

APART Project

In the Most Unparliamentary Language...

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P A R E N T A L

A D V I S O R Y

EXPLICIT CONTENT

Overview

① What?

- Conceptualisation and theoretical framework

② Why?

- Gaps in the literature and key contributions

③ How?

- Data
- Methods
- Challenges

Conceptualisation

- Increased hostility between US partisans led to creation of concept of '**affective polarisation**' (Iyengar et al. 2012).
- Measures of hostility: prejudice, bias, negative stereotyping etc (e.g. Mason 2018, Kalmoe & Mason 2019).
- 'Affect, Not Ideology': hostility driven by social identities rather than issue disagreement.

The Role of Elites

- Elite-level ideological polarisation seen as major factor behind mass-level AP (Mason 2018; Iyengar et al. 2019)
- But it follows from AP theory that ideological polarisation != affective polarisation. Elites who disagree might not necessarily be hostile to each other.
- Elite polarisation widely studied in terms of issue disagreement (e.g. Levendusky 2010; Lupu 2015 etc) - what about affectively polarised elites?

Elite Hostility: An Example

- **"Language: A Key Mechanism of Control"** (Gingrich 1994) - instructions on how Republicans should describe Democrats.
- Words such as "betray, bizarre, decay, destroy, devour, greed, lie, pathetic, radical, selfish, shame, sick, steal, and traitors".
- Not about policy, but about demonising the opponent.

Measuring Elite Behaviour Through Text Analysis

- Existing literature focused on capturing ideological positioning through parliamentary speeches (e.g. Lauderdale & Herzog 2016; Proksch et al. 2019).
- We focus on capturing **hostility** between elites.
- Better assessment of how elites contribute to mass-level affective polarisation. Can also advance understanding of coalition formation, quality of democracy etc.

Questions We Can Answer

- When do elites turn hostile?
 - When debating particular topics?
 - Closer/further from election time?
 - Economic crises, popularity?
- What parties hate each other the most?

The Pipe

Steps of targeted Sentiment Analysis

- ➊ Parliamentary Speeches (Ireland since 1945)
 - ➋ Pre-processing
 - ➌ Create dictionary of entities
 - ➍ Detect patterns & extract sentences around them
 - ➎ Post-processing
 - ➏ Sentiment Analysis of created windows
 - ➐ Validation (& start over from 2.)
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- ➑ Aggregation to measures

1. The Data

Database of Parliamentary Speeches in Ireland, 1919-2013:

Speeches of the Dáil Éireann, the lower house & principal chamber of Ireland.

- **Scope** 1919 - 2013; Dáil 1-31st; 4,443,713 speeches
- **Subset** since 13th Dáil; 3,802,945 speeches
- **Content** Speech, MP name, Party, Constituency, Title of Session, Date;
- **Source** Harvard Dataverse

2. Pre-processing & 3. Creation Entity Dictionary

2. Pre-processing

- Fairly clean data, removal of comments in brackets

3. Creation of Entities Dictionary

- Dictionary of all MPs and parties per legislative period (via the speaking MPs)
- All *possible and unique* matches per MP

	legper	party_name	originalname	match	alternativematch
56	18	Fianna Fáil	Mr. Thomas J. (Dublin South-Central) Fitzpatrick	Deputy Thomas J. Fitzpatrick	Deputy Thomas Fitzpatrick
57	18	Fine Gael	Mr. Thomas Francis (Unr.) O'Higgins	Deputy Thomas Francis O'Higgins	Deputy Thomas O'Higgins

Figure: Dictionary Example

4. Pattern Detection & 5. Post-processing

4. Pattern Detection

① **KWIC** function from QUANTEDA [R]

- tokenizes speech
- detects matching patterns as tokens
- extracts a window around pattern (+/- 50 tokens)

Output: one window per detected entity in speech

② **Extract sentences** Sentence before match + sentence of match + after match.

5. Post-processing Correcting false positives of KWIC

- speeches by speaker
- misguided KWIC 'as referred to'
- Exclude the pattern itself

KWIC Example

I move: That Dáil Éireann: recognises that:— the two biggest issues in housing are mortgage distress and the lack of social housing and— the current Government has pursued a policy to pass responsibility for providing social housing onto the private sector and has continued to deplete the public housing stock notes that:— one in four mortgage holders in the State is in distress, while tens of thousands more are at risk of distress — 115 mortgage holders are falling into distress every day — Fine Gael and the Labour Party have failed to fully implement the recommendations of the report by the Inter-Departmental Mortgage Arrears Working Group into the mortgage crisis — the Central Bank and the financial institutions are failing to be pro-active — the Personal Insolvency Act 2012 will do little for the vast majority of mortgage holders currently in distress — despite the fact that Sinn Féin and others have, since 2011, called for an independent statutory mortgage distress body to adjudicate and enforce agreements on mortgages between banks and mortgage holders.

6. Sentiment Analysis

Application of sentiment dictionary to sentences of and around match with **SentimentR**. Package accounts for...

- degrees of positivity / negativity
- de-amplifiers
- amplifiers
- valence shifters

7. Validation

Window (KWIC)

- Face validation on window length (long enough to capture sentiment, short enough to be precise).
- Classifying accuracy of matched entities. 200 random windows for each coder.

Sentiment

Contrasting dictionaries against hand-coded negative, neutral, positive windows. 200 random windows per coder.

- LSD vs sentimentR
- Weighted vs unweighted

8. Aggregation to measures

Window DF is basically a weighted edge list and can be aggregated at...

① the **entity level**

- Member of Parliament
- Party
- Government vs. Opposition

② the **relational level**

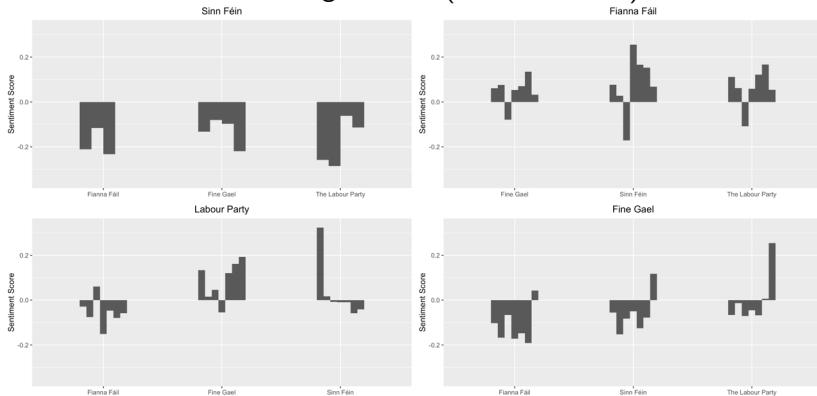
- party dyads (directed)

③ at the **aggregate level** (via AP formula)

- by time frame (e.g. legislative period, year)
- by topic (title of session or via LDA)

Sneak Peak at Data

Directed Inter-party Sentiment Scores across 6 Legislatures (25th-31st Dáil)



Current Challenges

- Validity of **KWIC**
 - validity of the patterns
 - abstention (not-talking
 - 'as referred to by...' issue
 - distortion due to context #window size
- Validity of **Sentiment Analysis**
 - adjusting dictionary

Misleading KWIC Sentiment Analyses

Well...

He is making a very damaging and nasty insinuation which I am sure Deputy Andrews would be the first to contradict.

Sorry, Deputy, but I wish to let Deputy Crowe speak.

I agree with Deputy Rabbinette about questions, but maybe I say too much.

Current Challenges

Thank you for your attention!

Resources I

Herzog, Alexander; Mikhaylov, Slava, 2017, "Database of Parliamentary Speeches in Ireland, 1919-2013", <https://doi.org/10.7910/DVN/6MZN76>, Harvard Dataverse, V2.

Iyengar, S., Sood, G. & Lelkes, Y. (2012) 'Affect, not ideology: A social identity perspective on polarization', *Public Opinion Quarterly*, 76(3), pp. 405–431. doi: 10.1093/poq/nfs038.

Iyengar, S. et al. (2019) 'The Origins and Consequences of Affective Polarization in the United States', *Annual Review of Political Science*, 22(1), pp. 129–146. doi: 10.1146/annurev-polisci-051117-073034.

Resources II

Kalmoe, N., & Mason, L. (2019). Lethal mass partisanship: Prevalence, correlates, and electoral contingencies. Presented at NCAPSA American Politics Meeting.

Lauderdale, B. E. and Herzog, A. (2016) 'Measuring political positions from legislative speech', *Political Analysis*, 24(3), pp. 374–394. doi: 10.1093/pan/mpw017.

Levendusky, M. S. (2010) 'Clearer cues, more consistent voters: A benefit of elite polarization', *Political Behavior*, 32(1), pp. 111–131. doi: 10.1007/s11109-009-9094-0.

Lupu, N. (2015) 'Party Polarization and Mass Partisanship: A Comparative Perspective', *Political Behavior*. Springer US, 37(2), pp. 331–356. doi: 10.1007/s11109-014-9279-z.

Resources III

Mason L. (2018) *Uncivil Agreement: How Politics Became Our Identity*. Chicago: Univ. Chicago Press McCarty.

Proksch, S. O. et al. (2019) 'Multilingual Sentiment Analysis: A New Approach to Measuring Conflict in Legislative Speeches', *Legislative Studies Quarterly*, 44(1), pp. 97–131. doi: 10.1111/lsq.12218.