# Election Symbols

Alexander Lee<sup>\*</sup>

Weihong Qi<sup>†,‡</sup>

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#### Abstract

A large literature has shown that ballot order and ballot structure can influence voting. We focus on another behavioral cue for voting: the symbols that are assigned to candidates in many democracies. We take advantage of a natural experiment in India, where independent candidates can choose from a list of free symbols and conflicts are resolved by a drawing of lots. We find that winning the draw has a substantial effect on vote share. We find that candidates attempt to choose their symbols strategically, and that their choices are correlated with their own backgrounds. Candidates also choose symbols fitting their constituencies; household goods are preferred in where they are more commonly found in voter's homes.

<sup>\*</sup>Associate Professor of Political Science, University of Rochester, Harkness Hall, Rochester, NY 14627. Email: alexander.mark.lee@rochester.edu.

<sup>&</sup>lt;sup>†</sup>PhD candidate in Political Science, University of Rochester, Harkness Hall, Rochester, NY 14627. Email: wqi3@ur.rochester.edu.

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#### 1 Introduction

Many voters, often those with low information, are thought to vote based on cues they find on the ballot itself. Voters have been shown to vote differently based on order on the ballot (Gulzar, Ruiz and Robinson, Forthcoming; Ho and Imai, 2008; Blom-Hansen et al., 2016; Koppell and Steen, 2004) or the type of voting technology (Fujiwara, 2015; Desai and Lee, 2021).

In this research note, we make the first study of perhaps the most prominent behavioral cue on ballots in many democracies, election symbols. As a guide for illiterate voters, many countries, including India, South Africa, Italy Pakistan, the Bahamas, Egypt, Singapore, Thailand, and, formerly, many US states printed a party or candidate symbol next to the candidate's name. These symbols, which may be complex logos of simple pictures of everyday objects, are prominently displayed in the election materials of candidates, and become the one of the most important parts of their branding. While symbols are frequently mentioned in ethnographic accounts of elections (Banerjee, 2015), we are not aware of any systematic study of their effects, or their strategic use by candidates.

The possible effects of ballot symbols at are more complex than ballot order, since voters are theorized to always favor the first candidate due to cognitive heuristics (Kim, Krosnick and Casasanto, 2015) and all candidates consequently prefer to be first. Symbols, particularly everyday objects can have an emotive appeal to voters, and different groups of voters may be attracted by different symbols. Candidates, moreover, may find symbols that have some tie to their personality or platform especially effective. The "right" way for candidates to choose symbols thus varies both across constituencies and across candidates.

We focus on India, the world's largest democracy, to take advantage of a natural experiment in symbol allocation. While political parties are permanently assigned symbols, independent candidates apply for a symbol from a list of available ones, giving their top three choices. When multiple independent candidates choose the same symbol, a drawing of lots determines the winner. This lets us study the causal effect of gaining one's preferred symbol, as well as to study descriptively which symbols are chosen by whom.

Using a set of recent elections in the state of Tamil Nadu, we find that symbols can influence vote choice among independent candidates, even conditional on symbol choice and constitutency. Independent candidates who win their preferred symbol have a vote share of 21.8% higher than those who do not, though since most independents perform poorly this effect is small in terms of overall vote share. We believe that the impact of well-established party symbols may possible be larger—certainly competition between party factions over their use is intense.

Descriptively, candidates favor symbols previously associated with political parties, or visually resembling those of existing parties. Symbols associated with food, agriculture, cooking and luxury goods are also relatively popular, while furniture and toys are unpopular. There are also suggestive correlations between candidate traits and symbol choice. Older candidates choose the symbols of defunct political parties (with which they are more likely to be familiar) at high rates and poorly educated candidates are less likely to choose electronics. At the district level, areas where specific consumer goods are more common are more likely to see those goods chosen as symbols.

This note makes several contributions to the literature. It reinforces existing findings on the role of behavior and ballot effects factors in voting, providing evidence from a new, a potentially important, behavior cue. It also shows that parties anticipate this behavioral response, and shape their symbol selection to their own appeal and their constituency. More broadly, it shows that visual culture, often treated as epiphenomenal to political processes, can play an independent role in shaping behavior.

#### 2 Symbols in Politics

In many democracies, political parties or candidates must include election symbols next to their names on the ballot. These symbols are intended as an aid for voters incapable of reading candidate names, though the policy has persisted in democracies with high levels of literacy. These symbols are assigned or chosen some time before the election, and politicians often make these symbols a central part of their advertising and branding. However, while symbols are often discussed in ethnographic accounts of elections, the authors are aware of no study of their effects.

Voters, especially those who are tired or lack information, may rely on cognitive heuristics to make decisions among candidates. In the case of ballot order, they may assume that candidates listed first are more qualified and important than others, or simply be unwilling to process names after the first. Symbols are potentially much more evocative signifiers than ballot order. In the case of established political parties, they may be become associated with traditions of electoral success, or with specific policies. The rooster symbol, for instance, was closely associated with the Democratic party and with white supremacy in the state of Louisiana, and when in 1948 the state's rights faction of the party claimed the rooster for Strom Thurmond and forced Harry Truman to use the donkey symbol, this was considered decisive in destroying Truman's chances in the state (Key, 1949, 341). Even symbols with no past electoral use may convey information to voters. The Italian Christian Democrat's cross symbol, for instance, conveyed a message about the relationship between the party and the catholic church. In these situations, voters are using symbols to infer candidate ideology and qualifications in much the same way they might use party identification (Bonneau and Cann, 2015) or candidate occupation (McDermott, 2005) when those are listed on the ballot.

However, even pictures of everyday objects may convey similar semiotic content. A lantern, for instance, may convey images of light and enlightenment, guidance and leadership. Voters may use these symbols to infer candidate's ideology or qualifications even when they symbol assignment has only a limited relationship to their actual traits. Such behavioral preferences for superficial traits are well-known in consumer product marketing, where the color or design of logos and packaging strongly influences brand image and consumer choice (Bottomley and Doyle, 2006).

How should candidates respond to this voter behavior? In general, they should try to choose symbols that have positive connotations for voters: Strength, competence, benevolence etc. Which symbols carry such connotations, of course, varies from culture to culture, and from constituency to constituency, so the choices of candidates should vary spatially, unlike the strategic responses of candidates to ballot position (Gulzar, Ruiz and Robinson, Forthcoming). At a minimum, candidates should favor goods which are familiar to voters, in order to maximize the number of voters making inferences based on the symbol, or to make the candidate seem more familiar to voters.

More subtly, candidates may seek symbols that reinforces their existing branding. The informational effect of symbols may be stronger where it echoes existing information about the candidate. A farmer candidate, for instance, can reinforce his image as a farmer by choosing a plough as a symbol, while the same choice by a non-farmer would seem random. To the extent possible, candidates should thus choose symbols that represent some aspect of themselves and their ideology, even when the symbols has no explicit political relevance.

To summarize, we expect that 1) symbols should influence vote choice, 2) candidates should chose symbols that are common within their constituencies, and 3) that candidates should choose symbols that are reflective of their own appeal and aspirations. In the rest of the note, we test the first of these claims, and provide descriptive evidence for the other two.

#### 3 Election Symbols in India

Election symbols play an important role in the political process in India, the world's largest democracy, where they were instituted at independence as an essential tool for voting in a society where illiteracy was common. India is a federal parliamentary democracy where both state and national legislatures are elected from single member districts using a plurality system. Each candidate has a symbol printed next to their name and button on the electronic voting machine.

Candidates of electorally successful national and state parties ("recognized parties") are guaranteed the exclusive use of their symbols. These symbols, like the hand of the Indian National Congress and the lotus of the BJP, are universally known and closely associated with the parties in question. When parties split, the faction that gets the party symbol, which is regarded as having a major advantage. Candidates of "unrecognized" parties, which are unable to meet the minimum electoral performance to be recognized, must choose their symbols from a list of free symbols created by the national Election Commission, though once they have done so they get the symbol are verywhere they run candidates (though not elsewhere. Most of these symbols are

drawings of everyday objects. Figure 1 shows images of the most popular free symbols.



Figure 1: The Five Most Popular Free Symbols

Independent candidates are allotted symbols from among the free symbols not claimed by the parties. They are allowed (but not required) to list their top three choices of symbol on their nomination forms. Candidates are allotted their top choice if no other candidate wants it. If several independent candidates want the same symbol, the District Electoral Officer (a senior bureaucrat) conducts a drawing of lots to determine who gets it.

The high value of symbols to parties can be seen in the intrigues within the All India Anna Dravida Munnetra Kazhagam (AIADMK), one of the two major parties in the southern state of Tamil Nadu. Under longtime leaders M. G. Ramachandran (MGR) and J. Jayalalithaa, the party's two leaves symbol had become ubiquitous on walls and banners in Tamil Nadu. According to the party website, the two-leaves symbol showed Javalalithaa "is two times the magnificence of other leaders" and "will work double for its people."<sup>1</sup> After Jayalalitha's 2016 death, the party was gripped by a factional struggle between her former aides O Panneerselvam (OPS) and Edapaddi K Palaniswamy (EPS) and T. T. V. Dhinakaran, the nephew of Javalalitha's longtime companion. Both petitioned the election commission for "the famed Two Leaves, [which] has a history of bestowing credibility and cementing loyalty." The election commission was unable to decide, and granted EPS and Dhinakaran the hat and OPS the electric pole. Both sides were aware of the symbolic possibilities of these choices. Hat-wearing EPS supporters proclaimed that "the Hat is very favourable for us because our leader MGR always wore a hat. We'll wear the hat and camp and it will be definitely effective," while OPS supporters were pleased that "the symbol in some sense resembles the...two leaves" and that "it was not long ago that Chennai corporation converted all the lamps in city into the two lamps model, and that..has made their job familiarising the twin lamps easy."<sup>2</sup> When EPS and Dhinakaran fell out, the election commission granted OPS and EPS the two leaves, while Dhinakaran was granted his own symbols, first the pressure cooker, then the gift box and then the pressure cooker again.

It is difficult to overstate the role of election symbols in the visual culture of India politics. Banerjee (2015, 120) notes that "party symbols are used liberally in all campaign materials; party supporters are encouraged to sport clothing, umbrellas, caps, and scarves marked by the party symbol and in the colours of the party thereby creating maximum visibility and subliminal awareness among voters during a campaign. Great play is also made on the names of parties and the symbols...Akhilesh Yadav of the Samajwadi Party made the most of his party's symbol, which is a bicycle...he cycled thousands of miles across Uttar Pradesh... By doing so he could convey a message about his down-to-earth nature, his accessibility, his desire to identify with the common person despite his expensive overseas education, and his youth and vigor with which he hoped to replace his aging and unwell father." During the campaign they are painted

 $<sup>^{1} {\</sup>tt https://indianexpress.com/article/india/panneerselvam-palaniswami-sasikala-dhinakaran-aiadmk-two-Accessed 8/17/21}$ 

<sup>&</sup>lt;sup>2</sup>https://www.indiatoday.in/india/story/tamil-nadu-election-commission-hats-electric-poles-967308-: Accessed 8/17/21

over walls throughout the country, and independent candidates regard the fact that they are assigned symbols only after nomination a major disadvantage in making themselves know to voters.

#### 4 Data and Estimation

To study the effect of symbols, we focus on four elections in the Indian state of Tamil Nadu. While the list of available symbols and the lot drawing policy are implemented nationally, they are difficult to study because each candidate's top three symbol choices are listed on their nomination forms. These forms, unlike the much-studied affidavits of candidate assets and criminal cases, are not usually made public, but the Chief Electoral Officer of Tamil Nadu began posting them online in 2019. We scrapped these forms, which were then manually translated from the original handwritten Tamil. This data was then merged with the candidate affidavit data digitized by the Association for Democratic Reforms and the Trivedi Center's Election data.

The data covers four different elections for two different bodies held on three separate days. The 2016 and 2021 state elections chose members for the 234 seats in the state assembly of Tamil Nadu. In April 2019 elections, were held for Tamil Nadu's 39 seats in the national parliament, as well as by-elections in 18 state assembly constituencies.

We focus on independent candidates, since they can choose their symbols. Across the four elections, we have data on the symbol choices of 3628 independent candidates.<sup>3</sup> Of these, 1.3% were illegible, 23.7% did not indicate a choice, 19.0% choose a symbol not on the permitted list, 11.3% choose a valid symbol but had their first choice preempted by a unrecognized party, 28.7% received their unique first choice, and 9.7% made conflicting first choices and were entered into a the drawing of lots. We focus on the last category in our causal estimation of the effects of symbols and the last three categories in our descriptive study of symbol choice.

The dependent variable is logged vote choice in percent. The unlogged variable is strongly right-skewed, as shown in Figure A.1. While a few independent candidates win

<sup>&</sup>lt;sup>3</sup>A small number of candidate's nomination forms were not available for technical reasons.

sizable votes, in Tamil Nadu's two block party system most do very poorly, with the median independent earning only .08% of the vote.

While winning the lottery is random, there is heterogeneity between winners and losers in the distributions of symbol choice (since there can be many losers but only one winner) and there is also heterogeneity between constituencies and across types of elections in the level of political competition. For these reasons, the main models include fixed effects for each drawing of lots (year-constituency-first choice symbol). For this reason, the estimates we present are the effect of winning the lottery conditional on constituency and symbol choice, neither of which vary within strata. Standard errors are clustered at the constituency-year level to account for the interdependence of vote choice in a race. the estimating equation is thus:

$$Log(VoteShare)_{ijt} = \beta_0 + \beta_1 LotteryWinner_{it} + \beta_2 F_{ljt} + \epsilon_{ijt}$$

where  $Log(VoteShare)_{ijt}$  is the logarithm of vote share of candidate *i* of constituency *j* in year *t*,  $LotteryWinner_i$  is the dummy variable indicating whether candidate *i* won the lottery,  $F_{ljt}$  is the lottery fixed effect in year-constituency-first choice level and  $\epsilon_{ijt}$  is the error term.

#### 5 Results

	(1)	(2)
	Log(VoteShare)	Log(VoteShare)
LotteryWinner	0.218	0.284
	(0.110)	(1.188)
$Literate \times LotteryWin$	nner	-0.070
		(1.452)
Drawing FE	YES	YES
Ν	330	256

Table 1: The Effects of Winning Lottery on Vote Share

**Note:** The table reports the effects of winning lottery in symbol assignment on the vote share of the candidates. The results show that winning lottery increase vote share by 21.8%. Standard errors in parentheses are clustered at the constituency. The drawing fixed effect of symbol selection and constituency is included in each model.

Table 1 shows the effect of winning one's preferred symbol on vote share. For a candidate with the median vote share, winning one's preferred symbol would increase vote share by 21.8%.

It is tempting to theorize that the effect of winning a symbol would be higher in areas with high illiteracy, where more voters might be supposed to be choosing candidates based on their symbol. However, there is insufficient variation in Tamil Nadu (one of India's more literate states) to test this. Model 2 shows that while the effect of winning the lottery is higher in districts with high literacy, the effect is not statistically significant in our relatively small sample. Note that the direct effect of literacy is absorbed by the lottery fixed effects.

What types of symbols are chosen? Figure 2 shows the top 20 symbols chosen by candidates. Of these symbols, eight had a previous association with a political party or faction, or are thought to resemble a major party symbol.<sup>4</sup> The other popular symbols include the diamond, television and coconut farm.

Figure A.2 shows the distribution of first choices across categories of free symbols, relative to the overall distribution of free symbols. Overall, candidates do not seem to cluster on particular types of symbol. While symbols associated with transportation and construction and cooking are popular, this is broadly reflective of the distribution of available symbols.

Do candidates choose symbols that are particularly fitted to their constituency? We find some evidence for this in Table 2. Candidates seem to be more likely to choose objects that are relatively familiar to their voters. Using the 2016 National Family Health Survey, we calculated the proportion of households in each administrative district who possess a wide variety of household goods. We focus on four goods that are relatively common as symbols (greater than .5% of first choices) and neither universal nor rare—air conditioners/coolers, pressure cookers, gas stoves/canisters and computers. The choice of these symbols is more common in areas where they are common in the homes of

<sup>&</sup>lt;sup>4</sup>Auto rickshaw (RMM), pen nib with rays (resembles DMK sun), pot (VCK), pressure cooker (AMMK), electric pole (AIADMK faction), gift box (AMMK), ring (IJK) and hat (AIADMK faction)





Note: This figure shows most popular first choices of candidates in the sample. The most popular choice, Auto-Rickshaw, was chosen by 114 candidates out of 1720 first choices in the sample. Symbols associated with a party are marked in italics.

voters, and we can jointly reject the null that the joint effect is zero. The results with full controls are shown in Table A.2.

Do candidates choose symbols that are particularly fitted to their personality or appeal? We find evidence for several such associations. Most simply, some of the free symbols were formerly associated with political parties or factions, but subsequently became available after the party dissolved or was granted a new symbol. As we have seen, such symbols are among the most popular choices for independent candidates. However, older candidates might be expected to be more familiar with these symbols, since they were more likely to be politically aware when they were in common use. We find evidence for such an association in Table 3: elder candidates are more likely to choose former party symbols.

Candidates may also be unwilling to choose symbols with which they are not familiar, or which are inconsistent with their background. Many of the available symbols are electronic goods, such as computers, which are relatively uncommon and unfamiliar to

	(1)	(2)	(3)	(4)
	Computer	Pressure cooker	Air conditioner	Gas Cylinder
Computer	0.176			
	(0.111)			
	[0.133]			
Pressure cooker		0.152		
		(0.129)		
		[0.061]		
Air conditioner			0.383	
			(0.187)	
			[0.105]	
LPG (natural gas)				0.025
				(0.082)
				[0.071]
Controls	YES	YES	YES	YES
· · · · · · · · · · · · · · · · · · ·	- 10	- 20		
SUR $\chi^2 = 11.29$ , $Prob > \chi^2 = 0.0235$				
N	1357	1357	1357	1357

Table 2: The Effects of District Features on Symbol Choices

**Note:** The table reports the correlation between district features and symbol choices by individual candidates. Empirical results show that the candidates from districts with more air conditioner are more likely to choose it as the election symbol. Standard errors in parentheses and square brackets are clustered at district level. The standard errors in parentheses are from single OLS regression models and standard errors in square brackets are from SUR joint model test. The table with full controls is presented in Table A.2.

some voters. In Table 3, we show that less educated candidates (those who have not graduated secondary school) are less likely to choose electronics. This is consistent with the NFHS survey data, which find that electronic goods, especially computers, are less common in the homes of the less educated.

#### 6 Discussion and Conclusion

Election symbols, like other aspects of ballot structure, have a small but appreciable effect on vote choice, with candidates winning their favorite symbols winning significantly more votes than those that do not. Note that this is very probably an underestimate of the potential effect of symbols, since we are estimating the effect of first choice symbols relative to second and third choice symbols, rather than relative to the least attractive symbols. In addition, many of the most attractive symbols are presumably chosen by political parties. The results suggest that more study of the role of visual culture in politics may be warranted.

	(1)	(2)
	Previous party	Electronics
Female	-0.088	-0.032
	(0.040)	(0.050)
Criminal Cases	0.061	-0.023
	(0.062)	(0.043)
Log(age)	0.132	-0.007
	(0.061)	(0.048)
Log(assets)	0.001	0.000
	(0.007)	(0.007)
Poor education	-0.021	-0.065
	(0.026)	(0.022)
N	1137	1136

Table 3: The Effects of Personality on Symbol Choice

**Note:** The table reports the correlation between personality and the symbol choices by the individual candidates. The results suggest older candidates are more likely to choose previous party symbols, and poor educated candidates are less likely to choose electronics. Standard errors in parentheses are clustered at constituency level.

Unlike with other elements of ballot structure, the nature of what constitutes a good symbol varies from constituency to constituency and from candidate to candidate, with candidates choosing symbols likely to be familiar to themselves and to their voters, and that project their own willingness to pay for votes. This indicates that candidates are strategically responding to the behavioral heuristics of voters, attempting to maximize the degree to which "irrational" elements of voter's decision calculus benefit them. To the extent that these choices contain meaningful information about candidate type, symbols, and images more generally, may in fact be a more reasonable decision heuristic for voters than others commonly in use. Future research may wish to focus on the way images are chosen to signal the policy and personality of candidates.

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# Online Appendix

## A Summary Statistics and Additional Results



Figure A.1: Vote Share of Candidates before Logarithm ( $\leq 2$ ) Note: The figure only shows the vote share of candidates below 2% which is enough to show the strong right-skewed distribution. There are only 68 candidates won more than 2% of vote share.



Figure A.2: Top 10 First Choice Category Distribution and Overall Category Distribution Note: This figure shows top 10 category distribution of first choices made by the candidates and the overall distribution.



Figure A.3: Balance Tests for the Winning Lottery

	(1)	(2)	(3)	(4)	(5)
	Female	Criminal Cases	Log(age)	Log(assets)	Poor education
LotteryWinner	0.060	0.034	-0.063	-0.000	-0.051
	(0.047)	(0.048)	(0.039)	(0.000)	(0.098)
Criminal Cases	-0.022		-0.033	0.000	0.162
	(0.023)		(0.070)	(0.000)	(0.123)
Age	-0.001	0.038		-0.000	0.013
	(0.008)	(0.039)		(0.000)	(0.033)
Log(age)	0.026	-1.620		0.000	-0.272
	(0.333)	(1.533)		(0.000)	(1.414)
Log(assets)	0.005	0.009	0.021	1.000	-0.027
	(0.009)	(0.015)	(0.012)	(0.000)	(0.023)
Poor education	0.032	0.073	0.080	-0.000	
	(0.051)	(0.056)	(0.045)	(0.000)	
Female		-0.068	-0.045	-0.000	0.216
		(0.049)	(0.044)	(0.000)	(0.327)
Constant	-0.150	4.280	3.486	-0.000	1.288
	(0.834)	(3.995)	(0.159)	(0.000)	(3.747)
N	170	170	170	170	170

Table A.1: Balance tests for winning lottery

**Note:** The table shows the balance tests for the lottery winning dummy. Standard errors in parentheses are clustered at the constituency.

	(1)	(2)	(3)	(4)
	Computer	Pressure cooker	Air conditioner	Gas Cylinder
Computer	0.175			
1	(0.144)			
Pressure cooker	<b>`</b>	0.092		
		(0.158)		
Air conditioner			0.491	
			(0.230)	
LPG (natural gas)				-0.004
				(0.078)
SC Population	0.001	-0.001	-0.001	0.000
	(0.001)	(0.002)	(0.001)	(0.001)
Literacy	-0.434	0.416	-0.153	-0.382
	(0.121)	(0.497)	(0.082)	(0.194)
Rural Population	-0.001	0.001	0.000	-0.001
	(0.000)	(0.001)	(0.000)	(0.000)
General Election	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)
Byelection	0.007	0.194	-0.003	-0.030
	(0.023)	(0.060)	(0.009)	(0.011)
Female	-0.007	0.019	-0.009	0.037
	(0.015)	(0.037)	(0.004)	(0.033)
GDP	0.000	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.378	-0.320	0.114	0.346
	(0.094)	(0.398)	(0.065)	(0.166)
N	994	994	994	994

Table A.2: The Effects of District Features on Symbol Choices

**Note:** The table reports the results of local features on symbol choices with full control variables. Standard errors in parentheses are clustered at the district.