



The plot	The Analysis	Non-veridical environments
- Cross-linguistically, negative polarity items (NPIs) have been shown to be sensitive to different types of licensing environments. - In English, NPIs such as <i>any</i> and <i>ever</i> occur in contexts that can be characterized as downward entailing (Fauconnier 1975; Ladusaw 1979). - It has also been established that, in some other languages, NPIs are licensed in broader set of environments that can be described as non-veridical (Lin 1996, 1998; Haspelmath 1997; Giannakidou 1998, 2011, 2018). - However, relatively little attention has been given to the question of whether there are positive polarity items (PPIs) that are sensitive to similar environments. - In this study, we present a case of a PPI in the domain of attitude verbs that is sensitive to the veridicality of its environment.	We propose an account in the spirit of Zeijlstra (2022), according to which PPIs introduce a Non-Entailment-of-Non-Existence Condition – the mirror image of Lin’s Entailment-of-Non-Existence Condition for NPIs (Lin 1996, 1998). We implement this condition as a presupposition introduced by <i>polagat’</i>. <i>Polagat’</i> gets a standard semantics for <i>believe</i> in terms of universal quantification over doxastic alternatives. - Its difference from English <i>believe</i> lies in this presupposition <i>Polagat’</i> presupposes that <i>p</i> is compatible with the attitude holder’s doxastic state. (7) $\llbracket \text{polagat}' \rrbracket^{w_0} = \lambda p_{\langle s, t \rangle} . \lambda x_e . \exists w' [w' \in \text{Dox}(x, w_0) \ \& \ p(w')]. \forall w [w \in \text{Dox}(x, w_0) \rightarrow p(w)]$ Under this analysis, a positive sentence containing <i>polagat’</i> can be either true or false. - We propose that <i>polagat’</i> is a Neg-raiser. We adopt an Exh-based account of neg-raising following Jeretič (2022) and Mirrazi & Zeijlstra (2022, 2023). <i>polagat’</i> introduces subdomain alternatives that must be used by Exh. (8) LF: $[\text{Exh } A \text{ ne polagaet}' \ \varphi]$ - We assume the IE+II version of Exh. The prejacent: (9) $\llbracket A \text{ ne polagaet}' \ \varphi \rrbracket^{w_0} = \text{T iff } \neg \forall w [w \in \text{Dox}(A, w_0) \rightarrow \lambda w'. \llbracket \varphi \rrbracket^{w'}(w)]$ Assuming that the set of A’s doxastic alternatives is $\{w_1, w_2\}$, we have two subdomain alternatives. (10) ALT: $\{ \neg \forall w'' [w'' \in \{w_1\} \rightarrow \lambda w'. \llbracket \varphi \rrbracket^{w'}(w'')] ; \neg \forall w''' [w''' \in \{w_2\} \rightarrow \lambda w'. \llbracket \varphi \rrbracket^{w'}(w''')] \}$ - These alternatives cannot be negated consistently with the assertion of the prejacent and therefore are asserted. - The resulting interpretation is equivalent to that of negation taking scope below the universal quantifier. (11) $\llbracket \text{Exh } A \text{ ne polagaet}' \ \varphi \rrbracket^{w_0} = \text{T iff } \neg \forall w [w \in \{w_1, w_2\} \rightarrow \lambda w'. \llbracket \varphi \rrbracket^{w'}(w)] \ \& \ \neg \forall w'' [w'' \in \{w_1\} \rightarrow \lambda w'. \llbracket \varphi \rrbracket^{w'}(w'')] \ \& \ \neg \forall w''' [w''' \in \{w_2\} \rightarrow \lambda w'. \llbracket \varphi \rrbracket^{w'}(w''')] = \text{T iff } \forall w [w \in \{w_1, w_1\} \rightarrow \lambda w'. \neg \llbracket \varphi \rrbracket^{w'}(w)]$ This, however, contradicts the presupposition introduced by <i>polagat’</i>. (12) $\llbracket \text{Exh } A \text{ ne polagaet}' \ \varphi \rrbracket^{w_0}$ is defined only if $\exists w [w \in \{w_1, w_2\} \ \& \ \lambda w'. \llbracket \varphi \rrbracket^{w'}(w)]$ This contradiction accounts for the ungrammaticality of <i>polagat’</i> under negation in unembedded contexts. Accordingly, we predict that <i>ne polagat’</i> is acceptable in two cases: (i) when the presupposition projects in a way that does not contradict the asserted content; (ii) when no strengthening occurs.	<i>believe versus hope</i> If the embedded clause contributes the presupposition <i>p</i>, the resulting presupposition in both cases is ‘x believes <i>p</i>’ (Karttunen 1973, 1974; Heim 1992). Neg-raising applies within the embedded clause in both cases. In the case of <i>hope</i>, the presupposition is consistent with the assertion whereas in the case of <i>believe</i>, it is not. (13) $\checkmark$Hope: Presupposition: I believe you allow for the possibility that I will do this. Assertion: In all of my preferred worlds you believe I will not do this. (14) *Believe: Presupposition: I believe you allow for the possibility that I will do this. Assertion: I believe that you believe that I will not do this. Similarly, no conflict between the presupposition and the at-issue content is observed in the case of a bias question. Conditionals are cases in which no strengthening occurs. We assume that a conditional restricts the domain of a silent universal epistemic modal. Since antecedents are downward-entailing environments, the existential statement resulting from the negation of <i>polagat’</i> is stronger than the universal statement. The presupposition projects from the antecedent. (15) $\forall w [(w \in \text{Dox}(\text{speaker}, w_0) \ \& \ \exists w' [w' \in \text{Dox}(\text{coach}, w) \ \& \neg \text{you can do it}(w')]) \rightarrow \neg \text{coach puts you in the team } w]$ (16) Presupposition: $\exists w' [w' \in \text{Dox}(\text{coach}, w_0) \ \& \ \text{you can do it}(w')]$ This is consistent with the speaker’s ignorance about whether the coach believes p. Other DE environments <i>Ne polagat’</i> is not acceptable in other DE environments. (17) *Malo kto ne polagajet, čto on budet eto delat’. Few who NEG believe that he will this do Indented: ‘Few people don’t believe that he will do this’. Such cases are ruled out due to positive presuppositions or implicatures contributed by the sentence. Here, the problem is the implicature: <i>‘few, but some’</i> (derived by negating the alternative of <i>few - no one</i>). One Exh deals with all the alternatives. (18) Negative alternative: $\neg(\exists w [w \in \{w_1, w_2\} \ \& \ \neg p(w)] \vee \exists w [w \in \{w_3, w_4\} \ \& \ \neg p(w)] \vee \dots)$ (19) $\text{Alt}_{\text{subdomain}} = \{ \neg(\exists w [w \in \{w_1\} \ \& \ \neg p(w)] \vee \exists w [w \in \{w_3\} \ \& \ \neg p(w)] ..); \neg(\exists w [w \in \{w_2\} \ \& \ \neg p(w)] \vee \exists w [w \in \{w_4\} \ \& \ \neg p(w)] \dots) \}$ The negation of subdomain alternatives holds only if, for at least one individual, $\neg p$ is true in all of their doxastic worlds. Combined with the presupposition that this individual allows for the possibility of <i>p</i>, this results in a contradiction, leading to ungrammaticality.
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