What do *or* constructions ‘say’?

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Introduction

What do *or* constructions 'say'?

Aaron came with Betty or Cathy

Standard answer: *or* constructions have **two readings** (e.g. Horn 1972, Carston 1990)

	with Betty	with Cathy	with both
Inclusive disjunction: **true** when **at least 1** disjunct holds	**T**rue	**T**rue	**T**rue
Exclusive disjunction: **true** when **exactly 1** disjunct holds	**T**rue	**T**rue	**F**alse

Introduction

Our experimental findings:

- Speakers consistently **fail** to **interpret** *or* constructions as inclusive disjunction, even in inclusive-biased contexts
- But vary in **verifying** *or* constructions as true when both disjuncts hold

Our conclusions:

- Inclusive disjunction is **not a reading** of *or* constructions
- Verification is a **poor probe** for speaker-intended readings

Experimental study

80 Hebrew speakers saw **inclusive-biased** background stories, followed by a dialogue which included a target sentence

Background: Aaron often goes to a club with his friends. Men get a discount if they arrive with at least 1 woman.

Dialogue: S1: I hope Aaron got a discount.

S2: Don't worry. He came with Betty or Cathy. **(critical)**

Don't worry. He got a discount. **(control)**

Experimental study – interpretation

Task 1 was **interpretation**: participants chose among 3 options for the speaker's **intended message**

S2: Don't worry. He came with Betty or Cathy / He got a discount.

Interpretation task: According to S2, Aaron came with

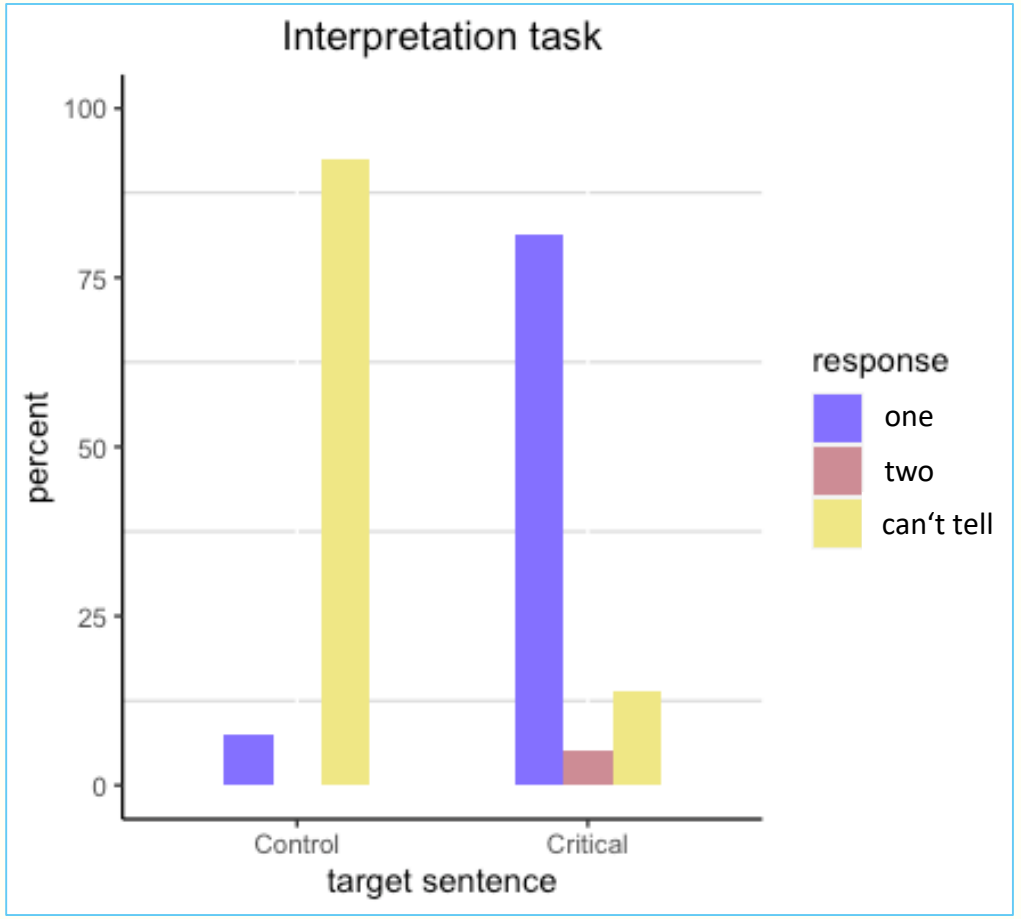
1. **One** woman. 2. **Two** women. 3. **Can't tell**.

Experimental study – interpretation

Interpretation results:

- **Critical** (with *or*): 81.2% **one**
- **Control** (without *or*): 92.5% **can't tell**

Participants did **not consider two** a possibility according to the speaker



Experimental study – interpretation

Finding:

Or constructions were **not interpreted as inclusive disjunction** in inclusive-biased contexts

Two possible explanations:

(i) Inclusive disjunction is **not a reading** of *or* constructions

(ii) Inclusive disjunction is dismissed in favor of a **default exclusive** disjunction reading, regardless of context (e.g. Fox 2007)

Experimental study – verification

Task 2 was **verification**: participants were told that both disjuncts hold and had to **judge the truth** of the target sentence

S2: Don’t worry. He came with Betty or Cathy / He got a discount.

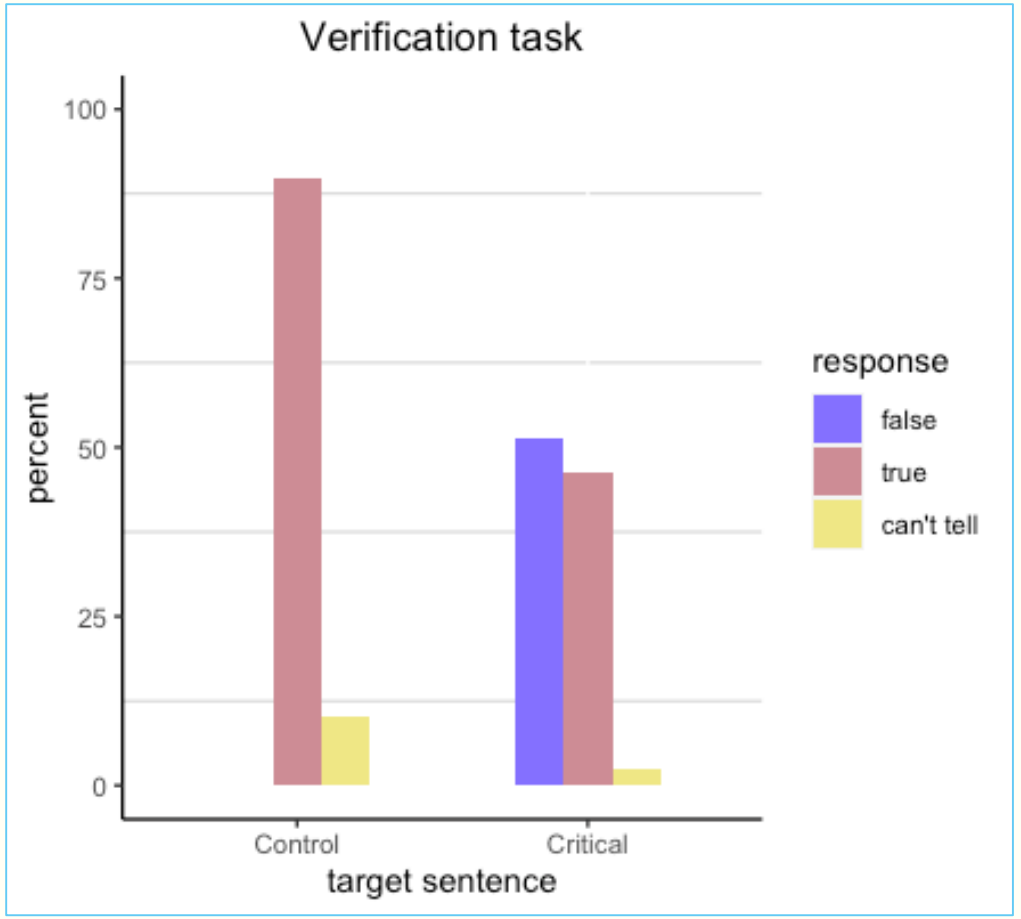
Verification task: It turns out Aaron came with both Betty & Cathy. Is what S2 said true?

1. **True**. 2. **False**. 3. **Can’t tell**.

Experimental study – verification

Verification results:

- **Critical** (with *or*): 46.2% **true**
  51.2% **false**
- **Control** (without *or*): 89.9% **true**
  0.0% **false**



Many participants judged *or* constructions as **true** when both disjuncts hold (despite **not considering two** a possibility according to the speaker)

Experimental study – verification

Two possible explanations for interpretation:

(i) Inclusive disjunction is **not a reading** of *or* constructions

(ii) Inclusive disjunction is dismissed in favor of a **default exclusive** disjunction reading, regardless of context

→ Possibility (ii) is **incompatible** with the verification finding, that 46.2% of participants judged *or* constructions as true when both disjuncts hold

Experimental study – verification

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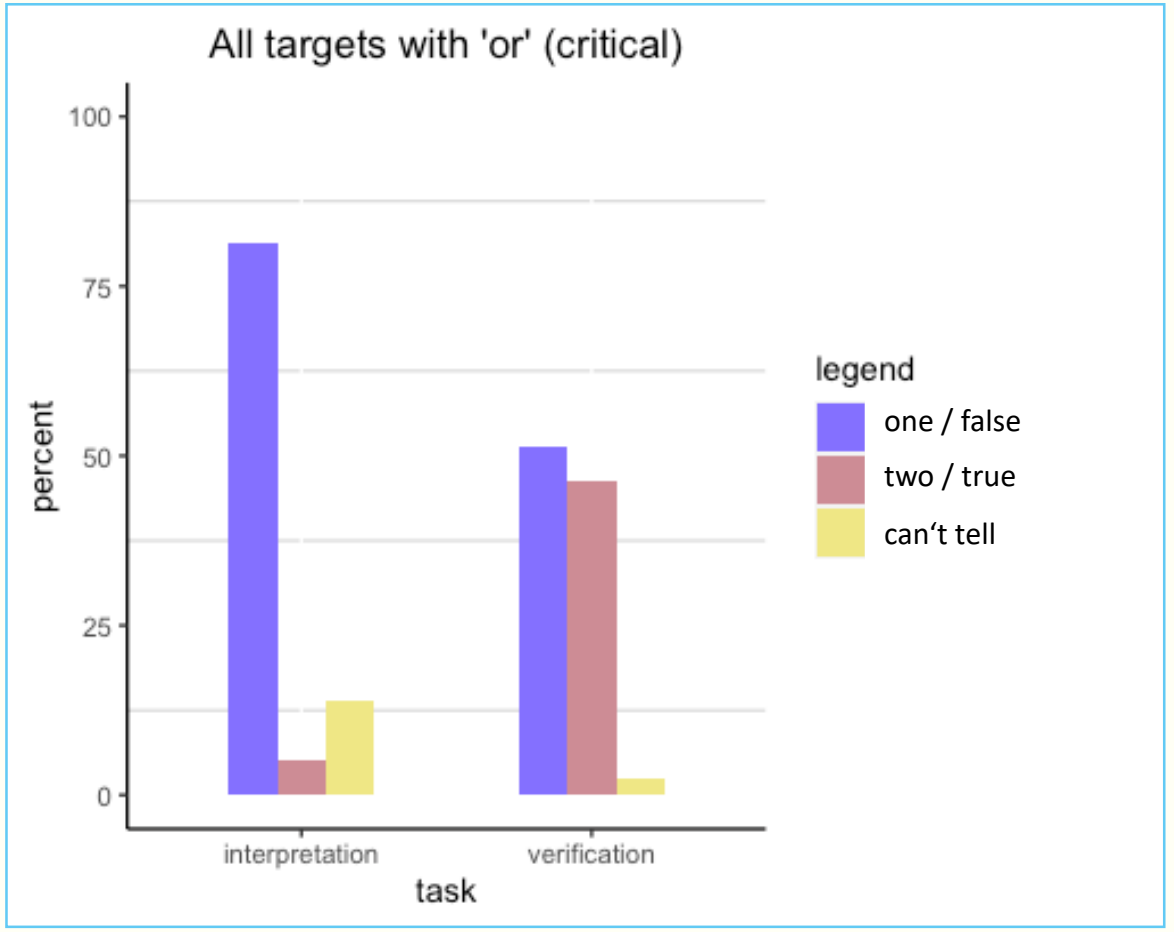
→ Possibility (ii) is **incompatible** with the verification finding, that 46.2% of participants judged *or* constructions as true when both disjuncts hold

Discussion

Apparent discrepancies

(i) In **interpretation**, **two** is **not** considered a possibility according to the speaker

But **two** does justify a **true** judgment in **verification**



(ii) Participants' responses are **consistent** in interpretation but **variable** in verification

Discussion

Our account:

We distinguish the speaker-intended message – **'what is said'** – from information that is merely compatible with the speaker's intentions – **'truth-compatible inferences'** (Ariel 2004)

Speakers generally agree on **'what is said'**, but may not agree on **'truth-compatible inferences'**, because they do not fall under the speaker's intention

Discussion

Our account cont'd:

Interpretation tasks directly probe **'what is said'**; hence responses are **consistent** across speakers

Verification tasks crucially rely on **'truth-compatible inferences'**; hence responses are **variable** across speakers

For *or* constructions, **two** is not part of **'what is said'**; it is only an (optional) **'truth-compatible inference'**

Discussion

Alternative account:

The inclusive disjunction reading might be salvaged if one assumes a **default exclusive** reading + a **Principle of Charity** which applies in verification (e.g. Davidson 1973, cf. Guerts & van Tiel 2013)

However, if the only times an *or* construction is accepted as inclusive disjunction is when the addressee is being "charitable", does this justify analyzing inclusive disjunction as a speaker-intended **reading**?

Conclusions

Recap:

Speakers consistently **interpret** *or* constructions to mean **one**, but vary in judging them as **true** (**verifying**) when both disjuncts hold

Inclusive disjunction is not a reading of *or* constructions, i.e. not part of **'what is said'**, but only a **'truth-compatible inference'**

Interpretation tasks probe **'what is said'**, whereas **verification** tasks crucially rely on **'truth-compatible inferences'**

Conclusions

So, what do *or* constructions 'say'?

For the constructions in our experiment, the speaker-intended **'what is said'** is **one** but may be seen as compatible with **two**

→ Neither **inclusive** disjunction nor **exclusive** disjunction

→ Not **truth-conditional** at all, but only impose an **alternativity** relation between disjuncts (Ariel & Mauri 2018, 2019)

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Thank you!

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