

Hypodermic needle after all? Individual-level Moderators of Media Framing Effects

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Section 1

Motivation

Media effects - maximal or minimal? I



FAKE RADIO 'WAR' STIRS TERROR THROUGH U.S.



Media effects - maximal or minimal? II

Maximal paradigm also follows from classic work

- attitude instability (Converse 1962; Zaller 1992)
- framing (Nelson, Clawson, and Oxley 1997)
- agenda-setting (McCombs and Shaw 1972)

Media effects - maximal or minimal? III



Minimal effects assumption with increasing media diversity (Bennett and Iyengar 2008):

- media environment more polarised and more diverse,
- viewers more likely to reject news conflicting with their views,
- viewers can opt for other sources.

→ strong effects unlikely

Media effects - maximal or minimal? IV

Evidence seems to support both views:

strong media effects on:

- voting behaviour (Boomgaarden and Vliegenthart 2009; Devine and Murphy 2020; Ladd and Lenz 2009),
- issue agenda (King, Schneer, and White 2017),
- attitudes (Nelson, Clawson, and Oxley 1997; Foos and Bischof 2020)

weak or no effects on:

- voting behaviour (Gentzkow, Shapiro, and Sinkinson 2011),
- issue agenda (Lau, Rogers, and Love 2021),
- attitudes (Guess et al. 2021).

Section 2

Moderators

Towards a theory of conditioning factors

Recently more discussion of moderators

- Mostly based on expectations regarding source:
 - Discounting of biased news (Chiang and Knight 2011)
 - Rejection of partisan takeovers (Spirig 2020)
- facing biased new media outlets doesn't seem to affect citizens (Guess et al. 2021)

Open questions:

- What about outlets currently consumed changing their commentary?
- What about individual-level factors?
 - political knowledge, opinion strength (Zaller 1992)?
 - media diet (Bennett and Iyengar 2008)?
 - partisan identification (Taber and Lodge 2006)?
- Is attitude change a result of changing issue definitions (Ajzen and Fishbein 2000; Nelson, Clawson, and Oxley 1997)?

Section 3

The case

The case

- In fall of 2015, major German tabloid Bild started calling for support for incoming refugees.
- This was a major deviation from the papers' agitative history.

BILD UND "EIN HERZ FÜR KINDER" BITTEN UM GELDSPENDEN

**Helfen Sie den
Flüchtlingskindern!**

Hunderttausende auf der Flucht. Männer, Frauen, Kinder in Not!

2016 onwards the framing changed



Logic of the paper

- I argue this represents a natural experiment to study migration framing,
- allowing to identify the *causal* impact of news framing on:
 - migration opinions,
 - and issue definitions.
- especially interesting case:
 - instead of treatment with a new source (Guess et al. 2021), cue-taking (from the newspaper) can be expected.
 - expectation of change in bias among readers unlikely (Chiang and Knight 2011; Spirig 2020)

→ *strong expectations for framing effect!*

Section 4

Data and research design

The GLES offers a number of possible data sources:

- Longterm-tracking,
 - $N \approx 1000$,
 - four times/year,
 - 2009-17
- Panel,
 - $N > 10,000$,
 - clustered around election

Both regularly contain questions on

- news consumption,
- migration/integration attitudes,
- open-ended MIP.

Treatments and Field Dates I

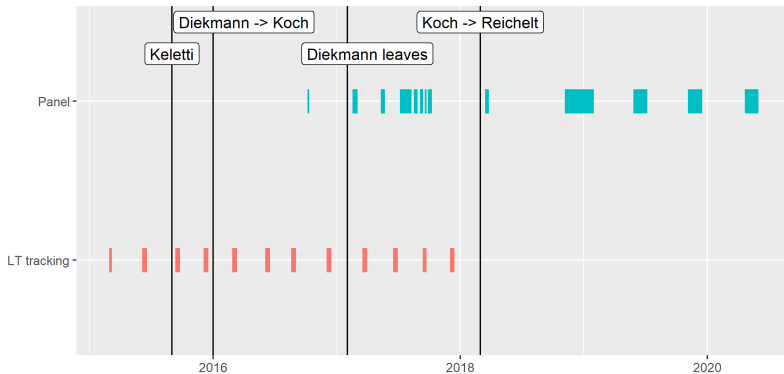
Journalists ascribe change to changing editors. This leaves us with a total of 4 possible treatments:

- ① Summer of 2015
- ② Diekmann replaced as editor-in-chief by Tanit Koch in 2016,
- ③ Diekmann finally left Bild in February 2017,
- ④ Koch replaced by Julian Reichelt in January 2018.

Not entirely clear which treatment is relevant -> assess changing framing in the newspaper!

Treatments and Field Dates II

Treatments and survey field times



Treatment selection

- ① Pre-select migration content with supervised classifier.
- ② Several possible approaches for treatment identification:
 - inductive frame identification (FA/STM)
 - dictionary for frames (humanitarian/crime/...)
 - sentiment towards migration
- ③ Treatment identified where parallel paths diverge

Modelling

Diff-in-Diff:

$$y = \beta_1 * T + \beta_2 * B + \beta_3 * T * B$$

- DVs: migration attitudes & issue definitions
- Additional interactions for individual-level moderators.

Measuring issue definitions

Embedding regression (Rodriguez, Spirling, and Stewart 2020)

- applicable in low-N environments.
- pre-existing word embeddings to understand how different groups communicate about migration.
- assess associations with migration in the MIP answers.

Fin

Thank you for your attention!

Section 5

Appendix

A preliminary effort at sentiment identification I

- identify sentences mentioning terms from migration dictionary.
- estimate sentiment of these sentences with German BERT sentiment classifier (Guhr et al. 2020).
- Trained to classify a variety of German text (wiki, reviews, tweets, ...) into positive, neutral, and negative content

A preliminary effort at sentiment identification II

Migration sentiment across time

Average per quarter, based on BERT estimates of all migration-related sentences



A preliminary effort at sentiment identification III

However, unclear what this really measures:

Hosted inference API ⓘ

🔗 Text Classification

Helfen Sie den Flüchtlingskindern!

Compute

Computation time on cpu: 0.061 s

positive

0.177

negative

0.691

neutral

0.132

Hosted inference API ⓘ

🔗 Text Classification

Asylanträge nehmen uns die Rente weg

Compute

Computation time on cpu: cached

positive

0.021

negative

0.945

neutral

0.034

Hosted inference API ⓘ

🔗 Text Classification

Die schlimmsten Drohungen beim Asylarzt

Compute

Computation time on cpu: 0.055 s

positive

0.020

negative

0.750

neutral

0.230

Hosted inference API ⓘ

🔗 Text Classification

Mehrere Asylbewerber wegen sexueller Belästigung angeklagt

Compute

Computation time on cpu: 0.066 s

positive

0.086

negative

0.098

neutral

0.896

A preliminary effort at sentiment identification IV

Takeaways:

- wait for supervised coding.
- focus on specific frames.
- measure association.

Section 6

Resources

Resources I

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Resources IV

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Resources V

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