

## Rationally Speaking #171: Scott Aaronson on “The ethics and strategy of vote trading”

Julia Galef: Welcome to Rationally Speaking, the podcast where we explore the borderlands between reason and nonsense. I'm your host, Julia Galef, and with me is this episode's guest, Professor Scott Aaronson.

Scott is a returning guest on Rationally Speaking. When last we spoke with Scott, he was a Professor of Computer Science at MIT in Cambridge, Massachusetts. He has since moved to Austin, Texas where he is now a Professor of Computer Science at the University of Texas, Austin.

Scott's research focuses on quantum computing and computational complexity theory, but he writes and blogs about a bunch of wide ranging and interesting topics, including one that we're going to talk about today, which is vote trading.

Scott, welcome back to the show.

Scott Aaronson: Thanks. It's great to be here.

Julia Galef: Scott, I will have you know that I picked up my ballot for this election and I've filled out almost all of it, including the gazillion propositions on the California ballot. And I've made my choices for state senate and mayor and all those things, but I have not actually officially voted yet. I haven't submitted my ballot. And that is because I was waiting to talk with you about vote trading.

So this is a personally pivotal conversation for me, and potentially for many of my listeners, as well.

Before we go any further, why don't you tell us what vote trading is and how it works.

Scott Aaronson: Yeah, so vote trading is an idea that first came to prominence in the 2000 U.S. election, you know, Bush versus Gore.

I was just teaching a class and talking about Bush versus Gore, and the students reminded me that they were 5 or 6 years old when it happened.

Julia Galef: Wow.

Scott Aaronson: For those who don't remember, that was an incredibly close election, and many of us at the time realized that it would be incredibly close, that the electoral college could actually matter a lot, and many of us feared what would happen if Bush won. I think that history shows that we were largely correct to fear that.

We wanted to do something to help Gore win the election, and what we realized was that 3% of the electorate or so was voting for Ralph Nader, and that those voters could actually make the crucial difference.

Now, these were typically voters who would strongly prefer Gore over Bush, but who just felt like Gore was not liberal enough and so wanted to register a

protest vote. Now, the idea, it was not my idea, but... a bunch of people may have independently come up with this idea. The idea was that people who live in swing states, even if they're Nader supporters, they will vote for Gore -- but they will arrange for someone who lives in a safe state, such as California or Texas or something, to vote for Nader on their behalf.

In this way, both parties get what they want. The Nader supporter who lives in the swing state gets a vote for Nader cast on their behalf, so Nader would get the same vote share that he would have gotten anyway.

Some people were concerned for him to get 5% of the vote, which would make him qualify for federal matching funds in 2004. In fact, he only got 3% of the vote, but people thought at the time that he might get 5%.

You wouldn't decrease his chances of getting that, but in the meantime, that Nader supporter would not be helping Bush win in a swing state.

In the meantime, a Gore supporter who lives in a safe state will vote for Nader instead of Gore where it doesn't really matter to the outcome, but they effectively get to teleport their Gore vote to a swing state where it does matter much more.

Julia Galef: Right. The third party voter, the Nader voter in this case, doesn't really care which state his vote is counted in because he only cares about it as a protest vote and also as its contribution to the total proportion of votes for the federal matching funds. Whereas the Gore voter does care very much which state his vote counts in because in some states, it's just so uncompetitive that ...

Actually, we should probably just give listeners a sense of just how unlikely it is that your vote will make a difference in a state like California. I mean, it's on the order of at least one in a billion, right?

Scott Aaronson: Yes.

Julia Galef: As opposed to in a swing state.

Scott Aaronson: Yeah, it would depend on what modeling assumptions you made, but generally, in states where there's a 10% margin or more, I mean, the polls would have to be wrong in a very major way for there to be any chance that your vote is going to matter.

Julia Galef: Right.

Scott Aaronson: Whereas in swing states, I mean, the amount by which your vote does matter can be gauged, maybe, by looking at what happened in Florida in 2000 where the entire presidential election was decided by about 500 votes.

Julia Galef: Right. Returning to the story at the time, did you set up a site for vote trading or did other people do it? And what happened?

Scott Aaronson: At the time I got involved, there were already vote trading sites that were up there.

But I saw that people were making arguments against vote trading that I thought were just invalid. For example, people were saying, "Well, couldn't Bush voters game the system?" That didn't really make any sense if you thought about it. There's nothing that a Bush voter has to gain by impersonating either side of this transaction.

Julia Galef: Wait. Unpack that just a little bit more.

Scott Aaronson: Yeah, yeah. Well, a Bush voter could pretend to be a Gore supporter, let's say, and so then they're going to get people to ... That is going to cause more people to vote for Gore in a swing state, which of course, is the opposite of what the Bush voter would want.

Julia Galef: Right.

Scott Aaronson: They could also get more people to vote for Nader in a safe state, but there would have to be a really, really massive amount of that for a safe state to actually become competitive.

Julia Galef: Right.

Scott Aaronson: Probably you would get an inkling if it were actually going on on such a scale.

Julia Galef: Right. All you could do if you are truly, deep down, a Bush supporter in that election, would be to increase the percentage of votes going to a third party candidate, but you can't increase Bush's chance.

Scott Aaronson: That's right, yeah. A more common argument that people made was that the Gore and the Nader supporter won't be able to trust each other. Each one will have a huge incentive to just renege and vote for their preferred candidate and there would be no way of checking it.

It is true that our voting system is designed to make it difficult to prove the way that you voted to someone else. The reason for that is that it's supposed to be difficult to sell your vote to someone or for someone to coerce someone else to vote a certain way.

Julia Galef: Right.

Scott Aaronson: In, I think, about half of the states, it is actually legal to send a photo of your ballot to another person. In half the states, it's illegal. Check the law in your state. But even in states where it's legal, you could, say, in principle, you could mark a ballot, send a photo of it, and then change the ballot.

Julia Galef: Right.

Scott Aaronson: At the end of the day, yes, you do have to have a baseline level of trust for the person who you're swapping with, and this is why all the vote swapping sites recommend that you actually talk to this person, talk to them on the phone or whatever, get to know them as you would get to know a friend, make sure that you have some baseline level of shared values.

Then the other point that's important here is: even if you thought that there was, let's say, a 50% chance that the other person was going to cheat, the overall trade is so much to your benefit that most likely it would still be to your benefit to do it.

For example, if you live in a safe state, then even a 50% chance that someone in a swing state is going to vote for Gore on your behalf, is better than a 0% chance of a swing state vote, which is sort of, to a first approximation, the only kind of vote that matters.

Julia Galef: Right. Let's say I'm a Gore supporter in California and I'm vote swapping with someone in Florida, I basically don't lose anything, right, because my vote wasn't going to count in California anyways.

Scott Aaronson: That's right.

Julia Galef: I'm getting this thing for free. Maybe this thing that I'm getting for free is only a 50% chance of someone voting for Gore in Florida, but 50% for nothing is great.

Scott Aaronson: Right. Now, for the Nader supporter or the Gary Johnson supporter or whatever in Florida, the calculus is a little bit different.

Julia Galef: Right.

Scott Aaronson: If they value Hillary winning the election over Trump sort of comparably to how much they value Gary Johnson getting a certain vote share, then again, they'll have to tolerate a certain chance of cheating.

Julia Galef: Right.

Scott Aaronson: Anyway, what I did in 2000 is I set up a website called "In Defense of NaderTrading" that just sort of set out these sorts of arguments.

And then within a few days, I was just getting hundreds of emails and was going on interviews. Because this was a trending topic, and somehow, I was just a random person who had set up a webpage, but I was out there to talk to. Then people would give me objections and I would respond to them on the webpage.

Julia Galef: Some more sensible than others.

Scott Aaronson: Yeah, yeah. That's right. This was before the concept of blogs existed, but this page effectively became like a blog. This page sort of pointed people to these vote swapping sites.

Now, unfortunately, while I was doing this, actually the main vote swapping site, voteswap2000, I think, was shut down by the California State Attorney General. He sent them a cease and desist letter.

Julia Galef: What were the grounds?

Scott Aaronson: Well, he was saying this is facilitating vote selling, which is against the law. Then a lot of people said that this was an outrage and that this shutdown would not stand in court.

This was a republican attorney general who was doing this. There were only a couple weeks until the election and so there was no time to litigate it. There were a couple other vote swapping sites that shut themselves down voluntarily because of what had happened in California. Even though in other states, it was still legal or no action had actually been taken against these sites.

Julia Galef: Wow. Given how close it was in Florida, it's really striking to think ...

Scott Aaronson: Yep. That could have made the difference.

Julia Galef: Yeah. If they had just continued for a few more weeks.

Scott Aaronson: This could absolutely have made the difference, yes.

Julia Galef: Wow.

Scott Aaronson: Yep. This is what we realized at the time, that it could come down to just a few thousand. I didn't know and imagine it would come down to 500 votes, but it could come down to a very small number.

There were 100,000 people who voted for Nader in Florida. Think about that. If we had gotten 1% of those people, that would have changed the outcome.

Julia Galef: Wow.

Scott Aaronson: Okay. So, we were trying. We did reach some thousands of people around the country, including some hundreds in Florida, and it was not enough.

Julia Galef: Yeah.

Scott Aaronson: I did all these interviews about it where I wanted to talk about the game theory, and the question that everyone wanted to ask me was just about legality, "Will I be thrown in jail if I do this?"

Julia Galef: So... speaking of legality, how has that situation changed at all since the 2000 election?

Scott Aaronson: Great question. It has changed dramatically.

At that time, the best I could say is, "Look, I'm not a lawyer. I'm a computer science grad student. If it's not legal then it clearly should be legal." I could give many, many moral arguments for that.

Julia Galef: Yeah. I definitely want to talk about the ethics of vote swapping, but let's hold on to that for a minute, after we cover the law.

Scott Aaronson: Of course, I couldn't guarantee someone that they wouldn't go to court either for swapping votes or for setting up a vote swapping site.

Now, the people who ran this vote swapping site in 2000 actually filed a lawsuit about it, and eventually, in 2007, it got resolved by the Ninth Circuit Court of Appeals in an amazing decision, which was called *Porter v. Bowen*. It's worth reading in full, but what this decision says, basically, is that swapping votes the way that these sites were doing, is an activity that's protected by the First Amendment.

These people were just legitimately using their voting power and deciding to vote strategically.

It is not at all the same thing as buying or selling a vote or trading a vote for a material good or service. It is, instead, trading a vote for another vote in an unenforceable way. In that way, it is not all that dissimilar from what the members of congress do all the time.

Julia Galef: Right.

Scott Aaronson: This decision did not prosecute the California Attorney General for what he had done. It granted him immunity, because it said, "Well, at the time that he did this, the legality of vote swapping had not been clearly established," but it also said, "Going forward, vote swapping is protected." It gave people the assurance that they will not be punished, either for doing vote swapping, for setting up website that facilitate vote swapping, or any of that.

As long as this ruling stands, and at this point, it's only the Supreme Court that could overturn it, but as long as it stands, vote swapping is legal.

Julia Galef: There are sites today, right, that are facilitating vote swapping for Clinton supporters who want to trade with a Johnson or a Stein voter in a swing state?

Scott Aaronson: Uh-huh, yep. Let me think. There's a "Trump traders" site. Oh, I'm sorry, there's also one called "makeminecount.org."

Julia Galef: I checked out Make Mine ... Oh you were just about to say their motto. Go ahead.

Scott Aaronson: Oh, yeah. It was "Everybody wins except Trump."

Julia Galef: Yeah, that's the one I was looking at.

Scott Aaronson: You checked it out?

Julia Galef: Yeah, a little bit. Do you have any recommendations? Is one better than the others?

Scott Aaronson: I don't really know. I mean, the truth is that I signed up for Make Mine Count. I don't think they ever gave me a match. It looks like the Johnson supporters in swing states are probably the limited commodity in this market.

Julia Galef: Right.

Scott Aaronson: It's sort of like sometimes a bar skews toward one gender or another. It looks like it's probably a skewed market to the Hillary supporters in the safe states, which might mean that people could contemplate arrangements where one Hillary vote in a swing state would be traded for several Johnson votes in safe states.

Julia Galef: Oh, interesting.

Scott Aaronson: I think that's entirely plausible to consider.

Julia Galef: I wonder if the sites are arranging things like that. I would totally do that.

Scott Aaronson: I don't know if they're actually arranging that. Anyway, I can tell you what I did.

I just wrote a blog post about it, and because of this blog post, I got an offer to trade from a libertarian in Ohio, a statistics professor there, so he said that he will vote for Hillary if I vote for Gary Johnson in Texas on his behalf. We agreed to that -- except that now Trump is doing so badly, fortunately, I think, that it looks like even Texas might be becoming competitive.

Julia Galef: Yeah, this election is all so unprecedented.

Scott Aaronson: Yeah, it is. It really is. He and I discussed it on the phone just a week ago and our arrangement is that if we decide the night before the election that Texas is really a swing state, then he will release me so that we will both vote for Hillary.

Julia Galef: Do you need a backup?

Scott Aaronson: Excuse me?

Julia Galef: Do you need a backup person to trade with in the event ...

Scott Aaronson: Oh, well, yes, I guess I could find if another person wanted to be my backup. Well, okay, but see, if Texas is really a swing state, then I should just vote for Hillary and just be done with it.

Julia Galef: Oh, right. That's right.

Scott Aaronson: He is going to vote for Hillary in any case, but if we decide that Texas is really competitive, then he'll release me to vote for Hillary, otherwise I'll vote for Johnson.

Julia Galef: Right, so HE needs a backup.

Scott Aaronson: Yeah, right. That's right.

Julia Galef: We could arrange a backup for him via you.

Scott Aaronson: Uh-huh.

Julia Galef: A listener could email you, offer to be the backup, and then you could pass him on to your partner.

Scott Aaronson: Yeah, that's true. I should say, I blogged about this. Of course, Trump has been doing very badly. All the prediction markets give Hillary about a 90% chance of winning.

Julia Galef: Yeah, although ...

Scott Aaronson: I'm happy about that, but at the same time, a 10% chance of Trump winning, I think, is still a greater risk than we want to bear.

Julia Galef: Yeah. I also feel like... I would not bet at 50-50 odds on Trump winning, but I still feel like things are volatile enough this time around that I'm not going to get too complacent, despite the current odds.

Scott Aaronson: That's right. I think it's good not to get complacent, and I think even though it looks likely that Hillary will win, I think that vote trading is still a very good idea because we would like to make it as clear as possible that he's going to lose, given what I regard as the threat that he poses to the country.

Julia Galef: Let's talk about some of the strategic questions involved in vote trading and then we can move on to the ethics from there.

Scott Aaronson: Yeah, sure.

Julia Galef: You already talked about the concern that, what if the other person doesn't uphold their end of the bargain?

A less common concern that I've heard people raise is the act of helping the third party candidate get funding and legitimacy, et cetera, it might actually seem like a good thing to the Clinton voter, even if they would still prefer that Clinton win

However, if you look at the long game -- if I, this election, am helping Gary Johnson get legitimacy and funding, and I'm happy to do that, especially because it helps Clinton win, then next election or the one after that, isn't the

power of the third party candidate to be a spoiler just increased? And so we're facing an even bigger problem next time than we did this time?

Scott Aaronson: I mean, I view third party candidates as just very, very hard to predict in American Politics. There doesn't seem to be a whole lot of continuity in them from one election to the next. Sometimes one will have their moment in the sun where they get some percentage of the vote, and then often if the same person runs again in four years, people have sort of lost interest by then and they get a much smaller vote share.

Julia Galef: Do the matching funds go to Johnson or to the libertarian party?

Scott Aaronson: I think it's for the party that gets 5%.

Julia Galef: Okay. So they could still ...

Scott Aaronson: To get federal matching funds would be an ironic sort of victory for the libertarian party.

Julia Galef: That's true!

Scott Aaronson: They could make the argument, "Well, this is the system as it stands and we have to work within it," and so forth.

I mean, the truth is that I think it would be great if there were more voices in our political dialog. I think that, unfortunately, our system has an incredibly strong equilibrium toward two parties. You can see that, like for example, Ralph Nader got 3% of the vote, right? Which was enough to swing the election from Gore to Bush, but is otherwise tiny. Then Bernie Sanders, 16 years later, running on a pretty similar platform to Nader's, actually almost defeated Hillary, could have won the election.

Julia Galef: Right.

Scott Aaronson: He did it within the democratic party.

Pat Buchanan, who was running on sort of a nativist, anti-immigrant, and so forth, platform, got 1% of the vote in 2000, and I think that's what many of us saw at the time, that that will always be a 1% share of the electorate.

Julia Galef: Right.

Scott Aaronson: Now we have Trump, who's run on the same kind of platform as Buchanan, but he did it within the republican party, and he came, still uncomfortably close, to being president. I don't actually think that third party candidates will ... It's hard to say that they're ever going to get more on the order of 10%. The last one we had that did was Ross Perot in 1992.

Julia Galef: Right.

Scott Aaronson: Even he got less than 20%. I mean, is there a causal relationship between what we do now and strengthening the third parties for eight years from now? I mean, I don't know, there might be. In any case, both with this election and with the 2000 election, I feel like there is such an overriding interest in preventing a bad outcome that we can worry about what happens four years later when we get to that.

Julia Galef: Yeah, point well taken.

To ask about one more long-term thing... even if you have the position that long-term considerations are trumped by the short ones in this case...

Scott Aaronson: Trumped in some sense, yes.

Julia Galef: Oh, man, that word's going to be ruined.

Scott Aaronson: Sorry, sorry.

Julia Galef: What about the perverse incentives that are created by this, in some cases it's called, moral trade? Where if someone's making a choice that you think is the wrong one morally, like voting for the candidate that you think is going to cause a worse outcome than a different candidate. By offering to trade with them, aren't you creating the incentive for people to be, in this case, third party voters in the longer run, because that gives them a lot of bargaining power?

Scott Aaronson: Well, I think that there's a word for this kind of thing, and the word is "politics".

I think I would argue that, of course, I'm not someone who anyone would mistake for a politician, I'm a theoretical computer scientist, who is very happy if I just have the social skills to just get through my own life without trying to lead anyone else.

My understanding would be that the entire essence of politics is trying to make some mutually beneficial arrangements and deals, actually, with people whose values might be very different from your own. If everyone had the same values, then there wouldn't be a need for political process.

Julia Galef: Well, I agree with that. In fact, I think that an objection that really annoys me is that people say vote trading is wrong because "everyone should be voting for which candidate they actually prefer."

Which, I could see that view, but it totally contradicts the thing that many people say when they argue, "Well, I might prefer Johnson, but I'm voting strategically, so I'm voting for the candidate who I think is best overall, given both my preferences and their chance to win."

In practice, many, many people do, in fact, vote strategically and endorse voting strategically, so that doesn't seem like a good objection to vote trading to me.

Scott Aaronson: Right. I mean, the presidents and the members of congress who we're electing are engaging in strategic behavior all the time, constantly. They're saying, "Okay, if you want this bill for farm spending, then it has to have this rider about this completed unrelated issue." This is every single day in congress.

Which is not necessarily a good thing, but these are the people who we're voting for. I think that some degree of coalition building is inevitable in a democracy. If everyone had the same values as you did, then there would be no need to form a coalition.

Julia Galef: Right.

Scott Aaronson: You would just already agree.

Julia Galef: But the thing that I was trying to point at with my previous question was not about the ethics of trading with people who have different preferences than you. It was about affecting people's preferences in the future, because they know that trading's an option.

People who otherwise might have voted strategically and voted for Clinton, or whoever you think is the right candidate, would instead decide to be third party voters because they know that vote trading exists. Consciously or unconsciously.

Scott Aaronson: Look, it's possible, but when it comes to questions about human behavior, I apply this very, very strong attenuation factor the further out you go into the future.

Julia Galef: Yeah, I respect that.

Scott Aaronson: There are so many predictions about what ... Just to give you another example, in 2000, there were actually Nader supporters, quite a few of them, who were arguing, "Well, we actually want Bush to win the election. Not only do we not care about throwing the election to Bush, we actually want him to win." Why? Because Bush will be so bad that he will obviously just galvanize everyone into a populous uprising that will then cause the green party to win, or something like that.

Julia Galef: Wow. That sounds very familiar. I've heard that same argument from Bernie fans.

Scott Aaronson: Yeah. That argument, such as it is, actually has a long history. The communists also believed that, right? They called it "heightening the contradictions," that actually you have to oppose liberal reformers and make things as bad as possible for ordinary working people. So that they will see that they have no option but to support a true uprising of the proletariat.

Julia Galef: Right.

Scott Aaronson: This kind of thinking has a long history, I wouldn't say a distinguished history, but a long history.

There are all kinds of predictions about what people might or might not do years into the future that often have a really poor track record. In this case, not only was Bush elected, he was then reelected in 2004. In between 2000 and 2004, several things have happened. The 9/11 attacks, the invasion of Iraq, that I think no one on any side was really predicting.

Julia Galef: Yeah.

Scott Aaronson: Yeah. Likewise, how many people were predicting Trump or were predicting the situation that we would be in right now back in 2012? These things are pretty volatile.

That's why I'm more concentrated on the immediate goal of preventing Trump from taking over the country.

Julia Galef: Yeah.

The defense that vote trading is practiced by politicians all the time, could, in another light, be seen as an indictment of vote trading. "One Man's Modus Ponens is Another Man's Modus Tollens..."

Scott Aaronson: I suppose so.

Julia Galef: Saying, "Well, congress does it, therefore it's fine." Other people might say, "Well, congress does it, therefore it's not fine."

Scott Aaronson: Therefore it's bad.

Julia Galef: Yeah, or not therefore it's bad, but we should condemn it both in the case of congress and in the case of private citizen voting in elections.

Is your claim just that, "Well, it's no worse than what politicians do already", or are you saying that the thing that politicians do is fine? Or are you saying that it's better than what the politicians do?

Scott Aaronson: I think it's definitely no worse than what politicians do.

I think that what politicians do is not great, especially nowadays when our political process has become more and more polarized with, I would say, one side often just holding the entire process hostage in order to achieve the things that they want.

On the other hand, I would also say that even in the best case, some degree of bordering and coalition building is probably inevitable in a democracy. There's probably never been any democracy where this sort of thing didn't happen. It's not something that I worry about like anywhere near as much as I worry about

the moral consequences of Trump winning.

Julia Galef: Right.

Scott Aaronson: There's another moral argument that I could try on you for size.

Julia Galef: Sure.

Scott Aaronson: Which is, look, let's say that you and I were friends and we just made a private agreement that we're going to swap our votes, that I'm going to vote for your preferred candidate and you're going to vote for mine. Then it's hard to think of anyone who would consider that to be immoral. It's just two friends exercising their right to vote how they want and discussing it with each other.

Then the argument is how is it really different if a website is involved in order to introduce these people to each other?

Julia Galef: Yeah, that's an interesting form of argument that I've seen before. I certainly find it compelling.

But I could imagine that those are two different policies -- where one policy is, if people want to do this privately, then fine, we're not going to interfere, there's nothing wrong with that. That's on the one hand.

Then the other policy is we're going to endorse or allow this on a wide, impersonal scale.

It seems to me that the consequences are different in the second case. You might believe that the former is fine because it can't actually affect the democratic process, because it's not going to happen at a wide scale. But if you try to make that extrapolation from the personal to the impersonal, then our democratic process could be under threat.

I'm not necessarily endorsing that argument. I'm just saying that I don't think that you can just scale up the act and assume that all the moral calculus is completely unchanged as you scale it up. In part, that's because the consequences can be very different when you scale it up.

Scott Aaronson: Right. But I think that any time you want to say this sort of activity is fine if people just do it here and there, but if they really use the internet to talk to each other and realize that they can do it and do it on a large scale, then we have to crack down on it. I think there are very, very serious issues with how a democratic society can maintain that kind of balance.

Julia Galef: Yeah.

Scott Aaronson: Because what people can do it all, they can talk about on the internet.

Of course, no one is forcing anyone to go to these websites. All that's being

asked is that those people who are interested can use them and that other people tolerate it.

Julia Galef: Yeah. This reminds me of another objection that I've occasionally heard made to vote trading, is that it undermines the role of the electoral college in our democracy.

Now, I'm not the hugest fan of the electoral college, but...

Scott Aaronson: Yeah. That I probably find the least compelling of all the arguments because I confess that I think the electoral college should be undermined. I mean, within a legal means.

But I think that it is an anachronism. I think that it A, makes no sense, and B, has no real relation to what the founders of the country actually intended. I mean, when they set up this system, the electoral college was actual electors who would travel on horseback or whatever to go and meet and then sit and discuss it. At the time that they were chose as electors, they wouldn't know themselves which candidate they preferred.

Now we have a system where the electoral college basically just functions to enforce sort of a tiered majority vote. For almost all of the states, almost all of the electors in that state are either legally obligated for vote for their party's candidate or, in practice, they're going to vote for their party's candidate. You effectively just have a tiered majority.

A tiered majority is just a very bad system compared to having a direct popular vote for a couple reasons.

One is the well-known reason, that it focuses this inordinate amount of attention on the issues of Ohio and Florida and North Carolina and a few other states. Those states just get deluged with ads and politicians and so forth. Meanwhile, there are all these other states whose problems basically just get ignored because they don't matter in the electoral college. They're not swing states.

There's also a second problem with a tiered majority system, and that is that it is much, much more vulnerable to small errors or small amounts of noise than a direct majority would be. To take an example, the 2000 election was ultimately decided by about 500 votes in Florida, where actually we don't even know exactly how many votes because there was a recount going on, which was substantially changing the situation before the Supreme Court intervened to stop it. Let's say it was a statistical tie in Florida, it all depends on which ballots you count and which you don't.

Meanwhile, the national popular vote was actually much less close. That was actually by a 500,000 votes in favor of Al Gore. You can actually do the math, and what you find is that a direct popular vote is way less likely to be at the margin of statistical dead heat than a tiered majority vote will be.

Julia Galef: Why is that a good thing? Why is it a desirable feature of a voting system?

Scott Aaronson: Well, because you would like to not have the outcome of an election be thrown into doubt because of a Florida-in-2000 type of a situation. You could say that we were lucky that time. We were unlucky in that Bush became the president, but we were lucky in that Gore stood down.

b He conceded the election, even though, by rights, maybe, he shouldn't have, and thereby prevented the kind of thing that, historically, could lead to a civil war.

Julia Galef: Right. I was wondering, as you were describing the flaws in the electoral college, I was wondering whether I actually want to endorse the general policy that we should be undermining a national institution because we think it's bad.

I have qualms about that policy, in general, but I think in this case, the means ... I think I'm okay with undermining national institutions as long as the means by which we're doing it are legitimate and transparent and ethical, which I think this is.

Scott Aaronson: Right. I think of myself as a patriotic American. I want what's good for the country. I'm not even suggesting that anyone even contemplate breaking the law here. I'm talking about doing something that's completely consistent with the law.

Then they might say, "Oh, but he's going against what the Founding Fathers wanted," or whatever, but I'm not going against that either. I'm just going against this irrational system that this evolved into and that we're stuck with right now, which is not actually the way things were set up originally.

Julia Galef: We're just about out of time, but before we close, I wanted to ask you about a quote that I saw. I forget if it was on your blog or an interview that you gave, but you were talking about what you liked about vote trading and you said that it reminds you of combining quantum mechanics with general relativity. Can you elaborate on that?

Scott Aaronson: Well, it was just a tongue-in-cheek comment that I made in 2000, that there were two different kinds of craziness here. One is the craziness of the electoral college, which you could say is a remedial kind of craziness but one that we're subjected to, and the other one is the craziness that always arises when you have an election with three or more candidates. This is the subject of Arrow's theorem, for example, saying that you're not going to ever have a completely rational way to hold an election between three or more candidates.

In effect, these two kinds of craziness are being canceled against each other, in some sense.

Julia Galef: To produce the deeply sensible world that we see.

Scott Aaronson: Right. That is not to be taken too seriously.

Julia Galef: Cool. Well, as my closing comment, I'll just say that I had been considering signing up for "Make Mine Count", and I was definitely leaning in favor of doing that before this episode. Now I am still in favor of vote trading, but I think because, as you've pointed out, the whole process is kind of limited by the third party supporters in swing states, I think it's probably best for me not to add my California Clinton vote to the giant ever-growing pile of California Clinton voters that are accumulating on sites like Make Mine Count, and I'll instead just offer to trade my vote with any listener of mine who was going to vote for Johnson or Stein in a swing state. You can just email me at [julia@rationality.org](mailto:julia@rationality.org) and we can chat.

Scott Aaronson: That's great. That's the convenient thing about having an audience.

Julia Galef: Yeah, absolutely.

Scott Aaronson: You can make offers like that.

Julia Galef: Okay. To my listeners, I would encourage you, if this whole thing sounds interesting and valuable to you as well, to check out Make Mine Count or [trumptraders.org](http://trumptraders.org) to look into vote swapping, especially if you're a third party supporter in a swing state.

Even if you're not, there's still a decent chance that your vote will be able to be paired with a third party supporter in a swing state. And yeah, email me if you would be interested in trading with me.

Scott, this is great. I'll wrap up this part of the podcast and we'll move on now to the Rationally Speaking pick.

Scott Aaronson: Okay.

[interlude]

Julia Galef: Welcome back. Every episode I invite my guest on Rationally Speaking to give the Rationally Speaking Pick of the Episode. That's a book or article or website or something that has influenced their thinking in some interesting way. Scott, what's your pick for today's episode?

Scott Aaronson: Okay. I think my pick for this episode will be the essays of Paul Graham.

Julia Galef: Oh, good one.

Scott Aaronson: He was the founder of Y Combinator, a start-up incubator. In particular, his essay called "Why Nerds are Unpopular". I mean, I think I first read it about a decade ago. It really changed the way that I thought about that question.

Julia Galef: Can you say a little bit more about how?

Scott Aaronson: Yeah. Basically, he puts forward an argument that a lot of the common theories

about why nerds are picked on, for example, the other kids envy them, are just not true. They just don't withstand scrutiny.

The main point is that to understand the phenomenon of the nerd, which is sort of actually a pretty recent cultural phenomenon, you have to understand something about the modern junior high-schooler or high schooler, and particularly in the U.S. and the way that these were designed as effectively holding pens. They might also teach people something.

Julia Galef: Just by accident.

Scott Aaronson: Yeah, that's not the main purpose. They're these holding pens. And then he says that any time that you create a situation like that, whether it's in a prison or it's Manhattan socialites or people who don't have real work to do, they will create a status hierarchy somehow.

Normally status hierarchies are based on things like who is contributing to the good of the group or who is building something or inventing something. If there's none of that, then people will create a sort of pure self-referential status hierarchy. You see that again and again, and so he put it into this much broader context.

Then, in his account, a nerd is just someone who is in that environment but who cares about something beyond the immediate self-referential status game, like they care about either math or literature or something in the external world. Then he says there are not neurosurgery residents or Navy Seals who work as hard at anything as high school students work at being popular. If you are not devoting 100% of your effort to this, then you are going to fall behind.

Julia Galef: Interesting.

Scott Aaronson: To me it was a very, very novel take on a question that's concerned me a lot, but I would also just say that his ...

Julia Galef: I too have had a personal interest in that question for much of my life!

Scott Aaronson: Yeah. Graham just came up on my blog recently. That's why I was thinking about him. His essays are some of my favorite essays.

Julia Galef: Me as well.

I think my favorite is Keep Your Identity Small, which maybe we can also link to on the podcast website.

Scott Aaronson: Yeah, absolutely.

Julia Galef: Just so many of them are gold. That's a great pick.

Scott Aaronson: Yeah, yeah.

Julia Galef: Well, Scott, thank you so much for joining us on the show again. I think this is a very important topic and I'm glad that you've been writing about it and I'm happy to increase the size of the conversation a little bit.

Scott Aaronson: Great. Well, thank you for having me, Julia. Let us hope this election has a good outcome.

Julia Galef: Indeed. At the least so that I can exhale after so many months of exhaling.

Scott Aaronson: That's right, and so that I can stop having to check PredictWise like ten times an hour.

Julia Galef: I know. It's become like a tick. I think I'll just keep checking after the election is over just because I can't stop.

Scott Aaronson: Exactly. It will do wonders for my productivity.

Julia Galef: Well, this concludes another episode of Rationally Speaking. Join us next time for more explorations on the borderlands between reason and nonsense.