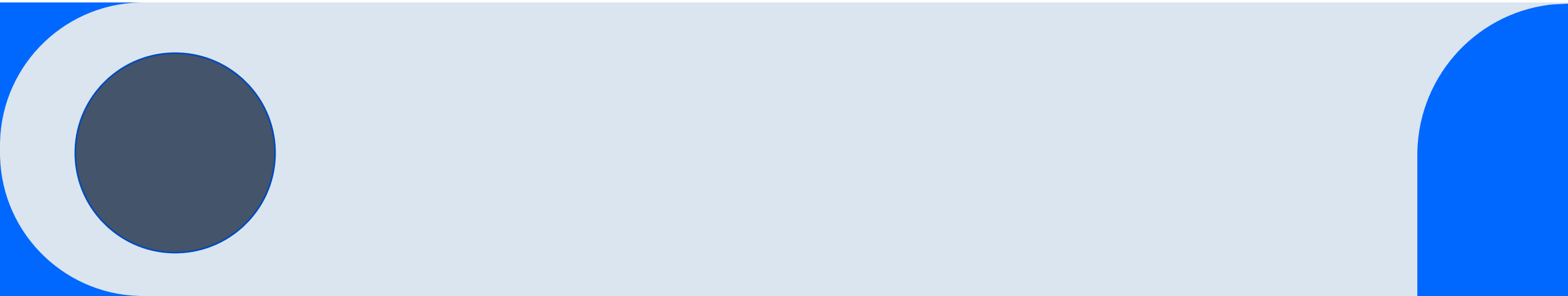# Lecture 3: Opinion research with a language focus

Linguistics, NLP, and Political Communication, ESSLLI 2025, Bochum

Asad Sayeed and Ellen Breitholtz

Empirical research into human expression

- Who are the subjects?

- What kind of data is being obtained?

- What is the relation of the researcher to the subject?

- What is the standard of evidence/process of analysis?

"Traditional" linguistic theory

- Data collected from: researchers themselves, carefully selected expert informants.

- Type of data collected: grammaticality/acceptability judgements.

- Relation of researcher to the subject: is the subject (or knows them well).

- Evidence/analysis: formal analysis + "trust me bro"

Psycholinguistic research

- Data collected from: controlled subject population relative to a linguistic behavioural phenomenon.

- Type of data collected: behavioural and physiological over a number of subjects.

- Relation of researcher to the subject: incidental, to be controlled for.

- Evidence/analysis: experimental control, normed stimuli, hypothesis testing.

Sociolinguistic research

- Data collected from: target populations/demographics relative to a phenomenon of sociolinguistic interest.

- Type of data collected: "textual" content, demographic data, behavioural data.

- Relation of researcher to the subject: researcher may be inadvertently part of the social dynamic affecting the subjects.

- Evidence/analysis: qualitative, quantitative. Acceptance of subjectivity.

NLP research (current)

- Data collected from: Everything Everywhere All At Once

- Type of data collected: "textual" content, construed broadly.

- Relation of researcher to the subject: who cares?

- Evidence/analysis: (accuracy) number go up.
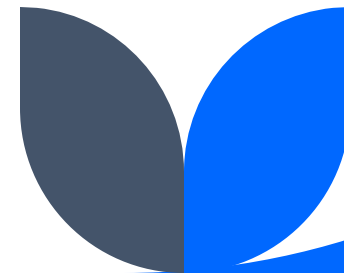
Political communications research

- Data collected from: target populations/demographics relative to a phenomenon of political interest.

- Type of data collected: "textual" content, demographic data, behavioural data.

- Relation of researcher to the subject: researcher **may have a "vested interest" in the behaviour of the subject.**

- Evidence/analysis: qualitative, quantitative. **Very high objectivity expectation.**

What kinds of questions do PolComm researchers ask?

- What policies to people support?

- Why do people vote how they do?

- What causes them to change opinion?

- How motivated are people by well-known ideologies?

- ...
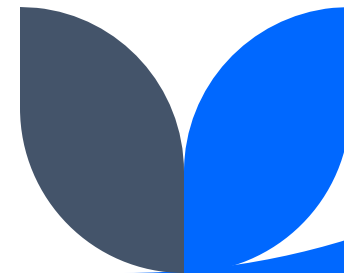
Methods

- Diverse:
  - Surveys – easy, "cheap".
  - Media analysis – qualitative, expensive.
  - Controlled experiments – difficult but not impossible.

Causal inference

- Social phenomena are complex. How do we know what causes what?

Causal inference

Steps of scientific method:

- Find a (statistical) relationship.
  - Fox news voters vote Republican.

- Consider (conceptually) a possible causal relationship.
  - Fox news *makes* them vote Republican -> consider reverse causality.

Causal inference

- Identify confounding factors and sources of .
  - Maybe Fox News-watching Republicans come from the same demographics?

- Address causal mechanisms
  - Susceptibility to messaging etc?

Causal inference

- Can be applied over many different study modalities – but to varying degree of difficulty.

- Naturally most obviously applied to highly quantified and controlled conditions.

- And what is the most obvious quantified and controlled modality?

Opinion surveys!

Empirical Methods in Political Science: An Introduction
Jean Clipperton, et al. (2022)
https://nulib-oer.github.io/empirical-methods-polisci/

# Advantages and disadvantages: surveys

Advantages

- Get quantitative data quickly.
  - Coding interviews (e.g.) is time consuming!
- (Seemingly) simple to design and administer.
- Easy to apply statistical analysis tools.

Disadvantages

- Respondent fatigue.
- Question wording and order effects.
- Limited human memory.
- Incentives (esp. for paid surveys via e.g. MTurk)
- Biases (social desirability, non-response).
- Intercoder reliability issues.
- Sampling/coverage issues.

Survey design

1. Conceptualization:
   - Identify variables of interest.
   - Define your terms.
   - Preliminary hypothesis of causality.
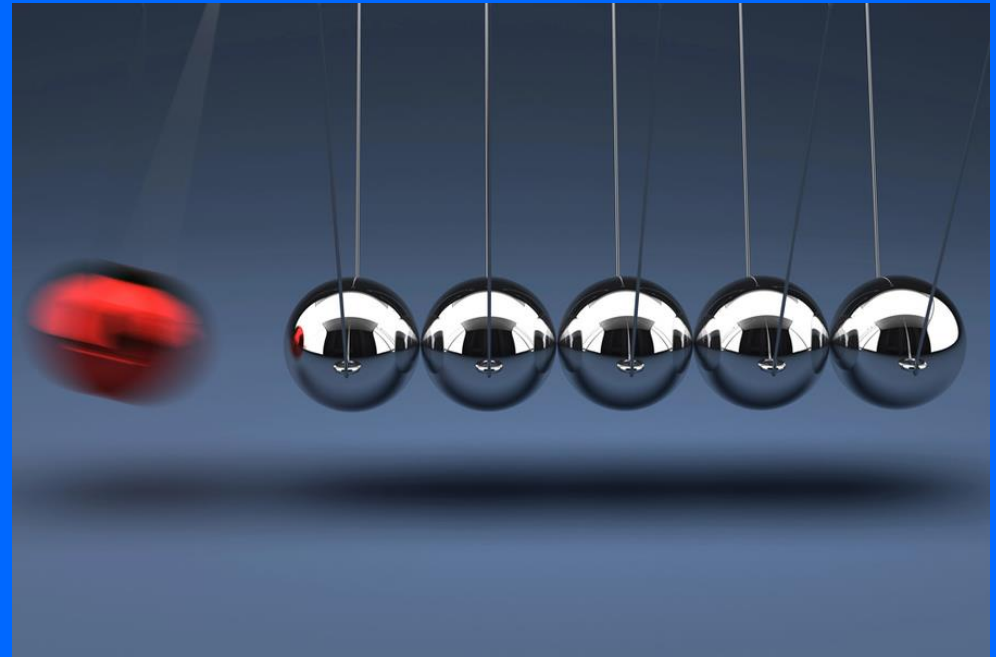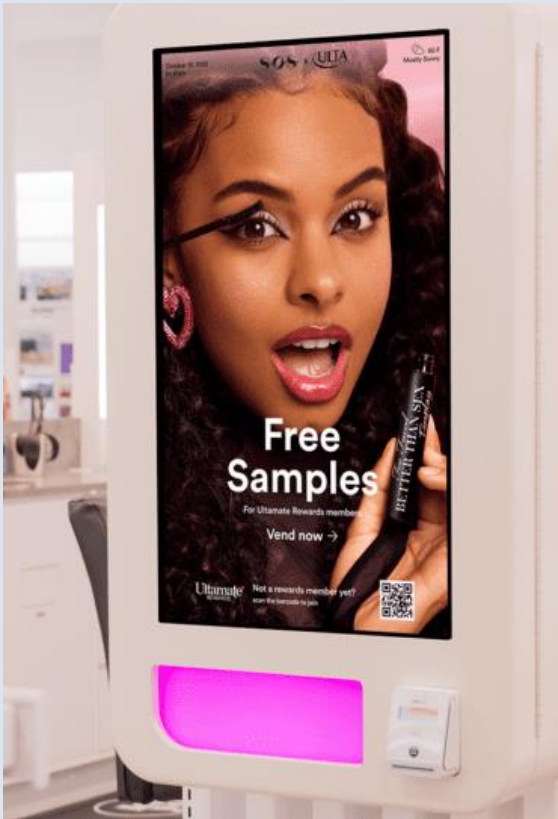
Survey design

Operationalization:

- Identify the empirically measurable aspects of your variable of interest.

Survey design

Question design

- Consider understandability, clarity, answerability.

- Avoid leading questions

- Consider where you ask socially sensitive question (e.g., save them for the end).

Sampling

Many options with pros and cons, e.g.:

- Simple random sampling.

- Stratified sampling –
  ensure demographic representation.

- Convenience sampling.

Fielding

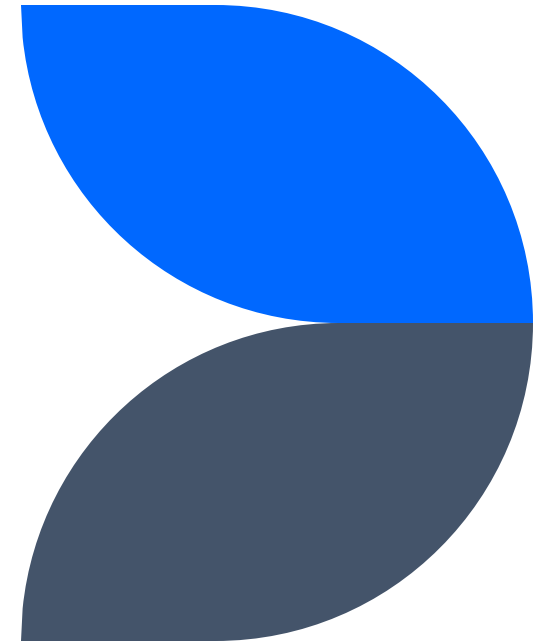- Face-to-face
- Telephone
- Online
- (Mail?)

A note on analysis

Once you have survey data, then you apply **hypothesis testing**.

- This is a whole other course (!).
- Regressions, significance tests.
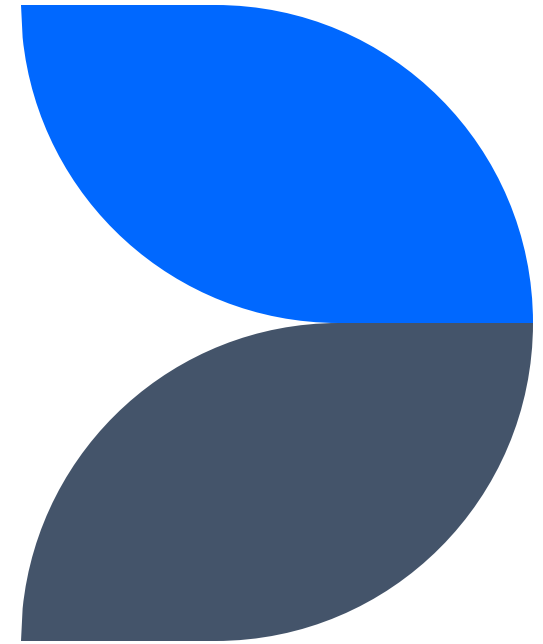
Sidney Sweeney

(Back to the important things.)

Genes/Jeans

DOD Rapid Response ✓ ⊕
@DODResponse

. @secdef has great jeans

Last edited 3:27 PM · 8/4/25 · 900K Views

Sidney Sweeney Activity – 20 mins

- Form groups of 4-6. Pick leader/secretary.
- Identify potential questions regarding public opinion and the jeans ad:
  - e.g. Effects, targeted demographics, etc.
- Identify populations of interest, variables of interest, causal hypothesis.
- Write down survey questions that reflect your hypothesis, keeping in mind survey design issues.
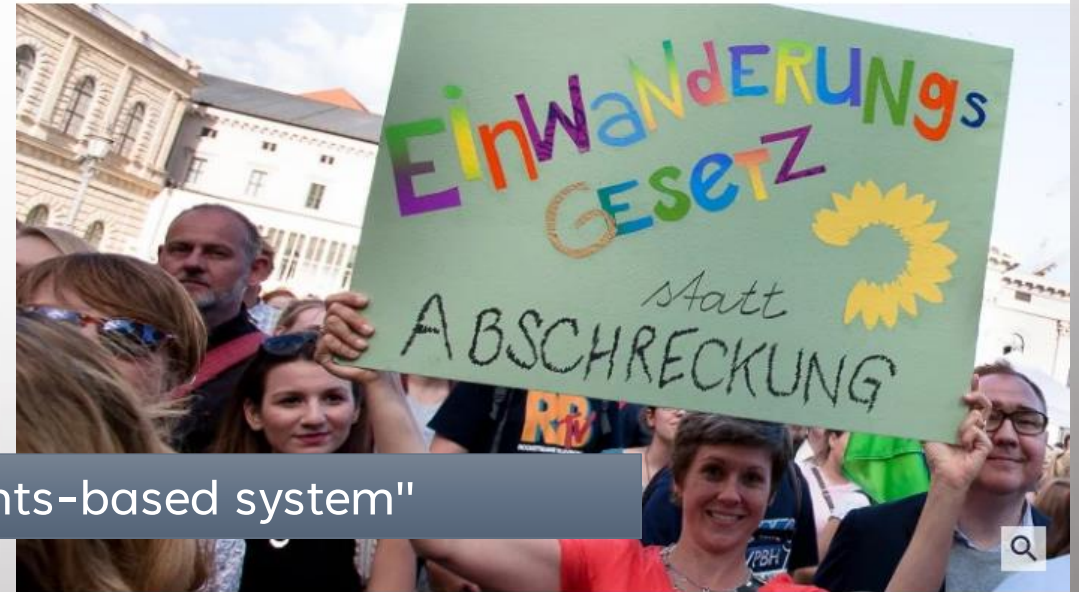- Tomorrow: 2-3 min verbal presentations from groups.

Political language

Die Welt, 2013

Süddeutsche Zeitung, 2016

6. November 2016, 15:55 Uhr   Gesteuerte Zuwanderung

SPD will Einwanderungsgesetz nach kanadischem Vorbild

Auf dem Münchner Max-Joseph-Platz fordern Demonstrierende ein Einwanderungsgesetz. (Foto: Florian Peljak)

Geregelte Zuwanderung à la Kanada

Für ganz Europa dringt die Partei auf ein einheitliches Einwanderungsgesetz nach kanadischem Vorbild. Ziel der AfD ist die Zuwanderung von qualifizierten Fachkräften. Das kanadische Punkte-Modell funktioniert so: Je höher die Qualifikationen und Sprachkenntnisse des Einwanderers, desto mehr Punkte bekommt er.

Nur wer eine bestimmte Punktzahl erreicht, hat überhaupt die Chance einzuwandern. Wie das Zuwanderungsmodell der AfD genau aussehen könnte, ist offen. Übrigens ist auch die FDP für ein Punktesystem.

"Canadian-style points-based system"

- Die SPD will noch vor der Bundestagswahl 2017 ein Einwanderungsgesetz beschließen.

- Am Montag stellt sie ihren Entwurf vor. Er sieht ein Punktesystem nach kanadischem Vorbild vor.
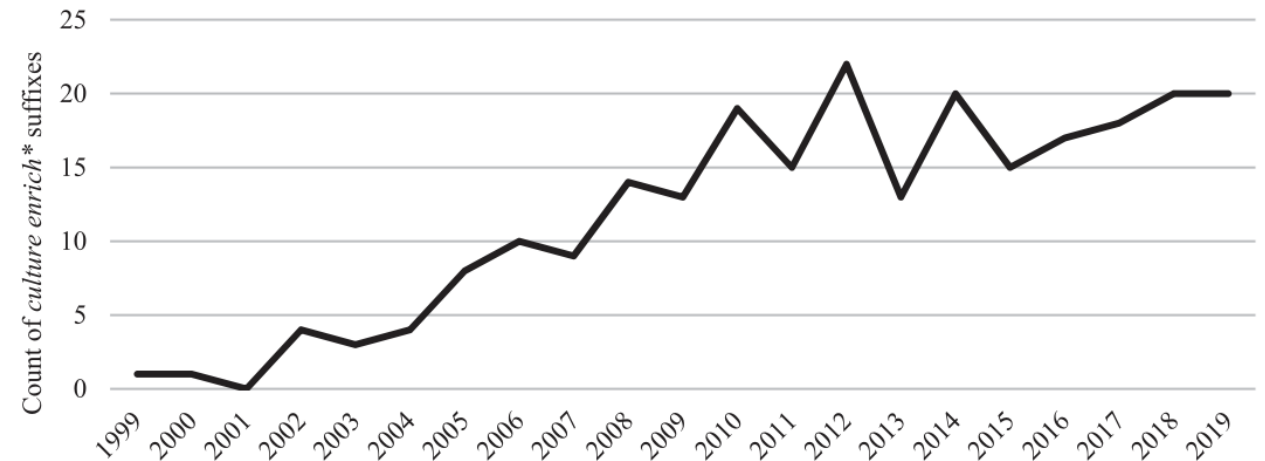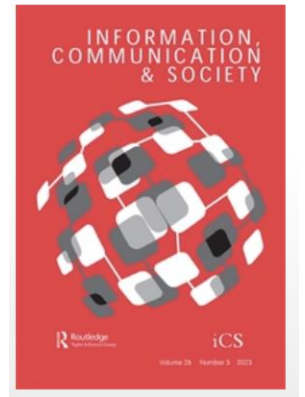
Dogwhistles and "Adversarial" Vagueness
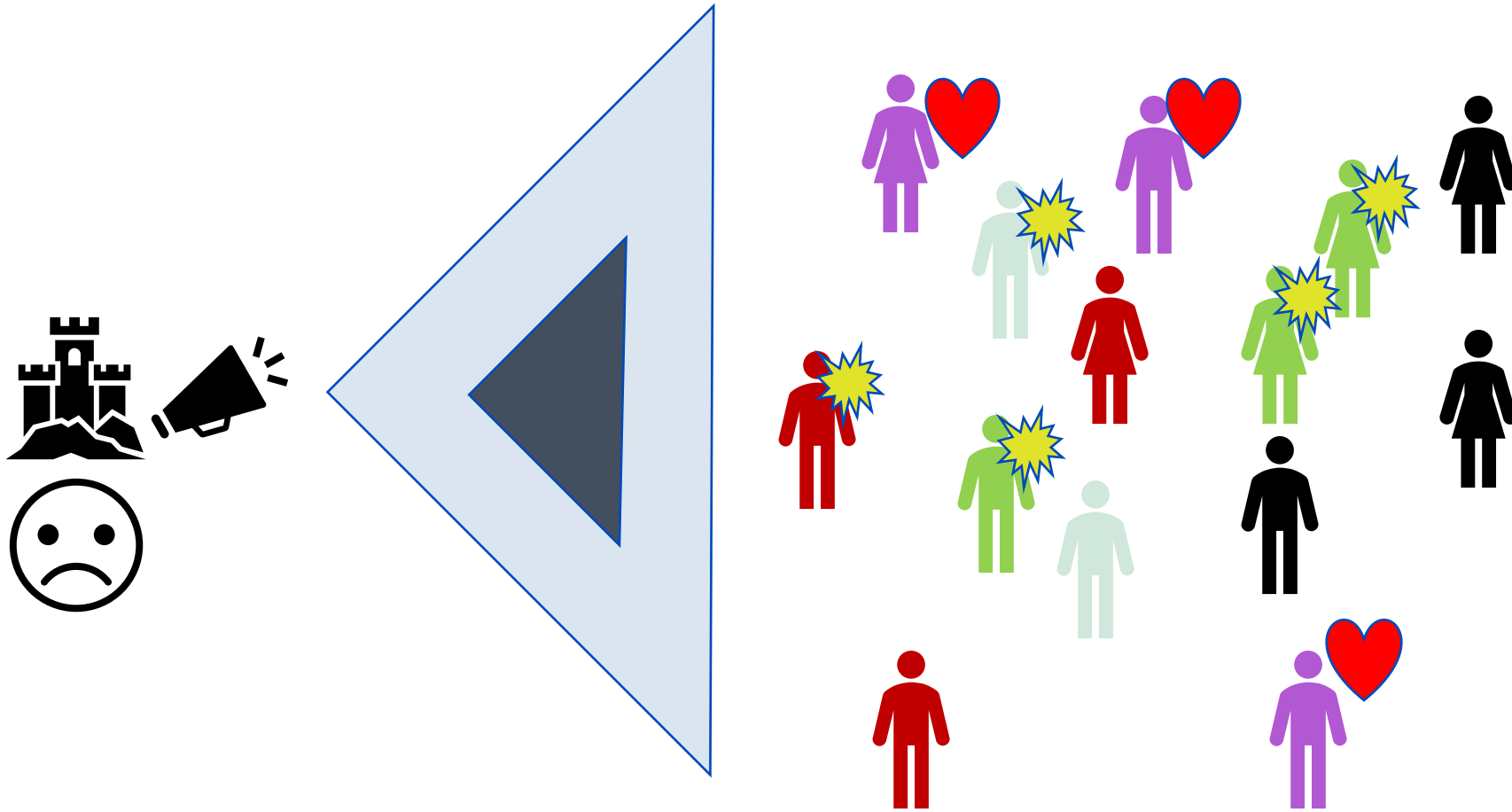
Dogwhistles and "Adversarial" vagueness
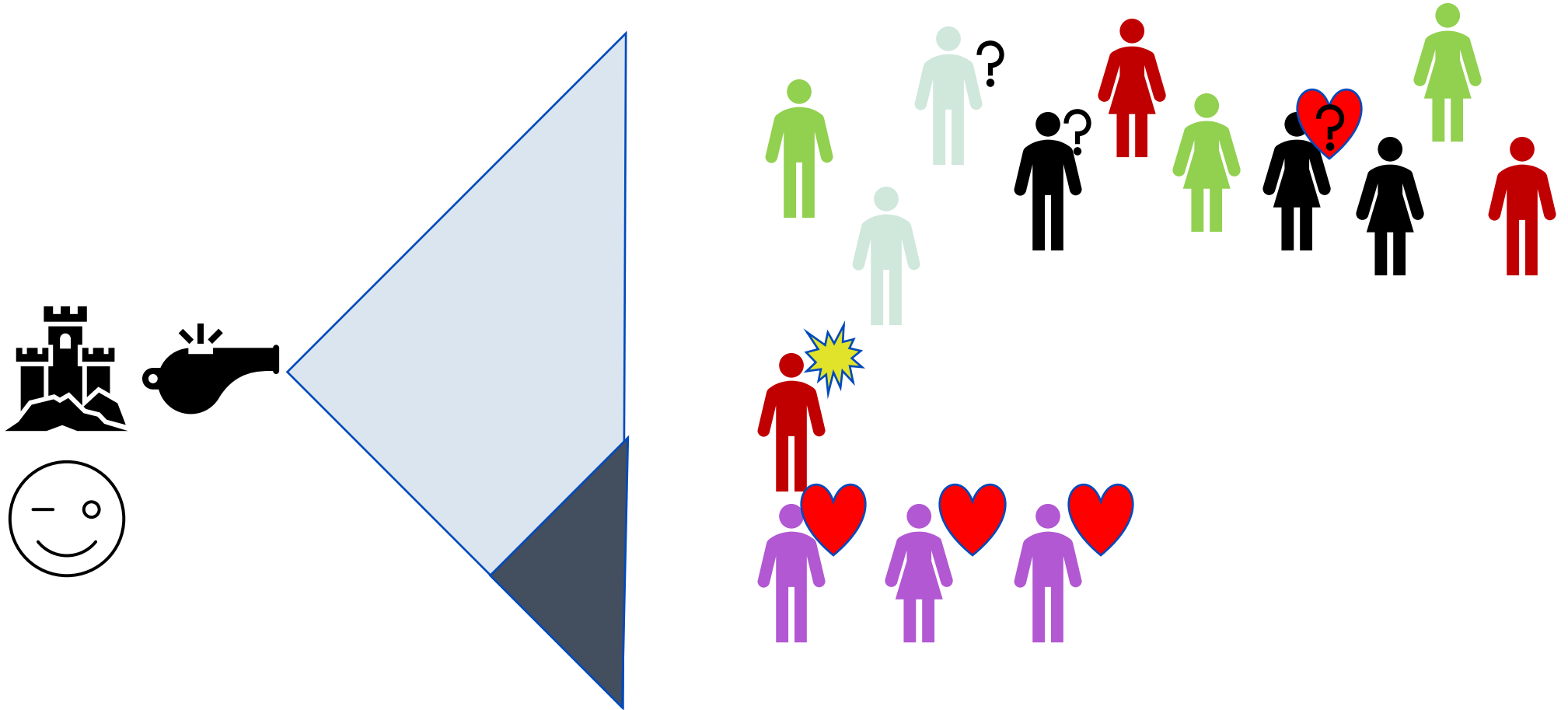
"Det räcker med att öppna en tidning för att få exempel på hur invandrare **berikar** Sverige"

(You only have to open a newspaper to get examples of how immigrants **enrich** Sweden.)

Articles

Dog whistling far-right code words: the case of 'culture enricher' on the Swedish web

Mathilda Åkerlund ✉

Word replacement study

Technique from psycholinguistics.

Applied through Swedish Citizens' Panel (*Medborgarpanelen*) with the efforts of GRIPES members Björn Rönnerstrand, Elina Lindgren.

Lets people reveal who "gets" the dogwhistle.

Responses associated with political affiliation

Survey of Citizens' Panel respondents

Läs meningen nedan och byt ut det markerade ordet till ett eller flera ord så att meningens budskap förblir ungefär detsamma. (read the sentence below and exchange the bolded word to one or more words so that the sentence's message stays approximately the same)

*"**Återvandring** lyfts fram som ett sätt att motverka de problem som migrationen skapar." (**Remigration** is highlighted as a way of resolving the problems that migration causes.)*

Medborgar- panelen
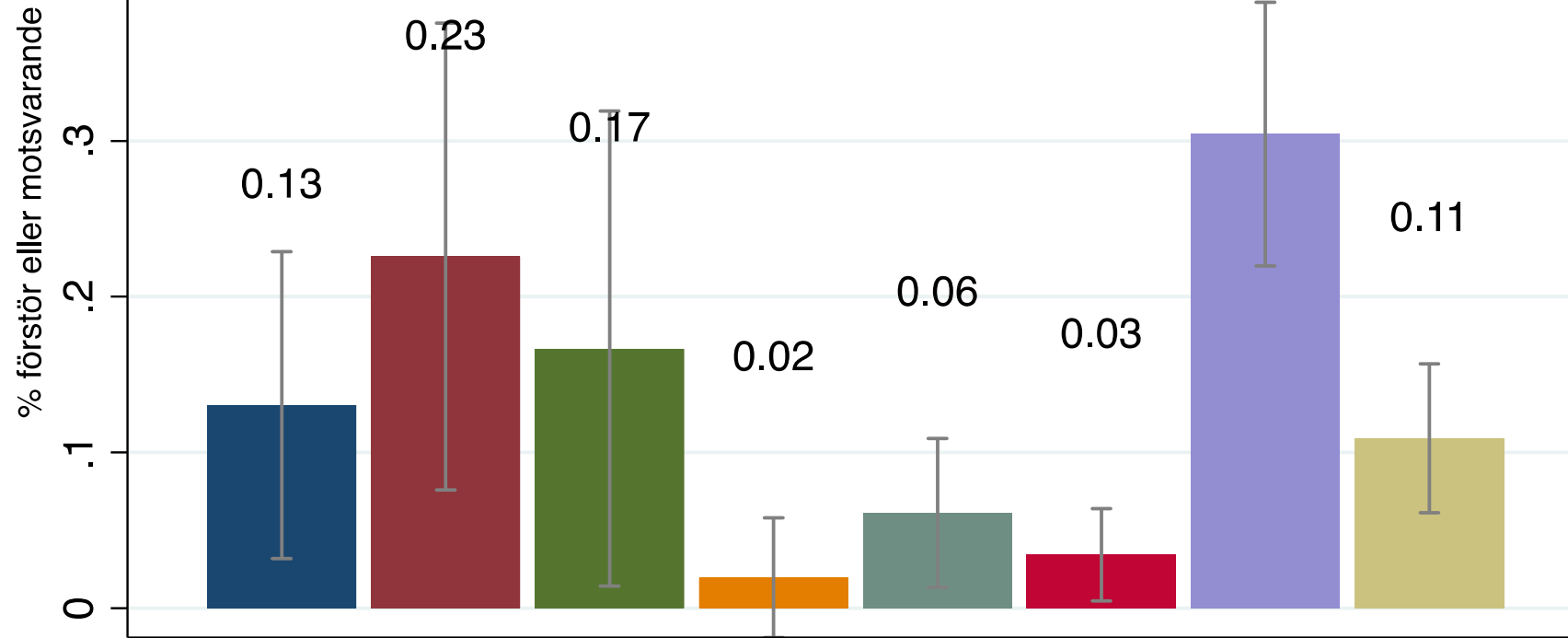
Answers are coded manually by members of GRIPES:
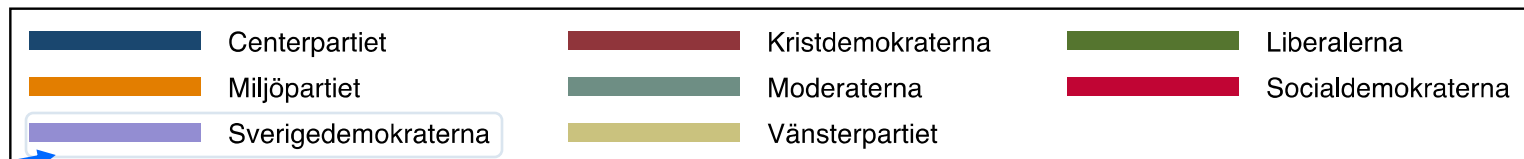0= explicit meaning
1= implicit meaning

"Det räcker med att öppna en tidning för att få exempel på hur invandrare **berikar** Sverige" (You only have to open a newspaper to see examples of how immigrants **enrich** Sweden.)
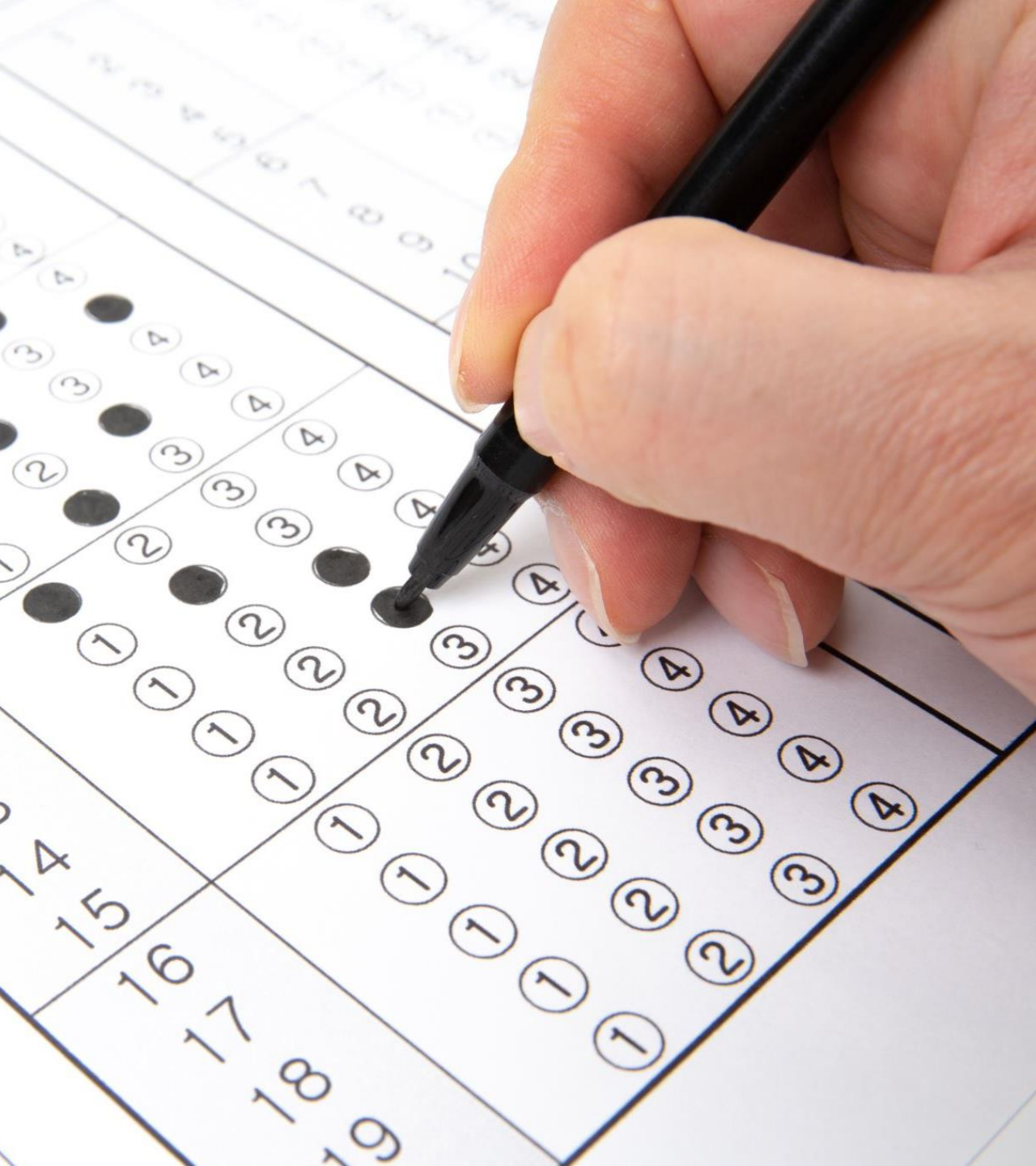
But does it affect Political Behaviour?

HYPOTHESES

Politician uses a dogwhistle (and not explicit message) ⇨

Overall support from public ↑ (H1)

Overall support form outgroup ↑ (H2)

Overall support from ingroup unchanged (H3)

Support operationalized as voting, donations, social media likes, etc.

Political posts: Dogwhistle vs explicit payload message

| Explicit payload message	Dogwhistle
"Shootings and bombings in the streets must be stopped. Strong action is needed against criminal immigrant gangs."	"Shootings and bombings in the streets must be stopped. Strong action is needed against criminal suburban gangs."
"It is enough to open a newspaper to get examples of how immigrants destroy Sweden."	"It is enough to open a newspaper to get examples of how immigrants enrich Sweden."
"The chaos during the refugee influx in 2015 must not be repeated. It's time to restrict the refugee policy!"	"The chaos during the refugee influx in 2015 must not be repeated. It's time for good order in the refugee policy!"
"The integration in Sweden is not working. More deportation of refugees is required."	"The integration in Sweden is not working. More re-migration is required."

Vote intention on likert scale (1-7)
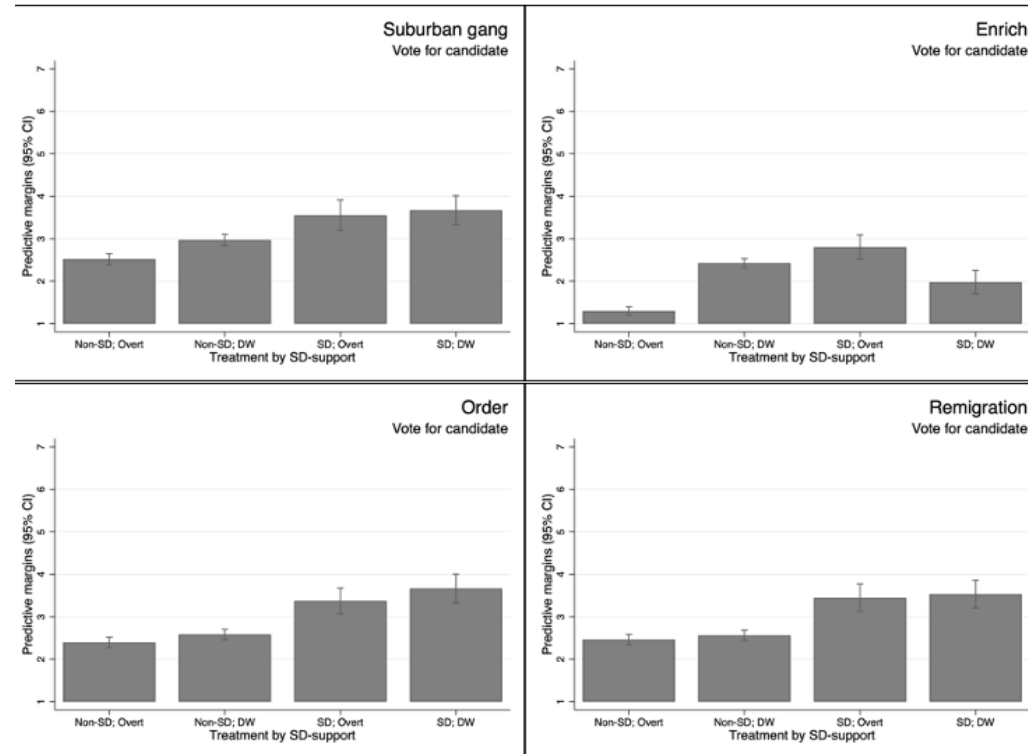
Study characteristics and outcomes

Preregistered analysis.

Experiment performed via Swedish Citizens' Panel (1948 respondents).

For voting intention:

- H1 supported in ¾ cases (public more willing to vote for far-right politician in dogwhistle case)
- H2 supported in ¾ cases (out-group more willing to vote for far-right politician in dogwhistle case)
- H3 supported in ¾ cases (in-groups are not affected by dogwhistle vs. explicit message)

The missing dogwhistle is not the same in each case!
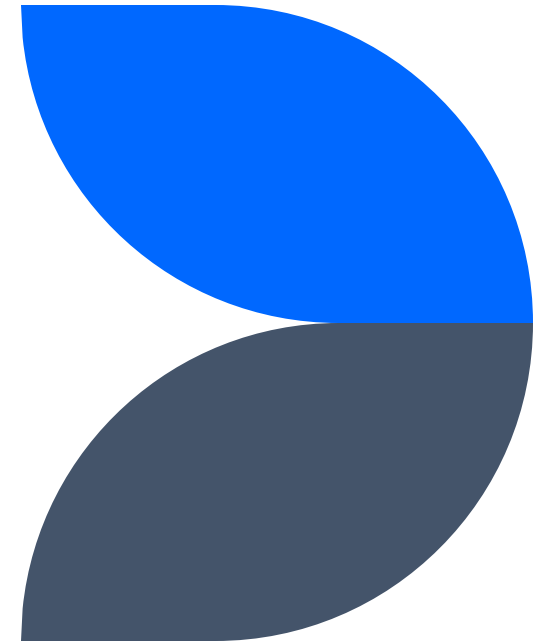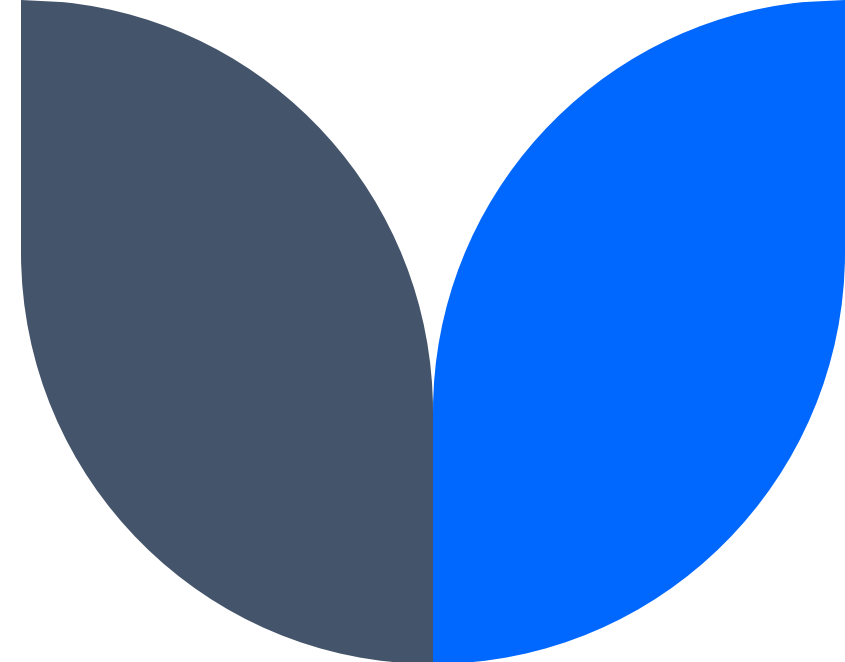
Linguistics and opinion research

Deceptive language

Linguistic approach

Access to political outcomes

But where does opinionated language "come from"?

And how do we get access to it?

Lindgren, E., Rönnerstrand, B., Rettenegger, G., Breitholtz, E., Cooper, R., & Sayeed, A. (2024). Coded Appeals and Political Gains: Exploring the Impact of Racial Dogwhistles on Political Support. *Journalism & Mass Communication Quarterly*, *0*(0). https://doi.org/10.1177/10776990241280373