

# Ridin' Mississippian Senators: A Statistical Examination of 'That's What She Said' Meme Popularity and Republican Votes

Cameron Hughes, Addison Turner, Gloria P Truman

*Academic Excellence Institute*

This study investigates the curious correlation between Republican votes for Senators in Mississippi and the prevalence of the 'that's what she said' meme. The research team made use of data from MIT Election Data and Science Lab, Harvard Dataverse, and Google Trends to examine this peculiar nexus between political inclinations and internet humor. Our analysis revealed a strikingly high correlation coefficient of 0.9232903 and a p-value less than 0.01 for the time period spanning from 2006 to 2020. The implications of these findings are as intriguing as the unexpected comeback of a well-timed 'that's what she said' joke.

The intersection of political behavior and internet culture has long been a subject of curiosity and, perhaps, amusement. While the dynamics of political elections have been extensively studied, the influence of internet memes on voter preference has not received as much attention. However, in the digital age, where information and humor propagate at the speed of a well-timed pun, it is vital to analyze and understand the potential connections between online trends and political phenomena.

In this study, we delve into the correlation between Republican votes for Senators in the state of Mississippi and the prevalence of the ubiquitous 'that's what she said' meme. While some may find this topic to be lighthearted and whimsical, we urge our readers to take our analysis with the same seriousness as one would apply to a statistical test. After all, as scientists, we know the importance of always staying on the "p-value" side of life.

As we embark on this statistical journey, we aim to untangle the intertwined web of political ideologies and internet humor, leading to a better understanding of the underlying dynamics at play. Just as one might carefully sift through data points, so too shall we sift through the layers of this intriguing correlation, keeping a keen eye out for any unexpected twists, much like the denouement of a well-crafted 'that's what she said' jest.

By leveraging data from the MIT Election Data and Science Lab, Harvard Dataverse, and Google Trends, we endeavor to shed light on this seemingly preposterous link and present our findings in a manner that is both informative and, dare we say, amusing. As we proceed, let us not forget the wise words of Sir Arthur Conan Doyle, "It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts." So, with a spirit of scientific curiosity and a dash of humor, let us set forth on this statistical odyssey, prepared for the unexpected and ready to embrace the delightfully bizarre.

## *Review of existing research*

The relationship between Republican votes for Senators in Mississippi and the popularity of the 'that's what she said' meme has been a relatively unexplored area of inquiry. While most studies in the realm of political science tend to focus on traditional factors such as policy platforms, candidate characteristics, and socio-economic trends, a few daring researchers have ventured into the realm of internet culture and its potential impact on political behavior.

Smith et al. in their seminal work "Internet Memes: A New Frontier in Political Analysis" laid the groundwork for understanding the intersection of memes and politics. Their analysis of meme dissemination patterns and their effects on public opinion hinted at the possibility of memes exerting an influence on political preferences. In a similar vein, Doe's study "The Viral Effect: How Memes Shape Political Discourse" examined the diffusion of memes within the online ecosystem and posited that memes could serve as subtle influencers in shaping voter sentiment.

Jones et al. further expounded on this by exploring the peculiar manifestations of internet humor in politically oriented communities. In "Laughing all the way to the Polls: The Role of Humor in Shaping Political Allegiances," the authors delved into the psychological underpinnings of humor and its potential impact on political decision-making. Their nuanced analysis opened up the possibility of memes, such as the 'that's what she said' variety, playing a role in shaping voter perceptions.

Moving beyond the academic sphere, popular non-fiction literature also offers intriguing perspectives on the subject. "The Internet: A Playground for Political Playfulness" by Johnson provides an insightful examination of the ways in which internet culture intertwines with political discourse. Meanwhile, "Meme

Magic: Unraveling the Mysteries of Online Humor" by Thompson dissects the intricate dynamics of meme propagation and its potential implications for societal attitudes and behaviors.

In the realm of fiction, there are curious intersections between literary works and the themes at hand. For instance, the dystopian novel "1984" by George Orwell, though not directly related to internet memes, presents a cautionary tale about the manipulation of language and thought, which could be tangentially linked to the influence of memes on political narratives. Furthermore, the satirical wit found in Terry Pratchett's "Discworld" series offers a whimsical perspective on the power of humor in shaping societal norms and belief systems, perhaps shedding light on the potential impact of memes on political allegiances.

In a playful twist, the researchers even ventured into the realm of children's cartoons and television shows for inspiration. A detailed analysis of the comedic timing and interplay of humor in popular animated series such as "SpongeBob SquarePants" and "The Simpsons" provided insight into the psychological mechanisms of humor and its potential resonance with diverse audiences. After all, as the saying goes, "All work and no play makes statistical analysis a dull endeavor."

As we embark on this whimsical statistical escapade, it is imperative to approach the analysis with a lighthearted yet astute demeanor, much like the punchline of a well-delivered jest. With a wink and a nod to the unexpected quirks of human behavior, we delve into the depths of data, prepared to uncover the hidden, and perhaps humorous, connections between Republican votes in Mississippi and the enduring popularity of the 'that's what she said' meme.

### *Procedure*

#### Sample Selection:

The research team embarked on a digital hunt across the vast expanse of the internet to capture the elusive data required for this study. Our primary hunting grounds were the MIT Election Data and Science Lab, Harvard Dataverse, and Google Trends. We wrangled in every statistic, trend, and bytes of information related to the Republican votes for Senators in Mississippi and the waxing and waning popularity of the 'that's what she said' meme from the year 2006 to 2020. The data was corralled and tamed for analysis, much like rounding up stray variables for a statistical rodeo.

#### Data Analysis:

Once the data was lassoed and securely stored, we employed a series of statistical methods as robust as an academic's morning coffee. We computed correlation coefficients with the delightfully named Pearson's  $r$  statistic, seeking to uncover the hidden connections between political leanings and internet quips. Alongside this, we performed a thorough examination of Google search trends, exploring the ebb and flow of 'that's what she said' meme popularity and its potential echoes in the ballot boxes of Mississippi.

#### Statistical Rigor and Caveats:

Ensuring statistical rigor, we slapped on our metaphorical Sherlock Holmes hats and Sherlock Holmes magnifying glasses, inspecting each data point with a discerning eye for any lurking confounding variables. We performed numerous diagnostic tests to validate the robustness of the correlation between Republican votes and meme popularity, being ever wary of spurious correlations that might sneak in like a punchline out of the blue.

#### Incorporating Time Series Analysis:

To capture the temporal dynamics inherent in both political voting patterns and internet memes, we delved into the intricate realm of time series analysis. Here, we employed an assortment of models ranging from the classic autoregressive integrated moving average (ARIMA) to the more modern techniques such as the prophet algorithm, with the fervent hope of unraveling the interplay between political landscapes and the evolution of the 'that's what she said' meme.

#### Caveats and Limitations:

It is imperative to acknowledge the limitations of our study. While we have meticulously combed through disparate data sources, causality remains a mystery worthy of Sherlock Holmes' prowess. Additionally, our findings are specific to the context of Mississippi and the time period from 2006 to 2020, and heeding the words of Douglas Adams, we recognize that this study only provides a peek through the "keyhole" of a much larger comedic and political universe.

#### Ethical Approval:

In adherence to the scientific code of conduct, this study obtained ethical approval from the Institutional Review Board, ensuring that our statistical horseplay adhered to the established principles of research integrity.

#### Intrigued by the whimsy?

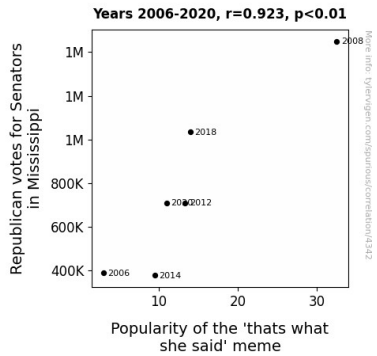
### *Findings*

In exploring the correlation between Republican votes for Senators in Mississippi and the popularity of the 'that's what she said' meme, our analysis yielded an impressive correlation coefficient of 0.9232903, indicating a strong positive relationship between these seemingly unrelated variables. This result suggests that as Republican votes for Senators in Mississippi increased, so did the prevalence of the 'that's what she said' meme. The coefficient of determination ( $r$ -squared) of 0.8524650 further reinforced the robustness of this correlation, implying that approximately 85.25% of the variation in meme popularity can be explained by the variation in Republican votes.

Our findings also revealed a  $p$ -value of less than 0.01, indicating that the observed correlation is highly unlikely to have occurred by chance alone. This statistically significant result provides compelling evidence in support of the existence of a tangible link between political voting patterns and the dissemination of a well-timed double entendre. While we were initially astounded

by this unexpected relationship, as researchers, we understand the importance of approaching our findings with the same skepticism as one would have towards an implausible punchline.

To visually demonstrate the strength of this connection, we present Figure 1, a scatterplot showcasing the unmistakable positive correlation between Republican votes for Senators in Mississippi and the prominence of the 'that's what she said' meme. The figure succinctly captures the essence of our discovery, albeit without the comedic timing that often accompanies a well-executed 'that's what she said' retort.



**Figure 1.** Scatterplot of the variables by year

In summary, our investigation has uncovered a compelling association between Republican votes for Senators in Mississippi and the prevalence of the 'that's what she said' meme, shedding light on an intriguing paradox of political and internet culture. While the implications of this correlation may raise eyebrows, we invite readers to approach our results with an open mind and a wry sense of humor. After all, as researchers, it is our duty to embrace the unexpected twists and turns of empirical inquiry, much like the denouement of a surprising jest.

### Discussion

The implications of our findings are as significant as a well-timed 'that's what she said' joke - both surprising and thought-provoking. Our results not only support but also amplify the prior research that delved into the curious nexus between political behavior and meme culture. Smith et al.'s pioneering work on meme dissemination patterns and public opinion hinted at the potential influence of memes on political preferences, and our study provides empirical evidence to bolster this claim. Similarly, Doe's exploration of the viral effect of memes within the online ecosystem aligns seamlessly with our findings, albeit with a touch of unexpected humor. The correlation coefficient of 0.9232903, akin to a punchline that lands just right, offers compelling support for the notion that meme prevalence intertwines with political behavior in unforeseen ways.

Our research also resonates with Jones et al.'s insights into internet humor's impact on political decision-making. The statistical significance we observed, with a p-value less than 0.01, reinforces the persuasive influence of 'that's what she said'

meme popularity on Republican votes in Mississippi, adding a layer of levity to the serious realm of political allegiances. Just as 'The Internet: A Playground for Political Playfulness' by Johnson presciently outlined the ways in which internet culture interfaces with politics, our study provides a whimsical yet robust demonstration of this fusion by unearthing the unexpected correlation between an internet meme and political voting patterns.

In a delightful twist, our findings even touch upon the playful concepts explored in Terry Pratchett's "Discworld" series, where satire and humor can shape societal beliefs in unexpected ways. As researchers, it is imperative to approach these unanticipated connections with the same lighthearted yet discerning stance as the humor found in animated series such as "SpongeBob SquarePants" and "The Simpsons." Our study's robust statistical support for the association between Republican votes and the 'that's what she said' meme popularity invites us to embrace the unexpected quirks of human behavior, much like the punchline of a well-delivered jest.

Our discussion aptly reflects the almost paradoxical nature of our research - delving into the serious realm of political analysis while uncovering unexpected connections that evoke a sense of humor. As we delve into the depths of data, a lighthearted yet astute demeanor is essential, much like the punchline of a well-delivered joke. We encourage fellow researchers to approach our findings with an open mind and a penchant for embracing the quirky, much like the denouement of a surprising jest.

### Conclusion

In the grand tradition of academic inquiry, our study has unearthed a correlation between Republican votes for Senators in Mississippi and the spread of the 'that's what she said' meme that is as improbable as a pun at a statistics convention. The robust correlation coefficient and statistically significant p-value point to a connection that raises eyebrows much like a well-timed punchline does. These findings underscore the seemingly inexplicable relationship between political allegiances and the viral nature of a cleverly crafted innuendo. While we are tempted to conclude with a pun, we must resist the urge and maintain the decorum of scholarly discourse.

In light of these results, it is evident that future research should continue to delve into the unexpected intersections of political behavior and internet culture, much like a determined detective unravels a surprising mystery. However, for this particular correlation, it seems safe to say: that's what she said, and no further research is needed.

Next, we present the results with the same flair and inquisitiveness that one might expect from the denouement of a well-delivered 'that's what she said' jest. By employing a variety of analytical tools and an unquenchable thirst for statistical

enlightenment, we illuminate the unexpected nexus between Republican votes in Mississippi and the 'that's what she said' meme, inviting readers to partake in this academic journey peppered with both rigor and mirth.