Robert Goodin and Kai Spiekermann, *An Epistemic Theory of Democracy* (New York: Oxford University Press, 2018), 480 pp.

In both academia and lay political culture, democracy has been enshrined as the system that best respects all citizens' freedom and political equality. However, it is worth inquiring whether we can trust democracy – the rule of the many, some of whom are neither informed and interested nor impartial - to produce good decisions systematically. In an optimistic and rigorously argued work, Robert Goodin and Kai Spiekermann claim we can. Compared with all familiar political systems, they assert, democracies produce decisions of the highest epistemic quality. In fact, the more people we enfranchise in making choices, the more likely they will choose the correct option. In the following pages, I will review the authors' sternly modeled arguments, present their modifications of traditional theories, and prod whether their assumptions genuinely hold. Goodin and Spiekermann build their analysis upon Condorcet's Jury Theorem (CJT). In short, the theorem claims that the many always outsmart the few, as long as several assumptions are in place. The classic CIT framework involves n voters choosing between two alternatives through majority rule. According to Condorcet, if citizens vote sincerely, are independent of each other in judging the state of the world, and are likelier than random to choose the correct option – or, more rigorously, if the probability of them making the right choice exceeds p = 0.5 – the likelihood of them choosing the right option converges towards certainty as their number increases (p. 18). In brief, the CJT makes two sweeping claims. First, the majority vote of a group of (independent, competent and sincere) voters is more likely to be right than any individual voter separately. Second, as the number of such voters nears infinity, the probability the majority of them is correct approaches one. As a consequence, the massive electorates typical of contemporary politics should be nearly infallible.

Goodin and Spiekermann spend the first portion of the book scrutinizing the scenarios of there not being a single truth and defending the CJT's assumptions about competence, sincerity and independence. The authors are not particularly concerned about the options of the right answer not being on the agenda and of there being multiple truths. It is entirely consistent with the CJT for citizens to correctly choose whatever option they consider best, even if it is not the absolute

ideal (p. 42). Regarding the CJT's assumptions, first, there is sincerity. According to Goodin and Spiekermann, the CJT is violated if citizens vote strategically or as a political statement, rather than for the option they genuinely deem best. However, as game-theoretic schemes are a considerable cognitive load, the authors conclude sincerity will be the default, and only a minority of voters will choose to waste their vote on convoluted schemes (p. 49). Second, there is competence. As we have said, the CJT presupposes that individual voters are minimally competent, which is to say, better than random. And while the CJT claims the aggregated vote of minimally qualified voters converges to perfection, it offers an equally firm warning that incompetent citizens' amassed voices near disaster. In that sense, theorists from Plato to Condorcet himself have feared that people's rampant ignorance would drive democracy in the latter direction.

Nonetheless, the fact that empirical evidence has shown citizens to be grossly uninformed about fundamental political data does not trouble Goodin and Spiekermann. After all, the CJT does not require citizens to be all-knowing, but only that they are likelier than random to be correct. Once they have passed the magical boundary of 0.5, all further improvements in competence have a limited epistemic effect. Besides, ignorant voters can use political cues – such as what their preferred party is proposing – to identify the correct option. They can also improve their epistemic standing through deliberation and pool knowledge with others whose judgments they trust to be similar to their own. Even so, we should be genuinely concerned if there was something – a bias, a heuristic or prejudice – that systematically made the voters worse than random in selecting the correct option. Although this sounds like a legitimate qualm, as citizens have been empirically shown to vote based on disputed stereotypes and identity prejudice, Goodin and Spiekermann briefly presume this is not, in fact, a breach of competence but a breach of independence, and proceed to the next topic.

Speaking of independence, the authors provide an entire list of conditions that violate the CJT's Independence Assumption. To be specific, voters are not independent if they depend "on the same shared opinion leader, on the same shared ideology or prejudice, on the same shared psychological mechanisms, on the same shared cues, on the same more fundamental shared properties, and the same shared evidence, background information, or theories" (p. 55). From this it is unclear whether there could ever be an electorate that does not depend on the "same shared psychological mechanism" or "the same shared evidence".

If this criticism is warranted, then the CJT is useless for all practical purposes. However, the authors claim the promising CJT results can still obtain in the case of dependence, as long as we are not dealing with extreme instances of all voters following the same, grossly incompetent opinion leader. Knowing that we seldom access the state of the world directly but instead use evidence or testimony, the authors introduce what they call the "best responder corollary" (p. 76). According to this modification, the voters are independent and competent if they can emulate the best responder in the given epistemic circumstances. While this adjustment indeed makes the CJT more permissive, it still does not mean the aggregated vote of citizens who are systematically worse than random would not converge to disaster.

In the second section, Goodin and Spiekermann discuss epistemic enhancement. Namely, according to the classic CJT, there are two ways to improve the epistemic performance of groups making decisions. One is to increase the number of voters with more citizens who are on average better than random. The other is to make existing decision-makers more competent than they previously were. Recall that the CJT shows how groups can be more capable than the agents who comprise them, as long as the members are epistemically minimally competent and independent of one another. Still, the more competent these members are, the less it will take for the group to converge to perfection. Goodin and Spiekermann argue that we do not need excessive gains in individual competence. According to them, "bumping mean individual competence from p = 0.51 to p = 0.55 will help group competence enormously. [...] More heroically bumping mean individual competence up from p = 0.6to p = 0.7 will make much less difference, in comparison" (p. 86). It is acceptable that many people are utterly incompetent in many random ways as long as the majority still pushes the collective result in the correct direction. This framework works, they argue, because the random incorrect votes will cancel each other out. As this is simply a modified reiteration of the competence assumption, it remains uncertain how we should approach the fact that many empirical voters seem to be utterly incompetent in precisely the same way, as they abide by the same sources of information and listen to the same authorities. Unburdened by such concerns, Goodin and Spiekermann note that uninformed voters can take cues - such as party belonging or "some particularly salient factoid" - to make them select the correct alternative (p. 91). Conceding that it is challenging for people to revise erroneous facts once they have embraced them, the authors propose civic education to set voters on a better epistemic footing. While such programs are undoubtedly desirable, here they seem like an inadequate response to a massive epistemic failure.

Goodin and Spiekermann's remaining strategies for epistemic enhancement are diversity, making it more likely for wrong votes to cancel each other out, and the division of epistemic labor, which would allow groups of citizens to consider options a few at a time. However, they place the most trust in deliberation, which they claim can increase group competence by increasing individual competence and can lead to sincerer voting. If that was not enough, it can also somehow reduce dependence, increase the probability that the circumstances and evidence are truthconducive, and adjust the decision problem by adding new evidence. While the other effects are more self-evident, the authors – who had previously noted how arduous it is to reject facts we have come to trust - make the psychologically unconvincing assumption that deliberation can make voters realize they have placed their trust in the wrong sources of information, rather than cause factionalism. Even so, since they make only the modest claim that "discussion and deliberation improve smaller and more discursive groups' competence by a small amount", this hasty presumption is not as problematic as it might otherwise be.

Moving onto structures of government, Goodin and Spiekermann first inquire whether an epistocracy, a rule by the experts, would have better epistemic performance than a democracy. As expected, they conclude it would not. A single "smartest guy" would have to be incredibly competent for his ability to approach the almost perfect competence of a large electorate composed of people just slightly better than random (p. 228). Likewise, a "smartest clique of guys" far more competent than the average voter cannot compare with the aggregated competence of a mass of citizens just p = 0.522 likely to be right (p. 229). In their reading, even if a smaller group benefitted from all available avenues of epistemic improvement – it deliberated, divided the epistemic labor and relied on truth-conducive evidence - it would remain less likely to be right than a massive electorate comprised of above-average voters. Goodin and Spiekermann also use this discussion of epistocracy - which they are visibly not in favor of – to argue that the sheer experience of voting can turn incompetents into competent voters. Unlike experts, who are assumed to have a fixed superior competence, average voters gain in ability with each round of voting, up until their group's collective competence becomes attuned to the CIT model. Their discussion of direct and representative democracy features an identical argument but with a different conclusion. Here, Goodin and Spiekermann claim that small groups of representatives can be epistemically better off than large electorates, as long as their members are on average more competent – as they have been selected in virtue of their superior competence – and engage in fruitful deliberation. It remains unclear why this strategy can work for groups of representatives but not for groups of experts.

Next up, Goodin and Spiekermann discuss institutional hindrances and aids to epistemic success. Unsurprisingly, the main obstacle is any institutional arrangement that gives smaller groups a decisive rather than a purely advisory role in the decision-making process. After all, the CIT teaches us that the majority in a larger group is more likely to be right. Such "epistemic bottlenecks" are, for instance, small legislative committees that do the preliminary work on legislation, primarily as larger assemblies are often quite deferential towards smaller ones' suggestions. However, this hindrance can be at least partially overcome if the smaller chamber reaps the benefits of deliberation and selection, which, we recall, did not work for experts. Other familiar barriers are strong leaders who dictate their followers' views, which can be mitigated if several such influencers neutralize each other. The final impediment entirely in tune with Goodin and Spiekermann's earlier verdicts are presidential vetoes or any instance where an individual gets to overrule a more massive body's decision, which is always likelier to be right. Moving on, they divide the institutional aids into (i) mechanisms to make decision situations more truth conducive, (ii) mechanisms to increase independence, (iii) mechanisms to increase competence, and (iv) mechanisms to increase sincerity. In short, we can make it easier for voters to select the correct choice by supporting them in finding better alternatives through structured deliberation. Political parties can also narrow the range of options by weeding out bad and confusing options, and decision situations can be made more truth conducive by improving the evidence base through deliberation and expert panels. In the following section, voters become more independent if elections are publicly funded and publicly broadcast as they can then access unbiased information on which they can base their votes. When it comes to mechanisms for increasing competence, Goodin and Spiekermann reiterate that increasing individual competence can have but a limited effect, as the CJT takes care of making voters more competent as a group. Even so, civic education and teaching citizens to rely on the right kind of cues might pay off in the long term. Finally, voters might be made sincerer if they deliberate and articulate their reasons for supporting a particular option. However, it could be argued that this would violate the Independence Assumption.

In a lengthy epilogue, Goodin and Spiekermann address two political outcomes that cast doubt on democracy's capacity to produce correct decisions: the result of the Brexit referendum in the United Kingdom and the election of Donald Trump in the United States. How is it possible that massive electorates – the probability of whom making the right choice should be near certain - opted for such questionable outcomes? To attune these outcomes to their conclusions, Goodin and Spiekermann attempt to discern which assumptions of CIT have been violated to allow for such disastrous decisions. Their most prominent finding is that both campaigns lied. The Brexit campaign flaunted an actual bus starring a provable falsehood, and Donald Trump has been calculated to lie once every three minutes. A possible answer might be that voters had different priorities than those theorists who consider these outcomes catastrophic: Trump's Rust Belt voters, for instance, feared immigration and desired someone who would defend their industries. Trump promised to address both of those concerns. Goodin and Spiekermann also entertain the possibility that the voters considered anything to be better than the status quo or intended to send a strategic signal about their dissatisfaction, never expecting the chosen option to win. Unlike Brexit, Trump's campaign launched an assault on objective truth, inaugurating concepts such as "fake news" and "alternative facts" that couched his supporters in a different reality than the one inhabited by the rest of society. In sum, Goodin and Spiekermann conclude that the voters had differing priorities, values, and interests than those who judge the outcome of the Brexit campaign to be unfavorable and that Trump's supporters fell for a particularly epistemically insouciant opinion leader. After all, they have stressed that large groups' competence converges towards perfection but never reaches it, so it is to be expected that even massive electorates will occasionally make the wrong decision.

While Goodin and Spiekermann's work is a timely contribution to a dynamic subject and a pioneering extensive work in this promising area of investigation, their book falls short of the reassuring effect they had intended. In the contemporary epistemic climate, the CJT's assumptions of competence and independence seem unreachable. The authors themselves openly list several obstacles that make CJT's requirements appear better suited to an ideal world than to our real epistemic circumstances. Writing about voter competence, they remark it would be unfortunate for democracy if all voters were to err in the same way systematically, take note of our shared heuristics and cognitive biases, and even concede that prejudices such as racism, sexism, and xenophobia are

ubiquitous (p. 53). It is evident from their mere wording that, in such a social context, it would be outlandish for most voters – and, in particular, untrained, uninterested voters – not to err in the same way systematically. Analyzing Brexit and Trump's election, they identify the deleterious effect of closed online communities, epistemic bubbles, and personalized newsfeeds in restricting information flow (p. 355). Knowing that most voters now acquire the bulk of their news from the Internet, it would be overly optimistic to conclude that algorithmic filtering, which exposes voters only to what they like to see, would not violate the Independence Assumption. If their beaming trust in democracy appears unwarranted, so does their distrust in experts, who seem not to benefit from the same aids – deliberation and superior competence – that do good to democratic representatives and smaller legislative committees. Although Goodin and Spiekermann advance a rigorous and considered argument, and although this book is perhaps the most comprehensive epistemological inquiry into CJT, a convincing epistemic defense of democracy would have to address its chance of surviving in the real world.

> HANA SAMARŽIJA hana.samarzija@gmail.com doi: 10.26362/20200207

Filip Grgić i Davor Pećnjak (ur.), Free Will & Action: Historical and Contemporary Perspectives (Cham: Springer, 2018), 154 str.

Djeluju li ljudi slobodno? Koji uvjeti trebaju biti zadovoljeni da bismo rekli da je djelatnik moralno odgovoran za svoje čine? Možemo li biti slobodni ako je svijet u kojem živimo i djelujemo uređen prema determinističkim zakonima? Ova i slična pitanja stoje u središtu jednog od najdugovječnijih i najsloženijih problema u filozofiji. To je problem slobode volje. Ukupno deset radova objavljenih u zborniku Free Will & Action: Historical and Contemporary Perspectives, koji su uredili Filip Grgić i Davor Pećnjak, teže otvoriti nove perspektive za rješavanje ovog problema. Zbornik je objavljen kao šesti nastavak Springerova niza "Historical-Analytical Studies on Nature, Mind and Action" u kojemu se