

Analytical Tool for European Parliament Voting Contextualization

European Parliament open data enables transparency, yet a semantic gap remains between raw records and actionable insights. Existing platforms often lack socio-economic context, obscuring the actual drivers of political decisions. This project introduces an automated pipeline that integrates legislative logs with Eurostat macroeconomic indicators using Large Language Models. By transforming fragmented datasets into a structured knowledge base, the solution reveals how national interests influence parliamentary behavior. This accessible context strengthens democratic oversight and enables data-driven research into European policy.



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1 Motivation

Provide an automated tool that transforms fragmented data into interactive visualizations of political behavior.

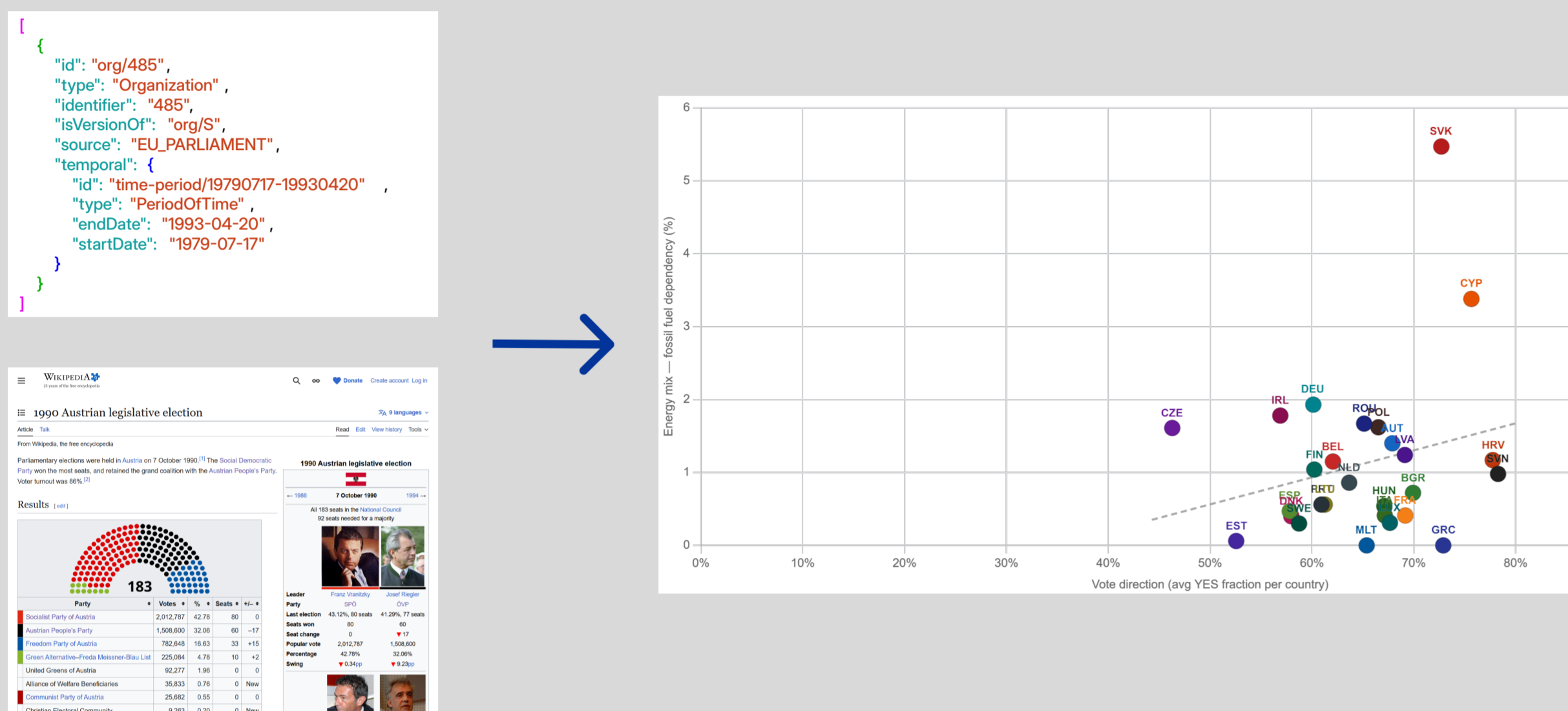


Fig 1. Motivation

3 Data mining

Compute behavioral metrics and socio-economic correlations from MySQL tables.

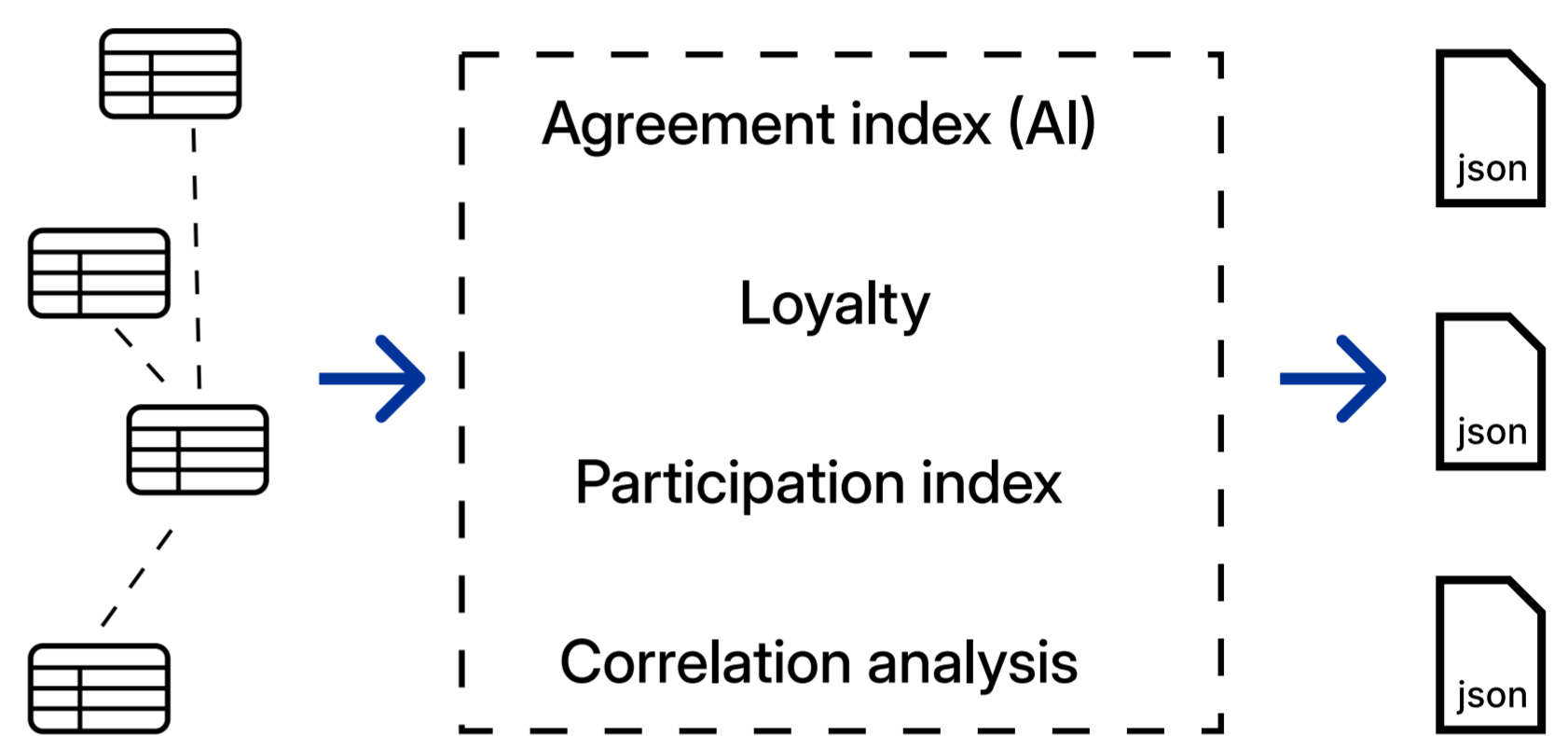


Fig 3. Data mining

2 Data extraction and loading

Automate the aggregation of structured and unstructured data from diverse sources like the EU Open Data Portal, Eurostat and Wikipedia.

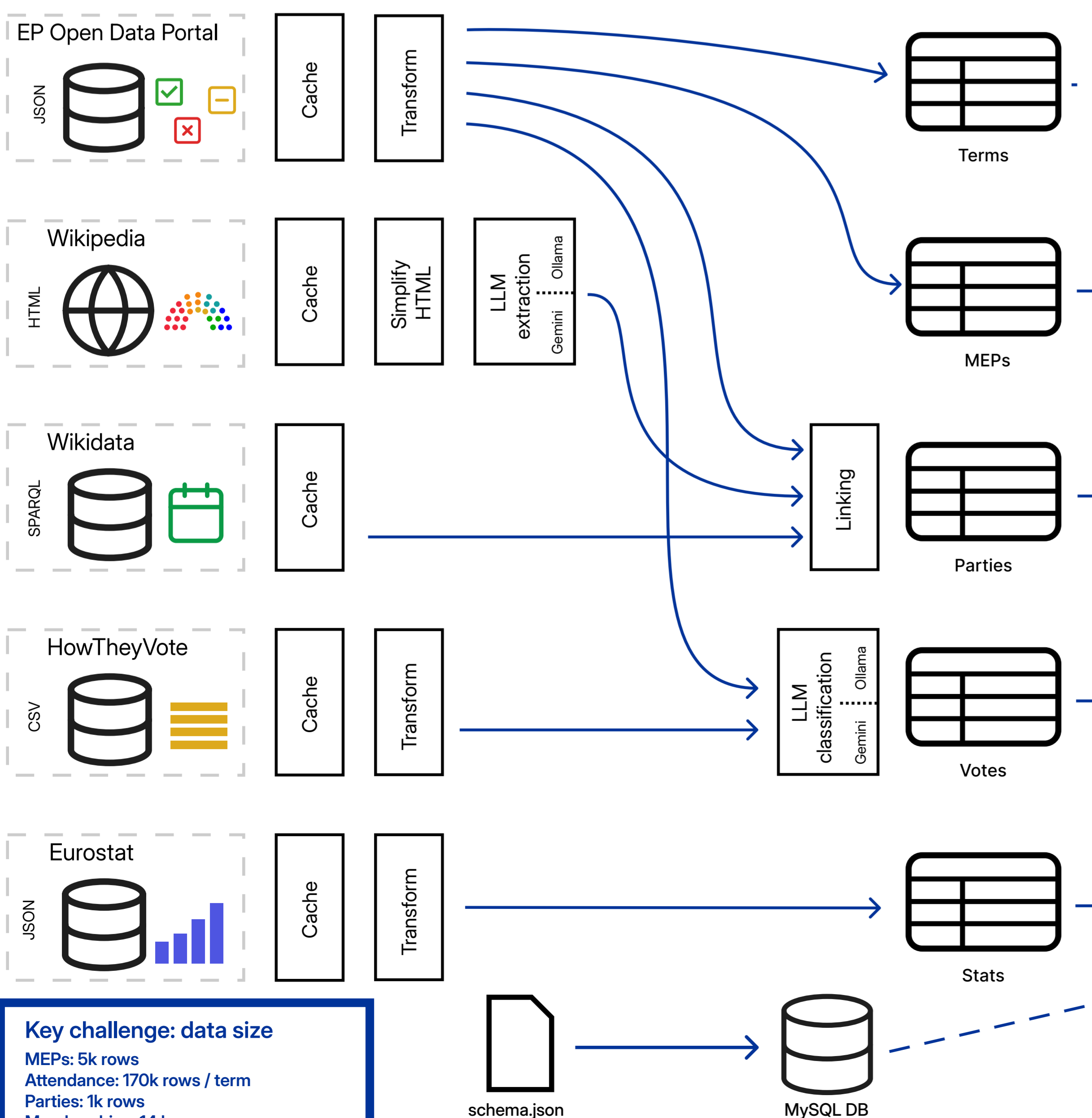


Fig 2. ETL pipeline

4 Visualisation

Transform precomputed files into an interactive view.

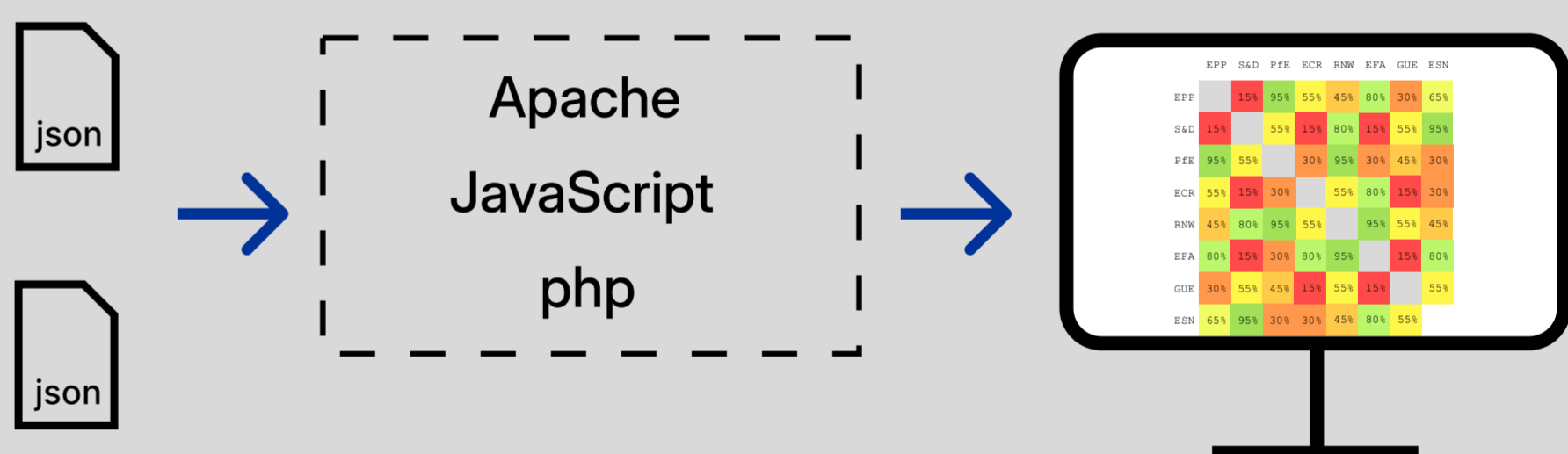


Fig 4. Visualisation

5 Result

The result is an interactive web application that visualizes complex voting patterns and their socio-economic drivers.

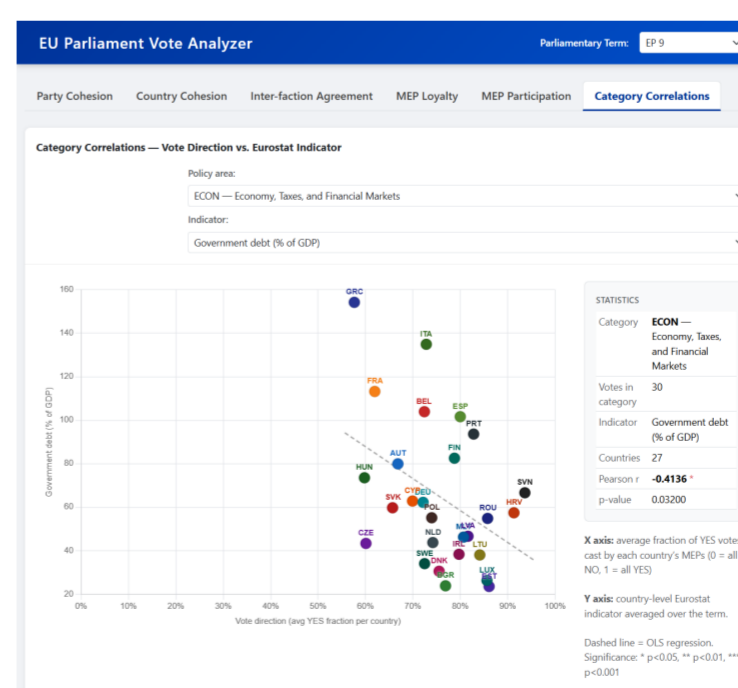


Fig 5. Correlation with metrics

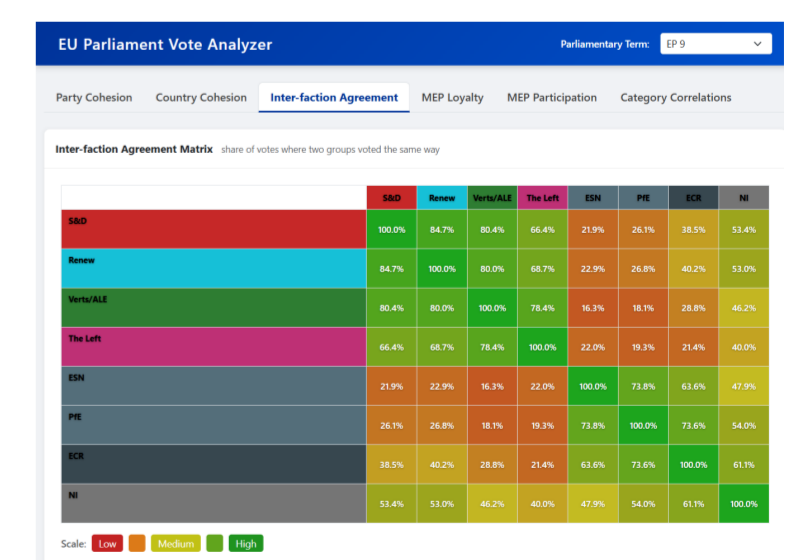


Fig 6. Agreement matrix

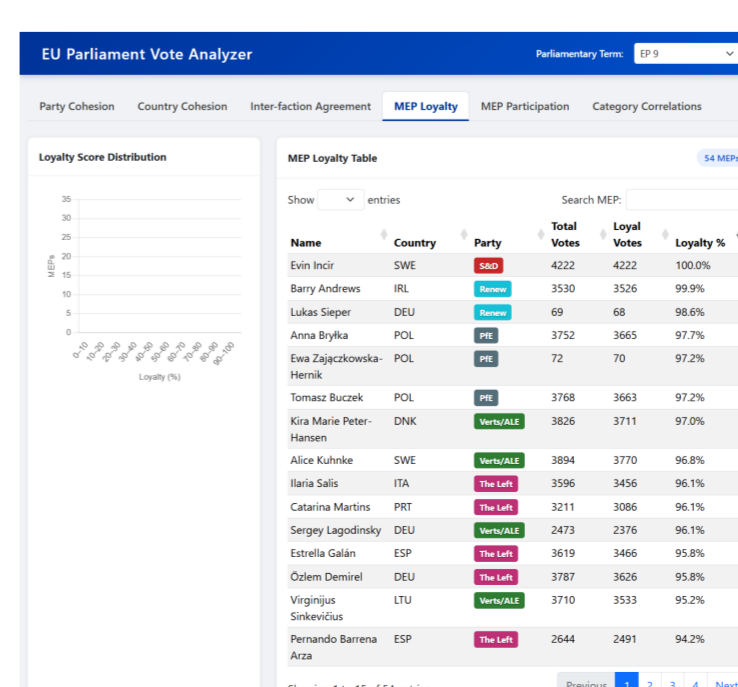


Fig 7. MEP loyalty

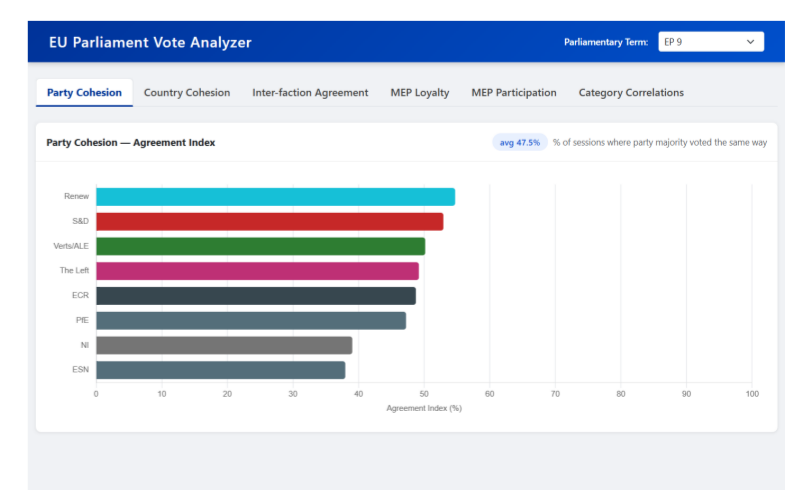


Fig 8. Party cohesion

