## Weakening is external to only

1. Introduction. As defined in Horn 1969, only applies to a proposition p (its 'prejacent'), presupposes that p is true, and asserts that all alternatives not entailed by p are false (1). The prejacent presupposition predicted by (1) is not always attested, though. Klinedinst (2005) contributes examples like (2a). With the LF in (2b), the prejacent presupposition of only should project past negation. (2a) is then predicted to convey, via presupposition, that Ai got her BA from Cal State. This meaning component is nevertheless not intuited: (2a) conveys that Ai got her BA from some institution other than Cal State.
(1) $\llbracket$ only $\rrbracket^{\mathrm{ALT}}(\mathrm{p})=\lambda \mathrm{w}: \mathrm{p}(\mathrm{w}) . \forall \mathrm{p}^{\prime} \in \operatorname{ALT}\left[\mathrm{p}^{\prime}(\mathrm{w}) \rightarrow \mathrm{p} \subseteq \mathrm{p}^{\prime}\right]$
(2) a. Ai didn't only get her BA from [Cal State] $]_{F}$. b. not [ only [ Ai got her BA from [Cal State] $\left.]_{F}\right]$

Crnič (2022) analyzes only as an exceptive construction, one of whose components contributes the prejacent presupposition. He derives the interpretation of (2a) by weakening that presupposition. We show that exceptives and only do not show parallel behavior and propose, building on Alonso-Ovalle \& Hirsch (2022), that the interpretation of (2a) is due to the weakening of only's prejacent.
2. Weakening only: an exceptive analysis. Crnič (2022) treats only as an exceptive construction. The LF for (2a) is (3a). In (3a), only conveys that Ai did not get her BA from any place other than Cal State. If the alternatives are Berkeley and UCLA, this means that she did not get her BA from Berkeley or UCLA (3b). MIN contributes the presupposition that Ai got her BA from some place that is not Berkeley or UCLA, i.e., Cal State (3c). This is the prejacent presupposition predicted by (1), which projects. The contribution of only gets negated, resulting in the assertion that Ai got her BA from Berkeley or UCLA. Presupposition and assertion together convey that Ai got her BA from Cal State and either Berkeley or UCLA. This is also predicted by (1) for (2b). When it is contextually assumed that nobody gets their BA from more than one institution, (3a) is pragmatically anomalous, since its presupposition contextually contradicts the assertion. The anomaly can be avoided in (3a) by pruning the domain of MIN. When MIN ranges over the empty set, it contributes a weak existential presupposition: that Ai got her BA from somewhere (4). This presupposition does not contradict the assertion that she got her BA from Berkeley or UCLA. Presupposition and assertion together convey that Ai got her BA from somewhere other than Cal State, as attested.
(3) a. not [MIN [only [Ai got her BA from [Cal State $\left.\left.\left.]_{F}\right]\right]\right] \quad \llbracket$ Cal State ${ }_{F} \rrbracket^{f}=\{$ Cal State, Berkeley, UCLA $\}$
b. $\llbracket$ only $\rrbracket(\langle\llbracket \mathrm{Cal}$ State $\rrbracket,\{\mathrm{x}:$ Ai got her BA from x$\}\rangle)=1 \Leftrightarrow$
$\llbracket$ no $\rrbracket\left(\{y: y \in \llbracket \text { Cal State }]_{\mathrm{F}} \rrbracket^{\mathrm{f}}-\{\right.$ Cal State $\left.\left.\}\right\}\right)(\{\mathrm{x}:$ Ai got her BA from x$\})=1 \Leftrightarrow \neg \phi_{\text {Berkeley }} \wedge \neg \phi_{\text {UCLA }}$
c. $\forall \mathrm{X} \in \operatorname{Pow}\left(\llbracket \mathrm{Cal} \mathrm{State} \mathrm{F} \rrbracket^{\mathrm{f}}\right)[[\mathrm{X} \cap\{$ Cal State $\}=\varnothing] \rightarrow$
$\llbracket \mathrm{no} \rrbracket\left(\left\{\mathrm{y}: \mathrm{y} \in \llbracket \mathrm{Cal} \mathrm{State} \mathrm{F} \rrbracket^{\mathrm{f}}-\mathrm{X}\right\}\right)(\{\mathrm{x}:$ Ai got her BA from x$\left.\})=0\right] \Leftrightarrow \quad \phi_{\text {Cal State }}$
(4) $\forall X \in \operatorname{Pow}(\emptyset)[[X \cap\{$ Cal State $\}=\varnothing] \rightarrow$
$\llbracket \mathrm{no} \rrbracket\left(\left\{\mathrm{y}: \mathrm{y} \in \llbracket \mathrm{Cal}\right.\right.$ State $\left.\left._{\mathrm{F}} \rrbracket^{\mathrm{f}}-\mathrm{X}\right\}\right)(\{\mathrm{x}:$ Ai got her BA from x$\left.\})=0\right] \Leftrightarrow \quad \phi_{\text {Cal State }} \vee \phi_{\text {Berkeley }} \vee \phi_{\text {UCLA }}$
3. A challenge. Consider the examples in (5)-(8), featuring exceptives. The analysis of exceptives that (3a) builds on gives for (5) the LF in (9). The sister of MIN in (9) asserts what (3b) conveys: that Ai didn't get her BA from Berkeley or UCLA. MIN conveys the presupposition in (3c), which contextually entails that. Since the presupposition contextually entails the assertion, (5) is correctly predicted to be anomalous. If the domain of MIN could be pruned to avoid a pragmatic anomaly, it should be pruned here, too, leading to the presupposition in (4), which doesn't entail the assertion. The deviance of (5)-(8) indicates that pruning is not freely available for MIN to avoid a pragmatic anomaly.
(5) \#Ai did not get her BA from anywhere but (7) (After rolling one die). \#Ai got no score but [two] ${ }_{F}$
$[\mathrm{Cal} \mathrm{State}]_{F}$
(6) \#Ai does not have any rank but [Assistant
(8) \#At the race, Ai did not win any medal but the $[\text { bronze }]_{F}$ medal.

Professor] ${ }_{F}$
(9) LF: MIN [not [ [anywhere but [Cal State] $]_{\mathrm{F}}$ ] $\lambda_{\mathrm{x}}$ Ai got her BA from x] $]$
4. An alternative: External weakening. (10), from von Fintel \& Iatridou (2007), is another case where (1) yields a presupposition that is stronger than attested. With the LF in (11), (10) is predicted to presuppose that you have to go to the North End for good cheese. Instead, (10) has a minimal sufficiency reading which makes the weaker claim that you can go to the North End for good cheese.
(10) To get good cheese, you only have to go to the North End. (11) only [have to [you go to [the $\mathrm{NE}_{\mathrm{F}}$ ]]] To derive the attested interpretation, Alonso-Ovalle \& Hirsch (2022) resort to an external covert operator (AT LEAST) (Crnič, 2011) that weakens the prejacent of only. AT LEAST is a focus sensitive operator that requires that the focus alternatives of its sister, given in (12) as a parameter of interpretation, be partially or completely ordered on a contextual scale ( $\leq$ ). AT LEAST presupposes that its prejacent ( p ) is lowest-ranked, and asserts that some alternative ranked at least as high as $p$ is true.
(12) $\llbracket \mathrm{AT}$ LEAST $\rrbracket^{\mathrm{ALT}_{\leq}}=\lambda \mathrm{p}: \forall \mathrm{p}^{\prime} \in \operatorname{ALT}\left[\mathrm{p}^{\prime} \neq \mathrm{p} \rightarrow \mathrm{p}^{\prime}>\mathrm{p}\right] . \lambda \mathrm{w} . \exists \mathrm{p}^{\prime \prime} \in \operatorname{ALT}\left[\mathrm{p}^{\prime \prime} \geq \mathrm{p} \wedge \mathrm{p}^{\prime \prime}(\mathrm{w})\right]$

When the context fixes a scale that ranks places where you can get cheese according to how much effort it takes to get to them, under the semantics for only in (1), (13) presupposes that you have to go to the North End or a more difficult place and asserts that you don't have to go anywhere more difficult than the North End. Presupposition and assertion together convey that you can (but don't have to) go to the NE.
(13) only [have to [at Least [you visit [the North End] ${ }_{\mathrm{F}}$ ]]

Triggering at least under the scope of only in (2a) derives the attested interpretation. Assuming, again, that the contextually relevant institutions are Cal State, Berkeley and UCLA, with the first ranked lower than the other two in a contextual scale capturing perceived value, the prejacent of only in (14a) is the first disjunction in (14b), which is globally presupposed. Under negation, only conveys that Ann did not get her BA from Berkeley or UCLA. Negating this claim conveys that she got her BA from Berkeley or UCLA. Presupposition and assertion convey, together, that she got her BA from an institution better than Cal State.
(14) a. not [only [At Least [Ai got her BA from [Cal State] $\left.{ }_{F}\right]$ ]]
b. P: $\phi_{\text {CalState }} \vee \phi_{\text {Berkeley }} \vee \phi_{\text {UCLA }}, A: \phi_{\text {Berkeley }} \vee \phi_{\text {UCLA }}, \mathrm{P} \& \mathrm{~A}: \phi_{\text {Berkeley }} \vee \phi_{\text {UCLA }}$
5. Restricting at least. If at least is external to only, we expect both (14) and (2b) to be possible LFs for (2a). The LF in (2b) is nevertheless predicted to yield a pragmatic anomaly, as we saw. We are then left with (14a) as the only viable LF. In cases where the alternatives are not (contextually) mutually exclusive, as (15), at LEAST overgenerates. The LF in (15b) presupposes that Ai visited Cal State and asserts that she visited some other place, in line with intuitions. The LF in (15c) presupposes that Ai visited some place and asserts that she visited Berkeley or UCLA. Presupposition and assertion together convey that Ai visited Berkeley or UCLA. The interpretation of (15c) is not pragmatically anoumalous, but it is still unattested.
(15) a. Ai did not only visit [Cal State $]_{\mathrm{F}}$.
b. not [only [Ai visited [Cal State] $\left.\left.]_{\mathrm{F}}\right]\right] \quad \mathrm{P}: \phi_{\mathrm{CS}}, \mathrm{A}: \phi_{\mathrm{B}} \vee \phi_{\mathrm{U}}, \mathrm{P} \& \mathrm{~A}: \phi_{\mathrm{CS}} \wedge\left(\phi_{\mathrm{B}} \vee \phi_{\mathrm{U}}\right)$
c. not [only [at least [ Ai visited to [Cal State] $\left.\left.]_{\mathrm{F}}\right]\right]$ P: $\phi_{\mathrm{CS}} \vee \phi_{\mathrm{B}} \vee \phi_{\mathrm{U}}, \mathrm{A}: \phi_{\mathrm{B}} \vee \phi_{\mathrm{U}}, \mathrm{P} \& \mathrm{~A}: \phi_{\mathrm{B}} \vee \phi_{\mathrm{U}}$.

Overgeneration can be restricted by assuming that insertion of AT LEAST is a last resort strategy to avoid pragmatic anomalies. The LF in (2b), without AT LEAST, leads to a pragmatic anomaly, since its presupposition contextually entails the assertion. Inserting at LEAST in (14a) avoids the anomaly. Since (15b) is not pragmatically anomalous, $(15 \mathrm{c})$ is not licensed. Likewise, we contend, with Crnic̆ (2022), that AT LEAST is licensed in (13) when it is taken for granted that there is no particular place where you have to go to get good cheese. When this is the case, the presupposition of (11) would be contextually contradictory.
6. Conclusion. The exceptive analysis derives (2a) via pruning. Pruning does not help with (10), though. Under the exceptive analysis, (10) is captured via weakening of only's prejacent (Crnič, 2022). We derive (2a) and (10) uniformly via external weakening. The fact that pruning does not seem to be freely available with the exceptives in (5)-(8) casts doubts on the unification of only with exceptives. At the same time, under the external weakening hypothesis, the availability of AT LEAST with exceptives depends on whether the right analysis of these feature a possible scope site for the operator, an issue that needs to be explored.

## Works cited

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