

On the Intensifier *propre* ('own') in French: a Counterpart of *-même* ('-self') in Possessive DPs?

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1. Introduction

French *propre* (cf. English *own*, German *eigen*) exhibits the same readings as *-même* (cf. English *-self*, German *selbst*): like *-même*, *propre* presents both the so-called adnominal (e.g. 1) and adverbial (e.g. 2) uses:

- (1) a. Paul **lui-même** va venir.
Paul himself is_going_to come
'Paul **himself** will come.' (and not only his sister)
- b. Dans un moment de folie, Michel a tué ses **propres** enfants.
in a moment of madness Michel has killed his own children
'In a moment of madness, Michel killed his **own** children.' (and not only the neighbors' children)
- b'. the children of Michel **himself**
- c. Dans un moment de folie, Michel a tué ses **propres** enfants.
in a moment of madness Michel has killed his own children
'In a moment of madness, Michel killed his **own** children.' (and not only the neighbors)
- c'. Michel's children **themselves**
- (2) a. Claire a décoré la salle **elle-même**.
Claire has decorated the room herself
'Claire decorated the room **herself**.' (without any help)
- b. Claire a fabriqué ses **propres** vêtements.
Claire has made her own clothes
'Claire made her **own** clothes.' (without any help)
- b'. Claire made her clothes **herself**.

Based on this observation and Eckardt's and Hole's analysis of German *selbst*, I will argue that *propre* is a counterpart of *-même* in possessive DPs. Thus, the goal of this paper is twofold. The main purpose is to show that *propre* behaves like a flexible intensifier in possessive DPs. I will also suggest that the parallelism between *propre* and *même* argues for an unification of the different uses of *-même*.

I would like to thank Daniel Büring for very useful advice and discussions.

2. Intuitions about *propre*

First, I describe the intuitions suggesting that *propre* can have two interpretations: it can contrast either the possessor¹ (possessor *propre*) or the possessum (possessum *propre*) of the possessive DP in which it occurs with a contextually determined set of alternatives.

2.1. First Case: Possessor *propre*

Let's compare the two following sentences:

- (3) a. Aujourd'hui, Claire_i a pris sa_i voiture pour aller au travail.
today Claire has taken her car for go to_the work
'Today, Claire took her car to go to work.'
- b. Aujourd'hui, Claire_i a pris sa_i **propre** voiture pour aller au travail.
today Claire has taken her own car for go to_the work
work
'Today, Claire took her own car to go to work.'

Both sentences are true in the same situation where Claire has a car and she took this car to go to work: the presence of *propre* does not change the truth-conditions of (3b) as compared to (3a).

However, the two sentences do not have the same felicity conditions: (3b) is felicitous only if there is some other referent in the discourse background whose car is or has been under discussion with respect to its use by Claire to go to work. For example, (3b) could be felicitous in the following context: Claire usually takes her husband's car because it works better than hers; but today, she takes her own car instead. Thus, *propre* requires some other contextually salient referent(s) that play(s) the role of alternative(s).

In other words, *propre* imposes a contrastiveness condition: an element can be associated with *propre* only if it is contrasted with other referents that are implicit or explicit in the context. This is further suggested by the fact that *propre* cannot be used in contexts where a contrast is infelicitous:

- (4) Carole a perdu son (***propre**) sang-froid.
Carole has lost her own blood cold
'Carole lost her (*own) cool.'

Since it is impossible that Carole loses someone else's cool, the referent of *son* ('her'), namely Carole, cannot be contrasted with other alternatives. This precludes the use of *propre* in (4): *propre* can only occur in contexts where the generation of contrast-sets of alternatives is possible.

¹Here, I assume as is standard that the relation of possession denotes a broad range of relations. The possessor corresponds to the possessing entity and the possessum to the possessed entity.

Moreover, in this first case – that I call *possessor propre* –, the alternatives target the possessor.² Thus in (3b), the referent of *Claire* that is contrasted with other individuals corresponds to the car’s possessor: the individual Claire belongs to the set of contextual possible possessors of the car; in particular, the other salient possessor in the context is Claire's husband.

This means that *propre* has here an effect similar to focusing the possessor by stressing the possessive determiner:

- (5) Aujourd'hui, Claire_i a pris SA_i voiture pour aller au travail.
 today Claire has taken HER car for go to_the work
 ‘Today, Claire took her car to go to work.’

2.2. Second Case: Possessum propre

In the first case called *possessor propre*, the semantic effect of *propre* consists in contrasting the referent of the possessor with a contextually determined set of alternatives. But we observe a second case in which the alternatives target the possessum, as illustrated by the following example. I call it possessum *propre*.

- (6) a. Arnaud_i est devenu si insupportable que sa_i fille a cessé de lui rendre visite.
 Arnaud is become so unbearable that his daughter has stopped of him visit
 ‘Arnaud has become so unbearable that his daughter stopped visiting him.’
 b. Arnaud_i est devenu si insupportable que sa_i **propre** fille a cessé de lui rendre visite.
 Arnaud is become so unbearable that his own daughter has stopped of him visit
 ‘Arnaud has become so unbearable that his own daughter stopped visiting him.’

As in the case of *possessor propre*, both sentences are true in the same situation, but they have different felicity conditions: alternatives come into play in (6b). However, it is not the referent of the possessor that is targeted in this sentence. Arnaud – the possessor – is not contrasted with other fathers. Rather, it is Arnaud's daughter – thus the possessum – that is contrasted with other individuals. For example, (6b) would be felicitous in the following context: Arnaud's friend and

²Note that *propre* can also target the possessor if it is expressed by a prepositional phrase *de X*, although it is not judged as good as the other case by all native speakers of French.

- (i) Donc me voilà débarquant dans un appartement plus grand que le propre
 so me here turning_up in an apartment more big than the own
 appartement **de mes parents** en France! [attested on google]
 apartment of my parents in France
 ‘And then, I was turning up at an apartment that was bigger than my parents’ own apartment in France!’

Arnaud's cousin have already stopped visiting Arnaud because he is too bad-tempered. Thus, *propre* targets the possessum in this case since it is the referent of the whole possessive DP *sa fille* ('his daughter') that is contrasted with other individuals.

This means that *propre* has an effect comparable to focusing the possessum by stressing the DP referring to it:

- (7) Arnaud_i est devenu si insupportable que sa_i **FILLe** a cessé
 Arnaud is become so unbearable that his DAUGHter has stopped
 de lui rendre visite.
 of him visit
 'Arnaud has become so unbearable that his daughter stopped visiting him.'

Note that the example (6b) could suggest that it is not the possessum individual, but rather the relation ('daughter') that is contrasted with other relations ('friend' or 'cousin' in the context). But this turns out to be incorrect because it is not necessary that the alternatives be related to the possessor as shown by the following example. The hypothesis that *propre* targets the relation would predict that the relation of motherhood in (8) is contrasted with other relations. However, at least one of the two alternatives explicitly given in the sentence does not confirm this idea: the witness does not stand in a specific relationship to John that could be a salient alternative to the relation of motherhood. It is rather the individual referring to 'his mother' (the possessum) that is contrasted with the individual referred to as witness.³

- (8) Ce n' est pas la victime qui a dénoncé Jean_i, ni un témoin,
 it NE is not the victim who has denounced John nor a witness
 c' est sa_i propre mère qui l' a dénoncé!
 it is his own mother who him has denounced
 'It's not the victim who denounced John, nor a witness, it's his own mother who denounced him!'

2.3. *The Alternatives: Remarks on Existential and Scalar Presuppositions*

Whether *propre* targets the possessum or the possessor, the alternative propositions may be either true (additive reading) or false (exclusive reading). This means that there is no existential presupposition involved by *propre*: for example, (8) is felicitous if John's mother is the only individual that denounced John; *propre* does

³As in the previous case, the possessum can also be targeted when the possessor is expressed by a prepositional phrase *de X*: here, the referent of the victim's son is contrasted with other individuals:

- (ii) Le meurtrier présumé qui a été placé en hôpital psychiatrique n' est autre
 the murderer presumed who has been placed in hospital psychiatric NE is other
 que le propre fils de la victime. [attested on google]
 than the own son of the victim
 'The presumed murderer who has been placed in a psychiatric hospital is no other than the victim's own son.'

not presuppose that any other proposition is true. This is confirmed by the fact that *sa propre mère* occurs in a cleft; (8) is therefore an example of exclusive reading. But (6b) illustrates that additive readings of possessum *propre* are possible too: (6b) is felicitous if the alternatives involving Arnaud's friend and Arnaud's cousin are true. Similarly for possessor *propre*, (3b) does not presuppose that the alternative proposition *aujourd'hui, Claire a pris la voiture de son mari pour aller au travail* ('today Claire took her husband's car to go to work') is true, and it is actually false in the given context (exclusive reading). Nevertheless, the alternatives do not have to be false either in the case of possessor *propre*, but may be true (additive reading⁴) as shown by (9):

- (9) Louis_i oublie toujours les anniversaires des gens. En fait, il a
 Louis forgets always the birthdays of people. in fact he has
 récemment oublié son propre anniversaire!
 recently forgotten his own birthday
 'Louis always forgets people's birthdays. Actually, he recently forgot his
 own birthday!'

So neither possessor *propre* nor possessum *propre* involves any existential presupposition. *Propre* is different from the focus particle *even* in this respect, since *even* presupposes that the proposition is true for at least one other element in the focus-generated set of alternatives.

However, just like *even*, possessum *propre* seems to involve a scalar presupposition, which orders the focus alternatives on a scale of expectedness. In every example involving possessum *propre*, the individual targeted by *propre* is an unlikely one⁵ in the context. That's why the following sentence is comparable to (6b): the only difference is that there is an existential presupposition here but not in (6b):

- (10) Arnaud_i est devenu si insupportable que même sa_i fille a
 Arnaud is become so unbearable that even his daughter has
 cessé de lui rendre visite.
 stopped of him visit
 'Arnaud has become so unbearable that even his daughter stopped visiting
 him.'

⁴The terms *additive* and *exclusive* have been proposed in the literature about German *selbst* ('-self') to differentiate two kinds of readings: in the first case, the alternatives are true, while they are false in the second case. See Eckardt (2001: 392) for more details.

⁵In the case of scalar presupposition, it is usually assumed that the target proposition is the least likely of all the alternative propositions (concerning such a scalar presupposition for *even*, cf. for example Rullmann 1997). But at least for *propre*, it does not seem to be correct to claim in (6b) that another individual such as Arnaud's mother cannot be as unlikely as Arnaud's daughter to stop visiting him, and the sentence would still be felicitous if Arnaud's mother is salient in the context too. That's why I propose that the individual targeted by *propre* is not the least likely one, but an unlikely one. In other words, the likelihood scale does not have a total order, but only a partial one.

However, possessor *propre* does not yield such scalar presupposition: in (3b), Claire is not less expected than her husband to be the possessor of the car that she takes to go to work.

So unlike possessor *propre*, possessum *propre* presents the same scalar presupposition as *even*; but like possessor *propre*, it does not involve the existential presupposition that *even* involves.

To sum up the semantic intuitions about *propre*, it appears that *propre* does not change the truth-conditions of the sentence in which it appears, but its felicity conditions: the semantic contribution of *propre* consists in contrasting the possessor or the possessum of the possessive DP in which it occurs with a contextually determined set of alternatives. These alternatives may be true or false, and they are ordered on a scale of likelihood only in the case of possessum *propre*.

3. Formalization: *propre* as a Flexible Intensifier Counterpart of *-même* in Possessive DPs

The main semantic intuitions about *propre* are similar in several respects to the intuitions that have been reported for German *selbst* ('-self'; cf. French *-même*) referred to as an intensifier. So, based on the analysis that has been proposed for *selbst*, I will argue that *propre* is a counterpart of the intensifier *-même*⁶ in possessive DPs and that *propre* therefore falls into the class of intensifiers.

3.1. Analysis of German Adnominal *selbst* (Eckardt 2001, Hole 2002)

Let's compare these two sentences to determine the semantic import of adnominal *selbst*:

- (11) a. Der König **selbst** wird teilnehmen.
the king himself will attend
'The king himself will attend.'
- b. Der König wird teilnehmen.
the king will attend
'The king will attend.'

Both sentences are true in a situation where the king will come to the meeting under discussion. So like *propre*, *selbst* does not change the truth-conditions of (11a) as compared to (11b).

But in (11a), at least one other person is under discussion as a possible attendee. For example, the sentence is felicitous in a context where the ministers usually attend the kind of meeting that is under discussion, but not the king; however, this time, the king will come in person. Therefore, *selbst* involves

⁶I assume here that the analysis provided for German *selbst* can be adapted to French *-même*.

alternatives to the referent of the DP to which it adjoins, namely here, alternatives to the referent of the king.

To capture these intuitions, it has been proposed that *selbst* is an identity function under focus.

First, since *selbst* does not change the truth-conditions of the sentence, it is assumed to denote the identity function over individuals. (12) presents Eckardt's proposal for the lexical entry of *selbst*.⁷

- (12) ID: $D_e \rightarrow D_e$
 ID(a) = a for all $a \in D_e$ (cf. Eckardt 2001: 380)

Adnominal *selbst* is thus a function of type $\langle e, e \rangle$ which maps individuals to themselves.⁸

So far, this predicts that *selbst* is a purely vacuous element. But crucially, the focus accent that is typically observed on *selbst* leads to a Rooth-style focus meaning of *selbst* (cf. Rooth 1985, 1992): *selbst*, which does not make a difference in the ordinary denotation, makes a crucial difference in the focus meaning by introducing alternative functions on the domain of individuals. The focus meaning of *selbst* is the set of all functions which map individuals to other individuals.

- (13) Ordinary meaning
 $\llbracket \text{selbst} \rrbracket^o = \lambda x_e. x$
- Focus meaning
 $\llbracket \text{selbst} \rrbracket^f = \{f_{\langle e, e \rangle}: f(x) \neq x\}$ ⁹
 = $\{\lambda x_e. \text{the } y \text{ such that } y \text{ is } x\text{'s minister}, \lambda x_e. \text{the } y \text{ such that } y \text{ is } x\text{'s wife}, \lambda x_e. \text{the } y \text{ such that } y \text{ is } x\text{'s proxy} \dots\}$

Thus, *selbst* evokes alternative functions on the domain of individuals and therefore, it indirectly induces a set of alternative individuals. This presumably predicts the so-called centrality effects:¹⁰ the set of functions alternative to the identity function will induce a set of alternative individuals structured into a center held by the referent of the DP to which *selbst* adjoins, and the alternative functions denote relationships between the central individual and the alternative individuals.

⁷This kind of denotation was already proposed in Moravcsik (1972) who argues that intensifying *selbst* denotes the identity function ID on the domain of objects.

⁸This correctly predicts that *selbst* adjoins to proper names and definite DPs. Moreover, Eckardt (2001: 380) also provides a type-lifted version of (12), which can be used under analyses which assume a generalized-quantifier account for plural DPs and in the case of specific indefinites as well.

⁹This is the formulation proposed by Hole (2002), who purposefully chooses not to include the identity function in the set of alternatives even if strictly speaking, a p-set à la Rooth has the focused element in it.

¹⁰The *centrality effects* on the alternatives to DP-*selbst* have received close attention in the literature. In (11a) for instance, the king is perceived as the central figure in the government and is central in the contextually given alternatives.

Note that contextual information, the knowledge state of the interlocutors and other factors constrain the set of relevant alternatives.

Based on this analysis and the similar intuitions observed in the case of *selbst* and *propre*, I propose that *propre* also falls into the class of intensifiers, defined as elements that involve an identity function under focus.¹¹ This will capture the intuitions that *propre* does not change the truth-conditions, but only the felicity conditions of the sentence.

3.2. The Meanings of *propre*

3.2.1. Differences between *selbst* and *propre*

However, this cannot be the whole story: *propre* cannot simply denote the identity function under focus, since it exhibits specific properties due to its distribution restricted to possessive DPs.

First, *propre* does not present the same combinatorial possibilities as *selbst*. *Propre* only occurs in definite possessive DPs that express both the possessor and the possessum. As illustrated by the following examples, *propre* is ungrammatical if the possessor or the possessum is not expressed (cf. 14-15) and if it combines with indefinites or quantifiers (cf. 16-17).

- (14) *le propre chien
the own dog
- (15) *propre Jean
own John
- (16) *un propre chien de Jean
a own dog of John
- (17) *quelques propres chiens de Jean
some own dogs of John

Therefore, *propre* cannot simply denote the identity function since this would incorrectly predict that *propre* can combine with proper names and definite descriptions, as illustrated by the ungrammaticality of (14)-(15).

Moreover, as opposed to *selbst*, *propre* is a flexible intensifier: even if it only appears in one specific syntactic position, namely in the prenominal position of possessive DPs, we have seen that it can have two targets for intensification, the

¹¹Even if both intensifiers such as *selbst* ('-self') and focus particles such as *even* or *only* involve focus effects, Eckardt argues that intensifiers such as *selbst* represent a class distinct from the class of focus particles for several reasons (cf. Eckardt 2001: 403): in particular, as opposed to *selbst* ('even'), *selbst* ('self') has adnominal sortal restrictions; it is stressed; there is no accent on the associated element; centrality effects arise; both additive and exclusive uses are possible; it syntactically follows the associated element.

possessor and the possessum. On the other hand, *selbst* can only intensify the DP that it adjoins to: this means that *selbst* is not a flexible intensifier, but it always has the same target for intensification when appearing in a certain syntactic position. Moreover, *selbst* does not occupy a fixed syntactic position: it can be adnominal or adverbial.¹² Thus, *propre* appears in a fixed syntactic position but is a flexible intensifier, whereas *selbst* occurs in a flexible syntactic position but is a fixed intensifier.

Therefore, to capture these differences between *selbst* and *propre* without obscuring their similarity as intensifiers, I argue that *propre* is a type-lifted variant of the identity function in focus, i.e. a type-lifted variant of *selbst* (or French *-même*) with two different targets for the identity function. This reflects the idea that *propre* is an intensifier similar to *-même*, except that it is specialized in possessive DPs, which accounts for its specificities.

3.2.2. The Ordinary Meaning of *propre*

I propose that the right analysis can be derived if we formulate the two following ordinary meanings for possessor *propre* and possessum *propre*:

$$(18) \llbracket \textit{possessor propre} \rrbracket^\circ = \lambda R. \lambda x. \lambda a. a (R (ID (x)))$$

$$(19) \llbracket \textit{possessum propre} \rrbracket^\circ = \lambda R. \lambda x. \lambda a. ID (a (R (x)))$$

- i. *ID* is the identity function on the domain of individuals: <e, e>
- ii. *R* is a variable over possessive relations: <e, et>
- iii. *x* is a variable over individuals: <e>
- iv. *a* is a specific kind of choice function defined for singleton sets: <et, e>

These denotations capture three main aspects of *propre*: (a) its distribution in definite possessive DPs (b) its vacuous meaning with respect to truth-conditions and (c) its flexibility in intensification.

(a) First, these denotations predict the right distribution for *propre*: it has to combine with a possessive relation (*R*, which is commonly expressed by a relational noun), a possessor individual (*x*), and it is only compatible with definite articles, as opposed to indefinite articles or quantifiers, as predicted by *a*, which corresponds to the definite article (cf. *THE* = $\lambda P. \lambda x. P(x)$).

(b) Moreover, this ordinary meaning is vacuous with respect to the truth-conditions since neither the identity function nor the simple combination of

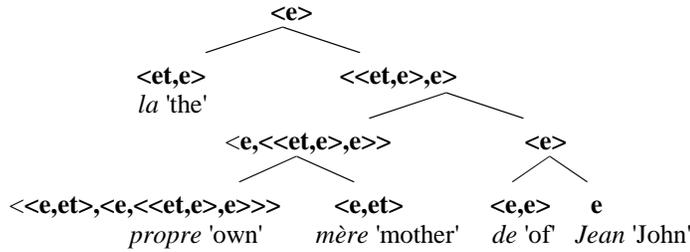
¹²*Selbst* occupies an adverbial position in cases such as:

- (iii) Maria hat sich die Haare selbst gefärbt. (cf. Eckardt 2001: 393)
 Maria has herself(reflexive) the hair herself dyed
 ‘Maria dyed her hair herself.’

I will come back to the meaning of adverbial *selbst*, but the point here is that there is only one reading in this case; therefore, there is only one intensifying possibility per syntactic position in the case of *selbst* as opposed to *propre*.

the possessive relation, the individual and the definite article can yield a semantic effect in the narrow sense. Thus, this correctly predicts that *la propre mère de Jean* ('John's own mother') has the same ordinary meaning as *la mère de Jean* ('John's mother'), as illustrated in (24). This is the case whether we deal with possessor *propre* or possessum *propre*, since the fact that the identity function takes different arguments in both cases does not make any difference in the ordinary meaning.¹³

(20) *la propre mère de Jean* 'John's own mother'



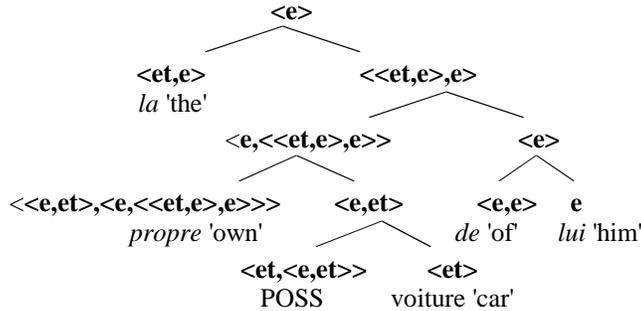
$[[propre]]^\circ = \lambda R_{e,et}.\lambda x_e.\lambda a_{et,e}.a (R(ID(x)))$

$[[mère]] = \lambda x_e.\lambda y_e.y \text{ is mother of } x$

¹³Note that in the case of non relational nouns, I suppose as is standard the presence of an abstract POSS ($\lambda f_{et}.\lambda x_e.\lambda y_e.f(y)=1$ and y is possessed by x).

Moreover, in the case of the possessive determiner *son* ('his'), I assume that *son* is decomposed into *le* 'the' and *de lui* ('of him'). These two points are exemplified here:

sa propre voiture
'his own car'



$[[voiture]] = \lambda x_e.x \text{ is a car}$

$[[POSS]] = \lambda f_{et}.\lambda x_e.\lambda y_e.f(y)=1$ and y is possessed by x

$[[POSS voiture]] = \lambda x_e.\lambda y_e.y \text{ is a car and } y \text{ is possessed by } x$

$[[propre]]^\circ = \lambda R_{e,et}.\lambda x_e.\lambda a_{et,e}.a (R(ID(x)))$

$[[propre POSS voiture]]^\circ = \lambda x_e.\lambda a_{et,e}.a ([\lambda x_e.\lambda y_e.y \text{ is a car and } y \text{ is possessed by } x] (ID(x)))$

$[[de]] = \lambda x_e.x$

$[[lui]] = [[de lui]] = \text{John}$

$[[propre POSS voiture de lui]]^\circ = \lambda a_{et,e}.a([\lambda x_e.\lambda y_e.y \text{ is a car and } y \text{ is possessed by } x] (ID(\text{John})))$

$= \lambda a_{et,e}.a([\lambda y_e.y \text{ is a car and } y \text{ is possessed by John}]$

$[[la]] = \lambda f_{et}$; and there is exactly one x such that $f(x)=1$. the unique y such that $f(y)=1$

$[[la propre POSS voiture de lui]]^\circ = \text{the unique } y \text{ such that } [\lambda y_e.y \text{ is a car and } y \text{ is possessed by John}](y)=1$

$= \text{the unique } y \text{ such that } y \text{ is a car and } y \text{ is possessed by John}$

$\llbracket \textit{propre mère} \rrbracket^\circ = \lambda_{x_e} \lambda_{a_{et,e}.a} (\llbracket \lambda_{x_e} \lambda_{y_e}.y \text{ is mother of } x \rrbracket (\text{ID}(x)))$
 $\llbracket \textit{de} \rrbracket = \lambda_{x_e}.x$
 $\llbracket \textit{Jean} \rrbracket = \llbracket \textit{de Jean} \rrbracket = \text{John}$
 $\llbracket \textit{propre mère de Jean} \rrbracket^\circ = \lambda_{a_{et,e}.a} (\llbracket \lambda_{x_e} \lambda_{y_e}.y \text{ is mother of } x \rrbracket (\text{ID}(\text{John})))$
 $= \lambda_{a_{et,e}.a} (\lambda_{y_e}.y \text{ is mother of John})$
 $\llbracket \textit{la} \rrbracket = \lambda f_{et}$; and there is exactly one x such that $f(x)=1$. the unique y such that $f(y)=1$
 $\llbracket \textit{la propre mère de Jean} \rrbracket^\circ = \text{the unique } y \text{ such that } \llbracket \lambda_{y_e}.y \text{ is mother of John} \rrbracket(y)=1$
 $= \text{the unique } y \text{ such that } y \text{ is mother of John}$

(c) Thus, the denotation for the ordinary meaning of *propre* expresses the vacuity of *propre* with respect to the truth-conditions. However, it crucially predicts a difference in the focus meaning of possessor *propre* and possessum *propre*: since the identity function takes two different arguments (possessor (x) or possessum ($a(R(x))$)), two different contrast-sets of alternatives are involved. In other words, this scope difference of the identity function predicts the flexibility in intensification of *propre*. This will be made clearer by examining the focus meaning of *propre*.

3.2.3. The Focus Meaning of *propre*

Like *selbst*, *propre* is stressed and this is the case for both possessor and possessum *propre*.¹⁴ This empirical observation suggests that *propre* is in focus, and this will predict the effect of *propre* on the felicity conditions of the sentence. While *propre* does not contribute anything to the meaning of the sentence, it will become meaningful if it is in focus: focused *propre* will, like any other focused item, evoke focus alternatives that will enter in the meaning of the respective focus construction.

Therefore, I propose that *propre* has a focus meaning à la Rooth (1985, 1992): the focus meaning of an item in focus is the set of all type-identical alternatives to it. However, the case of *propre* is a little more specific: since *propre* denotes a type-lifted variant of the identity function, I assume that the focus alternatives of *propre* are type-lifted variants of other functions from D_e to D_e ¹⁵ as shown in (26): *propre* in focus relates to alternative functions on the domain of individuals.

(21) $\llbracket \textit{propre} \rrbracket^f = \{\text{Lift}_n(f) \mid f \text{ is a contextually salient alternative to ID}\}$ for appropriate lifts Lift_1 - Lift_2

To this end, two lifts are necessary depending on which argument the identity function takes (the possessor or the possessum) as illustrated in (22) and (23).

¹⁴This is at least the case in my dialect of French. Note however that this seems to be different for German *eigen* or English *own* according to several German and English speakers: in these two cases, possessor *propre* is stressed whereas possessum *propre* is not, but the possessee is.

a) possessor *own*: his OWN daughter (cf. German: seine EIgene Tochter)

b) possessum *own*: his own DAUghter (cf. German: seine eigene TOCHter)

¹⁵I adopt here the same strategy as Eckardt, who proposes type-lifted variants of the identity function for adverbial *selbst* (2001: 381).

$$(22) \quad \begin{array}{c} \text{possessor } \textit{propre} \\ \swarrow \quad \searrow \\ \text{LIFT}_1 \quad \text{ID} \\ \lambda f_{e,e}.\lambda R_{e,et}.\lambda x_e.\lambda a.a(R(f(x))) \quad \lambda x_e.x \end{array}$$

$$(23) \quad \begin{array}{c} \text{possessum } \textit{propre} \\ \swarrow \quad \searrow \\ \text{LIFT}_2 \quad \text{ID} \\ \lambda f_{e,e}.\lambda R_{e,et}.\lambda x_e.\lambda a.f(a(R(x))) \quad \lambda x_e.x \end{array}$$

Thus, since focus on *propre* generates alternative functions on the domain of individuals, I predict that focused *propre* indirectly induces a set of alternative individuals in D_e , as shown in (24).

- (24) Let a be the referent of the element intensified by *propre*.
 Let $\{f_1, f_2, f_3, \dots, f_k\}$ be salient alternatives to ID in the given context C .
 Here is the induced set of alternatives to a in D_e^{16} in context C :
 $\text{Alt}(C)(a) = \{f_1(a), f_2(a), f_3(a) \dots f_k(a)\}$

Note that it is the context that restricts the potentially infinite set of individuals to the salient alternatives relevant in the discourse situation. Also, this analysis does not say anything about the truth of the alternatives, which correctly predicts that alternative propositions to the sentence including focused *propre* may be true (additive reading; cf. 6b, 9) or false (exclusive reading; cf. 3b, 8).

Let's apply this analysis to example (3b) repeated here:

- (25) [=3b] Aujourd'hui, Claire_i a pris sa_i **propre** voiture pour aller au
 today Claire has taken her own car for go to_the
 travail.
 work
 'Today, Claire took her own car to go to work.'

As shown above, this is an example of possessor *propre* since Claire is contrasted with another possessor of the car, namely her husband in the context: instead of taking her husband's car, Claire takes her own car today. Thus, the ordinary meaning of *propre* is the following one, where the identity function takes the possessor individual as argument:

$$\llbracket \textit{propre} \rrbracket^\circ = \lambda R.\lambda x.\lambda a.a(R(\text{ID}(x)))$$

Therefore, the focus meaning of *propre* in this sentence is the set of type-lifted variants (using Lift_1) of contextually salient alternative functions to the identity function, i.e. the set of type-lifted₁ variants of salient functions from individuals to individuals except for the identity function. Since the relevant alternative possessor

¹⁶I borrow this name from Eckardt (2001: 382).

of the car in the context is Claire's husband, there is only one contextually salient alternative function to the identity function, namely the function that takes Claire as argument and returns her husband; for obvious reasons, I call this function HUSBAND-OF.

$$\llbracket propre \rrbracket^f = \{\text{Lift}_1(f) \mid f_{\langle e, e \rangle} \text{ is a contextually salient alternative to ID}\}$$

$$f_{\langle e, e \rangle} \in \{\text{HUSBAND-OF}\}$$

Therefore, the induced set of alternatives to Claire in the domain of individuals is as follows:

$$\text{Alt}(C)(\text{Claire}) = \{\text{HUSBAND-OF}(\text{Claire})\}$$

Thus, the focus semantic value of (25) is the following set of propositions:

$$\llbracket \text{Aujourd'hui, Claire a pris sa } [propre]_F \text{ voiture pour aller au travail} \rrbracket^f = \{\text{today, Claire took } x \text{'s car to go to work} \mid x \in \text{Alt}(C)(\text{Claire})\}$$

This correctly means that the focus semantic meaning of the sentence 'today, Claire took her own car to go to work' is the alternative proposition 'today, Claire took her husband's car to go to work.'

3.2.4. Organization of the Alternatives: Remarks on Centrality and Scalarity

So far, I have argued that the core meaning of *propre* consists in involving a set of alternative functions to ID, which indirectly derives a set of alternative individuals to the possessor or the possessum. Thus, the alternatives play a crucial role in the meaning of *propre*; that's why I want to clarify the structuration of these alternatives. I have already mentioned that the potentially infinite number of alternatives is restricted by the context and the alternatives may be true or false. Now, the question is how the alternatives are organized.

First, the question of the so-called centrality effect arises given that it has received close attention in the literature about *selbst*. There is however an empirical difference between *selbst* and *propre* in this respect: in the case of *propre* (possessor *propre* or possessum *propre*), we observe that the alternative individuals need not be related to the individual intensified by *propre*, as illustrated by the following examples:

(26) Michel déteste louer des voitures, il préfère conduire sa propre voiture.
 Michel hates rent some cars he prefers drive his own car
 'Michel hates renting cars, he prefers driving his own car.'

(27) [=8] Ce n' est pas la victime qui a dénoncé Jean, ni un témoin,
 it NE is not the victim who has denounced John nor a witness
 c'est sa propre mère qui l' a dénoncé!
 it is his own mother who him has denounced
 'It's not the victim who denounced John, nor a witness, it's his own
 mother who denounced him!'

In (26), Michel is implicitly contrasted with rental car companies as possessors of the car (possessor *propre*). But Michel does not have any privileged relation to this kind of company that could identify the alternative function taking Michel as

argument and returning a rental car company: Michel is not central with respect to the possessors of rental cars. Similarly in (27), which is a case of possessum *propre*, the alternatives (the witness in particular) are not specifically related to the possessum John's mother: the possessum is not central with respect to the victim or the witness.

The absence of centrality effects for *propre* is therefore an empirical difference between *selbst* and *propre*; but this does not affect the analysis proposed here. Indeed, it does not necessarily predict that the alternative possessors are related to the intensified one. The alternative functions do not logically have to express human relationships, but logically speaking, we can find for any set $\{a, a_1, \dots, a_k\}$ on D_e a set of functions $\{f_1, f_2, f_3 \dots f_k\}$ such that $f_1(a)=a_1, f_2(a)=a_2 \dots, f_k(a)=a_k$. Any alternative individual can be returned by any alternative function to the identity function.

Thus, the alternative individuals indirectly induced by *propre* –unlike *selbst*– are not structured into a center. However, they are ordered on a scale of likelihood in the case of possessum *propre*: as opposed to *selbst*¹⁷ and possessor *propre*,¹⁸ possessum *propre* induces a scalarity effect. As shown above, the proposition containing the intensified element is an unlikely one as compared to the alternative propositions. For example in (6b) (repeated below), Arnaud's daughter is an unlikely individual to stop visiting Arnaud among the contextual alternatives Arnaud's cousin and Arnaud's friend.

(28) [=6b] Arnaud est devenu si insupportable que sa propre fille a
 Arnaud is become so unbearable that his own daughter has
 cessé de lui rendre visite
 stopped of him visit
 ‘Arnaud has become so unbearable that his own daughter stopped
 visiting him.’

This is the same kind of scalarity effect as the one induced by the focus sensitive particle *même* (cf. 10). But as mentioned above, the difference consists in the absence of an existential presupposition in the case of *propre*.

To account for this scalarity effect, I propose that possessum *propre* is associated with a silent element *even* that triggers a scalar presupposition. This is

¹⁷Eckardt (2001: 376) specifies that "not all examples of stressed *selbst* evoke a scale of surprise", as exemplified by the following sentence:

(iv) Der Busfahrer selbst erlitt einen Schädelbruch.
 the bus driver himself suffered a fracture of the skull
 ‘The bus driver himself suffered a fracture of the skull.’

¹⁸The following example shows that possessor *propre* does not involve any scalarity effect: it is not surprising that Benjamin prefers sleeping in his own bed as opposed to other people's beds.

(v) Benjamin préfère dormir dans son propre lit.
 Benjamin prefers sleep in his own bed
 ‘Benjamin prefers sleeping in his own bed.’

probably related to the possibly hidden *even* involved by minimizers (cf. Heim 1984) that denote the low endpoint of the contextually relevant pragmatic scale as illustrated in (29):

(29) He didn't < EVEN > lift a finger.

Hidden *even* introduces here a scalar presupposition: the proposition is the least likely proposition among the set of alternative propositions.

Let's apply this analysis to example (6b) repeated here:

(30) [=6b] Arnaud est devenu si insupportable que <EVEN> sa [propre]_F fille
 Arnaud is become so unbearable that his own daughter
 a cessé de lui rendre visite.
 has stopped of him visit
 'Arnaud has become so unbearable that his own daughter stopped
 visiting him.'

As shown above, this is an example of possessum *propre* since Arnaud's daughter is contrasted with other individuals, namely Arnaud's cousin and Arnaud's friend in the context. Thus, the ordinary meaning of *propre* is the following one, where the identity function takes the possessum individual as argument:

$$\llbracket \textit{possessum propre} \rrbracket^\circ = \lambda R. \lambda x. \lambda a. \text{ID}(a(R(x)))$$

Therefore, the focus meaning of *propre* in this sentence is the set of type-lifted variants (using Lift_2) of contextually salient alternative functions to the identity function, i.e. the set of type-lifted₂ variants of salient functions from individuals to individuals except for the identity function. Since the relevant alternative possessees in the context are Arnaud's cousin and Arnaud's friend, there are two contextually salient alternative functions to the identity function: the function g_1 that takes Arnaud's daughter as argument and returns Arnaud's cousin and the function g_2 that takes Arnaud's daughter as argument and returns Arnaud's friend.

$$\llbracket \textit{propre} \rrbracket^f = \{ \text{Lift}_2(f) \mid f_{\langle e, e \rangle} \text{ is a contextually salient alternative to ID} \}$$

$$f_{\langle e, e \rangle} \in \{ g_1; g_2 \}$$

Therefore, the induced set of alternatives to Arnaud's daughter in the domain of individuals is as follows:

$$\text{Alt}(C)(\text{Arnaud's daughter}) = \{ g_1 (\text{Arnaud's daughter}); g_2 (\text{Arnaud's daughter}) \}$$

$$= \{ \text{Arnaud's cousin}; \text{Arnaud's friend} \}$$

Thus, the focus semantic value of (30) is the following set of propositions, on which *even* operates:

$$\llbracket \text{Arnaud est devenu si insupportable que <EVEN > sa [propre]_F fille a cessé de lui rendre visite} \rrbracket^f = \{ \text{Arnaud has become so unbearable that } x \text{ stopped visiting him} / x \in \text{Alt}(C)(\text{Arnaud's daughter}) \}$$

This correctly means that the focus semantic meaning of the sentence p 'Arnaud has become so unbearable that his daughter stopped visiting him' is the set of the alternative propositions p_1 'Arnaud has become so unbearable that his cousin stopped visiting him' and p_2 'Arnaud has become so unbearable that his friend

stopped visiting him'. Moreover, silent <EVEN> introduces the presupposition that *p* is least likely than *p*₁ and *p*₂.

To sum up, the alternatives involved in the case of *propre* are not structured into a center, but silent *even* associated with possessum *propre* induces their ordering on a scale of likelihood.

Despite these differences concerning the alternatives, I have thus argued that *propre* is a counterpart of *-même* in possessive DPs. Like *-même*, *propre* is an intensifier, and its specificities come from its restricted distribution in possessive DPs: it is a flexible intensifier in that it can intensify either the possessor or the possessum.

3.3. Agentive propre

The spirit of this analysis that treats *-même* (corresponding to German *selbst*) and *propre* in a similar way is further justified by another empirical observation: *propre* seems to present the same variety of readings as *selbst*. In particular, *selbst* arguably exhibits two different readings depending on its syntactic position: adnominal *selbst* – that I have been referring to so far – differs from adverbial *selbst* that presents an agentive reading. The two following examples borrowed from Hole (2002) illustrate the difference. Moreover, the corresponding French examples show that the same difference holds for French *-même*:

- (31) Paul **selbst** wird teilnehmen, nicht nur seine Schwester. (adnominal use)
Paul himself will attend, not only his sister.
'Paul himself will attend, not just his sister.'
cf. French: Paul lui-même va venir, et pas seulement sa sœur.
- (32) Paul will **selbst** aufräumen. (adverbial-agentive use)
Paul wants himself clean_up
'Paul wants to clean up himself.' (= without any help)
cf. French: Paul veut ranger lui-même.

In (31), adnominal *selbst* says that at least one other person is under discussion as a possible attendee; in (32), agentive *selbst* expresses the idea that Paul does not delegate the job of cleaning up. To formalize these intuitions, Hole (2002) argues that in the case of adnominal *selbst*, the focused identity function takes as argument the DP to which *selbst* adjoins; but in the case of agentive *selbst*, it takes the agentive Voice Head proposed by Kratzer (1996).¹⁹

The important point for our purposes is that both readings are available with *propre* as well. Whereas possessor and possessum *propre* correspond to adnominal *même* (*-même* adjoined to the possessor or the possessum),²⁰ the following

¹⁹See Hole (2002) for more details about his analysis of agentive *selbst*.

²⁰Thus in (3b), *sa propre voiture* ('his own car') roughly corresponds to *la voiture de Claire elle-même* ('the car of Claire herself') and in (6b), *sa propre fille* ('his own daughter') roughly corresponds to *sa fille elle-même* ('his daughter herself').

examples illustrate two cases of agentive *propre*. This reading is particularly salient with deverbal nouns (33a) and objects of creation verbs (34a).

- (33) a. Ce site internet est de sa **propre** création.
 this site internet is of his own creation
 ‘This website is his own creation.’
 b. Cyril a créé ce site internet **lui-même**.
 Cyril has created this site internet himself
 ‘Cyril created this website himself.’ [= without help]
- (34) a. Claire a fabriqué ses **propres** vêtements.
 Claire has made her own clothes
 ‘Claire made her own clothes.’
 b. Claire a fabriqué ses vêtements **elle-même**.
 Claire has made her clothes herself
 ‘Claire made her clothes herself.’ [= without help]

Indeed, (33a) can be paraphrased by (33b) that clearly involves agentive *-même*. So, both sentences express the idea that Cyril created the website without any help. They do not mean that Cyril as opposed to someone else created the website, but Cyril is in an agentive relation to the creation of the website (as opposed to other alternative relations). Similarly, both (34a) and its paraphrase (34b) say that Claire made her clothes without any help. Under this reading, (34a) does not mean that Claire made her clothes as opposed to someone else’s clothes (as possessor *propre* would predict) or as opposed to something else (as possessum *propre* would predict), but that she made them by herself, without any help.

This observation would require further investigation, in particular to understand why such readings are particularly salient when *propre* is associated with deverbal nouns or creation verbs, and to provide an exact analysis of such readings. But for my purposes, it is enough for now to notice that *propre* presents the same range of readings as *même*. This argues in favor of the idea exposed here that *propre* and *-même* fall into the same class. Moreover, this suggests that adnominal and adverbial *-même* should not be analyzed as two different phenomena as it has often been proposed:²¹ it is presumably not accidental that these two readings arise together with two different morphological roots (*-même* and *propre*). Therefore, this argues for an unification of *-même* and this supports Hole’s hypothesis that unifies the two uses of *selbst*: according to his hypothesis, the only difference between adnominal and adverbial *selbst* is the argument that the identity function takes (DP or agentive Voice Head).

4. Conclusion

In this paper, I have proposed that French *propre* is an intensifier that is restricted to possessive DPs: in this sense, *propre* is the counterpart of *-même* in possessive DPs.

²¹For example, Eckardt (2001: 399) considers cases such as (34b) as open cases.

Its specificity is that it is a type-lifted version of the identity function that can target either the possessor or the possessum.

Furthermore, based on the similarity between *propre* and *-même*, I have suggested that adnominal and adverbial uses of intensifiers should be analyzed as the same phenomenon: the core meaning of intensifiers is to involve an identity function in focus (thereby relating to contextually salient alternative functions that do not map the respective referent onto itself, but onto some other referent) which may take different semantic arguments, whether the surface syntax of the intensifier remains the same (cf. *propre*) or not (cf. *même*).

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