

A morpho-semantic decomposition of French *le moindre* into *even* & superlative

It is well-known that units smaller than the word can contribute to the meaning of a larger expression. As an example, the compositional semantics of superlatives in English (Heim 1999) strengthens the claim that the word-meaning can arise from the combination of smaller units: **tall** + **-est**. We argue here that French *le moindre* (‘even the least’) supports a similar type of decompositional analysis. Crucially, we propose the following spellout rule: **even** + **the least** > *le moindre*. This claim is supported by the fact that *le moindre* bears the morphology of the superlative *le moins* and shares its semantics. In addition, similarly to *even*, *le moindre* triggers additive and scalar presuppositions. On a larger perspective, the interaction between *even* and the superlative morpheme has two interesting consequences: (i) it blocks the relative reading of the superlative, (ii) it strengthens the existential additive presupposition triggered by *even* into a universal additive presupposition.

**A superlative component.** The contribution of the superlative morpheme *-est* in *le moindre* relates two sets of degrees so that the former is greater than the latter. We assume the lexical entry in (1):

$$(1) \llbracket \text{-est} \rrbracket = \lambda C_{\langle e, t \rangle} . \lambda P_{\langle d, \langle e, t \rangle \rangle} . \lambda x_e . \forall y [[y \neq x \wedge y \in C] \rightarrow \max\{d|P(d)(x)\} > \max\{d'|P(d')(y)\}]$$

On the assumption that the meaning of the French superlative *le moins* contributes to the meaning of *le moindre*, we expect sentences (2a) and (2b) to be true in the same contexts.

- (2) a. Le policier a inspecté **le moins** grand recoin de ma maison.  
the policeman has inspected the least large nook of my house  
‘The policeman inspected the smallest nook of my house.’  
b. Le policier a inspecté **le moindre** recoin de ma maison.  
the policeman has inspected the MOINDRE nook of my house  
‘The policeman inspected even the smallest nook of my house.’

- (3) Size of the nooks: nook a < nook b < nook c (< = ‘smaller than’)

- a. *Context 1*: The policeman inspected a, b and c.  
b. *Context 2*: The policeman inspected a and the detective inspected b and c.

As expected, the sentences in (2) are both true in Context 1. However, while (2a) is true in Context 2, (2b) is not. It appears that the sentence containing *le moindre* ((2b)) entails the sentence containing *le moins* ((2a)), suggesting that in addition to the superlative morpheme, another element contributes to the meaning of *le moindre*. Specifically, we take the infelicity of (2b) under Context 2 as indicative of a presupposition failure.

**An even component.** We suggest that the presupposition in (2b) is triggered by the focus particle *même* (‘even’) which contributes to the meaning of *le moindre*. Following Karttunen & Peters (1979), we assume that *even* is a sentence level operator which (i) asserts its prejacent, (ii) imposes an **additive** condition (i.e. it requires some alternatives other than the assertion to be true) and (iii) is **scalar**; that is, it projects a non-assertive inference that the prejacent proposition is unlikely compared to its alternatives.

- (4)  $\llbracket \text{even} \rrbracket$  (C, p, w) is defined only if:  
a. *Scalar presupposition*:  $\forall q \in C [q \neq p \rightarrow p \triangleleft_c q]$   
b. *Additive presupposition*:  $\exists q \in C [q \neq p \wedge q(w) = 1]$   
c. If defined,  $\llbracket \text{even} \rrbracket$  (C, p, w) = 1 iff  $p(w) = 1$

The infelicity of the following sentences shows that *le moindre* triggers both an additive and a scalar presupposition.

(5) **Scalar presupposition:**

- a. # Puisque les plus grands animaux ne sont pas sûrs de passer sous le porch, le moindre animal passera sous le porch.  
Since the.pl more tall animals neg are not certain of cross under the porch, Le MOINDRE animal will.cross under the porch  
'Since the tallest animals are not certain to cross under the porch, even the smallest animal will cross under it.'
- b. **Scalar inference:** The smallest animals are less likely to cross under the bridge than animals taller than the smallest.

(6) **Additive presupposition:**

- a. #Le moindre détail intriguait Mary, tous les autres détails la laissait indifférente.  
'Even the tiniest detail intrigued Mary, all the others left her indifferent.'
- b. **Additive inference:** All details other than the tiniest intrigued Mary.

Unlike *even* ((4b)), *le moindre* triggers a **universal** additive presupposition. That is, if p is true, but some other alternatives in C are false, the sentence containing *le moindre* is infelicitous ((7)). Interestingly, the 'overt' version of (7) that contains both a superlative and *même* also triggers this universal additive presupposition ((8)).

- (7) #Le moindre détail intriguait Mary, d'autres détails la laissait indifférente.  
(8) #Même le plus petit détail intriguait Mary, d'autres détails la laissait indifférente.  
'Even the tiniest detail intrigued Mary, some others left her indifferent.'

Another intriguing consequence of the interaction between *even* and the superlative is the blocking of the relative reading in (10) and (11).

- (9) Size of the nooks: nook a < nook b < nook c (< = 'smaller than')  
a. *Context 'Absolute reading':* The policeman inspected a, b and c.  
b. *Context 'Relative reading':* The policeman inspected b,c. The detective inspected c.
- (10) Le policier a inspecté même le plus petit recoin de ma maison.      ✓ (9a) /# (9b)  
(11) Le policier a inspecté le moindre recoin de ma maison.      ✓ (9a) /# (9b)  
'The policeman inspected even the smallest nook of my house.'

These two last points will be argued to follow from the semantic properties of French *even* in the environment of the superlative.

**Deriving the distribution.** Charnavel (2015) claims that French *même* ('even') displays a more restricted distribution than English *even*. As predicted, the distribution of *le moindre* nicely patterns the distribution of French *même*:

- (12) ?? Montre-moi **même** un parti qui se soucie du peuple. (*Charnavel 2015*)  
Show to-me even one party that REFL.cares of-the people  
'Show me even one party that cares for the people.'
- (13) ?? Montre-moi **le moindre** parti qui se soucie du peuple.  
Show to-me LE MOINDRE party that REFL. cares of-the people

The assumption that *le moindre* is built on French *même* derives Jayez & Tovena (2003)'s generalization that *le moindre* occurs in both polarity contexts and in most Free Choice contexts as well as in certain episodic contexts ((11)).

SELECTED REFERENCES: **Charnavel (2015)**. How French sheds new light on scalar particles. **Heim (1999)**. Notes on Superlatives. **Jayez & Tovena (2003)**. Modes of non individuation for determiners. **Karttunen & Peters (1979)**. Conventional implicature.