

# The Heuristic Issue Voter: Issue Preferences and Candidate Choice

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## INTRODUCTION

- How do voters engage in issue voting? That is how many, and which, issues are voters considering and how are these considerations combined to form a vote intention?
- With few exceptions, issue voting research has failed to consider how voters process issues available for consideration in any given election and how these issues are aggregated by the voter to reach a decision
- Distinguishing between different forms of issue voting is empirically difficult due to **observational equivalence** (O.E.). Our polarized political landscape leads voters to the same decisions regardless of how they use issues
- Consequentially, we are unsure of how voters use issues, with scholars often concluding voters forgo issue information altogether in favor of non-issue heuristics like partisanship
- I create an adaptive static information board to alleviate O.E. and study how voters use issue information – finding that voters do use issues for political decision-making, just in a simplified manner

## STUDY DESIGN

### Choice Task Example

	Candidate A	Candidate B	Candidate C
Party	Democrat	Republican	Independent
Military Spending	Federal military spending should be <b>decreased</b> relative to other government programs	Federal military spending should be <b>increased</b> relative to other government programs	Federal military spending should be <b>decreased</b> relative to other government programs
Gay Marriage	Same-sex couples <b>should not be</b> allowed to marry	Same-sex couples <b>should be</b> allowed to marry	Same-sex couples <b>should be</b> allowed to marry
Firearm Regulation	Laws covering firearm sales should be <b>more</b> strict	Laws covering firearm sales should be <b>more</b> strict	Laws covering firearm sales should be <b>less</b> strict

Table 2: 3x3 Choice Task that includes Partisanship

Issues randomly selected from set of ten. Issue positions randomly selected to be liberal or conservative. With partisanship, always one Democrat and Republican, and one Independent in three candidate choice tasks. Partisanship always first row of party choice tasks. Order of issue rows randomized.

## EXPECTATIONS

- Citizens are limited by cognitive and motivational constraints, but this does not prevent them from engaging with issue information altogether
- Voters use issues, just in simplified way. They are not fully-informed nor do they ignore issue information outright
- Table 1 displays different forms of issue voters considered in this project. WADD represents a fully-informed issue voter. The other decision rules represent heuristic issue-based decision rules

Strategies	Examples	Search Rule	Stop Rule	Choice Rule
<b>Weighted-Additive (WADD)</b>	Payne, Bettman, & Johnson (1993)	For each candidate note (dis)agreements for all issues multiplied by preference intensity; Store this information	After each candidate has been evaluated	Choose candidate with highest evaluation
<b>Equal Weight (EQW)</b>	Kelley and Mirer (1974)	For each candidate note (dis)agreements for all issues; Store this information	After each candidate has been evaluated	Choose candidate with highest evaluation
<b>Take-the-Best (TTB)</b>	Gigerenzer & Goldstein (1999)	Choose the most important issue; Evaluate each candidate on this issue	After each candidate has been evaluated on the issue	If one candidate in agreement and rest in disagreement, select candidate; ELSE return to start rule with next most important issue and subset of agreeing candidates
<b>Frequency of Good &amp; Bad Feature (FGBF)</b>	Alba & Marmorstein (1987)	Add up the number of issues the first candidate agrees with you on	After each issue has been evaluated	Choose candidate if ratio of agreement to total issues is above some threshold; otherwise proceed to next candidate
<b>Composite Rule 1: TW</b>	Steenbergen, Hangartner, & de Vries (2011)	TTB until two candidates remain, then WADD	After TTB identifies one candidate or after two candidates are evaluated with WADD	TTB decision rule UNLESS two candidates remain, THEN WADD decision rule
<b>Composite Rule 2: TE</b>	Payne (1976)	TTB until two candidates remain, then EQW	After TTB identifies one candidate or after two candidates are evaluated with EQW	TTB decision rule UNLESS two candidates remain, THEN EQW decision rule

Table 1: Decision Strategies Relevant to Issue Voting

### Procedure

Respondents (Rs) engaged in 10 choice tasks where they pick their preferred candidate. Choice tasks varied in number of issues (3, 6), candidates (2, 3, 6), and whether or not partisanship is present (4 with, 6 without).

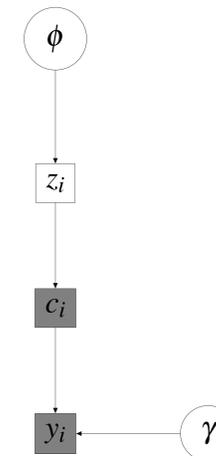
Choice tasks were adaptively curated for Rs to alleviate O.E., such that at least one strategy always makes a distinct prediction from all others. For each choice task...

- Rs randomly assigned to have one strategy, given their preferences, make an isolated decision
- A choice task is generated and each strategy is simulated using R's preferences
- If a choice task successfully isolates the chosen strategy, the R is shown the choice task
- Otherwise, the choice task is recycled and a new one is generated

## METHODS

I employ a Bayesian Cognitive Model, which estimates the proportion of voters in the population using each decision rule assuming they are collectively exhaustive

$\phi \sim Dir$ : Proportion of rule users of each decision rule with uninformed prior  
 $z_i \sim Cat$ : Indicator of Rs decision style  
 $c_i$ : Deterministic choice given decision style ( $z_i$ )  
 $y_i \sim Bern$ : Actual choice of Rs  
 $\gamma \sim Uni$ : Accuracy rate with uninformed prior



Circle nodes represent continuous variables, square nodes represent discrete variables, shaded nodes represent observed variables, unshaded nodes represent unobserved variables.

## IMPLICATIONS

- A significant proportion of the electorate may engage in issue voting despite substantial cognitive and motivational constraints
- Across a variety of choice tasks, voters commonly engaged in different heuristical forms of issue voting, even with partisan cues available
- Democracy is not doomed. The two strategies found to be most relied on, EQW and TTB, can be nearly as accurate as WADD in decision environments with high and low levels of importance weight dispersion
- Methodologically, the adaptive survey design provided a unique way of alleviating O.E. in voter decision-making that could be applied to other contexts

## RESULTS

### Decision Rule Proportion Estimates by Choice Task

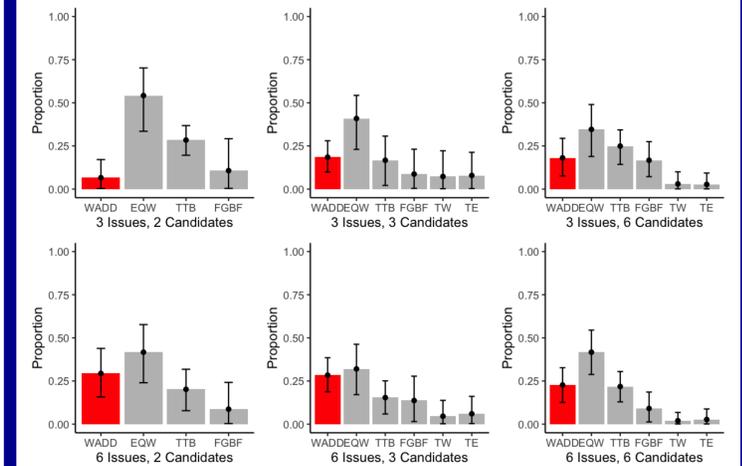


Figure 1: Non-Party Tasks

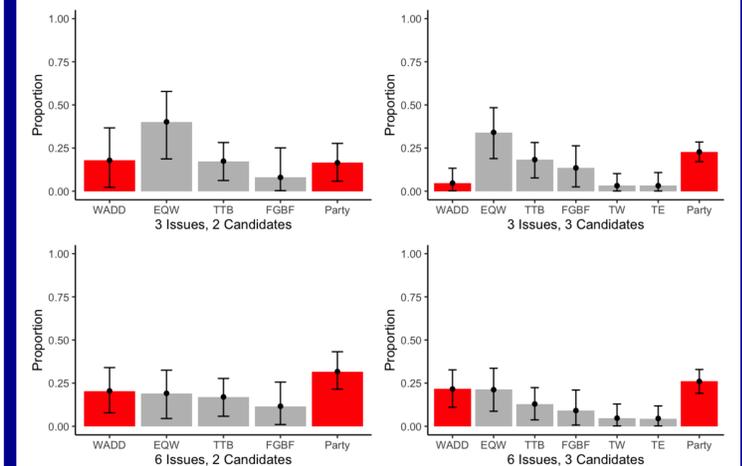


Figure 2: Party Tasks

Bars represent estimated proportion of voters using a given decision rule in a choice context, with 95% credible intervals. Figure 1 displays the 6 non-party choice tasks and Figure 2 shows the 4 party choice tasks. The party choice task analysis excludes non-partisan Independents.

## DRAWBACKS & FUTURE WORK

- There are non-issue considerations outside of partisanship that individuals may consider when deciding on their vote, such as candidate traits or viability. Future work could implement these considerations into the design as well
- Alternative methods, such as process-tracing, can be used to observe respondent use of different issue-based strategies in environments that are more representative of real-world elections.