

Gerrymandering

Gerrymandering, although often forgotten, is one of the many reasons that have contributed to the widespread distrust the US public has for congress. It's easy to see a hilariously drawn congressional district which connects distant parts of a state and being unable to imagine what it could be, look to whatever things bother one the most or what one thinks about those areas and determine that's why they were drawn as such. In highschool (outside of Chicago) I remember seeing in our textbook an example where here in Chicago there was a district which used a part of a hispanic neighborhood to connect 2 black neighborhoods with the textbook arguing that this was intended to skew the results of the election.

Although there is often clear bias involved with the process of establishing U.S. congressional districts, it's important to recognize that the current system also has some desirable traits which are often overlooked. Notably, the ability to allow areas with similar needs to be grouped together in order for them to select a candidate which best reflects their needs. Although this involves opinions, for example, my neighbor and I could have completely different ideas on what's needed in our local community, I believe that having arbitrarily drawn borders with no data inputs would be a mistake. Just look at Africa, a continent which had it's national borders arbitrarily drawn by colonizers without any thought for the socio-political context.

Additionally there are rules about what factors congress is allowed to use to inform their decisions on how to draw the borders, such as race for example, but this also relies on the congress members to be honest about what factors they used to determine the borders. Additionally the public has very little oversight of the process, especially when a single party controls both houses.

There exist many solutions which draw completely arbitrary borders but I think as I've shown here these really don't help ease public discomfort with the process or give them something to get behind. Thus I propose that instead of drawing districts strictly for political purposes we draw a variety of regions which would give useful data to politicians who serve in those districts as well as others trying to improve the lives of the people who live there. This would include for example:

- Crime Statistics: breakdowns
- Population density
- Traffic
- Public transit infrastructure capacity
- Major economic factors:
 - dominant industries
 - common professions
 - relative incomes
- Utilities:
 - Usage
 - Quality
 - Price

With this publicly available data we could try to find areas with the most possible overlap. We could even allow some human intervention in the way of allowing politicians to weigh different categories of data differently if, for example, some disparities are perceived as not as important as others, although this of course would have to be done before they see the maps.

Although the election cycle is too slow to realistically use machine learning to improve this system, one could easily add a scoring/reward system using on for example:

- Reducing emissions
- Increasing tax revenue
- Increasing population
- Conserving valuable resources
- Reducing infrastructure usage