# Logophoricity and Locality: a View from French Anaphors

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# Introduction

In a wide range of languages, we observe that the very same elements display two distinct behaviors: sometimes, they are subject to Condition A of the Binding Theory (Chomsky 1986, a.o), call them (as in Charnavel & Sportiche 2016-a) *plain* anaphors; sometimes, they are exempt from the locality conditions imposed by Condition A of the Binding Theory, call them (as in Pollard & Sag 1992) *exempt* anaphors. This is for instance the case of English *himself* (Pollard & Sag 1992, a.o.), French *lui-même* and *son propre* (Charnavel & Sportiche 2016-a, a.o.), Icelandic *sig* (Maling 1984, a.o.), Mandarin *ziji* (Huang & Liu 2001, a.o.), Japanese *zibun* (Nishigauchi 2014, a.o.), Turkish *kendi si* or Uyghur *öz* (Major & Özkan 2017), among many others. I will only be concerned with such elements in this article.

Why is it that in language after language, the same element exhibits two types of behavior, each with distinct associated properties?

To the (limited) extent that this question is addressed in the literature, the analysis proposed is one of lexical ambiguity locating the source of these different behaviors in the anaphors themselves: *himself*, for example, has two (related) lexical entries, one for plain behavior, one for exempt behavior.

This article argues for two main points primarily on the basis of the behavior of French anaphors *lui-même* and *son propre*.<sup>1</sup>

First, it proposes and motivates a unitary analysis of the plain/exempt dichotomy, which takes all instances of these anaphors to be plain: they must all obey Condition A. It will argue that instances of anaphors that seem to be exempt are in fact locally bound by a silent element introduced by a logophoric operator, and all the differences between plain and exempt anaphors derive from the properties of their antecedents. That they can have the same form in a variety of languages is thus not surprising.

<sup>&</sup>lt;sup>1</sup> The reflexive clitic *se* will not be investigated in this article because under closer scrutiny, it appears that *se* is not itself an anaphor, but it is rather a marker of voice (see Sportiche 2014, Ahn 2015, a.o.). In fact, the clitic *se* does not only occur in reflexive constructions in French, but also in other constructions such as middle or anticausative constructions.

The second goal of this article is to revisit the notion of logophoricity, reaching different conclusions about what it includes than the seminal work of Sells (1987), as described below.

Two crucial observations motivate this unitary analysis.

First, exempt anaphors exhibit logophoric, i.e. perspectival, properties, as noticed by many (Clements 1975, Sells 1987, a.o.): not only must they be anteceded by a DP denoting a perspective center, they must also occur in a constituent expressing the perspective of this center. The covert logophoric operator I postulate is needed to encode the property that this constituent must represent the perspective of its antecedent. As an anaphor can be bound by this covert operator, it will superficially appear as exempt and perspectival.

The second observation, based on cases of perspective conflicts, is that there is direct evidence that exempt anaphors are in fact subject to a locality condition similar to that imposed by Condition A.

Section 1 presents an initial argument from parsimony: I will survey the purported differences between plain and exempt anaphors and outline the proposal to reduce them to the presence vs. absence of a logophoric operator, which will code the first observation above.

Section 2 presents a detailed argument for this proposal from interpretation: I will first examine in detail and motivate what counts as logophoric conditions distinguishing between different types of logophoric centers, namely attitudinal and empathic perspectives, both of them mental. I will next argue that, contrary to what is reported in the literature (most prominently, Sells 1987), all instances of exempt anaphors meet these logophoric conditions. In particular, I will show that deictic centers, which are not necessarily mental, do not license exempt anaphora.

Section 3 will argue for the presence of the logophoric operator hypothesis by showing how it derives the second crucial observation mentioned above. The locality constraints of exempt anaphors will thereby be specified.

Section 4 will show that all properties of exempt anaphors derive from the presence of the logophoric operator, which locally binds them, but crucially need not be bound by the antecedent.

Section 5 will conclude by presenting some crosslinguistic implications and remaining questions.

# 1. The argument from parsimony: the issue of exempt anaphora

# 1.1. Differences between plain and exempt anaphors

Plain and exempt anaphors are reported to superficially differ in five ways. To illustrate these differences, I follow Charnavel & Sportiche's 2016-a strategy and take it that inanimate anaphors must be plain, while animate anaphors can be either (I will return to this in Section 1.3, where I examine the issue of how to identify exempt anaphors). In each case below, the plain anaphor cases use inanimate anaphors, the exempt cases animate ones.

First, by definition, plain anaphors are visibly subject to locality requirements, while exempt anaphors are not. This is exemplified in (1) using an inanimate version of the French anaphor *son propre* 'his own'.<sup>2</sup>

- (1) a. [Cette auberge]<sub>i</sub> fait de l'ombre à son<sub>i</sub> propre jardin et au jardin de la maison voisine.
  - '[This inn]<sub>i</sub> gives shade to its<sub>i</sub> own garden and to the garden of the neighboring house.'<sup>3</sup>
  - b. \*[Cette auberge]<sub>i</sub> bénéficie du fait que les touristes préfèrent son<sub>i</sub> propre jardin à ceux des auberges voisines.
    - '\*[This inn]<sub>i</sub> benefits from the fact that the tourists prefer its<sub>i</sub> own garden to that of the neighboring inns.'
  - c. \*Les gérants de [cette auberge]<sub>i</sub> s'occupent de son<sub>i</sub> propre jardin et de celui des auberges voisines.
    - "The managers of [this inn]<sub>i</sub> take care of its<sub>i</sub> own garden and that of the neighboring inns."

By contrast, exempt anaphors, which must be animate, can escape such locality conditions as illustrated in (2).

Charnavel (2012: chapter 1), the judgments of this kind of sentences were checked using a systematically controlled questionnaire administered to 86 native speakers of French. Also note that the presence vs. absence of stars indicates the existence of a significant contrast in acceptability, not necessarily of plain (un)acceptability.

<sup>&</sup>lt;sup>2</sup> In the case of *son propre*, explicit contrasts with another contextual possessor are made to guarantee that we deal with anaphoric possessor *son propre*: based on Charnavel (2012), Charnavel & Sportiche (2016-a) note that *son propre* exhibits different readings and only possessor *son propre*, i.e. *son propre* inducing a contrast with contextual possessors, behaves like an anaphor. Note that as explained in Charnavel (2012: chapter 1), the judgments of this kind of sentences were checked using a

<sup>&</sup>lt;sup>3</sup> Throughout the paper, the English translations are simply meant as glosses of the French examples: the (absence of) stars indicated in the English reflect(s) the French judgments. No stand is taken here on the judgment of the corresponding English sentences.

- (2) a. Mariei fait de l'ombre à sai propre fille et à la fille de la voisine.
  - 'Mary<sub>i</sub> is in the light of her<sub>i</sub> own daughter and the neighbor's daughter.'
  - b. Marie<sub>i</sub> bénéficie du fait que les touristes préfèrent son<sub>i</sub> propre hôtel à ceux de ses concurrents.
    - 'Mary<sub>i</sub> benefits from the fact that the tourists prefer her<sub>i</sub> own hotel to those of the competitors.'
  - c. Les parents de Marie<sub>i</sub> s'occupent de son<sub>i</sub> propre avenir et de celui de ses cousins.
    - 'Mary<sub>i</sub>'s parents take care of her<sub>i</sub> own future and that of her cousins.'

Second, plain anaphors must be exhaustively bound, while exempt anaphors can have partial or split antecedents (see Lasnik 1989, Den Dikken, Lipták & Zvolenszky 2001, a.o.): the (im)possibility of inclusive reference distinguishes between plain and exempt anaphors, as shown by the contrast between (3) and (4).

- (3) a.  $*[L'auberge]_i$  qui jouxte [la crêperie]<sub>k</sub> fait de l'ombre à leur<sub>i+k</sub> propre jardin et au jardin de la maison voisine.
  - '\*[The inn]<sub>i</sub> that is next to [the creperie]<sub>k</sub> gives shade to their<sub>i+k</sub> own garden and to the garden of the neighboring house.'
  - b. \*[L'auberge]<sub>i</sub> et la crêperie font de l'ombre à son<sub>i</sub> propre jardin et au jardin de la maison voisine.
    - '\*[This inn]<sub>i</sub> and the creperie give shade to its<sub>i</sub> own garden and to the garden of the neighboring house.'
- (4) a. Marie<sub>i</sub>, qui est à côté de Paul<sub>k</sub>, fait de l'ombre à leur<sub>i+k</sub> propre fille et à la fille de la voisine.
  - 'Mary<sub>i</sub>, who stands next to Paul<sub>k</sub>, is in the light of her<sub>i+k</sub> own daughter and the neighbor's daughter.'
  - b. Marie $_i$  et Paul font de l'ombre à sa $_i$  propre fille et à la fille de la voisine.
    - 'Mary<sub>i</sub> and Paul are in the light of her<sub>i</sub> own daughter and the neighbor's daughter.'

Third, plain anaphors only give rise to sloppy readings in ellipsis and focus constructions, while exempt anaphors can also trigger strict readings. This is illustrated using the French anaphor *elle-même* '≈herself' in (5) vs. (6).

- (5) a. [Ta page internet]<sub>i</sub> contient beaucoup de liens vers elle<sub>i</sub>-même, et la mienne aussi.
  - '[Your webpage]<sub>i</sub> contains many links towards itself<sub>i</sub> and mine does too (contain many links towards {itself/\*your webpage}).'
  - b. Seule [ta page internet]<sub>i</sub> contient des liens vers elle<sub>i</sub>-même.

    'Only [your webpage]<sub>i</sub> contains links towards itself<sub>i</sub> (the other webpages do not contain links towards {themselves/\*your webpage}).'
- (6) a. Simone<sub>i</sub> aime les photos d'elle<sub>i</sub>-même et Lucie aussi. 'Simone<sub>i</sub> likes pictures of herself<sub>i</sub> and Lucy does too (like pictures of {herself/ Simone}).'

b. Seule Simone<sub>i</sub> aime les photos d'elle<sub>i</sub>-même.
 'Only Simone<sub>i</sub> likes pictures of herself<sub>i</sub> (the other people do not like pictures of {themselves/Simone}).'

Fourth, plain anaphors, unlike exempt anaphors, seem to be in complementary distribution with pronouns (see discussion about this in Section Error! Reference source not found.), based on examples such as (7) vs. (8).

- (7) [La Terre]<sub>i</sub> tourne sur elle<sub>i</sub>-\*(même). '[The earth]<sub>i</sub> spins on it<sub>i</sub>\*(self).'
- (8) Marie<sub>i</sub> subit l'influence des nombreux politiciens qui tournent autour d'elle<sub>i</sub>-(même).
  - 'Mary $_i$  is subject to the influence of the many politicians that revolve around  $her_i(self)$ .'

To these distributional properties distinguishing between plain and exempt anaphors, we can add – as noted – an interpretive difference: unlike plain anaphors, exempt anaphors are characterized by their logophoric interpretation (Clements 1975, Sells 1987, Pollard & Sag 1992, a.o.). In the previous examples (i.e. (2)b-c, (4), (6) and (8)), exempt *son propre* or *lui-même* are subject to perspectival conditions: a phrase containing an exempt anaphor must be understood as expressing the perspective of the antecedent of this anaphor, as will be detailed in Section 2.

# 1.2. Unifying plain and exempt anaphors: the logophoric operator hypothesis

Despite these differences, these French plain and exempt anaphors are superficially morphologically identical. Furthermore, apart from the perspectival effects just mentioned, their meaning contributions are identical: their semantic value is that of their antecedent(s) or binder(s). This is not an idiosyncrasy of French, as the same array of differences between two sets of instances of anaphors has been observed in many languages from diverse language families (e.g. English *himself*, Japanese *zibun*, Mandarin *ziji*, Icelandic *sig*, Turkish *kendi si*, Uyghur *öz*, a.o., see references above).

Given that this pattern is documented in many unrelated languages, we are faced with an issue of parsimony: how to minimally account simultaneously for these similarities and differences.

One possible type of account locates the plain/exempt differences in the anaphors themselves, e.g. by postulating that anaphors are optionally underspecified for *phi*-features (Hicks 2009, a.o.). When so underspecified, they must AGREE with an

antecedent to become interpretable (the locality of AGREE guaranteeing the locality of binding). But this would say nothing as to why fully specified anaphors would have to be perspectival rather than, say, like plain pronouns.<sup>4</sup> A variant of this idea is to assume anaphors to be optionally marked as logophoric, e.g. [+log], and further assume that only [-log] anaphors are subject to locality requirements. But this would amount to postulating massive homonymy (and of the same type in various unrelated languages) and it would leave unexplained the correlation between locality and non-logophoricity. A combination of the two variants taking fully specified anaphors to be [+log] (cf. Anand 2006, a.o.) would stipulate the correlation non-locality/logophoricity.

The alternative defended here is to reduce all distributional and interpretive differences between plain and exempt anaphors to one: a silent, syntactically represented, logophoric operator introducing a logophoric local binder for the anaphor (generalizing Koopman & Sportiche 1989's introduction of logophoric operators in Abe, motivated on other grounds<sup>5</sup>).

The essence of the present analysis adapts Speas & Tenny's 2003 and Speas's 2004 proposal regarding the syntactic encoding of point of view: each clause (as well as some other constituents – see below Section 3) can be (and perhaps must be) presented from some individual(s)'s perspective. Syntactically, this is coded by the logophoric operator  $OP_{LOG}$ , a head taking a clause P as complement, and a silent pronoun (small  $pro^7$ ) as subject denoting this(/ese) perspective center(s). The exempt anaphor with overt antecedent A is locally bound by this pro, which is itself coreferent with the antecedent A, as represented in (9) (cf. Cole, Hermon & Huang 2006, Sundaresan 2012, Nishigauchi 2014, a.o., for the idea of a mediation between the antecedent and the anaphor, with crucially different consequences.

<sup>&</sup>lt;sup>4</sup> See Charnavel & Sportiche (2016-a: Section 5.2) for further reasons casting doubts on an AGREE-based solution.

<sup>&</sup>lt;sup>5</sup> Koopman & Sportiche (1989) introduce logophoric operators to account for the distribution of *n*-pronouns in Abe. Anand (2006) adopts them to account for the *de se* reading of some pronouns in Yoruba and English as well as some long distance anaphors in Mandarin.

<sup>&</sup>lt;sup>6</sup> Huang & Liu (2001) already introduce perspectival projections based on Sells's 1987 proposal: SourceP, SelfP and PivotP, to the specifier of which Mandarin *ziji* is argued to move.

<sup>&</sup>lt;sup>7</sup> It could be non-obligatorily controlled big PRO (cf. Sundaresan 2012, a.o.). Nothing here hinges on this choice.

<sup>&</sup>lt;sup>8</sup> Two types of previous proposals already assume a mediation between anaphors and their antecedents: proposals based on successive cyclic movement of anaphors (Cole, Hermon & Huang 2006, a.o.) and proposals based – like here – on the presence of a *pro* binding anaphors in their perspectival phrase and

Semantically, OP<sub>LOG</sub> has the following (rough) denotation:

(10) 
$$\|OP_{LOG}\| = \lambda P$$
.  $\lambda x$ . P from x's perspective

Assuming that this proposal is correct, it is easy to see that, even though the exempt anaphor is subject to Condition A and must be bound by *pro*, the illusion is created that exempt anaphors need not be bound: indeed, they need not be bound (or even c-commanded) by A, as the relation between A and *pro* can be one of coreference. The (local binding) dependency between the anaphor and *pro* is misconstrued as an unconstrained relation of coreference between the anaphor and the antecedent.<sup>9</sup>

This hypothesis allows us to unify the syntactic behavior of plain and exempt anaphors: we can assume that both types are subject to the same condition A locality restrictions. In Section 4, I will discuss how the other distributional differences follow as well.

This hypothesis also derives the interpretive specificity of exempt anaphors, namely their perspectival interpretation.  $OP_{LOG}$  selects the silent argument *pro*, which saturates the predicate of x in (10) and which must, by the definition in (10), refer to a perspective center (the apparent antecedent A of exempt anaphors). Moreover, the other argument P of  $OP_{LOG}$ , the domain containing the exempt anaphor, must represent the perspective of that logophoric center. This derives why exempt anaphors have to occur in clauses expressing the perspective of their antecedent, as we will see in details in Section 2.

coreferent with, or controlled by, a perspective center (Sundaresan 2012, Nishigauchi 2014, a.o.).

exhaustive binding and strict readings of exempt anaphors. The second set of proposals, based on a similar type of mediation as that proposed here, does not have these consequences, but Condition A is in effect removed and replaced by perspectival binding: Tamil *taan* (Sundaresan 2012) and Japanese *zibun* (Nishigauchi 2014) are argued to be *always* locally bound by silent perspectival elements. This analysis cannot extend to anaphors like French *son propre* and *lui-même*, among others, that can be inanimate and have non-logophoric readings, or to animate anaphors read non-logophorically.

These previous analyses differ in various ways from the present proposal. The first, movement-based type of analysis also aims to reconcile Condition A with apparent non-local binding, but it wrongly predicts (as acknowledged by the authors) that exempt anaphors cannot occur in islands (see Section **Error! Reference source not found.**), and it cannot account for the possibility of non-binding, non-exhaustive binding and strict readings of exempt anaphors. The second set of proposals, based on a similar type of mediation as that proposed here, does not have these consequences, but Condition A is in effect removed and replaced by perspectival binding: Tamil *taan* (Sundaresan 2012) and Japanese

<sup>&</sup>lt;sup>9</sup> This point is made (for another reason, see footnote 8) in Sundaresan (2012) in her treatment of the Tamil anaphor *taan*.

In sum, this hypothesis reduces both the syntactic and semantic specificities of exempt anaphors (as compared to plain anaphors) to a single factor: the presence of a logophoric operator. This allows us to unify instances of plain and exempt anaphors as instances of a single type of element that is subject to Condition A: the differences between them simply come from their binder (covert logophoric operator vs. overt antecedent). Thus, there is only one lexical entry and no homonymy needs to be postulated.

# 1.3. How to identify exempt anaphors

The source of the problem that I propose to solve mainly lies in the existence of distributional differences between plain and exempt anaphors in spite of their morphological identity. But note that simply stating the problem already raises a methodological issue: how should plain and exempt anaphors be distinguished, given that they have the same form and that we do not a priori know how Condition A should be characterized? As assumed by some, the fact that some instances of anaphors fall outside the scope of the Chomskian Condition A could be taken as an argument against this theory rather than as an argument for elaborating a theory of exemption. However, all attempts to redefine Condition A so as to capture the behavior of all instances of anaphors failed (see Huang & Liu 2001: 4-8 for a review), thereby suggesting that distinguishing between plain and exempt ones is indeed on the right track. So the two-variable problem remains: we are simultaneously looking for the generalization capturing the distribution of plain anaphors (so as to define Condition A) and for that capturing the distribution of exempt anaphors (so as to define a theory of exemption) without having the morphology help us distinguish between the two sets.

I here adopt Charnavel & Sportiche's 2016-a strategy to handle this problem, that is, the use of a criterion independent of the definition of Condition A to distinguish between plain and exempt anaphors in a given sentence. A property that meets these conditions for French is inanimacy: inanimate anaphors are always plain anaphors. The reasoning behind this idea goes as follows. Many crosslinguistic generalizations have been proposed, showing that the antecedents of exempt anaphors are logophoric centers (Clements 1975, Sells 1987, Pollard & Sag 1992, a.o.), but these various generalizations do not agree on a precise definition of logophoricity: the definitions of perspective center are too vague or too diverse in the literature (cf.

Clements 1975, Sells 1987, Kuno 1987, Culy 1994, Schlenker 2003, Anand 2006, a.o.) to safely identify exempt anaphors. However, all these generalizations agree on one fact: that a logophoric center must be a live person. This conversely means that inanimates cannot be logophoric centers and therefore cannot antecede exempt anaphors.

Inanimacy, used in sentences (1), (3), (5), (7), allows us (at least in French) to draw a dividing line between plain and exempt anaphors: the syntactic distribution of inanimate anaphors can be used as the empirical basis to determine the generalization to be explained by Condition A; this is Charnavel & Sportiche's 2016 strategy.

Conversely, we can conclude the following:

(11) An anaphor is exempt when it is animate and appears in a configuration disallowing inanimate anaphors.

By configuration, I mean that the structural position of the antecedent with respect to the anaphor must be taken into account: as we have seen above, animate anaphors, as opposed to inanimate anaphors, superficially allow non c-commanding or long distance antecedents. For instance, animate son propre is exempt in (2)b and (2)c because it occurs in the same configuration as in (1)b (esp. long distance antecedent) and (1)c (esp. non c-commanding antecedent) where the inanimate son propre is not acceptable. We thus have a reliable way to empirically identify some 10 exempt anaphors in French without presupposing any particular theory for Condition A. This will be the basis of investigation in this article. 11

<sup>&</sup>lt;sup>10</sup> Indeed, nothing prevents an exempt anaphor from occurring in a position allowing an inanimate

<sup>&</sup>lt;sup>11</sup> As mentioned in Charnavel & Sportiche (2016-a), there is one further caveat to take into consideration for the anaphor *lui-même*. We observe, as illustrated in (i) and (ii) below, that unless it is heavily stressed, *lui-même* is not acceptable when it can be replaced by a weaker form such as the clitic reflexive se (subject oriented cliticizable argument) or the object clitics le and lui. This falls under a generalization discussed by Cardinaletti & Starke (1999): all else relevant equal, if a weaker form of the target element is available, it must be used, thus blocking the use of a stronger form. Importantly, this condition is independent of both Condition A and exemption from it. For our purposes, this means that to observe the behavior of exempt *lui-même*, we need to exclude cases where *lui-même* occurs in configurations licensing se, le or lui. This will be taken into consideration in the rest of the article.

<sup>(</sup>i) a. Luc<sub>i</sub> s<sub>i</sub>'examine. / Luc<sub>i</sub> is examining himself<sub>i</sub>.'

b. \*Luc<sub>i</sub> examine <u>lui<sub>i</sub>-même</u>. (unless heavily stressed) / '\*Luc<sub>i</sub> is examining himself<sub>i</sub>.'

c. Luc<sub>i</sub> pense que Lise  $\{\underline{l_i}'/*\underline{s_i}'\}$  examinera. /' Luc<sub>i</sub> thinks that Lise will examine him<sub>i</sub>.'

d. \*Luc; pense que Lise examinera lui;-même. (unless heavily stressed) / \*Luc; thinks that Lise will examine himself<sub>i</sub>.'

<sup>(</sup>ii) a.  $*Luc_i \underline{se_i}$  dépend.  $`*Luc_i$  depends on himself<sub>i</sub>.' b.  $Luc_i$  dépend de  $\underline{lui_i}$ -même.  $`Luc_i$  depends on himself<sub>i</sub>.'

c. \*Luc; pense que Lise {se;/le;/lui;} dépend. / '\*Luc; thinks that Lise dépends on him;.'

d. Luc<sub>i</sub> pense que Lise dépend de lui<sub>i</sub>-même. / Luc<sub>i</sub> thinks that Lise depends on himself<sub>i</sub>.

# 2. The argument from interpretation: logophoricity of exempt anaphors

The goal of the previous section was to introduce the logophoric operator hypothesis. The goal of the present section is to support this hypothesis using an argument based on the interpretation of exempt anaphors: using the strategy centered around (11) to identify instances of French exempt anaphors, I will show that they have to be logophorically interpreted as specified in  $(12)^{12}$ .

- (12) Logophoric interpretation of exempt anaphors:
  - a. An exempt anaphor has to be anteceded by a perspective center (logophoric center).
  - b. The domain containing an exempt anaphor has to express the perspective of that center (logophoric domain).

Furthermore, I will propose – inspired by different proposals (in particular Sells 1987, Kuno 1987, Oshima 2006) that I will make more precise based on independent insights coming from the semantic literature on attitude contexts – that logophoric centers come into two main categories described in (13).

- (13) Taxonomy of logophoric centers
  - a. Attitude holder: intellectual center of perspective
  - b. Empathy locus: emotional center of perspective

Crucially, I will show that only these *mental* types of perspective centers can license (French) exempt anaphors. This directly follows from clause (b) in (12) and is directly accounted for by the logophoric operator hypothesis.

# 2.1. Logophoric center in attitude contexts: attitude holder

Attitude holder is the first type of logophoric center that I hypothesize to be relevant for our purposes: the French anaphors *son propre* and *lui-même* can be exempt when they appear in attitude contexts and are anteceded by the attitude holder of that context. To demonstrate this, I will define different tests for attitude contexts and show that the anaphors (superficially) do not need to obey locality restrictions when their clause passes these tests. Note that in this section, I only examine simple cases involving a single attitude holder; more complex cases involving several attitude holders in the same sentence will be studied in Section 3.

<sup>11</sup> 

<sup>&</sup>lt;sup>12</sup> The term *logophor* comes from Hagège (1974) and was first used to describe specific pronouns in West-African languages referring to the author of thoughts in an indirect discourse; see Charnavel, Cole, Hermon & Huang (to appear: section 5), for a review about the relation between logophoric pronouns and exempt anaphors first established by Clements (1975).

#### 2.1.1. Tests for attitude contexts

The notions of attitude context and attitude holder (which encompasses Sells's 1987 notion of Source and that of Self in part)<sup>13</sup> are well defined in the semantic literature based on independent grounds (for a review, see Pearson, to appear, a.o.). In most typical cases, the attitude holder is the subject of an intensional predicate like *think* and the attitude context is the embedded clause complement of that predicate. Below, I present two tests for identifying attitude contexts, and two tests for diagnosing attitude holders.

# (i) Substitution Test

First, attitude contexts are characterized by the fact that substitution of coreferring terms might change the truth value of the ascription, as was already shown by Frege (1980/1892). That's why (14) is not contradictory even if *Superman* and *Clark Kent* corefer: they are in the scope of the attitude verb *believes* and Lois does not necessarily know that they refer to the same person.

(14) Lois believes that Superman is strong and that Clark Kent is not strong.

# (ii) Double Orientation Test

A second property of attitude contexts is that evaluative expressions (e.g. epithets, expressives, appositives) contained in them can be evaluated either by the speaker or by the attitude holder (Sæbø 2011, a.o.). For instance, the appositive *a psychopath* in (15)a (from Potts 2005) is most naturally speaker-oriented, but the attribution of the appositive in (15)b (from Amaral *et al.* 2007) can shift to the attitude holder *Sheila*.

(15) a. Sheila believes that Chuck, a psychopath, is fit to watch the kids.

b. Sheila believes that Chuck, <u>a sweetheart if ever there was one</u>, is fit to watch the kids.

<sup>&</sup>lt;sup>13</sup> Sells (1987) defines Source as 'the one who is the intentional agent of the communication' and Self as 'the one whose mental state or attitude the content of the proposition describes'. The former usually corresponds to the subject of verbs of saying, and the latter to the subject of other types of attitude verbs (but not always: for instance, it can also be an object of *psych*-verb, which does not necessarily behave like an attitude holder). I here merge these two categories for two main reasons: first, the category of attitude holder has independently been shown to form a natural class based on semantic tests, some of which are presented in this section; second, it is not empirically justified to distinguish between Source and Self for the purposes of anaphora exemption in French: the anaphors *son propre* and *lui-même* behave similarly when anteceded by Source or Self. In fact, this seems to hold more generally: in particular, I do not know of any language that would exempt anaphors anteceded by a Source, but not those anteceded by a Self (e.g. French, English, Mandarin, Japanese, Icelandic); but this remains an open empirical question to be further investigated based on more crosslinguistic comparisons. The distinction between Source and Self seems however to have empirical correlates for logophoric pronouns (Culy 1994, a.o.).

# (iii) Epithet Test

Besides these two diagnostics for attitude contexts, we can define two tests for diagnosing attitude holders specifically. The first one is the epithet test, based on the observation that an epithet occurring in an attitude context cannot refer to the attitude holder of that context (cf. Ruwet 1990, Pica 1994, Dubinsky & Hamilton 1998, Patel-Grosz 2012<sup>14</sup>). For instance (the English examples are from Dubinsky & Hamilton 1998: 688), *the idiot* cannot refer to John in (16)-(17)a where John is the relevant attitude holder (subject of *told*; complement of *d'après* 'according to'), but it can in (16)-(17)b where John is not an attitude holder (subject of *ran over*; complement of *à propos de* 'speaking of').

- (16) a. \*John<sub>i</sub> told us of a man who was trying to give [the idiot]<sub>i</sub> directions. b. John<sub>i</sub> ran over a man who was trying to give [the idiot]<sub>i</sub> directions.
- (17) a. \*D'après Jean<sub>i</sub>, [cet idiot]<sub>i</sub> est marié à un génie.
  - "\*According to John<sub>i</sub>, [the idiot]<sub>i</sub> is married to a genius."
  - b. A propos de Jean<sub>i</sub>, [cet idiot]<sub>i</sub> est marié à un génie. 'Speaking of John<sub>i</sub>, [the idiot]<sub>i</sub> is married to a genius.'

## (iv) French Pronoun Test

The second test I will use for attitude holders is specific to French: the pronouns en/y ' $\approx$  of him/her/it' (vs. *lui*, *elle* 'him, her') are not acceptable in attitude contexts when they refer to the corresponding attitude holder (see Ruwet 1990)<sup>15</sup>; just like epithets, these pronouns are antilogophoric. This is illustrated in (18)-(19)c, where *en* and *y* - unlike *lui* in (18)-(19)b - cannot be anteceded by *Emile*, the subject of *pense* 'thinks'. By contrast, *en* and *y* are acceptable when they do not refer to the attitude holder in

<sup>&</sup>lt;sup>14</sup> Dubinsky & Hamilton's (1998: 689) claim that "an epithet must not be anteceded by an individual from whose perspective the attributive content of the epithet is evaluated". But for most speakers, even if the attributive content of the epithet is intended to be evaluated from the speaker's perspective, not from the attitude holder's, an epithet is still unacceptable when referring to the attitude holder: in (16)a and (17)a, *the idiot* is not acceptable whether it is intended to be evaluated by John or by the speaker. I therefore strengthen Dubinsky & Hamilton's 1998 claim (i.e. epithets occurring in an attitude context cannot refer to the attitude holder of that context) and use it as a basis for my epithet test. But note that for the few speakers who do accept epithets when evaluated from the speaker's perspective, this needs to be controlled for when using the Epithet Test.

Patel-Grosz (2012) proposes a similar principle, the Anti-Judge constraint: "an epithet cannot occur in a sentence s if (i) the sentence is interpreted with respect to a judge j that is identical to the epithet's antecedent, and (ii) the antecedent c-commands the epithet" (Patel-Grosz 2012: 109). Point (ii) seems however too strong in view of examples like (17), where the antecedent does not have to c-command the epithet to make it ungrammatical.

<sup>&</sup>lt;sup>15</sup> The demonstrative pronoun *ce* seems to be subject to similar constraints (see Coppieters 1982).

(18)-(19)c (index m), or when they appear in non-attitude contexts as shown in (18)-(19)a,d (the difference between the attitude verb *penser* 'think' and the non-attitude verb *mériter* 'deserve' was noticed by Ruwet 1990).

- (18) a. Sophie<sub>i</sub> en<sub>k</sub> est amoureuse/est amoureuse de lui<sub>k</sub>. Sophie<sub>i</sub> is in love with him<sub>k</sub>.
  - b. Emile<sub>k</sub> pense que Sophie<sub>i</sub> est amoureuse de lui<sub>k/m</sub>. 'Emile<sub>k</sub> thinks that Sophie<sub>i</sub> is in love with him<sub>k/m</sub>.'
  - c. Emile<sub>k</sub> pense que Sophie<sub>i</sub> en\*<sub>k/m</sub> est amoureuse. 'Emile<sub>k</sub> thinks that Sophie<sub>i</sub> is in love with him\*<sub>k/m</sub>.'
  - d. Emile<sub>k</sub> mérite que Sophie<sub>i</sub>  $\underline{en}_{k/m}$  tombe amoureuse. 'Emile<sub>k</sub> deserves the fact that Sophie<sub>i</sub> falls in love with  $him_{k/m}$ .'
- (19) a. Sophie<sub>i</sub>  $\underline{y}_k$  pense/pense à lui<sub>k</sub>.
  - 'Sophie<sub>i</sub> thinks about him<sub>k</sub>.
  - b.  $Emile_k$  espère que  $Sophie_i$  pense à  $lui_{k/m}$ .
    - 'Emile<sub>k</sub> hopes that Sophie<sub>i</sub> thinks about him<sub>k/m</sub>.'
  - c. Emile<sub>k</sub> pense que Sophie<sub>i</sub>  $\underline{y}_{k/m}$  pense.
    - 'Emile<sub>k</sub> thinks that Sophie<sub>i</sub> thinks about him\*<sub>k/m</sub>.'
  - d. Emile $_k$  mérite que Sophie $_i$   $\underline{y}_{k/m}$  pense.
    - 'Emile<sub>k</sub> deserves the fact that Sophie<sub>i</sub> thinks about him<sub>k/m</sub>.'

# 2.1.2. Testing exempt anaphors in attitude contexts

These four tests can be used to guarantee that the clause containing an anaphor is an attitude context and that the anaphor refers to the attitude holder of that context. When we do so, we observe that the anaphors can systematically be exempt from Condition A. This is first illustrated for the French anaphor *son propre* in (20)-(22).

# (20) Substitution test

Julie<sub>i</sub> pense que <u>Clark Kent</u> préfère <u>son<sub>i</sub> propre</u> hôtel et que <u>Superman</u> préfère celui de ses concurrents.

'Julie<sub>i</sub> thinks that Clark Kent prefers her<sub>i</sub> own hotel and that Superman prefers that of her competitors.'

#### (21) Double orientation test

Caroline<sub>i</sub> croit que <u>cet idiot de Nicolas</u> a voté contre <u>son<sub>i</sub> propre</u> projet. 'Caroline<sub>i</sub> believes that that idiot Nicolas voted against her<sub>i</sub> own project.'

## (22) Epithet test

a. Robert<sub>i</sub> imagine que le rival de [<u>cet idiot</u>] $*_{i/k}$  a voté pour <u>son<sub>i</sub> propre</u> projet. 'Robert<sub>i</sub> imagines that the rival of [the idiot] $*_{i/k}$  voted for his<sub>i</sub> own project.'

b. Robert<sub>i</sub> imagine que son<sub>i/k</sub> rival a voté pour le projet de [cet idiot]\*<sub>i/k</sub>. 'Robert<sub>i</sub> imagines that his<sub>i/k</sub> rival voted for [the idiot]\*<sub>i/k</sub>'s project.

 $<sup>^{16}</sup>$  Not all native speakers of French can use *en* or *y* to refer to human beings. Since this dialect (which corresponds to the prescriptive norm) is irrelevant for antilogophoric *en* or *y*, I ignore it here.

First, we can identify French son propre as an exempt anaphor in all these examples based on strategy (11) (inanimate son propre is forbidden in such configurations, cf (1)c). Second, the tests guarantee that son propre refers to the attitude holder of its context. Specifically, the Substitution Test in (20) (the sentence is not contradictory even if Superman and Clark Kent corefer) and the Double Orientation Test in (21) (cet idiot de Nicolas 'that idiot Nicolas' can be evaluated by the speaker or by the attitude holder Caroline) show that the clause containing son propre is an attitude context; the Epithet Test in (22), which is applied in two different ways (the epithet is inserted in the same clause as the anaphor in (a), and replaces the anaphor in (b)), guarantees that son propre refers to the attitude holder of its clause (cet idiot 'the idiot' cannot refer to Robert, the subject of the attitude verb imagine 'imagines' and antecedent of son propre). This demonstrates that there is a correlation between the attitudinal interpretation of son propre and the possibility of its exemption.

The same holds for *lui-même* as exemplified in (23)-(26) (where only verbs incompatible with *se/le/lui* are used to avoid the confound mentioned in Footnote 11). Besides the tests used in (23)-(25) as in the case of *son propre* in (20)-(22), the French Pronoun Test is applied in (26): *en*, which replaces the anaphor in (26)b, cannot refer to the attitude holder *Sonia*, the antecedent of the anaphor in (26)a.

#### (23) Substitution Test

Sophie<sub>i</sub> croit que le sort de <u>Clark Kent</u> dépend d'<u>elle<sub>i</sub>-même</u> mais que celui de <u>Superman</u> dépend de ses collègues.

'Sophie<sub>i</sub> believes that Clark Kent's fate depends on herself<sub>i</sub> but Superman's depends on her colleagues.'

#### (24) *Double Orientation Test*

Sonia<sub>i</sub> craint que <u>cet idiot de Julien</u> ne soit amoureux d'<u>elle<sub>i</sub>-même</u> au lieu de sa femme.

'Sonia<sub>i</sub> is afraid that that idiot Julien is in love with herself<sub>i</sub> instead of with his wife.'

#### (25) Epithet Test

- a. Frédéric<sub>i</sub> imagine que les rivaux de <u>cet idiot<sub>\*i/k</sub></u> ne dépendent que de <u>lui</u>même.
  - 'Frédéric<sub>i</sub> imagines that the idiot\*<sub>i/k</sub>'s rivals only depend on himself<sub>i</sub>.'
- b. Frédéric\_i imagine que  $ses_{i/k}$  rivaux ne dépendent que de  $\underline{cet\ idiot}_{*i/k}$ .
  - 'Frédéric<sub>i</sub> imagines that his<sub>i/k</sub> rivals only depend on the idiot\*<sub>i/k</sub>.'

#### (26) French Pronoun Test

- a. Soniai craint que Julien ne soit amoureux d'ellei-même.
- b. Sonia<sub>i</sub> craint que Julien n'en\*<sub>i/k</sub> soit amoureux.
  - 'Sonia<sub>i</sub> is afraid that Julien is in love with her\*<sub>i/k</sub>.'

Moreover, *son propre* and *lui-même* have the same behavior in Free Indirect Discourse, which patterns with attitude contexts with respect to these tests: sentences (27)a-b cannot be interpreted as Free Indirect Discourse when the epithets that they contain refer to the author of the thoughts, Mélanie. Correlatively, the anaphors in (28)a-b can be exempt from locality requirements when referring to Mélanie. Note that in this case, being exempt amounts to having no (overt) antecedent at all in the same sentence.

- (27) a. Mélanie<sub>i</sub> était inquiète. Les enfants de [<u>la pauvre femme</u>]<sub>#i/k</sub> et ceux du voisin refusaient de l<sub>i</sub>'écouter depuis hier.
  - 'Mélanie; was worried. [The poor woman]#i/k's children and the neighbor's had been refusing to listen to her; since yesterday.'
  - b. Mélanie<sub>i</sub> était inquiète. Son<sub>i</sub> voisin était amoureux de [<u>la pauvre fille</u>]<sub>#i/k</sub> et non de sa femme.
    - 'Mélanie<sub>i</sub> was worried. Her<sub>i</sub> neighbor was in love with [the poor girl]<sub>#i/k</sub>, not with his wife.'
- (28) a. Mélanie<sub>i</sub> était inquiète. <u>Ses<sub>i</sub> propres</u> enfants et ceux du voisin refusaient de l'écouter depuis hier.
  - 'Mélanie<sub>i</sub> was worried. Her<sub>i</sub> own children and the neighbor's had been refusing to listen to her since yesterday.'
  - b. Mélanie<sub>i</sub> était inquiète. Son voisin était amoureux d'<u>elle<sub>i</sub>-même</u> et non de sa femme.
    - 'Mélanie<sub>i</sub> was worried. Her neighbor was in love with herself<sub>i</sub>, not with his wife.'

Thus, the anaphors son propre and lui-même can be exempt in all types of attitude contexts as long as they refer to the attitude holder of the context. Furthermore, these French exempt anaphors have to be read de se (cf. Huang & Liu 2001 and Anand 2006 for long distance Mandarin ziji vs. Pearson 2015 for the Ewe logophoric pronoun  $y\dot{e}$ ). This is shown in (29) and (30), where the (a) sentences (not read de se given the context) contrast with the (b) sentences (read de se).

- (29) [At the beginning of the Marriage of Figaro, Marceline thinks that Figaro was born from unknown parents; at the end of the play, she learns that he is in fact her son.]
  - a. Au début, Marceline; dit que Suzanne va épouser son; (#propre) fils. <sup>17</sup> 'At the beginning, Marceline; says that Suzanne will marry her; (#own) son.'

<sup>&</sup>lt;sup>17</sup> If specific prosody is added on *propre* (stress and rising intonation), an anti-*de se* reading can arise, that is, an ironic reading where the speaker emphasizes that Marceline is not aware that she is talking about her own son. This possible effect confirms that exempt *son propre* normally requires to be read *de se*, since it builds on this *de se* requirement: it is only because the *de se* reading is here required that

- b. A la fin, Marceline<sub>i</sub> dit que Suzanne va épouser son<sub>i</sub> (propre) fils. 'At the end, Marceline<sub>i</sub> says that Suzanne will marry her<sub>i</sub> (own) son.'
- (30) a. [Sabine and her father Michel are listening to songs that they recorded, and Sabine is in admiration of the male voice that they take to be her student's. Unbeknowst to them, the male voice is actually Michel's.] Michel; a dit que Sabine était fière de lui;-(#même). 'Michel; said that Sabine was proud of him;(#self).'
  - b. [Sabine and her father Michel are listening to songs that they recorded, and Sabine is in admiration of Michel's voice.]
    Michel<sub>i</sub> a dit que Sabine était fière de lui<sub>i</sub>-(même).
    'Michel<sub>i</sub> said that Sabine was proud of him<sub>i</sub>(self).'

Importantly, the fact that exempt anaphors in attitude contexts have to be read *de se* provides a way to distinguish between plain and exempt anaphors beyond animacy: non *de se* animate anaphors in attitude contexts have to be plain. This can be shown using intensional transitive verbs taking non-propositional complements such as *adore* and *hate*, which pass the Substitution Test in (31) (cf. Grodzinsky 2007, Schwarz 2015, a.o.).

(31) Mary adores Clark Kent and hates Superman.

Thus, the animate anaphors *elle-même* and *son propre* are not read *de se* in (32) and (33). This means that they are plain anaphors here, and confirms that the distinction between plain and exempt anaphors does not simply rely on animacy, but on perspective.

- (32) [Liliane Martin and her daughter Lise have entered a poetry competition. Liliane has not done so seriously, but simply to encourage her daughter to do it with her. When looking at the results, Liliane thus does not imagine one second that she could have won a prize: when she sees 'L. Martin' in the list, she immediately thinks that her daughter has won and she is very proud of her. In fact, it is Liliane, not Lise, who has won a prize.]
  - Liliane<sub>i</sub> est très fière d'<u>elle<sub>i</sub>-même</u>.
  - 'Liliane<sub>i</sub> is very proud of herself<sub>i</sub>.'
- (33) [Liliane and her daughter Lise have a walk with Suzanne, the daughter of Liliane's best friend, who looks a lot like Lise and happens to be dressed similarly. Suddenly, they pass in front of a mirror, and stealing a glance at it, Liliane thinks that she has seen Suzanne and finds her truly beautiful. In fact, unbeknownst to her, it is her daughter Lise that she has seen.]
  - Liliane<sub>i</sub> admire <u>sa<sub>i</sub> propre</u> fille.
  - 'Liliane<sub>i</sub> admires her<sub>i</sub> own daughter.'

# 2.2. Exempt anaphors in ambiguous logophoric contexts

The previous observations support in two ways the hypothesis according to which exempt anaphors are locally bound by logophoric operators. Recall the proposal in (9)-(10) repeated below:

(34) 
$$A_i$$
 ... [  $pro_i$  [OP<sub>LOG</sub> [P ... exempt anaphor<sub>i</sub> ... ]   
  $coreference$  local binding

(35) 
$$\|OP_{LOG}\| = \lambda P. \lambda x. P$$
 from x's perspective

Firstly, the presence of the logophoric operator is needed to code the fact that the phrase containing the exempt anaphor (e.g. the attitude context) must express some individual(s)'s perspective (e.g. the attitude holder). Without it, we have no mechanism by which to guarantee whose perspective the phrase containing the anaphor expresses. For instance, if we simply assumed that an exempt anaphor must be directly anteceded by an attitude holder, there would be no way to ensure that the anaphor must occur in the attitude context corresponding to that perspective holder.

Secondly, taking exempt anaphors to be subject to Condition A guarantees that if the anaphor is exempt, that is, if it is bound by pro in (34), the antecedent A of the exempt anaphor must be the individual(s) whose perspective the phrase containing the anaphor expresses. Indeed, by assumption, the anaphor is bound by pro, which is anteceded by A (as pro must be perspectival due to  $OP_{LOG}$ ).

This hypothesis is further supported by cases of ambiguous logophoricity, where the clause containing the anaphor can a priori express the perspective of several possible centers.

This is first the case of appositives occurring in attitude contexts: as mentioned above in Section 2.1.1 (see Sæbø 2011, a.o.), the evaluation of an appositive in this environment can either be attributed to the speaker or to the attitude holder. Crucially, an exempt anaphor anteceded by the attitude holder and appearing in such an appositive forces the appositive to be evaluated by the attitude holder: the appositive containing the non-locally bound anaphor *leur propre* in (36)a (unlike that containing a pronoun in (36)b) has to express my friends' perspective, and is thus unfelicitous in the context.

- (36) a. #[Mes amis]<sub>i</sub> pensent que Lucie cette idiote qui a préféré garder <u>leur</u><sub>i</sub> <u>propre</u> fils plutôt que le mien est une fille remarquable.
  - '#[My friends]<sub>i</sub> think that Lucy that idiot who preferred to take care of their<sub>i</sub> own son rather than mine is a remarkable woman.'
  - b. Mes<sub>i</sub> amis pensent que Lucie cette idiote qui a préféré garder leur<sub>i</sub> fils plutôt que le mien est une fille remarquable.
    - '[My friends]<sub>i</sub> think that Lucy that idiot who preferred to take care of their<sub>i</sub> son rather than mine is a remarkable woman.'

The same holds in some adjunct clauses. For instance, a causal relation can either be established by the speaker alone or by the relevant event participant in the case of clauses introduced by *parce que* 'because' (see Charnavel 2016). But if it contains an exempt anaphor referring to the relevant event participant, like *elle-même* referring to Justine in (37), the causal clause cannot be interpreted from the speaker's perspective: the causal relation must have been established by Justine in (37); in fact, an epithet coreferring with the anaphor (*cette idiote* 'that idiot' in (37)b) is degraded (cf. Epithet Test).

- (37) a. Justine<sub>i</sub> est partie parce qu'il y avait une photo embarrassante <u>d'elle<sub>i</sub>-même</u> et de son mari qui circulait parmi les invités.
  - 'Justine; left because there was an embarrassing picture of herself; and her husband going around among the guests.'
  - b. Justine<sub>i</sub> est partie parce qu'il y avait une photo embarrassante <u>d'elle<sub>i</sub>(\*-même)</u> et du mari de [cette idiote]<sub>i</sub> qui circulait parmi les invités. 'Justine<sub>i</sub> left because there was a embarrassing picture of her<sub>i</sub>(\*self) and [the idiot]<sub>i</sub>'s husband going around among the guests.'

# 2.3. Logophoric center in non-attitude contexts: empathy locus

Based on the observation of exempt anaphors in attitude contexts, we concluded that a French anaphor can be exempt when it occurs in an attitude context and refers to the attitude holder of that context, and when it is exempt in such cases, it has to be read *de se*. We could be tempted to adopt a stronger conclusion, i.e. to suppose that to be exempt, a French anaphor must appear in an attitude context and *de se* refers to the attitude holder of the context.

This is however incorrect: French exempt *son propre* and *lui-même* can also appear in non-attitude contexts. This is illustrated in (38) and (39), where the Epithet Test applied in (b)-(c) (the epithet *ce héros* 'the hero' and *cette idiote* 'that idiot' can refer to Paul and Sylvie, respectively) and the Double Orientation Test in (d) (*adorable* 'adorable' and *astucieux* 'clever' can only be evaluated by the speaker, not by Paul and Sylvie, respectively) show that the anaphors in (a) are not contained in an

attitude context even if they are exempt (they are not overtly bound).

- (38) a. Le courage de Paul<sub>i</sub> a sauvé <u>sa<sub>i</sub> propre</u> maison des flammes ainsi que la maison de ses voisins.
  - 'Paul $_{i}$ 's courage saved his $_{i}$  own house from the fire and his neighbors' house as well.'
  - b. Le courage de Paul<sub>i</sub> a sauvé <u>sa<sub>i</sub> propre</u> maison des flammes ainsi que la maison des voisins de [<u>ce héros</u>]<sub>i</sub>.
    - 'Paul<sub>i</sub>'s courage saved his<sub>i</sub> own house from the fire and [the hero]<sub>i</sub>'s neighbors' house as well.'
  - c. Le courage de Paul<sub>i</sub> a sauvé des flammes la maison de [<u>ce héros</u>]<sub>i</sub> ainsi que celle de ses voisins.
    - 'Paul<sub>i</sub>'s courage saved from the fire [the hero]<sub>i</sub>'s house and his neighbors' house as well.'
  - d. Le courage de Paul<sub>i</sub> a sauvé <u>sa<sub>i</sub> propre</u> maison des flammes ainsi que la maison de ses adorables voisins.
    - 'Paul<sub>i</sub>'s courage saved his<sub>i</sub> own house from the fire and his <u>adorable</u> neighbors' house as well.'
- (39) a. Heureusement, l'avenir de Sylvie<sub>i</sub> ne dépend pas seulement d'<u>elle<sub>i</sub>-même</u>. 'Fortunately, Sylvie<sub>i</sub>'s future does not only depend on herself<sub>i</sub>.'
  - b. Heureusement, l'avenir de Sylvie<sub>i</sub> ne dépend pas seulement d'<u>elle<sub>i</sub>-même</u>, mais aussi des parents de [<u>cette idiote</u>]<sub>i</sub>.
    - 'Fortunately, Sylvie<sub>i</sub>'s future does not only depend on herself<sub>i</sub>, but also on [the idiot]<sub>i</sub>'s parents.'
  - c. Heureusement, l'avenir de Sylvie<sub>i</sub> ne dépend pas seulement de [cette idiote]<sub>i</sub> 'Fortunately, Sylvie<sub>i</sub>'s future does not only depend on [the idiot]<sub>i</sub>.'
  - d. Heureusement, l'avenir de Sylvie<sub>i</sub> ne dépend pas que d'<u>elle<sub>i</sub>-même</u>, mais aussi de ses <u>astucieux</u> parents.
    - 'Fortunately, Sylvie<sub>i</sub>'s future does not only depend on herself<sub>i</sub>, but also on her clever parents.'

I therefore hypothesize that logophoric conditions unrelated to attitude can also license these French exempt anaphors: there exists another type of logophoric center, the *empathy locus*, which is not created by attitude contexts. The notion of empathy has been mostly discussed in the literature on Japanese (see Kuno & Kaburaki 1977, Kuno 1987, Kuno 2004, Oshima 2006, a.o.), where some items are lexically marked for point of view outside attitude contexts: for instance, the verbs of giving *yaru* and *kureru* share the same core meaning ('give') and case frame (nominative – dative), but *yaru* is used when the action is looked at from the point of view of the referent of the subject or the neutral point of view, whereas *kureru* is used when the event is described from the point of view of the referent of the dative object. Following this literature, I define the empathy locus as the event participant that the speaker

empathizes with, i.e. identifies with from an emotional perspective. <sup>18</sup> Empathy loci are thus emotional centers of perspective: as opposed to attitude holders (intellectual centers of perspective), they are not triggered by intensional expressions, but can occur in non-attitude contexts. They partially overlap with Sells' notions of Self and Pivot (Sells 1987: 455, footnote 14).

#### 2.3.1. Test for empathy contexts

French does not seem to have verbs like Japanese *yaru/kureru* that lexically encode empathy, but I propose that the expression *son cher* 'his/her dear' can be used as a diagnostic for identifying empathy loci in French. Whether someone or something is dear to someone is subject to evaluation, and such an evaluation can only be directly made by the person experiencing the feeling (only I know whether someone is dear to me or not, nobody else can unless I tell them or show some signs of it): in that sense, *cher* is both evaluative and first-personal (cf. predicates of internal state in Japanese, Kuroda 1973). The use of third person *son cher* 'his/her dear' therefore requires empathy: the speaker has to empathize with the referent of *son cher*, i.e. to adopt her emotional perspective.<sup>19</sup> As expected, the antecedent of *son cher* has to be human (or humanized), as shown in (40)a-b vs. (40)c.

- (40) a. Jérôme<sub>i</sub> va aller rendre visite à <u>sa<sub>i</sub> chère</u> cousine.
  - 'Jérôme<sub>i</sub> will visit his<sub>i</sub> dear cousin.'
  - b. Jérôme; va prendre sa; chère moto pour aller au travail.
    - 'Jérôme<sub>i</sub> will take his<sub>i</sub> dear motorbike to go to work.'
  - c. [Cette moto]<sub>i</sub> plaît à  $\underline{son_i}$  (\*cher) propriétaire.
    - '[This motorbike]<sub>i</sub> pleases its<sub>i</sub> (\*dear) owner.'

Note that *son cher* is frequently used ironically, as illustrated in (41).

(41) Jérôme<sub>i</sub> va aller rendre visite à <u>sa<sub>i</sub> chère</u> cousine (qui profite de lui). 'Jérôme<sub>i</sub> will visit his<sub>i</sub> dear cousin (who takes advantage of him).'

'Apparently, Cécile is dear to Christophe.'

But this evidential use is impossible for attributive *cher* in possessive DPs: *son cher* 'his dear' can only express an internal (cf. logophoricity) vs. external (cf. evidentiality) perspective.

<sup>&</sup>lt;sup>18</sup> The notion of empathy is a technical term that is not to be confused with informal notions such as 'have sympathy for' or 'pity'; in particular, even an event participant towards whom the speaker has a negative attitude can be an empathy locus.

In principle, it is to some extent possible to deduce that someone/something is dear to someone based on their behavior, i.e. using indirect evidence. In fact, predicative *cher* 'dear' can be used in combination with markers of evidentiality like *apparemment* 'apparently':

<sup>(</sup>iii) Apparemment, Cécile est chère à Christophe.

This indirectly supports the hypothesis that *son cher* expresses the internal, emotional, point of view of its referent. Indeed, irony arises when two points of view are confronted. In the case of *son cher*, the irony effect comes from the discrepancy between its antecedent's and the speaker's perspectives: in (41), the speaker contrasts her perspective with Jérôme's, the antecedent of *son cher*, by suggesting that his perspective is ill-advised (as made explicit by the content of the parenthesis). Note that this is different from evaluative expressions like *cet idiot de Nicolas* 'that idiot Nicolas' examined in Section 2.1.1 (Double Orientation Test): Nicolas can be evaluated as an idiot by the speaker or the attitude holder irrespective of Nicolas's judgment; in (41) however, the speaker has to take Jérôme's emotional perspective to evaluate his cousin as dear to Jérôme: she cannot deny this since it is Jérôme's internal feeling; but she builds on it to add another layer of judgment, i.e. that Jérôme's feeling is unjustified, thus creating an irony effect.

Importantly, it can be corroborated that the perspective relevant for *son cher* is not one of attitude by applying the Epithet Test to a sentence containing *son cher* as in (42): the epithet *ce héros* 'the hero' can refer to Paul, the antecedent of *son cher*, which demonstrates that Paul is not an attitude holder in that context: it is an empathy locus.

- (42) a. Le courage de Paul<sub>i</sub> a sauvé des flammes la <u>chère</u> maison de [ce héros]<sub>i</sub> ainsi que celle des voisins.
  - 'Paul $_i$ 's courage saved from the fire [the hero] $_i$ 's dear house and the neighbors' house as well.'
  - b. Le courage de Paul<sub>i</sub> a sauvé des flammes <u>sa<sub>i</sub> chère</u> maison ainsi que celle des voisins de [<u>ce héros</u>]<sub>i</sub>.
    - 'Paul<sub>i</sub>'s courage saved from the fire  $his_i$  dear house and [the hero]<sub>i</sub>'s neighbors' house as well.'

To wrap up, the presence of *son cher* creates and requires an empathy context: its antecedent has to be the empathy locus of its clause. *Son cher* can thus be used as a test for the logophoricity of exempt anaphors in non-attitude contexts.

# 2.3.2. Testing anaphors in empathy contexts

Applying this empathy test to (38) and (39) (by adding son cher to the clause containing the anaphor in (a), or by replacing the anaphor with son cher in (b))

reveals that the antecedent of the exempt anaphors *son propre* and *lui-même* can be an empathy locus in these examples, as required.<sup>20</sup>

- (43) [cf. (38)] a. Le courage de Paul<sub>i</sub> a sauvé <u>sa<sub>i</sub> propre</u> maison des flammes ainsi que la maison de <u>ses<sub>i</sub> chers</u> voisins.
  - 'Paul<sub>i</sub>'s courage saved his<sub>i</sub> own house from the fire and his<sub>i</sub> dear neighbors' house as well.'
  - b. Le courage de Paul<sub>i</sub> a sauvé <u>sa<sub>i</sub> chère</u> maison des flammes ainsi que la maison des voisins.
    - 'Paul<sub>i</sub>'s courage saved his<sub>i</sub> dear house from the fire and the neighbors' house as well.'
- (44) [cf. (39)] a. Heureusement, l'avenir de Sylvie<sub>i</sub> ne dépend pas seulement d'<u>elle<sub>i</sub>-même</u>, mais aussi de <u>ses<sub>i</sub> chers</u> parents.
  - 'Fortunately, Sylvie<sub>i</sub>'s future does not only depend on herself<sub>i</sub>, but also on her<sub>i</sub> dear parents.'
  - b. Heureusement, l'avenir de Sylvie<sub>i</sub> ne dépend pas seulement de <u>ses<sub>i</sub> chers</u> parents.
    - 'Fortunately, Sylvie<sub>i</sub>'s future does not only depend on her<sub>i</sub> dear parents.'

More examples are provided below for further illustration.

- (45) [Le fils de Claire]<sub>i</sub> est parti avant que son<sub>i</sub> {propre/cher} fils n'arrive. '[Claire's son]<sub>i</sub> left before his<sub>i</sub> {own/dear} son arrives.'
- (46) Après ce qui s'est passé, Josiane<sub>i</sub> mérite qu'on s'occupe d'<u>elle<sub>i</sub>-même</u> et de <u>son<sub>i</sub> cher</u> mari.
  - 'After what happened, Josiane; deserves the fact that people take care of herself; and her; dear husband.'

Importantly, empathy tests are not only sufficient, but also necessary for exemption of French anaphors: if *son cher* is not acceptable in a given position, an anaphor cannot be exempt in that position. This is obviously the case for inanimates as in (47), or for deceased animates as in (48), which cannot be empathized with in principle, but also for living human animates as in (49), thus supporting the general hypothesis that the perspectivality of the antecedent is necessary for exemption.

<sup>&</sup>lt;sup>20</sup> The possible co-reference of the exempt anaphor with both an epithet and *son cher* in (iv) below further guarantees that empathy contexts are distinct from attitude contexts, and that *elle-même* can be exempt in empathy contexts.

<sup>(</sup>iv) Heureusement, l'avenir de Sylvie $_i$  ne dépend pas vraiment d'<u>elle $_i$ -même</u>, ou des compétences de [<u>l'idiote</u>] $_i$ , mais de <u>ses $_i$  chers</u> parents.

<sup>&#</sup>x27;Fortunately, Sylviei's future does not really depend on  $herself_i$ , or on [the idiot]i's skills, but on  $her_i$  dear parents.'

- (47) [cf. (1)c] \*[Cette auberge]<sub>i</sub> bénéficie du fait que les touristes préfèrent son<sub>i</sub> {propre/cher} jardin à ceux des auberges voisines.

  '\*[This inn]<sub>i</sub> benefits from the fact that the tourists prefer its<sub>i</sub> {own/dear} garden to that of the neighboring inns.'
- (48) Comme l'avait demandé [le pharaon]<sub>i</sub> de son vivant, les embaumeurs prennent soin de son<sub>i</sub> (\*{propre/cher}) corps et du corps de son épouse. 'As was asked by [the Pharaoh]<sub>i</sub> when he was alive, the embalmers are taking care of his<sub>i</sub> (\*{own/dear}) body and that of his wife.'
- (49) \*La soeur de Luc<sub>i</sub> gronde  $\underline{ses_i}$  {propres/chers} enfants, qui sont dans sa classe.
  - "\*Luc<sub>i</sub>'s sister scolds his<sub>i</sub> {own/dear} children, who are in her class."

Empathy tests differ from attitude tests in this respect. Even if the antecedent of a given anaphor is not an attitude holder, that anaphor can still be exempt if it is anteceded by an empathy locus (attitudinality not being necessary for exemption). However, if the antecedent of a given anaphor is not an empathy locus, that anaphor cannot be exempt (empathy being necessary for exemption): indeed, an attitude holder can always be construed as an empathy locus, as exemplified in (50), where Julie is both the attitude holder (subject of *pense* 'thinks') and the empathy locus (the antecedent of *son cher*).

(50) Julie<sub>i</sub> <u>pense</u> que les touristes préfèrent <u>son<sub>i</sub> cher</u> hôtel à ceux de ses concurrents.

'Julie<sub>i</sub> thinks that the tourists prefer her<sub>i</sub> dear hotel to those of her competitors.'

This is consistent with Sells's 1987 conclusion that there is an implicational relation between the different logophoric roles he postulates - Source, Self and Pivot (which do not exactly correspond to what I take perspective holders to be, see footnote 13 and table in (52)) as an attitude holder can always be an empathy locus, but the reverse does not hold. Crosslinguistically, this predicts that a logophor in principle licensed by empathy loci can also be anteceded by attitude holders (e.g. *son propre* or *lui-même*), but a logophor licensed by attitude holders is not necessarily acceptable in empathy contexts. The prediction can be shown to be borne out using the French antilogophoric pronouns *en/y*. Antilogophoricity of course reverses the implicational scale and indeed, these pronouns cannot refer to attitude holders (cf. French Pronoun Test in Section 2.1.1), but can refer to empathy loci, as illustrated in (51).

(51) a. Emile<sub>k</sub> mérite que Sophie <u>en<sub>k</sub></u> soit fière. 'Emile<sub>k</sub> deserves the fact that Sophie is proud of him<sub>k</sub>.' b. Emile<sub>k</sub> mérite que Sophie soit fière de <u>ses<sub>k</sub> chers</u> enfants. 'Emile<sub>k</sub> deserves the fact that Sophie is proud of his<sub>k</sub> dear children.'

Besides the fact that attitude contexts independently form a natural class, this last observation further supports the distinction assumed here between attitude holders and empathy loci as two distinct types of logophoric centers exempting anaphors in French.

# 2.4. A prediction: deictic centers are not logophoric

Attitude holders and empathy loci can antecede an exempt anaphor because they are mental perspective centers and can therefore create logophoric domains (the phrase P – selected by the logophoric operator – expressing the center's perspective and containing the exempt anaphor). This makes a prediction: non-mental perspective centers cannot license exempt anaphors. This section presents a confirmation of this prediction in French: spatial perspective centers – call them, as in Oshima 2006, deictic centers<sup>21</sup> – cannot antecede French exempt anaphors. Unlike attitude holders and empathy loci (intellectual and emotional perspective centers), deictic centers are indeed not mental in nature (they can be inanimate): they only need to be located in space and oriented. Consequently, there is no intrinsic reason why a given phrase would express the deictic center's perspective, so that no logophoric domain is created.

Sells's notion of Pivot should therefore be split into two categories: logophoric empathy locus (which overlaps with Sells's notion of Self, itself partially overlapping with the notion of attitude holder) and non-logophoric deictic center,<sup>22</sup> as represented in (52) below.

(52) Sells's 1987 vs. the present taxonomy of logophoric centers

Sells' hypothesis	Source	Se	lf	P:	ivot
the present hypothesis	Attitude holder		Empathy locus		Deictic center

<sup>&</sup>lt;sup>21</sup> Oshima (2006) also distinguishes deictic centers from empathy loci, and observes – against Iida 1996 – that deictic centers, unlike empathy loci, cannot systematically antecede long distance *zibun*. This suggests that the prediction is also borne out in Japanese.

<sup>&</sup>lt;sup>22</sup> Sells (1987) explicitly includes spatial centers of perspective into the Pivot category: "if someone makes a report with Mary as the pivot, that person is understood as (literally) standing in Mary's shoes" (Sells 1987: 455).

# 2.4.1. Types of deictic centers

Based on Oshima's 2006 observations about Japanese, I assume that there are two main types of deictic centers: those created by motion verbs like *come*, and those created by spatial prepositional expressions like *to the right of* or *behind*.

# (i) Motion verbs

As has long been observed in several languages (cf. Talmy 1975, Fillmore 1997, Oshima 2006, a.o.), motion verbs like French *venir* 'come' or *apporter* 'bring' basically require that the speaker or the addressee be located at the goal of the motion (or that the goal be the speaker or addressee's home location, cf. Sudo 2016) as shown in (53)-(54).

- (53) Luc va <u>venir</u> à Lyon.

  'Luc will come to Lyon.'

  Inference:<sup>23</sup> the {speaker/addressee} is {located at/associated with} Lyon.
- (54) a. Luc va <u>venir</u> {me/te} voir ici. 'Luc will come see {me/you} here.' b. \*{Je vais/tu vas} <u>venir</u> voir Luc là-bas. '\*{I/you} will come see Luc there.'

Call the individual located at the goal of the motion (e.g. the speaker or addressee in (53)-(54)) the deictic center. In attitude contexts, the deictic center can shift to the attitude holder (cf. Oshima 2007, Sudo 2016), as illustrated in (55)-(56).

- (55) Luc<sub>i</sub> espère que sa mère va <u>venir</u> à Lyon.

  'Luc<sub>i</sub> hopes that his mother will come to Lyon.'

  Inference: the {speaker/addressee} <u>or Luc</u> is {located in/associated with} Lyon
- (56) Luc<sub>i</sub> espère que sa mère va <u>venir</u> le<sub>i</sub> voir. 'Luc<sub>i</sub> hopes that his mother will come see him<sub>i</sub>.'

Furthermore, it has been observed (but not explained: Sudo 2016, a.o.) that the deictic center need not be a discourse participant or an attitude holder in certain cases like (57)-(58). An explication will be provided in Section 2.4.2.

- (57) Comme Luc vivait seul, son fils s'efforçait de <u>venir</u> à Lyon chaque semaine. 'As Luc lived alone, his son tried hard to come to Lyon every week.' Inference: Luc lived in Lyon.
- (58) Comme Luc<sub>i</sub> vivait seul, son fils s'efforçait de <u>venir</u> le<sub>i</sub> voir chaque semaine. 'As Luc lived alone, his son tried hard to come to see him<sub>i</sub> every week.'

<sup>23</sup> Oshima (2007) and Sudo (2016), a.o., analyze this inference as a presupposition. The exact nature of the inference is not crucial to my purposes.

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# (ii) Spatial prepositional expressions

Spatial prepositional expressions (cf. deictic angular expressions in Oshima 2006) like *derrière* 'behind' encode a spatial relation between two objects, and require a deictic center for their interpretation, as illustrated in (59)-(60) based on Figure 1 below.



Figure 1. Johannes Vermeer - Lady at the Virginal with a Gentleman, 'The Music Lesson'<sup>24</sup>

- (59) a. L'épinette est <u>derrière</u> la jeune femme.
  - 'The virginal is behind the young woman.' (from the speaker's perspective)
  - b. L'épinette est devant la jeune femme.
    - 'The virginal is before the young woman.' (from the woman's perspective)
- (60) a. La viole de gambe est <u>devant</u> la jeune femme.
  - 'The viola da gamba is before the young woman.' (speaker's perspective)
  - b. La viole de gambe est derrière la jeune femme.
    - 'The viola da gamba is behind the young woman.' (woman's perspective)

These spatial expressions give rise to two types of interpretation depending on the identity of the deictic center. Under the intrinsic interpretation, the deictic center is the referent of the complement of the preposition (e.g. the woman in (59)b and (60)b) and has to be intrinsically oriented (human beings have a back). Under the relative interpretation (cf. Levinson 2003, Rooryck & Vanden Wyngaerd 2011, a.o., for the intrinsic vs. relative distinction), the deictic center is a reference point (e.g. the speaker in (59)a and (60)a) distinct from the two objects spatially located (the musical instrument and the woman), and in that case, the complement of the preposition does not have to be intrinsically oriented (for instance, it could be a ball).

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<sup>&</sup>lt;sup>24</sup> From Google Art Project. Retrieved Nov. 7<sup>th</sup> 2016 from:

<a href="https://commons.wikimedia.org/wiki/File%3AJohannes\_Vermeer\_-">https://commons.wikimedia.org/wiki/File%3AJohannes\_Vermeer\_-</a>

Lady at the Virginal with a Gentleman%2C 'The Music Lesson' - Google Art Project.jpg

These two types of interpretation are lexically distinguished in French in the case of spatial expressions involving the notions of right and left: à la gauche/droite de 'to the left/right of' (with a definite article) triggers the intrinsic interpretation as in (61)a, and à gauche/droite de 'lit. to left/right of, on the left/right of' (without definite article) the relative interpretation as in (61)b.

(61) a. La jeune femme est à la droite du professeur de musique.

'The young woman is to the right of the music teacher.' (teacher's perspective) b. La jeune femme est à gauche du professeur de musique.

'The young woman is on the left of the music teacher.' (speaker's perspective)

## 2.4.2. Testing exempt anaphors in the presence of deictic centers

(i) Deictic centers do not create sufficient logophoric conditions for exemption

The logophoricity hypothesis predicts that being a deictic center, unlike an attitude holder or or an empathy locus, does not create logophoric conditions for exemption because they are not mental: indeed, a deictic center does not have a perspective or a point of view, it is merely a reference point for spatial coordinates. To test this prediction, we need to guarantee that the antecedent of the anaphor is the deictic center and that it is neither an attitude holder nor an empathy locus.

This is the case in (62)-(63) using the motion verb *venir* 'come': the DP *un voisin* 'a neighbor' is construed as the deictic center (its referent is located at the goal of the motion), but not as the empathy locus (the expression *ma chère* 'my dear' forces the speaker to be the empathy locus<sup>25</sup>). Crucially, the non-locally bound anaphors *son propre* and *lui-même* cannot be anteceded by this DP, which confirms the prediction.

(62) Ma chère mère ainsi que sa<sub>i</sub> (\*propre) mère <u>sont venues</u> voir [un voisin]<sub>i</sub> à l'hôpital.

'My dear mother as well as his<sub>i</sub> (\*own) mother came to see [a neighbor]<sub>i</sub> in the hospital.'

(63) Ma chère fille éprise de lui<sub>i</sub>-(\*même) <u>est venue</u> voir [un voisin]<sub>i</sub> à l'hôpital. 'The girl in love with him<sub>i</sub>(\*self) came to see [a neighbor]<sub>i</sub> in the hospital.'

<sup>25</sup> And we will see below in Section 3.1 that there is at most one logophoric operator per domain, which means here that there is only one empathy locus in the clause.

These sentences are acceptable in the absence of *propre* and *même* (i.e. with pronouns instead of anaphors) if the speaker is located at the hospital.

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The same holds with spatial prepositional expressions: exempt *son propre* and *lui-même* are not licensed even when we guarantee that the antecedent is the deictic center by forcing the intrinsic interpretation, as shown in (64)-(65) based on Figure 1.

- (64) a. A la droite du professeur, sai (\*propre) élève semble jouer de l'épinette. 'To the right of the teacher, his (\*own) student seems to play the virginal.'
  - b. <u>A la droite du</u> professeur<sub>i</sub>, un portrait de lui<sub>i</sub>(\*-même) est accroché audessus de l'épinette.
    - 'To the right of the teacher $_i$  a portrait of  $him_i(*self)$  hangs above the virginals.'
- (65) a. <u>Devant</u> [la jeune femme]<sub>i</sub> est accroché un miroir où apparaît son<sub>i</sub> (\*propre) reflet.
  - 'In front of [the young woman]<sub>i</sub> hangs a mirror where her<sub>i</sub> (\*own) reflection appears.'
  - b. [La jeune femme]<sub>i</sub> est à l'arrière-plan, avec une viole de gambe <u>derrière</u> elle<sub>i</sub>(\*-même).
    - '[The young woman]<sub>i</sub> is in the background, with a viola da gamba <u>behind</u> her<sub>i</sub>(\*self).'

It is important to take these cases as neutral descriptions of the painting to prevent construing the antecedent as an empathy locus. The facts are even clearer when we totally forbid the empathy construal by making the antecedent inanimate as in (66).<sup>27</sup>

- (66) [L'épinette]<sub>i</sub> est à l'arrière-plan, avec le mur <u>derrière</u> (\*elle<sub>i</sub>-même). '[The virginal]<sub>i</sub> is in the background, with the wall behind (\*itself<sub>i</sub>).'
  - (ii) Motion verbs create necessary logophoric conditions for exemption

The previous examples show that making the antecedent of *son propre* and *lui-même* a deictic center is not *sufficient* to exempt these anaphors, whether we use motion verbs or spatial prepositional expressions. But there is a further complication, which distinguishes between the two kinds of deictic expressions: unlike spatial prepositional expressions, motion verbs do interact with logophoric exemption. Specifically, in the presence of motion verbs, it appears to be *necessary* to make the antecedent a deictic center to license exempt anaphors: attitude holders or empathy

locality conditions (see Zribi-Hertz 1989, Rooryck & Vanden Wyngaerd 2011, Charnavel & Zlogar 2016, a.o., for discussion about the distribution of English *himself* in deictic conditions). The reason why (v) is acceptable is probably due to the construal of the adults as empathy loci.

<sup>&</sup>lt;sup>27</sup> Cantrall (1974: 146-147) notices that the following English example is acceptable under the intrinsic interpretation (i.e. from the adults' perspective):

<sup>(</sup>v) [The adults]<sub>i</sub> in the picture are facing away from us, with the children placed behind themselves<sub>i</sub>.

But crucially, he also mentions that this is not the case when the antecedent is inanimate:

<sup>(</sup>vi) [The house]; in the picture is facing away from us, with an elm tree behind it;(\*self). This means that deictic conditions alone are not sufficient in English either to exempt *himself* from locality conditions (see Zribi-Hertz 1989, Ropryck & Vanden Wynggerd 2011, Charnayel & Zlogar

loci anteceding exempt anaphors, as in (67)a and (68)a respectively, must be deictic centers.

- (67) a. [Le fils de Claire]<sub>i</sub> craint que le mauvais temps n'empêche {son<sub>i</sub> propre fils/un ami de <u>lui<sub>i</sub>-même</u> et de sa femme} de venir à Lyon. '[Claire's son]<sub>i</sub> is afraid that bad weather prevents {her<sub>i</sub> own son/a friend of his<sub>i</sub> and his wife} from coming to Lyon.'
  Inference: Claire's son is located in Lyon.
  - b. [Le fils de Claire]<sub>i</sub> craint que le mauvais temps n'empêche {son<sub>i</sub> fils/un ami à lui<sub>i</sub> et à sa femme} de venir à Lyon.
    '[Claire's son]<sub>i</sub> is afraid that bad weather prevents {her<sub>i</sub> son/a friend of his<sub>i</sub> and his<sub>i</sub> wife} from coming to Lyon.'
    Inference: Claire's son or the speaker/addressee is located in Lyon.
- (68) a. [Le fils de Claire]<sub>i</sub> mérite que les conditions climatiques permettent {à <u>son</u><sub>i</sub> <u>propre</u> fils/aux amis de <u>lui<sub>i</sub>-même</u> et de sa femme} de venir à Lyon. '[Claire's son]<sub>i</sub> deserves the fact that weather conditions allow {her<sub>i</sub> own son/friends of his<sub>i</sub> and his wife} to come to Lyon.'

  Inference: Claire's son is located in Lyon.
  - b. [Le fils de Claire]<sub>i</sub> mérite que les conditions climatiques permettent à son<sub>i</sub> fils/aux amis à lui<sub>i</sub> et à sa femme} de venir à Lyon.

    '[Claire's son]<sub>i</sub> deserves the fact that weather conditions allow {her<sub>i</sub> son/friends of his<sub>i</sub> and his wife} to come to Lyon.'

    Inference: Claire's son or the speaker/addressee is located in Lyon.

This does not hold in the case of spatial prepositional expressions: son propre and lui-même anteceded by le fils de Claire 'Claire's son' – the attitude holder in (69) and the empathy locus in (70) - are exempt even if the use of a droite a (without definite article) forces a relative interpretation, i.e. the speaker, not the antecedent, is the deictic center.

- (69) [Le fils de Claire]<sub>i</sub> craint que son ennemi ne soit placé à droite de {son<sub>i</sub> propre fils/lui<sub>i</sub>-même} sur la photo.
  '[Claire's son]<sub>i</sub> is afraid that his enemy may be placed to the right of {his<sub>i</sub> own son/himself<sub>i</sub>} on the picture.'
- (70) [Le fils de Claire]<sub>i</sub> mérite qu'on place son ami à droite de {son<sub>i</sub> propre fils/lui<sub>i</sub>-même} sur la photo.

  '[Claire's son]<sub>i</sub> deserves the fact that one places his friend to the right of {his<sub>i</sub> own son/himself<sub>i</sub>} on the picture.'

This difference can be explained by hypothesizing that motion verbs like *come* lexically require their deictic center to be a logophor, i.e. to be anteceded by a discourse participant as in (53)-(54), an attitude holder as in (55)-(56), or an empathy locus as in (57)-(58)), while spatial prepositional expressions do not have such a lexical restriction. In other words, I recast the proposed presuppositional restriction of

come (see footnote 23) as the presence of an obligatory implicit logophoric argument of come. Moreover, we will see in Section 3 that several logophors occurring in the same logophoric domain must crucially corefer. This explains why an exempt anaphor appearing in the same domain as come must corefer with the deictic center of come.

To sum up, deictic centers are not logophoric: since spatial perspective is not mental in nature, they cannot in principle create logophoric domains licensing the exemption of (French) anaphors. Deictic centers of motion verbs are nevertheless relevant to logophoric exemption, because they must corefer with exempt anaphors, i.e. they must be anteceded by the same logophoric center.<sup>28</sup>

# 3. The argument from perspective conflicts: local binding of exempt anaphors

In the first two sections, two main arguments have been provided for the logophoric operator hypothesis: it explains why plain and exempt anaphors are morphologically identical (they are one and the same element subject to Condition A), and it accounts for the fact that exempt anaphors must be in the perspectival domain of their antecedents. This section presents a further argument based on perspective conflicts: the logophoric operator hypothesis derives why two exempt anaphors in the same domain must corefer and thereby supports the idea that logophoric, exempt anaphors must be locally bound.

# 3.1. Constraints on clausemate anaphors: one operator per domain

Before examining the issue of locality more precisely in the next subsection (Section 3.2), let us first adopt an informal characterization of Condition A as requiring that an anaphor be bound within the domain of a c-commanding subject.

Striking evidence supporting the idea that logophoric anaphors must be locally bound comes from observations reported for the Mandarin anaphor *ziji* in Huang & Liu 2001. They observe that two exempt anaphors within the same clause must corefer. Examples such as (71) below show that the observation carries over to French.<sup>29</sup> If both instances of *propre* are present, example (71) is degraded:<sup>30</sup> the

<sup>&</sup>lt;sup>28</sup> Preliminary investigation (to be made more precise in future work) reveals that the same holds for Mandarin *ziji*.

<sup>&</sup>lt;sup>29</sup> We will more precisely characterize what counts as a clause below in Section 3.2.

Throughout this section (and most of the article, cf. Footnote 2), the presence/absence of stars in front of the examples is meant – as is standard - to indicate contrasts, not absolute judgments.

exempt anaphors *leur propre* and *son propre* are anteceded by two different logophoric centers (the attitude holder *les voisins* 'the neighbors', subject of *disent* 'say', and the attitude holder *Luc*, object of *d'après* 'according to').

(71) D'après Luc<sub>k</sub>, les voisins<sub>i</sub> disent que [ $_{TP}$  OpLOG<sub>i/k</sub> leur<sub>i</sub> (propre) fils et  $\underline{son_k}$  (propre) fils sont adroits].

'According to  $Luc_k$ , the neighbors<sub>i</sub> say that [TP OpLOG<sub>i/k</sub> their<sub>i</sub> (own) son and his<sub>k</sub> (own) son are skillful].'

This deviance is explained if we assume that there is only one (relevant, see later) logophoric operator within that clause, which locally binds the exempt anaphors.<sup>31</sup> That there is at most one logophoric operator in the domain of a given anaphor is justified in Koopman & Sportiche 1989 to handle logophoric pronouns in Abe, and is assumed in Speas 2004, reflecting the natural intuition that a logophoric domain can only express a single perspective.

As predicted by this hypothesis, the sentence becomes acceptable if we replace either of the anaphors with a pronoun (i.e. *son*, *leur*) or if both exempt anaphors refer to the same attitude holder as in (72).

(72) D'après Luc<sub>k</sub>, les voisins<sub>i</sub> disent que [TP OpLOG<sub>i</sub> la photo compromettante d'<u>eux<sub>i</sub>-mêmes</u> n'a pas été prise par <u>leur<sub>i</sub> (propre</u>) fils, mais par le sien<sub>k</sub>]. 'According to Luc<sub>k</sub>, the neighbors<sub>i</sub> say that [TP OpLOG<sub>i</sub> the compromising picture of themselves<sub>i</sub> has not been taken by their<sub>i</sub> (own) son, but by his<sub>k</sub>].'

The same holds if the two intended logophoric centers are of different types (i.e. attitudinal and empathic): (73) is degraded if both instances of *propre* are present.

(73) Les voisins<sub>k</sub> disent que [TP le courage de Paul<sub>i</sub> Oplog<sub>i/k</sub> a sauvé sa<sub>i</sub> (propre) maison des flammes ainsi que leur<sub>k</sub> (propre) maison].

'The neighbors<sub>k</sub> say that [TP Paul<sub>i</sub>'s courage Oplog<sub>i/k</sub> saved his<sub>i</sub> (own) house from the fire and their<sub>k</sub> (own) house as well].'

However, two anaphors can be disjoint if only one of them is exempt as in (74) (in that case, only one logophoric operator is needed in the clause) or when both are exempt but are in different clauses (as noted in Huang & Liu 2001) as in (75) (in that case, each clause can contain a different operator).

<sup>&</sup>lt;sup>31</sup> Throughout this section, I talk about binding (of the anaphor) by the logophoric operator. This is meant as an abbreviation: the binder is really the small silent pronoun *pro* introduced by the logophoric operator as explained in Section 1.

- (74) Solange<sub>i</sub> pense que [TP OpLOG<sub>i</sub> Cyril<sub>k</sub> est aussi fier d'<u>elle<sub>i</sub>-même</u> que de <u>sa<sub>k</sub></u> <u>propre</u> fille].
  - 'Solange<sub>i</sub> thinks that  $[TP \ OpLoG_i \ Cyril_k \ is as proud of herself<sub>i</sub> as of his<sub>k</sub> own daughter].'$
- (75) Anne<sub>i</sub> a dit que [TP1 OpLOG<sub>i</sub> [les journalistes]<sub>k</sub> en colère contre <u>elle<sub>i</sub>-même</u> et son mari affirment que [TP2 OpLOG<sub>k</sub> le gouvernement ne prendra en compte que <u>leurs<sub>k</sub> propres</u> affirmations]].
  - 'Anne<sub>i</sub> said that [TP1] OpLOG<sub>i</sub> [the journalists]<sub>k</sub> angry at herself<sub>i</sub> and her husband claim that [TP2] OpLOG<sub>k</sub> the government will only take into account their<sub>k</sub> own assertions]].'

Finally, note that this hypothesis also correctly predicts that any other type of logophor occurring in the same domain as an exempt anaphor must corefer with that anaphor. Examples like (67)a repeated below show that this is borne out: the logophoric deictic center of *come* must corefer with the exempt anaphor *son propre* or *lui-même*, i.e. it must be anteceded by the same logophoric center (the attitude holder Claire's son).<sup>32</sup>

(76) [=(67)a] [Le fils de Claire]<sub>i</sub> craint que le mauvais temps n'empêche {son<sub>i</sub> propre fils/un ami de lui<sub>i</sub>-même et de sa femme} de venir à Lyon. '[Claire's son]<sub>i</sub> is afraid that bad weather prevents {her<sub>i</sub> own son/a friend of his<sub>i</sub> and his wife} from coming to Lyon.'

Inference: Claire's son is located in Lyon.

# 3.2. Position of the logophoric operator

The previous examples show that exempt anaphors must be locally bound by the unique logophoric operator of their domain: if local binding was not obligatory, two disjoint anaphors anteceded by different (local or not) logophoric operators could co-occur. Perspective conflicts thus corroborate the argument from parsimony (in Section 1) for the local binding of exempt anaphors reducing them to plain anaphors subject to Condition A. I now turn to a more specific characterization of this notion of locality to further specify the position of logophoric operators.

The argument from parsimony implies that logophoric operators occur within the local binding domain of exempt anaphors. Under Charnavel & Sportiche's 2016-a formulation of Condition A stated in (77), which I adopt in this article<sup>33</sup>, this

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<sup>&</sup>lt;sup>32</sup> This implies that such logophors are also governed by locality conditions.

<sup>&</sup>lt;sup>33</sup> The Chomskian, antecedent-based theory of Condition A proposed in Charnavel & Sportiche (2016-a) captures the behavior of the plain instances of French anaphors under investigation in this article and is directly compatible with the logophoric operator hypothesis. Predicate-based theories such as Pollard & Sag (1992) or Reinhart & Reuland (1993), which rely on the notion of coargumenthood, are not,

specifically means that the logophoric operator must appear within the spellout domain containing exempt anaphors: based on the distribution of inanimate (thus plain) anaphors in French described in (78), Charnavel & Sportiche (2016-a) propose to reduce the locality imposed by Condition A to Phase Theory.

- (77) *Theoretical formulation of Condition A* (Charnavel & Sportiche's 2016-a:71) An anaphor must be bound within the spellout domain containing it.
- (78) Descriptive formulation of Condition A (Charnavel & Sportiche's 2016-a:65) A plain anaphor and its binder must be in the smallest XP containing both without an intervening subject and no larger than a tensed TP.

When an exempt anaphor is contained within a CP phase (and is not at the edge), this means that the logophoric operator has to be within TP, the spellout domain of the phase, as illustrated in (79).

(79) [cf.(21)] Céline<sub>i</sub> croit que [TP OpLOG<sub>i</sub> Nicolas a voté contre son<sub>i</sub> propre projet] 'Céline<sub>i</sub> believes that [TP OpLOG<sub>i</sub> Nicolas voted against her<sub>i</sub> own project]'

Under this proposal, logophoric operators occur in a lower position than Rizzi's 1997 left periphery of CPs. This hypothesis is consistent with previous proposals. Cinque (1999) argues that the Speech Act, Evaluative, Evidential and Epistemic Mood projections, in which Speas (2004) positions logophoric operators, are (the highest) elements of the IP-space, given that they can follow focused and topicalized phrases of the CP-periphery space. Similarly, Charnavel & Mateu (2015) demonstrate that the logophoric operator responsible for the Clitic Coference Constraint (i.e. in some Romance languages, an accusative clitic cannot cluster with a dative clitic when anteceded by an attitude holder) can occupy a position below the nominative projection. Finally, Nishigauchi (2014) claims that the set of projections that he calls POV – point of view – lies below Tense.

Specifically, the facts reveal that the logophoric operator can at least occupy two different positions within TP. First, the possible occurrence of exempt anaphors within the subject of TPs, as in (80), shows that the operator can appear above the nominative position so as to bind the exempt anaphor.

(80) Ils<sub>i</sub> disent que [TP OpLOG<sub>i</sub> leur<sub>i</sub> propre fils a vu le fils de Luc.] 'They<sub>i</sub> say that [TP OpLOG<sub>i</sub> their<sub>i</sub> own son saw Luke's son.']

since a logophoric operator is never a coargument (furthermore, they cannot capture the behavior of the French plain anaphors as shown in Charnavel & Sportiche 2016-a).

Conversely, the possible occurrence of the apparent antecedent within the subject of TP as in (81) implies that the operator can also appear below the nominative position, where it cannot bind the antecedent, thereby avoiding a Condition C violation. <sup>34</sup>

(81) [=(38)] [TP Le courage de Paul<sub>i</sub> Oplog<sub>i</sub> a sauvé sa<sub>i</sub> propre maison des flammes ainsi que la maison des voisins].

'[TP Paul<sub>i</sub>'s courage Oplog<sub>i</sub> saved his<sub>i</sub> own house from the fire and the neighbors' house as well.]'

This is in fact expected under the current proposal if Charnavel & Sportiche 2016-a are right in taking the domain of Condition A to be a phase spellout domain. Indeed, the top position lies at the periphery of and within TP. A post nominative position would be expected too at the periphery of and within the spellout domain of the vP phase (see footnote 34 for another argument for the relevance of the vP phase).

In sum, logophoric operators, whether they are attitudinal as in (80) or empathic as in (81), occupy a position within the smallest spellout domain containing the exempt anaphor such that the operator can bind the exempt anaphor in its binding domain but does not bind the antecedent, thus satisfying both Condition A and Condition C.<sup>35</sup>

It should first be mentioned that even if we adopt Belletti & Rizzi's (1988) proposal about the structure of *psych*-verbs (where the object c-commands the subject at some level of representation, i.e. before movement of the subject when it is in the theme position), the anaphor *elle-même* is not plain here, since *Lucie* is embedded within the object and thus cannot c-command *elle-même* at any level of representation. A logophoric operator should therefore be present to bind the anaphor. But it cannot occur just below the subject without violating Condition C since the antecedent is even lower. The issue can be solved if we adopt Belletti & Rizzi's (1988) proposal as illustrated in Figure 2: since the anaphor starts off within the VP, we can assume that the logophoric operator is in a position within the VP that c-commands the subject (to be raised), but does not c-command the object; this is possible since the object is argued to c-command the subject (to be raised) in this analysis.

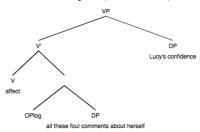


Figure 2. The structure of psych-verbs under Belletti & Rizzi's and the logophoric hypotheses Interestingly, note that this could be compatible with an analysis where the logophoric operator is in fact within the spellout domain of the vP phase. For space reasons, I will however not elaborate on the possible occurrence of logophoric operators in spellout domains of vP phases (see Charnavel & Sportiche 2016-a for issues raised by the vP phase hypothesis).

 $^{35}$  Note that this hypothesis implies that the *pro* subject of  $OP_{LOG}$  counts as an A-position, since under the classical theory of an A/A-bar distinction, anaphors are required to be A-bound (only A-movement

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<sup>&</sup>lt;sup>34</sup> *Psych*-verbs raise further questions: in such cases, the antecedent is lower than the subject position: (vii) Tous ces détestables commentaires sur elle<sub>i</sub>-même affectent la confiance de Lucie<sub>i</sub>.

<sup>&#</sup>x27;All these foul comments about herself<sub>i</sub> affect Lucy<sub>i</sub>'s confidence.'

The logophoric operator hypothesis has a further implication in cases where exempt anaphors are contained in DPs with subject. Given that DPs are argued to form phases when they have a subject (cf. Svenonius 2004, Charnavel & Sportiche 2016-a, a.o), the logophoric operator is predicted to appear within the spellout domain of the DP in such cases, so as to bind the anaphor in its local domain. This is illustrated in (82).

(82) A propos des journalistes, Anne<sub>i</sub> a dit que [DP leurs OpLOG<sub>i</sub> multiples attaques contre elle<sub>i</sub>-même et son mari] n'étaient pas justifiées.

'Speaking of the journalists, Anne<sub>i</sub> said that [DP their OpLOG<sub>i</sub> numerous criticisms against herself<sub>i</sub> and her husband] were unfounded.'

In this example, locating the operator within the DP rather than within the TP containing the anaphor is only required by our assumptions about the domain of Condition A. But this makes a prediction: just as two different TPs can contain disjoint exempt anaphors, two different DPs should be able to contain disjoint anaphors as long as they form binding domains, i.e. have a subject distinct from the anaphor<sup>36</sup>. This is exemplified in (83).<sup>37</sup>

(83) a. ?Louise<sub>i</sub> a dit à [sa fille Jeanne]<sub>k</sub> que [DP1 OpLOG<sub>k</sub> mon cadeau d'anniversaire pour sa<sub>k</sub> propre fille] ressemblait étrangement à [DP2 OpLOG<sub>i</sub> mon cadeau de mariage pour elle<sub>i</sub>-même et son mari].

'?Louise<sub>i</sub> said to [her daughter Jeanne]<sub>k</sub> that [DP1 OpLOG<sub>k</sub> my birthday gift for her<sub>k</sub> own daughter] was strangely similar to [DP2 OpLOG<sub>i</sub> my wedding

gift for herself, and her husband].

- b. \*Louise<sub>i</sub> a dit à [sa fille Jeanne]<sub>k</sub> que [TP OpLOG<sub>i/k</sub> les cadeaux d'anniversaire pour sa<sub>k</sub> propre fille ressemblaient étrangement aux cadeaux de mariage pour elle<sub>i</sub>-même et son mari].
  - "\*Louise $_i$  said to [her daughter Jeanne] $_k$  that [ $_{TP}$  the birthday gifts for her $_k$  own daughter were strangely similar to the wedding gifts for herself $_i$  and her husband].

can feed Condition A). This is consistent with Charnavel & Sportiche (2016-a): A-bar movement is movement to the edge of a phase; A-movement is movement within the spellout domain of a phase head. Under this view, as the logophoric operator occurs within the spellout domain of the anaphor, it is an A-binder.

<sup>&</sup>lt;sup>36</sup> If the anaphor is (within) the subject of the DP, it is not contained within the spellout domain of this DP and thus does not have to be bound within it (see Charnavel & Sportiche 2016-a for more details).

<sup>&</sup>lt;sup>37</sup> The many constraints that need to be controlled for here make it hard to provide a fully natural example: first, the two antecedents (Louise and Jeanne) must be logophoric centers (this was checked using the Epithet Test); second, the DPs must have subjects (the first person subject was chosen to avoid introducing a third individual, given that French - unlike e.g. Mandarin, cf. Huang & Liu 2001-does not exhibit blocking effects); third, those DPs should not introduce another perspective (that's why the noun *gift* was chosen, rather than, say, *comment* or *picture*); fourth, the French anaphors require contrasts.

The slight contrast between (83)a (involving DPs with (underlined) subjects) and (83)b (involving DPs without subjects) suggests that the prediction is borne out. Nevertheless, it remains difficult to decisively conclude given that the complexity of the examples (see footnote 37) makes the judgments quite subtle. A clearer (i.e. involving less subtle judgments) independent argument for the occurrence of logophoric operators in the spellout domain of DPs will be provided in Section 4.2.

# 4. Deriving the properties of exempt anaphors

In the previous section, we have focused on the local binding relation between the exempt anaphor and the silent pronoun *pro* introduced by the logophoric operator. This section concentrates on the relation between *pro* and the apparent antecedent A of the exempt anaphor. As we will see, the syntactically unconstrained nature of that relation derives the cluster of properties that exempt anaphors – as opposed to plain anaphors – exhibit.

# 4.1. Absence of visible locality requirements

The absence of syntactic requirements between the logophoric operator and the antecedent is the key to understand the apparent differences between exempt and plain anaphors. In particular, the possibility of coreference between the operator and the antecedent A<sup>38</sup> explains why an exempt anaphor appears to disobey Condition A: given that its local binder is the operator, the anaphor does not have to be bound by A or occur in its domain, as made clear by the representation in (9) repeated below.

(84) 
$$A_i$$
 ... [  $pro_i$  [ $OP_{LOG}$  [ $P$  ... exempt anaphor $i$  ... ] coreference local binding

<sup>38</sup> This does not mean that the operator is necessarily coreferent with the antecedent: in particular the operator has obviously to be bound by quantifiers such as *chaque enfant* 'each child' below:

Furthermore, Rule I must be taken into account, as in standard cases.

<sup>(</sup>viii) [Chaque enfant]<sub>i</sub> pense qu'on OpLOG<sub>i</sub> prendra soin de lui<sub>i</sub>-même et de ses frères et soeurs./ '[Each child]<sub>i</sub> thinks that one OpLOG<sub>i</sub> will take care of himself<sub>i</sub>/herself<sub>i</sub> and his/her siblings.'

By transitivity, there is a binding requirement between a quantifier antecedent and an exempt anaphor as shown in (ixa) (WCO effect) vs. (ixb).

<sup>(</sup>ix) a. ??La chère personne qui Oplog<sub>i</sub> s'occupe de lui<sub>i</sub>-même et de ses frères et soeurs a habillé [chaque enfant]<sub>i</sub>. /'??The dear person who Oplog<sub>i</sub> takes care of himself<sub>i</sub> and his siblings has dressed [each child]<sub>i</sub>.'

b. La chère personne qui Oplog<sub>i</sub> s'occupe de lui<sub>i</sub>-même et de ses frères et soeurs a habillé [Antonin]<sub>i</sub>./'The dear person who Oplog<sub>i</sub> takes care of himself<sub>i</sub> and his siblings has dressed [Antonin]<sub>i</sub>.'

Moreover, this hypothesis (unlike analyses involving successive cyclic movement, cf. Cole et al. 2006, a.o.) correctly predicts that exempt anaphors can occur in an island while the apparent antecedent sits outside the island, as in (85).

(85) Claire, espère que les voisins seront là [quand des lettres adressées à elle,même ou à son mari arriveront].

'Claire, hopes that the neighbors will be there [when letters addressed to herself<sub>i</sub> or her husband arrive].'

The possibility of coreference between the operator and the antecedent also allows for flexibility in the choice of the antecedent (as long as the perspectival conditions are met). Example (86) below illustrates that there is no syntactic constraint on the choice of attitude holder.

(86) Christel<sub>i</sub> pense qu'Agnès<sub>k</sub> a dit que [TP l'avenir de Constant OploG<sub>i/k</sub> ne dépend que d'elle<sub>i/k</sub>-même].

'Christel<sub>i</sub> thinks that Agnès<sub>k</sub> said that  $\lceil_{TP}$  Constant's future OpLoG<sub>i/k</sub> only depends on herself<sub>i/k</sub>].'

The same holds for empathy loci: in (87), both Christel and Ninon can be empathy loci, and the exempt anaphor ses propres can refer to either.<sup>39</sup>

(87) Christel<sub>i</sub> mérite que [TP] le futur métier de Ninon<sub>k</sub> OploG<sub>i/k</sub> corresponde à ses<sub>i/k</sub> propres aspirations plutôt qu'aux contraintes de la société]. 'Christel<sub>i</sub> deserves the fact that [TP Ninon<sub>k</sub>'s future job OpLOG<sub>i/k</sub> corresponds to her<sub>i/k</sub> own aspirations rather than to the constraints of society].'

## 4.2. Non-exhaustive binding

As we have seen in Section 1.1, one of the puzzling properties characterizing exempt anaphors is the possibility of non-exhaustive binding: as opposed to plain anaphors, exempt anaphors can have partial or split antecedents. The possibility of coreference between the operator and the antecedent also accounts for this property: what we in

<sup>&</sup>lt;sup>39</sup> The flexibility in the choice of antecedents nevertheless depends on semantic constraints on the distribution of logophoric operators. For instance, a logophoric operator prefers to refer to an attitude holder when there are several possible logophoric centers of different types, as shown in (x) and (xi).

<sup>(</sup>x) Le voisin<sub>k</sub> a dit que le courage de Paul<sub>i</sub> OpLOG<sub>k/7i</sub> a sauvé <u>sa<sub>k/7i</sub> propre</u> maison des flammes ainsi que celle du maire. /'The neighbork said that Pauli's courage OploGk/?i saved hisk/?i own house from the fire and the mayor's too.'

<sup>(</sup>xi) Selon Christelk, l'avenir de Ninon, OpLOGk/9, dépend d'ellek/9,-même. /'According to Christel<sub>k</sub>, Ninon<sub>i</sub>'s future OpLOG<sub>k/2i</sub> depends on herself<sub>k/2i</sub>.'

Both (x) and (xi) contain an attitude holder (le voisin 'the neighbor' and Christel, respectively) and a potential empathy locus (Paul and Ninon, respectively), and in both cases, the exempt anaphor (sa proper and elle-même, respectively) preferably refers to the attitude holder. A hierarchy between the two types of logophoric centers can therefore be hypothesized, as stated in (xii), and the logophoric operator tends to refer to the highest one on that hierarchy:

<sup>(</sup>xii) Referential preference of logophoric operators: Attitude holder > Empathy locus

fact observe is not non-exhaustive *binding* (of the anaphor, which remains exhaustively bound by the logophoric operator), but non-exhaustive *coreference* (between the operator and the antecedent); just like a standard pronoun, the silent pronoun *pro* introduced by the logophoric operator can refer to the sum of two antecedents or to part of an antecedent.

Split antecedence, abstractly schematized in (88), is illustrated in (89)-(90).

- (88) antecedent- $1_i$  ... antecedent- $2_k$  ...  $[TP ... OpLoG_{i+k}$  ... anaphor<sub>i+k</sub>...]
- (89) [Le voisin]<sub>i</sub> a persuadé Joël<sub>k</sub> que [TP OpLOG<sub>i+k</sub> personne d'autre qu'<u>eux<sub>i+k</sub>-mêmes</u> ne devrait prendre la tête du comité]. '[The neighbor]<sub>i</sub> persuaded Joël<sub>k</sub> that [TP OpLOG<sub>i+k</sub> no one but themselves<sub>i+k</sub> should become the head of the committee].'
- (90) Christel<sub>i</sub> a convaincu Ninon<sub>k</sub> que [TP OpLoG<sub>i+k</sub> l'avenir dépendra de leurs<sub>i+k</sub> propres efforts (à toutes les deux)].
  'Christel<sub>i</sub> convinced Ninon<sub>k</sub> that [TP OpLoG<sub>i+k</sub> the future will depend on their<sub>i+k</sub> own efforts (of both of them)].'

In (89) and (90), the exempt anaphor (*eux-mêmes* and *leurs propres*, respectively) refers to the sum of two attitude holders (*le voisin* 'the neighbor' and *Joël* in (89), *Christel* and *Ninon* in (90)<sup>40</sup>). Consequently, the logophoric operator refers to that sum, just as the pronoun *ils* 'they' in (91) refers to the sum of *le voisin* 'the neighbor' and Joël. However, the anaphors themselves remain exhaustively bound by the operator.

(91) [Le voisin]<sub>i</sub> a persuadé Joël<sub>k</sub> qu'ils<sub>i+k</sub> devraient prendre la tête du comité. '[The neighbor]<sub>i</sub> persuaded Joël<sub>k</sub> that they<sub>i+k</sub> should become the head of the committee.'

Moreover, note that the split antecedents can be of different types, as shown in (92) where *Christel* is an attitude holder and *Ninon* is an empathy locus.

(92) Christel<sub>i</sub> pense que [TP l'avenir de Ninon<sub>k</sub> OpLOG<sub>i+k</sub> dépendra de <u>leurs<sub>i+k</sub></u> <u>propres</u> efforts (à toutes les deux)].

'Christel<sub>i</sub> thinks that [ $_{TP}$  Ninon<sub>k</sub>'s future OpLOG<sub>i+k</sub> will depend on their<sub>i+k</sub> own efforts (of both of them)].'

<sup>&</sup>lt;sup>40</sup> The object of verbs like *persuader* 'persuade' or *convaincre* 'convince' behave like attitude holders when attitude tests are applied. For instance, the object of *persuader* 'persuade' cannot be referred to by an epithet in the complement clause (Epithet Test):

<sup>(</sup>xiii) \*Joël a persuadé [le voisin]i que tout le monde voterait pour [cet idiot]i.

<sup>&#</sup>x27;\*Joël persuaded [the neighbor]; that everybody would vote for [the idiot];.'

Partial binding can be explained in a similar way: there is in fact no partial binding of the anaphor, but only partial coreference between the operator and the antecedent, as illustrated in (93)-(96).

- (93) [antecedent<sub>i</sub> and x]<sub>k</sub> ... [TP ... OpLOG<sub>i</sub> ... anaphor<sub>i</sub>...]
- (94) [Joël<sub>i</sub> et ses voisins]<sub>k</sub> ont annoncé que [<sub>TP</sub> OpLOG<sub>i</sub> personne d'autre que <u>lui</u>-<u>même</u> ne devrait prendre la tête du comité]. '[Joël<sub>i</sub> and his neighbors]<sub>k</sub> announced that [<sub>TP</sub> OpLOG<sub>i</sub> no one but himself<sub>i</sub> should become the head of the committee].'
- (95) [Christel<sub>i</sub> et ses enfants]<sub>k</sub> croient que [TP Oplog<sub>i</sub> l'avenir ne dépendra que de ses<sub>i</sub> propres efforts].

  '[Christel<sub>i</sub> and her children]<sub>k</sub> believe that [TP Oplog<sub>i</sub> the future will only depend on her<sub>i</sub> own efforts].'
- (96) [Joël<sub>i</sub> et ses voisins]<sub>k</sub> ont annoncé qu'il<sub>i</sub> devrait prendre la tête du comité. '[Joël<sub>i</sub> and his neighbors]<sub>k</sub> announced that he<sub>i</sub> should become the head of the committee.'

Given that there is at most one logophoric operator per domain as shown in Section 3.1, this further predicts that a tensed TP cannot contain two exempt anaphors that partially overlap in reference, as schematized in (97).

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(97) a.*antecedent-1_i...antecedent-2_k...[TP...OpLOG_{??}...anaphor_{i+k}...anaphor_{i/k}...] b. *[antecedent_i and x ]_k ... [TP...OpLOG_{??} ... anaphor_i... anaphor_k...]
```

This is borne out, as shown by (98) and (99), which are both degraded if the two instances of *propre* are present.

- (98) Christel<sub>i</sub> a convaincu Ninon<sub>k</sub> que [TP OpLOG<sub>k/i+k</sub> son<sub>k</sub> (propre) avenir et celui de ses frères dépendront de leurs<sub>i+k</sub> (propres) efforts (à toutes les deux)]. 'Christel<sub>i</sub> convinced Ninon<sub>k</sub> that [TP OpLOG<sub>k/i+k</sub> her<sub>k</sub> (own) future and her brothers's will depend on their<sub>i+k</sub> (own) efforts (of both of them)].'
- (99) [Christel<sub>i</sub> et ses enfants]<sub>k</sub> croient que [TP OpLOG<sub>k/i</sub> leur<sub>k</sub> (propre) avenir ne dépendra que de ses<sub>i</sub> (propres) efforts].

  '[Christel<sub>i</sub> and her children]<sub>k</sub> believe that [TP OpLOG<sub>k/i</sub> their<sub>k</sub> (own) future will only depend on her<sub>i</sub> (own) efforts].'

We however expect partial coreference between two exempt anaphors to become possible as long as they occupy different binding domains (in that case, they can be bound by different logophoric operators). In particular, this should be the case if one of them is within a DP with subject, which we have assumed forms a binding domain. Examples such as (100) (which are easier to judge than (83)) reveal that the

prediction is borne out, and thus provide an additional independent argument for the occurrence of logophoric operators in the spellout domain of DP phases containing exempt anaphors (cf. Section 3.2).

- (100) a. Julie<sub>i</sub> dit que [<sub>TP</sub> cette réunion Oplog<sub>i</sub> a autant confronté Simon<sub>k</sub> <u>qu'elle<sub>i</sub>-même</u> à [<sub>DP</sub> tes Oplog<sub>i+k</sub> critiques de <u>leurs<sub>i+k</sub> propres</u> scénarios et de ceux de leurs collègues]].
  - 'Julie<sub>i</sub> says that [ $_{TP}$  this meeting  $OpLoG_i$  confronted  $Simon_k$  as well as herself<sub>i</sub> to [ $_{DP}$  your  $OpLoG_{i+k}$  criticisms of their  $_{i+k}$  own scripts and those of their colleagues]].'
  - b. Julie<sub>i</sub> dit que [<sub>TP</sub> cette réunion a confronté [chacun de ses<sub>i</sub> collègues]<sub>k</sub> à [<sub>DP</sub> tes OploG<sub>i+k</sub> critiques de <u>leurs<sub>i+k</sub> propres</u> scénarios et de ceux de leurs partenaires]].
    - 'Julie<sub>i</sub> says that [ $_{TP}$  this meeting confronted [each of her<sub>i</sub> colleagues] $_k$  to [ $_{DP}$  your OpLOG $_{i+k}$  criticisms of their $_{i+k}$  own scripts and those of their partners]].'

Here, the exempt anaphor leurs propres is contained in a DP that contains the subject tes (thus a phase, presumably), and has a split antecedent (Julie + Simon in (100)a, Julie + chacun de ses collègues 'each of her colleagues' in (100)b). Sentences (100)a and (100)b provide two different arguments that the logophoric operator occurs in that DP, and not higher in the TP. In (100)a, exempt elle-même within the TP must be bound by the operator OploG<sub>i</sub> referring to Julie; thus, the operator OploG<sub>i+k</sub> referring to both Julie and Simon cannot appear there (given that split binding is not possible, unlike split reference, as we have just argued), but below; this is corroborated by the fact that Condition C would be violated if OploG<sub>i+k</sub> appeared higher than Simon. In (100)b, the second antecedent chacun de ses collègues 'each of her colleagues' is a quantifier and must therefore bind the logophoric operator; moreover, OpLOG<sub>i+k</sub> cannot c-command the quantifier without triggering a Weak Crossover effect (see Sportiche 1985 for arguments that WCO effects are also triggered in the case of partial binding). We must thus assume in both cases that the logophoric operator referring to the split antecedent is lower than the two antecedents. This directly follows if we suppose that there is an operator in the spellout domain of the DP phase, as implied by our hypotheses.

The same holds with the exempt anaphor *eux-mêmes*:

(101) Juliei pense que [TP l'événement inattendu Oplogi a autant protégé Simonk qu'ellei-même de [DP tes Oplogi+k vilaines remarques sur euxi+k-mêmes et leurs enfants]].

'Julie<sub>i</sub> thinks that [ $_{TP}$  the unexpected event  $OpLOG_i$  protected  $Simon_k$  as well as  $herself_i$  from [ $_{DP}$   $\underline{your}$   $OpLOG_{i+k}$  mean comments about themselves $_{i+k}$  and their children]].'

We thus have clear evidence that logophoric operators have to be present in the spellout domain of DP phases to bind exempt anaphors there. This can be generalized to all cases of DPs with subject, even those like (82) that are compatible with different structures and cannot directly support this hypothesis.

# 4.3. Strict readings

Another property that distinguishes plain anaphors from exempt anaphors, as we have seen in Section 1.1, is the availability of strict readings in ellipsis and focus constructions: plain anaphors are standardly assumed to only trigger sloppy readings, while exempt anaphors can also give rise to strict readings.

For instance, Reinhart & Reuland (1993: 674) argue that *herself* has to be interpreted as a bound variable in (102)a and (103) (sloppy reading), but not in (102)b (sloppy or strict reading), where *herself* is exempt under their theory.<sup>41</sup>

```
(102)a. Only Lucie<sub>i</sub> praised herself<sub>i</sub>. (✓sloppy/*strict reading) i.e. [nobody else]<sub>k</sub> praised {themselves<sub>k</sub>/*Lucie}.
```

b. Only Lucie<sub>i</sub> buys pictures of herself<sub>i</sub>. (✓sloppy/✓strict reading)
 i.e. [nobody else]<sub>k</sub> buys pictures of {themselves<sub>k</sub>/Lucie}.

```
(103) Lucie; praised herself;, and Lili (did) too. (✓sloppy/*strict reading)
```

It is however unclear whether what Reinhart and Reuland (1993) characterize as plain anaphors (i.e. anaphors in coargumental positions) must indeed be interpreted as bound variables (cf. Charnavel & Sportiche 2016-a): (104) and (105) below license both strict and sloppy readings, readily for the first one (see e.g. Hestvik 1995, Kehler 2002, who show that ellipsis behaves differently in this respect in subordination and in coordination), for many speakers for the second (see Büring 2005: 141, a.o.).

(104) John; defended himself; before Bill did. (✓sloppy/✓strict reading) i.e. ... before Bill<sub>k</sub> defended {himself<sub>k</sub>/him;}.

-

<sup>&</sup>lt;sup>41</sup> Predicate-based theories basically propose that an anaphor must be bound by its coargument if it has one as in (102)a and (103), but is exempt from Condition A if it does not have any coargument as in (102)b.

```
(105) Only John; finds himself; intelligent.
                                                                        (✓sloppy/✓strict reading)
       i.e. [nobody else]<sub>k</sub> finds {themselves<sub>k</sub>/John<sub>i</sub>} intelligent.
```

The problem lies on the fact that we do not know whether animate anaphors bound in a configuration obeying Condition A are indeed plain, or are exempt "accidentally" obeying Condition A. 42 But these claims can be reevaluated (at least for French) in view of the finding that inanimate anaphors have to be plain anaphors (cf. Section 1.3).

In particular, (106) (vs. (107)) reveals that examples containing the ellipsis site<sup>43</sup> in a subordinate clause (cf. (104)) only trigger a sloppy reading when they involve an inanimate (vs. animate) anaphor.

```
(106) [Ta page internet]; contient plus de liens vers elle;-même que [la mienne]<sub>k</sub>.
     i.e. que [la mienne]<sub>k</sub> ne contient de liens vers {elle<sub>k</sub>-même/*[ta page internet]<sub>i</sub>}
       '[Your webpage]<sub>i</sub> contains more links towards itself<sub>i</sub> than mine<sub>k</sub>.' i.e. than
       mine<sub>k</sub> contains links towards {itself<sub>k</sub>/*[your webpage]<sub>i</sub>}
                                                                                         (✓sloppy/*strict)
```

```
(107) Coralie, possède plus de photos d'elle, même que [sa soeur]<sub>k</sub>.
        i.e. que [sa soeur]<sub>k</sub> ne possède de photos d'{elle<sub>k</sub>-même/Coralie<sub>i</sub>}
        'Coralie<sub>i</sub> owns more pictures of herself<sub>i</sub> than [her sister]<sub>k</sub>.'
        i.e. than [her sister]<sub>k</sub> owns pictures of {herself<sub>k</sub>/Coralie<sub>i</sub>}
                                                                                               (✓ sloppy/strict)
```

This confirms that the (un)availability of strict readings does distinguish between plain and exempt anaphors: inanimate (thus plain) anaphors only exhibit sloppy readings, while animate anaphors can give rise to both sloppy and strict readings.

The logophoric operator hypothesis accounts for these facts, assuming that the ellipsis site contains a copy of the anaphor (unlike what is assumed under analyses based on vehicle change, cf. Fiengo & May 1994, a.o.). In the case of inanimates, only sloppy readings are available because the elided anaphor has to be locally bound by the overt antecedent, e.g. la mienne 'mine' in (106), as represented in (108).

```
(108) [Ta page internet]<sub>i</sub> contient plus de liens vers elle<sub>i</sub>-même que [TP la mienne<sub>k</sub>
        (ne contient de liens vers elle<sub>k</sub>-même)].
        '[Your webpage]i contains more links towards itselfi than [TP minek
        (contains links towards itself<sub>k</sub>)].'
                                                                                             (sloppy)
```

But in the case of animates as in (107), the elided anaphor can be exempt, i.e. anteceded by a logophoric operator as represented in (109)b. A strict reading can

<sup>&</sup>lt;sup>42</sup> As we saw in Section 2.1.2, this can be disambiguated based on (non) de se readings. This correctly predicts that (105) cannot give rise to a strict reading when it is not read *de se*.

43 In French, only TP-ellipsis is possible, not VP-ellipsis.

therefore arise as long as the antecedent of the non-elided anaphor (*Coralie* in (109)b) is a logophoric center (e.g. an empathy locus as favored by *sa chère* 'her dear' in (109)b). The elided animate *elle-même* can also be directly bound by the local antecedent *sa soeur* 'her sister' and thus give rise to a sloppy reading as in (109)a: it is construed as a plain anaphor here.

```
(109)a. Coralie<sub>i</sub> possède plus de photos d'elle<sub>i</sub>-même que [TP [sa soeur]<sub>k</sub> (ne possède de photos d'elle<sub>k</sub>-même)].

'Coralie<sub>i</sub> owns more pictures of herself<sub>i</sub> than [TP [her sister]<sub>k</sub> (owns pictures of herself<sub>k</sub>}).'

(sloppy)

b. Coralie<sub>i</sub> possède plus de photos d'elle<sub>i</sub>-même que [TP sa<sub>i</sub> (chère) soeur Oplog<sub>i</sub> (ne possède de photos d'elle<sub>i</sub>-même)].

'Coralie<sub>i</sub> owns more pictures of herself<sub>i</sub> than [TP her<sub>i</sub> (dear) sister Oplog<sub>i</sub> (owns pictures of herself<sub>i</sub>)].'
```

In sum, plain anaphors only give rise to sloppy readings because the elided anaphor has to be bound by the local antecedent in its clause, but exempt anaphors can also give rise to strict readings because they are bound by logophoric operators, which can refer to the antecedent of the matrix clause under the right perspectival conditions.

The same holds for focus constructions as in (5)b-(6)b repeated in (110)-(111): the availability of strict readings depends on the presence of a logophoric operator.<sup>44</sup>

```
(110) Seule Simone; (OpLoGi) aime les photos d'elle;-même.

'Only Simone; (OpLoGi) likes pictures of herselfi.'

Focus alternatives: i. x likes pictures of x

ii. x OpLoGi likes pictures of herselfi

(strict)

(111) Seule [ta page internet]; contient des liens vers elle;-même.

'Only [your webpage]; contains links towards itselfi.'

Focus alternatives: i. x contains links towards x

ii. *x OpLoGi contains links towards itselfi

(*strict)
```

Thus, the availability of strict readings depends on the possibility of construing the first antecedent as a logophoric center. This can explain, I argue, the contrast between subordination and coordination observed by Hestvik (1995) and Kehler (2002): it is easier to interpret the antecedent as a logophoric center in the case of subordination. Consider the English example (104) again and its coordinated counterpart.

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<sup>&</sup>lt;sup>44</sup> This implies that the difference between (102)a and (102)b observed by Reinhart & Reuland (1993) (if the judgment can be confirmed) must be reduced to a difference in the possibility of construing Lucie as a logophoric center in the two sentences (it should be easier in (102)b than in (102)a).

```
(112)[=(104)] John<sub>i</sub> defended himself<sub>i</sub> before Bill did. (✓sloppy, strict)
```

(113) John<sub>i</sub> defended himself<sub>i</sub> and Bill did too. (✓sloppy, \*strict)

In (112), John, the main subject of the sentence, can easily be construed as an empathy locus in the subordinate clause. In (113) however, it is much harder to interpret John as an empathy locus in the second conjunct because of the parallelism imposed by the coordinated structure: only the subject of the second conjunct, Bill, can easily be construed as an empathy locus in the ellipsis site. This accounts for the contrast in French between (107), which involves subordination and licenses a strict reading, and (114).

(114) Coralie<sub>i</sub> a de nombreuses photos d'elle<sub>i</sub>-même dans son bureau et Suzanne<sub>k</sub> aussi (a de nombreuses photos d'{elle<sub>k</sub>-même/??Coralie<sub>i</sub>}.(✓sloppy, ??strict) 'Coralie<sub>i</sub> has many pictures of herself<sub>i</sub> in her office and Suzanne<sub>k</sub> (does) too (have many pictures of {herself<sub>k</sub>/Coralie<sub>i</sub>}.'

The hypothesis that it is parallelism in coordination structures that disfavors strict readings by precluding the construal of the first antecedent as a logophoric center in the second conjunct is supported by the following observation: explicitly breaking the parallelism between the two conjuncts makes strict readings more accessible in coordination structures. In (115), the presence of *sa chère* 'her dear' in the second conjunct contributes to construing Coralie as an empathy locus in the ellipsis site; a logophoric operator referring to it can thus bind the elided anaphor.

(115) Coralie<sub>i</sub> a de nombreuses photos d'elle<sub>i</sub>-même dans son bureau et [<sub>TP</sub> <u>sa<sub>i</sub></u> <u>chère</u> soeur Oplog<sub>i</sub> <del>a de nombreuses photos d'elle<sub>i</sub>-même dans son bureau</del> aussi].

'Coralie<sub>i</sub> has many pictures of herself<sub>i</sub> in her office and [TP her<sub>i</sub> dear sister Oplog<sub>i</sub> (does) have many pictures of herself<sub>i</sub> in his office too].' (strict)

The same holds if the antecedent of the anaphor is an attitude holder: a strict reading can arise even in structures with coordination like (116).

(116)D'après Thomas<sub>i</sub>, la police fait souvent appel à lui<sub>i</sub>-même et ses informateurs, et [<sub>TP</sub> les services secrets Oplog<sub>i</sub> font souvent appel à lui<sub>i</sub>-même et ses informateurs aussi].

'According to Thomas<sub>i</sub>, the police often calls on himself<sub>i</sub> and his informants and [ $_{TP}$  the secret service OpLoG<sub>i</sub> (does) often call on himself<sub>i</sub> and his informants too].' (strict)

In sum, I have shown that once the inanimacy criterion is taken into account to establish the facts, the availability of strict readings in ellipsis and focus constructions

does characterize exempt anaphors as compared to plain anaphors. This supports the logophoric operator hypothesis, which can derive this: both plain and exempt anaphors are locally bound in the ellipsis site, but binding by a logophoric operator gives rise to strict readings. Thus, the so-called *referential* interpretation is due to the fact that the logophoric operator (not the anaphor) *refers* to the antecedent, while in the so-called bound interpretation, the anaphor is directly bound by the antecedent.

## 4.4. Complementarity with pronouns

Finally, exempt anaphors, unlike plain anaphors, are often assumed to be in free variation with pronouns.

The question whether plain anaphors are in fact in complementary distribution with pronouns concerns the definition of Condition B and is thus outside the scope of this paper. But note that facts about French inanimates (e.g. (7) and (1)a repeated below) suggest that the picture seems more complicated (cf. Hicks 2009, Charnavel & Sportiche 2016-a, a.o.).

- (117) [La Terre]<sub>i</sub> tourne sur elle<sub>i</sub>-\*(même). '[The earth]<sub>i</sub> spins on it<sub>i</sub>\*(self).'
- (118) [Cette auberge]<sub>i</sub> fait de l'ombre à son<sub>i</sub> (propre) jardin et au jardin de la maison voisine.
  - '[This inn]<sub>i</sub> gives shade to its<sub>i</sub> (own) garden and to the garden of the neighboring house.'

Regarding exempt anaphors, the question of how they are predicted to be in free variation with pronouns hinges on the definition of Condition B.

Under a semantic coargumenthood-based analysis of Condition B (cf. Reinhart & Reuland 1993), free variation between exempt anaphors and pronouns directly follows, since logophoric operators are no coarguments.

Under a Chomskian theory of Condition B, the type of prediction depends on how the domain for Condition B is defined. Suppose that the domain for Condition B is smaller than the domain for Condition A. In that case, free variation between exempt anaphors and pronouns is predicted by the logophoric operator hypothesis as long as the operator can appear outside the domain for Condition B, but inside the domain for Condition A. Suppose now that the same domain (say, the spellout domain of a phase) is relevant for both Condition A and Condition B. In that case, free variation between exempt anaphors and pronouns is predicted as long as the

logophoric operator is optional<sup>45</sup> or its antecedent is flexible as illustrated in examples like (8) repeated below.

- (119)a. Marie<sub>i</sub> subit l'influence des nombreux politiciens qui [OpLOG<sub>i</sub> tournent autour d'elle<sub>i</sub>-même].
  - 'Mary<sub>i</sub> is subject to the influence of the many politicians that [OpLOG<sub>i</sub> revolve around herself<sub>i</sub>].'
  - b. Marie<sub>i</sub> subit l'influence des nombreux politiciens qui [(OpLOG\*<sub>i/k</sub>) tournent autour d'elle<sub>i</sub>].
    - 'Mary<sub>i</sub> is subject to the influence of the many politicians that  $[(OpLOG*_{i/k})$  revolve around her<sub>i</sub>].'

This would have at least two implications: first, perspectival interpretation does not require the presence of logophoric operators, given that pronouns can occur in perspectival domains (e.g. attitude contexts) and refer to the perspective center of the domain (e.g. attitude holder); second, coreferring pronouns and exempt anaphors cannot occur in the same domain, given that exempt anaphors require the presence of a logophoric operator while pronouns forbid it.<sup>46</sup>

To check such predictions carefully, the domain of Condition B crucially needs to be reexamined. I will therefore leave the examination of these predictions for a future occasion.

## 5. Conclusion – Crosslinguistic implications and open question

To sum up, the issue of exempt anaphora is solved by the hypothesis that there are silent logophoric operators that can bind anaphors. This allows us to explain both the syntactic specificities (esp. absence of structural constraints between the apparent antecedent and the anaphor, possibility of non-exhaustive binding, availability of strict readings) and the semantic specificities (perspectival interpretation) of apparently exempt anaphors, as compared to plain anaphors, without postulating a lexical difference between them. The morphological identity between plain and

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<sup>&</sup>lt;sup>45</sup> As we have seen in the previous section, this is also implied by the availability of both strict and sloppy readings in the case of animate anaphors. Note also that this optionality is only available in the absence of an exempt anaphor.

<sup>&</sup>lt;sup>46</sup> Examples like (xiv) below are relevant here: the exempt anaphor *sa propre* and the clitic pronoun *lui*, which both refer to Marie, co-occur in the same domain (tensed TP). This example is acceptable: the logophoric operator does not trigger any condition B effect. This suggests that a definition of condition B based on coargumenthood is more promising than one based on spellout domains like condition A.

<sup>(</sup>xiv) Marie; subit l'influence des nombreux enfants de politiciens que [Oplog; sa; propre fille lui; présentel.

<sup>&#</sup>x27;Mary<sub>i</sub> is subject to the influence of the many politicians' children that  $[OpLOG_i her_i own daughter introduces to <math>her_i]$ .

exempt anaphors that we observe in many languages is therefore directly accounted for.

In this paper, the logophoric operator hypothesis has been primarily motivated based on French data. But I expect this hypothesis to explain the distribution of exempt anaphors more generally, i.e. in other languages where exempt and plain anaphors have the same form. As we have seen, this seems promising in cases like English *himself*, Japanese *zibun*, Mandarin *ziji*, among others, but a careful application of the logophoric tests and the other diagnostics mentioned will be necessary to confirm the predictions. In particular, these ambiguous anaphors are hypothesized to be unspecified with respect to logophoric marking; they should therefore allow for both attitudinal and empathic interpretations.

This does not mean that all these exempt anaphors will exhibit exactly the same characteristics as French ones. I leave open the possibility that other cases of morphologically identical plain and exempt anaphors exhibit additional, language-specific properties not found with these French anaphors. For instance, it seems that English *himself* is subject to an additional prosody-related condition preventing exempt *himself* from appearing in certain positions such as the direct object position as suggested by Ahn (2015) or Charnavel & Zlogar (2016). Also, Mandarin *ziji* seems to be subject-oriented, as opposed to French *son propre* and *lui-même*. Fully explaining the behavior of plain and exempt anaphors in other languages may require an understanding of other independent, language-specific factors, which could interact with the logophoric operator hypothesis in ways to be determined.

Moreover, the present article does not say anything about languages where the two kinds of anaphors are morphologically distinct. In particular, it does not exclude the existence of more specified anaphors: some anaphors in some languages may well be more specified, e.g. [-log], so as to be unbindable by perspectival elements (such anaphors would only be plain; a potential candidate could be Dutch *zichzelf*); or conversely, some anaphors in some languages may be more specified, e.g. [+log], so as to be necessarily perspectival (such anaphors would be logophors; potential candidates are Dutch *hemzelf* or Tamil *taan*, cf. Sundaresan 2012). As opposed to ambiguous anaphors, some of these specialized anaphors could be restricted to one type of perspectival contexts, e.g. attitude or empathy.

Furthermore, the focus of this article was on exempt anaphors that are not subject to any syntactic requirement (also sometimes called *free* anaphors). I did not

aim to take a stand on the putative existence of so-called *long distance* anaphors (cf. Reinhart & Reuland 1993, Cole *et al.* 2006, Reuland 2011, a.o.), which are considered to be exempt from locality constraints (their antecedent can be outside the local binding domain defined by Condition A), but not from binding constraints (they still need to be bound). Such anaphors are also often assumed to be monomorphemic and subject-oriented, as opposed to complex anaphors such as French *son propre* and *lui-même*. The null hypothesis would be to reduce the behavior of so-called long distance anaphors and free anaphors to a unique behavior (i.e. to capture both cases using the logophoric operator hypothesis). But this would imply that long distance anaphors have the same distributional and interpretive properties as free anaphors, which is an empirical question. This question is investigated in Charnavel & Sportiche 2016-b in the case of Icelandic *sig*. Further careful empirical investigation should decide the issue whether long distance anaphors should be considered as a different category than exempt anaphors.

Besides crosslinguistic investigations, further work needs to be done to address several remaining questions tied to the logophoric operator hypothesis.

In particular, this paper has focused on third person anaphors (which are morphologically marked as such in French), but examining first and second person anaphors will also be necessary to shed light on the status of discourse participants (speaker and addressee) as logophoric centers.

Finally, my goal was to reduce the behavior of exempt anaphors to that of plain anaphors by using independently existing mechanisms (binding, logophoric operator). But of course, the logophoric operator hypothesis could be made more precise by further specifying these mechanisms it involves (which should be done on independent grounds): on the one hand, the (semantically but not syntactically constrained) relation between a logophoric operator and its antecedent; on the other hand, the binding mechanism for anaphors. Regarding the latter, the nature of binding involved in Condition A remains controversial: some reduce it to Agree (Hicks 2009, Reuland 2011, Rooryck & Vanden Wyngaerd 2011, a.o.), others adopt a movement approach (see discussion in Charnavel & Sportiche 2016-a: section 5). Regarding the former, the precise examination of other types of logophors (besides exempt anaphors), such as non-obligatory controlled PRO or implicit arguments of motion verbs, among others, should be crucially informative.

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