

Voter Specialization in Local Elections

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Abstract

The established literature on voter behavior suggests that voting typologies can be generally defined as follows: (1) voters participating in all elections, (2) voters participating in state and federal elections only, (3) voters participating only in federal elections, and (4) voters participating only in presidential elections. My thesis investigates whether there are some voters who fall outside of these established voting typologies and focus their civic efforts towards nonpartisan or local issues elections. Utilizing data from the Ohio Secretary of State, I used Q methodology factor analysis to distinguish voter types. While I was unable to establish a local-specialist voter type, I was able to find groups of biennial federal specialists and habitual voters. Using hypotheses for the characteristics local specialists might have in common, I performed multivariate regression analysis to explain the difference between these federal specialists and the habitual voters who participated in local elections. I found that the habitual voters tend to be less partisan and from more rural counties, and turnout more often when elections have tax issues on the ballot and less often when elections have bond issues on the ballot. I found no indications that these habitual voters tend to be older or have specializations in local or miscellaneous issues (as defined by the Ohio Secretary of State).

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We cannot kindle when we will
The fire which in the heart resides;
The spirit bloweth and is still,
In mystery our soul abides.
But tasks in hours of insight will'd
Can be through hours of gloom fulfill'd.

With aching hands and bleeding feet
We dig and heap, lay stone on stone;
We bear the burden and the heat
Of the long day, and wish 'twere done.
Not till the hours of light return,
All we have built do we discern.

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Chapter 1

Introduction

On November 4th, 2008, for the first time in my life, I cast a vote for president of the United States. Though this was not the first election in which I had participated (my first was the midterm election in November, 2006), it was the first with such widespread national and even international interest. Joining me on that day, in addition to the rest of the voting public, were my mother, my father and grandmother, each of whom has a varied and different voting history, but whose voting behavior in part inspired this research.

My mother first voted in 1984 when Ronald Reagan ran for reelection against Walter Mondale. She was encouraged by her grandfather to vote for the Republican candidate, because he would “protect their money”—an interesting notion since she had nowhere near enough money to require any “protection.” Not long after, she and my father moved from Ohio to California. By the time the next election came around, Vice President George H. W. Bush was running for president, and I was just shy of two months old at the time. I was a colicky, fussy baby that required lots of attention, so she couldn’t be bothered to vote.

Starting in 1992 with Bill Clinton’s first presidential race, she voted for the Democratic candidate at the urging of her grandmother, who informed her of the family’s long-standing progressive ties (“our family always votes Democratic,” her grandmother used to say). Up to and including the election of Barack Obama to the presidency in 2008, my mother has cast ballots in the presidential elections and in two midterm elections (2006 and 2010). Her interest in politics was always marginal at best, with a slight increase in interest occurring briefly during the 2008 presidential election. It has since receded once again.

My grandmother’s voting history is not much different, though her story certainly is. She is a woman who thinks of herself as a “rebel”—someone always trying to separate herself from the mainstream. She gave birth to both of her

children during her latter teen years. She first voted, just before the birth of my mother, for John F. Kennedy in November of 1960. By the time her children were in high school, she found herself the mistress of a Catholic millionaire who was unable to get a divorce. During their time together, he became more and more controlling of her everyday life, and she was eventually forced to break off all contact with him. She found herself in an old van with her dog, heading west to explore the rest of the country.

Eventually she made her way to Colorado, where she took up residence in a small cabin in the woods outside of Redstone. As you might imagine, her voting history is quite fractured. Rarely was she in a place long enough to find herself eligible to vote, nor did she have any interest in voting for a government she had since found both hypocritical and highly objectionable. Once her life had “settled down” in Colorado, she was stable enough to vote, but only did so occasionally, and then only for president. In the Marble, Colorado firehouse, sitting on an upturned bucket, she once cast a vote for a third party candidate whom she cannot remember (we eventually determined it was H. Ross Perot, though she could not recall whether it was in 1992 or 1996), and always for Ralph Nader whenever he was a candidate.

My father describes his voting history as being “fairly straight forward.” He has always voted in presidential elections, but no others outside of the general election like primaries or special elections. He has always voted for a candidate rather than against a candidate, and has shown up only to support a particular candidate or issue that he felt strongly about. He has no party affiliation, and chooses only to vote when he feels educated enough to cast a ballot intelligently.

In almost every election, one will see people involved in get-out-the-vote (GOTV) efforts, trying to mobilize voters described as “chronic nonvoters” (Arceneaux and Nickerson 2009). Efforts to mobilize unreliable voters can often make or break a candidate’s chances in an election, especially if that election is likely to be close. GOTV efforts are often touted to be the deciding factor for increasing turnout when a person’s propensity to vote is low (Arceneaux and Nickerson 2009). Reasons why some voters chose to vote with regularity and others are either unaware or indifferent to an election differ.

Some voters, like my grandmother, are only interested in top-of-the-ticket offices such as president, senator or governor, and have little interest in the “insignificant” offices that occur further down the ballot. Others may have an interest only in specific issues, and look only for elections and candidates relevant to those issues. Still others may only be concerned with the candidates themselves, rather than the offices or issues, as my mother did in 2008, and cast their votes specifically for people over other concerns. Flanigan and Zingale (2010), in their text on American voter behavior, suggest that the difference in

turnout between elections and in votes cast for top-of-the-ticket versus further down-ballot candidates is the result of five factors:

1. Difference in media coverage based on the nature of the election.
2. How voters see the significance of the office.
3. Salience of issues raised during the campaign cycle.
4. How attractive (physically, politically, etc.) a candidate appears to voters.
5. How contested the election is likely to be.

These factors led Angus Campbell (1966) to define a classification of elections as being either *high-stimulus* or *low-stimulus*. However, what this information does not indicate are the natures of the voters themselves and why they choose to turnout (or not) for a specific election. For some voters, these five factors may have no effect on their likelihood to turnout to an election, and for others, the effect may be extremely pronounced. In some elections, most of these determinants are non-existent, such as a race for a local school board in a small, isolated community. Yet, people continue to turn out for these elections, suggesting that there may be other stimulating factors influencing the decision of whether or not to vote.

Voters are generally classified into two categories. The first are *habitual* voters. These voters, as the name implies, participate in as many elections as they can. My mother has become a habitual voter in recent years. She votes in every general election, often asking for my advice on how to vote because she thinks it is important enough to participate but lacks confidence in her ability to make the “right” choice on her own. She also votes in primaries and special elections whenever they are held. Thus far, I also count as this type of voter, since I have participated in every election available to me since I became eligible to vote.

The differences in turnout for offices across time come from the second type of voter, the *episodic* voter. These are voters who do not participate regularly in any elections, but pick and choose through the myriad of options over the course of their voting lifetime and cast ballots for those races in which they are inspired to participate. These voters form specializations around certain types of elections, like the biennial federal contests or presidential elections, and participate only in those elections, rather than every election available to them like the habitual voters. These episodic voters may be motivated by the five factors suggested by Flanigan and Zingale, and turn out only for elections that rank high on these factors. However, some voters may participate in elections where these factors rank quite low, like local contests, when they feel their vote really can make a difference or when the issues are particularly meaningful.

My grandmother seems a classic example of an episodic voter. She has voted for only a handful of presidents in her seventy-two years, and none with any regularity. Even knowing her as I do, it's hard to see a pattern in her electoral behavior that could be described as habitual. My father might appear to be episodic from a participation standpoint, though controlling for a specific issue or issues that are salient to him would cause his behavior to become more habitual. Other instances of episodic voters are prevalent in many races in the United States. The differences in total turnout for a president's first election versus those for his reelection imply that the number of episodic voters has changed, because habitual voters—by their very nature—are always present in the voting base, though additional changes occur as voters die and new voters register.

From these types of voters another distinction must be made: some of the voters are partisan voters, while others are nonpartisan. At the national level, this information is much less important due to the high visibility of the race. Whether or not voters are aware of the nominees' partisan affiliation before casting their votes, the inclusion of partisan labels guarantees that knowledge after receiving a ballot. Even if they were non-partisan voters, it would be impossible to determine from the available data. However, at the local level, party identification of candidates or issues may be unknown to voters, or may be entirely non-existent if the race itself is a non-partisan race. At this level, partisanship can disappear, leaving an entirely new set of cues as the determining factor in voters' choices.

Adrian (1958) offers a typology of nonpartisan¹ elections with distinctions between levels of partisan involvement. These typologies differ by the prevalence of voters' knowledge about partisan support for candidates even though party labels do not appear on ballots. His first type (Type I) are elections where only those candidates supported by a major party have any chance of being elected. Voters view these contests as interchangeable with partisan elections. His second type (Type II) allows for candidate support to come from both parties and interest groups, with parties given a somewhat diminished role. His third type (Type III) eliminates the presence of political parties and allows for candidate support to come only from interest groups. Finally, his fourth type (Type IV) are elections where neither parties nor groups have any particular role in endorsing candidates. He found this fourth type to be quite common, especially in small-population areas of fewer than five-thousand residents, where politics is far more of an inter-personal activity. The characteristics of this fourth type of nonpartisan election, coupled with its apparent frequency in small towns

¹For common characteristics of nonpartisan elections, see Adrian (1952).

and cities, suggest that this may be the place where the factors identified by Flanigan and Zingale are not influential on turnout. Instead, voters respond to a different set of motivators.

Finally, it should be mentioned that there remains one final voter type: the *non-voter*. This person abstains from voting at all times and is likely to not be registered (at least by their own doing). Usually, this voter-type is combined with habitual voting and is considered a *habitual non-voter*.

It is my suggestion that the definition of habitual voters needs to be adjusted. A habitual voter may cast his or her ballot in every local election, but pay no attention to elections for state or national office. Likewise, a habitual voter may cast a ballot for every presidential race but have no interest in any down-ballot candidates or races. A habitual voter might even focus exclusively on an issue set, such as education, and only vote in elections with education-related items, and within that election ignore anything not related to education. What a habitual voter does is *consistently* votes in a given election or elections.

In any case, habitual voters are the core of any election's turnout—always present and always voting. My father is an example of this kind of habitual voter, in that he casts a vote regularly for president of the United States.

What may be the case is that some voters that appear to be episodic voters (those without any obvious regularity in voting) may actually be habitual voters with specializations. These voters may find themselves specializing in a type of election—such as partisan or non-partisan races. Or perhaps they are voters who specialize in participating only when a certain local issue is raised, such as a farmer voting for a ballot initiative regarding water rights or a family voting for a mill levy intended for closing a school district's budgetary shortfall. These voters would appear to be episodic voters, perhaps voting in a primary election here and there, a general election once and a while, and an occasional midterm race.

Because of the use of the anonymous Australian ballot, we cannot know specifically how each person voted. However, knowing the content of those ballots may allow some insight to be extracted from the available data. My research question can be stated as follows: *Are there clusters of voters falling outside of the traditional voting typologies who specialize in local non-partisan or issues elections?*

Exploration of this question will be accomplished with data provided through the Ohio Secretary of State.² These data consist of validated voter files, updated on a weekly basis, which include (among other things) voters' names, addresses, political jurisdictions, party registration, and election participation since the

²These data are available for download from the website of the Ohio Secretary of State at <http://www2.sos.state.oh.us/pls/voter/f?p=111:1>. Link valid as of February 5, 2013.

year 2000. Also available from the Ohio Secretary of State are descriptions of ballot content and turnout figures for those elections, which includes votes cast for both candidates and ballot issues.

Chapter 2

Literature Review

The discussion of voter types naturally stems from an overall discussion of voter turnout and the factors that contribute to an individual's choice to show up at the polls. By standard definition, habitual voters choose to turnout for most or all elections, while episodic voters choose to turnout in relatively few contests.

1 Modeling Individual Turnout

In 1957, political scientist Anthony Downs published a treatise about voter behavior. In it, he proposed a model by which economic theory could be used to analyze political decision-making. Riker and Ordeshook (1968) used Downs' proposals to construct a mathematical model of vote turnout choice in "A Theory of the Calculus of Voting," upon which most subsequent models were based or from which they were altered. This model is:

$$R = PB - C \tag{2.1}$$

where

- R = the utility of voting.
- P = the probability of casting a decisive vote.
- B = the benefits perceived of having one candidate win over another.
- C = the costs incurred by the act of voting.

R is the indicator of turnout, the indicator of the utility or reward of participation. If $R \leq 0$, turnout will not occur. Any positive value of R gives a voter the incentive to turnout for an election. P is how likely the vote of the individual is to bring about B , which represents the benefits of the election of

one candidate over another. P is represented as a percentage (in decimal form), with the value $0 \leq P \leq 1$. The interaction term PB in this model represents the benefits of voting. Finally, C represents all costs associated with turning out for an election, both explicit (such as income lost from missing work) and implicit (such as time lost that could be spent doing other things that would bring greater utility).

The outcome for an individual voter is simple: whenever $PB > C$, voting will occur, and when $PB \leq C$, the costs outweigh the benefits, and voting will not occur. The failing of this model occurs most prominently at the national level. The probability P of casting a decisive vote is essentially zero for any one person because of the large number of voters participating in national and state-level elections. Thus, turnout R would essentially be determined by $-C$, meaning that according to this model, no one has an incentive to vote in national or even most state-wide races.

The only place where this model may be viable is at the local level, albeit dependent upon the size of the local race (i.e. small rural community vs. large metropolitan area). In a small local race, the probability P of a single person's vote making a difference is larger than that of national and state-level elections. Additionally, given the characteristics of Adrian's (1958) Type IV elections, local races in small population areas play by a different set of rules than larger metropolitan, state-wide or national races. It is in these races where the benefits PB and costs C can be substantially different, since politics can (and often does) take on an inter-personal aspect, which Adrian calls the "politics of acquaintance" (1958, 457). However, even in these Type IV elections, the altered benefits PB may or may not be enough to outweigh the altered costs C .

Because of the insufficiency of Downs' initial model in accounting for turnout (Aldrich 1993; Riker and Ordeshook 1968), an additional variable was added:

$$R = PB - C + D \quad (2.2)$$

where

- R = the utility of voting.
- P = the probability of casting a decisive vote.
- B = the benefits perceived of having one candidate win over another.
- C = the costs incurred by the act of voting.
- D = civic and/or psychological benefit of voting.

The addition of the variable D represents additional benefits received from voting that aren't included in the benefits PB , such as "the satisfaction from

compliance with the ethic of voting, the satisfaction from affirming allegiance to the political system, the satisfaction from affirming a partisan preference, the satisfaction of deciding, going to the polls, etc., [and] the satisfaction of affirming one's efficacy in the political system" (Riker and Ordeshook 1968, 28):

$$D = \sum_{i=1}^n d_i \quad (2.3)$$

where

d_i = the individual components that comprise the additional benefits D .

The difference between C and D represents the net costs of voting, which can be either positive or negative.

As in the initial model, the interaction term benefits PB vary significantly across elections. In high-visibility, high-salience elections like presidential contests, most voters assign high values for the benefits B , and a non-zero value to the probability P of casting a decisive vote (especially if the state is considered a "swing" state), allowing the interaction term benefits PB to significantly influence the utility of voting R .

Conventional voter types can be identified using this model. For a habitual voter, D is a variable that is always strong enough to drive turnout irrespective of the values of the interaction term benefits PB or costs C :

$$PB + D - C > 0 \text{ for } PB > 0. \quad (2.4)$$

$$D - C > 0 \text{ for } PB = 0. \quad (2.5)$$

For swing state habitual voters (2.4), the interaction term benefits PB become the additional benefit to turnout. In non-swing states (2.5), the interaction term benefits PB are an unrealized benefit.

The episodic voter, on the other hand, frequently (but not always) finds that the costs C exceed the total benefits $PB + D$:

$$PB + D - C > 0 \iff \text{Participation.} \quad (2.6)$$

$$PB + D - C \leq 0 \iff \text{No Participation.} \quad (2.7)$$

For a typical nonvoter, it is reasonable to assume that the civic and psychological benefits D are almost always valued at or near zero. It is also reasonable to assume the same for the benefits B , making the interaction term benefits PB equal to zero as well. A nonvoter's utility of voting is therefore essentially determined by $-C$, which results in their consistent absence at the polls.

For any voter participating in a large contest, the probability P that his or her vote will be decisive is extremely small. In this case, the value of P , and thus the interaction term benefits PB , is always zero or nearly zero, suggesting that the real determinant of turnout comes down to the interplay between D and C —the net costs of voting. The conventional habitual voter’s civic and psychological benefits D always outweigh the costs C . For episodic voters, the variables find themselves in flux, with turnout determined by whether the benefits D exceed the costs C on Election Day.

The model proposed by Downs, and later refined by Riker and Ordeshook, and Aldrich, does not account for the altruistic nature of some voters that can change turnout incentives. Fowler (2006) provides an argument for the infusion of altruism within the model. “Although the probability that a single vote affects the outcome of an election is quite small, the number of people who enjoy the benefit when the preferred alternative wins is large. As a result, people who care about benefits to others and who think one of the alternatives makes others better off are more likely to vote” (Fowler 2006, 674). Altruism adds new information into the valuation of the benefits B , allowing it to take on a larger value than in previous models. This may reduce the impact of a low-valued or approximately zero-valued probability P of casting a decisive vote. However, regardless of the value of the benefits B , if the probability P of casting a decisive vote is still essentially zero, the value of the interaction term benefits PB will likewise be essentially zero irrespective of increased potential benefits.

Regardless of the model in use, there are differing factors such as age, sex, race, marital status, income, education, and occupation, that determine what sorts of costs C a voter will incur:

$$C = \sum_{i=1}^n c_i \quad (2.8)$$

where

c_i = the individual components that comprise the costs C .

Thus, for most voters, whether or not they vote depends on the net costs $D - C$, essentially a cost-benefit analysis:

$$D - C > 0 \iff \text{Participation.} \quad (2.9)$$

$$D - C \leq 0 \iff \text{No Participation.} \quad (2.10)$$

These models’ parameters are influenced by socioeconomic factors, legal barriers, and the political context of the election in question (Kenney and Rice

1985). Take, for instance, income. A person with a low income may be very hesitant to give up any time on a particular Tuesday to vote, because the marginal cost of voting is so high. In contrast, the opportunity costs of voting may be substantially less because of lower marginal costs. Different voters experience different sets of costs with respect to their decision of whether to turnout or not for an election.

Some jurisdictions have attempted to mitigate these costs through various reforms of the voting methods used. Mary Fitzgerald (2005) finds that while these reforms do make it more convenient to vote by reducing costs, they do not generally have an effect on participation. In particular, she finds that reforms like early voting do not have an effect on turnout, and that states that implement voting reforms tend to have high turnout rates already. These findings suggest that some factor or set of factors other than the costs are driving down participation. However, she does find two exceptions. The availability Election Day registration is statistically significant, and has a positive effect on turnout, as does the National Voter Registration Act of 1993—commonly called the “Motor Voter Act”—which allows for registration when getting a new driver’s license.

Plutzer (2002) found that age was a determinant factor not only in turnout generally, but in a voter’s development of habitual voting behavior. In the initial stages of voting (usually when a voter first becomes eligible), the costs—the barriers to entry, so to speak—are substantial enough to drive away large portions of the newly eligible electorate. However, as time goes on and those costs are eliminated one by one, development toward habitual behavior begins. He further suggests that this behavior comes with inertia of its own, causing it to be an evermore powerful force in the future. Temporary disruptions may come about, but the inertia remains and picks up again at full force. Squire et al. (1987) found that the disruption caused by moving is a significant cost, similar to the costs experienced by those who just became eligible to vote. They found the impact of moving on turnout to be quite substantial.

The turnout rate for the United States is generally around two-thirds of the voting-age population (Pintor et al. 2002). This percentage represents the turnout for the highest-salience and highest-visibility elections that the United States holds—elections for the office of the president. Moving further down ballot, races become generally less-salient and less-visible, causing turnout figures for these races to be substantially lower than those for presidential races.

Considering that the costs are already incurred once a voter reaches the booth, one explanation for this “rolloff” down ballot comes simply from lack of information that voters deem necessary to cast votes for these offices (Wattenberg et al. 2000). Matsusaka, who believes that “voter turnout patterns can be

explained by extending the conventional rational voter model to include limited information” (1995, 91), also supports this conclusion. He contends that more information brings greater confidence in vote choice, which increases the utility received from voting and leads to fewer instances of rolloff.

In high-salience and high-visibility races, information is easy to acquire. Very few people who go to vote for president of the United States are unsure of how candidates differ on major issues or which candidate they prefer. This may be a product of the campaign cycle or simply from party identification cues. Holbrook and McClurg (2005) found that the presidential campaigns themselves have some impact on the turnout of both average voters and core partisan groups, suggesting that campaign developments like scandals or gaffes, incentivize non-habitual voters to come out and either support one candidate or vote against another candidate.

2 Judging the Past, Predicting the Future

A subset of the literature on voter choice is built upon the idea of prospective and retrospective evaluations. *Prospective evaluations* are assessments of a candidate’s or a party’s governing ability based upon what they promise to do once elected. In contrast, *retrospective evaluations* are assessments of the record of a candidate or a party in order to determine how they would govern once elected. In particular, these evaluations are most often focused upon the state of the economy and the status of war and peace during an election season.

Evaluations of this nature affect not only the candidates and issues voters choose to support, but can also have an impact on whether they choose to turnout at all. During the 2008 presidential election, Senator John McCain’s attempts to avoid comparisons with then-President George W. Bush were an effort to mitigate unfavorable retrospective evaluations about his party’s recent tenure in the White House. In addition, the massive collapse of the economy that began as Election Day was approaching triggered additional retrospective evaluations made by voters. These evaluations caused many to believe that Senator McCain would not be a suitable candidate to direct repairs of the economic system.

This argument is supported by Alvarez and Nagler (1998), who found that the status of the economy had the greatest effect on the 1996 presidential election—more so than any social issue (though a few, like abortion, still had some effects). The state of the economy and retrospective evaluations made by the voters favored incumbent Democratic President Bill Clinton’s policies over

those of Republican Senator Bob Dole or those of third party candidate H. Ross Perot.

In the turnout model proposed by Riker and Ordeshook (2.2), prospective evaluations become part of the benefits B , accounting for the benefits associated with having one's preferred candidate win over the alternative(s) or the benefits associated with having one approach to addressing an issue supported over another.

$$B = \sum_{i=1}^n b_i \quad (2.11)$$

where

b_i = the benefits perceived as a result of an evaluation.

Each individual evaluation b_i has a value ≥ 0 , and its magnitude depends on the strength of the preferences (i.e. for indifference, b_i would have a value of 0, but the stronger the preference for one candidate or approach to addressing an issue over an alternative, the closer the value of b_i and thus B is to ∞):

$$\text{Increasing Preference Strength} = b_i \rightarrow \infty. \quad (2.12)$$

$$\text{Decreasing Preference Strength} = b_i \rightarrow 0. \quad (2.13)$$

3 Assigning Responsibility to Government

An additional subset of the voter turnout literature is the concept of *functional assignment*. Functional assignment refers to the tendency of voters to assign different responsibilities to government jurisdictions across administrative levels (local, state and federal). For example, it is unlikely that anyone at the local level will have the authority to either protect a woman's right to abortion services or eliminate those rights all together. However, at the state level this authority increases. At the federal level, this authority is maximized. Because of these differences in authority and scope, voters will assign a set of function for which different government administrative levels are responsible. From there, each voter will choose how to cast their votes based upon their preferences.

Robert Stein (1990) finds that when voters assign functional responsibilities to different federal offices, those assignments determine the subjects upon which they make prospective and retrospective evaluations. From these differences in functional assignment come different evaluations across government administrative levels, which in turn cause different voter choices at each level. With respect to the economy, Stein finds that voters tend to think of it as the responsibility

of the federal government. Voters therefore evaluate candidates for federal office more on economic grounds than candidates for lower-level offices.

This finding is supported by Hibbing and Alford (1982) who found that voting for congressional candidates can be a referendum on the party of the president, though this only occurs in a limited fashion (such as the midterm election phenomenon that, since 1930, has seen an average loss of 30 seats in the House of Representatives and four seats in the Senate for the sitting president's Party).

If functional assignment is indeed the case for variations in voter choice down-ballot, then it is possible that voters exist in a variety of groups, some of which nest and others of which do not. These voters have preferences, and exercise those preferences in the voting booth. As a consequence, there may be some voters who are only concerned with functions that they assign to the federal government, while others may be concerned with functions that they assign to both state and federal governments. And, of course, there remain voters who are concerned with functions that transcend all government administrative levels, and choose to vote across all of those levels. Figure 2.1 is a diagrammatical representation of this concept.

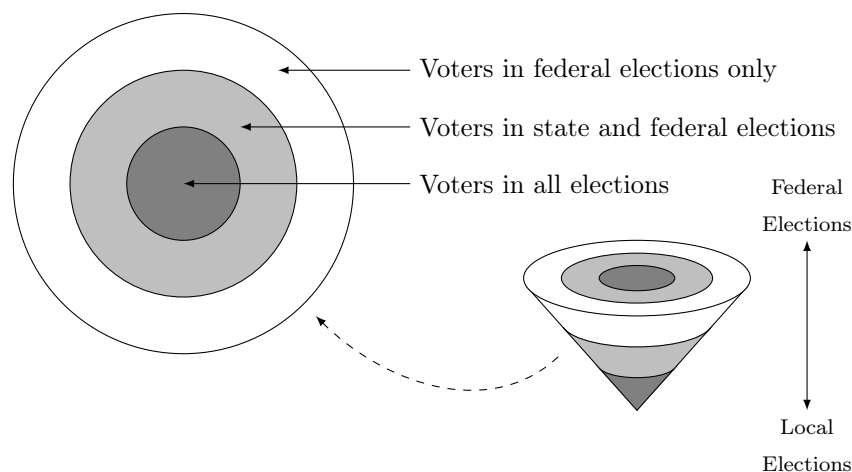


Figure 2.1: A simple model of voter specialization with functional assignment by government administrative level.

In some cases voters are interested in functions that they assign specifically to one administrative level of government (white). In other cases they are interested in functions that they assign among two levels (light grey). Finally, there are voters who are interested in functions that they assign among all three levels (dark grey).

However, this can be further extended to show that choice does not necessarily depend exclusively on the top-down specialization structure of Figure 2.1. Figure 2.2 shows groups of voters whose choice is determined by some other factor. These may be shared among levels (as seen in clusters 2 and 4), limited to one level (as seen in cluster 3), or extra-governmental all together (as seen in cluster 1).

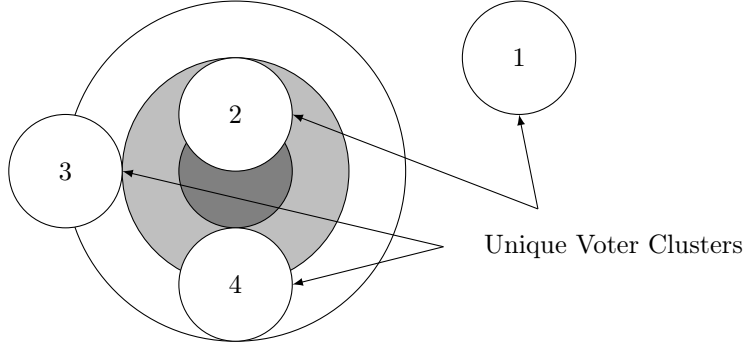


Figure 2.2: A simple model of voter specialization with satellite groups forming unique specializations outside of conventional voter typologies.

To relate functional assignment to the Riker and Ordeshook turnout model (2.2), the definitions of some of the variables must be altered. Functional assignment causes a subset of factors to emerge in the benefits B that allow it to have a value large enough to overcome the negating qualities of the costs C and an approximately-zero valued probability P of casting a decisive vote. The benefits B can then be decomposed into two components: conventional benefit factors b_i and functional assignment benefit factors b_f .

$$B = \sum_{i=1}^n b_i + \sum_{f=1}^n b_f \quad (2.14)$$

The functional assignment variables come into play when those subjects appear in a contest, and their magnitudes are determined by how strongly a voter feels about those subjects. Much like in (2.12) and (2.13), the values of b_i and b_f can approach ∞ in order to offset the costs C and a zero probability P of casting a decisive vote. From this new definition of B , functional assignment has an effect on turnout only when those issues are present in an election (and thus $\sum_{f=1}^n b_f > 0$).

Chapter 3

Theory and Hypotheses

In local (and non-partisan or issue elections in particular), the probability P of casting a decisive vote can have a positive value that does not equal zero, allowing the PB variables to come into play. For example, in my hometown of New Castle, Colorado, an election in April of 2012 for three city council seats had fourth place candidate Merle Means lose by only seven votes. In this case, the probability that a single person's vote could have made a difference was quite significant.

The distinction for local elections comes down to the benefits B , much like in functional assignment. If functionally-assigned issues do not come up with regularity, a voter has no incentive to turnout when those issues are not present. Thus, a voter may have the appearance of being an episodic voter when he or she may not be. Rather, like my father, this voter has formed his or her habit around something other than the act of voting.

I suggest that part of functional assignment includes the specialization of voters in certain types of issues or elections. In the cases where these factors are absent ($\sum_{f=1}^n b_f = 0$), the costs C exceed the benefits $PB + D$ and voting does not occur. However, when these factors are present in an election and $\sum_{f=1}^n b_f > 0$, voting always occurs. I offer the following model based upon those proposed by Downs, Riker and Ordeshook, and Aldrich:

$$R = P \left(\sum_{f=1}^n b_f + \sum_{i=1}^n b_i \right) - C + D \quad (3.1)$$

Consider the aforementioned example of a farmer who is concerned with water rights because of the need to irrigate his or her crops. This farmer, for whatever reasons, may not have any other interests in politics—he or she may not care about federal, state or local government in any other situation unless

agricultural issues are present. Thus, unless these issues appear regularly on ballots, the farmer may appear to be an episodic voter, when in reality he or she is a habitual voter when it comes to those specific issues.

My thesis questions whether these outlying voters exist in practice, and if they do, whether they make their decisions to participate based on some form of functional assignment or whether the conventional models of voting still hold. My theory is that there may be voters who specialize in elections based on the type of election or the nature of ballot content; specifically, that there are voters who specialize in local elections and avoid participation in higher-level elections. These voters, as illustrated in Figure 2.2, do not fit neatly into the nested Venn diagram, but instead exist as a satellite group that intersect the other groups when they share elections in common.

I expect to find this phenomenon at the local level rather than the national level because local elections are where races and ballot initiatives are substantially more issue-based than candidate-based, and where information is harder to come by for the average voter. In these elections, voters seek out information from family, friends, and acquaintances (Adrian 1958), adding a personal aspect to the benefits B and D . I propose the following hypotheses for describing the characteristics of voters specializing in local elections:

1. Local specialists are more likely to be older voters.
2. Local specialists are more likely to come from rural counties.
3. Local specialists may specialize in types of issues.
4. Local specialists are less likely to be partisans.

Chapter 4

Research Design

My thesis involves an attempt to establish a new voting typology. A statistical tool particularly well suited for finding these correlations is Q methodology factor analysis. Q methodology factor analysis is a statistical method for finding correlations among groups of people. It is similar to normal factor analysis (known as the “R” method), which involves finding correlations among variables across a set of observations. Q methodology accomplishes this same statistical process, but first transposes the data so that observations become the variables and variables become the observations. In my case, the voters become the variables and the elections become the observations.

The factor analysis process then reduces the electoral behavior of voters down to a few “factors,” (hence, factor analysis), indicating shared political behavior—which in my case are shared types of voting behavior, or a classification of voter types—represented as Pearson product-moment correlation coefficients. If a voter typology for local specialists is found, I can attempt to explain that factor through the use of multivariate regression analysis of those correlation coefficients on the measures of voter characteristics I listed as my hypotheses.

1 Data

The data from the Ohio Secretary of State come from two sources. The first are validated voter files, which include participatory information for each registered voter in the state. The second are election results, which include turnout figures for elections and issues, and the corresponding jurisdictions in which the various elections were held.

2 The Case for Ohio

Conducting research of this nature would be overwhelming when using data from all fifty states, not to mention financially difficult. It is therefore necessary, as is so often the case with this kind of research, to sample from the available data the best representation of the country as a whole, and Ohio is a prime candidate.

For years, Ohio has been popularly considered a microcosm of the United States in a variety of ways (Green and Coffey 2011). Since 1896, the state of Ohio has allocated its Electoral College votes to the winner of the presidential election in every contest except for 1944 and 1960, when its votes went to Thomas E. Dewey and Richard Nixon, respectively. It currently holds the longest-running perfect prediction streak (since 1960), with a success rate of approximately 93% since the 1896 election between William McKinley and William Jennings Bryan. Taking a weeklong journey across the state, CNN journalist Richard Quest (2011) discovered that it reflects America’s social and economic diversity as well, and even does so geographically.

“Ohio is a microcosm of the entire United States. The major newspaper, The Plain Dealer, has called it ‘The Five Ohios,’ with differing economies and politics. The northeast for instance, which includes Cleveland, and where the voters traditionally turn democrat. The Southwest, which is deeply conservative and traditionally votes republican. And in between, a huge farming belt (where church and family are strong), a desperately poor Appalachia region with the highest concentration of Veterans in the U.S., and a central region which is suburbia personified. This is America writ small.”

Quest is not alone in his assessment of Ohio. Others have both echoed and preceded his remarks with similar conclusions (Green and Coffey 2011). An article written by journalist Wesley Morris (2006) at the Boston Globe a day before the 2006 midterm election reiterated the oft-quoted adage “...so goes the nation”—a phrase frequently attributed to Ohio when describing it as “a microcosm of [the] country’s fractures.” The Economist (2008) quotes Jason Mauk, the executive director of the Ohio Republican Party, who claims that “this is where national politicians go to get a gut check on middle America.” Similar stories (Niquette 2011) exist in more recent news showing Ohio as a reflection of the debt crisis in America.

3 Data Strengths and Weaknesses

The validated voter files include both descriptive and participatory data for all voters registered within the State of Ohio. Included for each voter record are individual state and county voter identification numbers, physical and mailing address information, year of birth, registration date, partisan affiliation, political jurisdictions in which they reside (like school districts, precincts, counties, state and federal legislative districts, court districts, etc.), and elections for which they received and turned in a ballot. These data cover elections held between 2000 and 2012. It includes four presidential elections, three midterm elections, as well as several primary elections and special elections.

These data allow for the prediction of voter characteristics, such as income (based upon neighborhood attributes), partisanship (through participation in partisan elections like primaries), and approximate age, as well as more general characteristics like the types of elections held in Ohio (general, special, or primary) and the number of voters in any given jurisdiction. In addition, the election results tabulations list turnout figures for each candidate and ballot question by county, and indicate broad categories of types of issues on each county's ballot, reported by the Ohio Secretary of State as bond, tax, local options, and miscellaneous.

However, there are data in both the validated voter files and election results tabulations that are inconsistently reported by the secretary of state in one data set but not the other. There are election data within the validated voter files for which there is no documentation in the election results tabulations, and there are results for elections held that do not appear as data in the validated voter files. For a complete list of these missing data, see the appendix.

Another limitation of the data involves party registration. I had to make the assumption that any voter with a party affiliation held that affiliation for the duration of the available data. Therefore, anyone with a party affiliation and a participatory mark in a primary election was listed as a participant in an election for which they were eligible. Anyone with a party affiliation and no participatory mark in a primary election was listed as a non-participant in an election for which they were eligible. All others (those without party affiliation) were listed as non-participants in elections for which they were not eligible to participate. In other words, voters are either partisans or non-partisans. If they are partisans, they are eligible for all primary elections, and they can be listed as participants or non-participants. For non-partisans, they are not eligible for any primary elections, so they are only listed as non-participants.

4 Method

4.1 Data Manipulation

The first step was to download the most recent available set of validated voter files from the Ohio Secretary of State. For this thesis, I used a set current as of February 5, 2013. These data are designed for use by political campaigns, and do not come in a format that is initially useful to social scientists. In order to perform my proposed statistical analyses, some data transformations were necessary. In order to perform any kind of statistical analysis, some variables had to be recoded.

A voter’s participation in non-primary elections is indicated by an “X,” while participation in a primary election is indicated by a party label (such as “D” for Democratic and “R” for Republican). Also, there are no time series data for partisan affiliation (as mentioned in Section 3) or for indications of a voter’s death, and thus removal as an active voter. Because these files are intended for use by political campaigns, it is not unreasonable to assume that part of the weekly updates include the removal of deceased voters’ records.¹

Using SAS software, new variables were created. If a voter participated in a general election, that record was coded as 1. If a voter did not participate but had a registration date prior to the date the general election was held, that record was coded as 0. If a voter did not participate and was not yet registered, that record didn’t receive any coding, remaining blank.

For primary elections the same method was used, however a party registration variable was added as a qualifier. If a voter held a party registration, that record was coded as 1. If a voter did not hold a party registration, that voter was coded as 0. The primary election variables were then coded as 1 for participation and 0 for participation if the partisan variable was coded as 1. Records without partisan affiliation received no coding, remaining blank.

For special elections, eligibility by jurisdiction was first determined, also coded as a binary variable, which was then included as a qualifier. If a voter participated in a special election, that record was coded as 1. If a voter did not participate in a special election but they were eligible to, that record was coded as 0. All other voters received no coding, and remained blank.

¹My adviser informs me that this is a reasonable assumption for most states, but not Illinois, where voters continue to cast ballots for years after they die. For more information, see Ballotpedia’s article on “Dead People Voting” at http://ballotpedia.org/wiki/index.php/Dead_people_voting.

4.2 Random Sampling

The transposition of the data would create 8,012,341 variables, which exceeds the capacity limits of SAS when performing a factor analysis. Additionally, this analysis requires that the voters be eligible to participate in the local elections (there cannot be any blanks or missing data). Two of the special elections (February 8, 2005 and February 7, 2006) were held in relatively few jurisdictions, so I opted to drop them from the analysis in order to have a more diverse group of eligible voters from which to sample.

The sampling strategy I employed restricted the population to all people for whom eligibility for the four remaining special elections was greater than or equal to zero, meaning, regardless of participation, they were at least eligible to participate. This reduced the population from which I could sample to 475,221 voters. The SAS software was only able to transpose my data set when it contained approximately 1,500 variables given the hardware configuration of the laboratory computer. Because of these hardware and software restrictions, I had to take a random sample in order to do the factor analysis. I took a random sample of 1,532 voters based on the following sample size formula:

$$ss_{n=\infty} = \frac{z^2(p)(1-p)}{c^2} \quad (4.1)$$

where

- $ss_{n=\infty}$ = sample size for an infinite population,
- z = confidence level (95% is equivalent to $z = 1.96$),
- p = expected frequency value (50% is equivalent to 0.5),
- c = confidence interval ($\pm 2.5\%$ is equivalent to $c = 0.025$),

and adjusting for a finite population size $n = 475,221$:

$$ss_{n=475,221} = \frac{ss_{n=\infty}}{1 + [(ss_{n=\infty}) - 1]n^{-1}} \quad (4.2)$$

allocates a sample size of 1532 with 95% confidence $\pm 2.5\%$.

4.3 Q Methodology Factor Analysis

Using these sample data, I kept variables for the voter identification numbers and the new binary election participation variables. I then transposed the data so that each voter became a variable and each election became an observation. Using this transposed data set, I ran a factor analysis retaining the top five

factors sorted by eigenvalue using a standard varimax rotation. I chose to limit the analysis to five factors in order to account for five possible voter types, which I hypothesized would be the following, given the available data:

1. Voters participating in all elections.
2. Voters participating in presidential elections.
3. Voters participating in federal elections.
4. Voters participating in local elections.
5. Voters participating in partisan elections.

A factor analysis without any restriction on the number of factors retained produced a total of eight factors, all of which had eigenvalues greater than one and together accounted for 100% of the observed variation. However, bivariate regression tables created for five, six, seven, and eight retained factors did not show any significant insights gained from the inclusion of more than five factors. A scree test of the factor variance also indicated that five factors should be retained. These five voter types allow me to control for the various permutations of voters conventionally identified, as well as for the non-partisan and local specialists with which my thesis is concerned.

4.4 Bivariate Regression Analysis

The Q methodology analysis identified five factors, and provided each voter with a Pearson product-moment correlation coefficient for how highly they load on that factor with other similar voters. To determine which factors accounted for which types of voters, I sorted the sample data by each factor to see what the differences were between the voters with highly positive correlations and the voters with highly negative correlations. Using this “inter-ocular” test, I was only able to distinguish the two types listed in Chapter 5: the habitual voters and the federal specialists. The other factors appeared to be various distributions of voting behavior in between these two specializations, but none appeared to follow any of the established voting typologies aside from Factor 1.

To determine which factor corresponded with the local specialists, I first created several new participation variables for each voter. The first was the proportion of all elections in which they participated given their eligibility for each of those elections (*total*). Second, I created a variable for the proportion of all presidential elections in which they participated given their eligibility for those elections (*pres*). Third, I created a variable for the proportion of all federal elections in which they participated given their eligibility for those elections (*fed*). Fourth, I created a variable for the proportion of all local elections in which they participated given their eligibility for those elections

(*local*). Finally, I created a variable for the proportion of all partisan elections (primary and general elections) in which they participated given their eligibility for those elections (*partisan*). To determine which of the factors corresponded most highly to the various participation-proportion variables I had created, I performed a series of bivariate regressions of each factor on each of the five proportion variables.

Chapter 5

Data Analysis

The following data are the results of the factor analysis.

Factor	Eigenvalue	Difference	Proportion	Cumulative
1	614.25	438.09	0.4467	0.4467
2	176.17	20.50	0.1281	0.5749
3	155.67	43.25	0.1132	0.6881
4	112.42	5.03	0.0818	0.7698
5	107.39	25.00	0.0781	0.8479
Eigenvalues of the Correlation Matrix:				
Total				1375
Mean				0.8952

Table 5.1: Q Methodology Factor Analysis Results.

The following table indicates the variance explained by retaining five factors using a standard varimax rotation.

Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
493.88	207.82	171.97	164.93	127.31

Table 5.2: Variance Explained by Each Factor.

Once each voter was given a Pearson product-moment correlation coefficient for each of the five factors, I added this information into the original sample data. Using these data, I performed the bivariate regressions of the factors on each of the participation-proportion variables. The results are listed in Table 5.3.

	<i>total</i>	<i>pres</i>	<i>fed</i>	<i>local</i>	<i>partisan</i>
Factor 1	−0.68	3.09	14.63	−25.12	5.43
Factor 2	3.45	2.84	4.75	−2.22	4.71
Factor 3	1.73	1.78	2.03	1.07	1.88
Factor 4	−16.45	−10.74	−8.66	−17.57	−14.01
Factor 5	4.14	3.76	4.37	1.94	4.34

Table 5.3: Bivariate Regression of Factors on Participation-Proportions.

These bivariate regression results indicate that those voters correlating highly positively on Factor 1 participate (almost) exclusively in biennial federal elections. These voters correspond to the group of federal specialists in Figure 2.1. The opposite of these voters (those with a highly negative correlation to Factor 1) are those who participate in nearly all available elections, from the federal level to the state level. These voters correspond to the habitual voters (dark grey) in Figure 2.1.

It is reasonable to assume that, given the strong confirmation of both the federal specialists and the habitual participants, there also exist voters who focus their efforts toward federal and state elections, but avoid local elections (as also illustrated in Figure 2.1). Voters without correlation to any of the five factors (there are 161 in the sample) are the non-voters. They registered as voters before the general election in November of 2000, but have never participated in an election. It is probable that they were registered without their direct input, as it seems unlikely that a large number of voters would take the time to register to vote but never participate.

Unfortunately, these results do not indicate the presence of local specialists in the sample. However, the results do rather strongly confirm the existence of federal specialists and habitual voters. In particular, it shows that voters participating in the special elections are also participating in the biennial federal elections. Given that voting typologies can be determined with this factor analysis, it is still worthwhile to attempt to explain what may drive these Factor 1 voter specializations, in particular, what makes the federal specialists different from the habitual voters. The hypotheses I listed in Chapter 3 are still viable

tests for describing the characteristics of the voters who do participate in local elections. Here are those hypotheses for reference:

1. Local specialists are more likely to be older voters.
2. Local specialists are more likely to come from rural counties.
3. Local specialists may specialize in types of issues.
4. Local specialists are less likely to be partisans.

Once these voter types were identified through these bivariate regressions, I turned to multivariate regression to test the hypotheses I proposed in Chapter 3. These analyses allowed me to find which (if any) of those hypotheses could explain some of the characteristics that defined the voters that had participated in local elections as compared to the federal specialists.

Measures for county rurality were obtained from the United States Bureau of the Census as county population densities given as population per square mile. Voter age is included in the validated voter files as year of birth. The Ohio Secretary of State classifies issues into four categories: tax, bond, local options, and miscellaneous. Using these classifications, the presence of these issue types in an election was coded as 1, while absence of them was coded as 0. Using these presence variables, new variables were created indicating the proportion of local elections that contained each of the issue types in which a voter participated. These variables were used as the regressors in the multivariate analyses.

To test for these characteristics of habitual voters, I performed a multivariate regression of the Factor 1 Pearson product-moment correlation coefficients on the measures of voter age (year of birth), county rurality (population per square mile), the presence of bond, tax, local, and miscellaneous issues in the local election as defined by the Ohio Secretary of State, and the measure of partisanship where affiliated partisans were coded as 1 and unaffiliated voters were coded as 0. The results are listed in Table (5.4).

Variable	Coefficient	Standard Error	$P > t $
Intercept	0.7919179	0.5274546	0.134
Voter Age	-0.000136	0.0002696	0.614
County Rurality	0.0000386	0.0000194	0.047
Bond Issues Present	0.1766607	0.0535549	0.001
Tax Issues Present	-0.8820273	0.0969671	0.000
Local Issues Present	-0.0009135	0.0358602	0.980
Miscellaneous Issues Present	-0.0366869	0.0671222	0.585
Partisanship	0.2749489	0.0182493	0.000
n			1000
R^2			0.4246
Adjusted R^2			0.4206
Root Mean Squared Error			0.25418

Table 5.4: Regression Estimates for Characteristics of Factor 1.

I found that county rurality is significant at a significance level of $\alpha = 5\%$. This suggests that as counties become more urban (population per square mile increases), voters correlate more highly on Factor 1, indicating that the habitual participants (highly negatively correlated to Factor 1) are more likely to come from rural areas. This lends support to my second hypothesis, where I suggested that participants in local elections are more likely to come from rural counties. In addition to county rurality, I find that the presence of bond and tax issues in a local election is significant at a significance level of $\alpha = 0.1\%$. The coefficient on bond issues is positive, indicating that the habitual participants (again, those with a highly negative correlation on Factor 1) are less likely to specialize in bond issues. The opposite is the case for tax issues, with a strong negative coefficient suggesting that habitual participants are highly likely to participate in elections which include tax issues.

I believe the reason for this distinction between bond and tax issues is the result of perceived benefits and losses. The taxes voted on during these special elections tend to be county-wide taxes or mill levies on all properties in a jurisdiction, which affect a large number of voters directly. In contrast, bond issues are merely authorizations for a school district or similar organization to borrow money to fund an expansion or renovation of facilities. Often (though not always), these bond issues make use of existing tax revenues to make interest and principal payments, or extend existing taxes into the future rather

than implementing new taxes. Therefore, these bond issues do not often affect the status quo, and the benefits are particularized to a certain school or organization, further reducing participation incentives.

The only explanation I can offer for why the local options and miscellaneous issues are not a statistically significant determinant for turnout is that the habitual voters participating in these special elections will cast a ballot regardless of the presence of those issues. However, this should also be the case for the presence of bond and tax issues, yet they do have statistically significant effects. Further analysis of these effects is warranted.

Regardless, these results lend some support to my third hypothesis, suggesting that there are at least some types of issues that local participants specialize in, which drive them to the polls when these issues appear on a ballot. Finally, I found partisanship to be significant at a significance level of $\alpha = 0.1\%$. This provides support to my fourth hypothesis, indicating that voters correlating highly on Factor 1 (federal specialists) are more likely to be partisan than voters correlating highly negatively on Factor 1 (habitual voters). Age is not significant at any reasonable significance level of α , so I did not find any support for my first hypothesis.

Given these explanatory factors, I performed a second multivariate regression of local participation on the explanatory variables used in the previous regression to see if I could find further evidence of what drives these habitual voters to the polls during local elections. To explore this, I regressed each voter's average local participation (the proportion of eligible local elections in which they participated) on the measures for county rurality, age, partisanship, and the four local issues designations. I also controlled for the proportion of federal elections in which they participated. These regression results are listed in Table 5.5.

Variable	Coefficient	Standard Error	$P > t $
Intercept	-0.7860528	0.4915080	0.110
Voter Age	0.0002863	0.0002516	0.255
County Rurality	-0.0000469	0.0000181	0.010
Bond Issues Present	-0.1320503	0.0500041	0.008
Tax Issues Present	0.6924378	0.0904166	0.000
Local Issues Present	-0.0164604	0.0334261	0.623
Miscellaneous Issues Present	0.0107394	0.0626347	0.864
Partisanship	-0.2017659	0.0170441	0.000
Average Federal Participation	0.6350413	0.0305130	0.000
n			1000
R^2			0.4544
Adjusted R^2			0.4500
Root Mean Squared Error			0.23686

Table 5.5: Regression Estimates for Characteristics of Local Election Participants.

These results mirror those from the first multivariate regression. They suggest that those who participate in local elections also participate in federal elections. In addition, they suggest that partisans do participate less frequently at the local level than do non-partisans, and those from more rural counties are more likely to participate in local elections. In terms of issue presence at the local level, I found the presence of tax issues to be a strong indicator of turnout, and the presence of bond issues to have a somewhat negative effect on turnout. As before, there was no statistically significant effect of a voter's age on their participation in local elections.

Chapter 6

Conclusion

Though I was not able to find support for my theory that there is a voting typology for local election specialists, I was able to discover some interesting characteristics that local election participants seem to have in common. One of these characteristics was the tendency to be non-partisan. This finding is supported by Gimpel, Dyck and Shaw (2004), who found that there is an effect of partisanship of voter turnout. Specifically, they discovered that voters with partisan affiliations in what they call “enemy territory”—such as a Republican in San Francisco, California or a Democrat in Provo, Utah—tend to vote less than expected given shared characteristics with other voters in more ideologically homogeneous locations. Because of the nonpartisan nature of many local elections, I would not expect to find this effect to be as strong, and thus the finding that local participants are less-often partisans is consistent with the findings of Gimpel, Dyck and Shaw.

Another characteristic of local election participants was their tendency to come from more rural counties. Fortunately for my analysis, a large majority of counties in Ohio are not vastly different in size (see Figure 6.1, Table 6.1).¹ This helps to mitigate the appearance of large cities in large counties as equivalent to smaller, rural counties in terms of population density. This adds strength to the finding that local voters are more likely to be participating in more rural counties. It is probable that rural voters face fewer opportunity costs when deciding to vote, such as shorter lines due to fewer voters.

¹Note: Statistics other than count given in square miles.

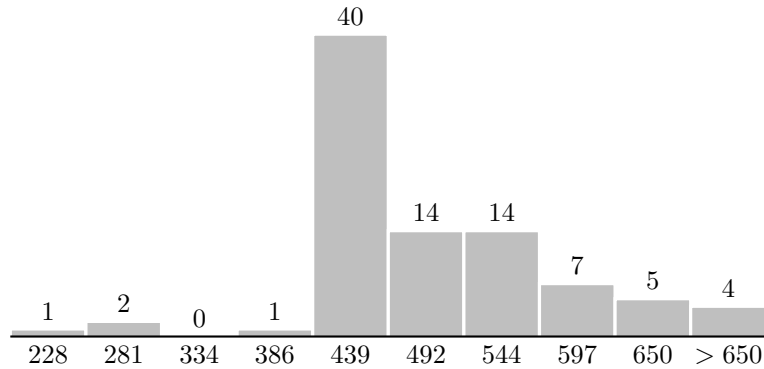


Figure 6.1: Land Area Distribution of Ohio Counties.

Count (n)	Min.	Max.	Mean (μ)	Median	St. Dev. (σ)
88	228.21	702.44	465.32	439.07	89.72

Table 6.1: Summary Statistics for Land Area of Ohio Counties.

I was also able to find a correlation between local election participation and the presence of tax issues. However, interpretation of these data require some careful thought. Two possible explanations for this correlation come to mind. First, it may be that, indeed, the voters have a strong interest in expressing their opinions regarding tax policy. However, it may also be the case that there just happen to be tax issues present in all four of the special elections in this analysis, and that participation of the habitual voters in these local elections exactly mirrors the proportion of local elections with tax issues present. Since the analysis was only able to use only around 20%² of the number of special elections reportedly held, more diversity in these local races could be able to provide more variation in the presence of these issues, thereby providing more meaningful insights on the impacts of these types of issues.

These issue-specialization coefficients suggest the need for a different method by which to measure their inclusion on a ballot. The Ohio Secretary of State data only give a broad classification, such as “there were miscellaneous issues on the Ashtabula County ballot during the May 6, 2003 special election.” This sort of data generalization represents one of the largest limitations to the analysis.

²Though the analysis uses four out of the six total special elections listed in the validated voter files, there are nineteen total special elections reported between the validated voter files and the election results tabulations. Thirteen of these special elections were missing from the validated voter files. For a list of these elections, see the appendix.

Generalizations had to be made across many variables in order to account for shortcomings in the data as reported from the Ohio Secretary of State.

It is important to remember that these data are made available for use by political campaigns, not political scientists. As a result, more care seems to have been put into the reporting of data relevant to campaigns, like participation in general and primary elections and current party affiliation—data of particular use to campaigns. The data are also not consistent in how information is reported, likely due to the work of many people inputting data. For example, Washington Township is listed in one of four ways: Washington, Washington Twp, Wash. Twp, and Washington Twp. There are also a number of voters who were listed as having been born in the year 1800. While these people must have fascinating historical insight into the early days of the Republic, something tells me these data are in error.

It is interesting to note that, in addition to being unable to find local specialists, I was also unable to identify a voter type that specialized only in presidential elections. This suggests one of several possibilities, since it is reasonable to conclude that there should be some presidential specialists (like my grandmother). The election results data from the Ohio secretary of State show that there is a significant difference (approximately 20%) in turnout between presidential election years and midterm election years. These data are listed in Table 6.2.

Election Type and Year	Turnout Percentage	Difference
General (2000)	63.60%	16.42%
Midterm (2002)	47.18%	
General (2004)	71.77%	18.52%
Midterm (2006)	53.25%	
General (2008)	69.97%	20.42%
Midterm (2010)	49.22%	
General (2012)	70.51%	
Mean General Turnout (2000–2012)	68.96%	19.08%
Mean Midterm Turnout (2002–2010)	49.88%	

Table 6.2: Turnout Rates in Ohio for Presidential and Midterm Election Years.

One possibility is that there may be errors either in my coding of election participation across the voters or in the factor analysis on dichotomous variables. Another possibility is that there may simply not be but a few presidential spe-

cialists in Ohio, though this seems an unlikely reality. Further, this lack of a clear presidential specialist category might suggest that there still may be local specialists as well, but these data are insufficiently precise to distinguish them from the more general, established voting typologies. In addition, the large number of missing special elections not included in the validated voter files severely limits the number of elections in which a local specialist could participate. With seventeen special elections instead of four, it is possible that there would be enough data to distinguish local specialists from other conventional voting typologies.

It should also be mentioned that there are local issues present in each of the biennial federal elections. A portion of the habitual voters who participate in all available general and special elections could still be local election specialists, but it would be impossible to distinguish that kind of participation given the restrictions of the data and the use of the Australian ballot.

I suspect the most important finding of this research is the relationship between population density and turnout in local elections. This provides some important information for campaigns and candidates who are running races and issues in low-information, low-salience, low visibility local races. Campaigns that have issues or field candidates in local elections have a higher probability of voters participating in these rural counties. Though campaigns may be tempted to focus their efforts in urban locations where more people can be reached and cost per-capita of information dissemination is substantially less, my research shows that these voters are already less likely to show up for off-cycle local races. If plurality is the goal (which it is in most jurisdictions), campaign efforts for exclusively local races may be more effective in gathering voter support in local areas, especially if those local races occur across both urban and rural counties.

This research certainly provides an interesting foundation upon which to build new voter typologies. A changing political landscape, altered by new methods of communication (like social media) and voting opportunities (like mail-in ballots, early voting, etc.), suggests that information and salience may no longer be bound to follow the established hierarchy. Further research into new voter typologies could provide some valuable insight into just what sorts of specializations are voters beginning to develop as electoral landscapes shift and information becomes far easier to acquire. My inability to find presidential specialists leads me to believe that there may still be local specialists out there somewhere.

A different approach to searching for these elusive participants is warranted. What might be particularly interesting would be to get information from individual ballots rather than individual voters over time. Ballots from a single presidential election that includes federal offices, state offices, and local issues

and elections could allow us to see just what proportions of an electorate are checking only the boxes for president—and maybe, just what proportions are checking only the boxes for local candidates and issues.

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Appendix: Missing Data

Data Missing from the Elections Results Tabulations

The following data are listed as elections in the validated voter files, but no results data are available from the Ohio Secretary of State.

- Primary Election held on September 13, 2005
- Primary Election held on September 11, 2007
- Primary Election held on September 8, 2009
- Primary Election held on September 15, 2009
- Primary Election held on September 29, 2009
- Primary Election held on September 7, 2010
- Primary Election held on September 13, 2011

Data Missing from the Validated Voter Files

The following elections are available as results data from the Ohio Secretary of State, but none are listed as elections in the validated voter files.

- Special Election held on August 3, 2004
- Special Primary Election held on June 14, 2005
- Special Election held on August 2, 2005
- Special Election held on August 8, 2006
- Special Primary Election held on September 14, 2006
- Special Primary Election held on September 15, 2006
- Special Election held on February 6, 2007
- Special Election held August 7, 2007
- Special Election held on August 5, 2008
- Special Election held on February 3, 2009
- Special Election held on August 4, 2009

Special Election held on February 2, 2010
Special Election held on August 3, 2010
Special Election held on February 8, 2011
Special Election held on August 2, 2011
Special Election held on August 7, 2012