Technology's threat to democracy: The exacerbation of gerrymandering

Author's Statement

This paper was written as a final report for the Grand Challenge Seminar: Democracy and Data (66-125): an interdisciplinary course taught by Dr. Jeria Quesenberry, a Teaching Professor of Information Systems, and Dr. Doug Coulson, an Associate Professor in the English Department. This course advances the learning goals of the Dietrich College Grand Challenge Seminars and explores the relationship between democracy and data. From gerrymandering to online political ads, data is being used in ways that raise urgent questions about the integrity of democratic elections. But, the relationship between democracy and data goes far beyond elections. We live in a world of constant surveillance in which vast amounts of data are gathered from our phones, our computers, and from other facets of our lives and in which new breakthroughs in machine learning and data analytics make such data dramatically more powerful. The course explores essential questions such as: *What does it mean for average citizens to have control over their own lives? What does democracy mean?*

For me, this piece was a demonstration of my own learnings and current wisdom compared to the perception that most Americans hold, myself included, prior to this course . This essay is also an informative piece which simultaneously heeds a very urgent warning regarding our current political systems via the example of gerrymandering. Hence, this piece serves the same purpose as the course from which it derived by highlighting one of the many examples of the dangerous potential consequences of unchecked technology: the exploitation of flaws in our democracy and subsequent delegitimization of the American electoral process.

-Ava

Introduction

Political sociologist Larry Diamond says democracy is a system consisting of four key elements, the first and foremost being "A system for choosing and replacing the government through free and fair elections" (Nwogu 131). Nevertheless, in recent years, many Americans have argued that there is great injustice in the electoral systems of the United States. For some, the issue of fairness is about adequate representation, for others it is about access and feasibility to get to the polls, and some even believe, despite our nation's historical reputation, that the largest scale election was stolen.

Regardless of which of the aforementioned beliefs hold true, the current, growing sentiment in our great nation is one of disbelief in the fairness of our electoral system. Americans rely on slander to enact blame and aspire for change and solvency without much improvement. In reality, American's are aimlessly pointing fingers at individual politicians. Investigative studies estimate that "Only two-in-ten Americans say they trust the government in Washington to do what is right 'just about always' (2%) or 'most of the time (19%)' (Bell). Logically, however, if these individual politicians are willing to compromise democracy and their moral duties as representatives of the people, they likely feel no shame nor desire to repent when attacked by slanderous words, and such finger-pointing has little effect. Thus, Americans ought to channel their energy towards cutting off the injustices in our electoral system at the source.

Though many of these sources of unfairness in elections are widely debated, there is one issue that a majority of Americans, regardless of political affiliation, would agree threatens the fairness of our elections: gerrymandering. In fact, "70 percent of voters from all parties agree the Supreme Court should place limits on gerrymandering" (Brennan Center).

Truly, gerrymandering practices have not only weakened democracy since the onset of our nation, but the more recent perilous blending of technology and democracy brought on by the dawn of the Information Age has exacerbated the issue of gerrymandering. Unfortunately, this issue is often overlooked. In fact, the lack of initiatives striving to alleviate this more objective injustice is mainly due to a lack of awareness of its existence and a lack of understanding regarding redistricting laws. A Pew Research survey found that 55% of Americans are unsure of their views on redistricting itself (Jones).

Before delving into the definition of gerrymandering and subsequent analysis, I would first like to offer a disclaimer. This piece is written from an informative stance. In an often polarized political climate, I hope to convey a sense of unity and agreement regarding the existence of this threat to American electoral values and the ever growing threat posed when the inherent flaws in our electoral structure are melded with the modern technological era. This piece doesn't aim to serve opinion, but rather call attention to an issue that requires immediate resolution.

What is gerrymandering?

Essentially, American political systems reassess district lines, a process known as *redistricting*, on federal and local levels after given periods of time–the federal timeline being every ten years. Gerrymandering is the deliberate manipulation of redistricting to favor one particular political party, and it directly undermines the fairness of elections because politicians strategically "…draw 'unfair maps' that dilute the voice of specific groups of people while amplifying the political power of others" (ACLU). As is demonstrated in Figure 1, results can be dependent on the manner in which boundaries are drawn.

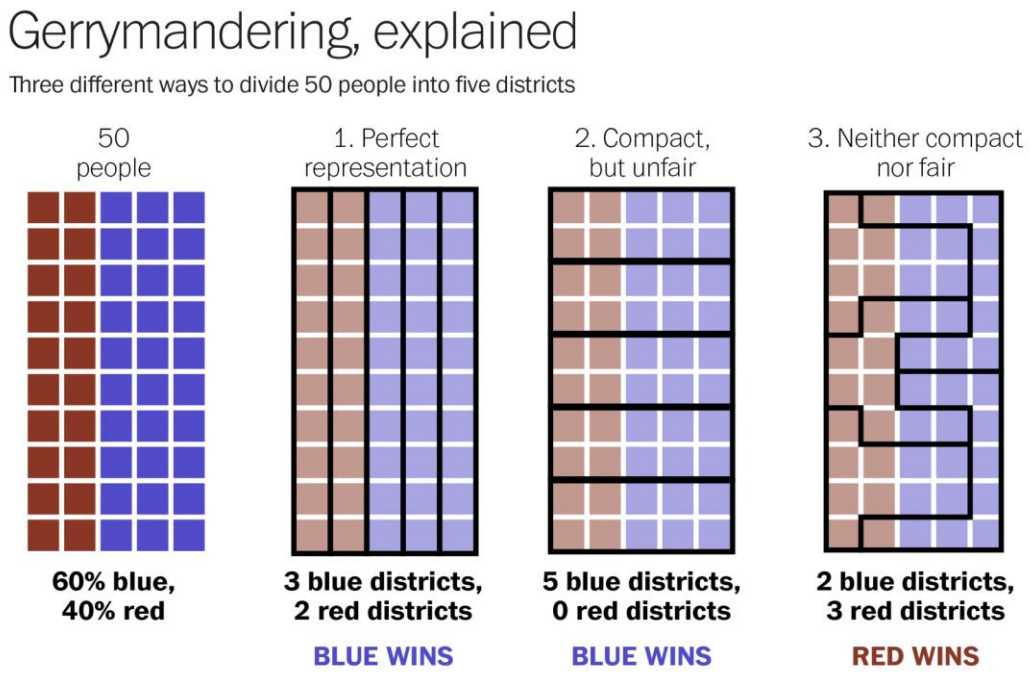

Figure 1: Visual representation by the Washington Post of Gerrymandering demonstrating redistricting effect (Ingraham).

Ironically, redistricting itself is intended as a governmental practice for consistently reassessing and assuring that every vote counts equally. Therefore, redistricting in the form of gerrymandering violates the fairness of democratic elections, for each vote is supposed to carry the same weight. "Redistricting should be a way of ensuring your vote counts," (Pierce) but redistricting by a gerrymanderer purposely achieves the contrary. For instance, "In 2018, Republicans won 3x more House seats than Democrats in Ohio despite the relatively close popular vote" (ACLU). At it's core, gerrymandering violates a democratic principle that we all purport to value and hope to hold true: the principle of *one person, one vote*.

Gerrymandering in the Age of Information

From the aforementioned background information, we acknowledge the existence of gerrymandering throughout our nation's history, and this practice is still occurring today, though it is now facilitated with growing accuracy thanks to the melding of politics and technology. Gerrymandering is made possible only through access to data pertaining to voter preferences.

With modern technology, we have seen a dramatic increase in federal and privatized abilities to collect such data and even manipulate voters in their decisions. With such power harnessed, voters become pawns and our elections increasingly become the product of a political game rather than the result of human beings exercising their right to vote in an equal manner.

Voter data from Big Tech platforms

It is no secret that modern technology has facilitated access to an ever-growing quantity of accurate data. In truth,

> …in 2016 we produced as much data as in the entire history of humankind through 2015. Every minute we produce hundreds of thousands of Google searches and Facebook posts. These contain information that reveals how we think and feel. Soon, the things around us, possibly even our clothing, will also be connected with the Internet. It is estimated that in 10 years' time there will be 150 billion networked measuring sensors, 20 times more than people on Earth. (Helbing)

Logically, these massive data portfolios can only aid gerrymandering if said data could be accessed and adversely used by redistricting politicians and parties. Unfortunately, this does in fact occur in the status quo. For example, a gerrymandering case in Ohio in 2018 demonstrating that gerrymandering was made possible by politican's access to immense amounts of voter data (ACLU). Essentially, politicians responsible for redistricting are legally permitted to "…conduct their own census or use an *alternative data sources*" (Zamarripa) in the case that census data is unavailable or delayed. Such alternative "data sources" could very well be the large and incredibly accurate databases of Big Tech entities such as Google or Facebook. "'The Google influence machine is one we've never seen before. It's the first dominant company in the internet age.' Politicians have come to rely on it for campaigning, communication and *data collection*"

(Guardian News and Media). The existence of relationships between Big Tech giants, such as Google, and politicians are undeniable.

Voter data from U.S. Census Reports

Perhaps even more alarmingly, it would seem that gerrymandering politicians may not need to hope for a delayed census report as the census reports themselves are evidently linked to Big Tech. The governmental entity responsible for census data collection, the United States Census Bureau, affirms, "We also collect additional data from other sources. Primary sources for additional data are federal, state, and local governments, as well as some commercial entities" (US Census Bureau). To no surprise, the publicized 2020 Census National Partners and Supporters List acknowledges companies such as Twitter, Google, and Facebook as some of those commercial partners. This confirms that census data used for redistricting is backed by Big Tech, and iff Big Tech is contributing to census data, then census data is more extensive and accurate than ever before, and gerrymandering is, thus, easier to carry out.

Social media as a tool for direct political party promotion

Aside from its role in encouraging the feasibility and effectiveness of gerrymandering, the rise and power of social media platforms and their widespread use has also opened the door for a modern, more deceptive version of voter manipulation —a version so powerful that politicians could bypass the gerrymandering process (and subsequent scandals) altogether. In fact, this modern tactic of direct party promotion through social media makes the traditional means of gerrymandering appear transparent. While both traditional gerrymandering and social media tactics create unfair elections, traditional gerrymandering is at least identifiable, whereas social media party-promotion is discrete and relatively undetectable.

Consider the infamous Cambridge Analytica scandal. Cambridge Analytica (CA) was a

"political data-analysis firm that worked on the 2016 Trump campaign. CA's professed advantage is having enough data points on every American to build extensive personality profiles, which its clients can leverage for 'psychographic targeting" of ads" (WIRED). Although initially deemed innocuous, this practice is incredibly detrimental as "Often the recommendations we are offered fit so well that the resulting decisions feel as if they were our own, even though they are actually not our decisions. In fact, we are being remotely controlled ever more successfully in this manner" (Helbing). By that logic, any politician or party who allies with tech companies such as Cambridge Analytica can acquire the ability to discreetly promote their political party and its ideology to a specific, targeted groups of people.

But, what is even more unsettling is the fact that governments already openly admit to utilizing social media for manipulation:

> Under the label of "nudging," and on massive scale, governments are trying to steer citizens towards healthier or more environmentally friendly behaviour by means of a "nudge"—a modern form of paternalism. The new, caring government is not only interested in what we do, but also wants to make sure that we do the things that it considers to be right" (Helbing).

The reality is that all it takes is one politician or party to use such "nudging" techniques for party promotion, causing people to vote with misinformation and thus making the election unfair and certainly not free. Such technological power bypasses the need to draw unfair redistricting maps, for these politicians could just target the necessary regions for victory without those people even knowing of the magnitude of mental indoctrination derived from social media. In this sense, technology is not only facilitating traditional gerrymandering, but negatively revolutionizing political party promotion tactics and thus guaranteeing unfair elections.

The Steps Towards a Solution

Those who have attempted to tackle the threat of technology, could, logically, either promote the deterrence of the technological world, or utilize a technological approach to tackle the issue. Either way, the problem lies in that Big Tech is, unfortunately, a sort of *Pandora's Box*. Consider modern tactics of party promotion:

> We could see the banning of programmatic political ads. And we are on cusp of a new debate about monopoly power and antitrust. But these are crude tools, and the systems that need regulating are getting more complex. AI will increasingly be the engine of our digital infrastructure, and yet these systems are opaque, hidden from view and, ultimately, unknowable even to those who created them. We do not yet have the governance language to hold AI and platforms accountable. (Owen)

Society tends to attempt to mediate the problems that technology has caused in our democracy through either futile legislation regarding Big Tech (futile because of the aforementioned interwovenness of our politicians and these conglomerates) or, ironically, by throwing more technology at the issue.

That being said, technology's contribution to gerrymandering and targeted advertising capabilities rely upon one crucial attribute: data. Hence, in theory, the promotion of more fluid democratic practices and depolarization efforts on the parts of individuals and resultantly the general US population could mediate the presence of both gerrymandering and social media voter manipulation tactics. Reducing the availability of information regarding an individual's political affiliation would automatically weaken the extensiveness and accuracy of Big Tech companies' data portfolios. Some conceptual considerations personifying this solution could include the following micro level changes, which in unison would have a large impact on

mitigating the evident problems.

1. Fluidity can derive from a less concrete affiliation system and possible adjustments include requiring voters to re-register each election cycle or allowing independents to vote in all primaries. Obviously, this would come with additional adjustments in that independents would need to choose a party each election cycle but remain independent in the interim in order to to maintain the benefits of party affiliation during elections.
2. The normalization of a multi-party platform. At the moment the two dominating parties hold a monopoly on all fronts. A simple modification such as the lowering of the 15% threshold limit for presidential debate participation could dramatically change the fluidity and polarization of US elections (CPD).
3. The dissolution of political parties in totality. This is certainly the most drastic possibility.

Irrespective of the method, all of the aforementioned strategies could promote a more fluid election process. No matter how complex an algorithm, a fluid election process is objectively more difficult to categorize and extract data for the purposes of gerrymandering and social media voter manipulation.

Concluding Remarks

As Americans we must recognize this perpetual cycle of injustice, and move towards true solvency. The fairness and legitimacy of electoral processes are the heart of a legitimate democracy. Continuous manipulations resulting from the threat of undemocratic policies and tactics, such as gerrymandering, violate the values of the American electoral system and call to question whether our great nation can truly qualify as a democracy. Nevertheless, this is a tale as

old as time, and the ever growing threat that technology poses to the American voter pushes this question into fruition with a new, more urgent need for solvency.

All in all, these circumstances begs us to realize: instead of attempting to mold the technological sphere to fit into our democratic election processes, it is time to adapt our democratic processes to be more suitable for the age of technology.

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