
An argumentative approach to deniability: theoretical and experimental considerations

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Fribourg

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Problems in identifying and evaluating denials

Part 1

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1.1

What are (metalinguistic) denials?

Working definition

A metalinguistic conversational move by which a speaker provides an alternative interpretation of one of their previous utterances that is different from the one that their audience derived

Structure of denials (building on Mazzarella (2021))

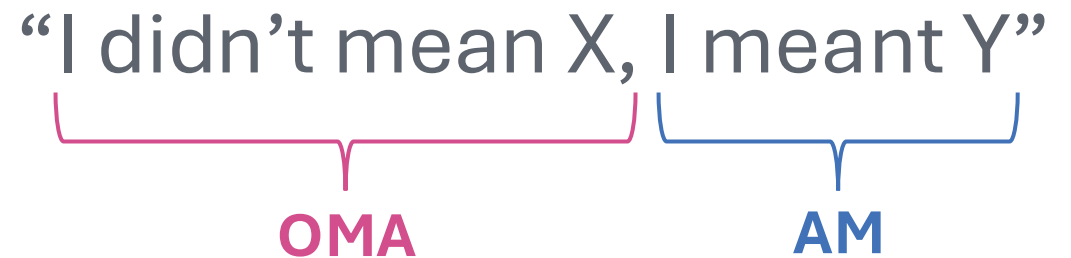
Full-fledged denial:

- Objection to meaning attribution (**OMA**)
- Alternative meaning (**AM**)

Ways of denying

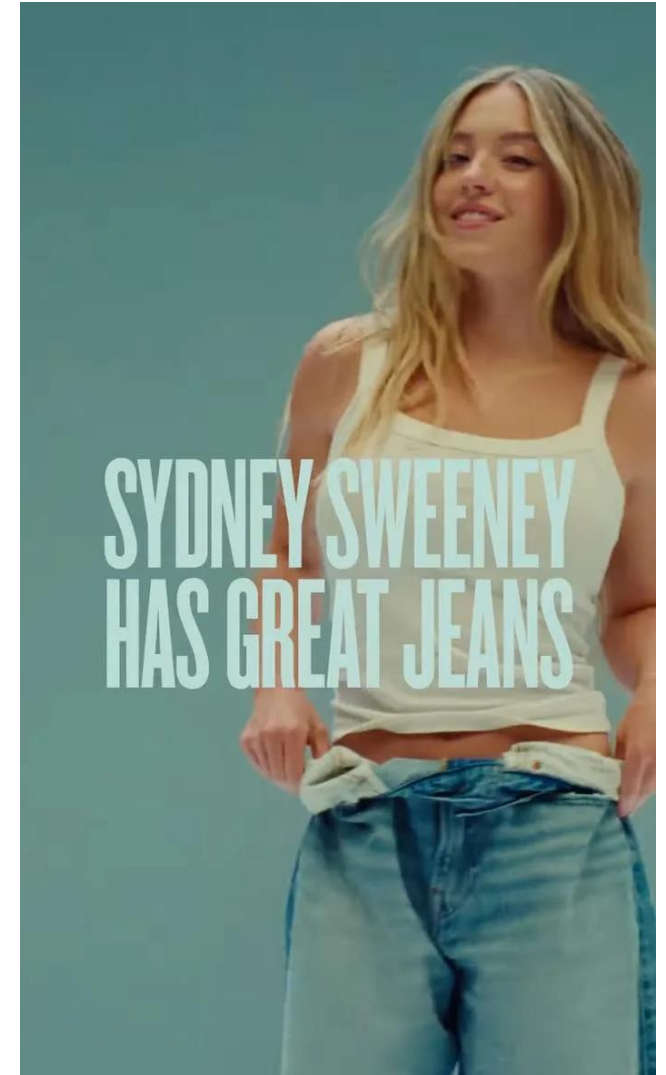
- Cancellation: deny the content of an utterance.
- Disavowal: deny the intention to communicate an utterance

(Domínguez Armas & Soria Ruiz, 2021, p. 71)



An example of real-life denial

- American Eagle jeans ad
 - The ad starred American actress, Sidney Sweeney
 - It played on the phonetic identity between *jeans* and *genes*
 - “Jeans [or genes] are passed on from parent to offspring, often determining traits like hair color, personality, and even eye color. My jeans are blue”
(<https://www.youtube.com/watch?v=2DNyA-6X0cl>)
- This ad’s communicative intentions sparked some controversy
 - Perceived as promoting eugenics
 - Perceived as claiming the superiority of Caucasian genes



An example of real-life denial

- As a reaction to the controversy, the brand published the following post on their social media
- This post tried to *deny* the meaning that the audience attributed to the ad
- However, this answer was not unanimously accepted by the audience (Cohen, 2025)
 - Not everyone deemed this denial as plausible
 - To understand why, we need to identify, reconstruct, and evaluate denials

“Sydney Sweeney Has Great Jeans”
is and always was about the jeans.

Her jeans. Her story.

We’ll continue to celebrate how everyone wears
their AE jeans with confidence, their way.

Great jeans look good on everyone.

Identify, reconstruct, and evaluate

Identify denials

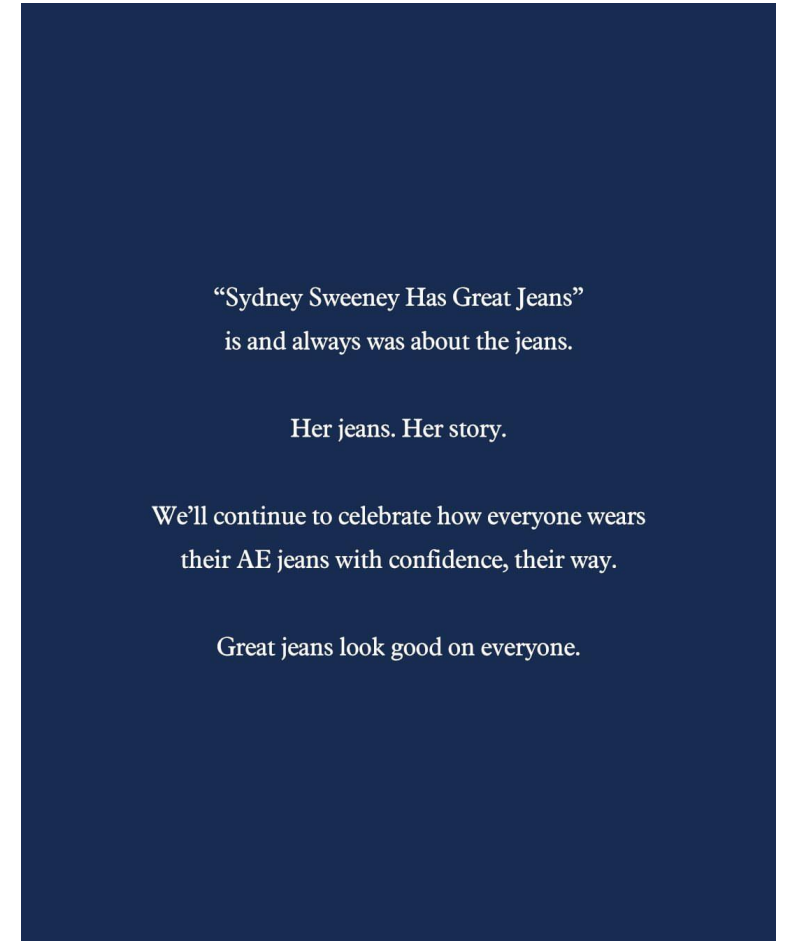
- This denial is not explicit
- By stating what the ad is about, the brand excluded other interpretations

Reconstruct denials

- “We didn’t mean to promote eugenics and white supremacy. Our ad is and always was about the jeans, and not genes.”

Evaluate the effectiveness of denials

- The provided AM might have been the issue
- Jeans do not get passed on from parent to offspring



An argumentative approach to denials

Part 2

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Relevance of an argumentative approach

Argumentation theorists aim to define what an argument is (and its structure), when it is normatively good (reasonable/sound/valid...), and what makes it effective (see Oswald (2023))

There are reasons to consider that denials can be approached through argumentative frameworks:

- In terms of structure and context of occurrence
- In terms of normative issues
- In terms of rhetorical effects

Arguments and denials – similarities

Structural and contextual aspects

Arguments

- Articulate *premises* with *conclusions* (Wohlrapp, 2026, p. 16)
 - Conclusions
 - Premises
- Argumentative indicators (see van Eemeren et al. (2007))
 - **because**
- Argumentative context (see van Eemeren & Grootendorst (2004)):
 - Disagreement
 - Participants do not align on the issue

Denials

- Two parts (see slide 3)
 - OMA
 - AM
- Two parts can be linked through an argumentative indicator
 - “I didn’t mean X **because** I meant Y.”
- Argumentative context
 - Inherently managing disagreement
 - Meant to realign participants on what was said

Arguments and denials – similarities

Normative aspects

Arguments

- Acceptability of arguments
 - Many different reasons (depending on framework)
 - Depends on the acceptability of the premise

Denials

- Plausibility of denials
 - Depends on *what* is denied (e.g., Bonalumi et al. (2023) or Boogaart et al. (2021))
 - **Might also depend on *how* it is denied**

Thus,

The plausibility of denials could be influenced by the plausibility of the alternative meaning of the denial

Arguments and denials – similarities

Rhetorical effects

Arguments

- Ethos “might be the most effective means of persuasion [the speaker] possesses” (Aristotle, *Rhetoric*, 1356a)
- Pozzi & Mazzarella (2024) show that committing to something for which there is low evidence negatively impacts ethos
 - These results could suggest that bad premises have an impact on the speaker’s ethos

Denials

- The ethos of a speaker should also influence the plausibility of their denial
 - This would be something to test in the future
- **Thus**, the plausibility of denials might have an impact on the denying speaker’s ethos

The *plausibility* of denials

Part 3

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The plausibility of *what* is denied

What is denied = **Deniability**

- The capacity of an utterance to be disavowed or canceled through a denial

Example (from Pinker (2007))

Bribe 1

A man gets pulled over for running a red light. To try to get out of this situation quickly, he decides to try to bribe the officer by telling him,

“So, maybe the best thing would be to take care of it here.”

Bribe 2

A man gets pulled over for running a red light. To try to get out of this situation quickly, he decided to try to bribe the officer by telling him,

“If you let me go without a ticket, I’ll pay you fifty dollars.”

The plausibility of *what* is denied

Having deniability ≠ acceptance by the audience

- A wide range of utterances have deniability (Peet, 2015)
- Not all denials are accepted (Pinker, 2007, p. 453-457)
 - The driver could not be prosecuted in court (not guilty beyond a reasonable doubt)
 - However, the officer still might be convinced that the driver tried to bribe him

This suggests that something else influences the plausibility of denials

- *How* it is denied → for now, we will focus on the plausibility of the AM
- *Why* it is denied → We will not focus on the *why* at this stage of the research (but we are working on it)

The plausibility of *how* it is denied

Plausibility is influenced by the context

- Theoretically justified by Mazzarella (2021), Oswald (2022), and Camp (2018)
- Experimentally supported by Bonalumi et al. (2023)
- Importance of context = explained by pragmatic frameworks (e.g., Relevance Theory (Sperber & Wilson (1995))

Plausibility is influenced by the relevance of the denial...

...more specifically, by the relevance of the AM

- Theoretically justified by Mazzarella (2021)
- Experimentally supported by Antille (2024)

Experiment 1 – Plausibility of AM

Goals

Provide evidence for the correlation between:

- The plausibility of the denial as a whole (OMA + AM)
- The way in which the AM is formulated
- The perceived image of the speaker

Participants

Analysis on 99 participants (see Table 1)

Age mean	41.26(range: 19-71)
Sex	50 Female (50.5%) 49 Male (49.5%)
Primary language	96 English (95.7%), 1 English + Korean (1.01%), 2 English + Spanish (2.02%)
Country of residence	United States (100%)
Time taken mean	22.15 minutes
Monetary reward	£ 2.01 per person

3.3 Experiment 1 – Material

Items

- 16 dialogues
- Between two characters (X and Y)
- Topics were neutral
- Randomized

Conditions (pretested)

- Plausible alternative meaning (PAM)
- Implausible alternative meaning (IAM)

Attention check questions

- Three (Two had to be answered correctly)
- Same structure as items
- Randomized

Experiment 1 – Example item

X and Y are siblings. They are discussing the distribution of weekly chores, and Y comes up with an already-made distribution of tasks for both X and Y. The dialogue proceeds as follows:

X₁: "You are always the one deciding who does what chore."

Y₁: "Are you implying that I don't divide chores equally?"

X₂: "I didn't mean that!" **OMA**

Y₂: "How so?"

X₃: "I meant that I'd also like to decide which chores I do sometimes." **AM (here PAM)**

Experiment 1 – Example item

X and Y are siblings. They are discussing the distribution of weekly chores, and Y comes up with an already-made distribution of tasks for both X and Y. The dialogue proceeds as follows:

X₁: "You are always the one deciding who does what chore."

Y₁: "Are you implying that I don't divide chores equally?"

X₂: "I didn't mean that!" **OMA**

Y₂: "How so?"

X₃: "I meant that it must be a burden for you to make those decisions every week." **AM (here IAM)**

3.3 Experiment 1 – Material

Measures

- Q1: To what extent do you think X_3 (the AM) justifies X_2 (the OMA)?
- Q2: To what extent do you think X (the denying speaker) is, overall, speaking in good faith?
- Q3: Based on the whole dialogue, to what extent do you think X_2 (the OMA) is plausible?

Participants were asked to evaluate these questions on a slider from 1 (Not at all) to 6 (Definitely).

To what extent do you think that X_3 justifies X_2 ?

Not at all

1

Definitely

6



Experiment 1 – Hypotheses & Design

Hypotheses

- Higher scores for all three measures for the plausible condition
- Significant correlation between all three measures

These hypotheses have been preregistered on the OSF website

Design

Counterbalanced within-subject design (using a latin-square):

- Participants were randomly assigned to one of two lists (List 1 and List 2)
- All items were displayed to all participants
- The condition under which the items appeared varied

3.3 Experiment 1 – Procedure

Standard procedure

1. Recruitment via Prolific
2. Display of welcome message and consent form
3. Display of sample Item
4. Display of items and ACQs

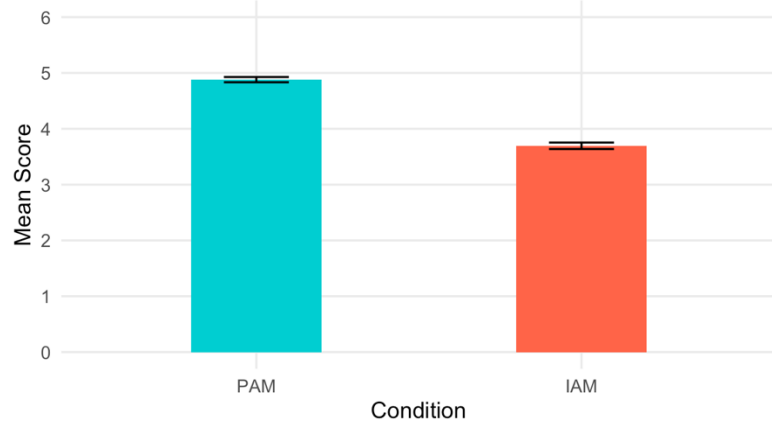
3.4

Experiment 1 – Results

- Significantly higher mean score for PAM than IAM
- Strong internal coherence across items ($\alpha = .858, .859, \text{ and } .865$)
- Small effect sizes ($\eta^2 = .217, .161, \text{ and } .149$)

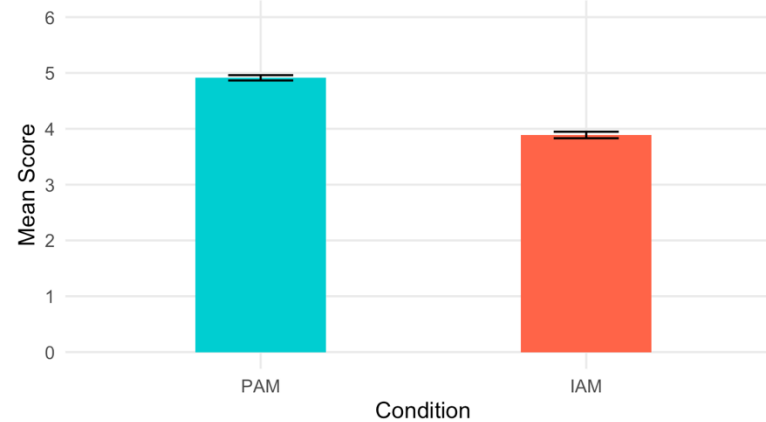
Q1

Mean score by Condition for Q1
 Extent to which the AM justifies the OMA by condition



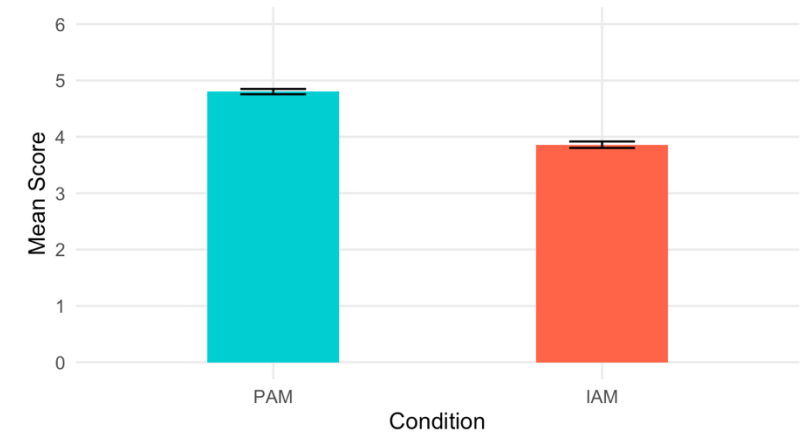
Q2

Mean score by Condition for Q2
 Extent to which X is perceived in good faith by condition



Q3

Mean score by Condition for Q3
 The plausibility of the OMA by condition



3.4

Experiment 1 – Results

- High correlation between measures

Correlation Between Measures (Q1, Q2, Q3)

Computed using Pearson correlation across participants



Experiment 1 – Discussion

The plausibility of the AM influences:

- The perception of justification between the AM and the OMA
- The image of the speaker
- The plausibility of full-fledged denial (OMA+AM)

This suggests that:

- The plausibility of a denial does not only depend on *what* is denied, but also on *how* it is denied
- The AM of a denial has an important influence on the denial as a whole

Similar to **arguments**

Argumentativeness of denials

Part 4

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Experiment 2 – Argumentative denials

Goals

Provide evidence for:

- The hypothesis that people treat denials and arguments similarly
- The inherent argumentative function of denials

This is only an **exploratory experiment**

Measures

- Q1: To what extent do you think that X wants to convince Y in X_2 (the full-fledged denial)?
- Q2: To what extent do you think X is giving Y a reason in X_2 (the full-fledged denial)?

Experiment 2 – Example item

X and Y are siblings. They are discussing the distribution of weekly chores, and Y comes up with an already-made distribution of tasks for both X and Y. The dialogue proceeds as follows:

X₁: “You are always the one deciding who does what chore.”

Y₁: “Are you implying that I don’t divide chores equally?”

X₂: “I didn’t mean that! I meant that I’d also like to decide which chores I do sometimes.”

OMA

Arg (AM)

Experiment 2 – Example item

X and Y are siblings. They are discussing the distribution of weekly chores, and Y comes up with an already-made distribution of tasks for both X and Y. The dialogue proceeds as follows:

X₁: “You are always the one deciding who does what chore.”

Y₁: “Are you implying that I don’t divide chores equally?”

X₂: “I didn’t mean that! Sorry that I gave you this impression.”

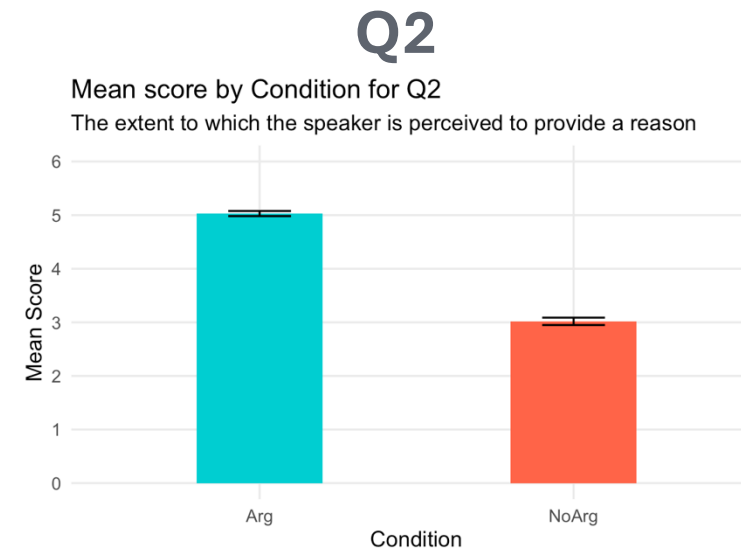
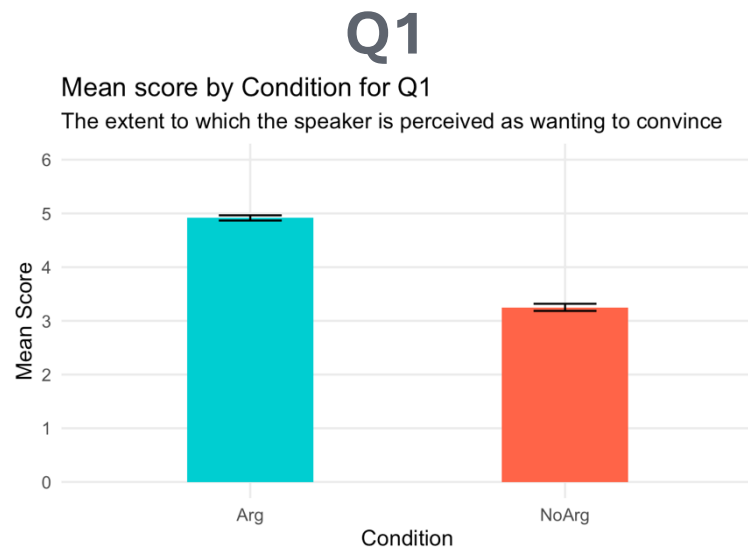
OMA

NoArg (no AM)

4.2

Experiment 2 – Results

- Significantly higher mean score for items with AM (*Arg*) than with no AM (*NoArg*)
- Strong internal coherence across items ($\alpha = .774$ and $.752$)
- Medium effect size ($\eta^2 = .396$ and $.449$)
- High correlation between both measures ($r = .654$)



Experiment 2 – Discussion

The presence of an AM in a denial:

- Makes the speaker be perceived as wanting to convince more
- Makes the speaker be perceived as trying to provide more of a reason

This supports the hypothesis that denials are processed similarly than arguments

However

- This experiment only shows that there is a difference in perceived argumentativeness between full-fledged denials and denials that do not have an AM
- More experiments would need to be conducted to precisely define the relationship between denials and arguments (e.g., adding an ARG-non-denial condition)
- Given the results, we will further investigate this question

**Thank you for your
attention**

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Works cited list

- American Eagle [@americaneagle]. (2025a, July 23). *@Sydney_Sweeney in her sensory era. Turn it up! Check out her full edit online* [Video]. Instagram. <https://www.instagram.com/p/DMdXCcSJTq2/>
- American Eagle [@americaneagle]. (2025b, August 2). “*Sydney Sweeney Has Great Jeans*” *is and always was about the jeans. Her jeans. Her story. We’ll continue to celebrate how everyone wears their AE jeans with confidence, their way. Great jeans look good on everyone.* [Photograph]. Instagram. <https://www.instagram.com/americaneagle/p/DM0tMjaTBl/>
- Antille, M. S. (2024). “*That’s merely circumstantial evidence...*” *The impact of prosody on the plausibility of the denial of insinuation* [Master Thesis]. University of Fribourg.
- Aristotle. (1985). *Complete Works of Aristotle, Volume 1: The Revised Oxford Translation* (J. Barnes, Ed.). Princeton University Press. <https://doi.org/10.1515/9781400835843>
- Bonalumi, F., Bumin, F. B., Scott-Phillips, T., & Heintz, C. (2023). Communication and deniability: Moral and epistemic reactions to denials. *Frontiers in Psychology, 13*, 1073213. <https://doi.org/10.3389/fpsyg.2022.1073213>
- Boogaart, R., Jansen, H., & Van Leeuwen, M. (2021). “Those are Your Words, Not Mine!” Defence Strategies for Denying Speaker Commitment. *Argumentation, 35*(2), 209–235. <https://doi.org/10.1007/s10503-020-09521-3>
- Cohen, R. (2025, August 1). *American Eagle says Sydney Sweeney ad “is and always was about the jeans.”* NBC News. <https://www.nbcnews.com/pop-culture/pop-culture-news/american-eagle-responds-sydney-sweeney-jeans-ad-backlash-rcna222560>
- De Oliveira Fernandes, D., & Oswald, S. (2022). On the Rhetorical Effectiveness of Implicit Meaning—A Pragmatic Approach. *Languages, 8*(1), 6. <https://doi.org/10.3390/languages8010006>
- Domínguez Armas, Á., & Soria Ruiz, A. (2021). Provocative insinuations. *Daimon, (84)*. <https://doi.org/10.6018/daimon.481891>

Works cited list

- Mazzarella, D. (2021). “I didn’t mean to suggest anything like that!”: Deniability and context reconstruction. *Mind & Language*, 38(1), 218–236. <https://doi.org/10.1111/mila.12377>
- Oswald, S. (2023). Pragmatics for argumentation. *Journal of Pragmatics*, 203, 144–156. <https://doi.org/10.1016/j.pragma.2022.12.001>
- Page Six (Director). (2025). *Sydney Sweeney poses in “Good Jeans” ad, skips her top for new campaign* [Video recording]. <https://www.youtube.com/watch?v=2DNyA-6X0cl>
- Peet, A. (2015). Testimony, Pragmatics, and Plausible Deniability. *Episteme*, 12(1), 29–51. <https://doi.org/10.1017/epi.2014.31>
- Pinker, S. (2007). The evolutionary social psychology of off-record indirect speech acts. *Intercultural Pragmatics*, 4(4). <https://doi.org/10.1515/IP.2007.023>
- Pozzi, M., & Mazzarella, D. (2024). Speaker trustworthiness: Shall confidence match evidence? *Philosophical Psychology*, 37(1), 102–125. <https://doi.org/10.1080/09515089.2023.2193220>
- Sperber, D., & Wilson, D. (1995). *Relevance: Communication and cognition* (2nd ed). Blackwell Publishers.
- Van Eemeren, F. H., & Grootendorst, R. (2004). *A systematic theory of argumentation: The pragma-dialectical approach*. Cambridge University Press.
- Van Eemeren, F. H., Houtlosser, P., & Snoeck Henkemans, A. F. (2007). *Argumentative indicators in discourse: A pragma-dialectical study*. Springer.
- Wohlrapp, H. R. (2026). The Concept of Argumentation. In S. F. Aikin, J. Casey, & K. Stevens (Eds.), *Routledge handbook of argumentation theory* (1st ed.). Routledge.

Appendix – Results (tables)

Experiment 1

Q1

Experiment 1					
<i>Repeated-measures ANOVA results for Q1</i>					
Effect	df	df_error	F	p	η^2
(Intercept)	1	98	2,518.820	< .001	0.935
Condition	1	98	62.093	< .001	0.217

Experiment 1						
<i>Descriptive statistics for Q1</i>						
Condition	N	Mean	SD	SE	95% CI Lower	95% CI Upper
PAM	99	4.880	0.968	0.097	4.687	5.073
IAM	99	3.696	1.275	0.128	3.441	3.950

Q2

Experiment 1					
<i>Repeated-measures ANOVA results for Q2</i>					
Effect	df	df_error	F	p	η^2
(Intercept)	1	98	2,461.315	< .001	0.934
Condition	1	98	43.494	< .001	0.161

Experiment 1						
<i>Descriptive statistics for Q2</i>						
Condition	N	Mean	SD	SE	95% CI Lower	95% CI Upper
PAM	99	4.913	1.007	0.101	4.712	5.114
IAM	99	3.889	1.318	0.132	3.626	4.152

Q3

Experiment 1					
<i>Repeated-measures ANOVA results for Q3</i>					
Effect	df	df_error	F	p	η^2
(Intercept)	1	98	2,486.017	< .001	0.937
Condition	1	98	41.140	< .001	0.149

Experiment 1						
<i>Descriptive statistics for Q3</i>						
Condition	N	Mean	SD	SE	95% CI Lower	95% CI Upper
PAM	99	4.802	0.993	0.100	4.604	5.00
IAM	99	3.860	1.255	0.126	3.609	4.11

Appendix – Results (tables)

Experiment 2

Q1

Experiment 2

Repeated-measures ANOVA results for Q1

Effect	df	df_error	F	p	η^2
(Intercept)	1	96	2,830.857	< .001	0.940
Condition	1	96	135.011	< .001	0.396

Experiment 2

Descriptive statistics for Q1

Condition	N	Mean	SD	SE	95% CI Lower	95% CI Upper
Arg	97	4.916	0.847	0.086	4.745	5.086
NoArg	97	3.251	1.192	0.121	3.011	3.491

Q2

Experiment 2

Repeated-measures ANOVA results for Q2

Effect	df	df_error	F	p	η^2
(Intercept)	1	96	2,806.864	< .001	0.929
Condition	1	96	141.306	< .001	0.449

Experiment 2

Descriptive statistics for Q2

Condition	N	Mean	SD	SE	95% CI Lower	95% CI Upper
Arg	97	5.029	0.910	0.092	4.846	5.213
NoArg	97	3.019	1.296	0.132	2.758	3.280

Appendix – Pretest

Example items

X and Y are in a relationship with each other. They are discussing who to see during the weekend, and Y suggests seeing Y's friends. X responds to Y's proposal in the following way:

X: "You always prioritize meeting your friends over mine."

Based on what X just said, how annoyed do you think X is?

Not at all 1 2 3 4 5 Definitely 6

The conversation between X and Y continues as follows:

Y: "Are you implying that I don't like your friends?"

X: "I didn't mean that!"

Y: "What did you mean then?"

X: "I meant that I'd like to choose who we see sometimes."

Based on the dialogue, to what extent would you find X's last sentence plausible?

Not at all 1 2 3 4 5 Definitely 6

Appendix – Experiment 2

Example Arg item

X and Y are siblings. They are discussing the distribution of weekly chores, and Y comes up with an already-made distribution of tasks for both X and Y. The dialogue proceeds as follows:

X₁: “You are always the one deciding who does what chore.”

Y₁: “Are you implying that I don’t divide chores equally?”

X₂: “I didn’t mean that! I meant that I’d also like to decide which chores I do sometimes.”

OMA

AM (Arg)

Appendix – Experiment 2

Example NoArg item

X and Y are siblings. They are discussing the distribution of weekly chores, and Y comes up with an already-made distribution of tasks for both X and Y. The dialogue proceeds as follows:

X₁: “You are always the one deciding who does what chore.”

Y₁: “Are you implying that I don’t divide chores equally?”

X₂: “I didn’t mean that! Sorry that I gave you this impression.”

OMA

NoArg