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A Limited Defense of Spoiler Voting¹

Abstract: A familiar debate in first-past-the-post democracies is whether ideologically disenfranchised voters should cast their vote for minor party candidates. We argue that voting for minor party candidates will sometimes be the best strategic option for voters with non-mainstream ideologies. Major parties, as rational agents, will be ideologically responsive to genuine threats of defection. By voting for a minor party, voters can simultaneously punish major parties for unfairly 'bargaining' with their voting bloc as well as signal their ideological reasons for defecting.

Every four years, and to a lesser extent every two years, United States election coverage brings a familiar debate to the fore: Should voters dissatisfied with both major political parties cast their vote for third party candidates? As each election creeps closer, voters contemplating this decision are told "Don't Waste Your Vote on a Third-Party Candidate"², that minor party voters "have some things to learn about democracy"³, and even that voting minor party reflects "Abhorrent White Privilege".⁴ If the sole advantage of voting minor party is to maintain ideological purity or pat one's self on the back, then, given the consequences of choosing one major party leader over another, it would seem problematic, even selfish, to vote for non-mainstream candidates. And what more could there really be to knowingly voting for a candidate that cannot win? This would give some real bite to the claim that minor party voters are wasting their votes.

¹ For helpful feedback on earlier versions of this paper, we would like to thank Dan Baras, Aaron Elliott, David Enoch, Nikki Fortier, David Sobel, and audiences at the Hebrew University Law & Philosophy Forum and the Canadian Society for the Study of Practical Ethics.

² Christen (2016).

³ Tomlinson (2016).

⁴ Dunst (2016). It's worth noting that exit polling in the 2000 presidential election — the most recent election for which a third party got a non-trivial percentage of votes — Ralph Nader, the leading third party candidate, did better with poorer voters and with LGB voters (no data is available for trans voters) than with heterosexual middle class white men, although he did do worse among African American voters.

(Roper Center:

<http://ropercenter.cornell.edu/polls/us-elections/how-groups-voted/how-groups-voted-2000/>)

See also the polling data included in Visser (2016).

In what follows, we argue that minor party voting is not always so fruitless. In fact, the values and ideology of many voters will often make it strategically best to vote for minor party candidates, even if they know their favored candidate will lose the election. Our claim is not that those who prefer the platform of some minor party over either mainstream party ought to always vote minor party; rather, our argument is only that, in certain circumstances, circumstances which as a matter of fact are often (but not always) met in American elections, voting minor party is the best strategy for the long term advancement of one's favored policies.

Our strategy has three steps. We begin in section 1 by building off of Alexander Guerrero's (2010) discussion of mandate influence as a rational basis for voting. Guerrero's discussion of mandates attempts to illustrate why it can be strategically rational to vote even when an agent knows that her vote won't be the deciding vote. We consider what Guerrero's argument entails for a voter whose policy preferences are opposed to both mainstream parties, concluding that such a voter would have little to no reason to vote for either mainstream candidate, even assuming she slightly preferred one mainstream candidate over another. In sections 2 and 3, we strengthen our argument by appeal to signaling and game theory. If successful, section 1 will have shown that a subset of voters will have little to no reason to vote for either mainstream candidate. But if those voters also have little to no reason to vote for minor party candidates, then the argument will be a wash. Sections 2 and 3 attempt to support the stronger claim that, from a strategic standpoint, this subset of voters will often have most reason to vote minor party. We model voting as an iterated decision game somewhat like an iterated prisoner's dilemma. Given the right incentives, there will be circumstances when a voter ought to defect from supporting a major party as a simultaneous signal and punishment for lack of cooperation. Sections 2 and 3 provide a proof of concept for the strategic advantage of minor party voting. Finally, in section 4, we look at some historical instances that vindicate

this idea by way of considering two objections to minor party voting from a recent paper by Neil Sinhababu. As we'll see, the history is mixed. This stresses the nuance of strategic minor party voting, rather than undermining it. And that is roughly where we conclude: Although there is no simple calculation for voters to make, we conclude that often enough, voting minor party will be the most rational strategy for a significant subset of American voters.

1. Guerrero on Mandate Influence as a Reason to Vote

Alexander Guerrero's (2010) article is primarily concerned with addressing the paradox of voting: What reason does an individual have to vote when it is all but guaranteed that her vote will not be the deciding vote?⁵ This is not our direct concern, but the notion of what Guerrero calls a "Manifest Normative Mandate" (MNM), which he develops along the way, is a useful concept for our arguments below.

We first need to see what a Normative Mandate is. Discussion of "mandates" is relatively common in political media. Guerrero's "Normative Mandate" can be seen as one (though not the only) way of making that vague idea more precise. A Normative Mandate, for Guerrero, is "the degree of support that a candidate has from those living in his or her jurisdiction."⁶ Ideally, we would have a way of directly accessing a given candidate's Normative Mandate. In the real world, we must identify the most precise methods of approximating a candidate's Normative Mandate. This is where the idea of a Manifest Normative Mandate comes in. An MNM is "[t]he best practically available measure of the normative mandate of a candidate."⁷ So insofar as a candidate's Normative Mandate is important, her MNM will be just as important.

⁵ Many approaches have been taken to attempting to resolve this paradox (See, for example, Parfit 1984, Carling 1995, Kagan 2011, Pinkert 2015, Nefsky forthcoming). It's worth noting that Guerrero's theory of mandate influencing as a reason for voting is compatible with most alternatives. So at worst, it provides a supplementary reason for voting. (Guerrero himself points this out: 274n7.)

⁶ Guerrero (2010), 274.

⁷ Guerrero (2010), 274.

In democratic systems like the United States, arguably the best available measure, and thus the MNM, is the amount of eligible voters living in a given jurisdiction who voted for that candidate. Given that a candidate's MNM is a matter of degree, not just a matter of winning or losing, each voter can, even if minutely, affect a candidate's MNM. In fact, even non-voters make a difference to a candidate's MNM by not voting, since they thereby lower the percentage of eligible voters who have voted for a given candidate. As a result, every eligible voter's action or inaction contributes to an elected candidate's MNM. We think this is a good-making feature of Guerrero's account, since it ensures that low enthusiasm for candidates is registered. An elected official from a very high turnout election should have a higher mandate than an elected official from a very low turnout election; Guerrero's account captures this intuition.

Having an effect on a candidate's MNM is in the control of each eligible voter, and even if that effect is small, it is certain. Even if a voter casts her ballot for a losing candidate, she has still had an effect by lowering the winning candidate's ultimate MNM. But there remains the question of why a voter should care to affect some candidate's MNM (for better or worse). Guerrero's argument turns on two ways that a political representative can discharge her duty of making policy decisions. On the one hand, she can act as a delegate, proposing and enacting policies in deference to her constituency. Acting as a delegate would, of course, mean acting against her own considered judgments about what would be best, treating herself as at best epistemically on a par with her constituency. On the other hand, she can act as a trustee, proposing and enacting policies that she herself judges to be best, even when these actions conflict with the preferences of her constituency. The thought behind acting as a trustee is this: Being elected in part signals to the electee that she is trusted to have good judgment, and to weigh considerations in favor of and against policies that the broader population does not have time to be educated about. When a representative governs as a trustee, she is treating herself as

epistemically superior insofar as she has been selected to research issues into more detail than her constituency plausibly can.

Of course, whether to govern as a delegate or a trustee is going to be a matter of degree, and rarely, if ever, should a representative govern purely as a delegate or purely as a trustee. But should representatives, generally speaking, govern more as delegates or more as trustees? Guerrero argues that the answer to this question depends on how powerful of a mandate a representative has. The higher a mandate a representative has, the more she should govern as a trustee. As Guerrero puts it:

Epistemic modesty and a concern for respecting autonomy both provide reasons for thinking that [those with a Weak MNM] ought to generally be guided by norms of deference when those norms conflict with norms of guardianship.⁸ In the case of [those with a Strong MNM], however, these arguments are altered...considerations of epistemic modesty get less bite. When one votes for a candidate, one thing the vote usually implies is that one believes that the candidate will do a good job acting as one's representative. A vote can be seen as turning over a kind of decision-making authority to another person".⁹

The higher one's MNM, the more confident she can be in treating herself as granted the power of an epistemic authority. On the other hand, if a representative has a low MNM — even if it is higher than any of the other candidates — she should not treat herself as having been granted that authority, and should rule more as a delegate. Insofar as representatives are and should be responsive to their MNM, the eligible voter should be concerned with altering the winning candidate's MNM by participating (or choosing not to participate) in the electoral outcome.

One may worry that the idea of a MNM dictating whether a real world politician will act as a delegate or a trustee is naive. And if Guerrero (and us, following him) is wrong about this, then the arguments that follow may rely on a problematic assumption. However, we think that this is not so. Even if Guerrero's trustee/delegate distinction is not applicable in the messy real

⁸ Guerrero (2010), 286.

⁹ Guerrero (2010), 287.

world, discussions of political and policy mandates are all pervasive, and seem to have an affect on the kinds of policies pushed by recently elected officials. This more colloquial notion of a political mandate, along with Guerrero's point that all eligible voters ultimately have an influence on this, can help to supplement the claims we make in what follows. But even if one *completely* rejects this talk of mandates as unrealistic, our arguments still stand to show how a voter can best signal her preferences, mandates aside.

2. Optimal Signaling Strategies

We now turn to how MNM is related to our model of voting as signaling. We do not claim that viewing voting as a signal is novel, but our application of that insight is new in two ways. First, it is novel in our application of voting as signaling to Guerrero's model of MNM. Second, we make an applied normative argument given that voting is a move in a signaling game, rather than a descriptive argument about what signals are sent in voting. We proceed by modeling the interaction between voters and representatives in which normative mandates arise as a signaling game. By voting, constituents do not just engage in a decision procedure for selecting their representatives and determining that representative's MNM. They also signal their preferred policies. An elected official's MNM determines how deferential she ought to be to her constituents' preferences, or at least how ambitious of policies she ought to pursue, so the means by which constituents signal their preferred policies is an important element in an account of MNM. In this section we glean insights on signals from Brian Skyrms to better understand how voters signal their preferred policies to representatives. Applying these insights to a "lesser of two evils" election demonstrates how voting minor party can be an optimal strategy.

We proceed by first arguing that voting *qua* signaling transmits two related but distinct kinds of *informational content* to use Skyrms's terminology. To put it differently, the same action

is a move in two separate but related signaling games. Second, we notice that abstaining from voting is only a move in one of those games, particularly the game that raises or lowers a representative's MNM. It is not a move in the game that signals a voter's preferred policies. Third, we argue that voting minor party is a move in both games and thus a more optimal signal. It affects a representative's MNM, and it signals a voter's preferred policies. Given the argument above, we close the section by examining when one ought to pursue such a policy.

Inspired by the work of Fred Dretske, Brian Skyrms (2010) analyzes signals as the carriers of information. Skyrms departs from Dretske by introducing the notion of *informational content*. He writes, "The informational content of a signal consists in how the signal affects probabilities."¹⁰ Imagine that there is a probability of 0.5 that the British come by land and a probability 0.5 that they come by sea. When the septon puts one lantern in the belfry the probability that the British are coming by land moves considerably closer to 1. It isn't exactly at 1 because the septon could be mistaken or lying, he could have forgotten the code, etc. Compare this situation made famous by Longfellow to one in which the septon puts one lantern on the belfry every day no matter what. In the former situation, the signal carries information because it changes the probability of some states' occurrences – it increases the probability that a land attack obtains and decreases the probability that a naval attack obtains. In the latter case the lantern in the window carries no information about the movements of the British.

The act of voting affects the probabilities of various states. Most obviously, it increases the probability that the voter wants the candidate she votes for to be elected. It also increases the probability that she wants the policies endorsed by the candidate to be enacted. We normally expect these two states to coincide, but they need not always do so. For example, a voter may want the policies endorsed by the candidate to be enacted, but not want the candidate to be

¹⁰ Skyrms (2010), 34.

elected because she does not trust the candidate. Or, she might want the candidate to win but has no preferences regarding the candidate's policies because the candidate is her friend or promised her a job. Nonetheless, because voters regularly vote for the candidates they want to win and vote for candidates whose policies they support, voting for a candidate signals both states – it carries both kinds of informational content.

Given Guerrero's argument, notice that both kinds of information must be signaled for a representative to be able to act responsibly. The content related to candidate preference is necessary because it is used in establishing the candidates' MNM. The content related to policy preference is necessary because it determines what a candidate ought to do *qua* delegate. Two observations follow. First, if one abstains from voting in order to lower the eventual winner's MNM, then her action still transmits information along one dimension (that she does not support any candidate) but her action transmits no information along the other (she does not signal what her preferred policies are). This missing signal is especially problematic if the whole point of lowering a representative's MNM is to increase her role as a delegate because the official lacks access to this voter's preferences. Voting for a minor party candidate, however, restores the ability to signal preferred policies without increasing a potential winner's MNM. If voting for minor party candidates were not an option, voters would be faced with what Skyrms calls "an informational bottleneck" where there are too few signals for appropriately signaling various states.¹¹ Voting for a minor party is preferable to not voting at all, if the potential voter has enough policy preferences that correspond to some minor party candidate.

The second observation is that when one votes for a lesser of two evils among the two major party candidates, a voter unwittingly signals that she supports that candidate's policies.

¹¹ Skyrms (2010), 112.

In Skyrms's parlance, the signal transmits misinformation.¹² Voting for the lesser of two evils, then, has the result of not only raising a potentially dangerous representative's MNM, but also of skewing the information that the winner appeals to whenever she acts as a delegate.¹³ It seems, then, that sometimes one ought to vote for the lesser of two evils; sometimes one ought to vote for a minor party candidate. It depends on the expected value one's vote has in possibly defeating the greater of two evils measured against expected value of raising the MNM of the lesser of two evils and signaling a preference for that candidate's policies. Drawing together the lessons of parts 1 and 2 we can run a kind of cost-benefit analysis on the voting for the lesser of two evils vs. voting for a third party candidate.

Assume that major candidates A and B will each do more harm than good if elected, and both support harmful policies. Table A presents the costs and benefits of voting for A (the lesser of two evils) over B and of voting for a sure-to-lose third party candidate C where "+" indicates a benefit and "-" indicates a cost.

Table A

Vote for A Over B	Vote for Third Party Candidate C
+ Increase A's chances of defeating B	+ Decrease A's MNM if A wins
+ Decrease B's MNM if B wins	+ Decrease B's MNM if B wins
- Increase A's MNM if A wins	+ Signal approval of good policies
- Signal approval of harmful policies	

¹² Skyrms describes mistaken signals as a case of misinformation: "There is a positive quantity of information in the signal because it moves the probabilities of the state, but this use of the signal is *misinformation* because it decreases the probability of the true state and increases the probability of the false state" (pg. 74). The moniker is also apt for accidentally transmitted signals when the signal increases the probability of a false state.

¹³ As David Enoch pointed out, there is a snag here that complicates things. Suppose a voter not only finds the views of the major party candidates to be harmful, but also finds the views of the majority of other voters to be even more harmful and/or abhorrent. In such a case, she may wish that, whoever ultimately wins the election, they act as a trustee rather than a delegate (lest they enact the populace's abhorrent policies). This would provide a reason for her to vote for whichever candidate she thinks has the most chance of winning, to increase the winning candidate's MNM.

It's an open question how frequently such a thing would happen, and we take the point — this is just another complication that potential voters should keep in mind when deciding how to vote.

Counting “signal approval of good policies” as a benefit for voting for third party candidate C does not entail that the voter agrees with every policy endorsed by C. It merely entails that signaling all the policies, good and bad, is a net positive. The more shared policies that C and the voter both support the higher the net positive should be. *Mutatis mutandis* the same point applies to the net cost of “signal approval of harmful policies” in voting for A. A voter may agree with some policies A endorses, but endorsing all of her policies may still be a net negative.¹⁴

Table A suggests that one ought to vote minor party in a lesser of two evils situation when one is sure that one’s vote will not make a difference in who wins. This is often the case in United States presidential election where many states’ Electoral College votes are guaranteed to go to one candidate or another and in United States Congressional elections where gerrymandered districts often guarantee a certain representative’s victory.

Table A ignores the possibility of abstaining from voting either as a means to communicate some signal or out of fear from miscommunicating. The problem with voter abstention is that abstention may more strongly signal apathy than whatever message the abstainer wants to send. As long as apathetic non-voters significantly outnumber ideological abstainers, the abstainers signal apathy by not voting. If no third party sufficiently matches the policy preferences of the would-be voter, then it would be rational for her to not vote. It is an assumption of this paper that for many voters such minor parties exist.

Table A also ignores considerations about the strength of the signal. A third party voter who assigns high expected utility to the benefit of increasing A’s chances of defeating B must

¹⁴ This suggests that single issue parties will often provide a voter the means to most clearly signal some of her preferred policies, but at the cost of minimizing the number of issues she’ll be able to signal her support for.

assign an even higher expected utility to decreasing A's MNM if A wins. Compare this to a second voter who sees practically no difference between A and B (perhaps the voter is an anarchist who sees both A and B as gross statist). Only a slight benefit in decreasing A's possible MNM can tip the scales for this second voter to vote for C. We might plausibly say that the first voter more strongly signals her preferred policies, because of her willingness to forgo the positive benefit of increasing A's chances of winning – she incurs a greater cost for her vote.

¹⁵ We leave these considerations out of Table A for two reasons. First, for individual voters, the strength of the signal as it is understood here is not available to the receiver of the signal. The particular values of the various costs and benefits are not communicated nor is the overall value difference between voting for A and voting for C. However, this particular feature of the signaling system does not undercut the fact that in some situations one can still optimize the expected value of her vote by by simultaneously lowering the MNM of an eventual winner and signaling a preference for better policies. Second, it is not clear that the strength of signal, even if it were trackable, affects the MNM. The willingness of voters to incur a cost to vote for C may play a role in A's or B's future-oriented strategic decisions once elected, but exploiting this possibility is the topic of the next section.

One might object that there are other ways of signaling preferred policies: protests, marches, petitions, opinion polls, monetary contributions, etc. We offer two responses to this objection. First, we grant that there are other means of signaling preferred policies. We need only assert that voting is a way that representatives gauge public preferences for policies to claim that it factors into the value of our voting strategy. Second, while citizens ought to exercise all available means for signaling their preferred policies, doing so at the ballot box is an especially democratic means of doing so. Protests and marches may or may not receive

¹⁵ We thank Aaron Elliott for raising this objection.

coverage, one may not be able to participate in them for a variety of reasons, and opinion polls are constrained by whose opinions they solicit. Legally, every vote for a registered candidate must be counted. And like lowering a representative's MNM, and unlike determining the winner of an election, the amount of voters who signal particular policy preferences is measured with a finer-grain than simple majorities.

Finally, there are creative solutions to the problem of effectively using one's vote as both a vote and a signal such as ranked choice voting as was recently adopted by the state of Maine and *fusion voting* where minor parties can allow voters to vote for major party candidates under a third party label such as the Working Families Party in New York.¹⁶ Voters who have access to such resources have additional means at their disposal to both affect their representatives' MNM and signal their preferred policies not considered in our argument, and thus their actions and strategies fall outside the purview of this paper.

3. Costly Punishment: Reciprocity Lessons from Iterated Games

Section 2 examined voting for a minor party by viewing voting as a single event with a single payoff. In reality, representative democracies have a series of ongoing elections, and this fact can't be ignored in optimizing one's voting strategy. One of the enduring lessons of Robert Axelrod's now famous Prisoner's Dilemma computer tournaments is that the best strategy for a game that will be played once may be a bad strategy for a game with multiple iterations.¹⁷ Axelrod invited game theorists to submit programs to compete against each other in iterated Prisoner's Dilemmas. The winning strategy employed *Tit for Tat*: cooperate the first time the game is played, and each round afterwards do whatever the other player did on the previous

¹⁶ Ranked choice voting was also an important piece of the Labour Party of Canada's platform in the 2015 Canadian federal election. See <https://www.washingtonpost.com/news/monkey-cage/wp/2017/02/13/canadians-wanted-their-government-to-reflect-the-national-vote-but-these-reforms-arent-happening/>

¹⁷ Axelrod (1984).

turn. In short, Tit for Tat rewards cooperation with cooperation and it punishes defection with defection. Reciprocity in both cooperation and defection, it turns out, is a powerful strategy in promoting long term cooperation. Subsequent work (Boyd 1989; Boerlijst et al.) improved upon Tit for Tat correcting for cycles of punishment and the possibility of communication and perception errors, but they result in similar reciprocal strategies that collectively we call “tit for tat strategies.”

In this section we observe that voting for a minor party can be a kind of useful defection in an iterated game. We explore how this defection can be usefully employed given that voting is an iterated opportunity to cooperate or defect with other players.

3.1 Promoting Cooperation with Reciprocity

We explore two cases in which a voter or voting bloc may have good strategic reasons for defecting. We do not claim that these two cases are exhaustive. In both cases withholding votes from a major party is a kind of defection used to punish a prior defection. This in turn disincentivizes future defections. The first case we explore is one in which voters defect as a means for punishing a party or representatives who are not appropriately responsive to the norms that should guide their behavior (e.g. a candidate who ignores a “norm of fidelity” by ignoring campaign promises). The second case is one in which voters defect in order to punish a party or representative who is concerned with appeasing *only* the dominant base of the party. In both cases we argue that voters have a pro tanto reason to not vote for a major party candidate, and the considerations presented in part 2 still hold such that a voter ought to vote for a minor party candidate as a means of signaling her preferred policies. In these cases an additional reason to vote minor party is to signal that a voter is actively defecting rather than not voting because of restricted access, apathy, or laziness.

Both cases are most interesting in a lesser of two evils context where the defection of voters, and especially the defection of a voting bloc, may cause the worse of two evils to be elected. In these cases, unlike a standard prisoner's dilemma, the punishment is costly. Defection potentially hurts the punisher along with the punished player. Self-interested players have an obvious reason not to engage in costly punishment to enforce certain behavior; however, this can have dire consequences in a population. A game proposed and simulated by Axelrod (1997) called the Norms Game illustrates this point.

In the Norms Game, players can receive a payoff of 3 by cheating which incurs a cost of -1 to all other players. Each opportunity to cheat comes with a randomly selected probability of getting caught. If a cheater is caught by any of the other players, then each of those other players can choose to punish or not punish the cheater. Punishing the cheater is costly, however. Punishment incurs a cost -9 to the cheater and an enforcement cost -2 to the punisher. (Notice that the enforcement cost is greater than the cost of being cheated.) Each player is randomly assigned a zero-to-one value of boldness and a zero-to-one value of vengefulness. If a player's boldness is higher than the chance of being caught, then he cheats. If a player catches a cheater, his degree of vengefulness determines what percentage of times he chooses to punish the cheater.

Axelrod simulated the game with 20 players. Each player received four opportunities to cheat. After the simulation the most successful players were given more offspring than the less successful players. Very unsuccessful players were given no offspring. There was a 1 percent chance that an offspring would have an altered rather than directly inherited strategy. The simulation was run again with the new generation and the process repeated for 100 generations. Axelrod describes the patterns in how the strategies evolve:

The first thing to happen is a dramatic fall in the boldness level. The reason for the decline is that when there is enough vengefulness in the population, it is very costly to be bold. Once the boldness level falls, the main trend is a lowering of vengefulness. The

reason for this is that to be vengeful and punish an observed defection requires paying an enforcement cost without any direct return to the individual. Finally, once the vengefulness level has fallen nearly to zero, the players can be bold with impunity. This results in an increase in boldness, destroying whatever restraint was established in the first stage of the process – a sad but stable state in this norms game.¹⁸¹⁹

The lesson is that players need to resist the urge to become less vengeful if they hope to prevent the proliferation of cheating. Axelrod claims that while the “trial and error” model of inherited strategies is useful, it does not take into account that real-life, rational players become forward-looking enough to develop long term strategies. He writes, “In particular, a person may realize that even if punishing a defection is costly now, it might have long-term gains by discouraging other defections later.”²⁰ Interestingly, Axelrod adapted the game so that those who refuse to punish cheaters have a chance of being observed. The new observers have a choice to punish the player who refused to punish the cheater with the same costly punishment payoffs. The outcome of this adapted game changes dramatically. The strategies evolved to produce high levels of vengefulness (that is high willingness to punish even with the enforcement cost) and low levels of boldness (that is low willingness to cheat when there is a non-zero chance of getting caught).²¹

¹⁸ Axelrod (1997), 52.

¹⁹ One weakness of the game is that it does not consider the ability to reward cooperation with a positive payoff, a key element of reciprocal behavior. Heinrich, et al. (2006) find that a willingness to engage in costly punishment exists in all 15 of the populations they studied, but that the degree of willingness to engage in costly punishment covaries with altruistic behavior across the populations. The authors suggest that altruism coevolved with costly punishment. The presence of both in members of a population may have a large impact on the evolutionary stability of either. Another weakness is that the model does not consider the role interactions between groups may play in the evolution of the group’s makeup (see Boyd and Richerson (2005), (2009), see also footnote 20.

²⁰ Axelrod (1997), 58.

²¹ For another model of altruistic, costly punishment see Boyd, et al. (2003). The authors model cooperators, defectors, and punishers as members of three different groups within the game rather than variable attributes of each member. They argue that group selection is responsible for the presence of altruistic punishment. If they are correct, then intra-group dynamics alone do not cause altruistic punishment to emerge or reach stability. This observation does not cut against our conclusion that engaging in costly punishment is rational. If anything, it adds further reasons for engaging in punishment if the punisher cares about the groups long-term cultural-evolutionary survival.

We can view Axelrod's model as a prediction that human societies, which are highly cooperative, must be full of individuals willing to commit costly punishments. Various studies have found humans across cultures willing to engage in costly punishment even when there is no expectation they will be the ones to gain from future cooperation.²² The lesson is that costly punishment can promote long term gains, and rational agents should sometimes engage in costly punishment. Defections from a major party by voters and voting blocs can result in a kind of costly punishment when it results in losing an election. In 3.2 and 3.3, we present two cases where the long term gains may warrant voter defection as a costly punishment. The argument in section 2 was based on the added benefits of lowering any eventual winner's MNM and signaling policy preferences. Its success partly depends on the incredibly low likelihood of a one's vote determining the outcome of an election. That argument does not easily extend to joint decisions made by large voting blocs that can collaborate to swing a close election. The reasons for voting for a minor party in this section do extend to influential voting blocs.

3.2 Enforcing Norms

Consider an incumbent candidate who has made promises to her constituents, then violates these promises. Further assume that the majority of her constituents would prefer that she keep these promises and that she has a low MNM. This constitutes an inappropriate violation of what Guerrero calls the "norm of deference", the norm guiding actions *qua* trustee, and the "norm of fidelity", the norm guiding efforts to fulfill promises. How should a voter respond?

The effectiveness of tit for tat strategies suggests that refusing to vote for an incumbent candidate who has not been responsive to appropriate norms – or members of a party whose candidates have consistently not been responsive to their appropriate norms – can serve as a

²² See for example Heinrich et al (2006), Fehr, Fischbacher, & Gächter (2002), and Fehr & Gächter (2000).

means of punitive reciprocity. Similarly, voting for an appropriately responsive candidate – or members of a party of appropriately responsive representatives – reciprocates cooperative behavior. One has a reason to defect from voting for a major party when a candidate from that party or the party itself has not been responsive to appropriate norms. Unfortunately, defection can lower expected utility by increasing the odds of the election of the worse of two evils. The Norms Game, however, illustrates the danger of not engaging in costly punishment when it is the only means of reciprocity. What has to be weighed is the long term danger of not punishing norm violations against the increased likelihood of the election of the worse of two evils. The latter may not be negligible if enough voters engage in norm enforcing behavior or if a voting bloc collectively punishes a candidate or party.²³

Estimating the value of enforcing a norm is incredibly difficult. First, one cannot calculate the effect any particular punishment or reward has on the stability of norm responsiveness. Second, one cannot know how many transgressions of a norm can go unpunished before the stability of a norm collapses. Third, one does not know if punishing future transgressions will be more or less costly than punishing the present one.

Maintaining one's reputation for honesty illustrates the difficulty of estimating these values. At the same time, it illustrates that human speakers are still responsive to these difficult to assess values. A general norm of honesty in interpersonal communication tolerates a substantial amount of deception without collapsing. Similarly an individual's reputation for honesty seems to tolerate some amount of lying. When speakers have an opportunity to lie, they must weigh the positive value gained from the lie against the long term effects of the damage

²³ For example, punishment for a violation of the norm of fidelity may have played a role in the George H. W. Bush's loss to Bill Clinton. During the 1988 Republican National Convention, Bush famously said, "Read my lips: no new taxes." Bush later expressed a willingness to compromise on this promise and in fact agreed to several tax increases. The New York Post ran the headline in 1990 "READ MY LIPS... I LIED!" Bush's popularity fell shortly after. The charge of lying was used against Republicans in 1990 midterm elections, by 1992 primary challenger Pat Buchanan, and by Bill Clinton in the general election. See Barilleaux & Rozell (2004) pp. 19-20, 33-35.

done to their reputation. Estimating these values is incredibly difficult. Like norm enforcement, a speaker does not know how much any given lie will damage her reputation or how many lies she can get away with. Nonetheless, speakers seem to do it.

So far in this section we have argued, first, following Robert Axelrod, that costly punishment is sometimes beneficial because it enforces norms and, second, that such willingness to engage in costly punishment may extend to the actions of rational individual voters or voting blocs for long term positive payoffs. We now move to a case that explores how a two party system incentivizes elected officials to ignore the goals and desires of a significant part of the population when the threat of costly punishment is removed.

3.3 Cooperation with the Whole Base

Given the nature of a two party system, parties are incentivized to appeal to the members of their base most likely to defect by either not voting or voting for the candidate of a different party. The following game, Radical-Moderate-Party (RMP), illustrates this point. RMP pictures voting as entering into an unenforceable agreement with an elected representative. In an election, a voter or voting bloc agrees to vote for a specific candidate or party increasing the probability of the candidate's or party's electoral victory. In return, candidate or party agrees to represent the interests of the voter or voting bloc. The agreement is unenforceable because voters cannot be coerced into voting for any particular candidate, and in a representative democracy, the candidate, once elected, can't, except in rare cases, be coerced into representing some particular interests.²⁴ Complete cooperation between candidates and those who vote for them would be possible if the voting base for that candidate was a single group with unified desires. However, in a two party political system, such a situation is unlikely. Instead a candidate or party must receive votes from a variety of diverse voters or blocs. This becomes

²⁴ Exceptions include referenda, recall elections, lawsuits, etc.

problematic when the desires of the various voters and blocs are in opposition. RMP simplifies this common situation by considering two voting blocs with arbitrarily chosen payoffs.

The game includes the Radical, the Moderate, and the Party. Radical and Moderate both must choose whether to cooperate with or defect from Party by either voting for Party or not. Party can cooperate with Radical or Moderate by supporting the policies endorsed by Radical or Moderate. Party cannot simultaneously cooperate with both Radical and Moderate because their preferred policies are inconsistent. The payoff structure is as follows: Party only wins the election if it gets votes from both Radical and Moderate, so Party gets a payoff of 1 if Radical and Moderate both cooperate; otherwise it gets a payoff of 0. Radical gets a payoff of 5 if Party wins and cooperates with it. It gets a payoff of -1 if Party wins and cooperates with Moderate. It gets a payoff of -3 if Party loses. Moderate gets a payoff of 0 if Party wins and cooperates with Radical. It gets a payoff of 5 if Party wins and cooperates with it. It gets a payoff of 1 if Party loses. This payoff structure is presented on Table B:

	Party Cooperates with Radical	Party Cooperates with Moderate
Radical and Moderate both cooperate with Party	(5,0,1)	(-1,5,1)
Radical and/or Moderate defect	(-3,1,0)	(-3,1,0)

Radical has more to lose than Moderate if Party loses. Radical, Moderate, and Party all know this. We might expect Moderate to exploit this position and announce that it will only vote for Party if Party agrees to cooperate with it. It seems that Party should accept this offer because it knows that Radical only hurts itself by defecting. If the game is iterated, then Party will uphold its agreement with Moderate to ensure Moderate's continued cooperation. It seems that all Radical can do is cooperate. If Radical defects, then it decreases its own payoff by 2. Radical consistently avoids the worst payoff, but never achieves its best payoff.

Continued cooperation between Moderate and Party is a kind of defection against Radical. Even though Radical has more to lose by defecting, its continued cooperation benefits Moderate and Party. Rather than continuing to cooperate, Radical would be prudent to demand a better situation. Radical should negotiate a better breakdown of how often Party cooperates with it and how often Party cooperates with Moderate. Even though Moderate has a stronger bargaining position than Radical, Radical can still use the threat of defecting as a means of negotiation. Given the arbitrarily chosen payoffs for RMP, there are various breakdowns that constitute a fair negotiation depending on one's solution to the bargaining problem. Following a solution proposed by Nash (1950), Radical and Moderate ought to agree to always cooperate with Party and in turn Party cooperates with Radical 23.3% (7/30) of the time and cooperate with Moderate 76.6% (23/30) of the time. If Moderate or Party strays from this strategy, then reciprocity demands that Radical defect to punish Party and Moderate.

Tit for tat strategies may be counterproductive if the punishment is too costly. In RMP, if tit for tat strategies can be used to force Moderate and Party into the Nash (1950) bargaining solution, then it obviously is not. Radical's payoff is lowered by 2 because of one defection, but its payoff increases 1.4 per iteration if Moderate and Party adopt the Nash solution to the bargaining problem. After two iterations Radical makes up the loss of a single defection. Of course Nash's solution is not the only solution to the bargaining problem. The players may settle on a solution where Radical and Moderate each loses as much as the other if either defects. In RMP this amounts to Party's cooperation with Radical 18.2% (2/11) of the time and Moderate 81.8% (9/11) of the time. The gains here are more modest, but still substantial over repeated iterations. Radical still makes up the enforcement cost after just two iterations. Radical and Moderate may also settle for something closer to a maximin solution of cooperate with Radical 55% (6/11) and Moderate 45% (5/11), in which case Radical makes up the enforcement

cost after one additional iteration. The point is that a player in Radical's position can use defection to enforce a more equitable bargain. Depending on the payoff structure, it may be well-worth paying the enforcement cost of a costly punishment.

The upshot is that given incentive structures similar to the arbitrary payoffs above, the best strategy for voters in Radical's position will sometimes be to defect from major party voting, despite the risk involved in doing so. The reasons given in section 2 still hold that a voter or voting bloc can use voting for a minor party as a means for signaling their preferences. It may also be a means for signaling what kind of behavior the voter or bloc is punishing and where they most want concessions. Some misinformation may still be transmitted. It may not be obvious what particular policies are at the root of a voter's or voting bloc's defection if a minor party has a range of issues that only partially intersects with the voting bloc's. The goal, however, is optimization of signaling, not perfect signaling. There are at least many cases where voting blocs are able to better signal the reasons for their defection by voting for minor parties, than by punishing a major party by voter abstention which will still carry misinformation. For example, abstaining voters do not signal which party was closer to receiving their vote, while it is obvious in some cases which major party is ideologically closer to a particular minor party's policy preferences. Voting for a liberal or conservative minor party signals to the dominant liberal or conservative party that these voters are potentially capturable even if the major party in question does not see the vote as a defection. Given the right payoff structure, voting for a minor party (at least sometimes) can be a perfectly rational voting strategy in two party systems. We now turn to consider two objections.

4. Sinhababu on Partisanship

Despite the frequency of editorials in the popular press on the pros and cons of third party voting, very little work in more formal political philosophy has explicitly addressed this

question.²⁵ Neil Sinhababu’s “In Defense of Partisanship” is an exception to this rule.²⁶ Sinhababu defends what he calls “Ethical Partisanship”, the position that in two-party electoral systems, one should select one of the two majority parties which is better, and vote for that party in both primaries and general elections.²⁷ Because Sinhababu argues explicitly that one should consistently support a major party even if both parties “favor deeply flawed policies”,²⁸ it’s worth briefly discussing his view and its relationship to ours.

Sinhababu’s argument can be separated into two related parts. First, Sinhababu argues that voting for a minor party in an electoral system is generally ineffective. Second, Sinhababu argues that working within a major party by participating in the primary process can effectively change major party policy. We’ll address these objections in reverse order.

Sinhababu’s second central claim against voting minor party is that effective change can occur by working within the major party system. Recall that we have argued that voting minor party can be rational because it simultaneously lowers the winning candidate’s MNM and signals the voter’s political preferences to the major parties, as well as punishes significant defections by the major party. On the contrary, Sinhababu argues, one can more directly signal one’s preferred ideology by participating in a major party’s primary process. There is some empirical support that parties are responsive to the distribution of primary votes when

²⁵ Though see, e.g., Douglass’ 1855 Anti-Slavery lecture to the Rochester Ladies’ Anti-Slavery Society (in Douglass 2000). Guerrero (2010) does mention it in passing within his discussion of MNM, but says that the issue will rarely come up in real world election cases, since the majority parties, he claims, will almost always provide a candidate that the vast majority of voters will find acceptable. See also W.E.B DuBois’ (1956) argument against voting.

²⁶ Sinhababu (forthcoming)

²⁷ He also defends “epistemic partisanship”, the position that one may have good reasons for believing that the news sources that align with one’s partisan views are more reliable than either those of alternative partisan views, or “neutral” sources of news. That position is outside of the scope of this paper.

²⁸ Sinhababu (forthcoming), 4.

formulating their general election platform.²⁹ Major party primaries allow “many different options”, and “democratically select two of the most popular ones for the general election.”³⁰

A few things are worth noting about this argument. First, while it is true that the primaries can represent a situation in which the would-be voter has more ideological choice, the ideology of any major party candidate will be nonetheless be greatly constrained. Unless one chooses to run oneself, a primary voter must choose between declared candidates. (And running for oneself costs huge time and financial resources, as is well known.) Second, at least in the United States, most presidential primary voters will have their options even more greatly constrained. Given the staggered calendar of major party primaries in the United States, many — in some cases *all but one* — candidates will have dropped out or have been mathematically eliminated by the time they are able to cast their vote.³¹ Third, and as has been noted elsewhere, Sinhababu’s claim does not have strong empirical support.³²

But setting all of the above aside, the more important point to make about Sinhababu’s argument is just that it is beside the point. It does seem sensible, as Sinhababu argues, that a voter cast a primary vote for a primary candidate that best represents their values. Doing so both improves one’s chances that a favored candidate will be on a major party ballot, as well as provides a way of signaling to the major party what policies one favors. But one need not choose between casting a major party vote in a primary and casting a minor party vote in a general election. To debate the effectiveness of these two strategies is to present a false dilemma. In sum, Sinhababu’s argument for voting in a major party primary may be sound, but it bears no relation to our argument that voting for a minor party can also be rational.

²⁹ See, for example, Meirowitz (2005).

³⁰ Sinhababu (forthcoming), 5.

³¹ See, for example, “How Valuable is Your Primary Vote?”: <http://time.com/4210389/primary-vote-value/>

³² Hirano & Snyder (2007), 3. This isn’t to say that Sinhababu’s claim is false, however. Rather, it is that, to our knowledge, no political scientist has formally studied the issue.

Let's then turn to Sinhababu's more direct argument against minor party voting. He states his argument powerfully but concisely:

Trying to get a major party to support a policy by voting for a minor party endorsing that policy is similarly ineffective. The major party may instead concede the policy's supporters to the minor party, and seek other ways to make up the lost votes...If Democrats move right and win over a Republican voter, they gain a vote while the Republicans lose a vote. But if Democrats move left and win over a Green voter, they gain a vote without reducing the Republican total. So long as Greens have less support than Republicans, winning Republican votes is twice as good as winning Green votes.³³

Putting this objection in terms of our RMP game above, the idea is that Party will always have a greater incentive to cooperate with Moderate because for each member of Moderate that defects, the probability of Party's outcome being 0 is raised more than by a defection by Radical. This is because the subset of Moderate defectors are much more likely to cooperate with Rival, the alternative mainstream party. To put the same point in simpler terms, each defection by a moderate voter counts twice over — once as a loss to Party, and once as a gain to Rival. On the other hand, a Radical voter will defect to some party other than Rival that won't directly challenge Party's chances.

Unlike Sinhababu's first objection to third party voting, this addresses the issue head on. However, it certainly won't always be true, as an *a priori* matter, that it will always be in Party's interest to court would be members of Moderate rather than would be members of Radical. Sinhababu seems to have in mind something more contingent, about the conditions that do in fact exist in the vast majority of elections in the US (and similarly structured democratic institutions). The success of this objection, then, depends on whether the expected payoffs in RMP ever approximates the relationship between actual parties and actual voting blocs. At the same time, an adequate response to this objection would bolster our argument for minor party voting by demonstrating a proof of concept.

³³ Sinhababu (forthcoming), 5.

We believe that, while Sinhababu's point can complicate the incentives of actual parties, such complications do not eliminate the bargaining power gained by radical voting blocs' threats of defection (and, if required, their following through on such threats). We first briefly discuss two general reasons why this is so. Then we turn to two historical examples that illustrate the power of radical voting blocs' threats to defect: the Populist Party of the late 19th century, and the Perot campaigns of the early 1990s.

The first general feature that mitigates the force of Sinhababu's objection is that it will often be more costly for parties to convince undecided moderates than it will be to convince undecided radicals. This is because undecided moderates present a voting bloc that many resources by the most powerful two major parties will be invested into. Both major parties will compete the most heavily for this voting bloc for the very reasons Sinhababu points out. But as a result, the resource cost per voter will proportionally rise as well.

Furthermore, and keeping in the theme of this paper, parties must weigh the cost of courting undecided moderates against the cost of a loss of undecided radicals. When the policy-responsive radical voting bloc is larger than the policy-responsive moderate voting bloc, this will involve a delicate calculation, of just the sort that major political parties often engage in. We submit that this condition is often met in the real world. And it is in keeping with our arguments above that major political parties will rationally engage in this balancing act on the condition that the radical voting bloc retain their threat to defect.

But perhaps the most convincing way to illustrate the success of our model is to consider historical cases where we have evidence that defection, or the threat of it, on behalf of radicals has been used to successfully promote policy change. For reasons of space, we only consider two cases, but we believe that many more could be cited to further buttress our argument.³⁴

³⁴ A few examples which we believe support our thesis but which we cannot defend here include the Liberty Party's and then the Free Soil Party's abolitionist influence, the New Democratic Party's influence

The first case to consider is that of the left-wing radical Populist Party of the late 19th century in the United States. The Populist Party, arising out of the populist movement, was an agrarian, anti-elitist, anti-capitalist, and pro-labor party established in 1891. It's most influential years were 1892-1896, though it officially remained a party until 1908. The party's platform of 1892, the so-called Omaha Platform, called for a more progressive income tax, the nationalization of the railroad, and stricter enforcement of the eight-hour work day.³⁵ Initially, many in the populist movement held out hope that their voting bloc, if sufficiently large, could sway major party representatives to take sympathetic positions without forming their own political party. This hope was seen as dashed for a significant number of populists as both Grover Cleveland and Benjamin Harrison — the major party nominees for president in 1892 — were seen as insufficiently responsive to the populist cause. Similar disappointments at courting Democrats happened at the more local level.³⁶ Thus, a third party seemed the only way forward.

The Populist Party's short lived existence remains one of the most successful post-Civil War ventures into third party politicking. So if our defense of minor party voting is correct, we would predict its success resulting in the adoption of parts of the Populist agenda by major parties to prevent further defection on the part of voters sympathetic to that agenda. And this is — with one qualification — just what we see.³⁷ Hirano (2008) studied the impact of the Populist threat on Congress member's roll call voting patterns just prior to and during the height of Populist party appeal. His research showed that while Populist Party electoral threat alone did not appear to have an effect on congressional voting, Populist Party electoral threat coupled

on Liberal Party policy, and George Wallace's 13% of the vote that arguably affected Nixon's approach to Civil Rights issues. There is also evidence that Republicans are responsive to threats from Libertarian candidates in their district (Klepetar ms).

³⁵ Among many other things (See https://en.wikisource.org/wiki/Omaha_Platform). The platform was itself a descendent of the Ocala Demands, formulated by the National Farmers' Alliance and Industrial Union in 1890. We of course do not mean to be endorsing their views--the project of this paper is neutral with respect to different political ideologies.

³⁶ Sanders (1999), 127-128.

³⁷ Hirano (2008).

with the mobilization and education efforts of Populist advocates did have a significant effect.³⁸

He concludes:

[T]he idea that major parties respond to the mobilization and education activities *and* the electoral threats of third parties--not only to the actual electoral success of third parties--is not likely to be unique to the Populist Party case...the threat of competition from new actors should provide sufficient incentives for the established actors to adjust their behaviors even before the new actor enters.³⁹

Thus, even the threat of defection to a minor party, so long as that threat is sincere, can motivate a change in the behavior of major party forces.

The second and more recent case is the success of the Reform Party, and specifically Ross Perot, in the 1992 and (to a lesser extent) 1996 elections. Perot's campaigns were focused largely on economic issues such as balancing the federal budget and economic nationalism (such as being against trade agreements like NAFTA), as well as more tough-on-crime policies and term-limits for congress members.⁴⁰ Perot's first campaign was historically successful, receiving 19% of the vote, the most of any minor party candidate since 1912.⁴¹

Again, as with the Populist Party, the success of Perot's campaign appears to have had a direct impact on Republican policy, or at least Republican policy emphasis. In 1994, prior to the Congressional midterm elections, the Republican Party released the "Contract with America" in a bid to regain a Congressional majority. The Contract focused on fiscal responsibility, term limits, strengthened anti-crime policy, and more restrictions on international trade.⁴² Rapoport & Stone (2001, 2005) provide evidence that as a result of these policy changes on behalf of the Republican Party, two-thirds of Perot voters shifted to Republican candidates in the 1994

³⁸ Hirano (2008), 148-152.

³⁹ Hirano (2008), 152.

⁴⁰ Rapoport & Stone (2001), 52.

⁴¹ Rapoport & Stone (2005), 4.

⁴² See

<https://web.archive.org/web/19990427174200/http://www.house.gov/house/Contract/CONTRACT.html> for text of the Contract.

elections, contributing to the success of the Republican Party in that election. Rapoport & Stone even argue that these Republican maneuvers were essential to their victory in the 2000 Presidential election.⁴³ Whether that is true, other research has supported the claim that major party politicians altered their policy and voting decisions in light of Perot's success.⁴⁴ There is also evidence that Libertarian candidates have a standing effect on Republican voting patterns (by district).⁴⁵

These cases illustrate the applicability of our argument to major party actors in the real world. And we think this shouldn't be surprising, on the reasonable assumption that major party actors are by-and-large rational and thus responsive to threats to their electoral success. Sinhababu has pointed out that major parties will also have reason to court moderate and "swing" voters, and this is certainly true. But this does not preclude their courting of radical voters as well, especially when radical voters make up a large enough voting bloc that their threats to defect have electoral bite.⁴⁶

5. Conclusion

It is frequently claimed that minor party voters are irrational in at least one of two ways. Either they irrationally believe that their preferred candidate can win the election in spite of all evidence to the contrary, or they are irrationally casting a ballot for the sake of their own purity with at best no strategic payoff (and at worst, a negative strategic payoff). We have argued that there are some circumstances in which voting for a minor party candidate, even one sure to

⁴³ Rapoport & Stone (2001), 53.

⁴⁴ Holian et. al. (1997) found a correlation between districts with high Perot votes and representatives voting against NAFTA. Lee (2012, 2014) extend this to other voting patterns.

⁴⁵ Klepetar (ms).

⁴⁶ Interestingly, Lee (2012) has argued that even small groups of potential minor party voters can affect policy emphasis and voting by major party politicians, when the positions promoted by those voters are orthogonal to those supported by moderates. We are sympathetic to this idea, but set it aside for purposes of space.

lose, can most increase the likelihood that a voter's preferred policies are implemented in the long-term.

We began by discussing the role of mandate influence that individual voters contribute to. A voter can lower a winning candidate's mandate by voting for a minor party candidate, while also signaling her reasons for abstaining from major party candidates. And this effect can occur even when the voter has little to no chance of her vote making a difference in who wins the election. Next, we more formally modeled minor party voting as a simultaneous signaling and bargaining game. On the assumption that major parties are quasi-rational, they will be ideologically responsive to genuine threats of defection away from major party voting. Finally, we briefly discussed two historical cases of this model in action, as a way of responding to an objection from Sinhababu (forthcoming). This provides empirical support for the formal model.

Things would be much simpler if voters could choose between the two major parties, flaws and all, and vote knowing that they're best advancing their preferred policies. If what we've argued is correct, no such procedure is available. Voters with non-mainstream ideologies shouldn't consistently vote for a less bad (from their perspective) major party; but neither should they consistently vote for a minor party. Voting remains a responsibility not so easily discharged.

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