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Abstract

Do citizens of democratic nations have a civic duty to cast a vote in elections? The question of whether such a duty to vote exists is a topic of much debate. I revisit a common generalization argument for the existence of a *civic* duty and, combining insights from the economics and political science literature, contend that no such duty follows. However, I show that the generalization argument can instead be used to establish the existence of a *partisan* duty to vote. That is, an argument can be made that those who identify with a political party, or a group whose interests align with a subset of parties, share a moral obligation to act in the electoral interest of their in-group. I discuss empirical evidence in support of the notion that there is a strong partisan element to voters' duty perceptions.

JEL codes: D72, D91.

Keywords: voting, turnout, electoral participation, civic duty, expressive behavior.

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1 Introduction

Researchers across the disciplines of economics and political science have done an enormous amount of research on the topic of voting. In particular, they have studied the question of *why* individuals vote, and whether the decision to vote or abstain can be rationalized based on instrumental and/or non-instrumental motives. In the voting context, instrumental utility is obtained from changing the outcome of an election in the case that an individual casts the decisive vote. In contrast, non-instrumental utility is obtained from the act of voting itself, and independent of whether one's cast vote was decisive.

Today, there is a consensus among economists and political scientists that instrumental motives alone are insufficient to explain the observed turnout in real-world elections (Gerber et al., 2020).¹ Instead, (non-instrumental) expressive voting (Brennan and Lomasky, 1994; Hillman, 2010), where voters seek to confirm their identity as good citizens who do their civic duty, is viewed as a key driver of turnout.² A number of voting models assume that citizens perceive a moral duty to vote and that they obtain 'warm glow' utility (Riker and Ordeshook, 1968; Feddersen and Sandroni, 2009) from acting accordingly. However, most researchers have eschewed the question of whether and how such a moral duty can actually be rationalized.

Instead, the question has been the exclusive domain of (political) philosophers. Among those scholars, there had been a near-consensus that a moral obligation to vote does indeed exist, with a variety of arguments brought in favor. However, in an influential paper, Lomasky and Brennan (2000) argue that common arguments in favor of a moral obligation to vote are flawed. The authors combine insights from political science, economics and moral philosophy which is instrumental in their highlighting of the flaws of the common arguments for a moral obligation to vote.

In this paper, I seek to build on Lomasky and Brennan's (2000) successful interdisciplinary work. I examine the validity of the civic duty assumption that is ubiquitous in research on turnout, by exploring if and how such a moral duty can be rationalized. Specifically, I focus on the so-called *generalization argument* for a moral duty to vote, which is the most well-known and often encapsulated by the question 'What if everybody did that?'. When a person in polite society announces that he does not vote in a national election, this is what he likely will hear asked by his peers. The question is treated as rhetorical, with the implicit understanding that if everyone was to emulate such behavior, a universally bad outcome, namely a failure of democracy, would result. Consequently, the act of abstaining is deemed immoral. However, as Lomasky and Brennan (2000) point out, the premise that no one will vote is false, since some individuals will still find it individually beneficial to vote.

¹See also Foster (1983), Matsusaka and Palda (1993), and Spenkuch (2018).

²See Riker and Ordeshook (1968); Goldfarb and Sigelman (2010); Blais and Achen (2019); François and Gergaud (2019); Blais and Daoust (2020).

However, the authors do not investigate whether the resulting turnout would be 'sufficient' to avert a failure of democracy. Based on their observation of the false premise contained in the common formulation of the generalization argument, Lomasky and Brennan (2000) conclude that it cannot be used to ascertain the existence of a civic duty to vote. This paper, in contrast, presents a *refined* formulation of the generalization argument that removes the false premise that 'no one vote' for a more elaborate behavioral rule that is to be evaluated. As a result, the validity of the generalization argument as such is ensured.

Based on the refined generalization argument, I contend that a world in which citizens vote purely out of self-interest, and based on instrumental considerations alone, does not result in a catastrophic failure of democracy. On the contrary, I demonstrate that even under the most conservative estimates, absolute turnout (i.e. the number of citizens who vote) under instrumental voting is sufficient to accurately reflect the population's preferences over electoral options, in particular for large electorates with millions of voters. This is assuming that the goal of the election is to find the true share of the population that is in favor of each of several candidates, regardless of their preference intensity. The working assumption that people vote only instrumentally serves as a 'worst case' scenario: the presence of additional non-instrumental, i.e. expressive, utility would further alleviate concerns about insufficient vote counts. In addition, I argue that election results under non-universal voting take into account preference *intensity*, so that the 'tyranny of the majority', which is inherent in democratic systems with universal participation, can be avoided. Hence, a world where individuals only vote if it is in their self-interest does not lead to a universally bad outcome, so that a civic duty to vote cannot be justified based on the generalization argument. While this conclusion corresponds to that of Lomasky and Brennan (2000), the argumentation to arrive at it differs.

Proceeding, I apply the refined generalization argument from the perspective of a member of a group whose constituents share policy preferences. The main argument of the current paper is that, if all members of a political party acted according to their own self-interest, and only voted based on instrumental considerations, then there would be no chance to ever win electorally and to implement the group members' shared policy preferences. Such an outcome could be argued to be catastrophic for all group members. Therefore, it would be immoral to abstain for those who share an identity with a political party or another group whose members' policy preferences are aligned. Accordingly, I contend that based on the generalization argument, there is a *partisan* duty (rather than a civic duty) to vote. Indifferent voters with no overt party affiliation do not harm their fellow citizens by abstaining. In fact, they *help* them by making their votes count more. On the contrary, partisans who abstain do harm their fellow party members by reducing the odds of their desired election outcome materializing.³

³A non politically-aligned individual who abstains thereby increases the probability that other voters will cast the pivotal vote. This change in probability is minute in large electorates, but *directionally*, it is to the

It is important to note that the arguments in this paper are based on the presumption that the generalization argument in the form presented here is suitable to establish deontological duties. To the extent that the generalization argument is a valid way of establishing social norms, I demonstrate that from it follows not a citizen duty but a partisan duty. However, the primary goal of this paper is to gain a better understanding of voters' reasoning with respect to their turnout decision. So even if the application of the generalization argument were limited in its formal moral implications, it could still represent the folk-philosophical argumentation that underlies voter behavior and the related public discourse.

Since the argument for the existence of a partisan duty is straightforward and intuitively appealing, it is plausible that such reasoning could feature in people's decision-making process regarding the choice to vote or abstain. Indeed, I discuss a number of studies that support the notion that there is a strong partisan dimension to voters' duty perceptions. The more strongly individuals identify with a political party, the more likely they are to perceive the act of voting as a duty. Furthermore, field and laboratory experiments show that individuals are much more likely to cast a vote when their (politically-aligned) neighbors will learn of their behavior, pointing to an interaction of social pressure and an implicitly-held belief in a partisan duty. Lastly, experimental studies suggest that individuals' moral norms regarding interaction with others are shaped by group identity, with party identification being the most salient type.

I then develop, based on moral-philosophical reasoning, a number of behavioral assumptions that follow from the existence of a partisan duty to vote. These assumptions give rise to a modified individual utility function. In a companion paper (Herrmann, 2023), I develop a game-theoretic model that explores the implications of a partisan duty on aggregate voting behavior. The partisan-duty model makes comparative statics predictions that are in line with the stylized facts on turnout. First, the model allows for significant turnout in very large elections. And second, the magnitude of turnout and the difference in vote shares between parties is sensitive to ex-ante election closeness, the stakes of the election, and voters' degree of party identification.

While civic-duty models can account for any level of turnout, they cannot account for the robust finding that turnout is higher in ex-ante close elections. Conversely, standard models of instrumental voting can explain the relationship between election closeness and turnout, but not the magnitude of turnout that we observe in elections with millions of voters. The partisan-duty model on the other hand, can account for both observations. The empirical success of the theoretical model of Herrmann (2023) gives credence to the underlying assumption that voters perceive a sense of partisan duty when deciding whether or not to vote.

benefit of fellow citizens. Similarly, the impact of a single partisan abstaining is negligible, but directionally, it harms group members, and when the behavior is universalized, leads to tangible harm.

Besides giving rise to new types of theoretical models, the concept of partisan duty can also improve our understanding of existing models of voting. The group rule-utilitarian model of Coate and Conlin (2004) assumes that individuals act according to the voting rule that, if followed by everyone else in their group, maximizes aggregate group welfare. Given the centrality of the assumption that voters behave as group rule-utilitarians, Coate and Conlin (2004) state that "more thought should be given to the justification of the behavior postulated here. Why should we expect citizens to behave as group rule-utilitarians in elections?". The current paper seeks to address this important question, by exploring the moral-philosophical underpinnings of a partisan duty to vote and by providing empirical evidence for its relevance.

The concept of partisan duty can also help us understand differences between competing theoretical models of voting. For example, this paper highlights the importance of an individual's degree of group identification for their perception of a partisan duty. The 'Kantian' model of voting of Grillo (2021) allows for such heterogeneity in individuals' compliance with a partisan duty, whereas standard rule-utilitarian models (Coate and Conlin, 2004; Feddersen and Sandroni, 2006; Levine and Mattozzi, 2020) do not. For an exhaustive comparison of group-based models of voting and how they relate to the concept of partisan duty, see Herrmann (2023).

Party identification is considered one of the most important determinants of voting in political science, but it has not been adopted widely in the economics literature on voting. This paper and the theoretical model in Herrmann (2023) emphasize the connection between party identification and the voting behavior that economists refer to as Kantian or rule-utilitarian, and is thus taking a step toward bridging the gap between the two disciplines' approaches to studying voter turnout. I further hope to convey with this paper that the insights from philosophical thought can and should inform our choice of assumptions for theoretical models of voting.

The paper proceeds as follows. Section 2 examines the generalization argument for the existence of a civic duty to vote, and Section 3 juxtaposes the exposition to that of Lomasky and Brennan (2000). Section 4 revisits the generalization argument to establish a partisan duty to vote, and provides empirical evidence for its existence and relevance in shaping voter behavior. In Section 5, I develop a set of behavioral assumptions that arise from the presence of a partisan duty. This exercise results in a reformulated calculus of voting, the implications of which I discuss. Finally, Section 6 concludes.

2 The generalization argument for a civic duty to vote

In this section, I discuss that the generalization argument, when properly applied, does not imply a civic duty to vote.

The generalization argument originates from Kant’s categorical imperative, which states that one ought to “act only in accordance with that maxim through which you can at the same time will that it become a universal law” (Kant, 1870; Johnson and Cureton, 2004). According to the categorical imperative, an individual must determine the morality of a maxim (i.e. a principle or rule of conduct) by imagining that it were a universal rule followed by everyone. If there arises a contradiction within the proposed universal rule or between the universal rule and some previously established moral rule, then a behavior is deemed immoral (Fieser, 2017).

Kant’s categorical imperative was criticized by a number of scholars. Among them, philosopher and economist John Stuart Mill, who criticized the theory as flawed and impractical. As a proponent of utilitarianism, Mill (1863) re-interpreted Kant’s categorical imperative as simply stating that a maxim is to be rejected if it leads to human unhappiness when adopted universally. It is this version of the generalization argument that is evoked in common use where people ask ‘What if everybody did that?’. If a bad outcome results for large groups or society at large, then a maxim/behavior is deemed immoral.

As Lomasky and Brennan (2000, p. 75) state, the typical form of the generalization argument for a duty to vote is as follows:

But what if everyone were to stay home and not vote? The results would be disastrous! Therefore, I (you/she) should vote.

The (implicit) premise of the above argument is that, if there is no duty to vote, then nobody would see a reason to turn out and vote.⁴ This lack of electoral participation would then imply a failure of democracy, an outcome perceived so catastrophic that the act of voting must be universalized through the institution of a duty to vote. The (meta)logic of the argument in the quote above can be described as follows (where the symbols \rightarrow and \Rightarrow represent an implication (if...then)):

(Absence of civic duty \rightarrow No one votes \rightarrow Failure of democracy) \Rightarrow A civic duty to vote exists.

Clearly, there is a critical flaw in the formulation of the argument, as is also observed by Lomasky and Brennan (2000). It misses the fact that there are reasons to vote other than adherence to a moral norm and the resulting duty. An absence of a perceived civic duty among the electorate does not in fact imply that no one votes. In other words, the first implication arrow in the logical argument is incorrect. Lomasky and Brennan (2000) claim that, based on the calculus of voting, there would be some equilibrium turnout level

⁴Note that in the context of the generalization argument, we assume that the (non)-existence of the duty is common knowledge. That is, if deontologically a duty does not exist, then nobody perceives there to be a duty.

where a certain number of citizens would go to the polls and vote based purely on self-interest. However, the authors do not derive any bounds on how low turnout would go, and consequently, whether turnout would be so low as to lead to a failure of democracy.

In what follows, I refine the generalization argument by basing it on a more elaborate maxim that tautologically follows from an absence of a civic duty. This will enable us to carefully determine the utilitarian implications of the maxim, which, if deemed sufficiently detrimental to society, would, by the generalization argument, imply that behavior absent a perceived civic duty is immoral. Accordingly, I claim that the maxim to be evaluated is not "No one votes" but rather "Each individual only votes if he finds it in his/her personal interest, independent of any perceived duty". The logic of this refined generalization argument when evaluating this maxim is:

(Absence of civic duty \rightarrow Each individual only votes if he finds it in his/her personal interest, independent of any perceived duty \rightarrow Failure of democracy)
 \Rightarrow A civic duty to vote exists.

Note that here, the first implication is tautologically true. What remains then is to evaluate the second implication arrow. Does a failure of democracy really result from people voting only if it suits their personal interest, without perceiving a civic duty? As I will argue below, this is not the case.

To illustrate why individuals might find it individually beneficial to vote even if there is no moral obligation to do so, we turn to the calculus of voting, as represented by the following equation (Downs, 1957; Riker and Ordeshook, 1968):

$$U = PB - C + D \tag{1}$$

In order to explain (1), consider an election between two candidates that is decided by majority rule. Then U denotes the expected utility obtained by an individual if he votes. P denotes the probability of the individual being decisive, i.e. of changing the outcome of the election with his vote. B is the differential benefit (in terms of utility) the individual obtains when his preferred candidate wins. In other words, B tells us how much higher the individual's utility is when his preferred candidate wins compared to the case where the less preferred candidate wins. C stands for the individual's voting cost (in terms of utility), i.e. the time spent on the election process and any disutility incurred in the process (e.g. walking through the rain to the polling station).

Lastly, D represents the individual's benefits of voting (in terms of utility) that do not depend on the outcome of the election. It can be considered to represent the satisfaction or 'warm glow' of doing good, in this case from voting (Andreoni, 1990; Feddersen and Sandroni, 2009). Alternatively, D can be considered to stand for the expressive utility obtained from the act of voting. Brennan and Lomasky (1994, p. 25) define as expressive an "action

that is undertaken for its own sake rather than to bring about particular consequences". Hillman (2010) defines expressive behavior as "the self-interested quest for utility through acts and declarations that confirm a person's identity". The latter definition has found a lot of support in the recent literature and I consider it the most useful in the context of voting. Based on this definition, D can be considered the *expressive* utility a voter obtains by confirming his identity as a moral person who does his civic duty. On the other hand, the term $PB - C$ is referred to as the expected (net) *instrumental* benefit.

An individual will only vote if the expected benefits of doing so outweigh the costs. That is, an individual will only vote if the variable U is non-negative. In very large elections with millions of voters, the probability of casting a decisive vote is infinitesimal. Consequently, the term PB is infinitesimal as well, whereas the voting cost is unaffected since it is incurred regardless of the outcome. Thus, if there were only instrumental considerations, then we would observe large scale abstention in elections. If expressive considerations exist, however, then the term D may offset the voting cost and thus allow for significant turnout even when the probability of being decisive is essentially zero.

The calculus of voting enables us to consider the consequences of the maxim that 'Each individual only votes if he finds it worthwhile to, independent of any perceived duty'. Absent a belief in a civic duty to vote, the D term would equal zero, so that only instrumental considerations remain. Yet, this would not result in a 'failure of democracy'. To show why, consider again the term P , the probability of being decisive. If millions of other people vote, then your probability to be decisive is vanishingly small. If, on the other hand, no one else besides you votes, then you could determine the election outcome by yourself. So clearly, there would be people voting even if there was no moral duty to vote.

To get an idea of the magnitude of turnout in this case, we refer to the work of Levine and Palfrey (2007), who construct a game-theoretic model of instrumental voting. In their model, individuals take into consideration the fact that the probability of being decisive depends on other people's behavior. In other words, individuals make their voting decision in light of the anticipated behavior by other individuals that are eligible to vote. This strategic interaction leads to a (Nash) equilibrium prediction about turnout. By making assumptions about the relative size of costs and benefits in an election, Levine and Palfrey (2007) are able to make predictions about the resulting turnout for a given electorate size. They find that, indeed, the equilibrium probability of being decisive, and therefore turnout, tends towards zero as the electorate size grows to infinity: the more people are eligible to vote, the lower the turnout *rate*. However, in equilibrium, the *absolute* turnout (i.e. the number of voters) is actually an *increasing* function of electorate size.

Figure 1 shows the relationship between the electorate size (i.e. the number of eligible voters) and the number of people who actually decide to vote based on instrumental reasons alone. The larger the electorate, the more people decide to vote. This is despite the fact

that each individual's chance of being decisive gets lower and lower as the number of eligible voters increases. I calculate these numbers based on the Levine and Palfrey (2007) model of instrumental voting, with a very conservative assumption about the relative size of costs and benefits. In the model, an individual's utility benefit obtained by determining the outcome of the election is only 3.6 times as large as the average person's voting cost. Arguably, voters in the real world would value the ability to determine the election outcome to a much greater degree than the cost of voting incurred. Hence, the numbers in Figure 1 represent a lower bound of what turnout numbers can be expected based on instrumental voting alone.

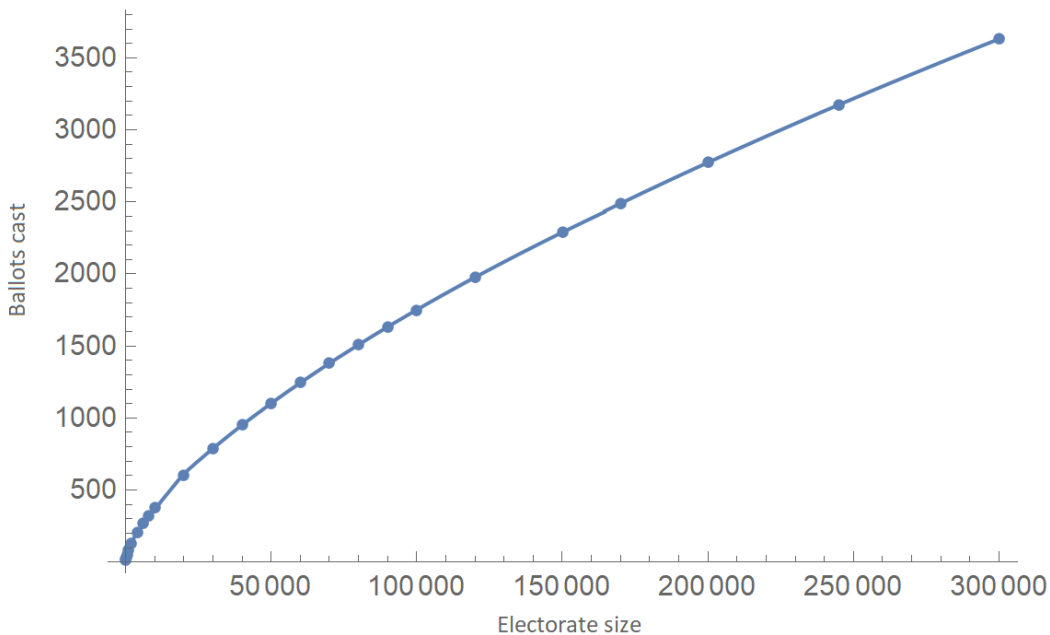


Figure 1: Number of cast ballots under instrumental voting relative to the electorate size. Source: author's calculations based on Levine and Palfrey's (2007) voting model. I use Levine and Palfrey's (2007) parameterization and set $H=105$ and $L=5$, where H (L) represents the payoff for members of the group that wins (loses) the election. The average voting cost is 27.5. The (unique) equilibria were calculated using the software 'Mathematica'. The code is available upon request.

Let us consider a practical example. Iceland is a democratic country with a population of only 333 thousand citizens as of 2016. The country held a presidential election in 2016, where 245 thousand citizens were eligible to vote. Based on the calculations of the Levine and Palfrey (2007) model, we would expect at least 3175 people to show up at the polls if the electorate's sole motivation to vote was instrumental (corresponding to a turnout rate of 1.3 percent). While that does not seem like a lot compared to the actual turnout of 185 thousand voters (corresponding to a turnout rate of 76 percent), it is also a far cry from the

feared total lack of participation and resulting 'disastrous' failure of democracy.

But is such turnout sufficient to not be considered a bad outcome? To answer that question, we need to consider the stated objective of a presidential election, such as the one of Iceland in 2016, which is to determine what proportion of the electorate supports which candidate. But to learn this, do we really need to ask every single eligible citizen to vote? Not necessarily. One can instead draw a random sample of the population of eligible voters to get an estimate of where they stand, which is what is being done to create elections polls. As a simplified example, imagine that there are two candidates, where 51 percent of the electorate support one and 49 percent the other. Imagine we conducted a poll of 3175 eligible voters, from an electorate of 245,000, about their preference over candidates or parties. With 99.9 percent confidence, such a poll would have a margin of error of less than 2.9 percentage points.⁵

Hence, in a small country like Iceland, when only 1.3 percent of the eligible voters turn out, the election results could differ significantly from the results under turnout of one hundred percent. Clearly, the lack of accuracy due to a small sample is undesirable. However, such a margin of error constitutes a 'worst case' scenario. The stakes of an election (as measured by $H - L$), are likely much higher in real world elections and therefore instrumental turnout would also be higher. Moreover, expressive benefits of voting (other than from a perceived moral duty to vote) provide additional benefits of voting, which would further increase turnout numbers.⁶ But since these benefits are hard to quantify, we restrict the analysis here to instrumental benefits only. Assume for a moment that eligible voters who turn out based on instrumental motives alone are a random draw from the population. Since sampling error is random, it does not introduce bias in any direction of the results. As Lutz and Marsh (2007) show, low turnout does not tend to favor one party over another. Which party benefits from the non-representativeness of election results with low turnout differs from election to election.

Importantly, for larger democracies like the US, random sampling error is even less of a concern. If one percent of the US voting age population of 255 million were polled, then the margin of error of the election result would be only 0.09 percentage points.⁷ Hence, if one percent of the US population were to cast a ballot based on instrumental motives, and if those voters were representative of the US voting age population, then the election results would virtually always be identical to the population's true preferences.

⁵Using Newbold et al. (2019, p. 317), we estimate the standard error of the sample proportion as $\hat{\sigma}_{\hat{p}} = \sqrt{\frac{\hat{p}(1-\hat{p})}{n-1} \left(\frac{N-n}{N-1} \right)} = \sqrt{\frac{0.51(0.49)}{3174} \left(\frac{241,825}{244,999} \right)} = 0.0088155$. The critical value from the standard normal distribution for a 99.9 percent confidence interval is denoted by $z_{0.0005}$. Hence, the margin of error is: $ME = z_{0.0005} \times \hat{\sigma}_{\hat{p}} = 3.28 \times 0.0088155 = 0.0289$.

⁶Such additional expressive utility could be due to *who* one votes for, rather than from the fact that one voted at all.

⁷Making the same simplifying assumptions about the number of candidates and their relative support in the entire electorate as in the Iceland example. The margin of error is: $ME = z_{0.0005} \times \hat{\sigma}_{\hat{p}} = 3.28 \times 0.0003115 = 0.000934$.

It should be noted that most national elections of democratic countries have turnout rates far below 100 percent, and therefore, the preferences of voters cannot be assumed to exactly reflect the true preferences of the population as a whole. Yet, despite the potential lack of representativeness, the outcomes of those elections are accepted by society as valid. In the case of referenda, many countries have no minimum participation threshold at all, while others require between 25 and 50 percent turnout in order for the results of a referendum to be binding (Herrera and Mattozzi, 2010). For referenda, there may be reasons beyond representativeness to insist on a minimum threshold. For example, to ensure that, despite the fact that referenda usually occur at irregular intervals, the entire electorate was aware of the referendum and had a chance to vote if they so desired. For regularly scheduled, and therefore easily anticipated, national elections, this is less of a concern.

Now, of course, we cannot assume that those who find it worthwhile to vote based on instrumental motives alone are a random draw from the population, and thus representative of the electorate. Looking at (1), we can see that those who turn out to vote will perceive a higher benefit B from determining the outcome of the election, and/or will have a lower voting cost than those who do not turn out based on instrumental motives. Under instrumental voting, those that receive more utility from their preferred candidate winning are more likely to turn out. Compare that to the case of (near-)universal voting, where citizens feel compelled to vote irrespective of how much benefit they perceive from altering the election outcome. Under universal voting, the election result represents the true share of the population that is in favor of each of several candidates. While this retrieval of vote shares is the stated objective of democratic elections, such an election result does not take into account voters' preference *intensity*.

To illustrate, consider a stylized election setup with 3000 eligible voters, who vote to power either candidate A or candidate B . Suppose 1000 voters have a strong preference for candidate A , whereas the remaining 2000 voters are almost indifferent between candidates but would choose candidate B if they cast a ballot. Under universal voting, candidate B would win, even though that would lead to lower aggregate welfare as measured by a standard utilitarian social welfare function. Under purely instrumental voting (and consequently less than universal participation), on the other hand, turnout among the supporters of candidate A would be much higher and thereby increase the odds of achieving the socially-optimal election outcome. The 'tyranny of the majority' that can result from universal voting in majority electoral systems has been discussed ever since John Stuart Mill's 'On Liberty' in 1889. Recent work by Saunders (2010, 2012) and Brighthouse and Fleurbaey (2010) has similarly discussed the benefits of voluntary and low turnout in maintaining minority rights in democracy. The potential for a 'tyranny of the majority' has also sparked the development of alternative voting systems, such as that of 'quadratic voting' (Lalley and Weyl, 2018).

We are now in a position to answer the question of 'What if every citizen only votes if

he finds it worthwhile to, independent of any perceived duty?'. On the one hand, absent the expressive benefits of following a social norm of universal electoral participation, less people would vote, though there will still be a non-trivial number of voters who turn out to vote regardless. Due to random sampling error, preferences of this sample of the electorate who turn out will not perfectly correspond to the preferences of the population as a whole. The smaller the electorate, the larger the margin of error between the sample of voters and the population of eligible voters. On the other hand, the shift away from universal turnout towards more instrumentally-based voting would serve to mitigate the 'tyranny of the majority' by taking account of voters' preference intensity. In other words, there is a trade off, and it is not clear at all that the outcome is better or worse. One may well argue that a world in which people do not vote universally would lead to a preferable outcome. But certainly, the outcome is far from the disastrous failure of democracy that is often assumed to result by proponents of a civic duty to vote. Therefore, I conclude that no civic duty to vote follows from the (refined) generalization argument. The logic of my argument can be summarized as follows (where a crossed-out implication arrow means 'does *not* imply'):

(Absence of civic duty \rightarrow Each individual only votes if he finds it in his/her personal interest, independent of any perceived duty \nrightarrow Failure of democracy)
 \nRightarrow A civic duty to vote exists.

3 Juxtaposition with Lomasky and Brennan's (2000) line of reasoning

In this section, I further compare and contrast my arguments from the previous section with the influential work by Lomasky and Brennan (2000). They also conclude that the existence of a civic duty to vote cannot be inferred from a generalization argument, but their reasoning differs from mine in important ways. As mentioned before, Lomasky and Brennan (2000) identify the same critical flaw in the commonly-used form of the generalization argument, namely the false premise that no one will vote, so that no duty can be inferred. They then present a number of further examples where this form of the generalization argument similarly fails, and therefore conclude that the argument itself is of no use and ought to be rejected. In contrast, I will use those same examples to show that my refined version of the generalization argument does in fact lead to the 'right' (i.e. intuitively-appealing) conclusion. Moreover, I show that the conclusions of the refined generalization argument are context-dependent, so that a maxim is judged as either moral or immoral, depending on the context.

Let us turn to the specifics of Lomasky and Brennan (2000). In section V of their paper, the authors assess the maxim 'No one votes', (i.e. generalized non-voting), and

acknowledge that this would indeed imply complete lack of participation and therefore a failure of democracy. However, they then point out that this maxim, the starting point of the generalization argument, is itself invalid since a number of individuals will find it personally beneficial to vote, even if they do not perceive a sense of duty to do so. They then turn to two distinct examples of generalization arguments to illustrate the point. In their first example, they consider the case of a farmer who wants to pursue a different career instead. If that farmer were asked 'What if no one grew fruits?', he would have to admit that the results would be universally bad. So based on a naive application of the generalization principle, he would have to conclude that his career switch would be immoral. However, Lomasky and Brennan (2000) point out that the retort 'But not everyone will give up farming' would suffice to invalidate the argument. The (defective) generalization argument in this case would be:

(Absence of duty for farmers to produce \rightarrow No one grows fruits \rightarrow Malnutrition)
 \Rightarrow A moral duty for farmers to produce exists.

Clearly, the first implication arrow does not hold because there exist market forces (specifically, the price mechanism) that ensure that other farmers find it individually beneficial to continue producing food and other goods. If a significant number of farmers leave the market due to finding more fulfilment in other careers, then market prices will increase and thereby ensure that there is enough individual benefit (i.e. higher profits) for farmers to continue production, potentially also on the land abandoned by others.

But now consider a situation where a government has put a price ceiling on the price of fruits, at a level where only a few farmers can still produce profitably. In that case, it would still be false to state that 'No one grows fruit', but the level of production could be so low as to induce malnutrition among the population. In this scenario, the formulation of the generalization argument used by Lomasky and Brennan (2000) would once again lead to the observation that 'Not everyone will give up farming', and hence no moral duty could be logically established.

As I have argued in the voting example in Section 2, we need to rectify the formulation of the generalization argument to reach a conclusion about the morality of giving up farming in each of the two scenarios. In the case with a functioning price mechanism, we cannot conclude based on my refined generalization argument that there is a duty for farmers to maintain production:

(Absence of duty for farmers to produce \rightarrow Farmers produce only if it is profitable for them to do so \rightarrow Malnutrition) $\not\Rightarrow$ A moral duty for farmers to produce exists.

In contrast, in the alternative scenario with excessive price controls, we can in fact conclude from the refined generalization argument that there *is* a duty for farmers to produce even if it is not profitable for them to do so, at least until government policy is (made to) change:

(Absence of duty for farmers to produce \rightarrow Farmers produce only if it is profitable for them to do so \rightarrow Malnutrition) \Rightarrow A moral duty for farmers to produce exists.

This example demonstrates that it is not enough to note the flaws in the commonly-applied formulation of the generalization argument, as Lomasky and Brennan (2000) do. Instead, the generalization argument needs to be rewritten in a logically consistent way to carefully study the implications of the proposed maxim.

In a second example, Lomasky and Brennan (2000) describe the case where an individual considers walking over freshly-planted grass instead of taking a detour around it. Here, the answer to the question 'What if everyone walked over the lawn?' is that the grass is destroyed, resulting in an eyesore that negatively affects the community as a whole. The retort that 'But not everyone will cut across the lawn, most people take more heed of signs than I do' would, as Lomasky and Brennan (2000) suggest, be less convincing than the analogous 'Not everyone will give up farming' in the previous example. That is because there is no mechanism to ensure that a large enough number of people continue to walk *around* the grass. The retort that 'Most people take more heed of signs than I do' instead argues that since enough other people act *against* their self-interest so as to act morally, a bad outcome will not materialize. But this retort thereby acknowledges that the behavior itself is immoral. Hence, the only way to avoid the generalization argument's conclusion that the maxim is immoral is to assume that the maxim is immoral.⁸

Instead, I argue that in the 'crossing the lawn' example, the maxim to be evaluated should be that 'Everyone walks over the freshly-planted grass whenever they find it individually beneficial'. Since nearly everyone will find it beneficial to take the shorter route, and since even small numbers of people crossing the grass will lead to damage, the behavior outlined in the maxim would in fact lead to the universally detrimental state of having a horribly disfigured lawn to look at every day. Thus, the maxim is immoral because it fails the generalization test which would make non-compliance with the corresponding moral norm 'unfair'. It is not because we assume that the behavior is immoral to begin with.

Indeed, with the generalization argument reformulated, we avoid the retort and still conclude that the behavior is immoral:

(Absence of duty to stay off the freshly-planted grass \rightarrow People walk over the grass if in their personal interest \rightarrow Destroyed grass for everyone) \Rightarrow A moral duty to stay off the grass exists.

Here, I thus have to disagree with Lomasky and Brennan's (2000, p. 77) contention that

⁸It is worth noting at this point that failing the generalization argument is sufficient, but not necessary for a maxim to be immoral. Indeed, even Kant acknowledges the existence of "inherent rational obligations" (Fieser, 2017) which have to be assumed as first principles.

Strictly speaking, what makes an ungeneralizable action wrong is not that it fails the generalization test. Rather, it fails the generalization test because of underlying unfairness, and it is the unfairness that accounts for the action's wrongness. Passing a generalization test is secondary; fairness or the lack of the same is what is primary.

Instead, I claim that failing a generalization test makes an action (or more precisely, a maxim) immoral, and it is non-compliance with the resulting moral norm that is unfair.⁹

Allow me to illustrate with one more example. The reader will likely agree that it is not immoral for an individual to not produce offspring during his life. Of course, many people find it personally beneficial to have children, so absent a moral norm to procreate, there is still enough offspring to prevent humanity from going extinct. But there may be other circumstances where the conclusion would change. Imagine if there was a catastrophic event like an asteroid impact that left only a few hundred human survivors. If many of the survivors were unwilling to procreate, then humanity could suffer from medically insufficient genetic variation or go extinct altogether, which is clearly a catastrophic outcome. Here is the logic of the generalization argument in this scenario:

(Absence of duty to procreate \rightarrow People only procreate if they find it personally beneficial \rightarrow Human extinction) \Rightarrow A moral duty to procreate exists.

So, again, depending on the scenario, the generalization argument leads to differing conclusions about whether there is a moral duty to procreate. The same action of being childless would be considered immoral in one scenario but not the other. There is nothing inherently unfair about not having children, but non-compliance with a moral norm is, and it is the latter that is established via the generalization argument.

Finally, concluding this section, we return to the voting example. Overall, Lomasky and Brennan's (2000) argumentation is similar in that they point out that there would be some people voting due to the presence of instrumental benefits as well as expressive benefits unrelated to fulfilment of a civic duty. They do not, however, discuss any bounds on how low the resulting turnout could be, and therefore whether the achieved turnout would be sufficient to achieve the aims of an election. Neither do they explore how those that cast a ballot would differ from a representative sample of the electorate and what this implies about aggregate welfare. Hence, I believe that my argumentation in Sections 2 and 3 adds important detail and clarity to their analysis of a civic duty. It should be noted that Lomasky and Brennan (2000) also discuss (and reject) several other philosophical justifications for the existence of a civic duty to vote, but these are beyond the scope of this paper.

⁹The Oxford Dictionary defines 'unfair' as "not based on or behaving according to the principles of equality and justice".

4 Revisiting the generalization argument for a *partisan* duty to vote

In this section, I argue that the generalization argument can be used to justify a duty to vote for those who share a political group identity. I also provide empirical evidence for the concept of a partisan duty.

Imagine that I presented the analysis of Section 2 at the Democratic (Republican) National Convention and enthusiastically explained to the audience that there was no moral duty to vote, and that all that is needed is a couple of percent of them to actually go to the polls. Would they be thrilled to hear that they could just go golfing on election day? Probably not. Instead, they would point out that if they did that, then their party would lose every election in perpetuity. If I made the same argument at the NAACP's national convention¹⁰, the audience would be similarly not amused. Indeed, the message that there is no moral obligation to vote would be rejected by any group whose members share an identity and whose policy preferences correlate more with one candidate than another.

Therefore, consider what the hypothetical scenario above illustrates is that when people ask 'What if everybody did that?', it is not at all clear whom they are referring to. Indeed, anyone who identifies as a member of a group with whom he shares an identity, a sense of community, or plainly common interests would likely feel some degree of shame if he did not turn out to vote while his fellow group members did, even if they would never find out. 'What if everybody in a group voted only if their instrumental benefits outweighed the (opportunity) costs of voting?'. Notably, the result would be bad for everyone in the in-group no matter the actions of the out-group. If the out-group maintained a norm of civic duty, resulting in high out-group turnout, then the in-group would have no hope of ever turning an election in their favor. If, on the other hand, the out-group had low turnout, then the result of the scenario "What if everyone in our group did that?" would be that the in-group gives up a guaranteed victory in every election. The logic of the generalization argument for a partisan duty can be summarized as follows:

(Absence of partisan duty \rightarrow Each group member only votes if he finds it in his/her personal interest, independent of any perceived duty \rightarrow No political power and policies unfavorable to in-group) \Rightarrow A partisan duty to vote exists.

Notice that here, the 'catastrophic' outcome to be averted is the loss of political power of the in-group. As history has shown, the exercise of political power can be essential for the safety and well-being of minority groups in particular. In the argument for a partisan duty, the observation that 'Some in-group members will vote even in the absence of perceived

¹⁰The NAACP is a civil rights organization to advance justice for African-Americans.

duty' would not be a valid retort, since the instrumental turnout level would generally be insufficient to achieve or to maintain political power.

To address another potential objection, consider a country with 2 groups, group *A* and group *B*. Assume that group *A* forms one-third of the population and group *B* two thirds. Furthermore, assume that there is a strong sense of civic (or partisan) duty among members of group *B*. Then no matter whether or not everyone in group *A* votes, their party or electoral candidate could never win the election. However, group *A* may well prevent the other group from achieving a two-thirds majority in legislative bodies, which in many countries is necessary for constitutional changes. Election results that are very strongly in favor of one group may also embolden this group to be more aggressive in implementing their policies against the election loser. Hence, the case for a partisan duty for members of a group holds even in scenarios where group sizes are uneven. With that being said, the severity or acuteness of the moral obligation to vote, as perceived by a group member, may well depend on the circumstances of the election. This idea is further developed in Section 5 of this paper.

It becomes clear now that an individual's identification with his in-group has a crucial impact on how he perceives the morality of his decision to vote or abstain. If someone without group identification abstains, then, directionally, he is actually benefiting other voters by increasing their likelihood of influencing the election outcome to their preference. On the contrary, if a partisan abstains, then directionally, he is actually harming the members of his own group by decreasing the likelihood that their preferred election outcome materializes. The partisan individual who abstains is free-riding on the efforts of his fellow group members, whereas a person without group identification does not.

Note that being an 'Independent' in the US party system may itself be considered a political identity, in the sense of being a centrist who prefers the most moderate political candidate. Even for this group of voters, a moral duty to vote can be justified with a generalization argument: 'What if all US Independents voted only if they found it individually beneficial, independent of any perceived duty?'. The result would be comparatively low turnout among Independents, since absent a moral duty, they would vote only based on instrumental considerations. As a result, Independents' overall vote share would decrease significantly. The consequence would be a radicalization of political parties on both the left and right, since they would no longer need to appeal to the median, centrist voter. In this sense, Independents may perceive a collective obligation to keep the political system stable.

4.1 Evidence in line with an (implicitly-held) belief in partisan duty

While the reasoning for the existence of a partisan duty above is somewhat subjective and grounded in introspection, there is also empirical evidence suggesting that there is a clear partisan element to voters' perception of a duty to vote.

Party identification is considered one of the most important determinants of voting behavior among political scientists (Dalton, 2016; Johnston, 2006). As of 2020, roughly 60 percent of the US electorate thought of themselves as either Democrat or Republican, with the remaining 40 percent considering themselves as Independents or non-political. Partisanship is increasingly thought of as a type of social identity. As Greene (1999) states, "social identity theory holds that individuals derive their self-concept from knowledge of their membership in a group (or groups) and that they place value and emotional significance on that group membership, with resulting perceptual and attitudinal biases. Individuals favor the in-group to which they belong which they define against a relevant out-group".

In the 2012 and 2016 editions of the American National Election Studies (ANES) survey¹¹, respondents were asked whether they considered voting a duty or a choice. Notably, the question does not ask about a *civic* duty, but only about the presence of 'a duty'. In addition, the survey asks respondents to state their party identification as either a Democrat, Republican, or Independent, and also elicits the strength of the identification.

Table 1: Proportion of respondents who consider voting to be a duty, broken down by party identification. Numbers calculated by the author based on the 2012 and 2016 rounds of the American National Election Studies (ANES) survey. 'D' stands for those who identify as Democrat, 'R' for those who identify as Republican. The prefix 'Strong' and 'Weak' indicates the degree of identification with the party. 'Indep.' stands for those who identify as Independent. Those can either be 'pure' or lean towards either the Democrat or Republican party.

	Strong D	Weak D	Indep. D	Pure Indep.	Indep. R	Weak R	Strong R
2012	0.52	0.42	0.40	0.27	0.37	0.46	0.63
2016	0.60	0.42	0.47	0.27	0.46	0.48	0.66

Table 1 breaks down by party identification the proportion of respondents who indicated that they consider voting to be a duty rather than a choice or neither of the two. We can see a belief in a duty to vote is much more wide-spread among party identifiers than among Independents. Furthermore, those individuals with strong party identification are more likely to believe in the presence of a duty to vote than those with a weak party identification. The data are consistent with the idea that a duty to vote is dependent on the presence of party identification, rather than being uniformly shared in the electorate.

Furthermore, there are several field experiments that have looked at the role that a perceived duty to vote plays in the turnout decision. Gerber et al. (2008) conduct a large-scale field experiment in the US, for which they send households mailings that either prime intrinsic motives or exert varying degrees of social pressure to do one's civic duty. They find that reminding households of their presumed civic duty leads to a modest 1.8 percentage point

¹¹The American National Election Studies (www.electionstudies.org). These materials are based on work supported by the National Science Foundation under grant numbers SES 1444721, 2014-2017, the University of Michigan, and Stanford University.

increase in turnout. Mailings that additionally provide past voting records of the recipients' and neighbor's voting records have a much larger effect of 4.8 and 8.1 percentage points, respectively. Gerber et al. (2008) interpret these findings as evidence of social pressure enforcing compliance with the societal norm of doing one's civic duty.

This explanation indeed seems very plausible. However, the size difference in treatment effects could also be partially driven by the fact that the provision of voting records may induce compliance not just with the (stated) concept of civic duty, but also with an implicitly held belief in a partisan duty. As Wasserman (2017) shows, 60 percent of the US population live in counties where either of the two major-party candidates for the 2016 presidential election won by a margin of twenty percentage points or more. The same analysis shows that more than a third of US counties were decided by a margin greater than 50 percentage points. When a randomly drawn member of one's neighborhood votes, it is much more likely than not that he will vote for the candidate also preferred by his neighbors. Thus, an implicit sense of partisan duty rather than civil duty may be what underlies a perceived social norm within one's neighborhood to turn out to vote.

Two papers point in this direction. In a laboratory experiment, Großer and Schram (2006) observe that turnout is higher when individuals can exchange information with their neighbors, and importantly, that turnout is higher when neighbors are political allies rather than adversaries. Fieldhouse et al. (2020) use the British Election Study, which contains a module on political discussion networks, to study the 2014 UK elections for the European Parliament. They find that "people are more likely to perceive that their fellow partisans care whether they vote than discussants who do not share a party affiliation, especially identifiers of opposing parties", an effect they dub 'partisan pressure'. In addition, perceived pressure to vote coming from discussants is positively associated with an individual's belief that there is a duty to vote. These findings suggest that it is primarily fellow partisans that act as the reference group when an individual deliberates about the presence of a duty to vote.

In another US field experiment, Gerber and Green (2000) mailed cards that appealed to citizens' civic duty and find that the intervention increased turnout only for those who were unaffiliated with any party, but not for registered Democrats or Republicans. This raises the obvious question of whether the concept of civic duty is more relevant to non-partisan voters, whereas partisans could be motivated by something more akin to a partisan duty. Clearly, perceptions of civic and partisan duty may coexist and the relative importance of each remains to be determined by future research.¹²

¹²While Lomasky and Brennan (2000) and this paper argue that a civic duty to vote cannot be logically justified, it is clear that a belief in its existence is nonetheless wide-spread and, hence, likely plays a role in driving turnout.

4.2 The role of the in-group in shaping individuals' moral norms

We know from experimental research that political identity influences behavior towards the in-group and out-group. Balliet et al. (2018) conduct an online experiment with US participants in which they measure an individual's political ideology and party identification and subsequently match individuals to play a classic prisoner's dilemma game. Prior to playing the game, they inform the participants about the party identification of the other player. They find that both Democrats and Republicans are more willing to cooperate with members of their in-group (i.e. those that share a party identification), and that they in turn anticipate more cooperation from members of their in-group versus their out-group.

Abbink and Harris (2019) conduct experiments with university students in Thailand, where participants were divided into groups based on their support for either of two rival political movements. During the experiments, participants play a multiplayer dictator game in which they divide a payout between themselves, their in-group, the rival out-group, and an out-group of politically-neutral participants. The authors find strong evidence of in-group favoritism in the division of funds. Notably, the degree of in-group favoritism was stronger in the (naturally-occurring) political groups than when participants were divided into arbitrary groups with neutral framing.

Ehrlich and Gramzow (2015) conduct several experiments with US undergraduate students. When asked to indicate the most important group to which they belonged, party membership was mentioned most often, followed by affiliation with sports teams. Of the 170 participants, 112 were classified as Democrats, and the remaining 58 as Republicans.¹³ Participants were then randomly assigned to either a self-affirmation treatment or a group-affirmation treatment and asked to assess how well several positive and negative characteristics described the in- and out-group, respectively. The group-affirmation treatment resulted in stronger in-group favoritism, and the effect was moderated by the intensity of political-party identification. This finding is in line with Derks et al. (2009), who observe that group affirmation increases intentions of group-serving behaviors only among those that have strong identification with their group.

Together, these studies suggest that individuals' moral norms regarding interaction with others are shaped by group membership. Participants in experiments appear to believe that there is one moral norm for cooperation among fellow partisans and another for cooperation with individuals outside this group. We can conclude from this that people are more willing to cooperate with fellow partisans, and in the context of voting, cooperation is equivalent to casting a ballot for the party's preferred candidate. Accordingly, when individuals contemplate whether there is a moral duty to vote, they are likely to distinguish between fellow partisans and the electorate as a whole. Therefore, it appears plausible that partisans jus-

¹³Forty-five students identified as Independent; they were allocated to either Democrats or Republicans based on the party they report as being the closest to.

tify their belief about a duty to vote based on the consequences for their reference group of fellow partisans, rather than the electorate as a whole. I would argue that the concept of duty resulting from such deliberation is best described as 'partisan' rather than 'civic' duty.

5 The behavioral implications of a partisan duty to vote

In the previous section, I have argued that the generalization argument, as applied by partisans, can be used to justify a moral duty to vote for those who share a political identity. Given how prominent partisan identity is in politics, particularly in the US, and given the relative simplicity of the moral argument presented above, it seems plausible that voters implicitly motivate their turnout decision along these lines. In what follows, I explore the moral-philosophical implications of the existence of a partisan duty for individual voter behavior. This examination will lead to the establishment of behavioral assumptions which form the basis for a game-theoretic model developed in Herrmann (2023).

As a start, assume that individuals indeed perceive a partisan duty to vote. To not vote, then, would constitute free-riding, and violate a moral norm shared within the partisan group. The effects of violating such a moral norm on the individual's utility are best modelled in terms of expressive utility. I already mentioned in Section 2 that there are several definitions of expressive utility, and the definition of Hillman (2010) strikes me as the most useful in the voting context. Recall that according to Hillman (2010) "expressive behavior is the self-interested quest for utility through acts and declarations that confirm a person's identity". Consequently, individuals obtain expressive utility when they engage in acts that confirm their desired identity as a moral person. Such expressive utility is entailed in the D term in the calculus of voting (1) that we have seen in Section 2. If a partisan were to abstain rather than vote, then he would forego the expressive utility obtained by engaging in the (personally costly) moral action. The larger the amount of expressive utility gained from voting (as measured by term D), the more likely an individual is to turn out to vote.

In the literature, the term D is generally assumed to be a constant that varies from person to person, since some people obtain higher expressive utility from voting than others. D is taken as an exogenous variable in the standard model, and what determines the size differences from person-to-person and election-to-election has not been examined sufficiently. In addition, previous research has assumed that the expressive utility stems in large part from fulfilling one's civic duty, i.e. a general duty for all citizens to vote in elections.

What I have argued for on the other hand, is a partisan duty to vote, which would be a function of an individual's sense of identification with a particular political party. The more strongly an individual identifies with a political party, the greater the chance that he will perceive a moral obligation towards fellow partisans. Indeed, this notion is supported by

the experimental evidence of Ehrlich and Gramzow (2015) and Derks et al. (2009) discussed in the preceding section. Let us define I as a variable that measures an individual's degree of identification with the political party they feel the closest to. I is measured on an arbitrary scale (such as $[0,1]$) and can be elicited based on questions applied in a survey or an experiment. The higher the degree of identification reported by an individual, the higher the value of I . This observation gives rise to the model's first behavioral assumption:

Behavioral Assumption 1 *The more strongly an individual identifies with a political party or aligned group, the greater the value of term D . That is, D is an increasing function of the degree of party identification I .*

Let us now take a closer look at the utility consequences of engaging in immoral behavior. There are many moral norms, and some of them carry more weight than others. The norm that "you shall not kill", and "you shall not steal" are both deeply held beliefs, but the disutility incurred from violating the former will far outweigh that from the latter. In other words, an action is not simply moral or immoral, there is also a degree to the badness of an immoral action. Therefore, the disutility incurred when an individual violates a norm depends on the degree of badness perceived by the individual.

Notably, the degree of badness of an immoral action can also depend on the circumstances in which it occurs. Take the following example. Most people would agree that health care professionals have a moral duty to maintain proper hand hygiene at all times. Yet, hand-hygiene compliance in US hospitals was below optimal levels in early 2020 and increased strongly in response to the first wave of the COVID-19 pandemic, only to fall again as case numbers and estimates of the case fatality rate decreased (Moore et al., 2020). Some of the increase in hand-hygiene compliance may simply be due to individuals trying to cut their individual risk of infection, an example of maximizing instrumental utility. But it seems likely that the perceived badness of violating the moral norm of proper hand hygiene was also higher due to the spread of COVID-19, thus making it more costly (in terms of expressive utility) for individuals to violate that norm. After all, the consequences of the scenario where nobody followed hand hygiene protocols (unless to cut their own risk) would be much more severe during a global pandemic than during normal times.

In the context of voting, the *expected* instrumental utility obtained does not depend on the stakes of the election, since the term B , the incremental benefit of changing the election outcome is multiplied by the infinitesimally small probability of being decisive P . In contrast, the expressive utility of voting may well depend on the stakes of the election. If the largest disagreement that two political parties have is about whether the corporate tax rate should be twenty or twenty-five percent, then it is hard to argue for a partisan duty to vote. To not have one's group's policy preferences be reflected in the electoral outcome is always bad, but the degree of badness depends on the stakes of the election. However, I

would argue that the stakes of elections are generally much higher than disagreements over marginal tax rates.

Take the example of abortion in the US. Based on survey data from 2019, 62 percent of self-identified Republicans believe that abortion should be *illegal* in all or most cases, whereas 82 percent of self-identified Democrats believe that it should be *legal* in all or most cases (Pew Research Center, 2019). Those who oppose abortion generally believe that life starts at conception and that to perform an abortion is to kill an unborn child. Those who advocate for abortion on the other hand, believe that life begins at birth, and that to deny a woman an abortion is to violate his human right to bodily autonomy. This is a fundamental disagreement and if each side's beliefs are genuine, then to not be in power to affect the abortion policy they want to see indeed qualifies as a 'catastrophic' outcome. There are many other weighty political issues, and which of those are at the forefront of the pre-election debate may vary from year to year. But in general, the more polarized the electorate along party lines, and the higher the stakes of the election, the higher the degree of badness of not fulfilling one's moral duty to vote as a partisan.

Similar to the above reasoning, Goodman (2018) proposes the notion of a *conditional* duty to vote, where "in the minds of some citizens the strength of electoral civic duty is conditional upon the presence and intensity of certain considerations". These considerations may include the stakes or competitiveness of an election. Note that Goodman (2018) applies conditionality explicitly to the concept of a *civic* duty to vote. However, the author leaves open how, for example, the stakes or importance of an election would change the badness of not complying with a perceived civic duty.

Goodman (2018) also analyzes data from a representative survey of Canadian citizens, in which respondents were, i.a., asked about their perceptions of citizenship and citizen duties in an election context. Of the respondents, circa 44 percent agree with the statement that "It is more important for people to vote in elections where the stakes are considered high", and slightly less than 40 percent with the statement that "I have a greater duty to vote in elections where there are major differences between parties and candidates". These results suggest that a significant proportion of citizens think of compliance with a duty to vote as conditional. These individuals may also exert social pressure on other citizens to get them to vote in elections deemed important. Since the expressive utility from voting can also stem from the act of confirming one's identity as a moral person to others (rather than oneself), even the voting decisions of those who did not agree with the above statements may exhibit conditionality.

Based on the above reasoning, we state the second behavioral assumption:

Behavioral Assumption 2 *The higher the benefit of changing the election outcome, as measured by B , the greater the value of term D . That is, D is an increasing function of B .*

Lomasky and Brennan (2000) mention another hypothetical situation that is instructive

in understanding the expressive utility consequences of immoral behavior. Consider a rural community where a farmer grows apples on an orchard. If a neighbouring villager picks an apple from the tree on a stroll, then he might think that "One won't be missed", and thereby justify his immoral action of theft. If most of the other villagers do not do the same (even though it may be individually beneficial to them), then this individual action is unlikely to lead to an outcome where the farmer sells the land to be used for other purposes (thereby restricting the supply of fresh fruit to the villagers).

If, on the other hand, the stealing of apples from the orchard is a common practice, then the losses to the farmer may be close to the threshold where he sells the land. If villagers are aware of the fact that the prevalence of theft is near the critical value, then an individual picking an apple regardless would feel much more guilty about the immoral action than in the situation where it is less common. In other words, the disutility incurred by stealing an apple from the orchard increases with the prevalence of said action, even though both the common and refined generalization argument would classify the action as immoral independent of the prevalence of said action. To simply classify an action as immoral is insufficient, the badness of immoral action depends on the prevalence of the action within the reference group.

The argument can be naturally extended to the voting case. If an individual's preferred party has overwhelming support among the electorate, then he would not feel particularly guilty to sit out an election, even though he recognizes that there exists a moral obligation to vote for the party he identifies with. On the contrary, in a situation where the electorate is split evenly between supporters of two parties, even small deviations from the moral norm of universal participation by party supporters could have adverse consequences, so that the badness of non-compliance with the norm is increased. Support for this notion is provided by Goodman (2018), who finds that up to 50 percent of Canadians agree with the statement that "It is important to vote in elections where the outcome is likely to be close".

Consider the case of US presidential elections. Due to the electoral college system, voters can only determine who wins the popular vote *within their state*, which will in turn determine the votes of the state's electors in the electoral college. The *national*-level popular vote, on the other hand, has no influence on the election results. In some states, one party has much more support among the electorate than the other, as measured by pre-election polls and historical election results.¹⁴ On the contrary, in the so-called 'battleground states', support between the two major parties tends to be split much more evenly.

For example, pre-election polls in the state of Vermont for the 2020 US presidential election indicated that 71 percent of respondents would prefer the Democrat candidate,

¹⁴While there are often third party candidates in US presidential elections, they historically only obtain insignificant vote margins. To simplify the argument, suppose that there are only two parties competing, Democrats and Republicans.

while only 26 percent preferred the Republican candidate.¹⁵ With such a stark preference for one candidate over the other, it does not seem particularly crucial for partisans on either side to comply with the moral norm of universal electoral participation. In a battleground state like North Carolina, on the other hand, it is crucial for supporters of both parties to uphold that norm since even small deviations from the norm on either side would sway the election results. Thus, an individual that identifies with one party over the other would ostensibly feel guilty for abstaining in a situation where compliance with the group norm is essential for the collective outcome. Then a Democrat supporter in North Carolina who does not cast a ballot incurs a much larger disutility than an otherwise identical individual in Vermont would if he abstained.

Let M denote the ex ante expected value of the vote margin between the two parties. In a setting with only 2 parties, M is defined as the expected vote share for the majority party minus the expected vote share for the minority party. The expected vote shares for each party can for example be based on pre-election polls. The smaller the absolute value of M ($|M|$), the closer the election is expected to be.

Behavioral Assumption 3 *The closer the election is expected to be, the greater the value of term D . That is, D is a decreasing function of the expected vote margin $|M|$.*

We can summarize these assumptions in terms of the calculus of voting. Equation (2) constitutes an individual utility function, where positive (negative) utility results in the decision to cast a vote (abstain). The only change compared to (1) is that the amount of expressive utility D received is now a function of the degree of party identification I , the stakes of the election (as captured by the benefit of changing the election outcome, B), and the closeness of the election $|M|$, i.e. we have:

$$U = PB - C + D(I, B, |M|) \tag{2}$$

$$\frac{\partial D}{\partial I} > 0, \quad \frac{\partial D}{\partial B} > 0, \quad \frac{\partial D}{\partial |M|} < 0$$

The utility function (2) describes how an individual member of the electorate evaluates his choice to vote or abstain. Assuming that the probability of being pivotal, P , is exogenous, we can also state how the parameters I , B , and $|M|$ will influence *aggregate* turnout. However, this is merely a simplifying assumption, and in reality, the probability of being pivotal is endogenous, i.e. determined by the interaction of voters with their individual utility functions. Nevertheless, assume for a moment that we can treat the pivot probability as exogenous. In that case, we can make a number of predictions about aggregate turnout behavior and compare it to the empirical evidence.

¹⁵According to polling of likely voters (Axios, 2020). Note that the remaining 3 percent of respondents preferred a third party candidate.

First, the closer the election is expected to be (i.e. the smaller $|M|$), the higher aggregate turnout. This prediction is in line with the empirical evidence. There is a well-established positive association between ex-ante election closeness and aggregate turnout in the empirical literature (Cancela and Geys, 2016; Arnold, 2018; Bursztyn et al., 2021). Notably, this association cannot be explained by the standard notion of a civic duty. Second, the larger the stakes of the election, the higher aggregate turnout. Clearly, this prediction is intuitive, and the empirical literature is again in line with it (Henderson and McEwen, 2010; Andersen et al., 2014; Dubois and Leprince, 2017). Third, the higher the degree of party identification, the higher aggregate turnout. Evidence to this effect is found in Heath (2007), Schram and Sonnemans (1996), and Smets and van Ham (2013).

In the companion paper (Herrmann, 2023), I construct a game-theoretic model to allow the pivot probability to be determined endogenously. Conceptually, this is important since voters do not make their vote choice in isolation, but rather they do so contingent on the expected behavior of others. Besides being more rigorous, the game-theoretic model also allows me to calibrate the model to real-world election data and to differentiate between aggregate turnout of partisans and that of non-partisans. As such, the game-theoretic model allows for a richer set of predictions. Herrmann (2023) also provides an extensive discussion of the empirical evidence on turnout behavior and compares the modelling approach to related group-based models of voting. The key takeaway from Herrmann (2023) is that the partisan-duty model of voting makes predictions that are remarkably consistent with the empirical evidence.

6 Conclusion

In this paper, I have investigated whether a moral duty to vote exists. Combining insights from the political science and economics literature, I show that common conceptions of 'civic duty' cannot be justified based on the well-known generalization argument. In a world where there is no social norm of universal participation in elections, instrumental motivations would nevertheless ensure sufficient turnout to accurately represent the electorate's preferences in large democracies like the US. In addition, while the election results would be unlikely to represent a random draw from the population, they would be more reflective of heterogeneous levels of preference intensity within the population, thereby ameliorating concerns about the 'tyranny of the majority' emerging in democratic forms of government. Thus, individuals deciding whether or not to vote based on their own self-interest, independent of a perceived duty to vote, would by no means lead to a failure of democracy. Consequently, no civic duty to vote follows.

However, application of the generalization argument to subsets of the electorate leads to a different conclusion. Those who identify with a political party, or group whose interests are

aligned with a party, can be argued to share a moral duty to act in the electoral interest of their in-group. A group member who abstains harms his fellow group members by decreasing the probability of the group's preferred election outcome. On the contrary, an individual who does not identify with any groups within the electorate and abstains actually *benefits* other voters by making their votes count more.

In the case of the US, a majority of the electorate identifies either as a Democrat or a Republican, and party positions differ substantially on controversial issues such as abortion rights, climate change, and gun laws. When partisan supporters consider the option of abstaining, and ask "What if everybody did that?", the answer of assured election losses qualifies as a catastrophic outcome. Thus, as a partisan, the behavior of only voting when in one's self-interest fails the generalization test, and a moral duty to vote follows.

Perceptions of such a 'partisan duty' could be part of voters' implicit reasoning when deciding whether to vote or abstain in given election, and there is significant empirical and experimental evidence to this effect. I developed a number of behavioral assumptions that follow from the existence of a partisan duty to vote, and in a companion paper (Herrmann, 2023) study their aggregate consequences using a game-theoretic model. The partisan-duty model makes a large number of comparative statics predictions that are all in line with the empirical literature. The model's empirical success gives credence to the underlying assumption that perceptions of partisan duty are a factor in voters' decision making process.

With this paper, I hope to provide a moral-philosophical foundation for the central assumptions in rule-utilitarian (Coate and Conlin, 2004; Feddersen and Sandroni, 2006; Levine and Mattozzi, 2020) and Kantian (Grillo, 2021) models of voting. Both types of models assume that individuals evaluate their own behavior based on the outcomes that would result if fellow group members behaved the same way. The concept of partisan duty, the empirical evidence behind it, and its moral implications may be useful to better understand the technical assumptions made in these models. Furthermore, the partisan-duty model relates explicitly to the concept of party identity which, despite its importance, has received much more attention in the political science than in the economics literature and formal modelling. As such, this paper seeks to bridge the gap between the disciplines' approaches to studying turnout.

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