DEED (Democratic Erosion Event Dataset) Analysis

Overview
This repository contains R code for analyzing the Democracy Erosion Event Dataset (DEED) and generating figures and tables. The analysis examines democratic erosion events across multiple countries from 2000-2024, comparing them with V-Dem democracy indicators and validating against external data sources.

Project Structure

Main Script
- `NaturePaper_Analysis.R` - Primary analysis script containing all figure generation code

Data Files
- `DEEDv7_Final_20251216.csv` - Main DEED dataset
- `compiled_clean_keepduplicates.xlsx` - Student case study data
- `V-Dem-CY-Full+Others-v15.csv` - V-Dem datast
- `killed.csv` - CPJ data on journalists killed
- `cpj_journalists_imprisoned.csv` - CPJ data on journalists imprisoned

Output Files
The script generates the following figures:
- `DEED_EventCounts_final.png` - Figure 1: Top 5 event categories by type
- `mediaplot_final.png` - Figure 2: Media bias/repression vs V-Dem censorship
- `typecount_byregime_new.png` - Figure 3: Event counts by regime type
- `total_counts_new2025.png` - Figure A1: Annual event counts
- `time_series_nov2025.png` - Figure A2: Regional time series
- `comparisonplot_scfh.png` - Figure A3: Student Case vs Freedom House comparison
- `top5_comparison_scfh.png` - Figure A4: Top 5 categories comparison

Required R Packages

```r
library(tidyverse)
library(ggthemes)
library(dplyr)
library(ggplot2)
library(tidytext)
library(writexl)
library(readxl)
library(patchwork)
```


Dataset Information

DEED Event Types
The dataset categorizes events into four types:
1. **Precursor** - Early warning signs of democratic erosion
2. **Symptom** - Active manifestations of erosion
3. **Resistance** - Civil society and institutional pushback
4. **Destabilizing Event** - Major democratic breakdowns

Key Variables
- `Country` - Country name
- `Year_1` - Event year
- `Type` - Event type (Precursor/Symptom/Resistance/Destabilizing Event)
- `Category` - Specific event category (Media Repression, etc.)
- `FH_year` - Freedom House year (for distinguishing FH vs Student Case data)

Coverage
- **Time Period**: 2000-2024
- **Number of Countries**: Run `num_countries` to see current count
- **Regime Types**: Closed Autocracy, Electoral Autocracy, Electoral Democracy, Liberal Democracy

Analysis Sections

1. Descriptive Statistics

- Total event counts by type
- Country coverage
- Event distribution across years

2. V-Dem Integration
Merges DEED events with V-Dem indicators:
- `v2x_libdem` - Liberal democracy index
- `v2x_polyarchy` - Electoral democracy index
- `v2x_regime` - Regime classification
- `v2mecenefm_ord` - Government censorship effort
- `e_regionpol_6C` - Geographic region

3. CPJ Validation
Compares DEED media repression events with Committee to Protect Journalists (CPJ) data:
- 60\% of country-years with journalists killed/imprisoned have corresponding DEED events
- 36\% of country-years with no CPJ incidents still have DEED media events

4. Media Censorship Analysis
Examines relationship between:
- DEED media bias/repression events
- V-Dem government censorship effort measures

5. Regime Type Comparisons
Analyzes event distribution across regime types:
- Filters out destabilizing events from liberal/electoral democracies
- Compares precursor/symptom/resistance patterns

6. Regional and Temporal Trends
- Annual event counts (2000-2024)
- Regional time series for all V-Dem regions
- Year-over-year patterns

7. Student Case vs Freedom House Comparison
Separates and compares:
- Student case study events (FH_year is NA)
- Freedom House-derived events (FH_year is not NA)