

Vote Selling in the United States: Introducing Machine Learning Methods to Analyzing Conjoint Experimental Data

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Abstract

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Keywords— conjoint; vector support machines; support for democracy; United States.

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We both thank.

I. INTRODUCTION

II. MULTIDIMENSIONAL APPROACH TOWARD THE STUDY OF VOTE-SELLING

Democracy has been theorized as a multidimensional concept. Referring particularly to *polyarchies*, Dahl (1971, p. 3) explains that among some of the requirements for sustaining a democracy, there must be some institutional guarantees that create opportunities to (1) formulate preferences, (2) signify those preferences, and (3) have preferences weighted equally when conducting a government.

Yet, clientelism—as a democratic failure—has been studied almost exclusively from a unidimensional perspective. We believe that there exists a methodological and conceptual alignment—one that biases our inferences. On the one hand, qualitative, historical and/or ethnographically based contributions describe clientelist transactions as complex and multidimensional. Leveraging qualitative techniques, researchers are able to provide “thick descriptions” (Goertz 1973) of the phenomena at hand (Posada-Carbó 1996; Sabato 2001; Auyero 2000; Szwarcberg 2013; Borges 2019). On the other hand, statistical, survey, and/or experimentally based work mostly explores singular aspects related to clientelism—typically, the effect of a single variable (or treatment) on the probability of clientelism. Quantitative scholars then usually focus on the “effects of causes” rather than on the “causes of effects” (Pearl 2015). For example, using a field experiment in Benin, Wantchekon (2003) stresses the role of “incumbency” on vote buying, while Jensen and Justesen (2014, p. 227) focus on the impact of “poverty” on vote buying. While the quantitative literature on clientelism has advanced on a number of important questions, most studies concentrate their efforts on a single variable which (when possible) is manipulated in an experimental or quasi-experimental design (Corstange 2012; Imai, Park, and Greene 2015; Nichter and Peress 2017; Hicken et al. 2015; Hicken et al. 2018; Michael and Thachil 2018; Bratton 2008; Weitz-Shapiro 2012; González-Ocantos, Kiewiet de Jonge, and Nickerson 2014; Hector Bahamonde 2018; Héctor Bahamonde 2020; Oliveros 2016).

We argue that to better understand the motivations behind clientelism and the micro-dynamics that drive it, studies should situate the phenomena within the multidimensionality of *democracy*. While qualitative researchers are better equipped to properly do so, there are some quantitative techniques that might provide broader explanations for the causes of clientelism. We do not argue that these quantitative tools might give us the kind of rich explanations ethnographies provide. However, we hope this paper provides multidimensional answers to a multidimensional concept.

hb: summarize the scope and findings

Ultimately, this paper tries to provide a multidimensional explanation for clientelism within the “effects of causes” approach. Exploiting a novel conjoint dataset, this paper developed an experimental designs which sough to answer *which of the three democratic subdimensions explained by Dahl (1971) should fail to produce clientelism?*

The next section gives a historical account of clientelism in the United States. The section also attempts to situate the phenomena within a historical context, at the same time that it justifies it as a case. It particularly shows how vote buying transitioned from their status as an important institution in American elections to a scarcely practiced electoral method.

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III. THE UNITED STATES AS A CASE STUDY

This paper makes both methodological and substantive contributions to the literature by leveraging a conjoint experiment on hypothetical vote selling in a consolidated democracy. Most quantitative studies have been conducted in developing countries, seriously narrowing the scope of our inferences. In part, this is because the clientelism literature usually focuses on realized behaviors only—that is, actual clientelist transactions. Unfortunately, by ignoring attitudes of potential vote sellers, particularly when it comes to the willingness to sell, selection bias seriously threatens causal inferences. Geddes (1990, p. 131) explains the well-known selection issues of studying “only cases that have achieved the outcome of interest.” Thus, and following the lead of González-Ocantos, Kiewiet de Jonge, and Nickerson (2014), this paper presents experimental evidence of hypothetical willingness to sell the vote in the United States.

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The evidence that this paper presents may be associated with a probable erosion of American democracy.¹ Foa and Mounk (2016, p. 7) document a deep “crisis of democratic legitimacy [that] extends across a [...] wider set of indicators” in the United States. They find that 26% of millennials declare that it is “unimportant” in a democracy for people to “choose their leaders in free elections” (Foa and Mounk (2016, p. 10), and Foa and Mounk (2017)). And such, this study follows a “least-likely” design presenting the United States as a “crucial case.” As Levy (2008, p. 12) explains, “[i]nferential leverage from a least likely case is enhanced if our theoretical priors for the leading alternative explanation make it a most likely case for that theory.” Since the vote-buying literature mostly considers developing countries and describes vote sellers as poor (Weitz-Shapiro 2014, p. 12),

¹Relatedly, see Levitsky and Ziblatt (2018).

uneducated (González-Ocantos, Kiewiet de Jonge, and Nickerson 2014), and undemocratic (Carlin and Moseley 2015), the willingness to sell votes in the United States should be low, making it a difficult case study on vote selling.

I. Brief Historical Section

At first, many advanced democracies were clientelist political systems. For instance, Stokes et al. (2013, p. 200) explain that in the nineteenth-century United States, “vote buying was commonplace” and “the major urban political institution in the late nineteenth century” (Erie 1990, p. 2). Poor bureaucracies and bad-quality record-keeping helped to foster electoral malpractice. First, most states did not have actual registration laws, making voter eligibility difficult to determine (Argersinger 1985, p. 672). Historians frequently report that judges at polling places had a hard time determining not only the age of the potential voter, but also whether the prospective voter was a U.S. citizen, especially in cases that involved newly naturalized immigrants with strong foreign accents (Bensel 2004, p. 20). For instance, judges used as a rough proxy whether the prospective voter had the ability to grow a beard (Bensel 2004, p. 20). Consequently, it was often up to the judge’s discretion whether to let prospective voters cast a ballot. Since judges were party appointees (Argersinger 1985, p. 672), their discretionary powers were systematically used to shape electoral outcomes.

The “party strip” or “unofficial” ballot system also permitted all sorts of fraudulent practices. The parties themselves produced party tickets. Since tickets varied by size and color, it made “the voter’s choice of party a public act and rendered voters susceptible to various forms of intimidation and influence while facilitating vote buying” (Argersinger 1985, p. 672). In addition, the ticket system required very strong party machines, which, in turn, required considerable economic resources to make the system work. However, political machines were oiled not only with money. On the one hand, many “ticket peddlers” (Argersinger 1985, p. 672) were volunteers (Bensel 2004, p. 17). Most of these volunteers “enjoyed the patronage of elected party officials by holding government jobs” (Bensel 2004, p. 17). On the other hand, political appointees “from janitor to secretary of state” and some corporations donated annually part of their revenues (Reynolds 1980, p. 197). Thus, parties amassed huge amounts of money. With all these resources flooding the polls on election day, voting was truly an interesting spectacle. On that day, party agents would offer voters plenty of liquor as an incentive to vote the party ticket. Hence, “the street or square outside the voting window frequently became a kind of alcoholic festival in which many men were clearly and spectacularly

drunk [to the point that] some could not remember whether or not they had voted” (Bensel 2004, p. 20).

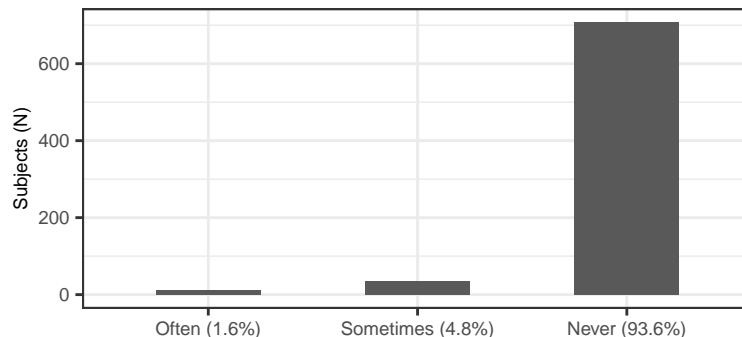


Figure 1: Frequency of Clientelism in the United States (2010).

Note: Figure shows the frequency of survey respondents, $N = 755$.

Source: *LAPOP*, 2010 wave for the United States. Question is *clien1*: “In recent years and thinking about election campaigns, has a candidate or someone from a political party offered you something, like a favor, food, or any other benefit or object in return for your vote or support? Has this happened often, sometimes, or never?”

Today, the *modus operandi* of clientelism has changed, and both the frequency of vote buying/selling and the importance of party machines have declined (Figure 1). Scholars have pointed out that “party machines are a thing of the past” (Stokes et al. 2013, p. 230). However, some contemporary accounts remain of vote buying and selling in American elections.² Similarly, non-academic sources find that during the 2010 elections, “selling votes [was a] common type of election fraud” (Fahrenthold 2012). Others find that “[v]ote-buying is extremely common in *developed* [...] countries” (Leight, Pande, and Ralston 2016, p. 1). *While clientelism seems to have declined in the United States, which of the three subdimensions explained by Dahl (1971) would need to fail to make clientelism more likely?*

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IV. STUDYING CLIENTELISM MULTIDimensionALLY: CLASSIC AND SUPPORT VECTOR MACHINES APPROACHES TO ANALYZING CONJOINT DATA

²For instance, Campbell (2005, pp. 243–244) explains how a Democratic leader in Logan County, West Virginia, accepted \$35,000 in cash to support Senator Kennedy. As the Democratic leader explained, “this money was for one purpose: ‘We bought votes with it [...] that’s the way real politics works.’ ” Other examples are the famous primary election in March 1972 in Chicago (Campbell 2005, p. 262) and the elections in the coal-rich Appalachian Mountains during the 1980s (Campbell 2005, p. 275).

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Collected in 2016, the data (N=11,080) are representative at the national level.³ Figure A1 shows the geographical distribution of survey respondents, grouped by party identification. The experiment was framed as a study about crime in the United States, not as a study about vote selling.⁴ While pretesting the study, it was decided that the experiment needed to mask a very serious felony (selling one's vote) among other equally serious felonies (such as stealing) and other less serious crimes (such as speeding or downloading music illegally from the Internet). Otherwise, the vote-selling item would have stood out among the other items, making it seem totally negative and undoable, and/or making the true purpose of the study obvious.

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See Appendix for wording

To further prevent the possibility of biased answers when asking the direct question to individuals in the treated group, the direct question stated that the hypothetical possibility of doing one of the illegal things mentioned previously in the excerpt would be randomly assigned. However, all participants were directly asked whether they would be interested in selling their vote. Direct answers were then used to estimate the proportion of “liars.”

As a follow-up, subjects answering “yes” to the direct question answered a pricing test that asked them to indirectly put a price on their votes. Following standard practice in marketing research, participants slid a handle indicating which price was considered “too cheap” for one's vote. The slide ranged from \$0 to \$1,000, in one-dollar increments. The idea was to capture the respondent's willingness to sell. The pricing test particularly measures the lowest bound at which the participant would perceive the least economic benefit that was still enough to make selling his/her vote interesting. Moving forward, the list experiment contemplated one control and two possible treatments, each with different vote-selling prices. Since pricing a vote is difficult and based on several pretests, an arbitrarily low (\$100) or an arbitrarily high (\$500) price appeared. Participants randomly assigned to the treatment condition answered only one of these two treatments. More than hard-pricing tests, these two treatments account for possible different elasticities that might have interacted with individual socioeconomic backgrounds, mainly defined by income.⁵

Before splitting the subject pool into the subjects' respective experimental conditions, participants

³1108 respondents, everyone answering 5 with 2 each. *Research Now SSI* collected the data between March 2 and March 6. Survey respondents belong to the online panel owned and administered by SSI. Notice of IRB exemption Protocol #E16-292 is kept on file at the Office of Research and Regulatory Affairs of [redacted] University.

⁴To isolate the risks and costs associated with engaging in any illegal activity, the next phrase was included: “assuming you would not go to jail.”

⁵Holland and Palmer-Rubin (2015, p. 1189) explain that “the poor are thought to be more susceptible to vote buying.”

<p>In the next section you will see 10 different candidates presented in pairs. Each candidate supports different policies. Some candidates might or might not share some similarities/differences. You might not like any of them, but we want to know which candidate represents the lesser of the two evils for you. You might want to focus your attention on the issues that you care about the most.</p>	
Candidate 1	Candidate 2
Media CAN confront the government	Media CANNOT confront the government
President CANNOT rule without Congress	President CAN rule without Congress
Citizens CANNOT vote in the next two elections	Citizens CANNOT vote in the next two elections
Citizens CAN run for office for the next two elections	Citizens CAN run for office for the next two elections
Citizens CAN associate with others and form groups	Citizens CANNOT associate with others and form groups
<p>Which of these candidates represents the lesser of the two evils for you?</p>	
Candidate 1 <input type="checkbox"/>	Candidate 2 <input type="checkbox"/>

Table 1: A Multidimensional Approach to Studying Clientelism: A Conjoint Design (example).

Note: Participants were asked to choose between two hypothetical candidates (*Candidate 1* and *Candidate 2*). Every entry was filled at random according to the five different attributes explained in *Table 2*. In practice, every subject chose between two unique hypothetical candidates. Note that in order to highlight the differences between the two candidates, the can and cannot were capitalized. The idea was to minimize experimental fatigue.

Dalh's Polyarchy Dimension	Dalh's Requirements for a Democracy	Experimental Operationalization: Five Polyarchy Attributes
Formulate preferences	Freedom to form and join organizations	Citizens can associate with others and form groups
	Freedom of expression	Media can confront the government
	Right to vote	Citizens can vote in the next two elections
	Right of political leaders to compete for support	President cannot rule without Congress
	Alternative sources of information	Media can confront the government
Signify preferences	Freedom to form and join organizations	Citizens can associate with others and form groups
	Freedom of expression	Media can confront the government
	Right to vote	Citizens can vote in the next two elections
	Eligibility for public office	Citizens can run for office for the next two elections
	Right of political leaders to compete for support	President cannot rule without Congress
	Alternative sources of information	Media can confront the Government
	Free and fair elections	Citizens can vote in the next two elections
Preferences are weighted equally in conduct of government	Freedom to form and join organizations	Citizens can associate with others and form groups
	Freedom of expression	Media can confront the government
	Right to vote	Citizens can vote in the next two elections
	Eligibility for public office	Citizens can run for office for the next two elections
	Right of political leaders to compete for support/votes	President cannot rule without Congress
	Alternative sources of information	Media can confront the Government
	Free and fair elections	Citizens can vote in the next two elections
	Institutions for making government policies depend on votes and other expressions of preference	Citizens can vote in the next two elections

Table 2: Dimensions of Democracy (Dahl 1971) and Their Corresponding Experimental Operationalizations.

Note: Dahl (1971) specifies three general dimensions that should be satisfied for a country to be considered a democracy. Every dimension has a number of requirements. In order to operationalize these requirements for the conjoint experiment, we devised five attributes that reflected these requirements. As Table ?? shows, all participants were asked to choose between hypothetical candidates that either supported or rejected each of these five attributes.

were asked to read an excerpt describing four illegal activities (including vote selling).⁶ All were formatted as news pieces. The idea was to explain “vote selling” to “newsreaders.”

I. Classic Conjoint Analyses

HB

II. Leveraging Support Vector Machines with Conjoint Data

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⁶See [Appendix](#) for wording.

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V. APPENDIX

I. Appendix

II. Experimental Manipulations and Vignettes

Distractor Paragraph. The next paragraph was used to distract subjects from the main purpose of the study, and also to define vote selling.

Washington, D.C.— A department store downtown had a robbery incident last week, reporting several missing iPods from their inventory. Authorities also inform that a group of local residents are trying to ``sell'' their votes to political candidates ahead of a local election for city council. Residents approached some of the candidates running for office and offered to vote for that candidate in return for monetary compensation. In a different subject matter, the local police station released a report on driving habits and behaviors in the Capitol district last week. Finally, cyber—crime has become an increasingly serious issue in the area in the past few year.

Direct Question. All subjects read the next paragraph, and then *all* answered the direct question:

Now you will be entered into a random lottery for the opportunity to do ONE of the illegal things you just read before. This means that you might be randomly offered to hypothetically do ANY of the activities mentioned before.

After a random assignment, you have been selected for the opportunity to hypothetically sell your vote. This means that you will have the hypothetical opportunity to accept money from a candidate for your vote. Would you be willing to accept the offer, assuming you would not go to jail? By selecting ``Yes,'' you could earn up to \$ 1,000.

III. Geographical Distribution of Survey Respondents

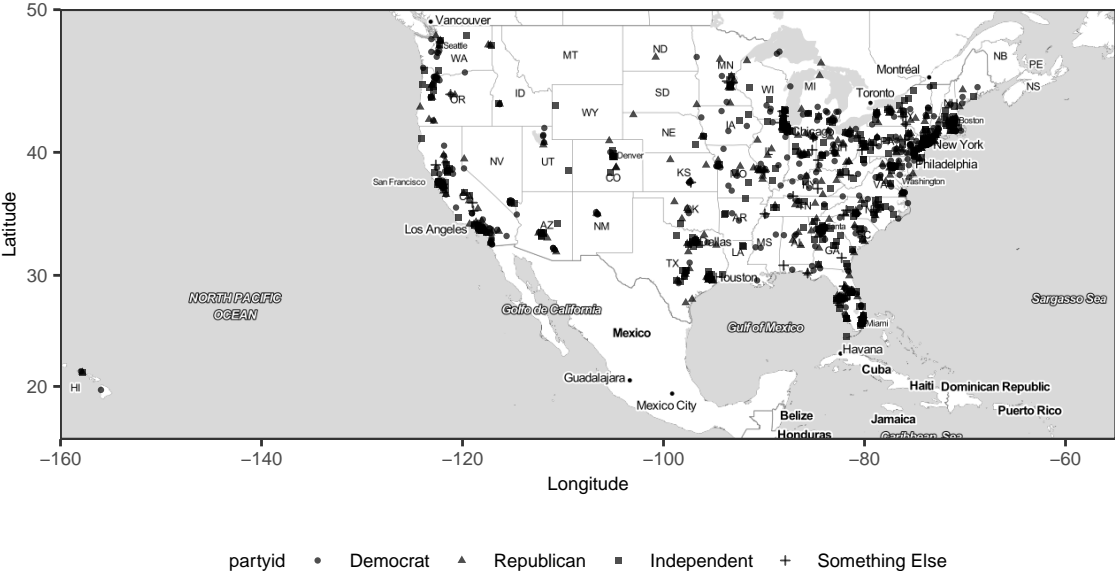


Figure A1: *Geographical Distribution of Survey Respondents by Party Identification.*

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approach
causal
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si cumple
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assumptions
en Hain-
mueller2014a.
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