Party Alignment and Citizen Competence in a New Election System: A Case Study of the 2008 Taiwan’s Legislative Election

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Abstract
The implementation of a new electoral system, mixed member majoritarian system (MMM) in Taiwan’s 2008 legislative election has posted a challenge to voters. Under the old single nontransferable vote system (SNTV), which had implemented more than two decades, each voter had only one ballot and the multiple geographical seats are filled by top-scoring candidates in the order of votes they receive. At the same time, the votes received by political parties in constituencies also decide the allocation of seats through proportional representation system. Under the MMM system, each voter has two ballots—one is for single-member district and the other one is for party list. The changes in electoral rules are dramatic to electorate who have used the old SNTV system. With cross-section rolling sample data collected one month before the legislative election, we examine the extent to which party alignment and attention to news shape voter competence in terms of the new system. We expect that partisans were very eager to learn how the new electoral rules allocate the seats so they know more about the new system than the rest of citizens. Additionally, paying attention to news would also increase voter competence. We assess the relationship between voter competence and voting intention; high voting intention should result from high voter competence. The implication of this study is to shed new light on knowledge and democracy by the evaluation of voter’s political learning from political parties and the mass media.

Introduction
Citizen competence is critical to democracy in that citizens should have knowledge of the politics, or they would be misled by politicians otherwise. However, the extent to which citizens learn the politics depends on individual characteristics and outside information. The former includes the level of education and political interest, and the latter refers to social contacts or media coverage.

As to a new election system, it takes time for people to learn how it operates. As matter of fact, on the one hand, political parties are not easily adopted to the new

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system. Duverger (1954) pointed out that even the mechanism of the election system will downsize the number of parties it takes more than one election to reach the new equilibrium. The slow change of political parties would extend to citizens. On the other hand, it is a long learning process for the mass public to learn new rules or institutions, especially when the old one has endured many years. Therefore, people are expected to spend time on learning new systems.

There have been a handful of researches on voting behavior in mixed systems (e.g. Schoen 1999; Pappi and Thurner, 2002; Karp, Vowles, Banducci, and Donovan, 2002; Gschwend, Johnston, and Pattie, 2003; Moser and Schneir, 2005). Karp (2006) has analyzed the determinants of political knowledge about the mixed member proportional systems in Germany and New Zealand. Because of the complexities of the new electoral rules, he expected that political interest and education have a positive impact. His analysis shows similar patterns in both countries over time. (p. 722) Interestingly enough, He also suggested that lack of knowledge does not cause confusion about the electoral rules; people may split their votes to balance the large and small parties. Regarding the EU referendum, Christin, Hug and Sciarini (2002:773) found that uninformed people may vote like the informed electors as long as they have basic knowledge and party cues.

It is therefore of interest to assess whether individuals are familiar with the new system and whether the level of political knowledge affects their voting behavior. First of all, we shall examine how much the mass public learns it from their political parties. The implication is that political parties are expected to reach out the mass public and lead them to act like the institution design sets up. Secondly, we are concerned about the role of the mass media during the campaign. Do the media convey the message of the new politics to the mass public or less so? Furthermore, we are interested in observing the dynamics of the learning process. With the survey data using the cross-section rolling design, we are able to set up an independent variable that measures the longitudinal effect. Moreover, we take advantage of the post-election panel data in which the campaign-specific effect can be isolated from the baseline attitude. Last, we attempt to explore whether the level of competence regarding the new electoral system has anything to do with the way people make their decisions. We expect that the more sophisticated people are, the more likely they would turn out to vote. It is because people are interested in the system and they are willing to implement their self-interest in it.

Scholars have investigated repeated cross-sectional (RCS) data in different ways. Deaton (1985:115) suggested that aggregating individuals belonging to a given cohort observed in the survey can absorb the fixed effects that may correlate with the other explanatory variables. Moffitt (1993) demonstrated estimation methods for the linear
fixed effects model, autoregressive linear models, and models with discrete dependent variables. Regarding the linear fixed effects model, he suggested that the exogenous variables should be replaced with instrument indicators and individual characteristics are projected onto cohorts. Verbeek (1992) discussed both Deaton and Moffitt’s approaches, and supported the latter. Johnston and Brady (2002) inherited Moffitt’s instrumental variable approach and applied it to the research of campaign effect\(^1\). To capture the cross-sectional effect, we follow Johnston and Brady’s method. We assume that the level of information is affected by partisanship and the level of attention to news. We use the pre-election poll data to estimate the effects. There are 3,571 cases in the pre-election wave of poll. The implication of this study is to shed new light on knowledge and democracy by the evaluation of learning from political parties and the mass media.

We will first lay out why the foundation of democracy depends on citizens’ knowledge, then review literature on this research question. After introducing the pre- and post-election telephone survey data, we will test our hypotheses by examining the data. Last, we shall summarize our findings and thereby generate our conclusions

### Are Citizens Learning What They Need to Know?

Classic theories of democracy stipulate a citizen with considerable competence in politics. It goes without saying that a basic knowledge of politics helps citizen to maintain political competence. This political knowledge, to some degree, responding to Zaller’s political awareness that “the extents to which an individual pays attention to politics and understands what he or she has encountered”(1992 p. 21) Political knowledge is an accumulative combination of various information. Therefore, the issue of how citizen receives and decodes information has been one of the core concerns in the study of political participation.

A handful of literature discusses how people obtain information. Lazarsfeld, Berelson, and Gaudet (1948), for example, emphasized the importance of opinion leaders. Their theory of two-stage information flow explains why opinion leaders are influential to the mass public. Downs (1957) discussed the uncertainty for government and voters, and argued that less-informed voters rely on ideology that can differentiate parties. (p.99) Stressing the role of partisanship, Campbell, Converse, Stokes, and Miller (1960) suggested that, “The stronger the party bond, the more exaggerated the process of selection and perceptual distortion will be.” (p.133) They argued that partisan attachment has an impact on the way politics is perceived. The role of elites is less emphasized in those foregoing discussion on information and knowledge. Zaller’s (1992) information theory gives credit to elite discourse on the formation of opinion.

\(^1\) Also see Brady and Johnston’s (2006:189-190) discussion.
He proved that people who pay attention to elites’ point of view tend to adopt the elite position. (p.67) Zaller’s model not only explains the mass public’s issue position, also applies to survey problems, such as response inconsistency and one-sided information. He also confirms the importance of information to the mass public in political matters.

Information are never in short supply to citizen. Instead, it is the credibility of information and the self-selection of citizen that matter. According to Lupia and McCubbins (1998), people need “the ability to predict the consequences of actions” to make choices. They argued that people may not need complete information in decision making, but they need knowledge that would avoid the costly mistake. (p.20) In Lupia and McCubbins’ theory, knowledge is more important than information in that most of time people can be persuaded by someone who may be punished for lying. In other words, people have limited information, but they always can find some trustworthy sources in making reasoned decisions.

Measuring and taking account of people’s knowledge is one thing, and examining the consequence of different level of political knowledge is the other thing. Bartels (1996) compared the political judgment of less-informed voters and others. Gilens (2001:389) also assess the extent to which less-informed people lack policy-specific information and the effect of policy-specific ignorance on their preferences. Scholars draw the similar conclusion that more and less informed people express different points of view on policies. Regarding voting behavior, better informed electors seem to turn out more often than less informed ones (Delli Carpini and Ketter 1996:226-227; Wattenberg, McAllister, and Salvanto, 2000; Larcinese, 2007). For instance, Larcinese found that political knowledge indeed increases the probability of participation (2007:400).

The foregoing literature suggests that partisanship and media attentive have a sizable effect on political knowledge. Moreover, we also expect to find association between political knowledge and political behavior. Unlike other scholars, we focus on political knowledge during the legislative campaign. The empirical implication is that the assessment of the mass public can enhance our evaluation of Taiwan democracy. The theoretical implication is that examining the dynamic of political knowledge during the campaign supplements the existing literature.

Taiwan’s 2008 Legislative Election

Until 2008, Taiwan’s legislative election uses the single-nontransferable voting system (SNTV). Each eligible citizen has one ballot, and each of the geographical constituency has more than one seat, which are filled by the top-scoring candidates. Beginning from the 1995, several representatives are elected from the national constituency and overseas communities. Only the parties that obtained more than 5
percent of valid votes from the geographical constituencies can be allocated those seats.

The old election system, which is based on the election result in the multi-member districts, essentially is candidate-oriented and modestly favors major parties. On the one hand, it encourages candidates to seek support from a small proportion of radical electorate, especially in a large district. On the other hand, it encourages major parties to nominate more than one candidate and manipulate their administrative resources to maximize their seat gains (Tsai, 2005). Although major parties may be punished for over-nomination, it is difficult for small parties to fight with major parties in every geographical district. Moreover, Taiwan has the popular presidential election since 1996, which helps the appearance of a two-party alliance (Yu and Tsai, 2006).

Under the pressure of civil society, lawmakers decided to modify the election system\textsuperscript{2}. In 2003, the Legislative Yuan passed the constitutional amendment and the National Assembly approved it in 2005. One section of the amendment stipulates that 73 legislators are elected in single-member districts, 6 elected in aboriginal constituencies, and the rest of delegates are allocated based on the proportion of party-list votes. Therefore, each voter has two ballots—party-list vote and candidate vote. The new system, using Sugart and Wattenger’s term, is a mixed member majoritarian system (MMM) that relationships between the two tiers are parallel like that of Japan’s new system since 1994. The new single-member district system forces many incumbent legislators to seek for new districts and many to retire. The Central Election Committee also advertised the new system on television.

The transformation of legislator’s electoral rule is revolutionary for electorates who are used the SNTV over the past decades on the one hand and the political parties on the other hand. It remains to be seen if the new system changes the voting behavior and the way political parties compete. That needs a special research design in which people who were interviewed in the last legislative election are asked the similar questions again. Our goal of this paper is smaller but not less significant; we intend to examine how many people understand the new system and what makes them do so. Besides, we want to look at the relationship between turnout and understanding of the new system. Before that, we will display the trend of voter competence.

\textbf{Party Alignment, Media Attention, and Voter Competence}

In the survey, there are four questions about the important facts of the new system and presented in Table 1. Provided that the new electoral rules may be advertised enough and most people pay attention to news, we follow Mondak and

\textsuperscript{2} For more discussions about the election system change, see Lin (2006).
Davis’ (2002) suggestion that “don’t know” option is not included in our instrument. First of all, respondents were asked how many legislators will be elected in the district in this Legislative Election. The proportion of correct answer is 45 percent. When asked how many ballots each voter can cast in this Legislative Election, 42.2 percent responded with the correct answer. Only 9.4 percent of respondents were aware that a party must receive 5 percent of party votes in order to participate in allocation of seats by party lists. It is probably because most people care less about party list vote than constituency vote so they are not sure about the allocation rule. When asked the years of a term for this year’s newly elected legislators, 57.4 percent responded with the correct answer.

<table>
<thead>
<tr>
<th></th>
<th>Correct (%)</th>
<th>Incorrect (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many legislators will be elected in the district in this Legislative Election?</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>Do you know, besides referendum ballots, how many ballots you can cast in this Legislative Election?</td>
<td>42.2</td>
<td>57.8</td>
</tr>
<tr>
<td>Do you know the threshold of the list vote that a party must reach in order to participate in allocation of seats by party lists?</td>
<td>9.4</td>
<td>90.6</td>
</tr>
<tr>
<td>How many years of a term are for this year’s newly elected legislators?</td>
<td>57.4</td>
<td>42.6</td>
</tr>
</tbody>
</table>

Source: TEDS2008L (Pre-election Survey)

Before summarizing the four items to create a knowledge scale, we use the reliability analysis to examine them. We find that dropping out the last question would increase the alpha value from 0.413 to 0.456. Therefore, we count how many correct answers that each respondent have on the first three items. In doing so, we can draw a line that represents the daily mean score of political knowledge.

Figure 1 plots the average value of correct answers. It is obvious that the increasing trend of political knowledge has a big drop around sixteen days in prior to the Election Day, but it regained its momentum and continued to rise until the end. Notice that people on average cannot identify more than one correct answer until ten days before the election, and that they cannot answer two of three questions correctly the day before the Election Day. We suspect that most people were not familiar with the party list vote so that few of them can respond with all of the correct answers.

Figure 1. Political Knowledge and Information over the Course of the 2008

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The increasing trend in Figure 1 reflects a moderate degree of understanding about the new electoral rules over the course of this election. Unfortunately, there is no survey to assess the level of knowledge about the SNTV system. Comparing political knowledge about New Zealand’s new system (Karp, 2006:719), we find that Taiwanese voters display lower degree of understanding about the new system. The average proportion of correct answer of two questions is 62.95 percent, but it is 38.5 percent for the Taiwanese electors. The difference between the two countries is left for further research, but the Taiwanese electors were aware of some aspects of the new electoral rules, except the party list vote.

We assume that the level of information is affected by partisan strength and the level of attention to news. Partisan strength is expected to drive electors to understand how the new system determines who will win the seat, thus it should exert a great impact on political knowledge. Moreover, political parties may educate their supporters about the new two-ballot system, which would reinforce their political knowledge.

News on television or newspapers intuitively help the mass public build up their political knowledge. The more people pay attention to news, the more they may know about the new electoral rules. In Taiwan, several TV networks broadcast news 24 hours a day; TV news is not scarce. Therefore, we assume that political knowledge depends on the level of attention to TV news on a four-point scale, instead of how long people watch it everyday.
Education is another source of political knowledge; Zallers (1992) used education as the indicator of political knowledge. Age is included because it may influence how fast people would respond to the questions and how much they remember the new system. We measure it on a five-point scale. Furthermore, age may represent generation; different generations have different level of political interest. The “response” hypothesis states that young respondents have better memory and quicker responses than old ones do, and the “generation” hypothesis states that senior citizens tend to care more about politics than young people. We measure it on a five-point scale.

To obtain consistent estimates, we follow Johnston and Brady’s (2002) method. The RCS design assumes that the longitudinal attitude and beliefs at the time of interview decide the current attitude. To measure the longitudinal attitude, either pre- or post-election attitude is needed. As for the pre-election attitude, Johnston and Brady suggested the average of a given attitude on a given day is an appropriate measure as long as the daily sample size is over 80. They argued that the daily mean subtracted from the individual responses can isolate the cross-section effect from the baseline attitude. They also suggest that the response coded in the post-election wave may represent the initial attitude better. Our panel data has this information available.

According to Johnston and Brady’s (2002) formula, current political belief is the function of the prior belief and time-series effect, which is, they assumed, common across all people (p.209). In our study, the level of political knowledge should be explained by the long-term factors and dynamic part in campaign period. The former refers to personal characteristics and prior information, and the latter indicates the current information at the time of interview. When the campaign is over and all of the campaign effect is cleared, the initial level of information could be measured by the post-election interview. We can predict the level of political knowledge in this way:

\[ PK_{it} = \alpha + \beta_1 I_{it} + \beta_2 I_{0it} + ZX_{it} + \epsilon_{it} \]  

(1)

The baseline information \( I_{0it} \) is the unobservable fixed effect that may correlate with the other explanatory variables \( X_t \) that associate with coefficient matrix \( Z \). According to Moffitt’s (1993:103) instrument variable model, the current information is the function of the baseline information and its sample mean at each time \( t \), which yields the following:

\[ I_{0it} = I^*_t + \nu_{it} \]

(2)

With the assumption of the identities among the cross-sectional sample, it is thus legitimate to use the mean of individual’s information, \( I^*_t \), as the time-series variation.
In other words, the dependent variable should change with the level of daily average of information.

\[ I^*_t = I_{it} / N_t \]  \hspace{1cm} (3)

Hence, we can regress political knowledge on the current information, its sample mean at each time \( t \), and other time-invariant variables.

\[ PK_{it} = \alpha_1 + \beta_1 I_{it} + \beta_2 I^*_t + ZX_i + \varepsilon_{it} \]  \hspace{1cm} (4)

Table 2 shows estimates of Eq. (4), in which the explanatory variables are age, education, partisan strength, and media attention. First of all, age has a positive impact on the level of political knowledge, which confirms the generation hypothesis. Secondly, the level of political knowledge will increase with education; high-educated people tend to have better political knowledge than people of lower education. Partisanship is also a strong predictor of political knowledge. This finding implies that party supporters are concerned about change in the election engineering. The coefficients of cross-sectional and time-series media effect are positive, which means the daily mean of media attention is on average larger than individual’s media attention. Because of the significant correlation between current information and period information, the standard error of the period information variable inflates.

Two conclusions can be drawn from the results. First, media attentiveness has a positive impact on voter competence on the new electoral system, controlling for age, education, and partisan strength. People who pay attention to TV news are supposed to be very interested in politics. According to Figure 1, media attentiveness did not significantly increase over the course of campaign. However, the trend has been indeed increasing along with political knowledge. Partisan alignment is important in that each party was stressed out for this new Legislative Yuan, whose number of seats was slashed into half. Core supporters were motivated to obtain political knowledge, while the moderate partisans or independents were not so enthusiastic about the race. Age and education are also significant predictors. Considering the small standard errors, all of partisan strength, age, and education have stable influence on voter competence.

Second, the impact of cross-sectional measure of media attentiveness appears to be smaller than that of daily-mean of it. However, the daily mean of media attentiveness has a larger standard error. It may imply the mismeasure of true baseline information. Without the post-election reading of media attentiveness, the interpretation of the coefficients should be cautious. More daily samples may also help reduce the measurement error.
Table 2. Estimation Results for Knowledge about the New System

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$ (S.E.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-2.076(0.404)***</td>
</tr>
<tr>
<td>Age</td>
<td>0.144(0.014)***</td>
</tr>
<tr>
<td>Education</td>
<td>0.169(0.013)***</td>
</tr>
<tr>
<td>Partisan strength</td>
<td>0.036(0.013)***</td>
</tr>
<tr>
<td>Media attention (cross-sectional)</td>
<td>0.227(0.018)***</td>
</tr>
<tr>
<td>Media attention (daily-mean)</td>
<td>0.586(0.162)***</td>
</tr>
</tbody>
</table>

N 3751
R-squared 0.128

Significance levels: * $p<0.05$; ** $p<0.01$; *** $p<0.001$

Voting Intention, Voting Behavior, and Voter Competence

So far we have seen that age, education, partisan strength, and media attentiveness are consistent factors of political knowledge. The following research question is the extent to which political knowledge affects people’s voting intention. Karp (2006) tested two hypotheses. The first one is that voters with low political knowledge may have wrong perception that voting for different parties in electorate and party-list votes may increase the seat share of parties they support. As matter of fact, the seat share is greatly determined by the party list vote. The alternate hypothesis is that people who want to balance major and small parties may split their votes. In other words, vote splitting is the result of sophisticated behavior.

The second hypothesis is that people who are not familiar with the new system may be likely to vote for their preferred party in the candidate constituency and extend their support to the party list vote. In other words, the old plurality system distorts electors’ behavior. The alternate hypothesis is that voters may support the less preferred party in the party list vote out of the reason that they can maximize the seat shares of parties in the same coalition. Karp examined the two hypotheses and found that both do not stand the statistical test. He concluded that understanding of the new electoral system does not explain whether people vote along with their party line in the party list vote or split their votes (p.727).

Although Karp’s analysis presents very important findings about voting behavior and political knowledge, it did not give enough space to the influence of political knowledge on turnout. We consider political participation as a prerequisite of democracy. Scholars argued that people’s sense of civic duty may decide their participation (Campbell, Gurin, and Miller, 1954; Riker and Ordeshook, 1968). Some
found that resources and skills are fundamental to participation (Verba, Schlozman, and Brady, 1995). Social pressure also has an impact on turnout (Lazarsfeld, Berelson, and Gaudet, 1944; Gerber, Green, Larimer, 2008).

Taiwan used to have higher turnout than the western democracies, but the complexity of the new system may discourage people’s voting intention. On the one hand, each voter has to decide her votes in the electorate and party list vote. On the other hand, the electors have to figure out new districts and how the new electoral rules operate. We assume that people who lack political competence may postpone their voting decisions because people may be confused by the new system and it takes time for them to make the decision. Respondents revealed their voting intention both in the electorate vote and in the party list vote are coded as one and zero otherwise.

Table 3 presents the logistic estimates of voting intention, in which we estimate the effect of age, education, partisan strength, media attention, political knowledge, and whether they turned out in 2004. All of the estimates are statistically significant at the 99% level. The findings show that the more knowledgeable people are the easier for them to decide their voting choices. Whether or not people participated in the last legislative election makes a big difference on their voting intention in this one. Partisanship and education are also consistent predictors. The influence of age is significant but not very stable; old people tend to postpone their decisions.

Table 3. Estimation Results for Voting Intention (Voting Intention Revealed=1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$ (S.E.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-5.688(0.295)***</td>
</tr>
<tr>
<td>Age</td>
<td>-0.095(0.045)*</td>
</tr>
<tr>
<td>Education</td>
<td>0.106(0.042)*</td>
</tr>
<tr>
<td>Partisan strength</td>
<td>0.925(0.053)***</td>
</tr>
<tr>
<td>Media attention</td>
<td>0.400(0.057)***</td>
</tr>
<tr>
<td>Political Knowledge</td>
<td>0.419(0.052)***</td>
</tr>
<tr>
<td>Turnout in 2004</td>
<td>1.137(0.109)***</td>
</tr>
<tr>
<td>N</td>
<td>3280</td>
</tr>
<tr>
<td>-2 LL</td>
<td>2980.065</td>
</tr>
<tr>
<td>Nagelkerke R-squared</td>
<td>0.417</td>
</tr>
</tbody>
</table>

Significance levels: * $p<0.05$; ** $p<0.01$; *** $p<0.001$

3 We code the voting intention as a continuous variable (2=reveal voting intention in both electorate and party list vote; 1=reveal voting intention in either electorate or party list vote; 0=undecided) and regress it on the same group of independent variables. All of the estimates remain the same sign.
The analysis above indicates that participation is a function of information and knowledge, which partly confirms Lazarsfeld and his colleagues’ (1944) assertion that interest is one of the participation factors. This finding also suggests that knowledge may play a bigger role in Taiwan politics than we expect as the actual turnout rate of this legislative election hits the record low: 58.67%.

**Conclusion**

Relying on the RCS data, our study explores the dynamic of political knowledge over the course of the legislative election in 2008. We also examine its influence on voting behavior. Based on the individual’s response, the daily mean of information is used to capture the time-series variation. Political information is measured by the attention to the mass media, and it indeed greatly shapes the attitude of political knowledge.

We also test the hypothesis about voting behavior and voter competence. We find that the more political knowledge one owns the higher likelihood that one would turn out to vote. The results suggest that people are likely to participate in this election if they are well aware of the new electoral rules.

Many scholars are skeptical about the mass public’s political knowledge, but they agree that democracy would not cease to work. The declining awareness of politics would not threat democracy because the mass public can take heuristics, such as party cues, to make decisions. That does not mean that political knowledge is replaced by the information. Instead, political knowledge indicates the extent to which people can learn about information and then avoid costly mistake. Our analysis indicates that information conveyed by the mass media is transformed to political knowledge, and that political knowledge is an impetus of turnout. Therefore, political knowledge in Taiwan effectively integrates information and contributes to people’s political participation.

**References**


