

India Votes: Mid-Evaluation Report

Hemang Jain (2022101086) Mohak Somani (2022101088)
Prithvi Karthik (2022101020)

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1 Introduction

India's democratic process is a complex tapestry of diverse voices, ideologies, and aspirations. In our project, "India Votes," we aim to discern the heartbeat of India's democracy through data visualization. By exploring the outcomes of previous elections, we seek to uncover insights lying beneath the surface, providing a deeper understanding of the electoral landscape.

2 Description of Data

The data appears to be a tabular dataset with information about various constituencies (PC name), their respective constituency numbers (no), type of constituency (GEN for General or SC for Scheduled Caste), the state they belong to, the candidate's name, their affiliated political party, the number of electors, the number of votes received by the candidate, the voter turnout percentage, the margin of victory (or defeat), the margin percentage, and the year of the election.

Each row represents a different constituency's election data from the year 1962. The data includes constituencies from several states in India.

The dataset provides insights into the electoral dynamics, voter turnout, and the margin of victory in different constituencies during the specified year. The each column has its importance among which % turnout and margin are supposed to be very useful

3 Current Progress

3.1 Plots Developed

- **Year-wise Plot for Each Constituency:** This visualization offers a comprehensive view of electoral trends over time, allowing for the analysis of shifts in voter behavior and political dynamics within each constituency.

- **Average Turnout Across India Over the Years:** By examining the average turnout over time, we can gauge the overall engagement of the electorate in the democratic process and identify any significant fluctuations or trends.
- **Turnout in Each Constituency as a Scatter Plot:** This visualization provides a granular perspective on voter turnout, allowing for comparisons across constituencies and the identification of outliers or regions of particular interest.
- **ScatterPlot for %Margin , %Turnout and Votes:** Provides a state-wise and yearwise visualization showing the domination of a political party in each constituency along with the the turnout and votes casted
- **Radial Stacked Bar Graph for statewide distribution of winning parties:** Provides an extremely comprehensive radial stacked bar graph to visualise the statewide winning constituencies for a given year.
- **Statewide Winning Parties:** By visualizing the winning parties in each state, we gain insights into regional political preferences and the distribution of power across the country.
- **Dynamic Scatter Plot Analysis of Turnout Rates Across States and Political Parties:** This interactive visualization offers a dynamic analysis of turnout rates, allowing users to explore variations across states and political parties. It facilitates deeper insights into the factors influencing voter engagement and the performance of different parties in mobilizing their supporters.
- **Evolution of Major Political Parties in Indian Parliament:** By plotting the trends of major political parties such as INC, BJP, CPI (M), and Others over time, this visualization illustrates the transition of India's political landscape from multipolarity to a largely bipolar system. It also highlights the stratospheric rise of BJP and provides insights into the changing dynamics of Indian politics.

3.2 Benefits of Current Plots

- **Informing Voters:** These visualizations empower voters to make informed decisions by providing insights into party performance, voter turnout, and electoral trends.
- **Guiding Upcoming Politicians:** Aspiring politicians can leverage these visualizations to understand the electoral history of India and make strategic decisions regarding party affiliation and constituency focus.
- **Assisting Political Parties:** Political parties can use these visualizations to assess their performance, identify areas for improvement, and understand the dynamics of rival parties in different regions.

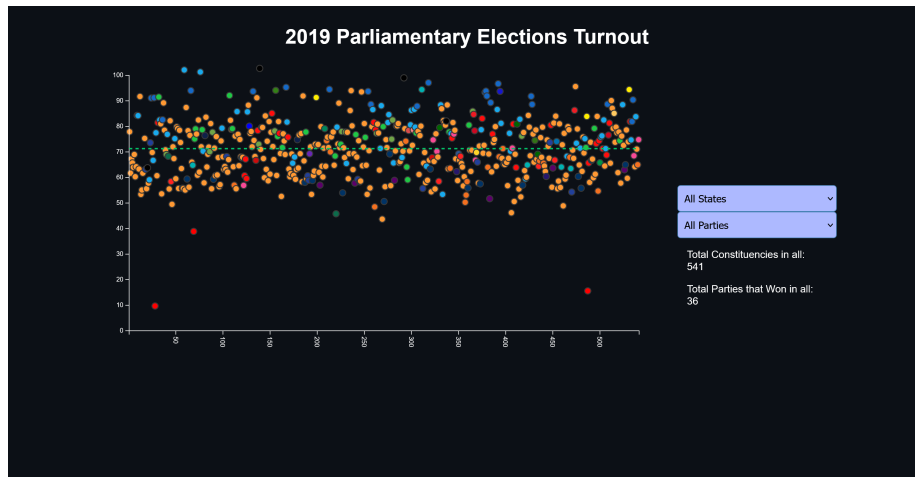


Figure 1: Turnout Scatterplot

- **Enabling Insightful Coverage by Press:** News channels and reporters can utilize these visualizations to enhance their election coverage, offering data-driven analysis and informed commentary to the public.
- **Supporting Political Analysts:** Analysts and researchers can delve into the nuances of electoral dynamics using these visualizations, identifying patterns and trends that shape India's political landscape.

3.3 Images

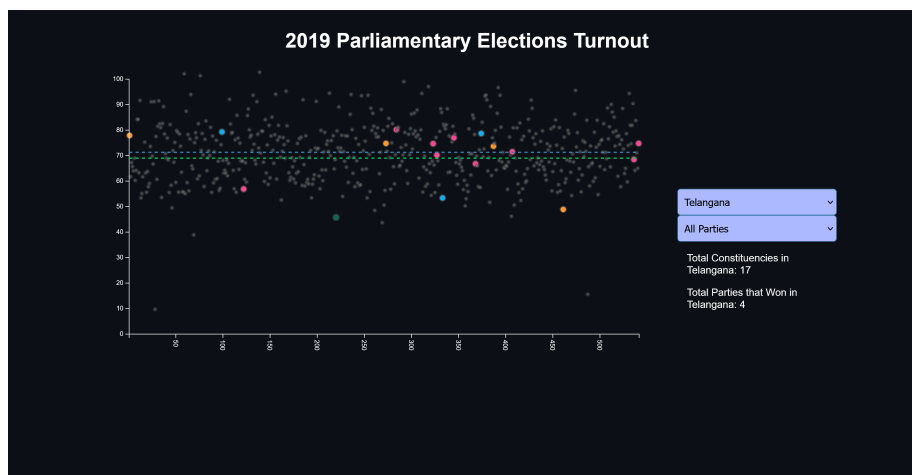


Figure 2: Turnout Scatterplot w/ State filtering

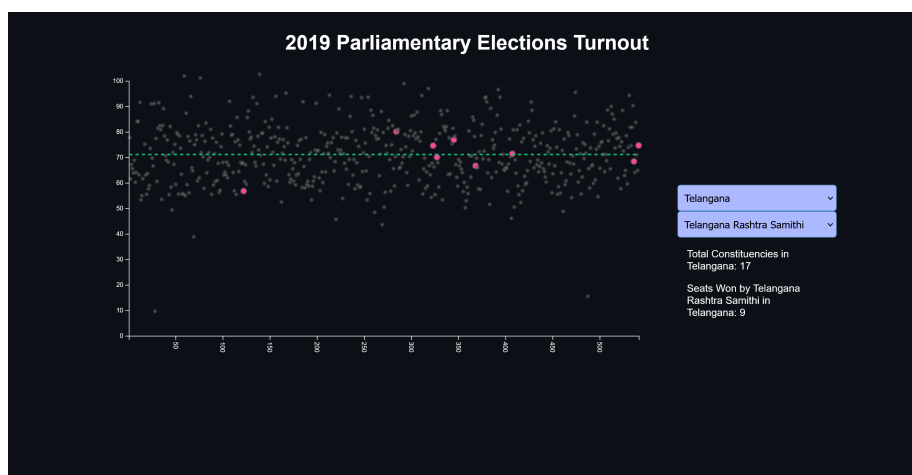


Figure 3: Turnout Scatterplot w/ State and party filtering

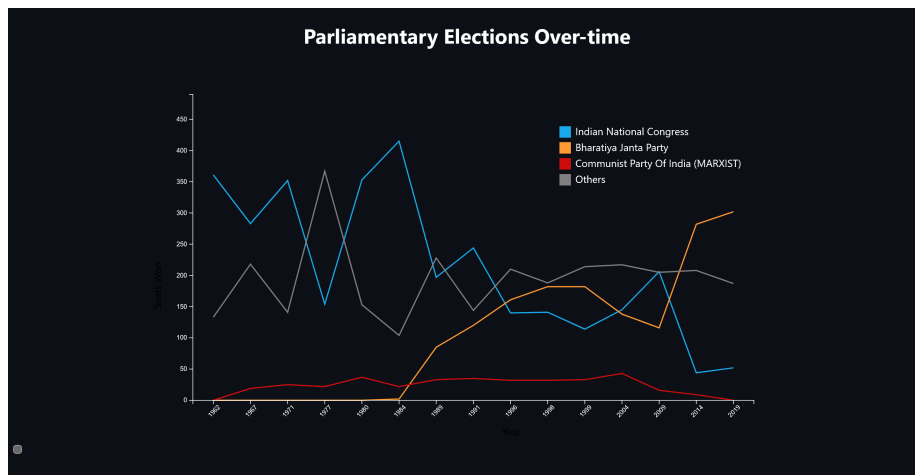


Figure 4: Election results(1962 - 2019)

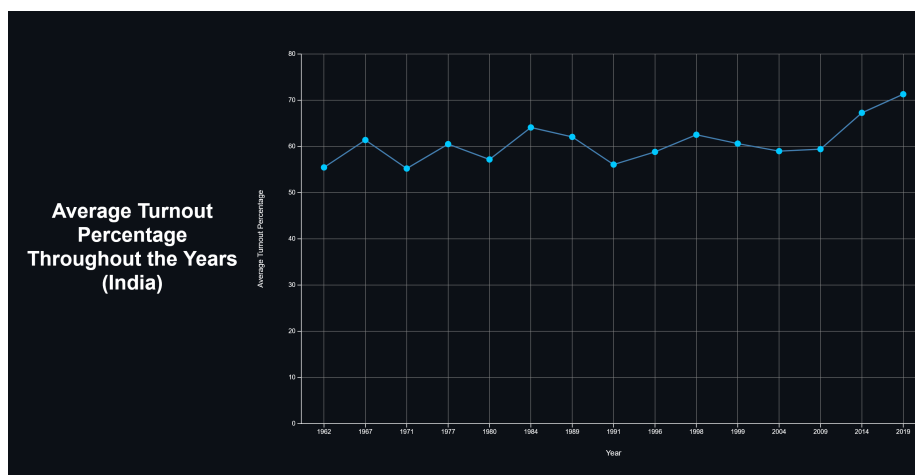


Figure 5: Turnout over the years

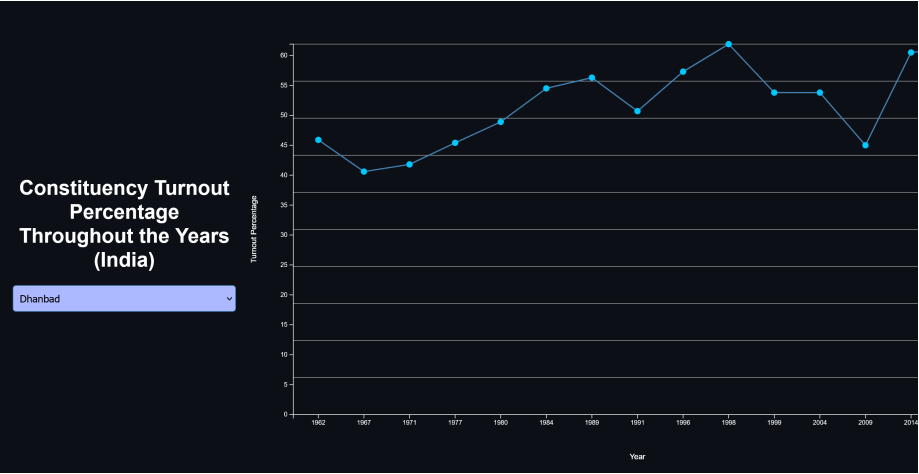


Figure 6: Dhanbad Constituency Turnout

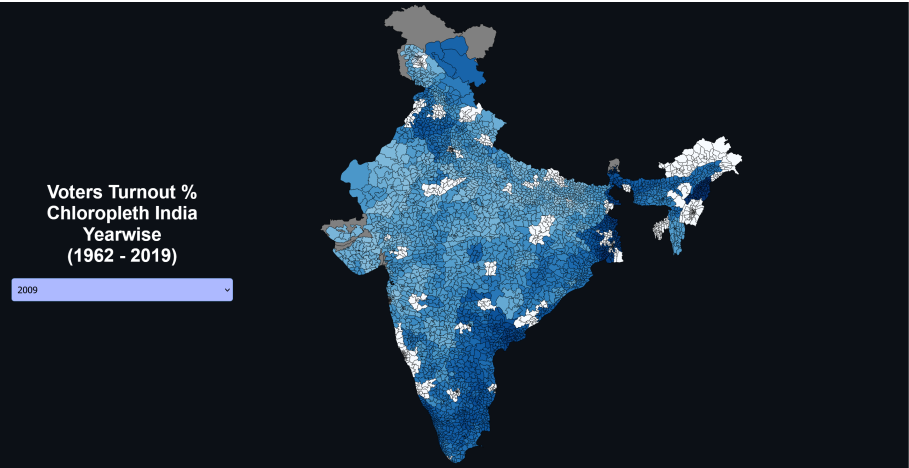


Figure 7: Turnout 2014 Chloropleth

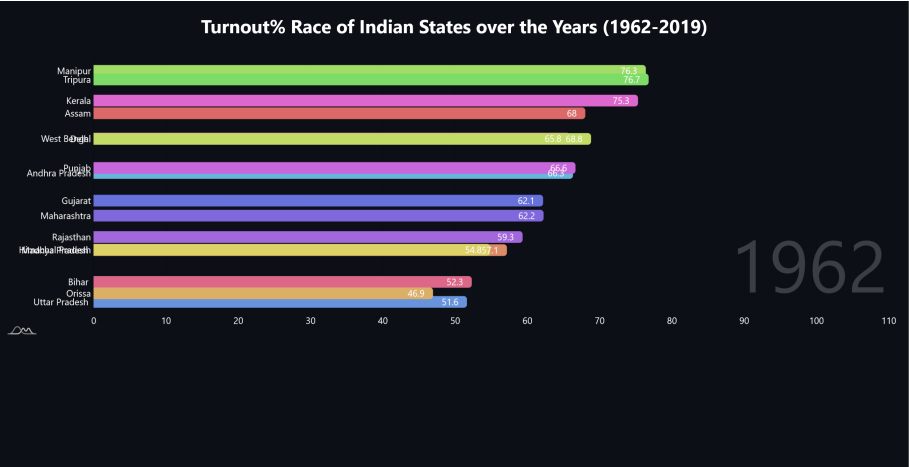


Figure 8: Turnout Race

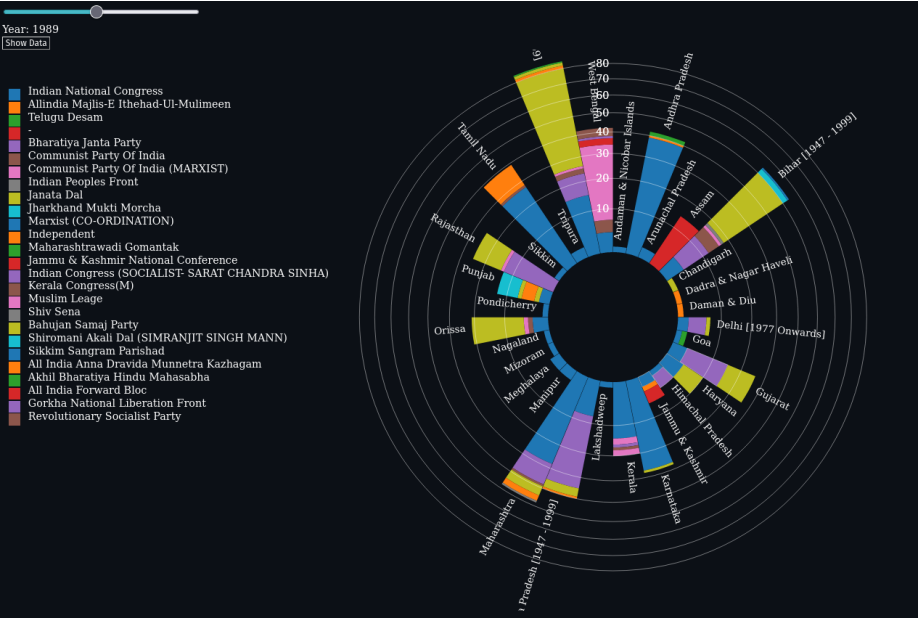
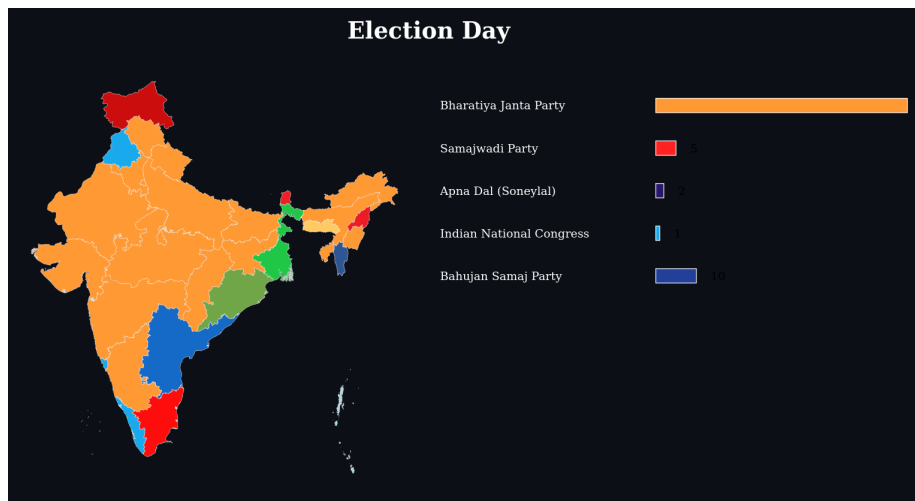
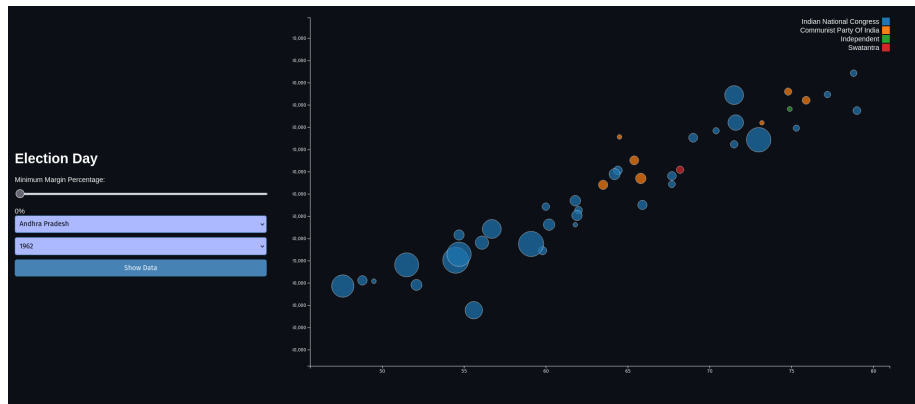


Figure 9: Radial Stacked Bar



4 Future Possibilities and Scope

While our current progress lays a solid foundation for understanding India's electoral landscape, there are several avenues for further development and exploration:

- **Incorporating Historical Context:** Adding contextual information such as socio-economic factors, historical events, and policy changes can enrich our understanding of electoral trends and outcomes.
- **Interactive Visualizations:** Developing interactive tools that allow users to explore data dynamically can enhance engagement and enable deeper analysis of electoral patterns.
- **Predictive Modeling:** Integrating predictive modeling techniques can enable forecasting of future election outcomes based on historical data, offering valuable insights for stakeholders.
- **Comparative Analysis:** Analysing the growth and fall of political parties and over the past years to deeply understand the recent political trends
- **Census Analysis:** Analysis of the census data to get better insights for the electoral outcomes
- **State Assembly Elections:** Analysis of state assembly elections for comparative visualization of the Lok Sabha to understand in depth the nationalistic views of people
- **Enhancing the UI of the Dashboard**

5 Conclusion

In conclusion, our project "India Votes" seeks to unravel the complexities of India's democracy through data visualization. By leveraging historical election data, we aim to provide valuable insights for voters, politicians, political parties, press, and analysts. With further development and exploration, we aspire to offer a comprehensive understanding of India's electoral landscape, empowering stakeholders to make informed decisions and contribute to the vibrancy of democracy.