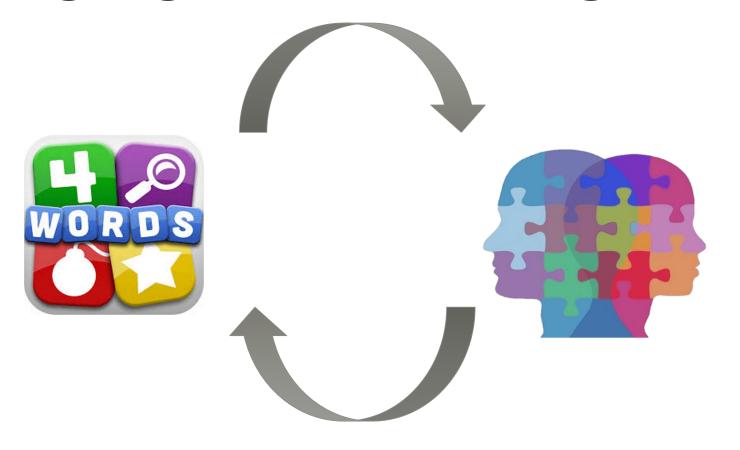# Language and social cognition

https://gsr-lab.com/

The Grammar of Social Relations Lab

SERIAL TRANSMISSION PARADIGM (LYONS & KASHIMA, 2003)

describe more behaviors that are consistent,
versus inconsistent, with stereotypes

CATE IS ITALIAN. SHE IS LOVES SHARING FOOD WITH FRIENDS, SHE DOES NOT LIKE NOISE.

CATE IS ITALIAN. SHE COOKS FOR HER FRIENDS, TYPICALLY PIZZA OR SPAGHETTI. SHE IS VERY WARM AND AFFECTIONATE. SHE IS OUTGOING AND EXPRESSIVE.

THREE METAPHORS OF LANGUAGE

- **VESSEL** in which thoughts are encapsulated and transmitted from one mind to another

- **LENS** which focuses cognition on certain aspects of the world and away from others

- **BAROMETER** reveals a communicator's cognition to the audience

LINGUISTIC ABSTRACTION

Linguistic Category Model (Semin & Fiedler, 1988); Nouns (Carnaghi et al. 2008)

ABSTRACT

Nouns

Adjectives
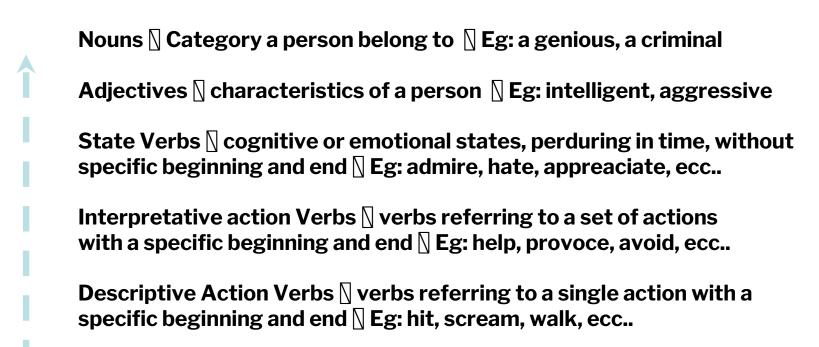
State Verbs

Interpretative action Verbs

Descriptive Action Verbs

CONCRETE

LINGUISTIC ABSTRACTION

Linguistic Category Model (Semin & Fiedler, 1988); Nouns (Carnaghi et al. 2008)

Nouns   Category a person belong to   Eg: a genious, a criminal

Adjectives   characteristics of a person   Eg: intelligent, aggressive

State Verbs   cognitive or emotional states, perduring in time, without specific beginning and end   Eg: admire, hate, appreaciate, ecc..

Interpretative action Verbs   verbs referring to a set of actions with a specific beginning and end   Eg: help, provoce, avoid, ecc..

Descriptive Action Verbs   verbs referring to a single action with a specific beginning and end   Eg: hit, scream, walk, ecc..

LINGUISTIC INTERGROUP BIAS (Maass, 1999)

Abstraction -> focus to stability

+ve ingroup   behaviors   &   –ve outgroup behaviors

If communicators use abstract language to describe a person˙s negative behavior and concrete language for their positive behavior, they are also seen as having negative attitudes and intentions (Douglas & Sutton, 2006)

generalization of positive behaviors to the entire ingroup

generalization of negative behaviors to the entire outgroup

Nouns (vs. adjectives)
Carnaghi et al. 2008

- Promote essentialization
- facilitate stereotype-congruent inferences
- inhibit incongruent ones
- Inhibit alternative classifications.
- Transmit prejudice

Reynaert and Gelman (2007)
he has baxtermia", "he is baxtermic", "he is a baxtermic"
Illness permanence----------------------------------

Agency
a core dimension of human functioning

- goal-orientation and the ability to plan and execute goal achievement (Bakan, 1966; Bandura, 2001; Abele & Wojciszke, 2014).

- close to "competence" dimension of stereotype content (competence in the STM)_ one of the Big Two (Abele, 2021)

- ->well-being (e.g., Adler et al., in press; Helgeson, 1994; McAdams et al, 1996; Woike & Polo, 2001).
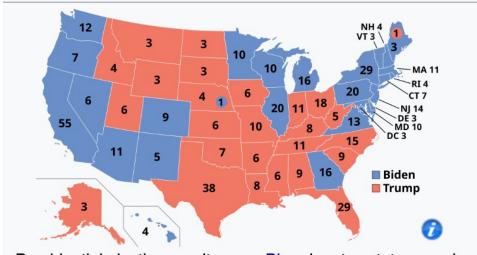
Agency
a core dimension of human functioning

- "socioculturally mediated capacity to act" (Ahearn, 2001; p. 112)
- Essential component of a **group** functioning:
  - *collective agency (Shteynberg et al., 2021) as shared subjectivity that is directed toward some object of our attention, desire, emotion, belief, or action.*
  - *collective action agentic language can mobilize voters (Formanowicz et al., 2021; 2024)*

Agency as a mobilizing language

2020 United States presidential election

November 3, 2020[a]

538 members of the Electoral College
270 electoral votes needed to win

Opinion polls

Turnout	66.6% (▲ 6.5 pp)[b]

	Joe Biden	Donald Trump
Nominee	**Joe Biden**	Donald Trump
Party	Democratic	Republican

Electoral vote	306	232
States carried	25 + DC + NE-02	25 + ME-02
Popular vote	81,283,501[1]	74,223,975[1]
Percentage	51.3%[1]	46.8%[1]

Presidential election results map. Blue denotes states won by Biden/Harris and red denotes those won by Trump/Pence. Numbers indicate electoral votes cast by each state and the District of Columbia.

DONALD J. TRUMP
@realDonaldTrump
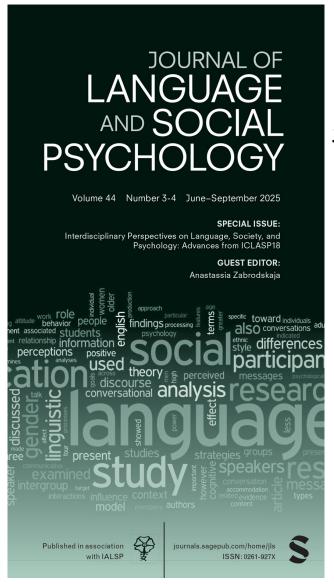
Peter Navarro releases 36-page report alleging election fraud 'more than sufficient' to swing victory to Trump washex.am/3nwaBCe. A great report by Peter. Statistically impossible to have lost the 2020 Election. Big protest in D.C. on January 6th. Be there, will be wild!

1:42 AM   December 19, 2020

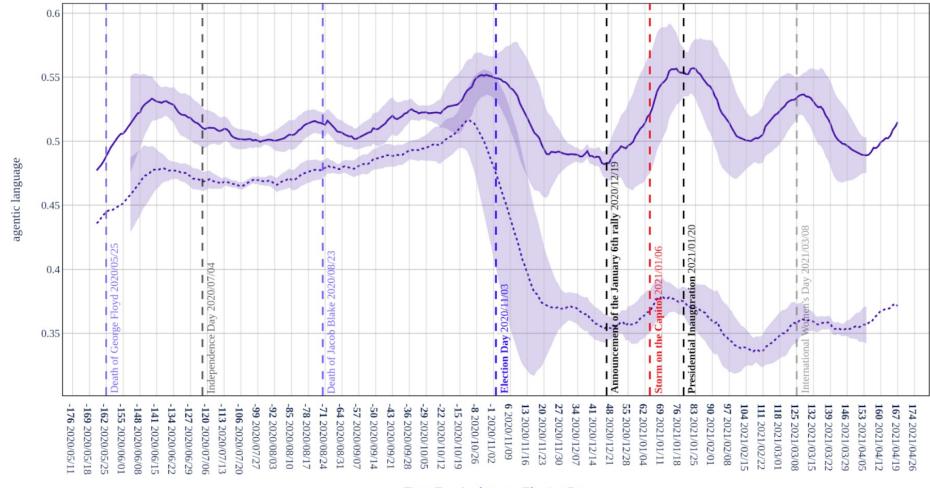"Statistically impossible to have lost the 2020 Election. Big protest in D.C. on January 6th. Be there, will be wild!")

The Role of Agentic Language in Mobilizing Election Candidate Support

Jan Nikadon[1,2], Caterina Suitner[3], Tomaso Erseghe[4], Lejla Džanko[1,4], Michał Olech[5], Paweł Jurek[6], and Magdalena Formanowicz[1]

- 2020 U.S. Congressional Elections, spanning 180 days before and after Election Day, and before the Capitol Hill riots.
- 495,252 messages posted by Democratic and Republican candidates on Twitter
- Agentic language

Nikadon, Jan, et al. "BERTAgent: The development of a novel tool to quantify agency in textual data." *Journal of Experimental Psychology: General* (2025).

In sum...

Greater agency was observed in tweets by **politicians who won elections**.
Temporal analysis showed **increased agency** leading up to key political events:
- Planned events (e.g., **Election Day**)
- Sudden disruptions (e.g., **Capitol riots**)

Understanding the **dynamics of agency** helps clarify its role in **political communication on social media**.

Riot Like a Girl? Gender-Stereotypical Associations Boost Support for Feminist Online Campaigns

Marta Witkowska[1] · Marta Beneda[2] · Jan Nikadon[1] · Caterina Suitner[3] · Bruno Gabriel Salvador Casara[2] · Magdalena Formanowicz[1]

Feminist collective actio

Agency trap: AGENCY is central for CA but violates prescriptive norms of being nice and nurturing, which could lead to social derogation (Radke et al., 2016).
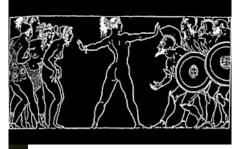
GOAL: examining the degree to which social support for feminist collective action varies in relation to violations of gender stereotypes and of agency dynamic

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NOT ALL CALLS ARE EQUAL!

❖Increase public awareness & share their stories (e.g., #YesAllWomen, #WhyIStayed, #SayHerName, #BeenRapedNeverReported, #MeToo)

❖Active resistance (e.g., #SexStrike, #IWillGoOut, #CzarnyProtest, #SlutWalk);

ORIGINAL ARTICLE

Riot Like a Girl? Gender-Stereotypical Associations Boost Support for Feminist Online Campaigns

Marta Witkowska[1] · Marta Beneda[2] · Jan Nikadon[1] · Caterina Suitner[3] · Bruno Gabriel Salvador Casara[2] · Magdalena Formanowicz[1]

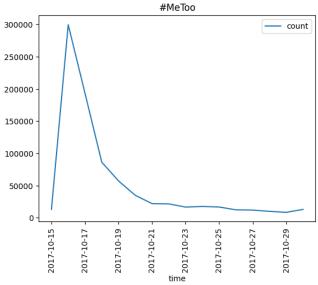## Study 1 (subsample 482,000 tweets)

#sexstrike and #metoo

-> less communal and more agentic (Pietraszkiewicz et al., 2019)

-> less popular (28.000 vs. 38 million)

Temporal analysis:
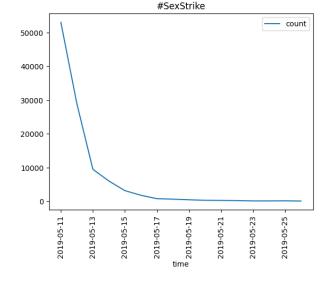# data was collected two weeks after the first use of hashtag/the movement gaining prominence

#MeToo

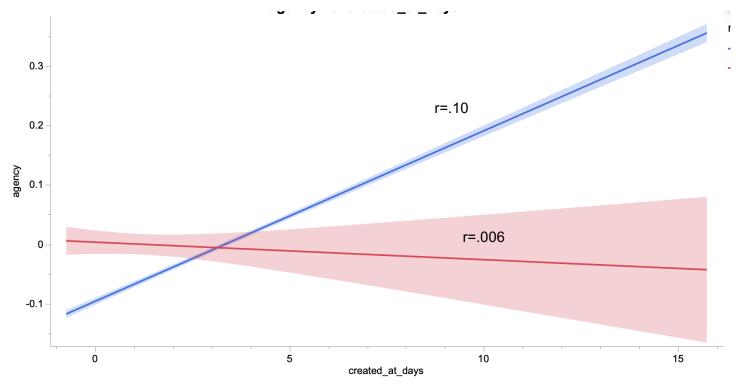#SexStrike

- Dates: 16.10.2017-30.10.2017
- Total tweet count: 833,049

- Dates: 11.05.2019-26.05.2019
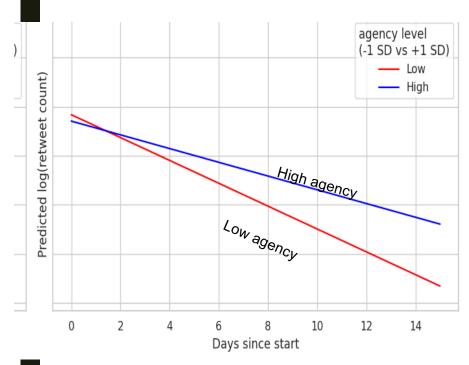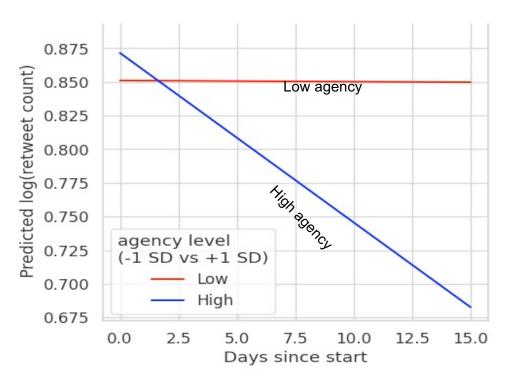- Total tweet count: 105,259

Temporal analysis: AGENCY

r=.10

r=.006

Temporal analysis: RETWEET COUNT

Verbs as carriers of AGENCY

- Pseudo-Verbs are perceived as more agentic

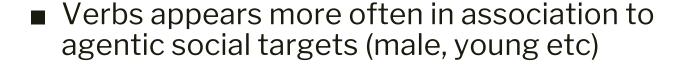- Verbs appears more often in association to agentic social targets (male, young etc)

- Verbs enhance persuasiveness of a message

Research suggests that verbs are linguistic markers of agency, a fundamental dimension in social perception.

- Studies have found that verbs are associated with higher agency compared to other grammatical categories like nouns and adjectives (Formanowicz et al., 2017; Pietraszkiewicz & Formanowicz, 2023; Weis et al., 2022).

- This association extends to natural language use, with verb usage positively correlating with agentic word use (Pietraszkiewicz & Formanowicz, 2023).

- Furthermore, verbs demonstrate a stronger implicit association with the self compared to nouns, suggesting a triad between self, agency, and verbs (Weis et al., 2022).

- The agency-verb link has practical implications for communication effectiveness. Messages framed using verbs rather than adjectives have been found to increase message effectiveness across various contexts, including NGO corporate campaigns and trigger action orientation (Formanowicz et al., 2021; 2025).

- Verbs and concrete langauge are associated with authors and readers perceptions of texts' persuasiveness (Formanowicz eta al., 2024)

These findings highlight the meta-semantic effects of verbs and underscore the importance of grammatical choices in social cognition and communication outcomes.

Generic masculine

- linguistic convention in English has long had it that masculine terms such as "man", "his", and the collective noun "Man", can be used without reference to gender.

- *fireman*

- *native language* rather than *mother tongue, police officers* rather than *policemen, humans* rather than *men* to refer to human beings)
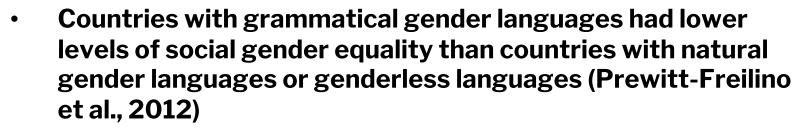
Generic masculine

- masculine generic inhibits the availability of female examplars (Stahlberg et al., 2007).

- the ratio of male to female pronouns reflected the status of women in the United States (1.2 million U.S. books, 1900–2008; Google Books database; Twenge et al., 2012)

- Countries with grammatical gender languages had lower levels of social gender equality than countries with natural gender languages or genderless languages (Prewitt-Freilino et al., 2012)

- participants with modern sexist beliefs were found to use more traditional, gender-unfair language (Swim et al., 2004).

STOP

DEROGATORY LABELS:
FAG IS NOT A SYNONYMOUS OF GAY

"the overhearing of derogatory labels would automatically activate negative feelings and beliefs associated with the group in question" (Greenberg and Pyszczynski, 1985, p.156)

people may infer that prejudice is normative when they hear others using hate terms.

-> self-perpetuating cycle of prejudice

REAPPROPRIATION OF DEROGATORY LABELS

Galinsky, Hugenberg, Groom, & Bodenhausen, 2003
a stigmatized group has the possibility to renegotiate the connotation of that word, transforming it from a negative expression to an empowering one.