Voting and Causal Responsibility

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I Introduction

In the standard Rational Choice Theory account of voting behavior (RCV henceforth), the idea of a vote being "pivotal" plays a central role. Votes are pivotal when an electoral option wins by one vote. In "pivotal" cases, the voters who vote for the winning option (J) are both jointly sufficient and individually necessary for J's victory. Each voter composing that set can, on this basis, be described as having "brought about" the victory of J. Each is causally efficacious in the sense that if she had voted for a different candidate (and everything else had remained the same), J would not have won. In all cases where the outcome is non-pivotal, any individual voter, had she voted differently, would not have altered the electoral outcome. Her vote would have been consequentially irrelevant (in this sense) in all but the non-pivotal case.[1]

For this reason, the *ex ante* probability of being pivotal is taken by RCV to be a crucial parameter in each individual voter's deliberations. It is this *ex ante* probability (denoted h henceforth) that influences:

> how much information about alternative candidates it will be rational for the voter to acquire;

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[1] There is a second-order complication that we should dispose of at the outset: J might win the election following an exact tie among all voters. The decision over who wins in the event of a tie might be determined by tossing a coin; and J, rather than K, might win that coin toss. Each voter, in these cases, is such that had she abstained, or voted differently, she would have brought about the victory of K. And in the case where J wins by exactly one vote, if a voter had abstained, she *might* have brought about the victory of K via a tie-breaking mechanism. So if voter A abstains rather than votes for J, in the first case, she would cause K to win by a majority of 1; or, in the second case, she would give rise to a situation in which K might win via a tie-breaking procedure. What this means is that the idea of being pivotal is slightly different depending on whether the option under consideration is voting for an alternative candidate or abstaining, and on whether the number of voters is odd or even. Here, we shall treat the idea of being pivotal capaciously – allowing it to cover all cases in which A's voting behavior could influence which candidate wins.

the extent to which decisions about which candidate to vote for will be influenced by the voter's individual self-interest;

and whether it will be rational to vote at all, given the stakes involved in the election for the individual as she perceives them, and the expected closeness of the race and the alternative actions to voting available.[2]

In most large elections, clearly, *h* (even capaciously defined in the sense of footnote 1) will be miniscule. Given this fact[3], rationality considerations (as RCV understands them) can explain:

1. why individual voters do not expend much effort in acquiring relevant information about candidates and their policies. After all, their votes are very unlikely to make a difference to the outcome. (This is the basis of Downs' (1957) claims about electoral "rational ignorance." For a more recent treatment see Caplan (2007).)
2. why considerations of individual interest as opposed to public interest are likely to play a smaller role in decisions about how to vote than in those same agents' market decisions. After all, since the chance that one's voting decision will have an impact on the outcome is far lower than in market contexts, where one's choice is usually decisive, the chance that it will have an impact on one's individual interest is correspondingly small. (This is the central upshot of the "expressive" account of voting behavior – as analyzed for example by Brennan and Lomasky (1993).)
3. why certain factors, and not others, are likely to influence aggregate levels of voter turnout.[4] After all, if the chance that one's vote will make a difference to the outcome is exceedingly small, the incentive provided by the thought that one's vote will make a difference will be small as well.

An implication of RCV is that any voter who votes in standard large-number democratic settings, thinking that her vote is likely to be causally efficacious in determining the electoral outcome, is making a mistake. Causal efficacy is possible: but its probability is so low that a rational voter will not include that prospect as being a major, let alone a predominant, "reason for voting."[5]

In one sense, such conclusions could be seen as showing the power of RCV logic. Means-ends thinking can indicate settings in which certain things are unlikely to work as a means to an end

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[2] It is perhaps worth emphasizing that the question of whether it is rational to vote or not involves a deployment of the logic of rationality that is somewhat at odds with its use in "rational choice theory". Charges of irrationality involve argument from presumed desires and beliefs on the one hand to actions that are inconsistent with those desires and beliefs on the other. The rational choice theory approach involves argument from observed behavior "backwards" to the beliefs and desires that are thought to motivate that behavior. Here, rationality works as an analytic assumption rather than an issue to be determined in any specific case. So, the presumption in RCV is (or ought to be) that both voters and abstainers are rational: the question then becomes -- what differences in beliefs and desires of the two sets of agents would explain these behavioral differences? The notion that one of these groups might be 'rational' while the other group is not is alien from the spirit of the RCV enterprise – a fact which did not prevent some early RCV theorists from speculating as to whether voting is "rational" or not. See for example, Tullock (1967).

[3] For example, in US Presidential elections, at most on the order of 1/12500 and almost certainly rather smaller than this. See Brennan and Lomasky (1993) chapter 4.

[4] The classic treatment is Riker and Ordershook (1968).

[5] Of course, expected benefit might be a reason for voting if the stakes for the voter are huge – but then it is the size of the stakes rather than the probability of making a difference to the outcome that is the primary "reason" to vote.

because the connection between the end (in this case the electoral *outcome*) and the means (the individual's vote) is too tenuous. Where there is reason to think one's vote won't serve as an effective means to securing a particular electoral outcome, the quest would then be for ends that *could* be appropriately cast as "rational reasons" for voting. And, predictably, people have suggested ends other than the electoral outcome that might provide people with reasons to vote (e.g. a concern to do their duty, or to avoid substantial regret, or to serve as an example to others). In each case, of course, the question will arise as to whether voting is actually an effective means to the suggested end, but assuming it is, one will have found reasons to vote that do not depend on thinking that voting is an effective means to bringing about one's preferred outcome.

The RCV's position, which is now standard in both economics and political science, hinges on h (the ex ante probability that one's vote will be pivotal) being the appropriate parameter for assessing an individual's causal efficacy when it comes to voting.

Alvin Goldman (1999), and more recently, with some variation[6], Richard Tuck (2008), have challenged this idea. They grant that it matters whether one's vote might be the cause of victory. Yet they maintain that the account of causal efficacy accepted by RCV is wrong. On the RCV view, one's vote counts as causing the outcome if, but only if, one's vote is pivotal – only if, one were to vote differently, the outcome would be different. Against this, Goldman and Tuck argue that what matters in thinking about whether one's vote might be the cause of victory is not whether it is necessary for the outcome, but whether it is a part of what is, in the appropriate way, sufficient for it.[7] To take an example from Tuck, a police officer will have killed a robber – will be the cause of the robber's death -- even if some other officer would have shot the robber had the first missed. So the first's accurate shooting was not necessary in order for the robber to die. And a life guard saves your live – is the cause of you not drowning – even if, had she not saved you, another life guard standing by would have: so the first lifeguard's action was the cause of your being saved even though her saving you was not necessary for you to survive. Similarly, on their view, one's vote can be a cause of an electoral outcome even in cases where there are more than enough votes for victory, so even when one's voting is not necessary for the outcome (although Goldman and Tuck differ concerning just when one's vote is properly seen as a cause in such cases). As a result, they argue, h is not the probability that deserves attention in thinking about whether one's vote will be causally efficacious; rather, what is important is the *ex ante* probability that one's vote will be among those that are, in the appropriate way, sufficient for electoral victory. (In what follows we refer to this at the "Goldman/Tuck account".)

So while RCV and Goldman/Tuck agree that in thinking about whether to vote a central question is whether in voting one will bring about, or cause, the desired outcome, they differ concerning their understanding of what it takes to be a cause. On the RCV view, the relevant test is counterfactual: would the outcome have been the same even if you had voted differently. If yes, then your vote is not pivotal, and so not (on this view) causally efficacious. On the Goldman/Tuck account, even if your vote is not pivotal, it will be causally efficacious if it is among the votes that are, in the appropriate way, sufficient for the outcome.

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[6] The variations are far from minor, but they share enough, we think, for it to make sense to consider them together, not least their rejection of the idea that what matters is that one's vote will be pivotal.

[7] We write of being sufficient "in the appropriate way" because Goldman and Tuck differ when it comes to identifying which votes are a part of what is sufficient for the outcome. We highlight the difference below.

There are some important differences between Goldman and Tuck concerning just which sufficient set of votes matters in the context of voting.

In particular, on Tuck's view, it is whichever minimally sufficient set actually settled the election. The idea shows up nicely, as Tuck emphasizes, in a roll call vote, where at a certain point victory is secured by someone's vote, together with those before, even if those following in the roll call would have voted in the same way.[8] The same idea shows up, although with complications due to the electoral college, in thinking about the causal efficacy of votes cast on the West Coast or in Hawaii in US Presidential elections. Often the outcome is settled, by the votes cast earlier, farther East, in a way that makes the later votes immaterial to the actual outcome.[9] For other votes as well, Tuck maintains, there is some subset of the votes cast for the victor – a minimally sufficient set -- that will have been causally efficacious, because actually sufficient for the outcome.[10] On Tuck's reckoning the *ex ante* probability that one's vote for a victorious candidate will be causally efficacious – the probability that it will be in the minimally sufficient set – is normally much higher than h, even in large landslide elections. For instance, in an election with a million voters, where the victor is expected to win with 60% of the vote, the probability that one will be in the minimally sufficient set, g, is .66 (whereas h is vanishingly small). And this is true even though, as is often the case, we cannot know which subset of the votes actually proved to be the sufficient set.

Suppose in a two candidate race, J emerges as victor, receiving N votes out of the total voting population of M. Now, since (M – N) voters voted for the alternative (K), the minimal set of voters J required for victory was in fact (M – N + 1). We do not know which particular voters compose that minimal set. But Tuck supposes, for this example, that the votes were counted in a particular order and there is indeed a determinate set of voters who compose that minimal set. So there is a fact of the matter about which voters these were. A, who voted for J, can reasonably ask what the probability is that she (A) herself was a member of that minimally sufficient set. And that probability is just the number of voters required for the minimal majority divided by the actual number of J-voters – or (M – N + 1)/N. Denote this probability, g. Tuck sees g as the appropriate measure of the probability that a voter is in the relevant minimally sufficient set, and thus a cause of the victory.

To take a simple arithmetic example, J gets 6000 votes out of a total of 9999 voters. So 3999 individuals voted for K. For J to win, J would have needed 4000 votes: this is the minimal set of voters required to bring about J's victory. So each of the 6000 actual J voters has a 2/3rds chance of being in that set –and should on this basis be seen as having a 2/3rds chance of being causally responsible for J's victory.

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[8] Tuck, p. 51

[9] Tuck's account faces complications, of course, in cases where votes are cast simultaneously, since the roll call voting method of isolating which set of votes was, in fact, sufficient, depends on temporal order. This fact plays an important role in motivating Goldman's account, which takes simultaneous voting as the normal case (on the grounds that our voting conventions treat the timing of ballots, and of their being counted, as irrelevant (p. 213).

[10] Writing about British parliamentary elections, Tuck notes that "at some point in the course of the evening one candidate's piles of ballot papers add up to the precise figure necessary for a majority, and those ballot papers have therefore by themselves accomplished the task of electing him." And he goes on to note that in the event of a recount, the original count proves not to have settled the election and "the set which first reaches the majority in the second count will then do so, or in the third count, or in however many counts are necessary to satisfy the satisfy the returning officer and the candidates that a proper count has been made" (p. 43).

Goldman, in contrast, holds that in normal elections a vote is a "partial" or a "contributory" cause as long as it is a member of *any* minimally sufficient set, privileging no particular set as the one that, in the event, was sufficient. This means that *every* vote cast for a victor, even in a landslide, counts as causally efficacious, not just those that are in some privileged minimally sufficient set.[11] As a result, the *ex ante* probability that one's vote for a victorious candidate will be causally efficacious, as Goldman thinks of things, is 1. (Of course, when one does not know for certain which candidate will win, the *ex ante* probability that one's vote will be causally efficacious in bringing about victory will be less than 1, reflecting the probability, whatever it is, that another candidate will win, but in any case, still much higher than h). Importantly, in developing his view, Goldman focuses on cases of what might be called simultaneous over-determination, where the sets of sufficient conditions are all in place at the same time. In these cases it is hard, to say the least, to make sense of the idea (important to Tuck) that one of the minimally sufficient conditions takes precedence over all of the others. Yet Goldman recognizes the challenge posed by cases of non-simultaneous over-determination (e.g. the roll call vote and our national elections), where the order of the votes, or the order in which they are counted, suggest that, as a matter of fact, one sufficient condition pre-empts all the others. In response, Goldman argues that in many elections we have a conventional system in place that "abstracts from this actual or "natural" order and considers all the votes on an equal basis" turning an apparent case of pre-emption into one of simultaneous over-determination.[12]

We are unsure as to whether the difference just noted is simply due to Tuck's focusing on cases of non-simultaneous over-determination, where one sufficient set of voters is reasonably seen as pre-empting the others, and Goldman focusing on cases of simultaneous over-determination, where there seems to be no grounds for privileging one set of sufficient conditions over others. It may be that each would accept the views of the other for the relevant cases. What is important for us here is that Goldman and Tuck both reject RCV, along with its emphasis on h, and recommend thinking of causation in terms of the sufficient, rather than necessary, conditions for an outcome. For the most part, differences between Goldman and Tuck (to the extent there are differences) won't matter to what follows, though where it does we will default to Tuck, using g (interpreted as his view, rather than Goldman's, would recommend). This is for two reasons. The first is that we think that in many cases (in elections and otherwise) the kind of convention Goldman relies on in forestalling worries about pre-emption is not in place. And we take it that when it is not we should be thinking in terms of preemption (as per Tuck) rather than simultaneous over-determination. The second is that the interpretation Tuck's account gives to g makes that probability more directly comparable to RCV's h than is the interpretation provided by Goldman's account (which would set the probability at 1 in cases where one is certain which candidate will win).

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[11] Goldman advances this idea as a way of understanding Mackie's INUS account of causation in light of which something is a partial or contributory cause if and only if it is "an *insufficient* but *necessary* part of a condition that is itself *unnecessary* but *sufficient* for the result" (p. 206).

[12] Goldman points out that "In the United States House or Senate, for example, a roll-call vote is completed even if the outcome is clear long before the last vote has been voiced. This is because, officially, votes are not counted or "registered" until all have been voiced. Because of this conventional feature, the causal impact of a late vote is not really preempted by a collection of early votes. From the official, conventional perspective, they are all simultaneous; hence, their causal statuses are perfectly symmetric" (p. 213).

The contrast between *g* and *h* is striking. For a start, *g* is very much larger in all democratically relevant cases. As noted in footnote 3, the probability of an exact tie (*h*) between candidates in a US presidential election too close to call is estimated at around 1/12500. But for just such an election, *g* will be quite close to 1. Even if the margin turned out to be 4 million voters out of 120 million (perhaps not so very close after all) then *g* is 58/62 or roughly .94. On Tuck's view, this probability measures the probability that one will be a cause of J's victory.

Note too that *g* and *h* vary in different ways. As electorate size increases, the probability of an exact tie declines roughly with the square root of size: so when M doubles, *h* declines by about 40%. By contrast, *g* is a matter of relevant *proportion*, increasing as the size of the minimally sufficient set increases.

It is worth emphasizing that *g* can be thought of as an *ex post* probability – to be calculated after the election is settled – whereas *h* cannot be. After the election, you will know whether you were pivotal or not. But the decision as to whether to vote or not depends on the probability that one will be a cause of the outcome in question; and so *g* should properly be thought of here in *ex ante,* expected terms. The *ex ante* expected value of *g* will be based on the *expected* size of the majority. The voter properly expects *h* to be tiny; but *g* is likely to be substantial.

In developing their accounts of how it is our votes might be causes of an electoral victory without be required for it, Goldman and Tuck are especially interested in why voters "should vote." They want to identify reasons people have to vote even in cases in which one candidate will predictably beat others, with or without their vote. Goldman explicitly recognizes that the reasons in play might be either prudential or moral; and though his own account focuses on the moral aspect, he thinks his reasoning has clear implications for the prudential dimension as well. Specifically, Goldman claims that:

> the account [of causal responsibility] presented here… can explain why people *should* vote (after obtaining sufficient information) and it can explain why people *do* vote (in fairly substantial numbers) [p. 216]

Taken in context, the idea, as we understand it, is that, once voters reckon properly the probability of their vote being causally efficacious, they will see that their vote is likely to have a causal impact on the outcome and will be able to take some moral satisfaction, after the fact, in having been part of the cause of their favored candidate's victory. Furthermore, the prospect of such moral satisfaction (and/or any social esteem that might attach to recognition of their role as members of the group that brought about that candidate's victory) is a significant incentive.

Interestingly, Goldman and Tuck both talk not just in terms of casual *efficacy* but also in terms of causal *responsibility*. And we shall have something to say later about the significance of this choice of terms. But we think the account draws much of its intuitive force from its use of "responsibility" language, since, with them, we do think that in elections all those who voted for the victor – not just one pivotal voter -- are responsible for the outcome. So consider, for example, an individual who voted for Hitler in the German elections of July 1932. This individual, one might think, and *all* the others who voted with her, must bear some responsibility for Hitler's successes in that election. Any such voter should properly be held in some contempt; and she ought to feel guilty for having voted in this way.

Suppose in her defense, she were to point out that her own *individual* vote almost surely made no difference to the electoral outcome. Hitler, she observes, would have been every bit as successful whether she had voted for him or not. Would we be – should we be – moved by this observation? Almost certainly not! Horribly bad moral consequences are associated with her actions and she moral responsibility for them.[13] And she ought to do so specifically despite the fact that her individual vote almost surely made no difference to the electoral outcome.

As will become clear below, we think Goldman and Tuck are right that there is an important sense in which in elections a group of voters, not just one, is causally responsible for the outcome. Our concern is with how thinking about what one might cause figures in justifying and explaining how people vote. In particular we want to focus on two questions:

1. What exactly is each J-voter responsible *for*?
2. And does such responsibility that arises by virtue of being *causally* efficacious (or *causally* responsible) exhaust electoral responsibility more generally? For example, what account of voter responsibility can RCV, as we have conceived it, put in play against the Goldman/Tuck account – and does the best RCV account serve to satisfy our intuitions in cases like the Hitler-success case?

We shall address those questions in turn in what follows.

The upshots of our discussion are twofold. The first is that there are serious reasons to doubt whether the Goldman/Tuck account of why people should vote succeeds in giving the right action-guiding advice. In that sense, the *normative* strand of the Goldman/Tuck account is suspect.

Our second claim is that the explanatory version of the account depends on assumptions that the circumstances of voting make rather dubious; and that under plausible conditions, the effect of the "Goldman/Tuck account of causal responsibility" on anyone convinced by it may well lead them to be less likely rather than more likely to vote. In that sense, the *explanatory* strand of the Goldman/Tuck argument is suspect.

Both RCV and the rival Goldman/Tuck account are about choices: the choices individuals do make; and the choices they ought to make. In the choice context, the proper *weight* of various considerations bears; and, in this context, we think two questions loom: 'What value is to be placed on being the cause of some outcome?' and 'What probability is to be assigned to that value?

The stakes for RCV orthodoxy are considerable. Given that g can be close to 100% for close elections (and far from negligible for even not so close ones):

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[13] We leave to one side the important question of just how to think of the relative degree to which she, as compared to others, is responsible for those consequences. We also leave to one side questions concerning the responsibility she bears for her vote, regardless of the consequences associated with it. (Here we are being careful to talk of the consequences *associated with* her vote, rather than of the consequences *of* her vote, since the latter assumes her vote had the consequences in questions – that it was causally efficacious, and it is that assumption that we are exploring.

1. We should expect, contra RCV, that the high probability that one's vote will be causally efficacious will motivate many people to expend time and energy in voting. This is, of course, precisely the point that Goldman and Tuck seek to make.
2. We should correspondingly expect voters to expend significant effort in acquiring relevant information about candidates and their policies, contra Downs and Caplan. (Unless, of course, they, perhaps mistakenly, think that they already have the relevant information.)
3. We should expect that considerations of individual self-interest are likely to play nearly as large a role in electoral settings as in those same agents' market decisions. After all, the probability that one will be causally efficacious (on the Goldman/Tuck account) will often be nearly the same in both contexts.

One crucial question is whether *g* or *h* is the way that people *actually* think about the probability that their vote will be causally efficacious.[14] The difference will have a significant impact when it comes to *explaining* voting behavior. Another crucial question is whether *g* or *h* is the *appropriate* way to think about the probability that one's vote will be causally efficacious. The difference will have a significant impact when it comes to justifying voting behavior.

II Responsibility For What?

Goldman and Tuck tie their account of moral *responsibility* to the notion of *causal efficacy*. We think that this elision is misleading. We think a proper account of moral responsibility is often usefully kept apart from any particular account of causation, and, indeed, in many cases, apart from causation altogether; and that this is true in the electoral case. Several considerations incline us to this view.

For one thing, we think that the Goldman/Tuck formulation, by grounding the idea of moral responsibility in its causal effects on the electoral *outcome*, fixes the idea of moral responsibility in electoral behavior too narrowly. It is not that we think that bringing about an electoral outcome is totally irrelevant to the ethics of voting behavior, but as we shall argue, it is not the *only* relevant aspect.

More generally, though both responsibility and causality are notions whose application turns on context and convention, the relevant contexts and conventions are significantly different in the two cases.

Take causation. It seems clear that in most (perhaps almost all) possible descriptions of what caused some 'outcome' X, there are a number of factors that might be isolated all of which were present -- and necessarily -- for X to come about. But what counts as a *cause* of that outcome –

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[14] We believe it is likely that many people do think that as long as they voted for the winner of an election, they helped to cause the victory, as Goldman's (but not Tuck's) version of g would have it. Yet we suspect that thought does not depend on ideas concerning their being in a minimally sufficient set. In any case, it does seem plausible that many people recognize that they cannot claim credit for a victory without voting and suppose that as long as they do vote (for they winner) they can claim credit. And we think that is likely a real incentive to many people.

and what in particular as "*the*" cause, or a *primary* cause – can be highly contextual. As Goldman puts it, "*causal upshots*" can be "*defined or stipulated by social convention*".

Nevertheless, causation does not seem to be as permissive in this respect as is responsibility. Take the linguistic indicators. Common parlance allows variously: "holding responsible"; "feeling responsible"; "taking responsibility"; "being responsible"; "acting responsibly"; and related expressions. All these states of feeling/holding/taking etc. refer to social and psychological facts of an impressively wide variety. When people talk of their "taking responsibility for X", they seem to do so not so much because they believe that they have caused X but rather in face of the conviction that they have not. Equally, when people take the trouble to declare that they are holding A responsible for X, it is often enough in a setting where the causal connection between A's actions and X is either unclear – or seen as irrelevant. The analogous linguistic indicators and practices with respect to causation seem different and much more constrained. People do not talk so readily of "accepting causation" – except perhaps in the rather loose sense in which causation might be connected to responsibility. We might invite others to treat us *as if* we were causally efficacious but only as a maneuver in getting them to assign responsibility to us: causal efficacy remains "as if" – while the responsibility we take on, we do indeed treat as ours.

It is, we think, unexceptionable that when A votes for a winning option J, people at large *are* disposed to "hold A partially responsible for J's victory" in a way that they would not hold B, who abstained, responsible; and in turn more than C who voted for K. But this is a weak claim – entirely consistent with the thought that A's voting for J rather than for K (or abstaining) almost surely made no difference to whether J would win. A's responsibility might derive from the fact of A's *supporting* some outcome, even if, as we think, it is not restricted to A's being causally efficacious in bringing the outcome about.

Consider for example citizen A. Suppose that J and K are rivals in an electoral race. Suppose that it would be desirable from a moral point of view if J were to win; and that A recognizes this fact. So, A thinks, in any case where the chances that J will win are pretty high, that fact is a good thing (better than if J were likely to lose). A has, as we might put it, a morally grounded "pro-attitude" towards J's victory. In that attitudinal sense, A supports J.

However, A could support J in another way -- by bending her own agency to the project of J's election by voting for her. In that way, so the thought goes, A might well turn out to be a *cause* of J's victory in a way that A wouldn't be if she failed to vote.[15] And when J is duly elected, A could properly feel moral satisfaction for her own part in supporting this desirable outcome. Now, it is important to emphasize that A's contribution here does *not* collapse to the difference A's vote made to whether the good outcome would come about. *That* effect is fully captured by the *h* factor – which by hypothesis here is very small; J's chances of winning without A's "contribution" in the postulated example are already high. Perhaps A's "responsibility lies, as the Goldman/Tuck account would have it, in A being, as they think about it, a cause of the victory. But we think that does not capture all that is in play, and, in fact, we suspect it misses the most important part: That what A is doing when he votes for J is *exercising agency* in support

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[15] Whether she is a part of the cause depends, of course, on whether J wins and also, on the Goldman/Tuck account, on whether her vote was part of (on Tuck's version) *the* minimal set of votes that was sufficient for J's victory or (on Goldman's version) *a* minimal set of votes sufficient for J's victory.

of the relevant outcome. And that seems to us to be the appropriate turn of phrase. Accordingly, we want to say a little more about what is at stake in this "agency" thought.

As the Goldman/Tuck view in effect emphasizes, in lots of situations, individuals want not just that something good comes about but also that it is *they* who bring it about. A wants his partner to enjoy pleasure: but it is likely that A wants that pleasure to be at *A's* hands. We ourselves desire intellectual progress in understanding 'reasons to vote' – but we also want that progress to come about partly as a result of *our* work -- not just that some paper be written and make its contribution, but that it be *our* paper. In a similar way, it is a familiar experience that a newly appointed CEO (or new Dean in the University setting) wants to make changes in the way things are done, or in the personnel who are her underlings -- not just because those changes are good in themselves (though she may well think so) but also because she wants to leave her mark. She has the power to make changes for the better and she relishes the exercise of that power.[16]

In the case of the new CEO/Dean (and perhaps the others as well), this motivation can appear to include an "ego trip" element: she may be making the changes simply because she can, and largely independent of whether the changes represent genuine improvements. But this (limiting) case reminds us that the exercise of agency can come apart from approval of the changes in the outcome qua outcome. And once we recognize that the exercise of agency can be desired for its own sake, we can see that changes might be made even when the agent does not know or much care whether such changes would be desirable were they to come about in some other way. A person may think: 'these are *my* changes and I am making *my* mark upon the world.' And that exercise of agency may well be the source of her satisfaction.

Note that, since on the Goldman/Tuck account the reason to vote relates to being causally responsible for the outcome, the desire to be a cause provides individuals with incentives to vote for the candidate most likely to win. This is so because on the Goldman/Tuck account, you cannot be causally responsible for something that doesn't happen: voting for a losing candidate deprives you of anything to be responsible for.[17] So if you want to be causally responsible for an event in political history, just for the sake of leaving your mark, you need to vote for the winner.[18]

It is worth noting too in passing that the notion of agency at stake here is distinct from that implicit in most rational actor theory, because in RCT any and all rational action is seen as the outcome of *choice*. So *any* choice is an example of the individual exercising 'agency'. In particular, the choice to abstain rather than to vote is a *choice* – and hence abstaining becomes an action, an instance of agency. By contrast, the notion of "agency" we see as being brought to the fore in the Goldman/Tuck account of voting has a more common sense quality: to play tennis or go jogging is to exercise agency in a way that choosing to do nothing would not be; to choose to

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[16] As Tuck notes acknowledging a concern with agency, and with being oneself the cause of an outcome, is perfectly compatible with a holding that RCV offers the right account of when a prospective outcome provides instrumental reason to act. See pp. 54-57.

[17] "On my account," Tuck writes, "it is rational to vote (all other things being equal) only if I believe that there are likely to be enough votes for my candidate for my vote to be part of a causally efficacious set… In other words, I think that it is precisely in the situation where it looks on the standard modern view [RCV] as if my vote is unnecessary that I have a good reason to vote" (p. 60).

[18] For an account of voting behavior based on the related, but importantly different, conjecture that voters want to be on the winning side for its own sake (at least over some range) see Schuessler (2000).

intervene in the world is to exercise agency where to choose to let things take their course would not be. And specifically, to vote is to be active in a process, in a manner that abstaining would be passive. Both voting and abstaining involve choices; but only one of those choices involves one's full political agency. Or at least, so the thought goes. And it is by no means an unfamiliar thought. The distinction between killing and letting die depends precisely on a notion of agency in this 'common sense' sense. The decision as to what to do in familiar trolley problems involves a choice; but "agency" is involved only when you pull levers or push fat men.

Of course, in the CEO/Dean cases, and many others, the agent is fully causally efficacious in bringing about the outcomes that represent her mark upon the world. That is not so in the voting case. Nevertheless, there *can be* an agency effect – something for the voter to be responsible for, over and above that voter's (usually very small) impact on the likelihood of J's victory. A has chosen to be causally involved by bending her agency in the furtherance of J's election; and the spirit of the Goldman/Tuck account seems to be that there is a level of causal responsibility associated with the fact of "being a cause" -- distinct from her individual contribution to likelihoods. Further, this agency effect can both: a) motivate individuals to vote; and b) provide a moral justification for A's voting.

The a) aspect we find perfectly plausible. Individuals might well be induced to vote for candidates because they want *themselves* to be a cause of that candidate's victory. In what follows we grant this point.[19] At the same time, we note that where people do have this concern, their voting has a very high probability of being pivotal to their success in pursuing *that* end.

However the b) aspect requires more argument. We think there is at least a range of cases in which including the agency effect will secure a worse outcome than if no such effect were present. In that sense, the Goldman/Tuck account of causal efficacy seems to give the wrong action-guiding advice. To show this is the aim of the ensuing section.

III Action-Guiding Advice

Begin with a simple example. There is a community of voters and an election in which the moral stakes are seriously large. The expected outcome is that 60% of voters will vote for J. This means that the probability is quite high that in voting of J one will be (in the Goldman/Tuck sense) a cause of J's victory, and so able properly to see oneself as having brought it about (along with others).

Now consider, in this setting, a specific voter A, who has an opportunity to bring a real, but not especially large, benefit, of E, to the community. There is however a difficulty – namely, that securing this benefit requires A to be out of town on voting day and hence unable to cast a vote. Should A remain in town and vote; or secure the benefit of E? On the stipulated assumptions, we think it is clear: A should go out of town and secure the benefit, even if the value of J's victory is *much* greater than the value of E.[20] This is because it is virtually certain that J will win (since

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[19] Though we will have cause to revisit that issue briefly in section IV.

[20] Of course, there is some difference in the relative values of J's victory and of E that would recommend staying and voting. But for a broad range, the fact that J's victory is more valuable will in effect be irrelevant to what A has reason to do, given the expected votes of others.

60% of the electorate is expected to vote for J): A's vote will almost surely not make a difference to the outcome. That is, h is very small. At the same time, g is substantial and the Goldman/Tuck emphasis on whether one will be a cause (in their sense) of a valuable outcome misdirects attention to the possibility of being a cause of that outcome, ignoring the crucial fact that one is close to decisive over E. Absent there being an independent (and substantial) value to *being* a cause (again, in the Goldman/Tuck sense) of some outcome, a concern for the value of outcomes ought to lead one to be both indifferent to g and attentive to h in determining what one should do.

Now, Goldman and Tuck may dispute that A can know with total certainty that J will win. We of course concede that point. Suppose we allow that A's absence does reduce the probability that J will win by a certain fraction. So the expected cost of A going out of town is not zero after all. That does not bring the Goldman/Tuck account of causal responsibility in line with reasonable action guiding advice, unless the probability that J might lose is extremely high (given the assumed values at stake). And to insist that it matters that the probability is not zero is, in effect, to concede what is at stake – namely that what is relevant for determining what A should do is not the share of so-called 'causal responsibility' (as Goldman/Tuck would have it) -- not the probability that A, if she votes, would have been one of the people that counted to make up the minimal majority -- but rather the likelihood that J will lose *because* A doesn't vote. In short, h.[21]

The example could be set out, not in terms of voting, but in other terms where the same issues are in play. Suppose the Coast Guard has two boats – a small one and a large one. The small one requires only a one-person crew; the large one requires a six-person crew. There are seven people on call at the station and two distress calls come in from different points along the coast. One involves a ship with 140 people; the other involves a boat that has just one person. All seven could attend to the ship with 140. Or six could crew the larger boat, while the seventh takes the smaller boat out to save one more. The best outcome is achieved, we assume, if both boats go out and 141 are saved. We take it that under these circumstances the right action guiding advice is that someone take the small boat out.

But it is far from clear that this outcome is what the Goldman/Tuck approach would recommend. Consider the calculus of each of the Coast Guards. Each can go with the larger ship and take moral credit for saving 140. (Just how much credit redounds to each is unclear. One reasonable suggestion is that the credit should be divided equally among all who participate in the rescue, or among the six in the minimally sufficient set; alternatively, though, it might be (as Tuck argues) that each rescuer in the minimally sufficient set can take full credit for saving all 140[22], still another is that the credit to be shared equally is determined by the size of the minimally sufficient crew.) Or one could crew the smaller rescue-vessel (receiving full moral credit for saving just one person) and allow her colleagues to crew the larger ship.

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[21] Tuck acknowledges that "it might obviously be a good reason for doing something that I am probably the only person able to do it" (p. 59), so it may be that our disagreement is more a matter of emphasis, than principle. But we are struck by the extent to which Tuck (and Goldman) think the relevant consideration in contexts of voting is whether one will likely be part of a relevant set of votes that is minimally sufficient for victory, and not whether one's vote is likely to be necessary.

[22] Tuck focuses on the allocation of utility, not moral credit, arguing that in an election that has an outcome with a utility of 200, each vote that is part of the causally sufficient set, "'represents" a utility of 200. But he cautions that we shouldn't conclude "that it possesses such utility, precisely because the notion of representation implies that the thing represented is different from its representative" (p. 42-43).

Suppose for the example that, out of gratitude, each person saved provides a reward of $N to the crew that saves her, and let's tentatively use that reward as a proxy either for the moral credit, or for the value, of saving them. Then the crew of the larger boat will collectively receive $140N (to be shared in some way by those who are causally efficacious), whereas crewing the smaller boat promises only $N. Absent side payments -- and irrespective of whether each in the larger group divides the money, credit, or utility, evenly, or each can claim the total amount of what they cause (as understood by Goldman and Tuck) -- each reasonably prefers to crew the larger boat. And this remains the case whether the reward comes as money, or social esteem, or moral satisfaction.[23]

Of course, there *is* a reward/credit-sharing scheme that will create incentives to produce the best outcome (which, in this case, we take to involve maximizing lives saved). That scheme will require that the total amount of reward to be distributed across all seven in a way that is insensitive to who saves whom. This will secure the best outcome because, when the seventh goes with the larger boat rather than the smaller, her participation serves to reduce *pari passu* the reward each of the six would otherwise receive. The total reward (monetary, social, or moral) across all who crew would be maximized when all 141 are saved. And one can certainly imagine a 'reward-sharing' scheme that would secure this result. But note that that "best-outcome" reward-sharing scheme is more difficult to imagine operating in the case where the reward comes in the form of esteem or moral satisfaction. Monetary rewards are readily transferable between persons: esteem and moral satisfaction are not. That is, it seems plausible to suppose that public esteem and even "moral self-satisfaction" associated with worthy acts (like saving people in distress) accrues to those actors who are 'causally responsible' whether in whole or in part. Securing the 'incentive-compatible' reward-sharing would require a separation of *reward* from *agency* that seems entirely alien to the spirit of the Goldman/Tuck treatment.[24]

The divergence between what action serves to secure the best outcome and what action serves (on the Goldman/Tuck account) to maximize the individual actor's moral credit is troubling. It is troubling not least because, for Goldman and Tuck, the analysis is supposed to explain why individuals will have incentives to behave in particular ways – and if moral credit is indeed allocated according to the Goldman/Tuck scheme, then it is clear that the outcomes secured will often not be best.

There are really two issues here, as we see it. One concerns which scheme would provide incentives that would predictably provide better outcomes. The other concerns which way of thinking about what one might cause by acting provides the right account of what one has reason to do. (We here take no stand on how tightly connected these two concerns are, though we think they are connected.) Our main point is that the weight the Goldman/Tuck account gives to being

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[23] The difference between *h* and *g* makes all the difference here, since however the credit or utility is to be apportioned, the much higher value of *g*, compared to *h*, makes the expected utility of joining the crew of the larger boat much greater than the value of crewing the smaller boat.

[24] One might seek to block the force of the Coast Guard example in a number of ways. One might be to insist that the seventh is likely not a cause because she adds nothing to whether the project of saving will be successful, assuming the other six are in place. This is a point defenders of RCV would make (even as they allow that there is a small chance that the seventh would prove necessary to success since, for instance, one of the others might become sick or fall over-board). But clearly, since only 6 are needed, and so only 6 are in the minimally sufficient set, *g*, for each, will still be extremely high on Tuck's interpretation (and 1 on Goldman's, since each of the seven is a member of some set of sailors that is sufficient).

(in their sense) a cause of an outcome gives the wrong action guiding advice, if what matters is the moral (or other) value of the outcome.

We recognize that these examples may not be decisive. There may be other examples where the Goldman/Tuck approach might produce better outcomes than the RCV equivalent. Furthermore, we concede that quality of outcomes qua outcomes may not exhaust the moral domain. Nevertheless, it seems to us that failure to provide the right action-guiding advice in the case we describe (and the many others that have the same structure) is a significant count against the Goldman/Tuck account. To meet this charge defenders of the Goldman/Tuck account need arguments for thinking either that each person should indeed join the larger boat or that their account does not make that recommendation. As far as we can see, Goldman and Tuck provide no such arguments. Nor do we see how those might go.

IV Electoral Responsibility within Expressive Theory

Nothing that we have said so far denies that when A votes for J, A is in fact supporting J's victory, nor is it to deny that A might have a high probability of being (in the Goldman/Tuck sense) a cause of J's victory. What we deny is that that probability (g) provides much by way of a reason to vote. But that doesn't mean that J has no substantial reason to vote. Indeed, we think people find, and are right to find, significant value in exercising their agency, in no small part as a way of expressing their political commitments. And we think people are rightly seen as responsible for exercising their agency in this way (as in others). Yet the importance of exercising agency is in play regardless of whether one votes for the victor or not. What matters in elections, we are thinking, is both the outcome and the exercise of agency, but not that in exercising that agency one happens to be among those who (in the Goldman/Tuck sense) cause the outcome.

When A votes for J, she does three things: first, she reveals certain things about her *attitudes* and *beliefs;* second she reveals her preparedness to *express* those attitudes and beliefs; and third, she expresses those beliefs specifically at the ballot box. All of these attributes/actions are ones for which A can properly be held responsible (and are proper grounds for pride or guilt). The moral responsibility for those attitudes and expressions applies, over and above any causal influence on J's election and, indeed, independently of whether J wins.

Consider attitudes first. People can be, and typically are, held responsible for their political attitudes, whether or not those attitudes actually bring about the states of affairs that are the content of those attitudes. Someone who holds the view that Hitler's eugenics policies were admirable surely does deserve our contempt on that account, even if she never does anything in relation to those policies other than to admire them. If A's moral judgments are defective then A is morally defective to that extent.

But *expression* of such attitudes involves a further step. Sometimes, when people have odious views, it is best that those people keep such views to themselves. They ought to be silent at dinner parties when certain topics come up; they ought to refrain from writing op-ed pages; or calling in to live radio shows. It is one thing to *hold* the views in question, another to *express* them. If A gives expression to the attitudes in question – if he declares them – he is endorsing them, giving them a public life that they do not deserve.

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We are drawn to the Goldman/Tuck idea (as we interpret it) that when A expresses his attitudes at the ballot box he is expressing them in a distinctive way – in a way that may have causal upshots, however small. For given the effects on the probability of success of his favored candidate are positive, A can be thought of as "bending his agency" to the cause of that candidate's victory, whether or not he is a cause of that victory. Voting falls under the description of "agency-bending" because the consequential effects are strictly non-zero. But it would be a mistake to think that because the agency effect depends on *h* being non-zero, the agency value is a direct function of the degree of causal impact. A's bending his agency towards the cause of J's victory has to be sharply distinguished from the causal impact of A's vote on the likelihood of J's victory.

So when A votes he can be held morally responsible for the *political attitude* that vote reveals, for *expressing* the attitude, and for the mobilization of his agency in a given direction. Note that these are all things that depend not at all on what any other voter does, nor on what the outcome of the election ends up being, nor on whether one is among those in the set of votes that were minimally sufficient for victory.

But here is one (further) sense in which this 'expressive' version differs from the Goldman/Tuck account. A central feature of the Goldman/Tuck account is that what individual voters are (partially) responsible for is the electoral *outcome*, and hence that only those voters who vote for the actual outcome can bear this responsibility: voters who vote for the unsuccessful candidate have no outcome to be responsible *for*. But on our view, those who vote for a bad, but happily unsuccessful, candidate do not avoid responsibility just because their candidate was unsuccessful. Bad but unsuccessful voters bear the responsibility for their odious attitudes, for their expressions of those attitudes, for bending their agency in a bad cause, and for the risky behavior they undertook in promoting the chances of a seriously bad outcome. And these components of moral responsibility remain, whether the candidate won or not. Of course, Goldman and Tuck need not deny this. They do not claim that their account of causal responsibility exhausts all that might be said about electoral responsibility. However, when these other aspects of responsibility are included – elements that the RCV account can in principle include -- it is not so clear that the Goldman/Tuck account of specifically *causal* responsibility adds much.[25]

In summary, a plausible account of what one is morally responsible *for* in voting provides a notion of *responsibility* captures what lends the Goldman/Tuck view most of its intuitive force. Such an account suggests that a voters' causal *efficacy* in relation to electoral outcomes is rather less important than Goldman and Tuck seem to imply. Certainly, on the account of responsibility we've highlighted, individuals will systematically be morally responsible for their beliefs and attitudes, and their expressions of them, and how they cast their votes, and will remain so whether they vote for the winner or the loser. At the same time, we are inclined to think that if one has bent one's agency in support of an outcome, and it comes about, one is responsible for it whether or not one was (in the Goldman/Tuck sense) causally efficacious.

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[25] And we are concerned that taking *g*, rather than *h*, as the probability relevant in making choices obscures, rather than clarifies, what is at stake. When it is important to an agent to exercise her agency, as we recognize it might well be, we think it appropriate to use *h*, not *g*, in thinking about the expected value of the options (in these cases not just the agency-independent value of the potential outcome of that exercise, but also the value of exercising agency). Of course, choosing to exercise one's agency is, normally, both necessary and sufficient for doing so, so *h*, in such cases, will be 1.

V The Normative vs. the Explanatory

The Goldman/Tuck account purports to show not only why agents *ought* (or at least have moral or prudential reason) to vote; but also to explain why significant numbers of them actually *do*. We have already indicated why the normative aspect of the argument is questionable. But as we indicated at the close of section II, the explanatory and the normative aspects of the account are less closely linked than Goldman and Tuck suppose. And indeed, as we indicated there, the desire to exercise agency in and of itself might well provide a plausible motive for voting. So insofar as that desire is what Goldman and Tuck have in mind by "causal responsibility," the explanatory part of the argument seems to proceed intact.

To be sure, that explanatory story requires certain assumptions about the role of moral factors in agent motivation – the idea specifically that agents are motivated in part by the prospect of moral satisfaction and social esteem. These motivational assumptions might be controversial in some RCV circles but they are ones we broadly endorse, and so we shall not discuss them further here.

Nevertheless, to the extent that these motivational matters are in play, it is not entirely clear that they do indeed give rise to higher turnout than would arise if agents based their voting decisions on the standard RCV calculus – or some other calculus in which perceived causal efficacy in producing the electoral outcome to be lower.

To give a sense of our misgivings here, return to the example of agency effects involving the new Dean/CEO, exercising her agency largely for its own sake. She may well receive satisfaction from "leaving her mark" and she may do so somewhat independently of whether the mark so left is actually desirable or not. Perhaps she thinks her innovations probably *are* consequentially desirable; but it may well be that her epistemic warrant for this belief is somewhat tenuous. But now she reads Goldman and/or Tuck and realizes that she is more accountable for her actions than she had previously realized. She now sees that the moral and reputational stakes are higher than she had thought: her "sense of responsibility" increases. Accordingly, if there is a serious possibility that the changes she intended to make may be changes for the worse, then she may well be inhibited in making them. In the same way, if there is a serious chance that J will turn out to be an inferior candidate, any increase in perceived responsibility may well inhibit A from voting. The Goldman/Tuck examples take it as given that J's election is independently morally desirable.[26] But that assumption occludes real life uncertainty about the moral qualities of candidates and their policies.

Recall that by hypothesis there is a significant vote for K as well as J. Of course, motives for voting can be various; but in the Goldman/Tuck spirit, it seems reasonable to think that many of those K voters actually believe that K, not J, is the morally superior candidate. In the absence of any contrary argument, this fact should give the J-voter pause. Confidence in the proposition that J is indeed superior ought to be somewhat shaken.

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[26] Goldman considers cases in which someone's preferred candidate is objectively worse and argues that when that is true the person does not have (an objective) reason to vote. (He notes that she may still have a subjective reason, depending on the evidence she has concerning which candidate is better.) But he does not consider, as we do in what follows, the impact recognition of the possibility might have on voter behavior, in light of the more expansive account of causal responsibility he and Tuck defend (pp. 209-210).

And in the face of increased uncertainty about the moral qualities of options, A's voting calculus takes on a different hue. After all, we take it that it is a worse thing to bend your agency to the cause of the worse candidate than it is to abstain. So the effect of increased uncertainty about whether J is indeed the superior candidate to K seems bound to *reduce* turnout. And the effect of increased responsibility, in the face of a given level of such uncertainty, seems likely to have a similar effect. Greater probability that one will cause an outcome – a greater chance of being causally responsible for the outcome -- will encourage individuals to acquire more information about candidates given that they intend to vote. But whether, given the cost of information acquisition and the risk of making an error, the greater probability of responsibility will also induce more individuals to vote seems at best an open question.[27]

It is worth noting that increased perceived probability of responsibility may lead A to abstain even when A is *certain* that J is the superior candidate. If what morally commends J is not that J is good but rather that K is even worse, A may have to wear a certain social and moral opprobrium just for voting for a bad candidate. In such a case, increased perceived probability of responsibility for the outcome may leave A wanting to keep her hands clean – abstention may here too emerge as the preferred option.[28]

What greater perceived responsibility *will* do is to increase the proportion of voters who are morally confident or who are ignorant as to how ignorant they actually are. Voting is left not only to those who properly see themselves to be relatively well-informed, but also to the opinionated, the self-deceptive and those who vote for non-morally grounded reasons. A heightened sense of responsibility, as Goldman and Tuck think a more proper view of causal efficacy would generate, will not necessarily lead to higher turnout. But it probably will lead to a voting body that is more morally confident, whether because voters have gathered more information or because of independent psychological factors (whose normative status seems rather more dubious).

VI Conclusion

The "causal responsibility" account of voting behavior, advanced by Goldman (1999) and endorsed with some variation by Tuck (2008), purports to show why individuals *should* vote, and why they *will* vote in larger numbers than they would if they were informed by the standard rational choice account of voting behavior. According to the latter account, the *ex ante* probability of influencing the electoral outcome is the probability of a pivotal result – one in which voters for the successful candidate are individually necessary and jointly sufficient for the electoral outcome.

In our assessment of the Goldman/Tuck account, we have wanted to attend to three issues:

1. What is the distinction (if Goldman and Tuck see one) between causal *efficacy* and causal *responsibility?*
2. When an individual causes, or is a "part of the cause," of a candidate's success, what is she responsible *for*? Is she responsible (at least in part) for the electoral *outcome,* or for being (in the Goldman/Tuck sense) a cause of her favored candidate's success? If the

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[27] What is at stake here is how the moral payoffs to the three prospects --voting for the better candidate, abstaining and voting for the worse candidate -- each respond to changes in the perceived likelihood of responsibility.
[28] We are grateful to Emma Johnson for this observation.

latter, is there a material difference between being a cause of the candidate's success and "bending one's agency towards (the cause of) that candidate's success" (which is our own preferred way of thinking about such cases)?

To the extent that the issue does revolve around agency effects so understood, two further questions arise:

    a. Does the inclusion of agency effects give rise to the correct 'action-guiding' advice in electoral contexts?
    b. Is it plausible that including such effects will encourage increased turnout in the circumstances of normal elections?

Our answers to these two questions are negative.

Perhaps a negative response in relation to the first should occasion no surprise. Agency effects invoke factors that seem more at home in a 'virtue' account of electoral behavior than a standard consequentialist one; and it ought to be expected that adding normative requirements of this voter-virtue kind might 'cost' something in terms of the quality of outcomes qua outcomes. To be sure, Goldman and Tuck do not cast their "causal responsibility" story in virtue language; but we suspect that that is where their account properly belongs.

As to the second, explanatory question, the issue hangs on whether seeing oneself as more rather than less likely to be responsible for the outcomes of one's voting behavior increases the incentive to vote. Much depends on the weight of guilt/shame when one votes for the 'wrong' candidate vis-à-vis moral satisfaction/pride when one votes the right one. If the latter is less weighty than the former (as we think most likely) then the best course, in the face of uncertainty about which *is* the better candidate, may well be to abstain. Goldman and Tuck steer clear of such uncertainty in their examples – but it is difficult to ignore the prospect of this kind of error in fact, or indeed to account for the patterns of voting behavior that Goldman and Tuck assume in their examples (and especially for anything other than landslide victories) without risk of voter error being part of the story. Of course, having voters abstain when they would otherwise have voted for the worse candidate is presumably a good thing. But the expected value of that effect is properly measured by relying on the parameter that RCV theorists have long insisted *is* the proper parameter – namely, h.

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