IRRATIONAL BEHAVIOR RESEARCH PAPER

The Motivations behind the Trump-supported Capitol Riot

SS50: Complex Systems

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The Attack on the Capitol

On January 6, 2021, the US Capitol was attacked for the third time in history. Regarding the Republican party's loss in the 2020 presidential elections, Trump conducted activities against the House of Senates and the voting results, leading to insurrection. The invasion, caused by the unprecedented rise of furious Trump supporters, stopped the electoral college and led to numerous deaths and hundreds of injured.

We assume that rational individuals maximize utility. Conversely, irrational individuals act illogically and choose actions that do not maximize utility (Perry & Morgan, 2022). Irrational agents make decisions not based on the consideration of the possible outcomes but on mechanisms that blindfold their thinking, motivating them to perform specific actions, in this case, the riot of the Capitol. In a frenzy of rage and hatred, influenced Trump's supporters decided to break into the capitol building. Headed to disrupt the electoral process, they injured dozens of guards and caused significant damage to the building (Sucher & Gupta, 2021). The founder of Oath Keepers (far-right militia), Stewart Rhodes, announced that it was "stupid" to enter the Capitol (Dress, 2022). During the riots, they did not think about the consequences, like being sent to prison or getting injured, but followed the furious crowd.[1]

In the US election process, the interaction of different levels of analysis ended up causing the riot. Three primary levels constantly interact to influence election outcomes. The presidential candidates are at the highest level (in 2020, Trump and Biden); their backgrounds, actions, and speeches weigh emotionally and psychologically on the voters. The electoral college and political parties are at the middle level. They are the senators from the Republican and Democratic parties in the Capitol and are the final decision-makers in the elections. On the low level are the US citizens; they determine the result of the

[1] This application of #utility examines the decision-making of the people in the riot by initially characterizing it as irrational as they would receive adverse outcomes. However, we examined the reasons and motivations for which they made these decisions and found that the utility was heavily affected by #psychologicalexplanation and applied prospect theory in the "bad choice" scenario of fraudulent elections vs facing the consequences of a riot.

elections through voting (BBC News, 2021). The Trump Campaign leverages the power advantage of high-level influence (Trump's persona, Tweets, and provocative speeches) to manipulate low-level Trump supporters. This paper will examine how Trump exerted influence at the lower level, ultimately leading to supporters shutting down the Senate and postponing the electoral college process on January 6, 2021.[2]

Social Media and Polarization

The January 6 attack shocked many pundits, as most of the mob (around 80%) had no ties to far-right extremist groups (Greenblatt, 2022; Swol et al., 2022). To understand how "normal" Trump supporters (i.e. mostly middle-class and middle-aged people not affiliated with the far-right groups) were driven toward the violent attempt to stop the presidential election, we need to deconstruct the system based on exposure to radical right-winged media content.

Twitter and other social media platforms support selective exposure. Individuals with specific views can easily choose news and content that aligns with their political stand, isolating their attention to different political entities and leading to polarization (Stroud, 2008, 2010). This polarization creates a strong group identity that leads to considering out-group political members ("outsiders") as immoral and evil, motivating extremism (Swol et al., 2022).

Trump supporters can be divided by exposure to social media, where the increased exposure motivates extremist behaviors by grouping like-minded individuals. Low exposure does not motivate extremist behavior, as individuals do not face the social-media-propagated intense polarization. According to Beckett, around 50% of individuals with high exposure traveled in established groups to

[2] This application of #levelsofanalysis explains the different levels and their functions within the American election system and how the interactions between different levels can affect the results of the elections. Moreover, the example of how Trump's actions and influence on his supporters led to the halt of the electoral college gives reasoning to our explanatory challenge: why did people strike the Capitol.

Washington, DC to protest (Beckett, 2021). On January 6, protesters motivated by Trump's narration and urged by extremists attacked the US Capitol.[3]

Skepticism

In this section, we will explore network decompositions and phenomena alongside emergent properties to better understand the motivations behind our studied system.

Social media plays a fundamental role in most 21st-century social system evolutions. To understand Skepticism, we could analyze Trump's social media interactions (i.e., tweets, mailing lists) and their impact on the community (Li et al., 2022).

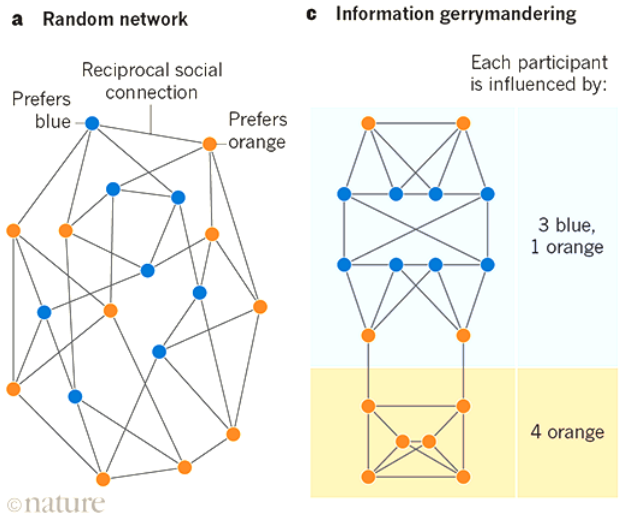

Fig. 1. Illustrative example of Gerrymandering. Each node represents an entity with a preference, either blue or orange, and there are an equal number of nodes preferring orange and blue. The network on the left represents a random configuration where the preference distribution is uniform (i.e., there is no bias or unfair advantage). The network on the right represents a carefully crafted system where two-thirds of entities mistakenly infer that blue is more popular. Modified from Bergstrom & Bak-Coleman (2019).

[3] This application of #systemmapping helps identify the individuals that rioted US Capitol. Trump supporters were divided into groups based on their exposure to social media to explain how "normal" Trump supporters developed extremist attitudes. The low-exposure individuals have a very low tendency to develop such attitudes, as they are usually the effect of social media. The high exposure motivates individuals to view only right-winged media and news, thus contributing to polarization and the development of extremist attitudes that led them to travel to Washington, DC, and later attack the Capitol.

This analysis will focus on the network phenomenon of Gerrymandering. This practice prevents meaningful representation of the community by drawing electoral districts in shapes that mathematically serve a political agenda, i.e., manipulating the distribution of electoral votes (Fig. 1) (Barnes & Solomon, 2020).

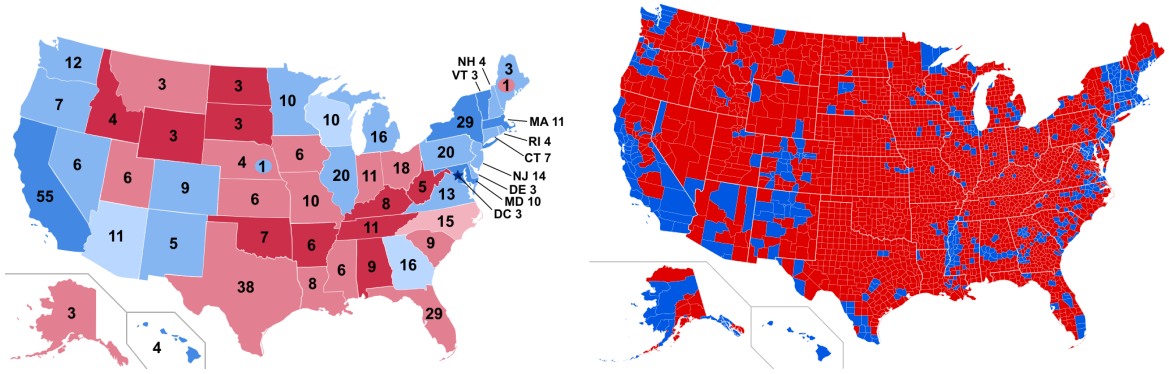

Fig. 2. Official results from the 2020 presidential election; red indicates that the Republican candidate (Trump) won in that region, and blue indicates that the Democratic candidate (Biden) won. On the left, we have the results shaded according to the number of votes per State. On the right, we have the results per county. Extracted from Federal Election Commission (2020).

Gerrymandering could result in a configuration where Trump won the elections (Witherspoon & Levine, 2021) (Fig. 2). Most importantly, Gerrymandering could have resulted in an unfair electoral advantage for Biden.

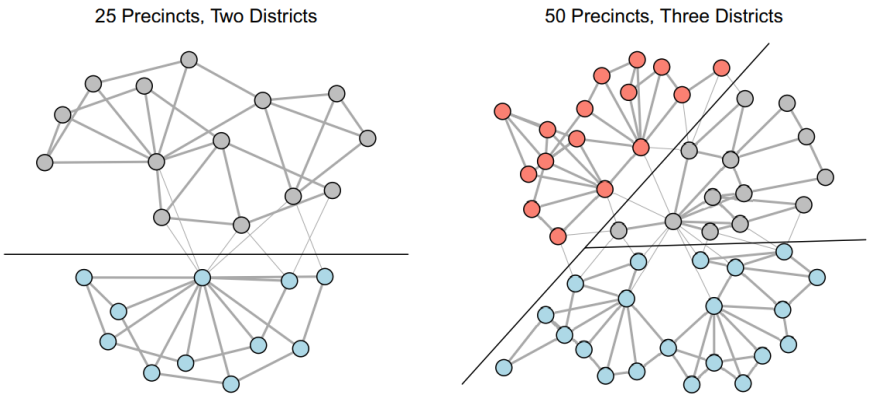

Fig. 3. Network representation of Gerrymandering & Redistricting. Each node represents a precinct, edges represent contiguity (i.e., neighboring precincts), and the same color nodes form a district. The Gerrymandering problem can

be thought of as optimizing graph cuts for a given network, where cuts delimit districts. Extracted from Fifield et al. (2020).

Gerrymandering and Redistricting can be seen as a graph-cut problem (see Figure 3), where nodes represent precincts, edges represent contiguity (i.e., neighboring precincts), and colors represent districts.

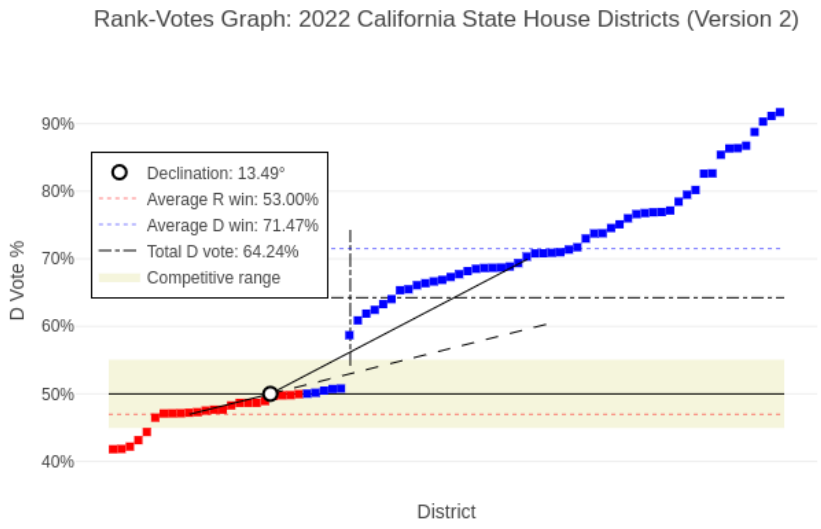

Fig. 4. Gerrymandered distribution of the winning outcomes in California (State House Districts, 2022). The y-axis represents the obtained percentage of Democratic votes, and the color of the points represents the winner (red for Republicans and blue for Democrats). The vertical back dash-dot line represents the average expected winning outcome, so all the points on the left should be red, and the right should be blue. In an ideal state, all of the points should lie inside the competitive range denoted by the beige color. We observe the effects of Gerrymanding by having blue points to the left of the expected outcome line. Extracted from Bradlee et al., 2020.

Figure 3 shows Gerrymandering as a graph-cut problem, where carefully crafted cuts can provide unfair advantages[4]. Figure 4 presents a hypothetical example[5] of an unfair district configuration for California. In this case, the configuration shown is unfairly advantageous for Democratic Party.

Gerrymandering is not just theoretical. Recently, the Justice Department filed a lawsuit against the State of Texas for its statewide redistricting plan since it promoted racial Gerrymandering (Department of Justice, 2021). Furthermore, U.S. Supreme Court is currently debating whether to adopt mathematical standards to measure Gerrymandering and validate the constitutionality of districts in Wisconsin and Maryland (Barnes & Solomon, 2020).

Additionally, the sudden change in voting trends was also a present phenomenon in the 2020 presidential elections. While counting the in-person votes, they observed a quasi-uniform trend (proportion of votes). However, when counting the mail votes, this trend was broken with a statistically significant advantage towards Biden (Pew Research Center, 2020).

Since the election happened during a pandemic, the Democratic party encouraged its voters to use mail ballots. However, this was not obvious when counting votes, leading people to think that there was electoral fraud.

In summary, Skepticism[6] emerged in the republican party through these interactions:

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[4] This application of #networks proposes a decomposition of the districts and precincts, explaining and justifying its construction (precincts as nodes, neighboring relationships as edges, and colors as districts) and structures (see Figure 4). Furthermore, it also explains how the Gerrymandering effect happens by providing an illustrative example (see Figure 1). In addition, it also proposes interventions (graph-cuts) that could change the winning outcomes in elections if done purposefully and carefully.

[5] This application of #dataviz provides detailed visualization of data (see Figure 3) while providing an appropriate interpretation of the illustrations (see Figure 1). Furthermore, it provides an abstract representation of a geographical environment as a network and applies concepts from Graph Theory (graph-cuts) to deepen the analysis of the studied system. In addition, it also shows high-dimensional data in a meaningful representation (see Figure 4) that provides insight into the studied phenomenon (Gerrymandering).

[6] This application of #emergentproperties identifies and explains the relevant causes and conditions from which Skepticism emerges. It also states how this emergent property is fundamental for the research question and sets the grounds for further exploration throughout the paper. In this section, the causes of this emergent property are analyzed from a mathematical standpoint, and will be further analyzed through the lenses of #psychologicalexplanation in the incoming section; offers novel and creative ways to explain the property's causation.

- the Democrats voting early through mail ballots,
- the Supreme Court's inefficient action towards Gerrymandering,
- Trump's hectic social media presence, and
- the susceptibility of people toward Fake News.

As they interact with US citizens, they are the fundamental cause of the Capitol Riot.

Trump's Speech

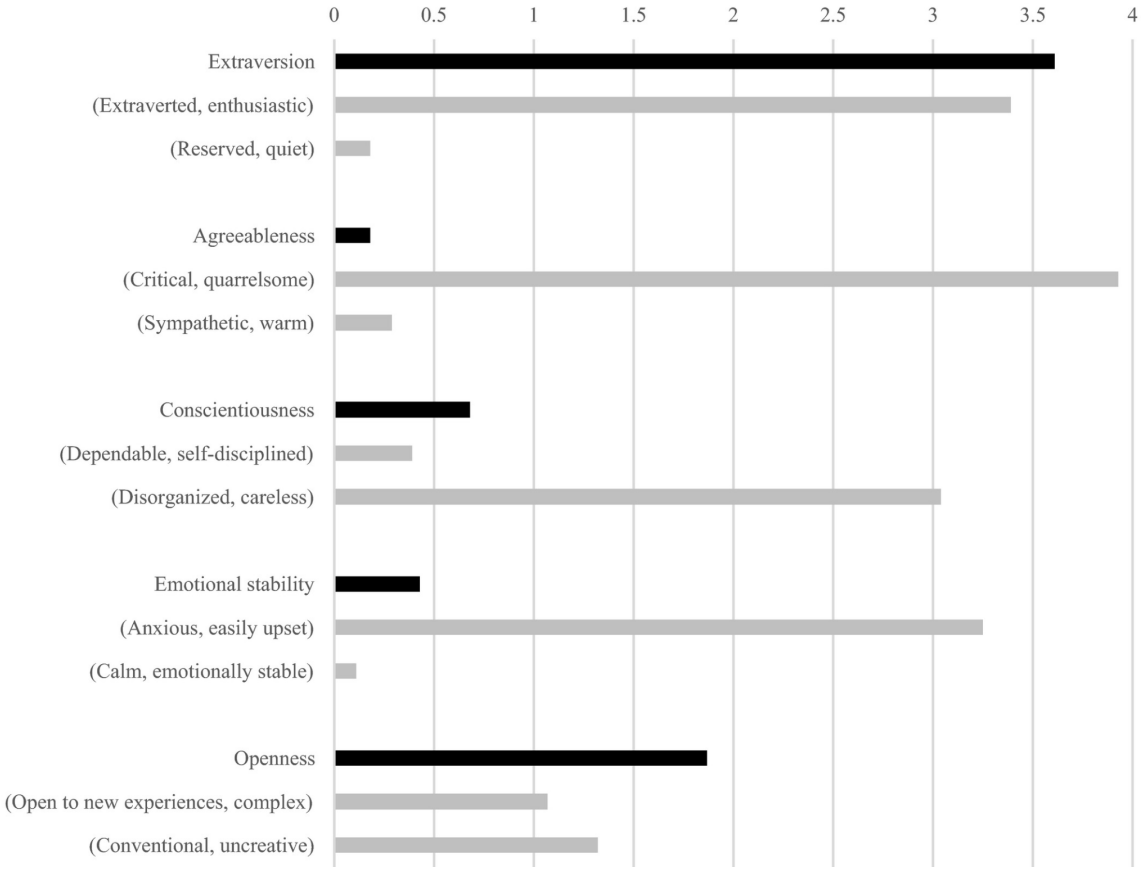

Fig. 4. Trump's Big Five personality model. He was characterized by extreme extraversion, neuroticism (lack of emotional stability), and shallow agreeableness. Obtained from Nai, Martínez i Coma, & Maier (2019) in https://doi.org/10.1111/psq.12511

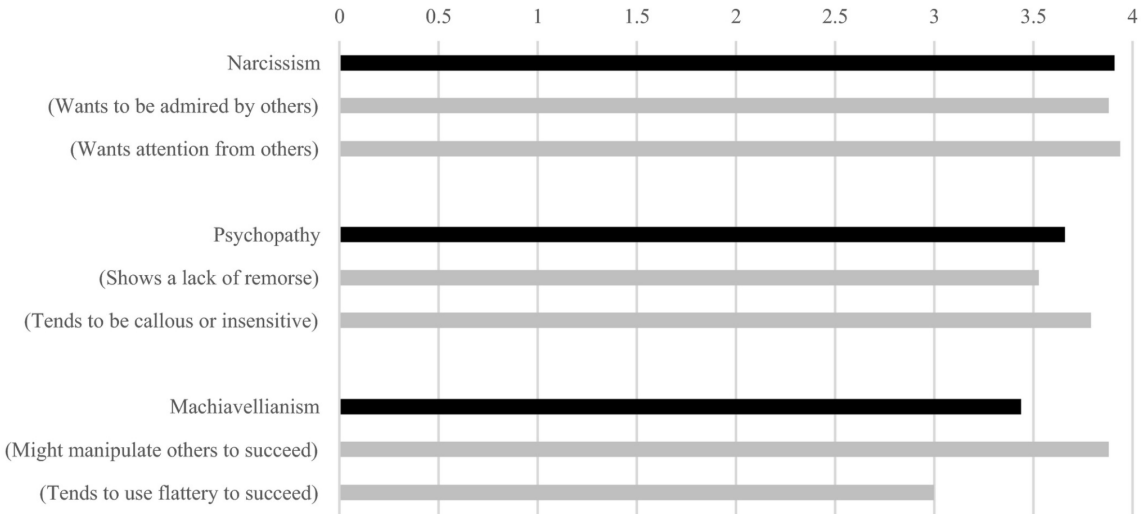

Fig. 5. Trump's Dark Triad model. High levels of the three dimensions characterized him. Obtained from Nai, Martínez i Coma, & Maier (2019) in https://doi.org/10.1111/psq.12511

Donald Trump's personality traits are associated with "negative" rhetoric usage. Nai, Martínez i Coma, & Maier (2019) analyzed Trump's personality traits using the Big Five and the Dark Triad model with numerous expert evaluations and compared them with multiple populist leaders worldwide. They found extreme levels of extraversion, narcissism, Machiavellianism, and psychopathy, in addition to low agreeableness and conscientiousness. The authors linked the combination of high extraversion and psychopathy with violent, hostile rhetoric in the speeches of populist leaders. Trump's personality highly influenced the rhetoric in his speeches, which were an essential piece of the events from January 6.[7]

Trump's word choices motivated a core belief in the crowd. Faiz et al. (2022) analyzed the rhetoric used by Donald Trump on January 6. They found that the speech allowed him to put the republic party as the legitimate winner and the democratic party as criminals by using words like "corrupt" and "fraud" on multiple occasions. The use of microstructure in language through metaphors, similes and highly connotative words that proposed a course of action ("fight, walk") elicited the crowd's arousal and

[7] This application of #differences answers why Trump uses hostile rhetoric in his speeches by analyzing his personality traits, which corresponds to similar patterns in populist leaders that also use this type of rhetoric: high extraversion and psychopathy.

anger[8]. Trump effectively used these effects to invite them to walk towards the capitol, believing they were “saving” democracy. They were now a group of people believing democrats stole the elections, and they needed to protect them by any means necessary.[9]

The Crowd on the Individual

We argue that the agents act consistently with their roles in the system. The group's collective identity as Trump supporters results in "normative limits" (Stott, C. et al. 2001). Contrary to “Contagion Theory,” which suggests that the crowd influences the individual, the normative limits require agents in the system to draw a line and stray away from the crowd if the crowd's actions do not reflect their beliefs (Christakis, N. A. et. al. 2012). Instead, they act accordingly with "Value-added Theory." The theory has three components: trigger event, structural strain, and generalized belief. Losing the elections was a "trigger event." Structural strain relates to the benefit of the social system, in this case, the belief that the outcomes of the elections would harm society. The generalized belief that the democrats “stole” the elections led to action (Saffer, A. J. 2018).

Then, people were presented with a “bad choice” and exhibited risk-seeking behavior. People are prone to have a “negativity bias,” in which events with adverse outcomes are more pronounced in memory. This bias toward adverse events strengthens the generalized belief. Negativity bias is rational because it provides an advantage to the agent against potentially dangerous situations (Vaish, A. et al. 2008). In Trump’s rhetoric, Catastrophism portrayed the election’s outcomes as a sure loss and striking the capitol as a potential loss with thoughts like: “the president requires our help!” By being loss averse to

[8] This application of #connotation to understand the effect of Trump’s word choices in his rhetoric to evoke particular emotional responses (arousal and angriness) in the crowd that attacked the Capitol, which complements the next application of #emotionaliq.

[9] This application of #emotionaliq uses the causes of emotions provided by #connotation and displays the effects in the crowd: walking towards the capitol and having a shared belief. The belief is later addressed with #psychologicalexplanation. The application shows how Trump utilized his speech to produce emotional responses and direct the crowd leveraging on that.

this "bad choice," the agents exhibited risk-seeking attitudes when trying to maximize the utility and choosing the action that has the best outcome based on the perceived utilities.[10]

Conclusion

Throughout the paper, we applied concepts ranging from Psychology to Graph Theory to give a possible explanation for the Capitol Riot. We illustrated how, in an attempt to maximize utility, the skeptic multi-level agents, with the available prior -incomplete- knowledge, caused the riot to fix what seemed like injustice and fraud to them. Trump, unwilling to accept his loss, irresponsibly escalated this situation using selective-exposure social media platforms to agitate his followers into action in the "Save America" rally. All factors considered, the lower-level rioting behavior can be understood and predicted in terms of the manipulative interactions from the higher levels of this complex social system.

WORD COUNT: 1577 words.

[10] This application of #psychologicalexplanation considers different possible psychological explanations for the given behavior of Trump supporters. Crowd theories such as "Contagion Theory" has shortcomings and use an oversocialized account to explain the behavior. We explained the agents' behavior relying on the Value-added Theory and identified how each component relates to the attack on the Capitol. We have also used unconscious biases and explained how loss aversion and risk-seeking is at play.

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