Election Campaign with Statements

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Abstract

We propose a model of electoral competition in which parties compete by making statements linking policies to outcomes. Voters assess these statements not by Bayesian updating, but by sequentially sampling past cases until they encounter evidence that confirms or refutes one of the two statements made by the incumbent and a challenger. The incumbent's policy determines the distribution of cases voters observe. We introduce equilibrium notions capturing stable regimes and cyclical competition over statements.

Our analysis highlights several phenomena such as: logically equivalent statements may differ in effectiveness, parties with less successful policies may remain in power, society may become trapped in cycles of power change, and politicians may strategically deviate from their ideology to shape the evidence available to voters.

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1 Introduction

Political campaigns are fraught with statements that relate policies to outcomes. Candidates often make simple statements about policies that work/fail, or argue that good/bad outcomes are the result of particular policies. Donald Trump stated in his 2019 State of the Union address that "When walls go up, illegal crossing is going way, way down".[1] Israeli Prime Minister Benjamin Netanyahu is quoted as saying that "weakness in the face of terrorism only brings more terrorism".[2] Rep. Elise Stefanik is quoted as saying in a press conference in 2022 that "inflation is skyrocketing because of Democrats' reckless and wasteful spending".[3] This paper proposes a simple model that captures a stylized feature shared by these examples: political parties compete by making simple implication statements of the form "this policy leads to this outcome" or "this outcome occurred because of this policy".

Our approach complements several standard approaches in the political competition literature. We identify three main strands:

(i) The Downsian approach (Downs (1957)) views a voter's choice as a function of the distance between the candidates' positions and the voter's own ideal position.

(ii) The informational approach (e.g., Prat (2002) and Besley (2005)) treats voters as Bayesian decision makers who assess candidates' quality on the basis of noisy signals sent by the parties.

(iii) The retrospective voting approach (Key (1966) and Fiorina (1981)) holds that voters choose after evaluating the candidates' past performance.

Our story, which builds in part on ideas developed in Eliaz and Rubinstein (2025), is related to the retrospective voting approach. Its main distinctive features are as follows: parties make statements that are assessed by voters; the

[1] https://www.youtube.com/watch?v=GM5z5cYt7BA

[2] https://www.theguardian.com/world/2025/oct/02/netanyahu-suggests-weakness-on-terrorism-led-to-uk-synagogue-attack?utm

[3] https://edition.cnn.com/2021/08/06/politics/inflation-gop-fact-check

statements are not treated as signals, and no Bayesian reasoning is involved; voters decide after assessing the statements by sampling past cases; no game-theoretic elements are involved.

Let us elaborate. In our model, there are two political parties, $\mathbb{A}$ and $\mathbb{B}$. When in power, a party occasionally faces a problem that requires choosing between two actions, A and B. These actions lead to success with probabilities a and b, respectively, and to failure with the complementary probabilities. Parties and voters agree on what constitutes success and failure.

Each party is characterized by a bias toward one of the actions. When party $\mathbb{A}$ (respectively, $\mathbb{B}$) is in power, it chooses action A (respectively, B) with probability $\lambda \geq 1/2$. This bias is meant to capture an ideological difference between the two parties—for example, one may be more hawkish while the other is more dovish, or one may be more supportive of fiscal austerity while the other favors public spending. However, depending on the circumstances (e.g., national or international crises, or political pressure), each party may choose the action that is not aligned with its ideology.

The two parties compete in general elections, where a popular vote determines the next ruling party. Here are the novel ingredients of the model:

Campaigning statements. Each party campaigns with a statement that either praises the policy it is biased toward or criticizes the policy associated with the rival party. Specifically, party $\mathbb{X}$, which supports action X, can make one of the positive statements, "action X leads to success" or "all successes occur because X was chosen", or one of the negative statements, "action Y (the other action) leads to failure", or "all failures occur because Y was chosen".

Assessing statements by sampling examples. Voters decide whom to vote for by assessing the validity of the parties' statements. This assessment does *not* follow Bayesian updating, but is based on sequentially sampling observations of action choices (A or B) and the resulting outcome (success or failure). These observations are drawn from the distribution of cases induced by the incumbent party's policy. A voter stops sampling and votes for a party as soon as he samples an observation that either confirms that party's statement or refutes the rival's statement.

An equilibrium notion. To study the steady states of the political competition described above, we propose an equilibrium notion in the spirit of solution concepts in Economic Theory (e.g., Rothschild and Stiglitz (1976)):

A "non-cyclical" equilibrium is a pair consisting of a party $\mathbb{X}$ and a statement s, such that, given the induced distribution of observations when $\mathbb{X}$ holds office, s receives at least half of the votes against any statement by the rival party. This equilibrium notion captures a stable regime where one political party or ideology persists over time.

A "cyclical" equilibrium consists of a cycle of statements made by alternating parties such that each statement is beaten by the next statement in the cycle. This equilibrium notion captures periods of instability in which the ruling party rotates.

These new equilibrium notions are particularly suited to capturing the feature that the distribution of observations, which affects the vote shares and hence the identity of the ruling party, is itself affected by the identity of the ruling party (this is reminiscent of the "Riley critique", see Riley (1979, 2001)).

Our framework allows us to formulate and answer questions that are difficult to address, or even to pose, in standard models of political competition:

(a) Which slogans stabilize an incumbent: self-praise or attacks on the opponent?

(b) Can a *less* effective party remain in power in a democratic election? Can a more effective party fail to remain in power?

(c) Under what circumstances is there no stable regime, so that society moves cyclically between different ideological sides?

(d) When does political competition cycle not only between parties, but also between types of *statements*?

(e) Is it useful for a party to partially depart from its ideological position in order to increase the likelihood of refuting its rival's statement?

2 The Model

There are two parties, $\mathbb{A}$ and $\mathbb{B}$, either of which may be in power. The ruling party responds to problems that come to its attention. It can choose one of two actions, A or B. The outcome of an action is either success (+) or failure (−). The success rate of action A is a, and that of action B is b, both lie in $[0,1]$. The success of an action is independent across instances.

Each party holds a different ideology, captured by a bias toward one of the actions. A party's name indicates the action the party is biased toward. When in power and faced with the choice between A and B, party $\mathbb{X}$ takes action X with probability $\lambda \in [1/2, 1]$. It does not always choose X because of additional random factors that do not affect the action's success probability. For example, a hawkish party may sometimes choose a dovish policy because of economic pressure or international relations. Likewise, a dovish party may sometimes adopt hawkish policies because of domestic pressure or international commitments. Our assumption that each party has the same probability of deviating from its ideal policy is made for simplicity.

A case is an observation of an instance in which a ruling party chose an action and the outcome that ensued. It thus consists of a pair: the chosen action, A or B, and the outcome, which is either success (+) or failure (−). There is no dispute about the outcome of an instance, and all prefer success to failure. The four possible cases are denoted naturally as A^+, A^-, B^+ and B^-.

When party $\mathbb{X}$ is in power, it generates a distribution of cases p_X as follows ($\mathbb{Y}$ denotes the other party, x is the effectiveness rate of action X, and y is the effectiveness rate of action Y):

$$p_X(X^+) = \lambda x, \qquad p_X(X^-) = \lambda(1-x),$$
$$p_X(Y^+) = (1-\lambda)y, \qquad p_X(Y^-) = (1-\lambda)(1-y).$$

Each party chooses a statement that favors its position. Party $\mathbb{X}$ chooses one of the statements $[X] \to [+]$, $[+] \to [X]$, $[Y] \to [-]$, $[-] \to [Y]$. In words, the $\mathbb{X}$

party makes one of the statements: "action X leads to success" or "all successes occur because X was chosen", "action Y (the other action) leads to failure", or "all failures occur because Y was chosen".

An implication statement of the form $C \to D$ is *confirmed* by a case in which both C and D are true, and *refuted* by a case in which C is true and D is false. We assume that cases in which either both C and D are false or C is false and D is true are not considered relevant for assessing the validity of a statement.

An incumbent party $\mathbb{X}$ comes to power with a statement s. When $\mathbb{X}$ is challenged by a rival $\mathbb{Y}$ who makes a statement s', each voter (from a continuum of voters) evaluates the statements s and s' by applying the following procedure. The voter samples cases sequentially from p_X, the distribution of cases induced by the incumbent's policy, and stops as soon as he encounters a relevant case, which is either a confirmation or a refutation of one of the statements. (The observation that people often try to confirm an implication and not only look for cases that disprove it is due to Wason (1960) and the big literature that follows it.)

A voter then casts his vote for the party whose statement is confirmed or for the party whose rival's statement is refuted. A case cannot confirm or refute *both* statements, but it might simultaneously confirm one statement and refute the other. Thus, each case either supports one of the parties or leads the voter to continue sampling. The share of voters supporting the incumbent $\mathbb{X}$ is therefore equal to the probability that the first relevant case drawn from p_X either confirms s or refutes s'. An incumbent $\mathbb{X}$ is defeated if and only if this probability is lower than $1/2$.

The following table specifies, for each statement made by party $\mathbb{X}$ (listed by row) and each statement made by the rival party $\mathbb{Y}$ (listed by column), the cases that induce a voter to vote for $\mathbb{X}$ (shown on the *left-hand side* of each entry) and the cases that induce a voter to vote for $\mathbb{Y}$ (shown on the *right-hand side*). For example, if $\mathbb{X}$ makes the statement $[+] \to [X]$ and $\mathbb{Y}$ makes the statement $[X] \to [-]$, then the case X^+ both confirms $\mathbb{X}$'s statement and refutes $\mathbb{Y}$'s statement, and therefore leads the voter to support $\mathbb{X}$. There are two cases that lead a voter to vote for $\mathbb{Y}$: Y^+, which refutes $\mathbb{X}$'s statement, and X^-, which confirms $\mathbb{Y}$'s statement.

$\mathbb{X}$ / $\mathbb{Y}$	$[Y]\to[+]$	$[+]\to[Y]$	$[X]\to[-]$	$[-]\to[X]$
$[X]\to[+]$	X^+Y^-/X^-Y^+	X^+/X^-Y^+	X^+/X^-	X^+Y^-/X^-
$[+]\to[X]$	X^+Y^-/Y^+	X^+/Y^+	X^+/Y^+X^-	X^+Y^-/Y^+X^-
$[Y]\to[-]$	Y^-/Y^+	Y^-X^+/Y^+	Y^-X^+/Y^+X^-	Y^-/Y^+X^-
$[-]\to[Y]$	Y^-/X^-Y^+	Y^-X^+/X^-Y^+	Y^-X^+/X^-	Y^-/X^-

Table 1: The cases of party $\mathbb{X}$ winning/losing the heart of a voter when $\mathbb{X}$ makes the row's statement and $\mathbb{Y}$ the column's statement.

The shaded entry in each row indicates the statement that party $\mathbb{Y}$ can make to maximize its vote share, given $\mathbb{X}$'s statement. Given a statement s by $\mathbb{X}$, party $\mathbb{Y}$ wins voters who first sample a refutation of s, and whatever statement $\mathbb{Y}$ makes, it does not win voters who first sample a confirmation of s. The best $\mathbb{Y}$ can do is to choose a statement s' whose confirmation is different from the refutation of s, and whose refutation coincides with the confirmation of s. Thus, if $\mathbb{X}$'s statement is $[C]\to[D]$, then the "best response" (in the sense of maximizing its vote share) by $\mathbb{Y}$ is $[D]\to[\neg C]$. Note, however, that best responding does not guarantee a majority. In addition, given a statement by $\mathbb{X}$, there may be more than one statement that gives $\mathbb{Y}$ a majority.

The best response to each positive statement yields the same cases in which a voter supports the incumbent $\mathbb{X}$ (namely, only X^+) or the challenger $\mathbb{Y}$ (namely, X^- and Y^+). This leads (given the distribution of cases induced by the incumbent's policy) to the ratio $\lambda x/(\lambda(1-x)+(1-\lambda)y)$ of $\mathbb{X}$ to $\mathbb{Y}$ votes. For the negative statements of $\mathbb{X}$, an analogous argument yields the ratio $(1-\lambda)(1-y)/(\lambda(1-x)+(1-\lambda)y)$. The above implies two basic observations.

Observation 1: *Each best response statement attracts a coalition of voters who are persuaded by the challenger and voters who are disappointed with the incumbent.*
The challenger's best response to an incumbent's statement has the following interesting property. It garners voters' support either because the evidence they receive confirms its statement or because this evidence refutes the incumbent's statement. This feature of the model reflects a real-life phenomenon: often, a challenger defeats a ruling party with a heterogeneous coalition consisting both of voters who are persuaded by the challenger and of voters who are disappointed with the incumbent.

Observation 2: *Logically equivalent statements are not politically equivalent.* Each positive statement is logically equivalent to one negative statement. The statement $[X] \to [+]$ is equivalent to $[-] \to [Y]$ and $[+] \to [X]$ is equivalent to $[Y] \to [-]$. However, the best responses to $[X] \to [+]$ and $[-] \to [Y]$ (and likewise to the other pair) are not the same and may yield different vote ratios for $\mathbb{X}$ and $\mathbb{Y}$. The reason is that logical equivalence depends only on the refutations (which are the same, X^-), but vote shares also depend on the confirmations of the two statements, which differ (X^+ versus Y^-).

This captures a real-life phenomenon: the relative effectiveness of the statements "if we remain united, we will win" and "if we lose, it is because we are not united" may depend on whether the public has just experienced a tragic loss during a national crisis or celebrated some past victory.

We are now ready to present the equilibrium concept. An *equilibrium* is a pair $(\mathbb{X}, s)$, where $\mathbb{X}$ is a party and s is a statement supporting $\mathbb{X}$, such that for every statement s' supporting $\mathbb{Y}$, the share of voters supporting $\mathbb{X}$ under the distribution of cases p_X is at least one half.

A pair consisting of party $\mathbb{X}$ and a positive statement is an equilibrium if

$$\lambda x \geq \lambda(1-x) + (1-\lambda)y$$

(that is, $x \geq \frac{1}{2} + \frac{1-\lambda}{2\lambda} y$), and the pair consisting of party $\mathbb{X}$ and a negative statement is an equilibrium if

$$(1-\lambda)(1-y) \geq \lambda(1-x) + (1-\lambda)y$$

(that is, $x \geq \frac{2\lambda-1}{\lambda} + \frac{2(1-\lambda)}{\lambda} y$).

A *cyclical equilibrium* is a sequence of pairs $(\mathbb{X}^t, s^t)_{t=1,\dots,T}$ (where T is a positive even number) such that (i) $\mathbb{X}^t \neq \mathbb{X}^{t+1}$ for all t; (ii) the statement s^t supports $\mathbb{X}^t$ and gets more than half of the votes under the distribution of cases $p_{\mathbb{X}^{t-1}}$ when it challenges s^{t-1} (and s^1 wins over s^T).

The next three observations concern the existence and structure of cyclical equilibria. Do parties exhibit inertia in their choice of statements, in the sense that there are cyclical equilibria involving only a single statement by each party, with each party being beaten by the rival's statement? Can there be a cyclical equilibrium in which a party that is beaten returns to power with another statement, and how many statements can be involved in such an equilibrium?

Observation 3: *There is always either a non-cyclical equilibrium or two cyclical equilibria, each involving two statements by each side, in which every statement is beaten by the opponent's best response.*

If there is no non-cyclical equilibrium, then for each statement made by the incumbent party, the challenger's best response beats it. Table 1 then implies that the two cycles are

$$[A] \to [+] \blacktriangleleft [+] \to [B] \blacktriangleleft [B] \to [-] \blacktriangleleft [-] \to [A] \blacktriangleleft [A] \to [+]$$

$$[+] \to [A] \blacktriangleleft [A] \to [-] \blacktriangleleft [-] \to [B] \blacktriangleleft [B] \to [+] \blacktriangleleft [+] \to [A]$$

where $s \blacktriangleleft s'$ means that the statement s' receives more votes than s when the incumbent is the party supported by s.

Observation 4: *For some parameter values, there exists a cyclical equilibrium in which a defeated party returns to power without changing its statement.*
Consider the case in which $\lambda = 1$ and $a, b < 1/2$. Party $\mathbb{A}$, making the statement $[A] \to [+]$, is defeated by $[B] \to [+]$ because there is no experience with action B, and cases refuting $[A] \to [+]$ are more frequent than cases confirming it. However, the same argument applies in the opposite direction.

The interpretation of this result is that when parties are inflexibly dogmatic, quite incompetent, and yet self-promoting, the electorate tends to cycle them in and out of power.

Observation 5: *For some parameter values there exists a cyclical equilibrium involving all statements in which one of the parties, whenever is in the opposition, wins with a non-best-response statement.*
For example, if $\lambda = 1/2$, $a > b$, $2b > a$ and $1 + b > 2a$, then the following is a cyclical equilibrium in which $\mathbb{B}$ uses a non-best-response statement to win against $\mathbb{A}$ whenever $\mathbb{A}$ is in power :
$[A] \to [+] \blacktriangleleft [+] \to [B] \blacktriangleleft [+] \to [A] \blacktriangleleft [A] \to [-] \blacktriangleleft [B] \to [-] \blacktriangleleft [-] \to [A] \blacktriangleleft [-] \to [B] \blacktriangleleft [B] \to [+] \blacktriangleleft [A] \to [+]$.

3 Analysis

The equilibria of the model depend on λ, the degree of bias of each party. The following panel presents, for some values of λ, the set of success rates (x for the incumbent and y for the challenger) for which an equilibrium exists in which the incumbent remains in power by using either a positive statement (in blue) or a negative statement (in red). For example, consider the graph for $\lambda = 0.5$. The blue region indicates that, for $0.5 \leq a \leq 1$ and $b \leq 2a-1$ ($0.5 \leq b \leq 1$ and $a \leq 2b-1$), there is an equilibrium in which $\mathbb{A}$ ($\mathbb{B}$), as the incumbent, uses a positive statement. The red region indicates that, whenever $b \leq a/2$ ($a \leq b/2$), there is an equilibrium in which $\mathbb{A}$ ($\mathbb{B}$), as the incumbent, uses a negative statement.

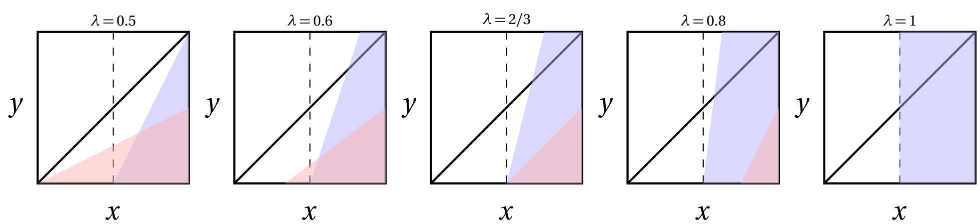

Figure 1: In blue (red), the set of (x, y) for which there is an equilibrium with a positive (negative) statement, where x is the incumbent's success rate and y is the challenger's.

3.1 No Bias

The case of $\lambda = 1/2$ captures a situation in which the two parties are unbiased in their choice of actions, and each is equally likely to choose either action. Nevertheless, the parties differ in their view of the world. Party $\mathbb{A}$ claims that A is the successful action, while party $\mathbb{B}$ claims that it is B. Both parties strive to be in power and try to persuade voters that their view is correct, even though in practice there is no difference in their actions. Will the party that is "more correct" remain in power?

Table 2 displays the conditions under which an incumbent using the statement in a given row is defeated by a challenger making the statement in a given column.

$\mathbb{X}$ / $\mathbb{Y}$	$[Y]\rightarrow[+]$	$[+]\rightarrow[Y]$	$[X]\rightarrow[-]$	$[-]\rightarrow[X]$
$[X]\rightarrow[+]$	$y > x$	$y+1 > 2x$	$1/2 > x$	$y > 2x$
$[+]\rightarrow[X]$	$2y > x+1$	$y > x$	$y+1 > 2x$	$y > x$
$[Y]\rightarrow[-]$	$y > 1/2$	$2y > x+1$	$y > x$	$2y > x$
$[-]\rightarrow[Y]$	$2y > x$	$y > x$	$y > 2x$	$y > x$

Table 2: For $\lambda = 1/2$ the conditions on the success rates x and y for which $\mathbb{X}$ with a row statement is beaten by a challenger $\mathbb{Y}$ with the column statement.

Observation 6: *(in the case $\lambda = 1/2$) In any non-cyclical equilibrium, the incumbent is the party advocating the more successful action.*

The condition for a non-cyclical equilibrium with a positive statement is $x \geq \frac{y+1}{2}$ and for a negative statement, it is $x \geq 2y$. In both cases x must be above y. Thus, when $\lambda = 1/2$ any non-cyclical equilibrium is "efficient". However, it is not the case that whenever $a > b$, there is an equilibrium with party $\mathbb{A}$ in power.

Observation 7: *(in the case $\lambda = 1/2$) If the difference in the success rates of the two actions is not too large, only cyclical equilibria exist.*

In the rhombus-shaped region of the parameters (a, b) given by $a > b/2,\ b > a/2,\ a < 1/2 + b/2$ and $b < 1/2 + a/2$, any statement made by an incumbent is defeated by some statement made by the challenger. For example, if $a = 0.7$ and $b = 0.6$ the positive statement $[A] \rightarrow [+]$ is defeated by $[+] \rightarrow [B]$. To see why, note that a voter votes for the challenger if either A^- or B^+ is sampled before A^+. In each draw A^- or B^+ occurs with probability 15%+30%, while the case confirming $\mathbb{A}$'s statement, A^+, occurs only with probability 35%. By contrast, the positive statement $[A] \rightarrow [+]$ will not be defeated if $a > 0.8$ and $b = 0.6$: it is confirmed in each sample with probability greater than 40%, while its refutation occurs with probability less than 10%, and the confirmation of $[+] \to [B]$ (the best response) occurs with probability 30%.

Observation 8: *(in the case $\lambda = 1/2$) There is no cyclical equilibrium where each party sticks to the same statement.*

If $\mathbb{A}$ is in power using the statement s_A, and is defeated by $\mathbb{B}$ making the statement s_B, then it cannot return to power with the same statement (unlike the equilibrium described in Observation 4) since when $\lambda = 1/2$, the distribution of cases is *independent* of who is in power. Therefore, the election outcome is the same regardless of which party is in power.

3.2 Extreme Bias

The case $\lambda = 1$ corresponds to a situation in which the party in power always follows its bias. Consequently, voters cannot observe any cases that involve the challenger's preferred action. This leads to the following observation:

Observation 9: *($\lambda = 1$) (i) When one party's success rate exceeds $1/2$ (regardless of whether it implements the best action), there is an equilibrium in which that party remains in power with a positive statement. (ii) When both parties' success rates are below $1/2$, there are only cyclical equilibria. (iii) As long as neither action is perfectly effective, there is a cyclical equilibrium in which each party uses a negative statement.*

(i) For an incumbent with $x > 1/2$, any positive statement is confirmed with probability greater than $1/2$, leading it to remain in power.

(ii) When $a, b < 1/2$, any statement by an incumbent $\mathbb{X}$ is defeated by the challenger's statement $[X] \to [-]$, which is confirmed with probability above $1/2$.

(iii) When $a, b < 1$, there is a cyclical equilibrium in which each party claims that all failures are caused by the rival's policy. When $\mathbb{X}$ is in power with the statement $[-] \to [Y]$, party $\mathbb{Y}$ wins with the statement $[-] \to [X]$. This is because $\mathbb{X}$'s statement is never confirmed, while $\mathbb{Y}$'s statement is never refuted, and whenever X fails, $\mathbb{X}$'s statement is refuted and $\mathbb{Y}$'s statement is confirmed.

3.3 Intermediate Bias

Intermediate bias creates a region where incumbents may survive despite inferior policies, where negative campaigning can dominate self-praise, and where strategic moderation becomes advantageous.

Observation 10: *(for* $1/2 < \lambda \leq 1$*) If the incumbent party is biased toward the less successful action, and the probability that it both chooses that action and that action succeeds exceeds* $1/2$*, then there is a non-cyclical equilibrium in which that party stays in power.*

If the success rate x of incumbent $\mathbb{X}$'s preferred action satisfies $\lambda x > 1/2$, then the statement $[X] \rightarrow [+]$ is confirmed on each draw with probability greater than $1/2$, and thus cannot be defeated, regardless of the success rate of the action Y.

Observation 11: *There is a region of parameters for which a non-cyclical equilibrium requires the incumbent to smear the challenger's preferred action even though its own action is more successful. However, when* $\lambda \geq 2/3$*, a non-cyclical equilibrium with a negative statement exists only if a non-cyclical equilibrium with a positive statement also exists.*

When $1/2 \leq \lambda < 2/3$, there is a region of pairs (a, b) defined by $\frac{1}{2} + \frac{1-\lambda}{2\lambda} b > a > \frac{2\lambda-1}{\lambda} + \frac{2(1-\lambda)}{\lambda} b$ (and thus $a > b$) for which there is a non-cyclical equilibrium with a negative statement, but not one with a positive statement, even though A is more successful than B.

For $\lambda \geq 2/3$, the inequality $a \geq \frac{2\lambda-1}{\lambda} + \frac{2(1-\lambda)}{\lambda} b$, which guarantees the existence of an equilibrium with a negative statement, implies that $a \geq \frac{1}{2} + \frac{1-\lambda}{2\lambda} b$, thereby guaranteeing the existence of an equilibrium with a positive statement.

Observation 12: *Only cyclical equilibria exist for a range of parameter values that includes pairs of success rates which are similar, and (for* $\lambda > 1/2$*) even pairs in which the less successful action is completely useless.*

Whenever $\lambda \geq 1/2$ and $a \in (0, \frac{\lambda}{3\lambda-1})$, both $a < \frac{2\lambda-1}{\lambda} + \frac{2(1-\lambda)}{\lambda}a$ and $a < \frac{1}{2} + \frac{1-\lambda}{2\lambda}a$ hold. This implies that if b is sufficiently close to a in this interval, then there is no non-cyclical equilibrium.

When $\lambda > 1/2$, $b = 0$ and $a < \min\{0.5, \frac{2\lambda-1}{\lambda}\}$, a positive statement by $\mathbb{A}$ is beaten by a negative statement by $\mathbb{B}$ (since $a < 1/2$), and a negative statement by $\mathbb{A}$ is also beaten by a negative statement by $\mathbb{B}$ since $\mathbb{A}$ is biased toward A, which is sufficiently unsuccessful that failures of A are sampled more often than failures of B.

Up to now we treated the bias λ as an exogenous parameter. Our final observation considers a situation in which a party can affect its bias. It addresses the following question: Would parties strategically deviate from their ideological position in order to shape the evidence available to voters?

Observation 13: *A party may prefer not to fully pursue its ideological position.*

Suppose a party aims to implement its favored action as much as possible. Nevertheless, it may prefer to reduce its bias toward that action in order to expose the weakness of its rival. Consider, for example, the case in which $a < 1/2$ and $b < a/2$. Party $\mathbb{A}$ may prefer to set the largest λ (that is, $\lambda = \frac{1-2b}{2-a-2b} < 1$), for which it remains in power with a negative statement about its relatively weak opponent, thereby avoiding levels of bias at which any statement would be defeated.

This feature of the model resembles a real-life phenomenon in which leaders sometimes choose an action that goes against their platform in order to make it clear to voters that the opponent's policy is flawed.

4 Related Literature

This paper adopts the approach introduced in Eliaz and Rubinstein (2025) to model political campaigning. The commonalities between that paper and the present one are: (i) statements are made about the relationship between an action and an outcome (that is, how one implies the other), and (ii) individuals assess the validity of these statements by sampling cases from the equilibrium distribution until they find either a confirmation or a refutation. The earlier paper focused on a monopolistic firm and also considered competition between two firms seeking to maximize profits. The competition there was modeled as a zero-sum game and analyzed using Nash equilibrium. In contrast, here the solution concepts refer to either a "ruling party" that determines the distribution of cases and cannot be defeated by a challenger, or to a cycle of political turnover.

We are inspired by the Wason selection task experiment (Wason (1960)), which examines the type of information people seek when testing the validity of implication statements of the form "if A is true, then B is true". In the spirit of Wason's results, we assume that voters also look for evidence that confirms a statement rather than merely for evidence that refutes it.

Our modeling of voters' behavior as a decision procedure based on a small sample of cases builds on ideas in Osborne and Rubinstein (1998), which were applied to strategic voting in Osborne and Rubinstein (2003).

The non-Bayesian approach of our voters, whose behavior is shaped by observing a past example rather than by aggregating statistical information, is related to the literature on *exemplification*. This literature shows that vivid cases can shape judgments more strongly than base-rate information suggests (see, e.g., Brosius and Bathelt (1994) and Krämer and Peter (2020)).

A key feature of our model is that logically equivalent statements may not be equally effective in campaigning. This framing effect is consistent with recent findings by Sahn, Stoker and Lerman (2026), who show that formally equivalent positive and negative descriptions of social problems can elicit different public reactions.

In our framework, a party advances a statement that links an action to an outcome, and can therefore be interpreted as asserting a causal connection. In this respect, our paper is related to recent work that treats narratives as causal models represented by directed acyclic graphs (Eliaz and Spiegler (2020) and Eliaz, Galperti and Spiegler (2025)). In that literature (unlike in our work), the public evaluates narratives in a Bayesian manner based on statistical data and adopts the narrative that maximizes its expected anticipated utility. A different approach is taken by Izzo, Martin, and Callander (2023), who study a game between political parties in which each party claims that the data observed by voters are generated according to some function, and voters adopt the statement that best fits the data.

5 References

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