Sentential Discourse-Negativity

This talk argues that the notion which Klima (1964) introduced as 'sentential negativity' should be characterized on the level of discourse representation, rather than appealing to sentential negation. It does so by presenting (I) judgment data of negativity being introduced implicitly in discourse; (II) a commitment-based analysis of negativity-tags and their negative antecedents on the level of discourse representation; and (III) experimental data from a forced-choice continuation task, suggesting that negativity-tags are sensitive to veridicality and speaker commitments, rather than overt negation.

Background: Discourse-Negativity and Negativity-Tags. Klima (1964) noted that English *neither*-tags are available with antecedents including negation (1-a), but not affirmative ones (2-a). The same is illustrated for agreeing uses of the response particle 'no' in the (b)-responses (Pope, 1972), and factive uses¹ of elliptical 'Why not'-questions in (c) (Hofmann (2018)).

- (1) Negative antecendent: I think that the (2) party planning committee didn't make an effort this year
 - a. Neither did the caterer
 - b. No, they really didn't.
 - c. but they didn't explain {why / why not}

Positive antecendent: I think that the party planning committee really made an effort this year

- a. # Neither did the caterer
- b. # No, they really did,
- c. but they didn't explain
 {why / # why not}

Further, Klima showed that negativity-tags are also available (to varying extent) with a syntactically and semantically heterogeneous class of 'negative' sentences, which involve include anti-additive and downward-entailing quantifiers, and negative proximatives. The variety of licensing contexts raises the question how the polarity-sensitivity of negativity-tags can be characterized.

Previous Accounts treat it as sensitivity to some notion of sentential negation. E.g. ellipsis-based analyses of Polarity Particles (PolPs) (e.g. Kramer and Rawlins, 2009) rely on syntactic reflexes of sentential negation (following Klima, 1964; Zeijlstra, 2004). The feature-based approach to PolPs (Farkas and Bruce, 2010, e.g.) makes reference to Jackendoff's (1969) semantic characterization, which assumes that a negative operator takes scope over the full (semantic representation of) a clause. As a result semantic sentential negation is associated with a decompositional semantic analysis of negative quatifiers (Ladusaw, 1992; Penka, 2007). I argue that referring to sentential negation or any clausal representation cannot capture the relevant generalization. Instead, we need a representation that allows for interaction with contextual factors introducing negation.

I. Contextual Introduction of Negativity. The talk presents some data suggesting that negativity can be introduced contexually, by pragmatic inference. The implicit introduction of negativity happens without an overt reflex of sentential negation or a negative operator in the antecedent clause. This can be the case in cases of neg-raising² (3-a), especially also cases of neg-raising which are uncontroversially considered derived semantically³ like (3-b).

¹This refers to information-seeking and factive embedded uses of questions, i.e. non-rhetorical uses which (pragmatically) presuppose the existence of an answer (see Fitzpatrick, 2005), i.e. the ones that Hofmann (2018) suggests require a negative antecedent

²These are cases which Kroll (2019) identifies as contexts licensing polarity-reversal in sluicing.

³While Collins and Postal (2018) argue for a syntactic derivation of classical neg-raising cases like (3-a), they suggest that neg-raising in island contexts is derived pragmatically in the sense of Gajewski (2007).

- (3) a. Neg-raising antecendent:

 I don't think that the party planning committee made an effort this year
 - b. (Semantic) Neg-raising antecendent:

 I don't get the impression that the party
 planning committee made an effort this year
- (4) a. Neither did the caterer
 - b. No, they really didn't.
 - c. but they didn't explain
 {why / why not}

II. Discourse-level Commitment Based Account The presented analysis suggests that a discourse-negative utterance introduces an anti-veridical propositional discourse-referent (dref)—referring to a proposition that the speaker is committed to being false. This is based on analyses where negative utterances introduce a propositional dref for the negated content (Stone, 1999; Krifka, 2013) (as well as Snider (2017), where propositional operators more generally introduce drefs for their prejacents.)

Characterizing discourse-negativity in this way can capture all the overtly negative cases reported by Klima under a decompositional analysis of negative quantifiers, and the contextual cases in (3) where an embedded proposition is interpreted as counterfactual based on inference. It also predicts that other anti-veridical propositional embeddings may license negativity-tags, like (5).

(5) AV-attitude antecendent:

- a. It's just a rumor that the party planning committee made an effort this year,
- b. but they didn't explain {why / why not}
- III. Experimental Evidence for the understanding of discourse-negativity as the presence of an anti-veridical propositional dref is presented from a forced-choice task, which used negativity-tags as a diagnostic of negativity (following Brasoveanu et al., 2013, 2014). Specifically, the study presented participants with various antecedent types and asked them to chose between a possible follow-up with 'why not', and one with the neutral counterpart 'why'. As illustrated in examples throughout, this choice can indicate if

	WHY	WHY NOT
Neg	206	217
Neg-raising	207	216
Semantic Neg-Raising	250	173
Av Attitude	315	108
Pos	406	17

Table 1: Counts of why/why not responses by condition

an antecedent is discourse-negative: For negative antecedents either choice is acceptable, but for positive ones a negativity-tag cannot be used.

There were five conditions for different types of antecedents: Neg(ation), N(eg)-R(aising), S(emantic) N(eg)-R(aising), A(nti-)V(eridical) attitude, P(ositive). The study measured the proportion of negativity-tag why not responses in relation to the neutral why responses by condition, shown in **Table 1**, and graphically represented in **Figure 1**. As expected, the results show that in the Neg-condition, both follow-ups are equally acceptable, and in the Pos-conition, why not-responses occur to a negligible extent. Cases of (canonical) neg-raising pattern like explicitly negative antecedents. The conditions SNR and AV both show a preference for why over why not, but higher proportions⁴ of why not compared to the positive baseline. Between the two, AV has fewer why not follow-ups compared to

⁴The generalizations reported here were established using a Bayesian mixed-effects logistic regression and a pairwise comparison of posterior probability of a 'why not' response between the conditions.

References References

SNR.

Discussion, Outlook, and Conclusions. The experimental results are interpreted as evidence agaist a negativity-as-sentential-negation account: If negativity was only sensitive to overt expressions of negation (syntactically or semantically), we would expect SNR and AV conditions to behave exactly like POS. The fact that there is a clear difference between these conditions and the baseline suggests that the negativity-tag is sensitive to something present in these conditions, i.e. a counterfactual proposition.

The fact that the SNR and AV conditions appear to be 'less discourse-negative' than NEG and NR, though, would fit into this picture, if we assume

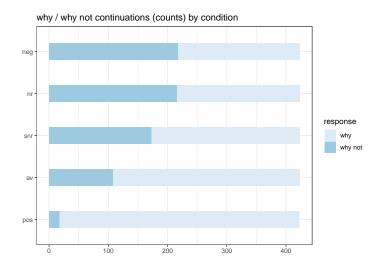


Figure 1: Barplot of counts of why/why not responses by condition

that these conditions are subject to additional constraints on propositional anaphora (and relevance to a polar QUD is offered as a hypothesis for future research).

I suggest that the results developed here fit into a larger picture of how anaphora interact with negation/anti-veridical operators: The interaction of anaphora and negation can be explained as a sensitivity to speaker commitments and the veridicality of the embedding context.

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