1 Recap of Arrow Conditions

- U - any input is allowed
- P - if everyone prefers x to y, society prefers x to y
- TP - output is transitive in preferences
- TI - output is transitive in indifference
- ND - for every person, there is some circumstance where they don't get their way
- IIA - individual comparisons of x and y is all that matters to whether society prefers x to y

2 Relaxing U

As Brecht says, this is like dissolving the people and electing a new one. There are mathematically interesting results here, but beyond that, I'm not sure

3 Relaxing TI

Consider the following model

- Some people are called the oligarchs
- If every oligarch prefers x to y, society prefers x to y
- Otherwise, society is indifferent between x and y

That violates TI. Imagine there are two oligarchs, and one has A > C > B, and the other has B > A > C. Then society has A > C, but A_B, and B_C.

Is this bad? Well, consider the version that everyone is an oligarch. Maybe that's not so bad.

Gibbard's result: Any theory that satisfies all the Arrow conditions except TI is an oligarchs theory, with n >= 2 oligarchs.

4 Relaxing Output Conditions

- Should we even demand a strict order?
- Perhaps not; ultimately who cares beyond the first.
- Perhaps enough would be enough to just make a selection.
- Or perhaps to select a set, with a random choice between the options. (Or even a weighted choice.)

5 IIA and Sen's Condition

IIA is a condition that says that (a feature of) the output should be invariant across changes in (a feature of) the preferences

Sen's Principle (dropping C can't move from first choice A to B) says that (a feature of) the output should be invariant across changes in the options.

These are both ways of saying C shouldn't affect the A/B choice, so it is easy to run them together. Indeed, Arrow himself confused them! But they are separate enough that we should keep them apart.

6 Why Are We Playing this Game Anyway?

- Why this Arrow-inspired focus on voting like methods?
- If we want to know what's best for the group, why not find out how good each option is for each person, add up the numbers, and choose the one with the highest value.

Objection one - organic unities. Not clear the voting method really helps. And really…

Objection two - this violates autonomy of the people. But see Sen on liberalism.

Objection three - this isn't really a different approach, since welfare just is preference satisfaction.

Objection four - we can't add these up, since interpersonal welfare comparisons don't make sense.

Note that objections three and four tend to go together, but they need not. A non-preference theory of welfare could still believe in impossibility of interpersonal comparisons. (E.g., a hedonist who said we can never compare intensity of feels.) And a preference theorist could believe in interpersonal comparisons (E.g., someone who thought the 0–1 rule worked.) But de facto they go together.

7 Digression on Welfare

Parfit's example of the train traveller who cares about other passenger's mother

Michigan person who wants bad things to happen to Ohio State fans.

Note we have to distinguish the claim that the warm fuzzy feelings from finding out good/bad news contributes to welfare, from the claim that the very fulfilling of those preferences contributes to welfare. The former is almost certainly true. The latter is the big claim.

8 Sen's Liberalism Condition

- It's really weak.

- Normally we'd think that if we're liberals about a topic, there are a lot of pairwise choices that we get to decide on.
- Sen's view is like this:
- If everything else is *just so*, I get to decide whether my walls are pink or white.
- But otherwise, society decides for me.
- This isn't much liberalism.
- And Sen isn't saying that it is; he's just saying that this incredibly minimal amount of liberalism is enough to get a problem going.

9 The Clash

Imagine that A gets to decide on A1 vs A2. And B gets to decide on B1 vs B2. And they have the following preference ordering:

- A: B2 > A1 > A2 > B1
- B: A2 > B1 > B2 > A1
- Now society has A1 > A2, and B1 > B2, by L
- And by Pareto, it has A2 > B1, and B2 > A1.
- And we can't have all those things.

We can't even pick a best option.

10 The Lady Chatterley's Lover Example

We have one copy of LCL, and two people, with the following preferences:

- Lewd: Prude reads > Lewd reads > No one reads.
- Prude: No one reads > Prude reads > Lewd reads.
- Liberalism suggests give the book to Lewd.
- Pareto suggests that Prude reads is better than Lewd reads.

11 Solutions to this Problem

- Find some way to build liberalism into the decision rule
- Hope that folks actually have liberal values
- The general puzzle here is how much democrats should do to protect other values that they hold dear. Should they work to embed them in the decision rule, or should they evangelise for them and hope for the best?
- Neither seems particularly attractive.