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Hidden comparisons and the meaning of *presque*

1. The problem

Recent work on *almost* (Morzycki 2001, Nouwen 2006, Penka 2005) has re-investigated its semantic structure in order to account for its incompatibility with some determiners (e.g. *almost every N* vs. **almost some N*) and its interaction with scalar phenomena. In this abstract, we describe *presque*, the French counterpart of *almost*, focusing on its *argumentative* properties, in the sense of Ducrot and Merin. Such properties call for a different analysis, which makes room for a *comparative* facet in its meaning. We show that such hidden comparisons are responsible for the discourse behaviour of a family of adverbs and determiners.

As an illustration, consider an account that assigns to *almost* a conjunction of conditions (1) defined over a contextually relevant scale s , as in Penka (2005). The first member asserts that the proposition p is false and the second member that some proposition q is true, which is close to p w.r.t. the scale s .

(1) $\llbracket almost \rrbracket_s = \lambda w \lambda p_{\langle s, t \rangle} . \neg p(w) \ \& \ \exists q (q \approx_s p \ \& \ q(w))$.

How does this approach fare with respect to the following contrast?

- (2) [context : the price is 58 euros]
- Le livre est cher, presque 60 euros – ‘The book is expensive, almost 60 euros’
 - ?? Le livre n’est pas cher, presque 60 euros – ‘The book is cheap, almost 60 euros’
 - ?? Le livre est cher, à peine 60 euros – ‘The book is expensive, hardly 60 euros’
 - Le livre n’est pas cher, à peine 60 euros – ‘The book is cheap, hardly 60 euros’

This approach raises three problems. First, since the proximity depends on the direction of the scale s (\approx_s) and prices are downward monotone (if x costs y , x costs y' for $y' \leq y$ and $y' \geq 0$), *presque 60 euros* entails ‘less than 60 euros’. However, the discourse *Le livre n’est pas cher, (un peu) moins de 60 euros* ‘the book is cheap (slightly) less than 60 euros’ is perfect. So, the oddity of (2b) is still to be explained. Second, according to (Jayez 1987), *à peine* ‘hardly’ is quite similar to *presque*: *à peine 60 euros* entails that the actual cost is very close to 60 euros and slightly superior. So, to capture the strong analogy between *presque* and *à peine*, one would simply replace \approx_s by $> \ \& \ \approx$. Under that view, (2c) is unexpected. Finally, it is unclear why we obtain similar effects with comparatives, for instance equality comparatives (3).

- (3) a. Marie est grande puisqu’elle a presque la même taille que Yolanda
‘Mary is tall since she is almost the same size as Yolanda’
- b. # Marie est petite puisqu’elle a presque la même taille que Yolanda
‘Mary is short since she is almost the same size as Yolanda’
- c. Marie est grande /petite puisqu’elle a la même taille que Yolanda
‘Mary is tall / short since she is the same size as Yolanda’

The same inability to predict correct discourse connections affects intensional analyses. Nouwen (2006) proposes that *almost p* is true iff p is true in some world that differs minimally from the actual world w.r.t. the denotation of (contextually relevant) properties. Although there are minimally different worlds in which the book costs exactly 60 euros (2) or Mary’s size is just Yolanda’s size (3), this does not explain how an indication of proximity –be it intensional– constrains discourse sequences. Being approximately the same size as Yolanda or costing approximately 60 euros does not in itself favour inferences about (non-)tallness or (non-)expensiveness. The phenomena illustrated in (2) and (3) call to mind similar observations by Ducrot (1972, 1980 for instance) for various determiners and show that a uniform and principled treatment is needed.

2. A new analysis for *presque*

Our proposal has two main components. First, we take up the intuition expressed in (Jayez 1987) that data such as (2) and (3) show that (i) *presque* has a *two-layered* semantic structure corresponding to the contributions to the main act or to a conventional implicature (CI)¹ and (ii) the main content is comparative.² For simplicity, we consider only a traditional degree analysis, deferring the incorporation of degrees as ordered intervals (Kennedy) or extents (Meier) to the full paper. We represent *presque* as in (4), where C is the relevant context and

¹We won’t discuss here the status of presuppositions and will assume that CI is a general category that contains presuppositions and possibly other entailed non-central material. Nothing essential hinges on that.

²The two-layered nature of *almost* has been independently contemplated by Penka and assumed by Nouwen, but they do not draw central conclusions from this assumption because it does not involve comparisons.

θ and θ' are *proximity thresholds* for a property P (being Yolanda's size, costing 60 euros) in a context C . The left proximity threshold θ is the degree from which (\geq) it makes sense to say that the actual degree is significantly close to the degree/s that make P true in C . The same goes for the right proximity threshold θ' (\leq). $\text{deg}(x, s_P, d)$ notes that x satisfies property P on scale s to the maximal degree d . The satisfaction of $(\neg)P(x)$ depends on the monotonicity properties of the scale and the perspective adopted by the speaker. For example, 59 or 61 euros may be viewed as $\neg(60 \text{ euros})$, if the exact price is relevant, in which case *presque* is possible, or as equivalent to 60 euros assuming some vagueness (see Kennedy 2007), in which case *à peine* is possible (see (5)).

$$(4) \quad \llbracket \textit{presque} \rrbracket_C = [\lambda P. \lambda x. \exists \theta \theta' (\textit{prox-thr}_l(\theta, P, C) \ \& \ \textit{prox-thr}_r(\theta', P, C)) \ \& \\ \forall d (\text{deg}(x, s_P, d) \Rightarrow \phi_{C, s_P}[d])] \times [\lambda P. \lambda x. \forall d (\text{deg}(x, s_P, d) \Rightarrow \neg P(x))]$$

In the spirit of Potts's treatment for CIs, (4) assigns a product (\times) of terms as denotation. ϕ_{-} is a function from contexts and dimensions to properties and returns either $\lambda x. x \geq \theta$ or $\lambda x. x \leq \theta'$. The first term of the product corresponds to the main content and says that the actual degree is \geq (resp. \leq) to the left (resp. right) proximity threshold, along the scale s_P (size, price) relative to the property. The second term corresponds to the CI and says that the actual value does not allow for P to hold. Application distributes over products, i.e. $(X \times Y)[t] = X[t] \times Y[t]$. We follow Ducrot (for *presque*) and Nouwen in assuming that *presque* does not intrinsically require that the actual quantity be smaller or greater than the mentioned one. So the choice of the left or right threshold depends on the context and the monotonicity properties of scales, as indicated by ϕ_{C, s_P} .

The second aspect of the proposal consists in using Merin's decision-theoretic semantics (e.g. 1999) and its notion of *relevance*, which says that p is positively (negatively) relevant to p' whenever updating with p a context (= a set of worlds) where neither p nor $\neg p'$ are true, raises (lowers) the probability of p' . When p is positively (negatively) relevant to p' , it is intuitively perceived as an 'argument' (in Ducrot's sense) for (against) p' . If x denotes the actual degree, an indication such as $x \geq \theta$ in (2) or (3) raises the probability that the book is expensive or that Mary is tall. Let W be a context such that $W \not\models \neg \textit{tall}(\textit{john})$ and $W \not\models x \geq \theta$. Then, $W' = W \oplus x \geq \theta$ is $W - \{w : w \in W \ \& \ w \models x < \theta\}$, where \oplus notes the usual modal eliminative update. This entails that the proportion of worlds where John is tall increases in W' , which is reflected by an increase of the corresponding probability. Other examples can be dealt with in a similar way. For *à peine*, we posit a symmetric constraint. *A peine* P contributes the main content proposition that the actual degree is inferior to the right proximity threshold for P , thus raising the probability of propositions contrary or s -symmetric to those strengthened by *presque*, e.g. that Mary is not tall (contrary) or short (scale symmetry).³

$$(5) \quad \llbracket \textit{à peine} \rrbracket_C = [\lambda P. \lambda x. \exists \theta (\textit{prox-thr}_r(\theta, P, C)) \ \& \\ \forall d (\text{deg}(x, s_P, d) \Rightarrow d \leq \theta)] \times [\lambda P. \lambda x. \forall d (\text{deg}(x, s_P, d) \Rightarrow P(x))]$$

3. Beyond *presque* and *à peine*

In the full paper, we show that the two-layered comparison-based approach to *presque* and *à peine* extends to modifiers and quantifiers like *, peu* 'little' vs. *un peu* 'a little', *plusieurs* 'several' and to less studied determiners like *autant de* 'as many / much as', which we analyse as the combination of an implicated proposition that the actual value is \leq to the comparison standpoint and a main content proposition that it is \geq to the same standpoint. This two-layered profile entails that the actual value is equal to the standpoint, but accounts for contrasts such as *Marie a ?? peu / beaucoup de livres puisqu'elle en a autant que Yolanda* 'Mary owns few / many books since she owns as many books as Yolanda'.

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³We disregard other uses of *à peine*.