### Overview

**Course:** CS 238: Optimized Democracy  
**Course Level:** Primarily Graduate  

**Course Description:** Optimized Democracy examines the mathematical and algorithmic foundations of democracy, running the gamut from theory to applications. The goal is to provide students with a rigorous perspective on, and a technical toolbox for, the design of better democratic systems.

Topics include computational social choice (identifying optimal voting rules), fair division with applications to political redistricting (avoiding gerrymandering) and apportionment (allocating seats on a representative body), sortition (randomly selecting citizens' assemblies), liquid democracy (transitively delegating votes), and weighted voting games (analyzing legislative power through cooperative game theory).  

**Module Topic:** Democracy, Ignorance, and Power over Others  
**Module Author:** Samuel Dishaw  
**Semesters Taught:** Spring 2021  

**Tags:** Sortition [CS and phil], Ethics of Voting [phil], Epistocracy [phil], Democracy [phil], voter ignorance [phil]

**Module Overview:** The module discusses the problem of voter ignorance (ignorance about information relevant to voting well), and how voter ignorance bears on individual duties regarding voting, on the one hand, and what decision procedure modern democracies ought to use, on the other.

**Connection to Course Material:** The course discusses issues in the mathematical foundations of democratic decision procedures. The module complements this by looking at moral arguments regarding individual voting and collective decision procedures.

The module centers on voter ignorance because worries about voter ignorance have been a driving force in recent developments in political philosophy, especially Brennan (2018) and Guerrero (MS). Moreover, students are already familiar with thinking about democratic decision-making as aiming at accuracy, since students encounter Condorcet’s Jury Theorem and modern versions of it in class.

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1 https://sites.google.com/view/optdemocracy/
A different module could explore in greater detail the technical aspects of the course by drawing from discussions of Condorcet’s Jury Theorem in political philosophy. List and Goodin’s “Epistemic Democracy: Generalizing the Condorcet Jury Theorem” (2001, *The Journal of Political Philosophy*) is a useful resource in this vein.

Another possible in-depth connection with the course content concerns the fairness of sortition selection processes, and whether random selection is sufficient for it.

Finally, yet another possible topic of interest is liquid democracy, on which there exists some philosophical work (Blum and Zuber (2015), “Liquid Democracy: Potentials, Problems and Perspectives”, *The Journal of Political Philosophy*).

### Goals

**Module Goals:**

1. Consider and discuss three views on the ethics of voting.

2. Consider the Competence Argument for Epistocracy, and invite students to discuss whether it would be ethical to restrict voting on the basis of political knowledge.

3. Consider a sortition-based decision process and discuss whether decisions arrived at via sortition lack legitimacy.

**Key Philosophical Questions:**

1. What are our moral duties, as individual voters?

2. Is universal suffrage procedurally unjust if enough voters are ignorant about important issues?

3. Is epistocracy unjust?

4. Are there some issues which a sortition-assembled governing body lacks the legitimacy to decide on?

The three views are: (i) everyone has a duty to vote; (ii) everyone has a conditional duty to vote responsibly if they vote; (iii) any individual voting decision (including abstention) is permissible.

Question (1) is sharpened by thinking about whether it is wrong to cast a vote without any knowledge about the relevant issues, or whether it would at least be better to abstain in these conditions. Question (2) is the central focus of discussion regarding Jason Brennan’s claim...
that democratic decision-making enables groups to wield power over others incompetently and to that extent is unjust. Question (3) arises in response to Brennan’s alternative proposal that the right to vote should be restricted to those who demonstrate some sufficient level of political knowledge. Question (4) arises in discussing another alternative proposal to universal suffrage, namely sortition or ‘lottocracy’ wherein a governing body is selected at random from a larger pool of candidates.

<table>
<thead>
<tr>
<th>Key Philosophical Concepts:</th>
<th>Democracy</th>
<th>Political Ignorance</th>
<th>Power</th>
<th>Competence</th>
<th>Epistocracy</th>
<th>Equal political rights</th>
<th>Sortition</th>
<th>Legitimacy</th>
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The notion of political ignorance (or voter ignorance, or the ignorance of voters regarding political matters) serves to raise worries about democratic decision-making. Focusing first on the case of individual duties regarding voting, some students find that voting without any knowledge of the relevant issues is risky, and that one might be better off abstaining. The second step is then to generalize from an individual case and think about the conditions under which it is acceptable for a group of people to hold power over others. There is at least a case to be made, drawing on Brennan (2017), that a group should be allowed to exercise power over another only if they exercise that power competently. This raises a challenge for democratic decision-making, at least under current conditions of widespread political ignorance. The epistocratic alternative to democracy disenfranchises voters who can’t demonstrate sufficient political knowledge. This makes the electorate more competent as a group but violates a basic commitment to political equality.
Sortition-based decision-making tries to preserve a commitment to political equality by giving everyone an equal chance of serving on a single-issue governing body.

**Assigned Readings:**
- Brennan, J. “The Right to Vote Should be Restricted to Those with Political Knowledge”, *Aeon*, [https://aeon.co/ideas/the-right-to-vote-should-be-restricted-to-those-with-knowledge](https://aeon.co/ideas/the-right-to-vote-should-be-restricted-to-those-with-knowledge)

Both *Aeon* pieces are short, clear and provide a good summary of political ignorance and how these two philosophers think we should respond to it. Brennan’s *Ethics of Voting* and *Against Democracy* are useful resources for the instructor. At the time this module ran, Guerrero’s manuscript on Lottocracy was not yet published, but should be by the end of 2021.

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**Implementation**

**Class Agenda:**
1. The Ethics of Voting
2. Rational Voter Ignorance
3. The Competence Objection and Epistocracy
4. Sortition

**Sample Class Activity:** The final class activity is a poll + discussion about whether Brexit should have been decided via sortition rather than a referendum.

The primer was:

“Should the decision to leave the EU or not have been made by a group of 300, well-informed citizens in concert with community consultation?

Or would the resulting decision have lacked legitimacy?”

The poll options were:

(A) Brexit Sortition > Brexit Referendum

(B) Brexit Referendum > Brexit Sortition

When running this module, live student responses to the poll have been split almost in a dead heat. This reflects that this case is genuinely hard. Part of what makes this case hard is the role that political ignorance seems to have played in deciding the outcome: (i) ‘Leave’ won by a slim margin; (ii) a third of Leave voters cited concerns about immigration and border control as their main reason for voting ‘Leave’; (iii) these voters overestimated by a proportion of 4 to 1 how many EU immigrants live in the UK (at 20% of the population, rather than 5%). So, there is a strong motivation for a better informed, sortition-based decision-making in this case. At the same time, putting the decision in
the hands of just three hundred people (as Guerrero’s model suggests) seems to result in a decision that lacks legitimacy. One follow-up question to raise here is whether there is some number of participants in the sortition that would be small enough to reach the epistemic benefits of sortition, but large enough to have legitimacy.

Module Assignment: The module assignment asks the same question that is raised in the class activity above. The only difference is that, if students wanted to defend the superiority of Brexit Sortition over Brexit Referendum, they have the option of modifying the number of citizens elected via lottery to the deliberative body (from the initial three hundred that was suggested). In defending their position, students must draw on at least one notion covered in class.

Since the two Aeon pieces are very accessible, another option would be to have a pre-module assignment. For instance, students might discuss, on the online discussion forum in the days before lecture, Jason Brennan’s proposal that the right to vote should be restricted to those who can pass some ideologically neutral political knowledge test. Students might discuss whether this policy is feasible, and whether, even if feasible, it could be wrong.

Lessons Learned:

1. One lesson from this module is that the distinction between morality and the law is not always clear in students’ minds. For instance, in discussing the ethics of voting, many students interpret the question of whether one has a moral duty to abstain from voting if one is ignorant of the relevant issues as equivalent to the question of whether the law should prohibit people from voting if they are ignorant of the relevant issues.

2. Another lesson from this module is that computer science students are eager to discuss issues in ethics and political morality at a relatively high level of abstraction, and even if there is no technical solution in the offering. In fact, some students reported wishing that the lecture had covered more ethical and political theory (at the expense of discussion).