

政黨認同與民主信念：意義探勘的方法論、工具方法與應用

Party-(non)Identification and Passion for Democracy: An Exploratory Study of the Potential Relationship using the Data-Assisted Meaning-Mining Approach

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Abstract

Taiwan initiated democratization in the late 1990s and witnessed the 3rd party alternation from the KMT to DPP in 2016. While Taiwan is a relatively stable and successfully functioning democracy, there has been no close examination of whether her citizens remain optimistic about democracy. This study is one of the few pioneering works that has adopted the meaning-mining approach and multiple correspondence analysis (MCA), an exploratory data analysis method, to explore the profile of voters who are passionate about democracy and those who are not. The series of analysis of two face-to-face interview survey datasets, TEDS2008 and TEDS2016, representative data collected after Taiwan's 2008 and 2016 presidential elections, respectively, reveals a pattern suggesting that democratic values are very likely to be associated with partisanship: partisans are divided in terms of passion for democracy, while non-partisans stand on the side of indifference. The implications of this seldom seen pattern are discussed in this paper.

Keywords: democratization, democratic values, political identification, partisanship, independent voter

1. Introduction

Twenty five years ago Stanford professor Francis Fukuyama (1992) in his “The End of History and the Last Man” stated that history would end with the ultimate victory of democracy. He wrote this work when the whole world before and after 1989 were seeking new (democratic) social order and alternative political institutions. However, Fukuyama started to modify this optimistic view toward democracy after witnessing the failure of implementing American democracy in Iraq (Fukuyama, 1995). His recent works “The Origins of Political Order: From Pre-human Times to the French Revolution” (2012) and “Political Order and Political Decay: From the Industrial Revolution to the Globalization of Democracy” (2014) revealed his concern that the ideal of democracy may not be achieved due to interest group politics that are associated with party competition, as well as “vetocracy” under the name of checks-and-balances.

Fukuyama’s observations and his conclusion about the U.S. democracy via a macro or historical approach, however, are controversial, as interpretation and reasoning may differ among scholars. Putting aside the debates surrounding Fukuyama’s thought-provoking works, an equally important task that empirical scholars have not sufficiently addressed is how to examine the health of democracy at a micro or citizen level. It is equally important to employ empirical data, not just historical facts, to answer the same fundamental questions about why and how both experienced and new democracies suffer from the broken promises of a better economy, environment, and governance. Most importantly, can democracy be the cause of its own destruction?

Through literature on voting behavior we have learned to avoid the naïve notion that all citizens are involved in thinking about or concerned about the future of democracy, or, at least, that they are interested in public affairs. If democratization does bring hope, freedom of choice, and opportunities for change to citizens, one should expect that most citizens would agree with statements about democratic values, such as “relatively speaking, democracy is a superior regime type”, no matter what the election results are. But is this a practical depiction of the present situation? Fukuyama’s puzzle about why democracy can bury itself could be better solved with micro level evidence.

Taiwan is chosen as a case for this study because it has been an important laboratory of democracy. Taiwan's party politics have been well-examined at both elite and individual levels. It initiated democratization in late 1990s and witnessed the 3rd party alternation on January 16, 2016, from the Kuomintang (KMT)—the leader of the “pan-blue” political camp, whose ideology is fixed to “one China”— to the Democratic Progressive Party (DPP) – the leader of the “pan-green” camp whose ideology is tied closely with the strengthening of Taiwanese ethnic identity. To understand how party identification could have affected the perceived legitimacy of democracy in established democracies, it would be useful to explore a younger democracy like Taiwan whose two-party system has been well perceived at both elite and citizen levels.

This data-assisted meaning mining work is undertaken from the perspective of party identification. First, party identification has been the core for explaining voting behavior and choices in American politics (Campbell, Converse, Miller, & Stock, 1960; Converse, 1964, 2006). Second, while a good number of studies identify and acknowledge Taiwan's relatively stable and functioning democracy and party politics (e.g., Fell, 2014; Schubert, 2004; Tan, Ho, Kang, & Yu, 2000), most studies that take Taiwan politics into consideration pay more attention to her relationship with Mainland China (e.g., Schubert, 2015; Wong & Wu, 2016) and the relationship between ethnic identity and party identification (e.g., McLean-Dreyfus, 2015; Niou & Paolino, 2003; Rigger, 2006) than to Fukuyama's fundamental question of whether and why her citizens remain optimistic about democracy, or not so passionate about it. Therefore, I see this study as the beginning of a series of comparative works that aim to discover “what is going on” under the bright outlook of democracy. I provide elucidation on a pattern drawn from citizen-level data and connect it with micro-level perception in order to facilitate a better understanding about macro-level phenomena.

After a discussion about why partisans and non-partisans play critical role in understanding Taiwanese voters' attitudes and preferences in the next two sections, I introduce an exploratory data analysis method, which will be applied to a survey data set that is composed of 25 important survey questions drawn from a representative sample. The four sections of analysis lead to a revealing summary, suggesting that both partisanship and nonpartisanship could serve as enemies of an open democracy.

2. Partisanship, non-partisans and perception about democracy

Partisanship in American politics has been identified as a critical factor of political behavior, values, and choices. Partisans, given the two party-system game rule, have lead their “belief systems” to grow over time and therefore their voting patterns have stabilized (Converse, 1964; Festinger, 1957; Kinder, 2006; Leeper, 2014; Page & Shapiro, 1992; Zaller & Feldman, 1992). Over the decades, empirical research on “independent” voters has also reached a consensus that independent voters are a very small fraction of voters and most self-claiming non-partisans or intendent voters are less likely to be pure independent voters than “closet partisans” (Johnston, 2006; Keith et al., 1992; Magleby, Nelson, & Westlye, 2011; Miller & Wattenberg, 1983; Petrocik, 1974). According to recent political psychology research, closet partisans may very well have partisan orientation, as voters do not simply receive information from political parties, but also require parties to provide a distinction between themselves and others, as well as establish significance. According to the concept of “partisan motivated reasoning” stemming from this perspective, political parties selectively disseminate partisan messages to potential supporters, while those with partisan leanings will actively seek those messages and, what is more, will interpret those messages in order to fit or satisfy their partisan orientation (Johnston, 2006; Kim, Wang, Gotlieb, Gabay, & Edgerly, 2013; Kleinnijenhuis, van Hoof, & Oegema, 2006; Leeper & Slothuus, 2014). After being received, these messages will be amplified in the citizen based on her personal feelings, and this will determine voting decisions as well as other political behavior. Research already exists which indicates the voting behavior of those with partisan orientation is not determined by policy evaluations, but rather is the result of prompts from partisan messaging (Jimenez, 2009). The direction of public political issue understanding is often guided by political parties or influenced by information undergoing latent partisan reinterpretation (Leeper & Slothuus, 2014). This directional guidance does not influence all of one person’s political actions, but can sufficiently influence the order of importance an individual assign to various issues.

While partisans are usually labelled as biased and stubborn in terms of their stability of preferences and consistency of ideology, a growing number of citizens prefer to call themselves “independent voters” and reject partisanship (Magleby et al., 2011). There are two factors that may lead voters to declare they have no particular partisan orientation. The first is a desire to avoid conflicts which may arise as a result of a difference of opinion with others after declaring one’s political leanings.

Thus, the respondent assumes a defensive attitude. In addition, we can easily find instances in which people suspect polling organizations have ulterior motives in conducting general public opinion surveys. Because they distrust the polling organization, people will refuse to answer or be non-committal. Secondly, many voters believe “median” or “independent” seems like a more rational and independent position, and this label provides them with a sense of security in taking surveys. More and more members of the public want to avoid the troubles involved with being affixed with party labels by others and, thus, declare themselves as neutral or without partisan orientation to the outside world. That an ever-increasing number of respondents refuse to directly respond to questions concerning partisan orientation makes the voting public increasingly mysterious. At the same time, those not openly expressing partisanship are also seen as a key constituency for electoral victories.

In the Taiwanese context, where voters perceive the party system as one that functions like America’s two political party system, the independent voter described in most public opinion polls refers to a member of the public without any particular partisan orientation. The percentage of such voters appearing in common telephone surveys is ever increasing, as non-committal respondents compose approximately 40 to 50 percent of all respondents in these polls. There are even some polls in which the ratio for this type of voter exceeds 50%.¹ Scholars have repetitively confirmed that partisans and closet partisans matter in elections, as their vote choice, turnout decisions, and stability of voting are driven by partisanship. Unfortunately, very little attention has been paid to whether or not and how partisanship and orientation toward rejecting party identity associate with their views about democracy.

3. Research Methodology and Design

This study attempts to explore possible patterns regarding relationships between political attitudes and values. Without assuming any theoretical causal relationship before exploration, mining meaning requires methods that rely on bottom-up, data-driven methods. Without the guidance of any theoretical reasoning, we should treat each of the attitude and value variable equally and let

¹ For details, please see National Chengchi University Election Study Center, 2013, “Distribution of Trends Concerning Attitudes on Important Political Issues,”<http://esc.nccu.edu.tw/modules/tinyd2/content/partyID.htm>, date accessed: October 18, 2013.

the statistical analysis presents patterns for later interpretation. This approach is commonly used in the emerging discipline data science but should not be limited to big data analysis. It is applicable to “smaller” data such as survey data.

The tradition of exploratory data analysis (EDA), an approach to analyzing data in order to summarize their main characteristics, often with visual methods, garners scholarly attention when social media and government data becomes available. Parallel to the behaviorist emphasis on formal modeling or hypothesis testing, the EDA approach is emphasized by researchers who prioritize what the data, whether or not they are “big”, can tell us and helps in the formulation of hypotheses that could lead to new data collection, experiments, and stories (Lindstrom, 2016; Tukey, 1977).

Factor analysis, particularly principle component analysis, is the method derived from the EDA approach and has been widely applied in a variety of disciplines. Although it is a great tool for exploring concepts through the reduction of dimensions drawn from variables, its potential unfortunately has not yet been applied to most social research due to its limit with respect to continuous variables. These are hardly available in a non-laboratory context.

Correspondence analysis (CA) is the method that brings factor analysis to categorical data, the type of data survey research most commonly obtained. CA includes traditional binomial correspondence analysis and multiple correspondence analysis (MCA), which can deal with multiple dimensions. MCA was developed in Europe before World War II and was first made known to linguistic science when it was introduced to the U.S. around 2000 (Glynn, 2014; Glynn & Robinson, 2014). Through analysis of correlation matrix, MCA transforms counts in a contingency table into dimensions via calculation of the distance between the counts of variable categories (e.g., the options of the survey questions). Most importantly, this method allows calculation of multiple variables and variable categories (Abdi & Valentin, 2007; Blasius & Greenacre, 2014; Greenacre & Blasius, 2006; Roux & Rouanet, 2009). Therefore, the information and meanings presented in MCA factor maps are much richer than pie charts or bar charts of single variable and beyond the conventional chi-square tests of the relation between two selected variables. MCA has been developed into “homogeneity analysis” and “dual scaling” at present

(Blasius & Greenacre, 2014; Leeuw & Mair, 2009; Nishisato, 2004). This method matters not only because EDA gains popularity; this method plus survey methods will empower researchers to seek better conceptualization and measurements.

MCA makes this bottom-up approach of conceptualization possible for political scientists. As a survey questionnaire is usually composed of variables that are relevant to concepts, researchers could explore or confirm the extent to which these variables or measurements align to represent a dimension, factor, or concept that concerns the researcher. This process will help avoid incorrect linkage between concepts and measurements before modeling and, most importantly, discover new dimensions or formulate new concepts that stimulate deeper thinking about a political phenomenon.

The data used for this exploratory study is Taiwan's Election and Democratization Study: Survey of the 2016 Presidential and Legislative Elections (TEDS2016), a national island-wide face-to-face interview project. This survey was conducted right after the presidential election, starting on January 17 and ending on April 28, 2017 (N=1,690). The data was weighted using raking method. The weighted sample is representative of the population (official statistics published in 2016) in terms of gender, age, education, and residence area. As the survey covers over 150 questions, with topics ranging from political interest to evaluation of each candidate, I selected 25 questions that are most relevant to this study—ethnic and party identification, values about democracy, and attitudes toward government and politicians. See Appendix 1 for the list of the variables and their coding scheme. MCA requires a data set without missing values. After applying list-wise deletion (i.e., any individual who have vague or invalid answer to any of the 25 question is excluded from analysis) to the subset data, the sample size becomes 990. Note that in the upcoming reports of analysis results I use “variable” to refer to a survey question and “category” for each of the categorical options for a variable. For example, “interested in politics” and “not interested in politics” are two categories of the variable “How interested would you say you are in politics?” (B1r). The results of exploratory data analysis are presented below in order of (1) the emerging factors, (2) correlation between the variables, (3) correlation between the variable categories, and (4) the visualization of profiles of non-partisans and democracy supporters.

4. Findings and Patterns

The scree plot (Figure 1) suggests that the dataset is composed of two major latent concepts, or that two factors should be generated for analysis. This is a situation in which we can properly plot the variables, categories, and individuals onto two-dimension factor maps.

[Figure 1 goes here]

(1) Emerging Factors as Latent Concepts

Next, I focus on the two axes that represent the two most important factors embedded within the set of 25 variables. These two factors are also called latent concepts and play a critical role in later interpretation of individual voter patterns. Before labeling the two factors, it is necessary to check the composition of each factor.

[Figures 2 and 3 goes here]

Figure 2 presents the extent to which each category contributes to the first factor. The categories are sorted by their contribution and those extending past the reference line are considered important elements to the factor. The top categories center around the concepts of (dis)trust of politicians—“most politicians care only about the interests of the rich and powerful” (E7r), “politicians are the main problem in our country” (E4r), and “most politicians are trustworthy” (E3r) and public officials—“public officials do not care much about what people like me think” (D2r) and “government officials often waste a lot of money we pay in taxes” (D5r), followed by (dis)trust in government (D6r), political self-efficacy (D1r, D3r, D7r, H3, and H6r), and political interest (A1r and B1r).² Given the above analysis, I would like to label this factor as “**trust in government and political actors**”—the right of the x-axis refers to trust and the left to distrust.

The top contributing categories of the second factor, as Figure 3 shows, include three key elements—party identification with the DPP (Q2ar) or KMT (Q2r), and ethnic identity (P1), followed by a set of variables that some of the democracy variables involved—prospective views

² The full list of the categories, sorted by contribution, includes E7r_0, D2r_0, D5r_0, D2r_1, D6r_1, D6r_0, E4r_0, D1r_1, E3r_1, D3r_0, E7r_1, H3_3, Q2r_1, B1r_1, D7r_1, A1r_0, H6r_0, B1r_0, and H1r_0.

about economy (G2r), democracy as a preferable regime (H3), voting matters (H6r), voting as a responsibility (H1r), interest in politics (B1r and A1r), and distrust in governmental officials (D5r, D4r, D6r, and E6r), and partisanship.³ This pattern suggests that political identification plays an important role in forming this latent variable. However, it is not easy to label this latent variable, as some democracy variables are involved. One possible scenario is that these attitudinal variables regarding democracy are aligned with political identification. Hence, it is a better strategy to (1) temporarily refer to this latent variable as **“passion for democracy”** where the upper part of the y-axis refers to indifference to democratic values, while the lower refers to a tenacious desire to defend democratic values, and (2) in later analysis check how partisans (including supporters of the KMT and DPP) and non-partisans align concerning this factor.

(2) Clusters of Variables

[Figure 4 goes here]

The regrouping of the variables by MCA method provides us an exploratory way to locate the relationship between the focused variable, partisanship, and attitudes toward democracy. The variable factor map, as shown in Figure 4, shows the relative distance between variables that are clustered or associated with each other on the two-dimensional plot. With confirmation through chi-square testing, four clusters of variables can be identified. The first group of variables concerns one's perceptions about the government and its officials, including agreeing or disagreeing with the following statements: “public officials do not care much about what people like me think” (D2r), “Government officials often waste a lot of money we pay in taxes” (D5r), “do you think “public welfare” is the government’s first priority when it decides important policies?” (D6r), and “when the government decides important policies” (E7r).

The second group of variables concerns respondent political identity, views about the economy, and attitudes toward democracy in general. The following variables are likely to be associated with

³ The full list of the categories, sorted by contribution, includes Q2ar_1, Q2ar_0, P1_2, G2r_2, P1_1, Q2r_1, H3_1, B1r_1, H6r_0, B1r_0, H1r_0, A1r_0, partisanship_0, D5r_0, H3_3, H6r_1, D7r_1, D4r_1, and D6r_1.

each other: ethnic identification, measured by identifying self as Taiwanese, Chinese or both (P1), identification with/against KMT (Q2r), perceptions about Taiwan's economy over the past year (G1r) and the coming year (G2r), perceptions about voting as a responsibility (H1r), preferring democracy over other kinds of regimes (H3), and the statement "the people, and not politicians, should make our most important policy decisions" (E6r).

The third set of variables groups political interest, partisanship, self-efficacy, and attitudes toward voting. The following variables are likely to be associated with each other: attention to political news (A1r), interest in politics (B1r), confidence in digesting political information—measured by "you feel you understand the most important political issues of this country" (D7r), voting as a responsibility (H1r), belief that voting can make some difference (H6r). Note that the variable partisanship—measured by self-claiming as partisan or independent, is located in this group, suggesting a linkage between theoretical categorization of (non)partisans and their perceptions about particular democratic values.

The fourth set of variables include political efficacy, attitudes toward politicians, and evaluation of Taiwan's democracy. These variables include "people like me don't have any say about what the government does" (D1r), "sometimes politics seems so complicated that a person like me cannot really understand what is going on" (D3r), "most politicians are trustworthy" (E3r), "politicians are the main problem in our country" (E4r), and satisfaction with "the way democracy works in Taiwan" (H5r).

(3) Clusters of Categories

Given the meaning of the two axes and the association between key variables, the focus switches from the relationships between the variables to the correlations among the categories drawn from the variables. This will help identify the attitudinal and behavioral profiles of voters and uncover more information beyond the analysis of variable association.

[Figure 5 goes here]

The second factor map, as presented in Figure 5, shows clusters of variable categories that may lead us to “explore” phenomena unimaginable to us before this analysis. As 25 out of 55 categories contribute most to the first two factors (See Appendix 2 for details), Figure 3 plots four clusters that are composed of these 25 categories.

The first cluster is composed of six categories that are likely to be associated with each other: agreeing that “most decisions made by the government are correct” (D4r_1) and that public welfare is government’s first priority (D6r_1); disagreeing that “government officials often waste a lot of money we pay in taxes” (D5r_0), and that “most politicians care only about the interests of the rich and powerful” (E7r_0). These attitudes are likely to be associated with support for the KMT (Q2r_1). This cluster suggests that supporting the KMT and trusting the government are associated even though the DPP had become the ruling party by the time at which the survey was conducted. Note that this cluster has little association with core democratic values, beliefs, or attitudes.

The second cluster is composed of six categories, which together present two features of the respondents: identifying as both Chinese and Taiwanese (P1_2) is associated with disliking the DPP (Q2ar_0). Those who are soft in their attitudes regarding whether voting should be a responsibility (H1r_0) are likely to feel that voting won’t make a significant difference to what happens (H6r_0), not very interested in politics (B1r_0), and cannot confidently state they understand this country’s most important political issues (D7r_0). This pattern suggests that (anti-DPP) partisanship and ambivalence in ethnic identity may be associated with indifference to democratic voting.

The third cluster is composed of those agreeing the following statements: “Most politicians care only about the interests of the rich and powerful” (E7r_1), “Government officials often waste a lot of money we pay in taxes” (D5r_1), “Public officials do not care much about what people like me think” (D2r_1), disagreeing that “Most decisions made by the government are correct” (D4r_0), and most importantly, distrusting that government makes “public welfare” its first priority (D6r_1), and most importantly rejecting a partisan label (Q2r_0). This cluster depicts a profile of cynical citizens that are critical of party politics. Note that this cluster has little to do with support for or opposition to democracy, or specific democratic values and attitudes.

The fourth cluster is composed of ethnic identification with Taiwan (P1_1), belief that “democracy is preferable to any other kind of regime” (H3_1), that “who people vote for can make a big difference in what happens” (H6r_1), “voting is a responsibility, and you should vote even if you don’t like any of the candidates or parties” (H1r_1), interested in politics (B1r_1), feeling capable of “understanding the most important political issues of this country” (D7r_1), and most importantly, support for the DPP (Q2ar_1). This pattern clearly suggests that belief in democratic values is aligned with DPP partisanship.

In drawing comparisons across the four clusters, two interesting patterns should be addressed: First, political interest is associated with DPP identification, where those who are not interested in politics may take stances against the DPP (cluster 2) and those who have been interested in politics (and are likely to be core supporters of democratic values) desire to stand by the DPP (cluster 4). Second, the divide in views about democracy does not perfectly align with partisan cleavage. KMT supporters that have a follow-the-leader orientation (cluster 1) do not homogeneously stand for or against democratic values. Even the cynical group (cluster 3) that has doubts about the function and role of the government in a democracy has little association with democratic values.

(4) How Partisans and Non-partisans Differ

The above exploratory analysis results lead us to suspect Taiwanese voters’ passion for democracy—measured mainly by if democracy is a preferable regime (H3), if voting matters (H6r), and if voting is a responsibility (H1r)—is associated with their partisan orientation: voters who are uninterested in democracy tend to reject partisanship or to oppose the DPP, while voters who are zealous about democratic values are more likely to support the DPP. To further examine this emerging pattern, Figure 6 plots all of the 990 valid respondents (those who had answered all of the selected 25 survey questions) on to the two-dimensional map and then identifies non-partisans (black) and partisans (red) on the right. The majority of non-partisans mainly scatter above the x-axis and correspond to the profile of the 2nd cluster of Figure 5.

[Figure 6 goes here]

It is a revelation for me to see how those identifying as non-partisan are associated with indifference to democratic values and opposition to a particular political party. Non-partisans are not KMT supporters but seem to dislike the DPP more. If one's zeal for democratic values are associated with supporting or opposing the DPP, it is equally important to plot KMT and DPP supporters onto the same map.

[Figure 7 goes here]

As Figure 7 shows, most KMT supporters (who gave 6 or higher points in a 11-point scale of supporting KMT) are located above the x-axis, in contrast to the majority of DPP supporters (who gave 6 or higher points in a 11-point scale of supporting the DPP) who are located below the x-axis. This pattern corresponds with the summary drawn from the previous stages of analysis. As a pattern that has not been uncovered by previous studies, the captured relationship between partisanship and democratic passion requires more interpretation and deliberation.

5. Conclusion and Discussion

If democratization does bring hope, freedom of choice, and opportunities to change to citizens, one should expect that most citizens would agree with democratic values, such as “relatively speaking, democracy is a superior regime type”, no matter the results of an election. Ironically, this study demonstrates that democracy can allow its enemy into its open system and undermine its own legitimacy. This study explores a data set composed of 25 important survey questions drawn from a representative sample—putting together ethnic and party identification, political interest and efficacy, attitudes toward government, politicians, and democracy as a preferable regime type— and shows that both partisanship and nonpartisanship could serve as enemies of an open democracy.

The results of this exploratory study may be seen as a warning message, as it contradicts the picture of Taiwan as a “functioning” open democracy that accommodates competition between the two political parties. While it is too early to say if their indifference will lead to a denial of democracy, we have seen in Figures 6 and 7 that (1) when passion toward democracy is “engineered” to align with partisanship, which makes democracy merely a slogan or campaign mobilizer, non-DPP

supporters and KMT leaners are likely to lose their interest and passion toward democracy as an ideal. Similarly, non-partisans who are sick or indifferent to party competition are very likely to turn their back to democratic values. It is worth examining in future studies if the groups of voters who turn their backs on democratic values feel more positive about Mainland China.

Conventional positivist data analysis paradigm suggests that researchers begin with the creation of a concept, followed by the selection of a response variable and explanatory variables. A challenge to this procedure is that the linkage between subjectively created concepts and subjectively selected measurements is usually weak and lacks validation. The data-assisted meaning-mining (DAMM) approach presented in this study suggests the reverse: list whatever variables we think are proper for studying a phenomenon and then observe how latent concepts emerge from the set of these variables and their categories. The limit of this approach is embedded in its subjective selection of variables and the data set itself. For this study, the data used for discovery was collected right after the presidential election, where the KMT was defeated by the DPP after 8 years of rule. Therefore, respondents that support the KMT felt negatively about all the concepts associated with the DPP, including democratic values. Future studies need to select data sets that are collected in a non-election season to validate the findings of this study. Additionally, as there is no boundary or rule for variable selection, future studies are encouraged to enlist more creative variables associated with above suspicion, such as leadership, the future of world order, the possibility of a war, etc.

Future studies also need to focus on “mining” meanings that are embedded within data-based patterns. For example, a challenge to making sense of the results about non-partisans (Figure 6) is determining whether these non-partisans are KMT closet partisans. If they are closet KMT supporters, this group of voters could widen the gap between the pro-KMT and pro-DPP camp. Anti-DPP voters who are not passionate about democracy could lose their confidence in the democracy that is practiced by the DPP. If they are not KMT closet partisan, they could be anti-DPP voters who support other smaller political parties. Unlike most KMT supporters that will take the government and institution into consideration and vote against DPP when it comes an election, nonpartisans are likely to oppose DPP policies or decisions via non-electoral and non-democratic means. This is where the pitfall lies. Therefore, analyzing data collected right after another party

turnover will help solve the suspect. For example, the 2008 presidential election where the ruling party was switched from DPP to KMT could be taken as a critical case for duplicating this analysis.

Last but not least, I should declare that this paper is built upon a moral assumption that citizens in a democracy should embrace some key democratic values. The above discussions may lead a reader to look down upon those who are located in the upper plot of Figure 7. This part awaits more deliberation between empirical scholars and political philosophers. We should not judge those who are not passionate about democracy while living in a democracy. Rather, what this scenario mean to democracy's future is a whole new chapter for political scientists to write.

References

- Abdi, H., & Valentin, D. (2007). Multiple correspondence analysis. *Encyclopedia of Measurement and Statistics*, 651–657.
- Blasius, J., & Greenacre, M. (Eds.). (2014). *Visualization and Verbalization of Data*. CRC Press.
- Campbell, A., Converse, P., Miller, W., & Stock, D. (1960). *The American Voter*. New York: Wiley.
- Converse, P. E. (1964). The nature of belief systems in mass publics. In D. Apter (Ed.), *Ideology and Discontent* (pp. 206–261). New York: New York: Free Press.
- Converse, P. E. (2006). Democratic theory and electoral reality. *Critical Review*, 18(1–3), 297–329.
- Fell, D. (2014). Should I stay or should I go? Patterns of party switching in multiparty Taiwan. *Journal of East Asian Studies*, 14(1), 31–52.
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Palo Alto: Stanford University Press.
- Fukuyama, F. (1992). *The End of History and the Last Man*. Free Press.
- Fukuyama, F. (1995). *Trust: The Social Virtues and the Creation of Prosperity* (F First Edition Used edition). London: Penguin Putnam.
- Fukuyama, F. (2012). *The Origins of Political Order: From Prehuman Times to the French Revolution* (Reprint edition). New York, NY: Farrar, Straus and Giroux.
- Fukuyama, F. (2014). *Political Order and Political Decay: From the Industrial Revolution to the Globalization of Democracy* (Reprint edition). Farrar, Straus and Giroux.
- Glynn, D. (2014). Correspondence analysis: Exploring data and identifying patterns. In D. Glynn & J. A. Robinson (Eds.), *Corpus Methods for Semantics: Quantitative studies in polysemy and synonymy* (pp. 443–485). John Benjamins Publishing Company.

- Glynn, D., & Robinson, J. A. (Eds.). (2014). *Corpus Methods for Semantics: Quantitative Studies in Polysemy and Synonymy*. John Benjamins Publishing Company.
- Greenacre, M., & Blasius, J. (2006). *Multiple Correspondence Analysis and Related Methods*. CRC Press.
- Jimenez, G. C. (2009). *Red Genes, Blue Genes: Exposing Political Irrationality* (First edition). Brooklyn, N.Y.: Autonomedia.
- Johnston, R. (2006). Party identification: Unmoved mover or sum of preferences? *Annual Review of Political Science*, 9, 329–351.
<https://doi.org/10.1146/annurev.polisci.9.062404.170523>
- Keith, B. E., Bagleby, D. B. M., Nelson, C. J. N., Orr, E. A., Westlye, M. C., & Wofinger, R. E. (1992). *The Myth of the Independent Voter*. Berkeley: University of California Press.
- Kim, Y.-M., Wang, M., Gotlieb, M. R., Gabay, I., & Edgerly, S. (2013). Ambivalence reduction and polarization in the campaign information environment: the interaction between individual- and contextual-level influences. *Communication Research*, 40(3), 388–416.
<https://doi.org/10.1177/0093650211431884>
- Kinder, D. R. (2006). Belief systems today. *Critical Review*, 18(1–3), 197–216.
- Kleinnijenhuis, J., van Hoof, A. M. J., & Oegema, D. (2006). Negative news and the sleeper effect of distrust. *Harvard International Journal of Press-Politics*, 11(2), 86–104.
<https://doi.org/10.1177/1081180X06286417>
- Leeper, T. J. (2014). Cognitive style and the survey response. *Public Opinion Quarterly*, 78(4), 974–983. <https://doi.org/10.1093/poq/nfu042>
- Leeper, T. J., & Slothuus, R. (2014). Political parties, motivated reasoning, and public opinion formation. *Political Psychology*, 35(1), 129–156. <https://doi.org/10.1111/pops.12164>

- Leeuw, J. de, & Mair, P. (2009). Simple and canonical correspondence analysis using the R package anacor. *Journal of Statistical Software*, 31(5).
<https://doi.org/10.18637/jss.v031.i05>
- Lindstrom, M. (2016). *Small Data: The Tiny Clues That Uncover Huge Trends*. New York City: St. Martin's Press.
- Magleby, D. B., Nelson, C. J., & Westlye, M. C. (2011). The myth of the independent voter revisited. In P. M. Sniderman & B. Highton (Eds.), *Facing the Challenge of Democracy: Explorations in the Analysis of Public Opinion and Political Participation* (pp. 238–266). Princeton University Press.
- McLean-Dreyfus, M.-A. (2015, October 26). Changing Face: a New Presidential Candidate for Taiwan's KMT. Retrieved January 2, 2017, from <http://www.youngausint.org.au/single-post/2015/10/26/Changing-Face-a-New-Presidential-Candidate-for-Taiwans-KMT>
- Miller, A. H., & Wattenberg, M. P. (1983). Measuring party identification: Independent or no partisan preference? *American Journal of Political Science*, 27(1), 106–121.
- Niou, E., & Paolino, P. (2003). The rise of the opposition party in Taiwan: Explaining Chen Shui-bian's victory in the 2000 Presidential election. *Electoral Studies*, 22(4), 721–740.
- Nishisato, S. (2004). Dual scaling. In D. W. Kaplan (Ed.), *The SAGE Handbook of Quantitative Methodology for the Social Sciences* (1 edition, pp. 3–24). Thousand Oaks, Calif: SAGE Publications, Inc.
- Page, B. I., & Shapiro, R. Y. (1992). *Rational public opinion*. Chicago: University of Chicago Press.
- Petrocik, J. R. (1974). An analysis of intransitivities in the index of party identification. *Political Methodology*, 1(3), 31–47.

- Rigger, S. (2006). *Taiwan's Rising Rationalism: Generations, Politics, and "Taiwanese Nationalism"*. Retrieved from <http://scholarspace.manoa.hawaii.edu/handle/10125/3494>
- Roux, B. L., & Rouanet, H. (2009). *Multiple Correspondence Analysis*. SAGE Publications.
- Schubert, G. (2004). Taiwan's political parties and national identity: The rise of an overarching consensus. *Asian Survey*, 44(4), 534–554.
- Schubert, G. (Ed.). (2015). *Taiwan and the "China Impact": Challenges and Opportunities*. London: Routledge.
- Tan, A. C., Ho, K., Kang, K.-T., & Yu, T. (2000). What if we don't party? Political partisanship in Taiwan and Korea in the 1990s. *Journal of Asian and African Studies*, 35(1), 67–84.
- Tukey, J. (1977). *Exploratory Data Analysis*. Pearson. Retrieved from <http://www.amazon.ca/exec/obidos/redirect?tag=citeulike09-20&path=ASIN/0201076160>
- Wong, S. H., & Wu, N. (2016). Can Beijing buy Taiwan? An empirical assessment of Beijing's agricultural trade concessions to Taiwan. *Journal of Contemporary China*, 0(0), 1–19. <https://doi.org/10.1080/10670564.2015.1104868>
- Zaller, J., & Feldman, S. (1992). A simple theory of the survey response: Answering questions versus revealing preferences. *American Journal of Political Science*, 36(3), 579–616.

Figure 1. Scree plot for Dimension Reduction

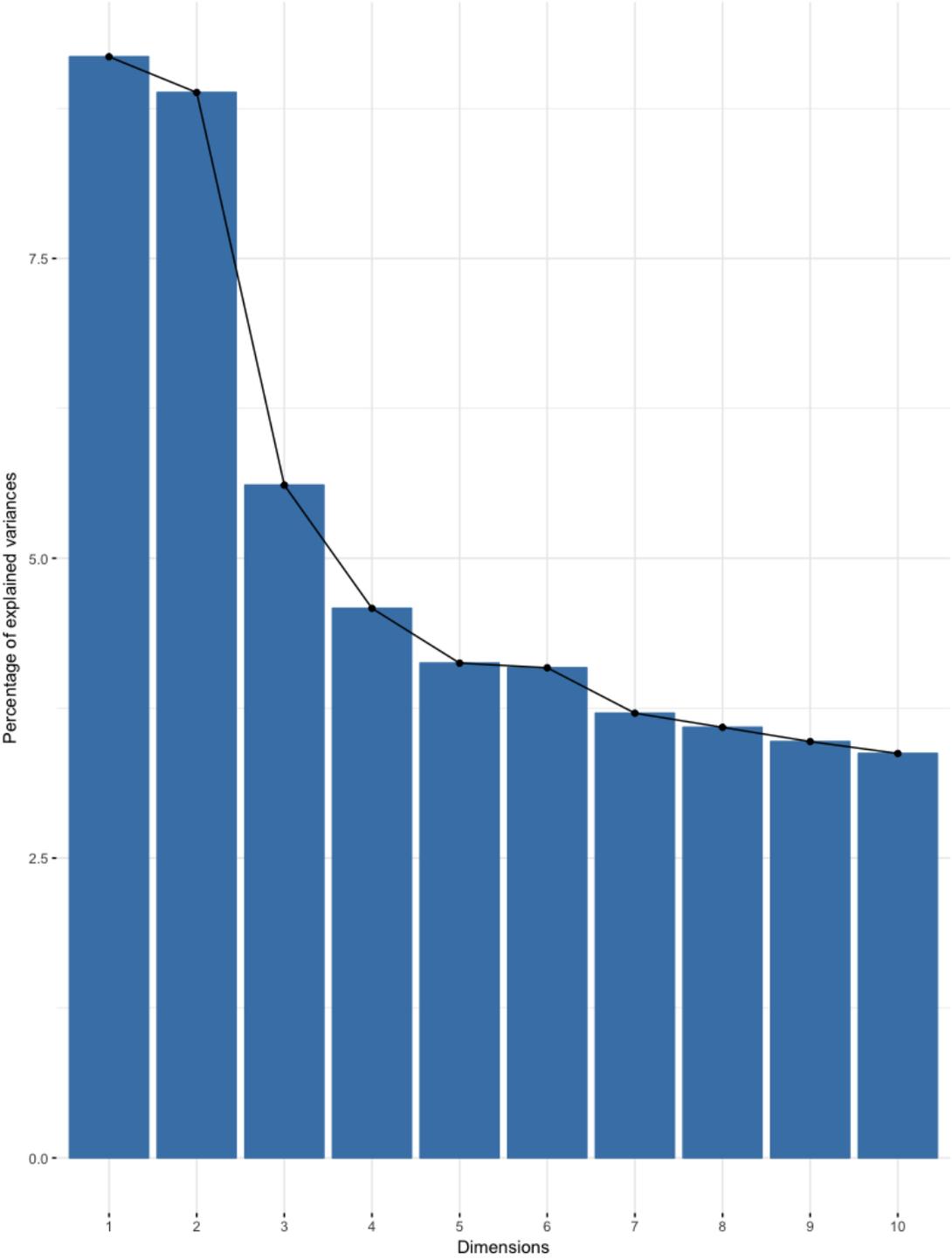


Figure 4. Variable Factor Map

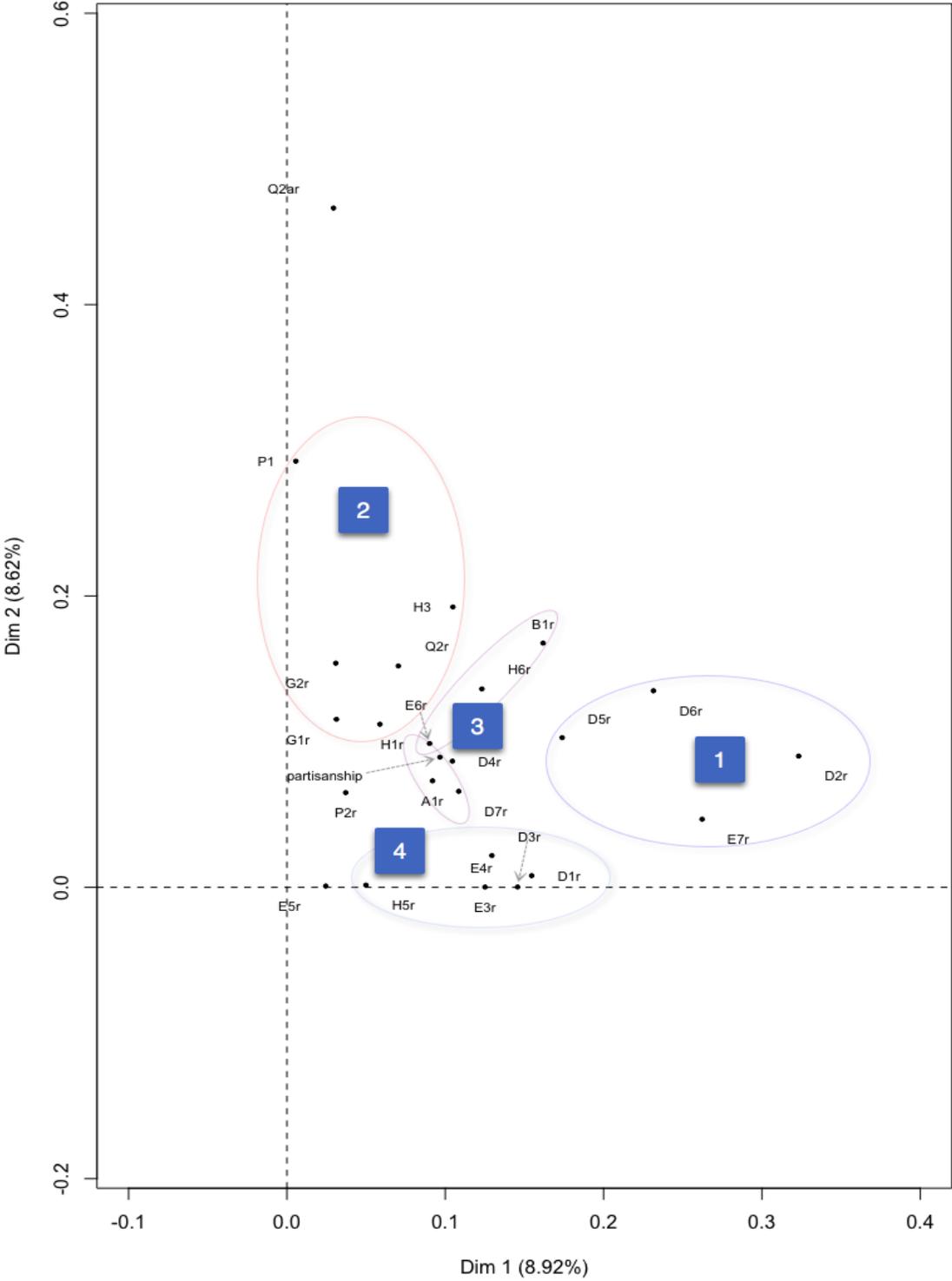
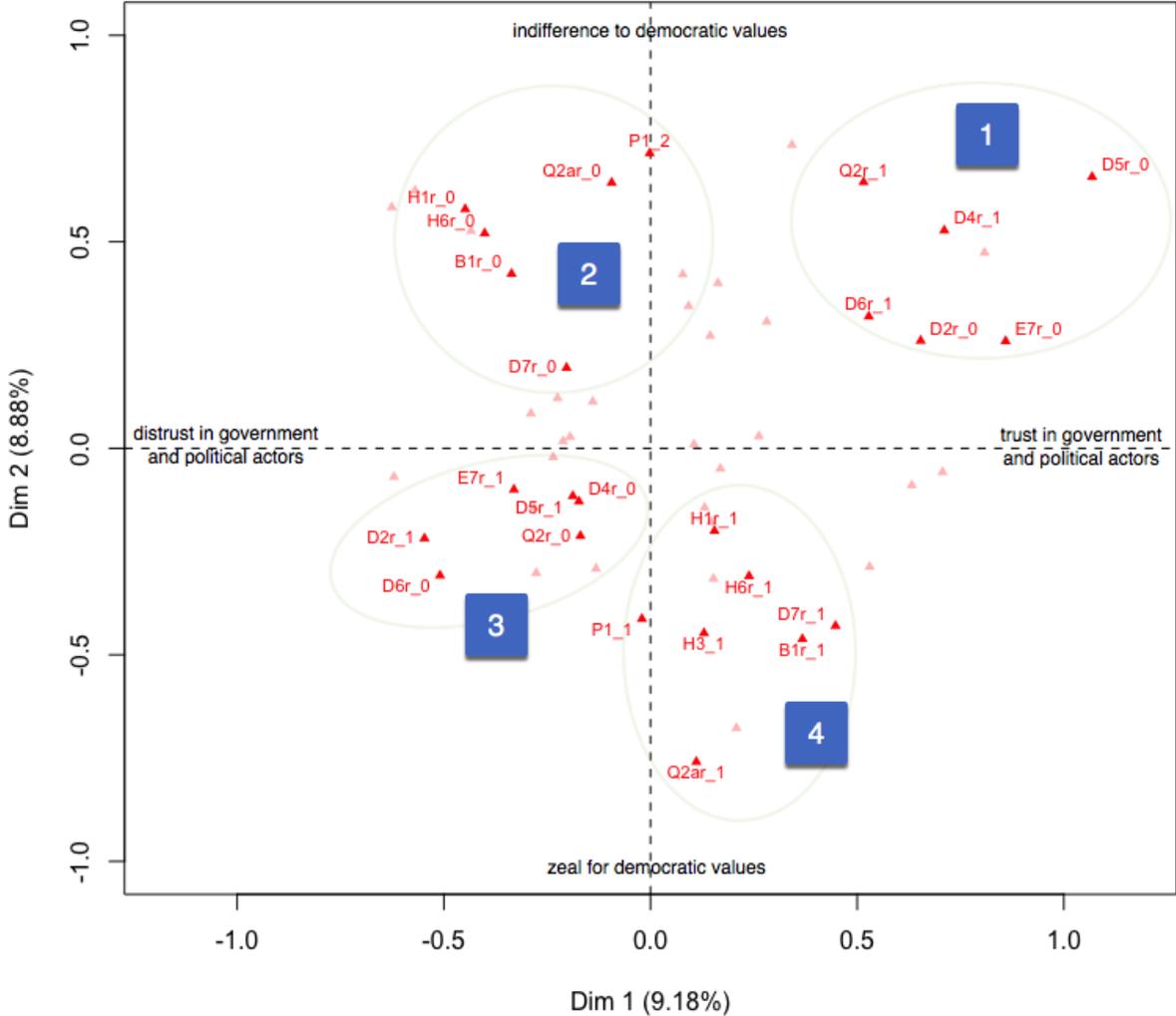
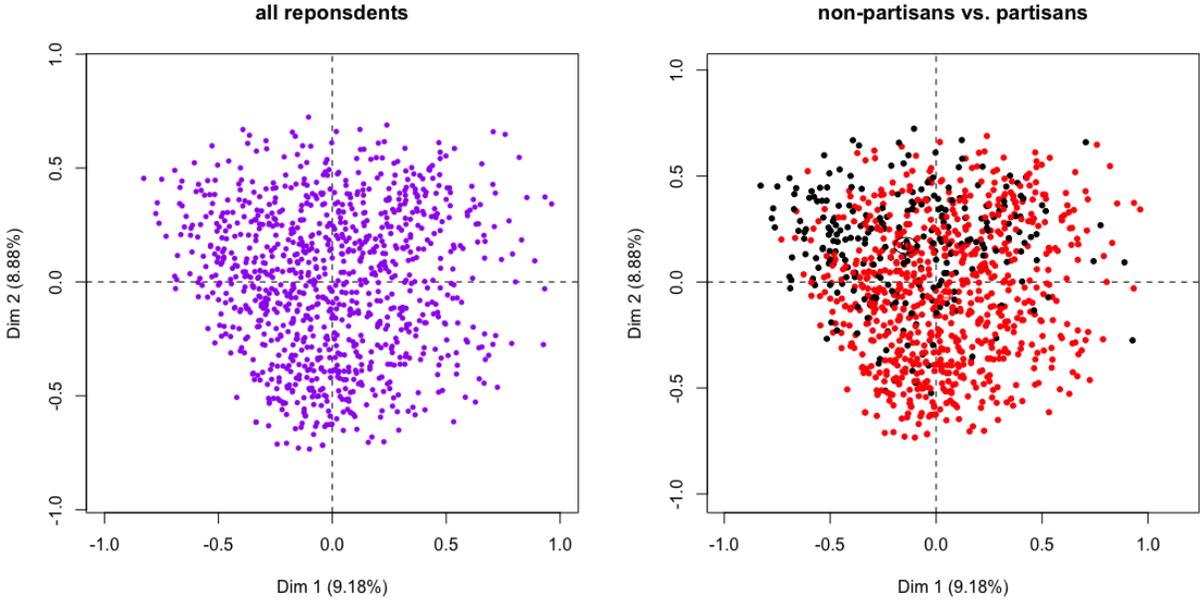


Figure 5. Category Factor Map



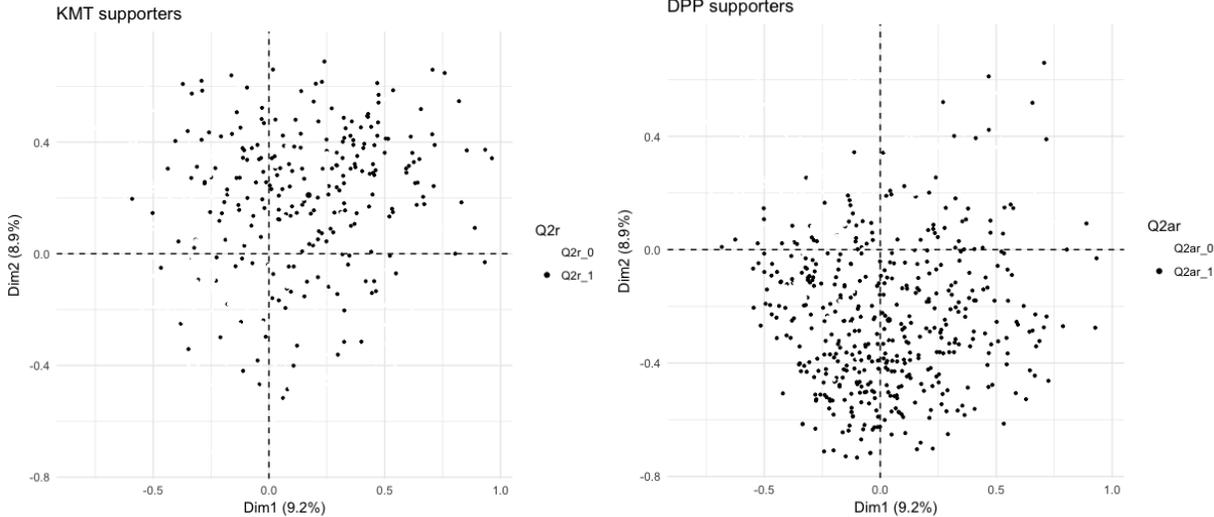
Note: the x-axis refers to a latent concept labelled as “trust in government and political actors” and the y-axis refers to a latent concept labelled as “passion for democracy”

Figure 6. Comparison between non-Partisans and Partisans



Note: the x-axis refers to a latent concept labelled as “trust in government and political actors” and the y-axis refers to a latent concept labelled as “passion for democracy”

Figure 7. Comparison between KMT and DPP Supporters



Note: the x-axis refers to a latent concept labelled as “trust in government and political actors” and the y-axis refers to a latent concept labelled as “passion for democracy”

Appendix 1: Recoding of Selected Survey Questions

<i>Variable Names</i>	<i>Original Variable Labels</i>	<i>Value Labels</i>	<i>Freq.</i>	<i>%</i>
A1r	How closely do you follow politics on TV, radio, newspapers, or the Internet?	0 not very closely, not at all 1 very closely, fairly closely	185 805	18.69 81.31
B1r	How interested would you say you are in politics?	0 very interested, somewhat interested 1 very interested, somewhat interested	517 473	52.22 47.78
D1r	Some people say: “People like me don’t have any say about what the government does”.	0 disagree, strongly disagree 1 agree, strongly agree	696 294	70.30 29.70
D3r	Some people say: “Sometimes politics seems so complicated that a person like me cannot really understand what is going on.”	0 disagree, strongly disagree 1 agree, strongly agree	295 695	29.80 70.20
D2r	Some people say: “Public officials do not care much about what people like me think.”	0 disagree, strongly disagree 1 agree, strongly agree	451 539	45.56 54.44
D4r	Some people say: “Most decisions made by the government are correct.”	0 disagree, strongly disagree 1 agree, strongly agree	796 194	80.40 19.60
D5r	Some people say: “Government officials often waste a lot of money we pay in taxes.”	0 disagree, strongly disagree 1 agree, strongly agree	148 842	14.95 85.05
D6r	When the government decides important policies, do you think “public welfare” is its first priority?	0 seldom, never 1 often, sometimes	504 486	50.91 49.09

D7r	You feel you understand the most important political issues of this country.	0 neither agree nor disagree, disagree, strongly disagree 1 agree, strongly agree	681 309	68.79 31.21
E3r	Most politicians are trustworthy.	0 neither agree nor disagree, disagree, strongly disagree 1 agree, strongly agree	757 233	76.46 23.54
E4r	Politicians are the main problem in our country (i.e. Taiwan).	0 neither agree nor disagree, disagree, strongly disagree 1 agree, strongly agree	228 762	23.03 76.97
E5r	Having a strong leader in government is good for our country even if the leader bends the rules to get things done.	0 neither agree nor disagree, disagree, strongly disagree 1 agree, strongly agree	684 306	69.09 30.91
E6r	The people, and not politicians, should make our most important policy decisions.	0 neither agree nor disagree, disagree, strongly disagree 1 agree, strongly agree	491 499	49.60 50.40
E7r	Most politicians care only about the interests of the rich and powerful.	0 neither agree nor disagree, disagree, strongly disagree 1 agree, strongly agree	275 715	27.78 72.22
G1r	Would you say that over the past twelve months, the state of the economy in Taiwan has gotten much better, gotten somewhat better, stayed about the same, gotten somewhat worse, or gotten much worse?	0 somewhat & much worse 1 about the same 2 somewhat & much better	545 402 43	55.05 40.61 4.34
G2r	Would you say that in the forthcoming year, the state of the economy of Taiwan will get better, stay about the same, or get worse?	0 somewhat & much worse 1 about the same 2 somewhat & much better	252 498 240	25.45 50.30 24.24
H1r	Different people have different opinions about voting. Some people think that voting is a responsibility, and you should vote even if	0 It's alright either to vote or not to vote 1 voting is a responsibility	254 736	25.66 74.34

you don't like any of the candidates or parties. Other people think that it is all right to vote or not to vote, and the decision depends on how you feel about the candidates or parties. Do you think that voting is a responsibility, or do you think that it is all right either to vote or not to vote?

H3	Which of these three statements is closest to your own opinion?	1 Democracy is preferable to any other kind of regime.	507	51.21
		2 Democracy is preferable to any other kind of regime.	300	30.30
		3 For someone like me, it doesn't matter what kind of regime we have.	183	18.48
H5r	On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the way democracy works in Taiwan?	0 somewhat & vary dissatisfied	365	36.87
		1 somewhat & very satisfied	625	63.13
H6r	Some people say that no matter who people vote for, it won't make any difference to what happens. Others say that who people vote for can make a big difference to what happens. Where would you place yourself? (a 5-point scale)	0 1~3	369	37.27
		1 4~5	621	62.73
P1	In Taiwan, some people think they are Taiwanese. There are also some people who think that they are Chinese. Do you consider yourself as Taiwanese, Chinese or both?	1 Taiwanese	628	63.43
		2 both	322	32.53
		3 Chinese	40	4.04
P2r	Do you believe that cross-Strait relations will become warmer, more tense, or remain unchanged?	0 more tense, much more tense	432	43.64
		1 unchanged	340	34.34
		2 warmer, much warmer	218	22.02

Q2r	I like to know what you think about each of our political parties. After I read the name of a political party, please rate it on a scale from 0 to 10, where 0 means you strongly dislike that party and 10 means that you strongly like that party. If I come to a party you haven't heard of or you feel you do not know enough about, just say so. The first party is KMT. (a 10-point scale)	0 1~5 1 6~10	745 245	75.25 24.75
Q2ar	Using the same scale, where would you place, DPP?	0 1~5 1 6~10	536 454	54.14 45.86
partisanship	Q1. Do you usually think of yourself as close to any particular party? Q1a. Do you feel yourself a little closer to one of the political parties than the others?	0 Q1=0 & Q1a=0 1 Q1=0 & Q1a=1 1 Q1=1	251 739	25.35 74.65

Source: TEDS2016 (N=1,690); subset without N/A for MCA analysis (N=990)

Appendix 2: Major Categories that Contribute to Both of the First Two Factors

