from each county and city* (emphasis added).” Due to this mandate, several areas, including the smaller cities on the East coast and the offshore islands, have disproportionate influence relative to their population, not unlike the representation allotted the lower population states in the US Senate. The population per Taiwanese district ranges from over 475,000 in Hsinchu County to less than 10,000 for Lienchiang County. Most of the lower population districts, and particularly the three smallest, which are comprised of islands between Taiwan and the mainland, lean toward the KMT (or, more accurately, away from the DPP). In addition, the six seats reserved for aboriginals and still under SNTV also lean toward conservative parties. Prior to the election, Wang Yeh-lih, a political science professor at

Tunghai University, argued that the system is “like a race starting with the score of 11 seats for the ‘pan-blues’ to zero” (Shih 2007). Lin Chia-lung, the DPP secretary general concurred claiming, “We lose 11 seats from the very beginning” (Gao 2007).

It is the case that the Pan-Blues were heavily favored in most of these seats from counties and cities with only one representative. However, two facts mediate the effects noted in the arguments above. First, under the old SNTV rules, eight seats were reserved for aboriginals. The six seats now determined by aboriginal voters are a greater proportion of the legislature, since the number of seats has been halved; however, an advantage to the Pan-Blues in the aboriginal seats is not a product of the new electoral system. These seats, although with somewhat less relative influence, existed under the previous system.

Table 6: One Legislative Seat County and City Districts by Population Ranking (plus median district in bold)

Rank	District	Population
73	Lienchiang County	9786
72	Kinmen County	79884
71	Penghu County	91942
70	Taitung County	154986
68	Hualien County	254373
58	Chiayi City	272055
37	Changhua County District 1	313267
7	Keelung City	382109
3	Hsinchu City	395239
2	Yilan County	445811
1	Hsinchu County	475928

Source: Central Election Commission of the Republic of China (Taiwan)

More important, among the ten one-seat districts, there is overrepresentation, but there is underrepresentation as well. There are ten counties or cities in Taiwan having only one legislative seat each. Indeed, several of these are cases of severe

overrepresentation. At the extreme, Lienchiang County with a population of only 9,786 elects one legislator. Kinmen County and Penghu County, with populations of 79,884 and 91,942 respectively, also have one seat each. All three of these counties are comprised of smaller islands off of Taiwan still under ROC control. For comparison, the median district by population is Changhua County District 1 with a population of 313,267. All districts under this population could be considered to be overrepresented, and all over it underrepresented. But given difficulties in demarcating geographically based districts proportionally, it is the extreme cases that are problematic. Taitung County, on the East Coast of Taiwan, is also noted for being a one district county with a small population, just 154,986 people.¹⁰ Thus, Lienchiang, Kinmen, Penghu and Taitung counties can be considered the four cases of overrepresentation. These are all Pan-Blue strongholds. Table 6 presents the populations of the one seat cities and counties as well as that of the median district, Chang Hua County District 1.

These four districts are structurally advantageous for the Pan-Blues, or at least conservatives. But the degree of this advantage has been overstated because among the ten counties and cities with one seat, there is also underrepresentation, as indicated in Table 6. The three districts with the greatest populations in Taiwan, Hsinchu City, Yilan County and Hsinchu County (395,239; 445,811 and 475,928, respectively) are also one seat regions. The final one seat city district is Keelung City, with a population of 382,109, also far above the median. All four of these underrepresented districts were won by KMT candidates, in three cases with well over 60% of the vote. It should be noted for comparative purposes that the district with the smallest population among the cities and counties with multiple representatives is Nantou County District 1 with

240,511 people, just 50.5% of the Hsinchu County district's population but with equal representation. In short, the counties and cities that are constitutionally mandated to have one representative do not give the KMT a tremendous structural advantage. There is overrepresentation among these, and in one case it is extreme. However, there are an equal number of cases of underrepresentation.

Perception of Election Outcomes

It is not difficult to determine which party is perceived to have lost a legislative election in Taiwan; the loser is evident when one party's leaders end the election season by resigning following a public *mea culpa* for a performance that has been perceived as worse than expected. Following the KMT's relatively poor performance in the December 2001 legislative elections, Chao Shou-po, director of the party's organization and development committee, lamenting what he described as an 'unprecedented setback' for the KMT, resigned (Hsieh 2001). Republic of China (ROC) President and DPP Party Chairman Chen Shui-bian stepped down from the latter post following both the 2004 and 2008 legislative elections. Following the December 2004 balloting, Chen stated at a press conference in Taipei, "To completely take the responsibility, A-bian (Chen's nickname) formally tenders my resignation to the central standing committee...A-bian wants to express my deepest apologies to all DPP members and supporters" (Sun 2004). Again at the helm of the party for the January 2008 election, Chen, following the DPP's widely considered dreadful performance, once more resigned, stating, "This is the most disastrous defeat since the establishment of the party...as the party chairman, it is my inescapable responsibility to seriously face the matter and shoulder the responsibility with courage" (Ko 2008). When three other party dignitaries followed Chen's lead, a

January 19, 2008 *Taipei Times* headline declared “DPP Trio Fall on Swords over Elections.” In the January 17, 2008 edition of the *Economist*, next to a picture of Chen kowtowing in contrition during the press conference announcing his resignation, reads the headline: “Bowling out: Electoral humiliation marks the end of the Chen Shui-bian era.”

While the superlatives and metaphors used by the media and office holders to describe the extent of the perceived defeat may be hyperbole or culturally informed, it is clear from pronouncements prior to the elections that party expectations were not met, and the results of these elections were widely considered to be worse than expected. But given the fact that the DPP’s vote share increased in both 2004 and 2008, why were these elections perceived as defeats for the party? I argue that this perception is partially due to the manner in which electoral rules intervene to cause seat share to diverge from vote share. To the extent that the electoral rules either complicate the vote to seat share transformation calculus or are poorly understood, expectations of electoral performance must be based on likely *vote* share. But election outcomes are measured by *seat* share. The intervention of electoral rules affects the perception of election results to the extent that they cause outcomes to differ from expectations.

Thus, the DPP’s performance in the 2004 and 2008 Legislative Yuan contests illustrates how the mechanical and psychological effects of electoral rules not only affect election outcomes but also how they affect the perception of those outcomes. In the 2004 election, strategic missteps by the party under the murky information environment of SNTV caused the party to gain fewer seats than expected, resulting in the perception that the party had lost, despite a greater vote share than in the previous election. Expectations,

based on likely vote share diverged from the actual outcome, measured by seat share. In 2008, the simpler but relatively unfamiliar MMM system converted the DPP's greater vote share, relative to prior elections, to its smallest seat share since 1989, leading to the impression of an exceptionally poor performance by the party.

The perception of a major loss for the party in 2008 was due in part to the DPP's well publicized goal of winning 15 proportional and 35 district seats, for a total of 50; the party won just slightly over *half* that total.¹¹ Interestingly, the DPP fell short of its proportional seats goal by only one seat, whereas the party won just 37% of its predicted district seats. Of course, party predictions can be strategic and can have both an *ex ante* and an *ex post* effect. Predictions beyond rational expectations may hope to induce a bandwagoning effect. However, if the bandwagoning effect fails to occur, exaggerated expectations can induce post-election perception that the party performed poorly. While the DPP was not expected to do as well as previously, given the new district configurations and the unpopularity of President Chen, as Ting-I Tsai in the Asia Times (January 15, 2008) suggested, "...nobody foresaw such an overwhelming defeat." Considering the low expectations for the DPP, what is interesting is that the party actually received a relatively high vote share.

Conclusion

Fundamentally, the mechanical effect is the electoral rules by which vote share is translated into seat share. Unanticipated mechanical effects influence *ex post* perception; the mechanical effect intervenes between the expected and actual outcome, the former conceived in terms of vote share, but the latter measured by seat share, influencing the perception of the election result. The mechanical effect on perception has the potential to

be greater when it presents information problems. Like Duvergerian mechanical and psychological effects (Benoit 2002), the mechanical effect of the vote to seat share rules and expectations are endogenous: electoral rules influence expectations, while expectations inform how actors behave within the constraints of the electoral institutions. This endogeneity further complicates the information environment blurring the relationship between expectations regarding, and perception of, election results. Likely vote share influences expectations, while actual seat share measures electoral success.

In the long run, the shift in Taiwan from SNTV to MMM will clarify the information environment. But the move from the complex rules of SNTV to the simple rules of MMM did not have this immediate impact. Unfamiliarity with the drastic effects of the new rules on vote to seat share conversion meant that, despite the simpler MMM system, information was still far from complete. With the experience of this election, expectations regarding, and perceptions of, legislative election outcomes should converge. However, this convergence will be mitigated by a recently enacted rule preventing public opinion polls from being released within ten days prior to legislative elections.¹² In addition, if the DPP responds to the new system by moving toward the ideological center, legislative elections may become more competitive and less predictable.

Since expectations are partially retrospective, it is likely that earlier results in which the DPP's seat share exceeded its vote share still informed expectations in early 2008. Given that the DPP started as an opposition party, it is generally seen as the main 'native' party, and its vote and seat share had risen fairly steadily since it first participated

in 1986, a major decline in seat share was a dramatic reversal of long-term trends. This also influenced how the election results were perceived.

The most objective measure of popularity is vote share; however, it is seat share that is often used as a measure of party approval. This is particularly problematic in the Taiwan case. The international media commonly extrapolates from the outcome of an election about highly important issues, such as Taiwan-mainland China relations. Following the 2008 election, the New York Times reported, “The outcome was widely interpreted as a clear repudiation of Mr. Chen’s controversial policies aimed at shifting Taiwan toward independence” (Lague 2008). A Bloomberg headline prior to the election (January 11, 2008) read “Taiwan Voters Choose Between Closer China Ties and Local Identity.” Perhaps more important, a US Congressional Research Service Report called it a “crushing defeat” for the DPP declaring: The results appear to be a repudiation of DPP leader and Taiwan President Chen Shui-bian’s emphasis of a radical pro-independence agenda...”

While cross-Strait relations undoubtedly affect Taiwan politics, it is wrong to interpret the dramatic fall in the DPP’s seat share to a sea change in the attitude of Taiwan voters. As has been shown, the DPP’s decline in seat share was not paralleled by a similar decline in vote share. Comparing outcomes based on seat share relative to prior elections is problematic if the electoral rules determining that seat share have changed or if party strategies under complex rules such as SNTV can cause the seat share to vote share ratio to vary unpredictably from one election to the next. Electoral rules intervene between voters’ preferences and election outcomes; the effect of these rules in

aggregating preferences and determining seat shares must be considered if voter preferences are to be understood.

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Endnotes

¹ However, all else equal, parties nominate the most popular candidates given expected vote share.

² Named for the DPP color.

³ The following week Tkacik penned another article for the Asia Times, “‘Wholesale’ Disaster for Taiwan’s DPP.’ Dec. 15, 2005.

⁴ One extreme case of vote misallocation came in Taipei County District 1, where a DPP incumbent missed winning a seat by only 90 votes, while another DPP candidate in the district won his seat with 20,000 more votes than needed. ⁴

⁵ In Taiwan under SNTV district magnitude (the number of seats per district) ranged from 1 in Kinmen, Lienchang, Penghu, and Taitung counties to 13 in Taoyuan county.

⁶ See: “Lawmakers pass bill to halve legislature.” Taiwan News, Aug. 24, 2004. Originally at <http://www.etaiwannews.com/Taiwan/2004/08/24/1093312475.htm> accessed January 12, 2005, and Concise history. Legislative Yuan of the Republic of China.

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⁷ In that district, the DPP candidate’s 40.08% along with the TSU candidates 12.63% could have combined to beat the winning KMT candidate’s 46.7% of the vote, assuming constant Pan-Green support.

⁸ Excluding aboriginal districts.

⁹ This figure excludes the Non-Partisan Solidarity Union from the Pan-Blue camp.

¹⁰ Hualien and Chiayi Counties are also one seat counties with less than the median population, but both of these have over 250,000 people. These are not outliers, as there are ten districts located in counties and cities with multiple seats that have smaller populations than Chiayi County.

¹¹ The party’s proportional vote was 36.9%, increasing to 41.9% after all parties not reaching the five percent threshold were dropped. The KMT’s shares were 51.2% and 58.1% of the party vote, respectively.

¹² Similar to Article 52 of the Presidential and Vice Presidential Election and Recall Law, this article, a revision to the Public Officials Election and Recall law took effect for the 2008 legislative election. See *Gongzhirenyuan Xuanju Bamian Fa Xiuzheng Zhongdian Shuoming Yilanbiao* (Explanation and Schedule of Revisions to the Public Officials Election and Recall Law).