

# **Apparent Exemption from Condition A: a Perspective-Based Theory**

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## **Abstract**

The goal of this article is to explain why anaphors are typically either subject to Condition A of Binding Theory or exempt from it, but with specific interpretive properties. Based on French data and crosslinguistic comparisons, I first show that such ‘exempt’ anaphors must be anteceded by logophoric, i.e. perspective, centers. Elaborating on, but modifying Sells (1987), I argue that they can be of three kinds: intellectual (attitude holders), emotional (empathy loci) and perceptual (deictic centers). Specific tests are provided to justify this classification into these three types, the (un)availability of which explains crosslinguistic variation. Next, the logophoricity of exempt anaphors derives from the following hypothesis: seemingly exempt anaphors are in fact bound by silent, syntactically represented logophoric operators within their local domain. This hypothesis explains why exempt anaphors have to be anteceded by perspective centers (their interpretation is derived from their binder); it also accounts for the apparent exemption from Condition A, reanalyzed here as local binding by a silent operator. Ultimately, this means that plain and exempt anaphors are one and the same type of element subject to the same locality constraint, the apparent difference between them coming from the availability of implicit perspective coding in language.

## **Keywords**

exempt anaphor, Condition A of Binding Theory, perspective center, logophoric operator

## Introduction

Chomsky's Condition A of Binding Theory (1981, and subsequent versions of it) is the most widely adopted theory of anaphora despite a fundamental problem: it has been challenged by exceptions from different languages - including English - known as 'long distance anaphors', 'free anaphors' or 'exempt anaphors', among others.

The goal of this article is to show that these anaphors are in fact not exceptional by proposing a theory of exemption: seemingly exempt anaphors are actually not exempt from Condition A, but locally bound just like plain anaphors; that's why in language after language, so-called exempt anaphors have the same form as plain anaphors. The only difference between plain anaphors and exempt anaphors is that the former have overt antecedents, while the latter have covert ones so that local binding is not directly visible.

The covert antecedents for exempt anaphors are, I propose, logophoric operators. This hypothesis is based on the pervasive idea that exempt anaphors appear to behave like logophors, i.e. they require a center of perspective as antecedent. The notion of logophor is however unclear in the literature: originally, it referred to morphologically specific pronouns in West African languages denoting the source of an indirect discourse (Hagège 1974, Clements 1975, Culy 1994, a.o.); in the semantic literature, logophors are assimilated to *de se* elements or shifted indexicals (Schlenker 2003, Anand 2006, a.o.); in the syntactic literature, 'logophor' sometimes just means exempt anaphor without implying any specific interpretation (Reinhart & Reuland 1993, a.o.). To make the idea of logophoricity more precise, I divide logophoric centers into subtypes, elaborating on, but modifying Sells (1987)'s proposal. Specifically, based on French data and crosslinguistic comparisons, I use specific tests to demonstrate that exempt anaphors can be anteceded by three types of perspective centers: intellectual centers of perspective in attitude contexts, i.e. attitude holders; emotional centers of perspective, i.e. empathy loci; perceptual centers of perspective, i.e. spatial reference points. The variable availability of these three types in languages explains crosslinguistic variation with respect to the distribution of exempt anaphors.

Thus based on French detailed data, this paper proposes the following threefold hypothesis to account for apparent exemption from Condition A:

(1) *Main hypothesis of the article:*

- i. Apparent exemption - seemingly exempt anaphors are in fact plain anaphors obeying Condition A: they are always locally bound by a silent, syntactically represented logophoric operator.
- ii. Logophoricity - exempt anaphors are logophoric: the interpretation of an anaphor is wholly derived from the interpretation of its binder.
- iii. Crosslinguistic variation - exempt anaphors can exhibit variation in their distribution: logophoric operators can refer to three types of logophoric centers (attitude holders, empathy loci, deictic centers) variously available in languages.

The first section will be mainly descriptive: based on French data and crosslinguistic comparisons, I will show in detail that exempt anaphors do not have structural, but interpretive requirements, i.e. they have to be anteceded by perspective centers, which come in three flavors characterized by specific tests. The second section will be analytic: I will demonstrate that this behavior of exempt anaphors can be explained if we assume that they are locally bound by logophoric operators; this hypothesis accounts for all the properties that seem to distinguish exempt from plain anaphors.

## 1. Logophoricity of exempt anaphors

### 1.1. How to identify exempt anaphors

#### 1.1.1. The issue

The goal of this article is to account for the exceptional behavior of anaphors that appear to be exempt from Condition A (the term *exempt anaphor* comes from Pollard & Sag 1992). This raises a methodological issue: how can we guarantee that such anaphors are indeed exceptions? Assuming that anaphors disobeying the Chomskian Condition A are subject to exceptional conditions indeed presupposes that the Chomskian Condition A is right. But in principle, it could well be the case that such exceptions in fact demonstrate the failure of this theory. This has been the reasoning of many linguists who tried to redefine Condition A so as to capture all the data.

All these attempts however failed (see Huang & Liu 2001: 4-8 for a review), thereby suggesting that distinguishing between plain anaphors (obeying some version of Condition A) and exempt ones<sup>1</sup> is on the right track. But how can we determine the scope of Condition A and the scope of the exceptions without presupposing the validity of any theory *a priori*?

### 1.1.2. The solution: inanimacy

I here adopt Charnavel & Sportiche (2016)'s 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 in French (Charnavel & Sportiche 2016). The reasoning behind this idea goes as follows. Many crosslinguistic generalizations have been proposed, showing that the antecedents of exempt anaphors are logophoric centers, but these diverse generalizations do not agree on a precise definition of logophoricity: the definition of perspective center is too vague and too diverse in the literature to safely identify exempt anaphors (see subsection 1.2.1). However, all these generalizations agree on one fact, namely that a logophoric center must be a live person. This conversely means that inanimates cannot be logophoric centers and therefore cannot antecede exempt anaphors.

The following contrasts involving the French anaphors *son propre* ('his own') and *lui-même* (lit. *him-same*, 'himself')<sup>2</sup> illustrate the relevance of inanimacy for locality.

- (2) 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.'
- b. Marie<sub>i</sub> fait de l'ombre à sa<sub>i</sub> propre fille et à la fille de la voisine.  
 'Marie<sub>i</sub> is in the light of her<sub>i</sub> own daughter and the neighbor's daughter.'
- c. \*[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.'
- d. Marie<sub>i</sub> bénéficie du fait que les touristes préfèrent son<sub>i</sub> propre hôtel à ceux de ses concurrents.  
 'Marie<sub>i</sub> benefits from the fact that the tourists prefer her<sub>i</sub> own hotel to those of the competitors.'
- (3) a. [La Terre]<sub>i</sub> tourne sur elle<sub>i</sub>-(\*)même).  
 '[The earth]<sub>i</sub> spins on it<sub>i</sub>-(\*)self.'
- b. [Le derviche]<sub>i</sub> tourne sur lui<sub>i</sub>-même.  
 '[The dervish]<sub>i</sub> is spinning on himself<sub>i</sub>.'
- c. [La Terre]<sub>i</sub> subit l'effet gravitationnel des nombreux satellites qui tournent autour d'elle<sub>i</sub>-(\*)même).  
 '[The earth]<sub>i</sub> is subject to the gravitational effect of the many satellites that revolve around it<sub>i</sub>-(\*)self.'
- d. Marie<sub>i</sub> subit l'influence des nombreux politiciens qui tournent autour d'elle<sub>i</sub>-(\*)même).  
 'Marie<sub>i</sub> is subject to the influence of the many politicians that revolve around her<sub>i</sub>-(\*)self.'

Both sets of sentences exhibit a correlation between animacy and locality. In the structures used in (a) and (b), all the anaphors are licensed, but in the structures in (c)-(d), only the animate ones (in d) are. Moreover, (a)-(b) and (c)-(d) contrast with respect to the locality of the antecedent: under any definition of locality, the antecedent is more local to the anaphor in (a)-(b) than in (c)-(d). This means both that (i) *son propre* and *lui-même* are subject to locality conditions – Condition A to be defined more precisely – (ii) inanimacy is a property subjecting the anaphors to locality conditions.

Inanimacy is thus a criterion allowing us to draw a dividing line between plain and exempt anaphors (at least in French) independently of the precise definition of Condition A: the syntactic distribution of inanimate anaphors

<sup>1</sup> The terms 'plain anaphor' and 'exempt anaphor' (used in Charnavel & Sportiche 2016) are technical: 'plain anaphor' refers to anaphors that standardly obey Condition A, while 'exempt anaphor' refers to anaphors that seem to be exempt from Condition A. Ultimately, we will show that 'exempt anaphors' are in fact not exempt so that plain and exempt anaphors are actually one and the same element. But the term 'exempt anaphor' is used descriptively.

<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) 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.

<sup>3</sup> Throughout the paper, the English translations are meant as glosses of the French examples, so that the (absence of) stars indicated in the English reflect(s) the French judgments. I do not take any stand on the judgment of the corresponding English sentences.

differs from that of animate anaphors, and the scope of this difference is a good basis for simultaneously determining a theory of locality (Condition A governing the behavior of plain anaphors) and a theory of exemption (other condition governing the behavior of exempt anaphors) for French. The present article concentrates on the latter (for the former, I will adopt a Chomskian-type, antecedent-based theory of locality, following Charnavel & Sportiche 2016).

Proposing inanimacy as a decisive criterion distinguishing between plain and exempt anaphors does not mean that the set of inanimate anaphors matches the set of plain anaphors and that of animate anaphors matches that of exempt anaphors: animate anaphors can have to obey Condition A (as will be discussed in section 2.6). In other words, inanimacy is a sufficient condition for being a plain anaphor (which is used by Charnavel & Sportiche 2016 to determine the scope of Condition A), but not a necessary one. Conversely, animacy is a necessary condition for exemption, but not a sufficient one. Thus animacy cannot directly be used to determine the scope of exemption. But given that inanimate anaphors can only occur in configurations obeying Condition A, we can adopt the following strategy to identify exempt anaphors:

- (4) An anaphor is exempt *when it is animate and appears in a configuration disallowing inanimate anaphors* (a configuration is crucially determined by the structural position of the antecedent with respect to the anaphor).

For instance, animate *son propre* is exempt in (2)d since it occurs in the same configuration as (2)c where the inanimate *son propre* is not acceptable; similarly, animate *elle-même* is exempt in (3)d since inanimate *elle-même* that appears in the structural equivalent (3)c is deviant. We therefore have a reliable way to empirically identify exempt anaphors in French without presupposing any particular theory for Condition A. This will be the basis of investigation in this article.

### 1.1.3. A caveat for *lui-même*

There is one caveat for the anaphor *lui-même*. We observe 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): a weaker form excludes a stronger form if the latter is more specified than the former. Importantly, this condition is independent of both Condition A and exemption (see more details in Charnavel & Sportiche 2016).

- (5) a. Romain<sub>i</sub> s<sub>i</sub>'examine.  
       'Romain<sub>i</sub> is examining himself<sub>i</sub>.'  
 b. \*Romain<sub>i</sub> examine lui<sub>i</sub>-même. (unless heavily stressed)  
       '\*Romain<sub>i</sub> is examining himself<sub>i</sub>.'  
 c. Romain<sub>i</sub> pense que Lucie {l<sub>i</sub>'/\*s<sub>i</sub>'} examinera.  
       'Romain<sub>i</sub> thinks that Lucie will examine him<sub>i</sub>.'  
 d. \*Romain<sub>i</sub> pense que Lucie examinera lui<sub>i</sub>-même. (unless heavily stressed)  
       '\*Romain<sub>i</sub> thinks that Lucie will examine himself<sub>i</sub>.'
- (6) a. \*Romain<sub>i</sub> se<sub>i</sub> parle.  
       '\*Romain<sub>i</sub> is talking about himself<sub>i</sub>.'  
 b. Romain<sub>i</sub> parle de lui<sub>i</sub>-même.  
       'Romain<sub>i</sub> is talking about himself<sub>i</sub>.'  
 c. Romain<sub>i</sub> pense que Lucie {se<sub>i</sub>/\*le/\*lui<sub>i</sub>/en<sub>i</sub>} parle.  
       'Romain<sub>i</sub> thinks that Lucie is talking about him<sub>i</sub>.'  
 d. Romain<sub>i</sub> pense que Lucie parle de lui<sub>i</sub>-même.  
       'Romain<sub>i</sub> thinks that Lucie is talking about himself<sub>i</sub>.'

Thus (5)a-b and (6)a-b show that *se* and *lui-même* are in complementary distribution when the antecedent is clausemate - unless there is heavy stress on *lui-même*. Similarly, *lui-même* and *le* are in competition in (5)c-d and (6)c-d when the antecedent is not in the same clause. In sum, *lui-même* is available only when none of the clitics *se/le/lui* are available to express the same meaning. Note that the clitic *en* (or *y*) is not a competitor as shown in (6)c-d because *en* is a prepositional clitic that encodes more information than a strong pronoun.

For our purposes, this means that to observe the behavior of exempt *lui-même* without any confound, 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.

## 1.2. First type of logophoric center: attitude holder

As explained in the previous section 1.1, the present study targets animate anaphors in configurations disallowing inanimate anaphors (and some clitics in the case of *lui-même*), mainly in French. To account for their exempt behavior, our hypothesis will be that an exempt anaphor has to be anteceded by a logophoric center that comes in three flavors:

- (i) attitude holder: intellectual center of perspective in attitude contexts, i.e. author of discourse or thoughts;
- (ii) empathy locus: emotional center of perspective;
- (iii) deictic center: perceptual center of perspective, i.e. spatial reference point.

This section 1.2 is devoted to providing arguments for the first category of logophoric center.

### 1.2.1. Logophoricity in the literature

The idea of considering an attitude holder as a logophoric center originated in the literature on West African languages forty years ago. Hagège (1974) coined the notion of logophoricity: according to him, logophoric pronouns are specific pronominal forms in West African languages that appear in environments such as indirect discourse. Clements (1975) defines the antecedent of logophors as the center of perspective, i.e. the one "whose speech, thoughts, feelings, or general state of consciousness are reported". This is illustrated below in the Kwa language Ewe.

- |  |   |                      |
|--|---|----------------------|
| (7) a. kofi be yè-dzo<br>Kofi say LOG-leave<br>'Kofi <sub>i</sub> said that he <sub>i</sub> left.' | b. kofi be e-dzo<br>Kofi say 3SG-leave<br>'Kofi <sub>i</sub> said that he <sub>k</sub> /she <sub>k</sub> left.' | (Clements 1975: 142) |
|--|---|----------------------|

(7) involves an indirect discourse whose author is Kofi. In the embedded clause introduced by *be* 'say', the pronoun that must be used to refer to Kofi is the logophoric pronoun *yè*; the standard pronoun *e* cannot refer to the author of the indirect discourse.

Some variation has been reported in African logophors: depending on languages, logophoric pronouns are morphologically more or less specific (Von Roncador 1992, Culy 1994, Boyeldieu 2004, a.o.); they can take different combinations of *phi*-features and occupy different sets of positions (Hyman & Comrie 1981, Wieseman 1986, Culy 1994, a.o.); the logophoric licensor exhibits different properties (Frajzyngier 1985, Culy 1994, a.o.); and non-logophoric pronouns may be in complementary distribution with logophoric ones or not (Adesola 1985, Pulleyblank 1986, Koopman & Sportiche 1989, a.o.). Despite this variation (which cannot be described in detail here, see Charnavel, Cole, Hermon & Huang, to appear, for more details), the main generalization emerging from the literature on African languages is the following: some pronouns require a center of perspective or subject of consciousness as antecedent.

Strikingly, it has been observed that anaphors exempt from Condition A exhibit the same kind of properties as exemplified below in Icelandic (8), Mandarin Chinese (9), and English (10).

- (8) a. Barnið<sub>i</sub> lét ekki á ljós [að ?að hefði verið hugsað vel um sig<sub>i</sub>]  
the-child put not in light that there had-subj been thought well about self  
'[The child]<sub>i</sub> didn't reveal that he<sub>i</sub> had been taken good care of.'
- b. \*Barnið<sub>i</sub> bar ?ess ekki merki [að ?að hefði verið hugsað vel um sig<sub>i</sub>]  
the-child bore it not signs that there had-subj been thought well about self  
'[The child]<sub>i</sub> didn't look as if he<sub>i</sub> had been taken good care of.'
- (Sells 1987: 451)

- (9) a. Zhangsan<sub>i</sub> kuajiang-le [[changchang piping ziji<sub>i</sub> de] naxie ren<sub>i</sub>].  
Zhangsan praised-PERF often criticize self DE those persons  
'Zhangsan<sub>i</sub> praised those people who criticize him<sub>i</sub> a lot.'
- b. ??Zhangsan<sub>i</sub> kuajiang-le [[houlai sha si ziji<sub>i</sub> de] naxie ren<sub>i</sub>].  
Zhangsan praised-PERF later kill die self DE those persons

‘Zhangsan<sub>i</sub> praised those persons who later killed him<sub>i</sub>.’

(Huang & Liu 2001: 20-21)

(10)a. John<sub>i</sub> said to Mary that physicists like himself<sub>i</sub> were a godsend.

b. \*Mary said about John<sub>i</sub> that physicists like himself<sub>i</sub> were a godsend.

(Kuno 1987: 123)

As shown by Thráinsson (1976), Maling (1984, 1986), Anderson (1986) and Sigurðsson (1990) among others, Icelandic reflexive *sig* appearing in a subjunctive clause can take a long distance antecedent if it is a center of perspective: the contrast between (8)a and (8)b comes from the fact that the child is the subject of consciousness in the former, but not in the latter. Similarly in Mandarin, the reflexive *ziji* can disobey Condition A when its antecedent is a perspective center as in (9)a, but not otherwise as in (9)b. Kuno (1987) provides parallel data in English where *himself* does not need a local antecedent if it is the author of a discourse as in (10)a vs. (10)b.

The problem that we face is that the definition of perspective center seems rather intuitive and variable in the African and syntactic literature. Some precise definitions are proposed in the semantic literature (Schlenker 2003, Anand 2006, a.o.), but logophoricity does not correlate with exemption under such definitions: for instance, logophors are defined by Schlenker (2003) as obligatorily shifted indexicals, that is, indexicals that may only be evaluated with respect to a reported speech act; but exempt anaphors – which are not indexicals in the first place – do not necessarily occur in the scope of context-shifting operators like attitude verbs (e.g. in (9)a).

My aim is to reconcile these two approaches: I propose that exempt anaphors in attitude contexts correspond to one type of logophors that can be identified in a precise way by a series of tests. Later on in the paper, we will see why we can categorize such exempt anaphors as one type of logophors (by contrasting different kinds of exempt anaphors), and how all types can be analyzed in a uniform way (as binding by a logophoric operator).

Also, note that in this paper, I do not hypothesize any distinction between exempt anaphors and long distance anaphors. It is sometimes assumed (Reinhart & Reuland 1993, Cole *et al.* 2006, Reuland 2011, a.o.) that simplex anaphors such as Icelandic *sig*, Korean *caki*, Dutch *zich* or Mandarin *ziji* differ from complex anaphors such as Mandarin *ta-ziji*, Korean *caki-casin*, Dutch *zichzelf* or English *himself*: the former, which are argued to have specific properties such as monomorphemicity or subject orientation, can be long distance bound (which implies that the antecedent has to c-command the anaphor but does not necessarily have any specific interpretation), while the latter can be exempt from Condition A (which implies that there is no structural constraints on the antecedent, but only interpretive ones). However in view of the interpretive constraints in fact observed on the antecedent of *sig* or *ziji* above in (8)-(9) and the absence of structural constraints on their antecedent (they do not necessarily have to be subject, see Maling 1984, Huang & Liu 2001, a.o.), such a distinction is not clearly supported. Therefore, I here make the null hypothesis that all anaphors that are apparently not subject to Condition A behave the same (i.e. they are exempt anaphors), even if some additional conditions (e.g. subject orientation) can constrain some anaphors. This does not affect my argument though, since it is based on the French complex anaphors *lui-même* and *son propre*; it could be compatible with the hypothesis of a distinction between those and long distance anaphors. A precise investigation of the relation between (some) simplex anaphors and logophoricity would be required to decide the issue, which is beyond the scope of this paper.

### 1.2.2. Tests for attitude contexts

The claim of the current section 1.2 is that French exempt anaphors are licensed by attitude contexts, and in such environments, they refer to the attitude holder. Here, we 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 2.3.

I propose that three tests can diagnose attitude contexts:

(i) *Substitution Test*: as already shown by Frege (1980/1892), substitution of coreferring terms within the scope of intensional predicates might change the truth value of the ascription. That’s why (11)a and (11)b are 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 are one and the same person.

(11)a. Lois believes that Superman is strong.

b. Lois believes that Clark Kent is not strong.

(ii) *Double Orientation Test*: in attitude contexts, evaluative expressions (e.g. epithets, expressives, appositives) can be evaluated either by the speaker or by the attitude holder. Thus in (12), *a psychopath* in (a) is

more probably evaluated by the speaker, but *a sweetheart* in (b) is more probably the evaluation of the attitude holder *Sheila*.

- (12) a. Sheila believes that Chuck, a psychopath, is fit to watch the kids.  
b. Sheila believes that Chuck, a sweetheart if ever there was one, is fit to watch the kids. (Sæbø 2011: 79)

(iii) *Epithet Test*: epithets cannot refer to the attitude holder (cf. Dubinsky & Hamilton [1998: 689]: an epithet must not be anteceded by an individual from whose perspective the attributive content of the epithet is evaluated<sup>4</sup>). For instance in (13), *the idiot* cannot refer to John in (a) because John is the attitude holder (subject of *told*), but it can in (b) where John is not an attitude holder.

- (13) 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. (Dubinsky & Hamilton 1998: 688)

If we guarantee that we are in an attitude context using these tests, it turns out that exempt *son propre* is always acceptable when referring to the attitude holder as illustrated below.

- (14) a. Julie<sub>i</sub> pense que Clark Kent préfère son<sub>i</sub> propre hôtel à ceux de ses concurrents.  
'Julie<sub>i</sub> thinks that Clark Kent prefers her<sub>i</sub> own hotel to those of her competitors.'  
b. Julie<sub>i</sub> pense que Superman préfère son<sub>i</sub> propre hôtel à ceux de ses concurrents.  
'Julie<sub>i</sub> thinks that Superman prefers her<sub>i</sub> own hotel to those of her competitors.'
- (15) Caroline<sub>i</sub> croit que cet idiot de Nicolas a voté contre son<sub>i</sub> propre projet.  
'Caroline<sub>i</sub> believes that that idiot Nicolas voted against her<sub>i</sub> own project.'
- (16) a. Robert<sub>i</sub> imagine que son<sub>i/k</sub> rival a voté pour son<sub>i</sub> propre projet.  
'Robert<sub>i</sub> imagines that his<sub>i/k</sub> rival voted for his<sub>i</sub> own project.'  
b. Robert<sub>i</sub> imagine que le rival de [cet idiot]<sub>\*i/k</sub> a voté pour son<sub>i</sub> propre projet.  
'Robert<sub>i</sub> imagines that the rival of [the idiot]<sub>\*i/k</sub> voted for his<sub>i</sub> own project.'

In (14), (a) and (b) do not have the same truth conditions (this is clear if Julie does not know that Superman and Clark Kent are one and the same person) even if Superman and Clark Kent corefer (Substitution Test), and long distance *son propre* referring to the attitude holder *Julie* is acceptable. In (15), *cet idiot* 'that idiot' can be evaluated by the speaker or the attitude holder *Caroline* (Double Orientation Test), and *Caroline* can antecede *son propre*. In (16), *cet idiot* 'the idiot' in (b) cannot refer to the attitude holder Robert (Epithet Test) and *son propre* however can. In sum, all these sentences involve attitude contexts as guaranteed by the proposed tests, which licenses the use of exempt *son propre* referring to the attitude holder. Recall that we know that *son propre* is exempt in these cases because inanimate *son propre* is forbidden in such configurations (cf (2)c) (if only because an inanimate cannot be an attitude holder).

The same holds for *lui-même* as exemplified by the following similar sentences. Note that the possible confound mentioned in subsection 1.1.3 was avoided by using only verbs incompatible with *se/le/lui*.

- (17) a. Sophie<sub>i</sub> craint que le sort de Clark Kent ne dépende d'elle<sub>i</sub>-même.  
'Sophie<sub>i</sub> is afraid that Clark Kent's fate depends on herself<sub>i</sub>.'  
b. Sophie<sub>i</sub> craint que le sort de Superman ne dépende d'elle<sub>i</sub>-même.  
'Sophie<sub>i</sub> is afraid that Superman's fate depends on herself<sub>i</sub>.'
- (18) Sonia<sub>i</sub> craint que cet idiot de Julien ne soit amoureux d'elle<sub>i</sub>-même.  
'Sonia<sub>i</sub> is afraid that that idiot Julien is in love with herself<sub>i</sub>.'
- (19) a. Frédéric<sub>i</sub> imagine que ses<sub>i/k</sub> rivaux ne dépendent que de lui<sub>i</sub>-même.  
'Frédéric<sub>i</sub> imagines that his<sub>i/k</sub> rivals only depend on himself<sub>i</sub>.'

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<sup>4</sup> I have slightly modified Dubinsky & Hamilton's (1998) claim into "epithets cannot refer to the attitude holder", because 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.

- b. Frédéric<sub>i</sub> imagine que les rivaux de cet idiot<sub>\*i/k</sub> ne dépendent que de lui<sub>i</sub>-même.  
 ‘Frédéric<sub>i</sub> imagines that the idiot<sub>\*i/k</sub>’s rivals only depend on himself<sub>i</sub>.’

Finally, note that *son propre* and *lui-même* behave similarly in Free Indirect Discourse. This is expected given that Free Indirect Discourse passes the tests mentioned above.

- (20) a. Mélanie<sub>i</sub> était inquiète. Ses<sub>i</sub> propres 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. Le voisin était amoureux d’elle<sub>i</sub>-même et sa femme le savait.  
 ‘Mélanie<sub>i</sub> was worried. The neighbor was in love with herself<sub>i</sub> and his wife knew about it.’

All these tests consist of applying the tests for attitude contexts in the clause containing the exempt anaphor. This presupposes that the domain of attitude contexts extends to (at least) a clause. This assumption – albeit standard – can be avoided by directly replacing the exempt anaphor by the expressions diagnosing attitude contexts as illustrated below.

- (21) a. Julie<sub>i</sub> pense que les touristes préfèrent son<sub>i</sub> propre hôtel à ceux de ses concurrents.  
 ‘Julie<sub>i</sub> thinks that the tourists prefer her<sub>i</sub> own hotel to those of her competitors.’  
 b. Julie pense que les touristes préfèrent l’hôtel de {Superman/Clark Kent} à ceux de ses concurrents.  
 ‘Julie thinks that the tourists prefer {Superman/Clark Kent}’s hotel to those of her competitors.’  
 c. Julie pense que les touristes préfèrent l’hôtel de cet idiot de Nicolas à ceux de ses concurrents.  
 ‘Julie thinks that the tourists prefer that idiot Nicolas’s hotel to those of her competitors.’  
 d. \*Julie<sub>i</sub> pense que les touristes préfèrent l’hôtel de [cette idiote]<sub>i</sub> à ceux de ses concurrents.  
 ‘\*Julie<sub>i</sub> thinks that the tourists prefer [the idiot]<sub>i</sub>’s hotel to those of her competitors.’
- (22) a. Le discours de Laurent<sub>i</sub> a démenti les accusations portées contre lui<sub>i</sub>-même et sa femme.  
 ‘Laurent<sub>i</sub>’s speech denied the accusations against himself<sub>i</sub> and his wife.’  
 b. Le discours de Laurent a démenti les accusations portées contre {Superman/Clark Kent} et sa femme.  
 ‘Laurent’s speech denied the accusations against {Superman/Clark Kent} and his wife.’  
 c. Le discours de Laurent a démenti les accusations portées contre cet idiot de Julien et sa femme.  
 ‘Laurent’s speech denied the accusations against that idiot Julien and his wife.’  
 d. \*Le discours de Laurent<sub>i</sub> a démenti les accusations portées contre [cet idiot]<sub>i</sub> et sa femme.  
 ‘\*Laurent<sub>i</sub>’s speech denied the accusations against [the idiot]<sub>i</sub> and his wife.’

The sentences in (21)-(22)b-c-d still pass the three tests, thus confirming that the exempt anaphor in (21)-(22)a is indeed in an attitude context and refers to the attitude holder.

### 1.2.3. Properties of exempt anaphors in attitude contexts

In such environments, exempt anaphors inherit the properties of the attitude holder – the antecedent. In particular, they do not only have to be animate – as already explained – but also conscious.

- (23) a. Comme l’avait demandé [le pharaon]<sub>i</sub> de son vivant, les embaumeurs prennent soin de son<sub>i</sub> (\*propre) 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) body and that of his wife.’  
 b. Comme [le pharaon]<sub>i</sub> le demande, les embaumeurs prendront soin de son<sub>i</sub> propre corps et du corps de son épouse une fois qu’ils seront morts.  
 ‘As asked by [the Pharaoh]<sub>i</sub>, the embalmers will take care of his<sub>i</sub> own body and that of his wife when they die.’

In (23)a, *son propre* does not inherit the consciousness property of the attitude holder *le pharaon* ‘the Pharaoh’, subject of ‘ask’, because the time of the main clause containing the antecedent is different from that of the subordinate clause including *son propre*: the Pharaoh is alive in the latter, but not in the former. Correlatively, the presence of *propre* is not acceptable. However, the tense system is different in (23)b (in a way that we cannot

explain in detail here), so that *son propre* inherits the consciousness property of the antecedent ‘the Pharaoh’; in this condition, *propre* is acceptable.

Furthermore, it turns out that French exempt anaphors do not only have the properties of attitude holders in attitude contexts, but more specifically, they also have to be read *de se*.<sup>5</sup> This has also been observed for Mandarin *ziji* (see Huang & Liu 2001; Anand 2006).

- (24) [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 de la pièce, Marceline<sub>i</sub> dit que Suzanne va épouser son<sub>i</sub> (#propre) fils.  
‘At the beginning of the play, Marceline<sub>i</sub> says that Suzanne will marry her<sub>i</sub> (#own) son.’
- b. A la fin de la pièce, Marceline<sub>i</sub> dit que Suzanne va épouser son<sub>i</sub> (propre) fils.  
‘At the end of the play, Marceline<sub>i</sub> says that Suzanne will marry her<sub>i</sub> (own) son.’

In (24)a, the context forces a *de re non de se* reading of *son* since at the beginning of the play, Marceline thinks that Figaro was born from unknown parents; in such a context, *propre* is not acceptable, i.e. *son propre* has to be read *de se*. In fact, if we change the context so as to make the *de se* reading possible as in (24)b – at the end of the play, Marceline learns that Figaro is in fact her own son -, *propre* becomes acceptable.

Just like *son propre*, exempt *lui-même* has to be read *de se*.

- (25) [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<sub>i</sub> a dit que Sabine était fier de lui<sub>i</sub>-(#même).  
‘Michel<sub>i</sub> said that Sabine was proud of him<sub>i</sub>(#self).’

In (25), Michel thinks that Sabine is proud of her student, since they mistake Michel’s voice for her student’s. In that context, only the pronoun *lui* (read *de re*) can be used, not the anaphor *lui-même*, which has to be read *de se*.

In sum, a French exempt anaphor occurring in an attitude context refers to the attitude holder of that context. The anaphor inherits the properties of the attitude holder, and more specifically, it must be read *de se*.

#### 1.2.4. Delimiting attitudinal logophoricity

By showing that French exempt anaphors behave similarly in all attitude contexts (they are anteceded by the attitude holder), we have basically merged Sells’s notions of Source (‘the one who makes the report’, i.e. the speaker, see Sells 1987: 455) and Self (‘the one whose mind is being reported’, see Sells 1987: 455). Indeed, the behavior of exempt anaphors in French and other languages that we have mentioned (e.g. English, Mandarin, Icelandic) does not justify the distinction between Self and Source as two subtypes of logophoric centers: exempt anaphors exhibit the same properties under the scope of verbs of saying or other attitude verbs, i.e. they need to be anteceded by the attitude holder, whether it is a Source or a Self.

However, French exempt *son propre* and *lui-même* can also appear in non-attitude contexts, which could question the category of attitudinal logophoricity. This is illustrated below (see more examples in the next section 1.3), where the failure of the Epithet Test diagnoses non-attitude contexts: the sentence is acceptable when the exempt anaphor is replaced by an epithet referring to the same individual, which cannot therefore be an attitude holder.

- (26) a. Le courage de Paul<sub>i</sub> a sauvé sa<sub>i</sub> propre maison des flammes ainsi que la maison des voisins.  
‘Paul<sub>i</sub>’s courage saved his<sub>i</sub> own house from the fire and the neighbors’ house as well.’
- b. Le courage de Paul<sub>i</sub> a sauvé des flammes la maison de [ce héros]<sub>i</sub> ainsi que celle des voisins.  
‘Paul<sub>i</sub>’s courage saved from the fire [the hero]<sub>i</sub>’s house and the neighbors’ house as well.’
- (27) a. Heureusement, l’avenir de Sylvie<sub>i</sub> ne dépend pas seulement d’elle<sub>i</sub>-même.  
‘Fortunately, Sylvie<sub>i</sub>’s future does not only depend on herself.’
- b. Heureusement, l’avenir de Sylvie<sub>i</sub> ne dépend pas seulement de [cette idiote]<sub>i</sub>.

<sup>5</sup> It is not clear whether African logophors need to be read *de se*, see Pearson (2015) for discussion.

‘Fortunately, Sylvie<sub>i</sub>’s future does not only depend on [the idiot]<sub>i</sub>.’

Moreover, the Double Orientation Test also fails if it is applied to the sentence containing the exempt anaphor: *adorable* ‘adorable’ in (28) and *astucieux* ‘clever’ in (29) can only be evaluated by the speaker, not by Paul and Sylvie respectively.

(28) Le courage de Paul<sub>i</sub> a sauvé sa<sub>i</sub> propre maison des flammes ainsi que la maison des adorables voisins.  
‘Paul<sub>i</sub>’s courage saved his<sub>i</sub> own house from the fire and the adorable neighbors’ house as well.’

(29) Heureusement, l’avenir de Sylvie<sub>i</sub> ne dépend pas que d’elle<sub>i</sub>-même, mais aussi de ses astucieux parents.  
‘Fortunately, Sylvie<sub>i</sub>’s future does not only depend on herself<sub>i</sub>, but also on her clever parents.’

The behavior of French *son propre* and *lui-même* is therefore not sufficient to justify the categorization of attitudinal logophoricity as a subtype of logophoricity. However, other French elements are specifically sensitive to attitude contexts in that they cannot refer to the attitude holder: these elements are antilogophoric or more specifically anti-attitudinal.

This is first the case of epithets, which is the reason why the Epithet Test can diagnose attitude contexts as already shown. The contrast between the intensional expression *d’après* ‘according to’ and the non-intensional expression *à propos de* ‘speaking of’ below further demonstrates the anti-attitudinal property of epithets.

(30) a. \*According to John<sub>i</sub>, [the idiot]<sub>i</sub> is married to a genius.  
b. Speaking of John<sub>i</sub>, [the idiot]<sub>i</sub> is married to a genius. (Dubinsky & Hamilton 1998: 688)

(31) a. \*D’après Jean<sub>i</sub>, [cet idiot]<sub>i</sub> est marié à un génie.  
b. A propos de Jean<sub>i</sub>, [cet idiot]<sub>i</sub> est marié à un génie. (French equivalents to (30))

Some French pronouns such as *en/y/ce* exhibit a similar behavior (see Ruwet 1990 for *en/y*; Kupferman 1979, Coppieters 1982 for *ce*).

(32) a. Sophie<sub>i</sub> en<sub>k</sub> est amoureuse/est amoureuse de lui<sub>k</sub>.<sup>6</sup>  
‘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> en<sub>k/m</sub> tombe amoureuse.  
‘Emile<sub>k</sub> deserves the fact that Sophie<sub>i</sub> falls in love with him<sub>k/m</sub>.’

(33) a. Sophie<sub>i</sub> y<sub>k</sub> pense/pense à lui<sub>k</sub>.  
‘Sophie<sub>i</sub> thinks about him<sub>k</sub>.’  
b. Emile<sub>k</sub> espère que Sophie<sub>i</sub> pense à lui<sub>k/m</sub>.  
‘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> y<sub>\*k/m</sub> pense.  
‘Emile<sub>k</sub> thinks that Sophie<sub>i</sub> thinks about him<sub>\*k/m</sub>.’  
d. Emile<sub>k</sub> mérite que Sophie<sub>i</sub> y<sub>k/m</sub> pense.  
‘Emile<sub>k</sub> deserves the fact that Sophie<sub>i</sub> thinks about him<sub>k/m</sub>.’

(34) a. C<sub>k</sub>/il<sub>k</sub> est un héros.  
‘He<sub>k</sub> is a hero.’  
b. Jacques<sub>k</sub> pense (qu’on dit) qu’il<sub>k/j</sub> est un héros.<sup>7</sup>  
‘Jacques<sub>k</sub> thinks (that one says) that he<sub>k/j</sub> is a hero.’

<sup>6</sup> Certain French speakers cannot 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.

<sup>7</sup> The clause *on dit que* (‘one says that’) is here used to make (b) and (c) minimal pairs with (d), where plausibility requires the insertion of an intermediate clause between the matrix clause containing Jacques and the subordinate clause including the pronoun.

- c. Jacques<sub>k</sub> pense (qu'on dit) que c'<sup>\*<sub>k/j</sub></sup> est un héros.  
 'Jacques<sub>k</sub> thinks (that one says) that he<sup>\*<sub>k/j</sub></sup> is a hero.'
- d. Jacques<sub>k</sub> mérite qu'on dise que c'<sub>k/j</sub> est un héros.  
 'Jacques<sub>k</sub> deserves the fact that one says that he<sub>k/j</sub> is a hero.'

In (32), (33) and (34), *en*, *ce* and *y* differ from regular animate clitics (e.g. *lui*) by being unable to refer to the attitude holder as shown in (c) vs. (b). However, they are acceptable in non-attitude contexts as in (d) (the difference between the attitude verb *penser* 'think' and the non-attitude verb *mériter* 'deserve' was noticed by Ruwet 1990).

An accusative clitic also needs to be disjoint from the attitude holder when clustered with a dative clitic. Details about this case illustrated below can be found in Charnavel & Mateu (2015) (also see subsection 2.2.1).

- (35) a. \*D'après Jeanne<sub>i</sub>, on va la<sub>i</sub> lui présenter, au Président.  
 '\*According to Jeanne<sub>i</sub>, they will introduce her<sub>i</sub> to him – the President.'
- b. A propos de Jeanne<sub>i</sub>, on va la<sub>i</sub> lui présenter, au Président.  
 'Speaking of Jeanne<sub>i</sub>, they will introduce her<sub>i</sub> to him – the President.'

The existence of all these elements – epithets, *en*, *y*, *ce* and accusative clitic when clustered with a dative clitic - that cannot refer to the attitude holder demonstrates that the category of attitudinal logophoricity is pertinent in French. This predicts that exempt anaphors can in principle (in some languages) be restricted to attitude contexts. This prediction would require more detailed crosslinguistic investigation to be tested.

The following table summarizes the results of section 1.2.

Type of Logophoric Center	Tests diagnosing attitude contexts	Expressions creating attitude contexts	French expressions specifically sensitive to attitude contexts	French exempt anaphors licensed by attitude contexts
Attitude Holder	(i) Substitution Test (ii) Double Orientation Test (iii) Epithet Test	Intensional verbs ( <i>think</i> ), nouns ( <i>speech</i> ) and expressions ( <i>according to</i> )	Antilogophoric <i>en</i> , <i>y</i> , <i>ce</i> ; accusative clitic when clustered with dative clitic; epithets	<i>son propre lui-même</i>

Table 1. Attitude Contexts and Exempt Anaphors

### 1.3. Second type of logophoric center: empathy locus

In the previous section, we have shown that French exempt anaphors are licensed by attitude contexts, in which they refer to the attitude holder; in other words, these anaphors can disobey Condition A when they are anteceded by an intellectual center of perspective. We have also noticed that French exempt anaphors can occur in non-attitude contexts as well. In this section, we will demonstrate that this is so because French exempt anaphors are also licensed by empathy loci, i.e. emotional centers of perspective, which argues for the existence of a second subtype of logophoricity.

#### 1.3.1. Empathy in the literature

Empathy is defined by Kuno (see Kuno & Kaburaki 1977, Kuno 1987, Kuno 2004) as the speaker's identification, which may vary in degree, with a person that participates in the event or state that (s)he describes in a sentence. The degree of the speaker's empathy with a participant varies depending on different parameters such as the choice of descriptor (e.g. *John's sister* vs. *Mary*), surface structure, topic, speech act or humanness. Kuno determines empathy hierarchies for all these criteria: for instance, he assumes that it is more difficult for the speaker to empathize with a non-human animate object than with a human, or that given descriptor *x* (e.g. *John*) and another descriptor *f(x)* that is dependent upon *x* (e.g. *John's brother*), the speaker's empathy with *x* is greater than that with *f(x)*. Furthermore, Kuno proposes that a reflexive that is not a direct object of a verb needs to refer to the highest participant on the empathy hierarchy.

While the effect of empathy is presumably present in all languages (Kuno & Kaburaki 1977: 670),<sup>8</sup> how and in what domains it manifests itself varies from language to language. Japanese, for example, is argued to have a more extensive inventory of syntactic/morphological devices that reflect the empathy relation than English. Thus as demonstrated by Kuno (op. cit.) and Oshima (2006), giving verbs in Japanese contrast with respect to the empathy locus: both verbs *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. The possibilities of reference for long distance reflexive *zibun* correlate with the choice of verb, that is, exempt *zibun* has to refer to the empathy locus.

- (36) a. Taroo<sub>i</sub>-wa Hanako-ga zibun<sub>i</sub>-ni kasite kureta hon-o nakusite simatta.  
 Taroo-TOP Hanako-NOM self-DAT lending gave book-ACC losing ended up  
 'Taroo<sub>i</sub> has lost a book that Hanako lent himself<sub>i</sub>.'  
 b. \*Taroo<sub>i</sub>-wa Hanako-ga zibun<sub>i</sub> ni kasite yatta hon-o nakusite simatta.  
 Taroo-TOP Hanako-NOM self-DAT lending gave book-ACC losing ended up  
 '\*Taroo<sub>i</sub> has lost a book that Hanako lent himself<sub>i</sub>.'

In (36)a, the use of *kureru* makes the dative reflexive *zibun* an empathy locus, which allows it to take non-local Taroo as antecedent. However, the other 'give' verb *yaru* is used in (36)b so that the dative *zibun* does not correspond to the empathy locus and cannot therefore refer to Taroo.

In Sells's (1987) categorization, the notion of empathy roughly corresponds to that of Pivot (Sells 1987: 455, footnote 14), which represents 'the one from whose point of view the report is made' (Sells 1987: 455). Nevertheless, Sells understands Pivot in a more physical sense, as the center of deixis, which means that Sells's notion of Pivot is in fact broader than that of empathy: it in fact encompasses Oshima's notions of empathy and spatio-temporal perspectives. We will come back to this when discussing deictic centers in section 1.4.

In sum, it has been suggested by different authors that the speaker may adopt the perspective of an event participant (s)he empathizes with, and that this choice of point of view interacts with the behavior of reflexives. However, the way to identify empathy loci remains quite vague: it is considered as a gradual rather than categorical notion (cf. Kuno's empathy hierarchies) and does not manifest itself in the same fashion in different languages; English in particular does not seem to have any clear device that allows us to clearly identify empathy loci. Furthermore, the interaction between reflexivity and empathy has not been investigated in depth.

### 1.3.2. Tests for empathy contexts

Based on examples such as (26) or (27) repeated below, I hypothesize that empathy is a relevant notion for French reflexives: exempt anaphors can be anteceded by empathy loci (e.g. *Paul* and *Sylvie* below).

- (37) [= (26)a] Le courage de Paul<sub>i</sub> a sauvé sa<sub>i</sub> propre maison des flammes ainsi que la maison des voisins.  
 'Paul<sub>i</sub>'s courage saved his<sub>i</sub> own house from the fire and the neighbors' house as well.'

- (38) [= (27)a] Heureusement, l'avenir de Sylvie<sub>i</sub> ne dépend pas seulement d'elle<sub>i</sub>-même.  
 'Fortunately, Sylvie<sub>i</sub>'s future does not only depend on herself<sub>i</sub>.'

Following Kuno (1987), I define empathy locus as the event participant that the speaker identifies with, or empathizes with, that is, takes the mental perspective of. Note that 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, as, for example, could be the case in (38). 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.

Since French does not seem to have elements like Japanese *yaru/kureru* that lexically encode empathy, I propose to use the expression *son cher* 'his/her dear' as a diagnostic to identify empathy loci: *son cher* is intrinsically evaluative and first-personal, and thus directly reveals the individual that the speaker identifies or

<sup>8</sup> Oshima (2006) considers syntactic phenomena known as the syntactic direction (the direct/inverse opposition) and nominal obviation, which are attested in language groups such as Algonquian (e.g. Cree), Athabaskan (e.g. Navajo), and Tibeto-Burman (e.g. Jinghpaw) as devices to encode restrictions on the empathy relation.

empathizes with. Indeed, the fact that someone or something is *cher à* (dear to) someone is subject to evaluation, but this can only be directly evaluated by the person experiencing the feeling. Thus if the speaker uses *son cher*, it means that (s)he empathizes with its referent, i.e. (s)he adopts her/his emotional perspective.<sup>9</sup> Note moreover that as illustrated below, *son cher* can combine with an animate or inanimate noun but is necessarily anteceded by a human (e.g. *Jérôme* below), which correctly predicts that empathy loci, which can license exempt anaphors, are animate.

- (39) a. Jérôme<sub>i</sub> va aller rendre visite à sa<sub>i</sub> chère cousine.  
 ‘Jérôme<sub>i</sub> will visit his<sub>i</sub> dear cousin.’  
 b. Jérôme<sub>i</sub> va prendre sa<sub>i</sub> 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 son<sub>i</sub> (\*cher) propriétaire.  
 ‘[This motorbike]<sub>i</sub> pleases its<sub>i</sub> (\*dear) owner.’

Furthermore, *son cher* is frequently used ironically, which supports the hypothesis that *son cher* expresses the internal point of view of its referent, as irony arises when two points of view are confronted. In the case of *son cher*, the irony effect comes from the discrepancy between the speaker’s and the relevant event participant’s perspectives: the speaker surimposes his/her perspective by showing that the referent of *son cher*’s perspective is absurd.

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

In (40) for instance, it is because *son cher* is used, which expresses Jérôme’s first-personal feeling from his perspective, that the speaker can implicitly criticize his point of view. The parenthesis indeed questions the soundness of Jérôme’s feeling, and thus turns the positive evaluation of *son cher* from Jérôme’s perspective into a negative evaluation from the speaker’s perspective.

Because the referent of *son cher* is intrinsically an empathy locus, *son cher* can diagnose empathy contexts and identify possible referents for exempt anaphors: replacing an exempt anaphor with *son cher* (+noun) yields grammatical sentences, because the antecedent is an empathy locus.

- (41) cf. (37) Le courage de Paul<sub>i</sub> a sauvé sa<sub>i</sub> chère 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.’  
 (42) cf. (38) Heureusement, l’avenir de Sylvie<sub>i</sub> ne dépend pas seulement de ses<sub>i</sub> chers parents.  
 ‘Fortunately, Sylvie<sub>i</sub>’s future does not only depend on her<sub>i</sub> dear parents.’  
 (43) a. [Le fils de Claire]<sub>i</sub> est parti avant que son<sub>i</sub> propre fils n’arrive.  
 ‘[Claire’s son]<sub>i</sub> left before his<sub>i</sub> own son arrives.’  
 b. [Le fils de Claire]<sub>i</sub> est parti avant que son<sub>i</sub> cher fils n’arrive.  
 ‘[Claire’s son]<sub>i</sub> left before his<sub>i</sub> dear son arrives.’  
 (44) a. Josiane<sub>i</sub> mérite qu’on soit fier d’elle<sub>i</sub>-même et de son mari.  
 ‘Josiane<sub>i</sub> deserves the fact that people are proud of herself<sub>i</sub> and her husband.’  
 b. Josiane<sub>i</sub> mérite qu’on soit fier de ses<sub>i</sub> chers enfants et de son mari.  
 ‘Josiane<sub>i</sub> deserves the fact that people are proud of her<sub>i</sub> dear children and her husband.’

Conversely, *son cher* cannot be substituted for a long distance anaphor that is not acceptable.

- (45) a. \*La soeur de Michel<sub>i</sub> gronde ses<sub>i</sub> propres enfants, qui sont dans sa classe.  
 ‘\*Michel<sub>i</sub>’s sister scolds his<sub>i</sub> own children, who are in her class.’

<sup>9</sup> In principle, it is to some extent possible to deduce that someone/something is dear to someone based on their behavior, i.e. by adopting an external perspective. In fact, *cher* ‘dear’ can be used in combination with markers of evidentiality like *apparemment* ‘apparently’.

1) Apparemment, Marie est chère à Jean.  
 ‘Apparently, Mary is dear to John.’

However, this is impossible when *cher* is attributive as in possessive DPs, probably because it corresponds to a presupposition: *son cher* ‘his dear’ can only express an internal (cf. logophoricity) vs. external (cf. evidentiality) perspective.

- b. \*La soeur de Michel<sub>i</sub> gronde ses<sub>i</sub> chers enfants, qui sont dans sa classe.  
 ‘\*Michel<sub>i</sub>’s sister scolds his<sub>i</sub> dear children, who are in her class.’

- (46) a. [= (2)c] \*[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.’  
 b. \*[Cette auberge]<sub>i</sub> bénéficie du fait que les touristes préfèrent son<sub>i</sub> cher jardin à ceux des auberges voisines.  
 ‘\*[This inn]<sub>i</sub> benefits from the fact that the tourists prefer its<sub>i</sub> dear garden to that of the neighboring inns.’

In (45), the unavailability of both *son propre* and *son cher* show, I argue, that Michel is not an empathy locus: the speaker has not placed his/her camera on Michel, but on Michel’s sister. In (46), neither *son propre* nor *son cher* can be anteceded by the non-local inanimate *cette auberge* ‘this inn’. In general, it is impossible to empathize with inanimates, or with deceased animates: the speaker cannot adopt the camera angle of someone who is not living at the time of the event as shown below.

- (47) L’oeuvre de [Camille Claudel]<sub>i</sub> a été révélée au public par sa<sub>i</sub> (\*chère/\*propre) petite-nièce quinze ans après sa mort.  
 ‘[Camille Claudel]<sub>i</sub>’s works were revealed to the public by her<sub>i</sub> (\*dear/\*own) grandniece fifteen years after her death.’

Since Camille Claudel did not get to know her grandniece when she was alive, her grandniece cannot be dear to her: the speaker cannot empathize with Camille Claudel to describe an event occurring after her death; accordingly, exempt *son propre* cannot be anteceded by *Camille Claudel* since it is not an empathy locus (nor an attitude holder).

Finally, we can check that *son cher* indeed diagnoses empathy loci, and not attitude holders: *son cher* does not create an attitude context, since it can co-occur with an epithet referring to its antecedent (i.e. the Epithet Test fails).

- (48) a. Le courage de Paul<sub>i</sub> a sauvé des flammes la chère maison de [ce héros]<sub>i</sub> ainsi que celle des voisins.  
 ‘Paul<sub>i</sub>’s courage saved from the fire [the hero]<sub>i</sub>’s dear house and the neighbors’ house as well.’  
 b. Le courage de Paul<sub>i</sub> a sauvé des flammes sa<sub>i</sub> chère maison ainsi que celle des voisins de [ce héros]<sub>i</sub>.  
 ‘Paul<sub>i</sub>’s courage saved from the fire his<sub>i</sub> dear house and [the hero]<sub>i</sub>’s neighbors’ house as well.’  
 (49) a. Heureusement, l’avenir de Sylvie<sub>i</sub> dépend des chers parents de [cette idiote]<sub>i</sub>.  
 ‘Fortunately, Sylvie<sub>i</sub>’s future depends on [the idiot]<sub>i</sub>’s dear parents.’  
 b. Heureusement, l’avenir de Sylvie<sub>i</sub> dépend de ses<sub>i</sub> chers parents, et pas seulement des études de [cette idiote]<sub>i</sub>.  
 ‘Fortunately, Sylvie<sub>i</sub>’s future depends on her<sub>i</sub> dear parents, and not only on [the idiot]<sub>i</sub>’s studies.’

Thus *son cher* indeed diagnoses perspective centers that can occur in non-attitude contexts, that is, empathy loci. This does not mean that *son cher* cannot refer to an attitude holder; in fact, it can, as exemplified in (50).

- (50) Julie<sub>i</sub> pense que les touristes préfèrent son<sub>i</sub> cher 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 supports Sells’s idea that there is an implicational relation between the different logophoric roles, Source, Self and Pivot. Similarly, I hypothesize that an attitude holder is necessarily an empathy locus, but the reverse does not hold. This predicts that a given exempt anaphor, such as *son propre* or *lui-même*, that is licensed by empathy loci can also be anteceded by attitude holders, but a given exempt anaphor licensed by attitude holders is not necessarily acceptable in empathy contexts. French does not have exempt anaphors specifically sensitive to attitude contexts, but as shown in the previous subsection, it has antilogophors such as *en/y/ce* that cannot refer to attitude holders specifically. The hypothesized implicational relation is confirmed as they can however refer to empathy loci: as illustrated below, the fact that *en* cannot refer to the attitude holder in (51)a does not entail that *en* cannot refer to the empathy locus in (51)b diagnosed by *son cher* in (51)c.

- (51) a. Emile<sub>k</sub> pense que Sophie en<sub>\*k</sub> est fière.  
 ‘Emile<sub>k</sub> thinks that Sophie is proud of him<sub>\*k</sub>.’  
 b. Emile<sub>k</sub> mérite que Sophie en<sub>k</sub> soit fière.  
 ‘Emile<sub>k</sub> deserves the fact that Sophie is proud of him<sub>k</sub>.’  
 c. Emile<sub>k</sub> mérite que Sophie soit fière de ses<sub>k</sub> chers enfants.  
 ‘Emile<sub>k</sub> deserves the fact that Sophie is proud of his<sub>k</sub> dear children.’

### 1.3.3. Delimiting empathic logophoricity

The category empathy is harder to delimit than attitude, because in French or English (vs. e.g. Japanese), no specific expression can create empathy contexts in the same way as intensional operators create attitude contexts. Nevertheless, I hypothesize that it is a pertinent notion in French as exempt anaphors *son propre* and *lui-même* are licensed by empathy loci and attitude holders, while antilogophors such as *en* are only antilicensed by attitude holders.

Conceptually, I consider empathy loci as emotional centers of perspective that the speaker identifies with. *Son cher*, which expresses an intrinsically first-personal feeling, diagnoses empathy loci.

The following table summarizes the results of section 1.3.

Type of logophoric center	Tests diagnosing empathy loci	Expressions creating empathy contexts	French expressions specifically sensitive to empathy contexts	French exempt anaphors licensed by empathy loci
Empathy locus	<i>Son cher</i> (‘his/her dear’) Test	Japanese verbs ‘give’ <i>yaru</i> vs. <i>kureru</i>	None	<i>son propre</i> <i>lui-même</i>

Table 2. Empathy Contexts and Exempt Anaphors

### 1.4. Third type of logophoric center: deictic center

A third type of perspective center can license exempt anaphors, namely deictic centers. Conceptually, they correspond to perceptual centers of perspective, i.e. animate spatio-temporal reference points. Most authors include this concept under the notion of empathy (Kuno 1987) or Pivot (Sells 1987), but partly following Oshima (2006), I will argue that deictic centers should be distinguished from empathy loci, both for conceptual and empirical reasons. In particular, I will show that while English or Japanese exempt anaphors seem to be licensed by deictic centers, French ones are not, even if they can be anteceded by empathy loci.

#### 1.4.1. Deictic perspective in the literature

As we have seen, empathy according to Kuno (1987, 2004) is the speaker’s identification with an event participant and thus corresponds to the camera angle adopted by the speaker when (s)he places the camera on that event participant. In that sense, Kuno’s empathy locus encompasses the notion of deictic center even if this is not made explicit. Even more clearly, Sells’s concept of Pivot includes the notion of a physical center of perspective: according to him, the pivot is ‘the person from whose point of view the report is made, one with respect to whose (space-time) location the content of the proposition is evaluated’ (Sells 1987: 457), i.e. the center of deixis; thus ‘if someone makes a report with Mary as the pivot, that person is understood as (literally) standing in Mary’s shoes’ (Sells 1987: 455). Moreover, Sells suggests that reflexives are sensitive to deictic centers: he provides the following example where English *his own* can be anteceded by the long distance antecedent *he* only when it is the pivot, i.e. in (52)a (vs. b), assuming that the object of *come* corresponds to the deictic center while the object of *go* does not.

- (52) a. He<sub>i</sub> was happy when his<sub>i</sub> own mother came to visit him<sub>i</sub> in the hospital.  
 b. ??He<sub>i</sub> was happy when his<sub>i</sub> own mother went to visit him<sub>i</sub> in the hospital.<sup>10</sup> (Sells 1987: 465)

In the same vein, Cantrall (1974, mentioned by Zribi-Hertz 1989: 704) gives examples involving English reflexives that are sensitive to the deictic center.

<sup>10</sup> A possible confound comes from the fact that *be happy* is a psychological verb, which could make *he* an attitude holder, or at least an empathy locus.

- (53) a. [The women]<sub>i</sub> were standing in the background, with the children behind them.  
 b. [The women]<sub>i</sub> were standing in the background, with the children behind themselves.

Let's suppose, as does Cantrall, that (53) describes a photograph in which the standing women have their backs turned to the camera. In that situation, the use of the reflexive *himself* as in (53)b forces the reading where the children are located behind the women from the point of view of the women - that is, behind the women's backs, and consequently in the foreground of the picture; by contrast, the children in (53)a may be located behind the women from the speaker's point of view, therefore in the background of the picture. This suggests that *himself* is licensed by the deictic center, i.e. the women in that case.

Note that deictic centers are not simply spatial reference points, but need to have mental properties: an oriented inanimate like a house as in (54) below cannot license an exempt anaphor.

- (54) [The house]<sub>i</sub> in the picture is facing away from us, with an elm tree behind it>(\*self). (Cantrall 1974:146-147)

The anaphor *itself* cannot be anteceded by the non-local antecedent *the house*, even if we intend to use the house as reference point by saying that the elm tree is located behind the house. That's why I consider deictic centers to be perceptual centers of perspective: perception, not orientation, is crucial.

Oshima (2006) gives a more specific content to the notion of deictic center. According to him, the deictic center can be determined by three main classes of expressions: indexicals (e.g. *I, this*), deictic motion verbs (e.g. *come*) and deictic angular expressions (e.g. *to the right of*). But he argues that there is no unitary notion of deictic center (in particular, we need reference point(s), i.e. a set of individuals rather than a specific entity) and there is some interaction between deixis and reflexivity only in the following way: an empathy locus (licensing exempt anaphors) tends to be a reference point as shown in (55) and tends to be interpreted as the origin for a relative angular expressions as illustrated in (56).

- (55) a. Taro<sub>i</sub>-wa Hanako-ga kare<sub>i</sub>-o tazunete-{it/ki}-ta noni, irusu-o tukat-ta  
 Taro-TOP Hanako-NOM he-ACC visit-{go/come}-PAST though pretended.absence-ACC use-PAST  
 'Although Hanako {went/came} to visit him<sub>i</sub>, Taro<sub>i</sub> pretended not to be home.'  
 b. Taro<sub>i</sub>-wa, Hanako-ga zibun<sub>i</sub>-o tazunete-{??it/ki}-ta noni, irusu-o tukat-ta  
 Taro-TOP Hanako-NOM self-ACC visit-{go/come}-PAST though pretended.absence-ACC use-PAST  
 'Although Hanako {??went/came} to visit himself<sub>i</sub>, Taro<sub>i</sub> pretended not to be home.' (Oshima 2007: 28)
- (56) a. Taro-wa Hanako-ni teeburu-no migigawa-no otoko-o syookai-si-ta  
 Taro-TOP Hanako-DAT table-GEN right-GEN man-ACC introduce-PAST  
 'Taro introduced to Hanako the man to the right of the table from his/?her/my/your viewpoint.'  
 b. Taro-wa Hanako-ni teeburu-no migigawa-no otoko-o syookai-site-yat-ta  
 Taro-TOP Hanako-DAT table-GEN right-GEN man-ACC introduce-BEN-PAST  
 'Taro introduced to Hanako the man to the right of the table from his/?\*her/(?)my/(?)your viewpoint, for her sake.'  
 c. Taro-wa Hanako-ni teeburu-no migigawa-no otoko-o syookai-site-kure-ta  
 Taro-TOP Hanako-DAT table-GEN right-GEN man-ACC introduce-BEN-PAST  
 'Taro introduced to Hanako the man to the right of the table from \*?his/ her/ ?my/ ?your viewpoint, for her sake.' (Oshima 2007: 29)

In (55)b, the reflexive *zibun* can be anteceded by the non-local antecedent *Taro*, which is hypothesized by Oshima to be the empathy locus, only if it is the object of *come*, i.e. the deictic center. In (56)b (respectively c), *yaru* (respectively *kureru*) indicates that the speaker empathizes with Taro (respectively Hanako) and it is most natural to choose him as the origin of *migigawa* 'to the right'.

Iida (1996) however argues that long-distance *zibun* is bound by the deictic center as in (55)b. Oshima (2007) objects that the deictic center can differ from the referent of *zibun*, in particular when it is the speaker. Thus Iida's formulation must predict that matching between the referent of *zibun* and the deictic center is strictly enforced only in a case like (57)b.<sup>11</sup>

- (57) (adapted by Oshima 2007: 29 from Iida 1996: 162)

<sup>11</sup> It is not clear however if *zibun* is really a long distance anaphor in both (56) and (57).

- a. Taro<sub>i</sub>-wa Taro<sub>i</sub>/kare<sub>i</sub>-no migigawa-ni hon-o oi-ta.  
 Taro-TOP Taro/he-GEN right-DAT book-ACC put-PAST  
 ‘Taro<sub>i</sub> put the book on his<sub>i</sub> right.’  
 ‘Taro<sub>i</sub> put the book on the right of him<sub>i</sub> (from the speaker’s perspective).’
- b. Taro<sub>i</sub>-wa zibun<sub>i</sub>-no migigawa-ni hon-o oi-ta.  
 Taro-TOP self-GEN right-DAT book-ACC put-PAST  
 ‘Taro<sub>i</sub> put the book on his<sub>i</sub> right.’  
 ‘\*Taro<sub>i</sub> put the book on the right of him<sub>i</sub> (from the speaker’s perspective).’

In sum, the notion of deictic center seems to be relevant for exempt anaphora, but how exactly is not clear and would require more work. Based on the data mentioned above, I suppose for now that deictic centers can license exempt anaphors in English and possibly in Japanese, but the exact conditions for that need further investigation.

#### 1.4.2. Tests for deictic contexts in French

Using the same tools as Oshima (motion verbs and deictic angular expressions), we can show that French exempt anaphors are however not sensitive to deictic centers.

First of all, French *venir* ‘come’, just like English and Japanese motion verbs, requires that the reference point be at the goal, while French *aller* ‘go’ requires that it be not. The behavior of these verbs is illustrated by the following examples involving the first person, which has to be the reference point when used with such verbs.

- (58) a. Luc va venir me voir.                    ‘Luc will come see me.’  
 b. ??Je vais venir voir Luc.                    ‘??I will come see Luc.’
- (59) a. ??Luc va aller me voir.                    ‘??Luc will go see me.’  
 b. Je vais aller voir Luc.                    ‘I will go see Luc.’

If French anaphors were sensitive to deictic centers, this would predict that exempt *son propre* and *lui-même* can be anteceded by the reference point, that is by the object in the case of *venir* ‘come’ and by the subject in the case of *aller* ‘go’, but cannot be anteceded by the other argument in each case. This is not borne out:

- (60) Sa<sub>i</sub> (?propre) mère et la mère de sa femme vont venues voir Paul<sub>i</sub> à l’hôpital.  
 ‘His<sub>i</sub> (?own) mother and his wife’s mother came to see Paul<sub>i</sub> in the hospital.’
- (61) Sa<sub>i</sub> (?propre) mère et la mère de sa femme sont allées voir Paul<sub>i</sub> à l’hôpital.  
 ‘His<sub>i</sub> (?own) mother and his wife’s mother went to see Paul<sub>i</sub> in the hospital.’
- (62) La jeune fille éprise de lui<sub>i</sub>-(?même) est venue voir Paul<sub>i</sub> à l’hôpital.  
 ‘The girl in love with him<sub>i</sub>(?self) came to see Paul<sub>i</sub> in the hospital.’
- (63) La jeune fille éprise de lui<sub>i</sub>-(?même) est allée voir Paul<sub>i</sub> à l’hôpital.  
 ‘The girl in love with him<sub>i</sub>(?self) went to see Paul<sub>i</sub> in the hospital.’

Crucially, there is no contrast between (60) and (61) or between (62) and (63), which shows that reference points are not specific antecedents for exempt anaphors. Moreover, all the sentences have an intermediate grammatical status, because Paul can be made an empathy locus, but not easily, due to the presence of other possible empathy loci in the sentence.

The same holds with deictic angular expressions. A set of these expressions behaves like motion verbs in constraining the reference point lexically. In particular, *à la gauche/droite de* ‘to the left/right of’ contrasts with *à gauche/droite de* ‘lit. to left/right of, on the left/right of’ in this respect: the former (with a definite article) has to be used when the referent of the argument’s perspective is adopted, while the latter (without definite article) expresses the speaker’s perspective. This is illustrated by (64), which describes Figure 1.



Figure 1. Johannes Vermeer - Lady at the Virginal with a Gentleman, 'The Music Lesson'<sup>12</sup>

- (64) a. La jeune femme est à la droite du professeur de musique.  
 'The young woman is to the right of the music teacher.' (from the 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.' (from the speaker's perspective)

If deictic centers are possible antecedents for exempt anaphors, we expect exempt *son propre* and *lui-même* to be licensed by the argument of *à la droite/gauche de* 'to the right of/left of' used in (64)a, but not by the argument of *à droite/gauche de* 'on the right of/left of' used in (64)b. Again, this is not borne out.

- (65) a. C'est sa<sub>i</sub> (propre) épinette qui est à la droite du professeur<sub>i</sub>.  
 'It is his<sub>i</sub> (own) virginal that is to the right of the teacher<sub>i</sub>.'  
 b. C'est sa<sub>i</sub> (propre) épinette qui est à gauche du professeur<sub>i</sub>.  
 'It is his<sub>i</sub> (own) virginal that is on the left of the teacher<sub>i</sub>.'
- (66) a. Ce n'est pas un portrait de lui<sub>i</sub>-(même) qui est à la gauche du professeur<sub>i</sub>.  
 'It is not a portrait of him<sub>i</sub>(self) that hangs to the left of the teacher<sub>i</sub>.'  
 b. Ce n'est pas un portrait de lui<sub>i</sub>-(même) qui est à droite du professeur<sub>i</sub>.  
 'It is not a portrait of him<sub>i</sub>(self) that hangs on the right of the teacher<sub>i</sub>.'

In both (65) and (66), there is no contrast between (a) and (b), but all sentences are fine, because, I argue, the teacher can be construed as an empathy locus (they pass the *son cher* test).

Another set of deictic angular expressions behaves differently: expressions such as *derrière/devant* 'behind/before' or *dessus/dessous* 'above/below' do not lexically constrain the reference point, but give rise to ambiguities as illustrated by (67)-(68) below, still based on Figure 1.

- (67) a. L'épinette est derrière 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)
- (68) a. La viole de gambe est devant la jeune femme.  
 'The viola da gamba is before the young woman.' (from the speaker's perspective)  
 b. La viole de gambe est derrière la jeune femme.

<sup>12</sup> From Google Art Project. Retrieved July 9<sup>th</sup> 2015 from [https://commons.wikimedia.org/wiki/File:Johannes\\_Vermeer\\_-\\_Lady\\_at\\_the\\_Virginal\\_with\\_a\\_Gentleman,\\_The\\_Music\\_Lesson\\_-\\_Google\\_Art\\_Project.jpg](https://commons.wikimedia.org/wiki/File:Johannes_Vermeer_-_Lady_at_the_Virginal_with_a_Gentleman,_The_Music_Lesson_-_Google_Art_Project.jpg)

‘The viola da gamba is behind the young woman.’ (from the woman’s perspective)

Since the young woman has her back turned to us on the painting, the virginal (the keyed musical instrument) stands before her from her perspective, but behind her from our perspective; conversely, the viola da gamba (the stringed instrument) lies behind the woman from her point of view, but before her from our point of view. Both *derrière* ‘behind’ and *devant* ‘before’ can be used in either case.

The hypothesis that deictic centers are possible antecedents for exempt anaphors predicts disambiguation: exempt *son propre* and *lui-même* should only be licensed by the reference point, that is, only the event participant’s perspective should be available when the argument of *derrière/devant* ‘behind/before’ antecedes them, contrary to fact as shown below.

- (69) a. C’est sa<sub>i</sub> (propre) épinette qui est derrière [la jeune femme]<sub>i</sub>.  
 ‘It is her<sub>i</sub> (own) virginal that stands behind [the young woman]<sub>i</sub>.’  
 b. C’est sa<sub>i</sub> (propre) épinette qui est devant [la jeune femme]<sub>i</sub>.  
 ‘It is her<sub>i</sub> (own) virginal that stands before [the young woman]<sub>i</sub>.’
- (70) a. C’est un portrait d’elle<sub>i</sub>-(même) qui est devant [la jeune femme]<sub>i</sub>.  
 ‘It is a portrait of her<sub>i</sub>(self) that hangs before [the young woman]<sub>i</sub>.’  
 b. C’est un portrait d’elle<sub>i</sub>-(même) qui est derrière [la jeune femme]<sub>i</sub>.  
 ‘It is a portrait of her<sub>i</sub>(self) that hangs behind [the young woman]<sub>i</sub>.’

In (69) and (70), exempt *son propre* and *lui-même* can be anteceded by *la jeune femme* ‘the young woman’, whether she is the reference point or not. This is so, I argue, because deictic centers are not relevant for exempt anaphora in French and because the young woman can be construed as an empathy locus.

### 1.4.3. Delimiting deictic logophoricity

Even if French exempt anaphors cannot be licensed by deictic centers, I consider deictic centers to form a subtype of logophoric centers licensing exempt anaphors, because exempt anaphors in English and Japanese, it seems, can be anteceded by them. Moreover, because French exempt anaphors can be licensed by empathy loci, I distinguish between empathy loci and deictic centers as opposed to Kuno (1987) or Sells (1987) who encompasses them into the notion of Pivot. This distinction based on empirical data corresponds to a conceptual difference between emotional and perceptual points of view. Furthermore, the French facts as compared to the English and Japanese facts suggest that there is an implicational relation between empathy loci and deictic centers in the following sense: exempt anaphors that are licensed by deictic centers can also be in principle anteceded by empathy loci (e.g. English and possibly Japanese), but the reverse is not true (e.g. French).

The following table summarizes the results of section 1.4.

Type of logophoric center	Tests diagnosing deictic centers	Expressions creating deictic contexts	French expressions specifically sensitive to deictic contexts	French exempt anaphors licensed by deictic centers
Deictic center	Reference point for deictic expressions like <i>derrière</i> ‘behind’ or <i>aller/venir</i> ‘go/come’	Deictic motion verbs Deictic angular expressions	None	None

Table 3. Deictic Contexts and Exempt Anaphors

### 1.5. Interim conclusion

Section 1 has established that anaphors can be exempt from Condition A if they are anteceded by perspective centers falling into three types (intellectual, emotional or perceptual), which can be identified using specific tests summarized in Table 4 below. In metaphorical words, the speaker can adopt different camera angles by placing the camera into the mind, the heart or the body of an event participant, and this crucially affects the use of anaphors.

Type of logophoric center	Tests diagnosing logophoric center in French	Expressions creating logophoric context	French expressions specifically sensitive to logophoric context	French exempt anaphors licensed by logophoric center
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- (72) [= (21)] Julie<sub>i</sub> pense que [OpLOG<sub>i</sub> les touristes préfèrent son<sub>i</sub> propre hôtel à ceux de ses concurrents].  
 ‘Julie<sub>i</sub> thinks that [OpLOG<sub>i</sub> the tourists prefer her<sub>i</sub> own hotel to those of her competitors].’

Here, the silent logophoric operator OpLOG is in a relation of coreference (or non-obligatory control) with the antecedent *Julie*. It is however in a relation of local syntactic binding with the anaphor *son propre*, which thereby complies with Condition A.

The core of the proposal is thus based on the presence of a silent intermediate element - a logophoric operator - between exempt anaphors and their antecedent. This hypothesis allows us to understand why plain and exempt anaphors always have the same form and to reduce them to the same lexical entry: both plain and exempt anaphors are subject to Condition A, but while plain anaphors have overt antecedents (which makes their structural constraints directly visible), exempt anaphors have covert antecedents, that is, logophoric operators (which only makes their interpretive constraints directly perceptible).

Some aspects of this proposal are not new: logophoric operators have already been proposed by Koopman & Sportiche (1989), Anand (2006) and Sundaesan (2012), among others, to account for the distribution of logophoric pronouns (in Ewe, Yoruba and English) and long distance anaphors (in Mandarin, Japanese, Icelandic and Tamil). Also, the idea of a mediation between the antecedent and the anaphor is present in Huang & Liu (2001) and Tenny (2006), who assume that the anaphor (Mandarin *ziji* and Japanese *zibun*, respectively) moves to an intermediate position, and in Sundaesan (2012) and Nishigaushi (2014), who suppose that anaphors (Tamil *taan* and Japanese *zibun* respectively) are bound by a *pro* in their perspectival phrase.

Nevertheless, these previous analyses are ultimately very different from the present proposal. First, according to Huang & Liu (2001) and Tenny (2006), the mediation between the antecedent and the anaphor is effected by movement: in particular, Huang & Liu (2001) suppose that logophoric *ziji* LF-raises into the Specifier of a CP-type functional category (SourceP, SelfP or PivotP, based on Sells’s (1987) classification). This can explain properties (a) and (b), but not properties (c) and (d). Furthermore, this predicts that exempt anaphors cannot occur in islands since they could not move out of it at LF; this is not borne out as illustrated below for French *son propre* and *lui-même*:<sup>13</sup> even if *son propre* is subject to the Coordinate Structure Constraint in (73) and *lui-même* occurs in an adjunct island in (74), both anaphors can be anteceded by the long distance antecedent *Claire*.

- (73) Claire<sub>i</sub> espère que les voisins vont s’occuper [de son<sub>i</sub> propre fils et de celui de Paul].  
 ‘Claire<sub>i</sub> hopes that the neighbors will take care [of her<sub>i</sub> own son and of Paul’s].’

- (74) Claire<sub>i</sub> espère que les voisins seront là [quand des lettres adressées à elle<sub>i</sub>-même ou à son mari arriveront].  
 ‘Claire<sub>i</sub> hopes that the neighbors will be there [when letters addressed to herself<sub>i</sub> or her husband arrive].’

Second, Sundaesan (2012) and Nishigaushi (2014), who hypothesize the presence of a base-generated intermediate element *pro* in the specifier of a perspectival phrase, do not run into this problem; but their analysis crucially differs from the present one in reducing Condition A to such binding: under their accounts, all instances of anaphors (at least in Tamil and Japanese) are bound by a silent perspectival element in their local domain. According to Sundaesan (2012), this is motivated by the definition of linguistic perspective according to which an individual may not hold a perspective toward a predication that it is wholly embedded within. Furthermore, the two authors respectively argue that Tamil *taan* and Japanese *zibun* must be sentient. Although the conceptual motivation about the definition of linguistic perspective seems stipulative, the empirical argument about the obligatoriness of sentient antecedents may well support their account. It cannot however extend to French (or English), because there are inanimate anaphors and non-perspectival animate anaphors in these languages (see section 2.6). Given that Tamil *taan* and Japanese *zibun* are standardly considered as simplex anaphors, note that this may suggest that simplex and complex anaphors should not be treated alike; but as mentioned in section 2.1, this would require further investigation.

In sum, the present analysis, which will be detailed below, is new in accounting for the distribution of plain and exempt anaphors in a unified way by assuming the presence of silent logophoric operators, even if the idea of a mediating element between the antecedent and the anaphor has already been proposed. Both the motivation and the exact implementation of this idea (esp. the position of logophoric operators and the definition of local domains as

<sup>13</sup> Charnavel *et al.* (to appear) discuss the same problem posed by islands for Mandarin *ziji*.

will be made clear below) are different; furthermore, properties (c) and (d), which I will account for in sections 2.4 and 2.5, have never been explained so far to my knowledge. Before this, I will account for properties (a) and (b) by examining the binding relation between the logophoric operator and the anaphor (section 2.2) and then the coreference relation between the antecedent and the logophoric operator (section 2.3).

## 2.2. The binding relation between the logophoric operator and the exempt anaphor

The logophoric operator hypothesis, which unifies plain and exempt anaphors, implies that the logophoric operator must occur in the binding domain of exempt anaphors. According to Charnavel & Sportiche's (2016) formulation of Condition A in (75), this 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 (76), Charnavel & Sportiche (2016) propose to reduce the locality imposed by Condition A to Phase Theory.

(75) Condition A (theoretical formulation): an anaphor must be bound within the spellout domain containing it.  
(Charnavel & Sportiche 2016)

(76) Condition A (descriptive formulation): 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.<sup>14</sup>

### 2.2.1. CP phase

The case of the phase headed by C is the most straightforward one: according to the hypothesis above, the logophoric operator must occupy the smallest tensed TP containing the anaphor - as illustrated in (72) - since tensed TP is the spellout domain of the C phase. Even if discourse elements are often claimed to appear in the CP left periphery (Rizzi 1997, Cinque 1999, Speas 2004, a.o.), the spellout hypothesis implies that logophoric operators are not (among) the highest elements in the left periphery of clauses. Similar claims are found in Shklovsky & Sudo (2014) and Charnavel & Mateu (2015), among others (Nishigaushi 2014 similarly claims that the set of projections that he calls POV – point of view – lies below Tense). The former study, about indexical shift in Uyghur, shows that nominative subjects undergo indexical shift, but accusative subjects, which are structurally higher but still in the embedded clause, do not; the context-shifting operator is thus assumed not to be in the highest CP periphery (see Shklovsky & Sudo 2014 for more detail). The latter study demonstrates that in some Romance languages, an accusative clitic cannot cluster with a dative clitic when anteceded by an attitude holder as shown in (77); a nominative clitic is however not subject to this requirement as illustrated in (78). The logophoric operator assumed to be responsible for this constraint is therefore claimed to occupy a position below the nominative projection (but above T since the accusative and dative clitics appear above T) as shown for French in (79) (see Charnavel & Mateu 2015 for more detail).

(77) \*Pierre<sub>i</sub> dit qu' on le<sub>i</sub> lui<sub>k</sub> a présenté, à [la Reine]<sub>k</sub>.  
Peter says that s.o. ACC.3MSG DAT.3SG has introduced to the Queen  
'\*Peter<sub>i</sub> says that they introduced him<sub>i</sub> to her<sub>k</sub> – [the Queen]<sub>k</sub>.'

(78) Pierre<sub>i</sub> dit qu'il<sub>i</sub> lui<sub>k</sub> a présenté son fils, à [la Reine]<sub>k</sub>.  
Peter says that NOM.3SG DAT.3SG has introduced his son to the Queen.  
'Peter<sub>i</sub> says that he<sub>i</sub> introduced his son to her<sub>k</sub> – [the Queen]<sub>k</sub>.'

(79) NOM                      OPLOG                      [ 1/2.DAT/REFL                      3.ACC                      3.DAT ]  
il/elle/je                      me/te/se                      le/la                      lui

The following example supports this specific hypothesis for exempt anaphors as well.

(80) [= (26)] a. OpLOG<sub>i</sub> Le courage de Paul<sub>i</sub> a sauvé sa<sub>i</sub> propre maison des flammes ainsi que la maison des voisins.

<sup>14</sup> Descriptively, this formulation of Condition A is very close to Chomsky's (1986) theory, except that the domain is restricted to the smallest tensed TP containing the anaphor: a tensed TP boundary is opaque to the search for antecedent. This difference is justified by the fact that, contrary to what is predicted by the Chomskian theory, an inanimate anaphor occurring within the subject of an embedded tensed clause cannot be anteceded by a DP in the matrix clause (see Charnavel & Sportiche 2016 for more detail).

- ‘OpLOG<sub>i</sub> Paul<sub>i</sub>’s courage saved his<sub>i</sub> own house from the fire and the neighbors’ house as well.’  
 b. 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.  
 ‘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.’

In both (80)a and (80)b, the logophoric operator is in a position to bind the anaphor within the tensed TP containing it. However, (80)a, where the operator occupies the highest position of the TP just like in (72), raises an issue of Condition C since the antecedent *Paul* is coreferent with the c-commanding operator. This suggests that, as argued by Charnavel & Mateu (2015) based on clitic coreference restrictions, the logophoric operator should occur below the nominative position as in (80)b, so that it does not violate Condition C by binding *Paul*. In fact, all examples mentioned so far involving logophoric antecedents in the same clause as the anaphor exhibit these antecedents in the subject position:<sup>15</sup> this hypothesis therefore solves the Condition C issue in all cases.

We have thus established that when exempt anaphors occur within the spellout domain of a CP phase, logophoric operators, whether attitudinal as in (72) or empathic as in (80), appear within TP, more specifically low enough within TP so as to not bind the antecedent. Let us now show that, as already proposed by Koopman & Sportiche (1989) and Sundaresan (2012), there is at most one logophoric operator in the domain of a given anaphor. This is supported by the observation that two anaphors occurring within the same tensed TP cannot refer to two different perspective centers as illustrated below in (81). Note that the same perspective conflicts are documented in Mandarin Chinese: according to Huang & Liu (2001), two clausemate *ziji* that are not locally bound have to corefer.

- (81) D’après Luc<sub>k</sub>, les voisins<sub>i</sub> disent que leur<sub>i</sub> (propre) fils est plus adroit que son<sub>k</sub> (propre) fils.  
 ‘According to Luc<sub>k</sub>, the neighbors<sub>i</sub> say that their<sub>i</sub> (own) son is more skillful than his<sub>k</sub> (own) son.’

If both instances of *propre* are present, this example is unacceptable. In such a case, both anaphors *leur propre* and *son propre* are seemingly exempt (there is no overt local antecedent), but they are both anteceded by logophoric centers, the attitude holder *les voisins* ‘the neighbors’, subject of *disent* ‘say’, and the attitude holder *Luc*, object of *d’après* ‘according to’, respectively. The deviance is explained if we assume that there is only one logophoric operator within that TP.<sup>16</sup> The sentence becomes acceptable if we replace either of the anaphors (*son propre*, *leur*

<sup>15</sup> *Psych*-verbs raise further questions: in such cases, the antecedent is lower than the subject position:

- 2) Tous ces détestables commentaires sur elle-même affectent la confiance de Lucie.  
 ‘All these foul comments about herself<sub>i</sub> affect Lucy<sub>i</sub>’s confidence.’

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 if it occurs just below the subject as in (80)b, Condition C will be violated since the antecedent is even lower. The issue can however be solved precisely 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.

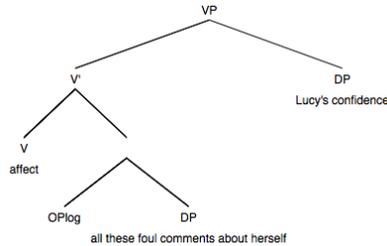


Figure 2. The structure of *psych*-verbs under Belletti & Rizzi’s and the logophoric hypotheses

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 for issues raised by the vP phase hypothesis).

<sup>16</sup> The logophoric operator must here appear above the nominative position to bind the exempt anaphor within the subject position. There are three analytical options to account for this: first, we can assume that the (unique) logophoric operator within tensed TP (spellout domain of the CP phase) can occupy two possible positions, that is, above or below the nominative position; second, we can suppose that an exempt anaphor within the subject of TP is bound by a logophoric operator within its DP (see sections 2.2.2 and 2.4.2 showing that logophoric operators can occur within DPs, but footnote 20 suggesting, based on (99)-(100), that operators are too low in DP to bind the DP subject); or we can hypothesize that

*propre*) by a pronoun (*son, leur*).

The same holds if the two intended logophoric centers are of different types (one attitudinal, the other one empathic): the following sentence is deviant if both instances of *propre* are present.

- (82) Les voisins<sub>k</sub> disent que le courage de Paul<sub>i</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 Paul<sub>i</sub>’s courage saved his<sub>i</sub> (own) house from the fire and their<sub>k</sub> (own) house as well.’

In sum, when an exempt anaphor occurs within a tensed TP, spellout domain of a C phase, it is bound by the single logophoric operator present in that domain. This operator is in a position that does not bind the antecedent as illustrated below, and can have two possible flavors (in French): attitudinal or empathic.

- (83) a. antecedent<sub>i</sub> ... [spellout:TP ... OpLOG<sub>i</sub> ... anaphor<sub>i</sub> ...]  
 b. ... [spellout:TP ... antecedent<sub>i</sub> ... OpLOG<sub>i</sub> ... anaphor<sub>i</sub> ...]

### 2.2.2. DP phase

DPs are argued to form phases when they have a subject (Charnavel & Sportiche 2016, a.o; see Svenonius 2004 for similar ideas). Given our general hypothesis, this implies that a logophoric operator occurs within the spellout domain of a DP with subject when an exempt anaphor appears there. Independent arguments for this specific hypothesis are more complex than in the case of CP phases. Because they will be based on split antecedence, we will come back to them in subsection 2.4.2 after having examined non-exhaustive binding in section 2.4.

In sum, a seemingly exempt anaphor does not intrinsically differ from a plain anaphor, but it is in fact bound by the logophoric operator occurring within the spellout domain containing the anaphor. The non-binding relation between the antecedent and the anaphor is mediated by a local binding relation between the operator and the anaphor.

### 2.3. The relation between the logophoric operator and the antecedent

The absence of structural constraints on exempt anaphors implies that the relation between the antecedent and the logophoric operator is not subject to structural requirements: since the logophoric operator binds the anaphor, if the antecedent had to bind the operator, there should be structural constraints between the antecedent and the anaphor by transitivity. I thus assume that the silent logophoric operator OpLOG is in a relation of coreference with the antecedent (or a relation of non-obligatory control, as argued by Sundaresan 2012 and Nishigaushi 2014; I will leave the choice between these two options open here).<sup>17</sup> Is that relation constrained in other respects? In particular, in the presence of several perspective centers as possible antecedents, which one should the logophoric operator (and thus the anaphor) refer to?

Example (84) below demonstrates that there is no constraint on the choice of attitude holder. This is so even if the two antecedents match in *phi*-features.

- (84) Christel<sub>i</sub> pense qu’Agnès<sub>k</sub> a dit que [TP OpLOG<sub>i/k</sub> l’avenir de Constant ne dépend que d’elle<sub>i/k</sub>-même].  
 ‘Christel<sub>i</sub> thinks that Agnès<sub>k</sub> said that [TP OpLOG<sub>i/k</sub> Constant’s future only depends on herself<sub>i/k</sub>].’

In (84), the exempt anaphor *elle-même* morphologically matches the two possible antecedents *Christel* and *Agnès*, which are both attitude holders. In that case, both can antecede *elle-même*, and the choice between them depends on the context. This means that the logophoric operator within the TP phase that binds the anaphor can refer to either *Christel* or *Agnès*.

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logophoric operators occur at the periphery of phases, and the operator below the TP subject is at the periphery of the vP phase while the operator above the subject is at the periphery of the CP phase. For simplicity, I will adopt the first option here since I do not discuss vP phases (see fn 15).

<sup>17</sup> But of course, when the antecedent is a quantifier, the logophoric operator has to be bound by it:

- 3) [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.’

Only in that case is there a relation of binding between the antecedent and the operator, just like between the operator and the anaphor. This implies that there are structural constraints between a quantifier antecedent and the exempt anaphor.

The same holds if there is a choice between two possible empathy loci: in (85), both *Christel* and *Ninon* can be empathy loci, and the exempt anaphor *ses propres* can refer to either.

- (85) *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].’*

Finally, what happens if the two possible logophoric centers are of different types?

- (86) *Le voisin<sub>k</sub> a dit que le courage de Paul<sub>i</sub> OpLOG<sub>k/?i</sub> a sauvé sa<sub>k/?i</sub> propre maison des flammes ainsi que celle du maire.*  
 ‘The neighbor<sub>k</sub> said that Paul<sub>i</sub>’s courage OpLOG<sub>k/?i</sub> saved his<sub>k/?i</sub> own house from the fire and the mayor’s too.’
- (87) *Selon Christel<sub>k</sub>, l’avenir de Ninon<sub>i</sub> OpLOG<sub>k/?i</sub> dépend d’elle<sub>k/?i</sub>-même.*  
 ‘According to Christel<sub>k</sub>, Ninon<sub>i</sub>’s future OpLOG<sub>k/?i</sub> depends on herself<sub>k/?i</sub>.’

Both (86) and (87) contain an attitude holder, that is, *le voisin* ‘the neighbor’ and *Christel* respectively, and a potential empathy locus, that is, *Paul* and *Ninon* respectively. In both cases, the exempt anaphor (*sa propre* and *elle-même* respectively) preferably refers to the attitude holder: the sentence is degraded when it refers to the empathy locus. Based on such facts, I hypothesize that there is a hierarchy between the two types of logophoric centers as stated in (88) and the logophoric operator prefers to refer to the highest one on that hierarchy:

- (88) *Referential preference of logophoric operators: Attitude holder > Empathy locus*

This constraint is not structurally encoded since it concerns the relation between the antecedent and the logophoric operator, which is a relation of coreference (or non-obligatory control); that’s why it is not a strict constraint. We must assume that attitude holders are somehow more salient to the logophoric operator than empathy loci.

Taking the two types of constraints discussed in the previous sections together (those on the relation between the operator and the anaphor, and those on the relation between the antecedent and the operator), this yields the pattern summarized in Table 5, which should be read as follows: a cell represents a situation involving exempt anaphors within a TP and two logophoric centers, one of the type of the row, the other one of the type of the column; for instance, the gray cell means that if a sentence involves an attitude holder (row) and an empathy locus (column), and there are two exempt anaphors in the same TP, the two anaphors must corefer and they preferably refer to the attitude holder.

Type of perspective center	Attitude holder	Empathy locus
Attitude holder	1 exempt anaphor refers to either	1 exempt anaphor refers to the attitude holder
	2 exempt anaphors refer to the same one	2 exempt anaphors refer to the same one, i.e. attitude holder
Empathy locus	1 exempt anaphor refers to the attitude holder	1 exempt anaphor refers to either
	2 exempt anaphors refer to the same one, i.e. attitude holder	2 exempt anaphors refer to the same one

Table 5. Interaction between several logophoric centers and several exempt anaphors

## 2.4. Split and partial antecedents: non-exhaustive binding

### 2.4.1. Analysis

It has been claimed (Charnavel & Sportiche 2016, a.o.) that the possibility of non-exhaustive binding characterizes exempt anaphors as opposed to plain anaphors: only exempt anaphors can have split antecedents or be partially bound. To my knowledge, this has never been explained. The logophoric operator hypothesis however gives us a way to understand this property.

Given the hypothesis adopted here that plain and exempt anaphors are in fact one and the same type of element, it follows that the possibility of non-exhaustive binding does not come from the relation between the operator and the anaphor (which is a standard local relation of anaphor binding, which can be reduced to Agree or movement<sup>18</sup>), but from the relation between the antecedent and the operator, which we have just shown is a relation of coreference or non-obligatory control involving no structural requirement: just like a pronoun, a logophoric operator can refer to the sum of two antecedents or to part of an antecedent.

Split antecedence, abstractly schematized in (89), is illustrated in (90)-(93).

(89) antecedent-1<sub>i</sub> ... antecedent-2<sub>k</sub> ... [TP ... OpLOG<sub>i+k</sub> ... anaphor<sub>i+k</sub> ...]

(90) Le voisin<sub>i</sub> a persuadé Joël<sub>k</sub> que [TP OpLOG<sub>i+k</sub> personne d'autre qu'eux<sub>i+k</sub>-mêmes 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].'

(91) 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)].'

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

(93) 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.'

In (90) and (91), the exempt anaphor (*eux-mêmes* and *leurs propres*, respectively) refers to the sum of the two attitude holders (*le voisin* and *Joël* in (90), *Christel* and *Ninon* in (91)); note that the object of verbs like *persuader* 'persuade' or *convaincre* 'convince' behave like attitude holders when attitude tests are applied<sup>19</sup>. This means that the logophoric operator refers to that sum; it thus behaves like pronouns, which can refer to the sum of two elements, as illustrated in (93). Furthermore, the split antecedents can be of different types as shown in (92) where *Christel* is an attitude holder and *Ninon* is an empathy locus.

A parallel pattern holds for partial antecedence as shown below.

(94) [antecedent<sub>i</sub> and x]<sub>k</sub> ... [TP ... OpLOG<sub>i</sub> ... anaphor<sub>i</sub> ...]

(95) [Joël<sub>i</sub> et ses voisins]<sub>k</sub> ont annoncé que [TP OpLOG<sub>i</sub> personne d'autre que lui-même ne devrait prendre la tête du comité].

'[Joël<sub>i</sub> and his neighbors]<sub>k</sub> announced that [TP OpLOG<sub>i</sub> no one but himself<sub>i</sub> should become the head of the committee].'

(96) [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].'

(97) [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.'

In sum, an exempt anaphor can take split or partial antecedents because the relation between the antecedent and the logophoric operator has the properties of coreference or non-obligatory control. This means that split or partial

<sup>18</sup> I will not take a stand on that issue here. See Charnavel & Sportiche (2016) for discussion.

<sup>19</sup> For instance, the object of *persuader* 'persuade' cannot be referred to by an epithet in the complement clause (Epithet Test):

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

\*Joël persuaded [the neighbor]<sub>i</sub> that everybody would vote for [the idiot]<sub>i</sub>.'

binding does not have to be postulated (it is in fact only split or partial *reference*), which simplifies the formal characterization of binding (whether in terms of movement or Agree).

This predicts that as schematized in (98), the same domain (e.g. tensed TP) cannot contain two exempt anaphors, one split, i.e. anteceded by two antecedents, and the other one referring to one of the two antecedents ((98)a), or one partially bound and the other one referring to the DP containing the partial antecedent ((98)b). This is so because as shown in subsection 2.2.1, there is only one logophoric operator per domain - with only one possibility of reference.

- (98) a. \*antecedent-1<sub>i</sub> ... antecedent-2<sub>k</sub> ... [TP ... OpLOG<sub>??</sub> ... anaphor<sub>i+k</sub> ... anaphor<sub>i/k</sub> ... ]  
 b. \*[antecedent<sub>i</sub> and x]<sub>k</sub> ... [TP ... OpLOG<sub>??</sub> ... anaphor<sub>i</sub> ... anaphor<sub>k</sub> ... ]

This is borne out as illustrated below: both (99) and (100) are degraded if the two instances of *propre* are present.

- (99) 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 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>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)].’

- (100) [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].’

#### 2.4.2. Back to the DP phase issue

Furthermore, the possibility of split antecedents for exempt anaphors provides a way to independently motivate the hypothesis mentioned in subsection 2.2.2 that each DP with subject (a phase, presumably) contains a logophoric operator binding an exempt anaphor if this anaphor occurs within the spellout domain of that DP. Consider the following examples:

- (101) a. Julie<sub>i</sub> dit que [TP cette réunion OpLOG<sub>i</sub> a autant confronté Simon<sub>k</sub> qu’elle-même à [DP tes OpLOG<sub>i+k</sub> critiques de leurs<sub>i+k</sub> propres scénarios et de ceux de leurs collègues]].  
 ‘Julie<sub>i</sub> says that [TP this meeting OpLOG<sub>i</sub> confronted Simon<sub>k</sub> as well as herself<sub>i</sub> to [DP your OpLOG<sub>i+k</sub> criticisms of their<sub>i+k</sub> own scripts and those of their colleagues]].’  
 b. Julie<sub>i</sub> dit que [TP cette réunion OpLOG<sub>i+k</sub> a confronté [chacun de ses<sub>i</sub> collègues]<sub>k</sub> à [DP tes OpLOG<sub>i+k</sub> critiques de leurs<sub>i+k</sub> propres scénarios et de ceux de leurs partenaires]].  
 ‘Julie<sub>i</sub> says that [TP this meeting OpLOG<sub>i+k</sub> confronted [each of her<sub>i</sub> colleagues]<sub>k</sub> to [DP your OpLOG<sub>i+k</sub> criticisms of their<sub>i+k</sub> 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 (a), *Julie + chacun de ses collègues* ‘each of her colleagues’ in (b)). Sentences (101)a and (101)b provide two different arguments that the logophoric operator occurs in that DP, and not higher in the TP. In (101)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 (cf. (99)-(100): recall that split binding is not possible, only split reference is), 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 (101)b, the second antecedent *chacun de ses collègues* ‘each of her colleagues’ is a quantifier and must therefore bind the logophoric operator: OpLOG<sub>i+k</sub> cannot c-command the quantifier, otherwise this would trigger 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.<sup>20</sup>

<sup>20</sup> Sentence (101) remains acceptable in the absence of a DP subject, which is presumably not a phase (even if it could be argued that nouns like *critique* ‘criticism’ always contain a (silent) subject):

5) Julie<sub>i</sub> dit que [TP cette réunion OpLOG<sub>i</sub> a autant confronté Simon<sub>k</sub> qu’elle-même à [DP OpLOG<sub>i+k</sub> plusieurs critiques de leurs<sub>i+k</sub> propres scénarios et de ceux de leurs collègues]].

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

- (102) Julie<sub>i</sub> pense que [<sub>TP</sub> l'événement inattendu OpLOG<sub>i</sub> a autant protégé Simon<sub>k</sub> qu'elle-même de [<sub>DP</sub> tes OpLOG<sub>i+k</sub> vilaines remarques sur eux<sub>i+k</sub>-mêmes et leurs enfants]].  
 'Julie<sub>i</sub> thinks that [<sub>TP</sub> the unexpected event OpLOG<sub>i</sub> protected Simon<sub>k</sub> as well as herself<sub>i</sub> from [<sub>DP</sub> your OpLOG<sub>i+k</sub> mean comments about themselves<sub>i+k</sub> 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 that cannot directly support this hypothesis.

- (103) A propos des journalistes, Anne<sub>i</sub> a dit que [<sub>DP</sub> leurs OpLOG<sub>i</sub> multiples attaques contre elle-même et son mari] n'étaient pas justifiées.  
 'Speaking of the journalists, Anne<sub>i</sub> said that [<sub>DP</sub> their OpLOG<sub>i</sub> numerous criticisms against herself<sub>i</sub> and her husband] were unfounded.'

(103) could in principle be explained in two different ways: the exempt anaphor *elle-même* could be bound by a logophoric operator occurring within the spellout domain of either the CP or the DP phase; nothing in the sentence excludes either case. But given the point made by (101) and (102), we can safely assume that the logophoric operator occurs within the DP here: the cases involving DPs are compatible with the hypothesis that exempt anaphors are bound within the spellout domain containing them, just like plain anaphors.

There is however a complication. This hypothesis makes a further prediction: each DP with subject should be able to contain a different logophoric operator; in other words, an example similar to (81) (with two non-coreferring exempt anaphors in the same TP) should become acceptable if the DPs containing the anaphors have subjects (distinct from the anaphors<sup>21</sup>). Consider (104) involving DPs without subjects and (105) containing DPs with (underlined) subjects.

- (104) D'après les journalistes<sub>k</sub>, Anne<sub>i</sub> a dit que [<sub>TP</sub> OpLOG<sub>i/k</sub> les attaques contre elle(-même) et son mari étaient bien plus fréquentes que les commentaires sur eux<sub>k</sub>(-mêmes) et leurs confrères].  
 'According to the journalists<sub>k</sub>, Anne<sub>i</sub> said that [<sub>TP</sub> OpLOG<sub>i/k</sub> criticisms against her<sub>i</sub>(self) and her husband were much more common than comments about them<sub>k</sub>(selves) and their fellow members].'

- (105) D'après les journalistes<sub>k</sub>, Anne<sub>i</sub> a dit que [<sub>TP</sub> [<sub>DP</sub> leurs OpLOG<sub>i</sub> multiples attaques contre elle(-même) et son mari] étaient bien plus fréquentes que [<sub>DP</sub> ses OpLOG<sub>k</sub> commentaires sur eux<sub>k</sub>(-mêmes) et leurs confrères]].  
 'According to the journalists<sub>k</sub>, Anne<sub>i</sub> said that [<sub>TP</sub> [<sub>DP</sub> their OpLOG<sub>i</sub> numerous criticisms against her<sub>i</sub>(self) and her husband] were much more common than [<sub>DP</sub> her OpLOG<sub>k</sub> comments about them<sub>k</sub>(selves) and their fellow members]].'

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'Julie<sub>i</sub> says that [<sub>TP</sub> this meeting OpLOG<sub>i</sub> confronted Simon<sub>k</sub> as well as herself<sub>i</sub> to [<sub>DP</sub> OpLOG<sub>i+k</sub> several criticisms of their<sub>i+k</sub> own scripts and those of their colleagues]].'

This does not affect the argument: what matters to unify the analysis of plain and exempt anaphors is that an exempt anaphor should be bound within the spellout domain of the phase containing it, that is, a logophoric operator must appear in that domain. Thus if an exempt anaphor occurs within a DP with a subject distinct from it, a logophoric operator must too. But the reverse does not hold: it does not necessarily mean that a DP without subject (presumably not a phase) cannot contain any operator.

Nevertheless, given the contrast between (99)-(100) (degraded in the presence of two overlapping exempt anaphors in the same TP) and (5), we must specify the hypothesis argued for in subsection 2.2.1 that there is at most one logophoric operator in the domain of an exempt anaphor. In view of example (5), it would be too strong (if we ignore vP phases mentioned in footnote 15) to claim that there is at most one logophoric operator in the spellout domain containing an exempt anaphor (in (5), there are two operators in the same TP, the only relevant spellout domain since it does not contain any DP with subject). In view of examples (99)-(100), it would be too weak to suppose that we can freely (as long as principle (110) is respected) have several logophoric operators in the same spellout domain. This leads to the conclusion that we need to specify the notion of domain and distinguish spellout domains and domains formed by certain constituents like TPs or DPs: the former can contain several logophoric operators under certain conditions, but the latter only have one position for logophoric operators. Thus in (5) there are two exempt anaphors in the same spellout domain (TP), thus two logophoric operators there, because one of them is within a DP (and the other one in the TP). In (99)-(100) there can however only be one exempt anaphor in the TP, because there is only one position for a logophoric operator in a TP and the exempt anaphors are too high in their DP to be bound by a logophoric operator within their DP (they are at the edge of the DP, while the operator must be in the spellout domain of the DP, see fn 21).

<sup>21</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 for more detail).

Given that the DPs containing *elle(-même)* and *eux(-mêmes)* do not have a subject in (104), this example is correctly predicted to be deviant if both instances of *même* are present (i.e., if there are two exempt anaphors anteceded by attitude holders, *les journalistes* ‘the journalists’ and *Anne* respectively): only one operator can appear in the relevant spellout domain, that is, the tensed TP here. But (105) is predicted to be acceptable with both instances of *même* since the DPs containing *elle(-même)* and *eux(-mêmes)* do have a subject in this example: given our hypotheses so far, we could assume that the spellout domain of each DP contains a logophoric operator, and these two operators could be different. This is however not borne out: just like (104), (105) is deviant if both instances of *même* are present.

The unacceptability of (105) with *elle-même* and *eux-mêmes* derives, I propose, from an additional constraint, namely a semantic constraint on perspective: a TP clause cannot be evaluated by different perspective holders.<sup>22</sup> In the presence of two attitude holders, the perspective of the embedded TP can be from either as shown in section 2.3 (and (104) and (105) are indeed fine if either instance of *même* – but only one - is present), but not mixed. In other words, once the attitude operator of the embedded TP is fixed, the logophoric operators occurring in the DPs within that TP have to corefer as illustrated in (107). Note that this would be sufficient to explain why disjoint exempt anaphors cannot co-occur in the same TP as shown in subsection 2.2.1, even if we supposed that several logophoric operators can be present in that domain (see footnote 20 for discussion on that point).

(106) *Do not mix perspective within TP* (first version): a TP cannot have a mixed perspective, that is, it has to be evaluated by the same perspective holder.<sup>23</sup> Consequently, all logophoric operators present within a TP must match.

- (107)a. D’après les journalistes<sub>k</sub>, [TP OpLOG<sub>k</sub> Anne<sub>i</sub> a dit que leurs multiples attaques contre elle<sub>i</sub> étaient bien plus fréquentes que [DP ses OpLOG<sub>k</sub> commentaires sur eux<sub>k</sub>-mêmes]].  
 ‘According to the journalists<sub>k</sub>, [TP OpLOG<sub>k</sub> Anne<sub>i</sub> said that their numerous criticisms against her<sub>i</sub> were much more common than [DP her OpLOG<sub>k</sub> comments about themselves<sub>k</sub>]].’
- b. D’après les journalistes<sub>k</sub>, Anne<sub>i</sub> a dit que [TP OpLOG<sub>i</sub> [DP leurs OpLOG<sub>i</sub> multiples attaques contre elle<sub>i</sub>-même] étaient bien plus fréquentes que ses commentaires sur eux<sub>k</sub>]].  
 ‘According to the journalists<sub>k</sub>, Anne<sub>i</sub> said that [TP OpLOG<sub>i</sub> [DP their OpLOG<sub>i</sub> numerous criticisms against herself<sub>i</sub>] were much more common than her comments about them<sub>k</sub>]].’

Furthermore, the type of perspective holder does not matter: an empathic logophoric operator within an attitude context must also match the TP logophoric attitude operator.

- (108)\*Anne<sub>i</sub> a dit à propos [des journalistes de France 24]<sub>k</sub> que [TP OpLOG-ATT<sub>i</sub> [DP leurs OpLOG-ATT<sub>i</sub> multiples attaques contre elle<sub>i</sub>-même et son mari] étaient dues à [DP son OpLOG-EMP<sub>k</sub> attitude envers eux<sub>k</sub>-mêmes et leurs<sub>k</sub> chers confrères]].  
 ‘\*Anne<sub>i</sub> said about [the France 24 journalists]<sub>k</sub> that [TP OpLOG-ATT<sub>i</sub> [DP their OpLOG-ATT<sub>i</sub> numerous criticisms against herself<sub>i</sub> and her husband] were due to [DP her OpLOG-EMP<sub>k</sub> behavior towards themselves<sub>k</sub> and their<sub>k</sub> dear fellow members]].’

<sup>22</sup> Anaphors that occur in different TPs can however refer to different perspective centers.

6) a. Anne<sub>i</sub> a dit que [TP<sub>1</sub> [les journalistes]<sub>k</sub> en colère contre elle<sub>i</sub>-même et son mari affirment que [TP<sub>2</sub> le gouvernement ne prendra en compte que leurs<sub>k</sub> propres affirmations]].

‘Anne<sub>i</sub> said that [TP<sub>1</sub> [the journalists]<sub>k</sub> angry at herself<sub>i</sub> and her husband claim that [TP<sub>2</sub> the government will only take into account their<sub>k</sub> own assertions]].’

b. antecedent<sub>1</sub> V<sub>ATT1</sub> [TP<sub>1</sub> antecedent<sub>2</sub> ... anaphor<sub>1</sub> ... V<sub>ATT2</sub> [TP<sub>2</sub> ... anaphor<sub>2</sub> ...]]

In (6a), *elle-même* and *leurs propres* appear in two different tensed complement clauses as schematized in (6b), and in this configuration, they can be disjoint.

Whether an anaphor in a complement clause and another anaphor in an adjunct clause can also be disjoint as exemplified below will be examined in future work: the judgments are subtle and the perspective possibilities of adjunct clauses in general need to be studied.

7) D’après Christel<sub>i</sub>, Sébastien<sub>k</sub> a dit que [TP<sub>1</sub> l’avenir des enfants dépend de lui<sub>k</sub>-même bien que [TP<sub>2</sub> la plupart des problèmes doivent toujours être réglés par elle<sub>i</sub>-même]].

‘According to Christel<sub>i</sub>, Sébastien<sub>k</sub> said that [TP<sub>1</sub> the children’s future depends on himself<sub>k</sub> even if [TP<sub>2</sub> most problems must always be dealt with by herself<sub>i</sub>]].’

<sup>23</sup> This does not always include the speaker, since as is well known, the speaker’s perspective can interfere, for instance in *de re non de dicto* readings. The status of the speaker’s perspective will be discussed in section 2.7.

In (108), *elle-même* is an exempt anaphor intended to refer to the attitude holder *Anne*, while *eux-mêmes* is an exempt anaphor intended to refer to the empathy locus *les journalistes de France 24* ‘the France 24 journalists’ (the empathy status is guaranteed by the presence of *leurs chers* ‘their dear’). Both are within DPs with subject, so the hypothesis that exempt anaphors should be bound within their spellout domain implies that the logophoric operator binding them occurs within the DP containing them. But because of principle (106), the empathic operator appearing in a DP within the TP evaluated from Anne’s perspective cannot introduce a perspective different from Anne’s. That’s why sentence (108) is degraded.

Principle (106) is however too strong: all logophoric operators do not have to be identical, as long as they do not conflict; in other words, overlap in perspective is possible as shown in (101)a and further illustrated by the following example:

- (109) Sébastien<sub>i</sub> a convaincu Ninon<sub>k</sub> que [<sub>TP</sub> OpLOG<sub>k</sub> son<sub>k</sub> propre avenir et celui de ses frères dépendra davantage de [<sub>DP</sub> ton OpLOG<sub>i+k</sub> avis sur eux<sub>i+k</sub>-mêmes] que sur son travail].  
 ‘Sébastien<sub>i</sub> convinced Ninon<sub>k</sub> that [<sub>TP</sub> OpLOG<sub>k</sub> her<sub>k</sub> own future and her siblings’ will depend more on [<sub>DP</sub> your OpLOG<sub>i+k</sub> opinion about themselves<sub>i+k</sub>] than on her work].’

Here, the exempt anaphor *son propre* refers to the attitude holder *Ninon* while the exempt anaphor *eux-mêmes* refers to the sum of both attitude holders *Sébastien* and *Ninon*. This means that the two logophoric operators present in the embedded TP (one high in TP, the other one within the DP with subject) do not exactly match but simply overlap. Principle (106) must thus be weakened:

- (110) *Avoid perspective conflicts within TP* (final version): a TP cannot involve a conflict in perspective, that is, it cannot be evaluated by distinct perspective holders. Consequently, all logophoric operators present within a TP must match or at least overlap in reference.

Thus the case of exempt anaphors occurring within DPs with subject is trickier because it involves two constraints: first, given the hypotheses that exempt anaphors are bound within their spellout domain and that DPs with subject form phases, the logophoric operator must occur within the DP with subject containing them; second, because there cannot be any conflict in perspective within a TP as stated in principle (106), logophoric operators appearing within DPs must match – or at least overlap with - the logophoric operator occurring within the TP containing these DPs.

- (111)a. antecedent<sub>i</sub>... [<sub>spelloutTP</sub> OpLOG<sub>i</sub> [<sub>spelloutDP</sub> OpLOG<sub>i</sub> anaphor<sub>i</sub>]... [<sub>spelloutDP</sub> OpLOG<sub>i</sub> anaphor<sub>i</sub>]...]  
 b. antecedent<sub>i</sub>... [<sub>spelloutTP</sub> OpLOG<sub>i</sub> [<sub>spelloutDP</sub> OpLOG<sub>i</sub> anaphor<sub>i</sub>]... antecedent<sub>k</sub> [<sub>spelloutDP</sub> OpLOG<sub>i+k</sub> anaphor<sub>i+k</sub>]...]

## 2.5. Strict and sloppy readings

Another property that has been claimed to distinguish plain and exempt anaphors is the availability of sloppy and strict readings in ellipsis and focus constructions: since Lebeaux (1984), it is standard to assume that plain anaphors only give rise to sloppy readings, while exempt anaphors can also trigger strict readings. For instance, Reinhart & Reuland (1993: 674) contrast the following two examples involving *only*:

- (112) a. Only Lucie<sub>i</sub> praised herself<sub>i</sub>. (Reinhart & Reuland 1993: (28d))  
 b. Only Lucie<sub>i</sub> buys pictures of herself<sub>i</sub>. (Reinhart & Reuland 1993: footnote 18)

They claim that *herself* is necessarily interpreted as a bound variable in (112)a (sloppy reading: nobody else praised herself/himself), but (112)b is ambiguous between a sloppy reading (nobody else buys pictures of herself/himself) and a strict reading (nobody else buys pictures of Lucie). According to them, this correlates with the status of the anaphor, plain in (112)a under their theory<sup>24</sup> since it has a coargument *Lucie*, but exempt in (112)b where it does not have a coargument. Similarly, they claim that non-exempt *herself* only has a sloppy reading in VP/TP ellipsis:

- (113) Lucie<sub>i</sub> praised herself<sub>i</sub>, and Lili (did) too (praise {herself/\*Lucie}). (Reinhart & Reuland 1993: (28c))

<sup>24</sup> Predicate-based theories basically propose that an anaphor must be bound by its coargument if it has one as in (112)a, but is exempt from Condition A if it does not have any coargument as in (112)b.

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

- (114) John<sub>i</sub> defended himself<sub>i</sub> before Bill did. = ... before Bill defended himself (sloppy)  
 = ... before Bill defended him (strict)
- (115) Only John<sub>i</sub> finds himself<sub>i</sub> intelligent. = Only John  $\lambda x$  (x finds x intelligent) (sloppy)  
 = Only John  $\lambda x$  (x finds John intelligent) (strict)

The problem is 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. We can reevaluate these claims (at least for French) in view of the new finding that only inanimates are necessarily plain.

Let us reexamine examples such as (114) - that is, examples that contain an ellipsis in a subordinate clause rather than in a coordination - with inanimate anaphors. This is illustrated below for French (where only TP ellipsis, not VP ellipsis, is possible).

- (116) [Ta page internet]<sub>i</sub> contient plus de liens vers elle<sub>i</sub>-même que [la mienne]<sub>k</sub> (ne contient de liens vers {elle<sub>k</sub>-même/\*ta page}).  
 ‘[Your webpage]<sub>i</sub> contains more links towards itself<sub>i</sub> than mine<sub>k</sub> (contains links towards {itself<sub>k</sub>/\*your webpage}).’

Here, inanimate *elle-même* is a plain anaphor, and crucially, it only gives rise to a sloppy reading in the ellipsis site (a comparative clause). This contrasts with animate *elle-même* in (117), which can trigger both sloppy and strict readings in the same configuration.

- (117) Coralie<sub>i</sub> possède plus de photos d’elle<sub>i</sub>-même que [son mari]<sub>k</sub> (ne possède de photos de {lui<sub>k</sub>-même/elle<sub>i</sub>}).  
 ‘Coralie<sub>i</sub> owns more pictures of herself<sub>i</sub> than [her husband]<sub>k</sub> (owns pictures of {himself<sub>k</sub>/her<sub>i</sub>}).’

This confirms that the availability of strict and sloppy readings does indeed distinguish plain and exempt anaphors - as previously assumed albeit based on problematic arguments: inanimate (thus plain) anaphors only exhibit sloppy readings, while animate anaphors can give rise to both sloppy and strict readings, that is, exempt anaphors license strict readings. Note that the availability of strict readings in (114) suggests that animate anaphors can always (i.e. whether in coargumental positions or not) be exempt; we will return to the question whether they can ever be plain in section 2.6.

The logophoric operator hypothesis can account for these results, assuming that the ellipsis site itself always contains a copy of the anaphor (unlike what analyses in terms of vehicle change assume). In the case of inanimates, the elided anaphor has to be locally bound by its antecedent as represented in (118), so that only a sloppy reading is available. But in the case of animates, the elided anaphor can be exempt and thus be anteceded by a logophoric operator as represented in (119)b, which can give rise to a strict reading.

- (118) [Ta page internet]<sub>i</sub> contient plus de liens vers elle<sub>i</sub>-même que [<sub>TP</sub> la mienne]<sub>k</sub> (~~ne contient de liens vers elle<sub>k</sub>-même~~). (sloppy)  
 ‘[Your webpage]<sub>i</sub> contains more links towards itself<sub>i</sub> than [<sub>TP</sub> mine]<sub>k</sub> (~~contains links towards itself<sub>k</sub>~~).’
- (119) a. Coralie<sub>i</sub> possède plus de photos d’elle<sub>i</sub>-même que [<sub>TP</sub> son mari]<sub>k</sub> (~~ne possède de photos de lui<sub>k</sub>-même~~).  
 ‘Coralie<sub>i</sub> owns more pictures of herself<sub>i</sub> than [<sub>TP</sub> her husband]<sub>k</sub> (~~owns pictures of himself<sub>k</sub>~~).’ (sloppy)  
 b. Coralie<sub>i</sub> possède plus de photos d’elle<sub>i</sub>-même que [<sub>TP</sub> son<sub>i</sub> (cher) mari OpLOG<sub>i</sub> (~~ne possède de photos d’elle<sub>k</sub>-même~~)]. (strict)

‘Coralie<sub>i</sub> owns more pictures of herself<sub>i</sub> than [<sub>TP</sub> her<sub>i</sub> (dear) husband OpLOG<sub>i</sub> (~~owns pictures of herself<sub>i</sub>~~)].’

Given that an exempt anaphor is not directly bound by its visible antecedent, but by a logophoric operator, animate *elle-même* in (119)b can give rise to a strict reading as long as Coralie is a logophoric center (presumably an empathy locus here, as shown by the availability of *cher* ‘dear’). The elided animate *elle-même* can also be directly bound by the local antecedent *son mari* ‘her husband’,<sup>25</sup> and thus give rise to a sloppy reading as in (119)a: it is construed as a plain anaphor here.

In sum, a plain anaphor only gives rise to sloppy readings because the elided anaphor has to be bound by the local antecedent in the second clause, but an exempt anaphor can in addition give rise to strict readings because it is bound by a logophoric operator, which can refer to the antecedent of the first clause under the right conditions.

The same holds for focus constructions:

- (120) a. Seul Simon<sub>i</sub> (OpLOG<sub>i</sub>) aime les photos de lui<sub>i</sub>-même.  
 ‘Only Simon<sub>i</sub> (OpLOG<sub>i</sub>) likes pictures of himself<sub>i</sub>.’  
 Focus alternatives: i. x likes pictures of x (sloppy)  
 ii. x OpLOG<sub>i</sub> likes pictures of himself<sub>i</sub> (strict)
- 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>.’  
 Focus alternatives: i. x contains links towards x (sloppy)  
 ii. \*x OpLOG<sub>i</sub> contains links towards itself<sub>i</sub> (\*strict)

Depending on the presence of a logophoric operator or not, either the anaphor is directly bound by the alternatives to the antecedent, thus giving rise to a sloppy reading, or by the logophoric operator referring to the antecedent, thus giving rise to a strict reading.<sup>26</sup> For example, (120)a exhibits both sloppy and strict readings because the anaphor can be bound either by the alternatives to Simon x in (i) or by the logophoric operator referring to Simon in (ii); (120)b does not have a strict reading however because an inanimate cannot antecede a logophoric operator.

Thus the availability of strict readings depends on the possibility of construing the first antecedent as a logophoric center. This explains, I argue, the contrast between subordination and coordination observed by Hestvik (1995) and Kehler (2002). Consider (114) again and its coordinated counterpart.

- (121) [= (114)] John<sub>i</sub> defended himself<sub>i</sub> before Bill did. (sloppy, strict)
- (122) John<sub>i</sub> defended himself<sub>i</sub> and Bill did too. (sloppy, \*strict)

When the elided anaphor occurs in a subordinate clause as in (121), it can give rise to a strict reading, unlike an anaphor that appears in a coordinated clause as in (122). This follows if we suppose that the subordinate structure licenses the interpretation of John as a logophoric center: as main subject of the sentence, it can easily be construed as an empathy locus in the subordinate clause; the coordinated structure, which imposes a sort of interpretive parallelism, makes this interpretation much harder. However, explicitly breaking the parallelism can make it possible as illustrated below.

- (123) Coralie<sub>i</sub> a de nombreuses photos d’elle<sub>i</sub>-même dans son bureau et Luc aussi.  
 ‘Coralie<sub>i</sub> has many pictures of herself<sub>i</sub> in her office and Luc (does) too.’ (sloppy, \*strict)
- (124) a. Coralie<sub>i</sub> a de nombreuses photos d’elle<sub>i</sub>-même dans son bureau et son cher mari aussi.  
 ‘Coralie<sub>i</sub> has many pictures of herself<sub>i</sub> in her office and her dear husband (does) too.’ (sloppy, strict)
- b. Coralie<sub>i</sub> a de nombreuses photos d’elle<sub>i</sub>-même dans son bureau et [<sub>TP</sub> [son<sub>i</sub> cher mari]<sub>k</sub> OpLOG<sub>i</sub> a de nombreuses photos d’elle<sub>i</sub>-même dans son bureau aussi]. (strict)

<sup>25</sup> It is well known that *phi*-features can be ignored in ellipsis.

<sup>26</sup> This implies that the difference between (112)a and (112)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 (112)b than in (112)a).

‘Coralie<sub>i</sub> has many pictures of herself<sub>i</sub> in her office and [<sub>TP</sub> [her<sub>i</sub> dear husband]<sub>k</sub> OpLOG<sub>i</sub> (does) have many pictures of herself<sub>i</sub> in his office too].’

(123) is a French structural equivalent of (122); the coordinated structure similarly forces a sloppy reading, it seems. But (124)a exhibits a strict reading as well even if it also involves a coordination. This is so, I argue, because the second conjunct contains *son cher mari* ‘her dear husband’, which contributes to construing Coralie as an empathy locus; a logophoric operator can thus bind the elided anaphor as represented in (124)b.

The same holds if the antecedent of the anaphor is an attitude holder: a strict reading can arise even in a structure with coordination.

(125) 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 [<sub>TP</sub> 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 the availability of strict and sloppy readings in ellipsis and focus constructions indeed distinguishes plain and exempt anaphors when the inanimacy criterion is taken into account. This supports the logophoric operator hypothesis, which can account for it: both plain and exempt anaphors are locally bound in the ellipsis site, but binding by a logophoric operator can give 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.

## 2.6. Can animate anaphors be plain?

So far, I have argued that inanimate anaphors are necessarily plain, while animate anaphors can always be exempt (if an appropriate antecedent is available), and all arguments have aimed at showing that the exempt behavior of animate anaphors comes from the presence of an intermediate logophoric operator referring to the antecedent but binding them. However, since the presence of a logophoric operator seems to be always an option, we do not yet know whether animate anaphors can ever be plain. As a matter of fact, recall that Sundaresan (2012) and Nishigaushi (2014) do argue that the anaphors *zibun* in Japanese and *taan* in Tamil, which are always animate, are always bound by a perspectival *pro*. It is thus legitimate to wonder whether French (or English) animate anaphors can ever be plain (not bound by a logophoric operator).<sup>27</sup>

A central difficulty comes from the fact that unlike attitude holders, empathy loci are not necessarily created by the use of specific expressions, and it seems that the only strict and easily detectable condition for being an empathy locus is to be animate. At first glance, there is therefore no simple evidence against the hypothesis that an animate anaphor is always bound by an empathic OpLOG operator.

Property (c) ((non)-exhaustive binding) does not help: the possibility of non-exhaustive binding shows that anaphors can be exempt, but the reverse is not true: the possibility of exhaustive binding for animate anaphors is compatible with the presence as intermediate binder of a logophoric operator referring to the relevant antecedent as represented in (126) and (127).

(126) Maud<sub>i</sub> (OpLOG<sub>i</sub>) pense à elle<sub>i</sub>-même.  
 ‘Maud<sub>i</sub> (OpLOG<sub>i</sub>) thinks about herself<sub>i</sub>.’

(127) Maud<sub>i</sub> (OpLOG<sub>i</sub>) compare son<sub>i</sub> propre fils au mien.  
 ‘Maud<sub>i</sub> (OpLOG<sub>i</sub>) compares her<sub>i</sub> own son to mine.’

Similarly, while the possibility of strict readings shows that animate anaphors can be exempt, the availability of sloppy readings does not necessarily demonstrate that they can be plain. Thus property (d) (sloppy/strict readings) does not help either. Recall (123), which only exhibits a sloppy reading:

<sup>27</sup> Note that supposing that animate anaphors are marked by a logophoric feature forcing binding by a logophoric operator is not an option, as we would lose the unification between plain and exempt anaphors.

- (128) [= (123)] Coralie<sub>i</sub> (OpLOG<sub>i</sub>) a de nombreuses photos d'elle-même dans son bureau et [<sub>TP</sub> Luc<sub>k</sub> (OpLOG<sub>k</sub>) a de nombreuses photos de lui-même dans son bureau aussi].  
 'Coralie<sub>i</sub> (OpLOG<sub>i</sub>) has many pictures of herself<sub>i</sub> in her office and [<sub>TP</sub> Luc<sub>k</sub> (OpLOG<sub>k</sub>) ~~(does) have many pictures of himself<sub>k</sub> in his office~~ too.'

Just like in (126) and (127), the elided anaphor in (128) could either be directly bound by Luc or by a logophoric (empathic) operator referring to Luc: a sloppy reading would arise in both cases, and there is no easy way to preclude Luc from being an empathy locus.

The structural constraint on plain anaphors (property a) is not helpful either, since the question is to know whether an animate anaphor has to be bound by a logophoric operator even when it could be locally bound by its antecedent.

We are left with property (b): can we force an animate to be non-logophoric? We have seen that it is hard given the conditions for empathy. But there are (at least) three ways to achieve this. First, empathy does not just require that the relevant event participant be animate, but more specifically sentient and conscious. Thus animates that are not so cannot be logophoric:

- (129) [Le roi]<sub>i</sub> est enterré aux côtés de sa<sub>i</sub> propre femme et de celle de son frère.  
 '[The king]<sub>i</sub> is buried next to his<sub>i</sub> own wife and to his brother's.'

- (130) Laure s'étonnait. Même dans son sommeil, Eric<sub>i</sub> lui semblait excessivement fier de lui-même et des siens.  
 'Laure was surprised. Even during his sleep, Eric<sub>i</sub> seemed to her to be excessively proud of himself<sub>i</sub> and his loved ones.'

In (129), the king is dead so that it cannot be construed as a logophoric center. Nevertheless, *le roi* 'the king' can antecede *sa propre*, which it locally binds: *sa propre* is a plain anaphor here. We could however argue that *le roi* 'the king' is in fact an inanimate here, so that this example does not show that animates can be plain. (130) is more convincing: it is a free indirect discourse representing Laure's thoughts. Given that attitude holders prevail over empathy loci as seen in (88), this implies that any other animate in the discourse will not (easily) be construed as an empathy locus; furthermore, Eric is asleep, which means that he is not conscious. All these clues imply that Eric is not a logophoric center here despite being animate. Nevertheless, *Eric* binds the anaphor *lui-même*, which shows that animate *lui-même* can be plain.

A second argument can be made using intensional verbs. We have seen in section 2.3 that exempt anaphors can be anteceded by attitude holders in French only if they are read *de se*. Usually, anaphors anteceded by attitude verbs cannot be locally bound by their antecedents and have thus to be exempt because attitude verbs select an embedded clause. But verbs taking non-propositional complements can also be intensional. For instance, Grodzinsky (2007) demonstrates that verbs like *adore*, *hate*, *dream about*, *praise* or *expect* are intensional using the classical Substitution Test described in subsection 1.2.2:

- (131) a. Mary adores Bob Parr.  
 b. Mary adores Mr. Incredible.

Let's imagine a context where Mary is a manager in an insurance company where Bob Parr works. She may not be aware that Bob is in fact Mr. Incredible, who assumed a new identity as part of the Federal Witness Protection Program. In such a context, (131)a and (131)b do not have the same truth conditions.

Using such verbs, we can test whether an animate anaphor anteceded by the subject has to be read *de se*: if not, we can conclude that it has to be plain.

- (132) [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. Thus when looking at the results, Liliane 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'elle-même.  
 'Liliane<sub>i</sub> is very proud of herself<sub>i</sub>.'

- (133) [*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 sa<sub>i</sub> propre fille.

‘Liliane<sub>i</sub> admires her<sub>i</sub> own daughter.’

Both (132) and (133) are natural in such contexts even though the animate anaphors *elle-même* and *sa propre* are not read *de se* since Liliane is mistaken about the identity of the relevant person. This means that they cannot be anteceded by an attitudinal logophoric operator, but are plain anaphors, directly bound by the local antecedent *Liliane*.

A third argument can be made based on the observation explained in subsections 2.2.1 and 2.4.2 that two exempt anaphors cannot be disjoint in the same TP:

- (134) Solange<sub>i</sub> pense que [<sub>TP</sub> Cyril<sub>k</sub> OpLOG<sub>i</sub> est aussi fier d'elle<sub>i</sub>-même que de sa<sub>k</sub> propre fille].  
 ‘Solange<sub>i</sub> thinks that [<sub>TP</sub> Cyril<sub>k</sub> OpLOG<sub>i</sub> is as proud of herself<sub>i</sub> as of his<sub>k</sub> own daughter].’

Recall that because of principle (110), two exempt anaphors can never refer to conflicting logophoric centers in the same TP. *Elle-même* referring to Solange and *sa propre* anteceded by Cyril cannot therefore be both exempt. Since the sentence is perfectly acceptable, we must conclude that *sa propre* is directly bound by the local *Cyril* and is thus plain.

In sum, we can prove in specific conditions that animate anaphors can be plain<sup>28</sup> and are thus not necessarily bound by logophoric operators.

## 2.7. Further issue: the speaker's perspective

In this study, I have only investigated third person exempt anaphors. What about first and second person anaphors? This issue is glaring since the speaker is the primary perspective center of a sentence and the addressee has a specific perspectival status too; furthermore, logophors have been identified to shifted indexicals in several cases (Schlenker 2003, Anand 2006, a.o.). I will not examine this issue in detail here (partly for space reasons, partly because French does not have shifted indexicals); a few remarks about first (and second) person anaphors are nevertheless in order.

By definition, first and second person pronouns cannot be inanimate and as discourse participants, they are intrinsically perspective centers. As is expected, this licenses *mon/ton/nos/ vos propre(s)* ‘my/your/our own’ and *moi/toi/nous/vous-même(s)* ‘myself/yourself/ourselves/yourselves’ as exempt anaphors: the following examples do not include any overt antecedent for *moi-même/toi-même* ‘myself/yourself’ in (135) or *mes propres/tes propres* ‘my own/your own’ in (136).<sup>29</sup> This suggests that logophoric operators can also refer to discourse participants.

- (135) Carole OpLOG<sub>i</sub> a pris une photo de {moi<sub>i</sub>/toi<sub>i</sub>}-même.  
 ‘Carole OpLOG<sub>i</sub> took a picture of {myself<sub>i</sub>/yourself<sub>i</sub>}.’

- (136) Carole OpLOG<sub>i</sub> a invité les enfants du voisin et {mes<sub>i</sub>/tes<sub>i</sub>} propres enfants.  
 ‘Carole OpLOG<sub>i</sub> invited the neighbor's children and {my<sub>i</sub>/your<sub>i</sub>} own children.’

Given that discourse participants are perspective centers, the following questions arise: what type of logophoric centers do they correspond to? What kind of perspectival interaction do they give rise to? The rest of the section will

<sup>28</sup> It would be interesting to use the same tests for Japanese *zibun* and Tamil *taan* to further evaluate Sundaesan (2012)'s and Nishigaushi (2014)'s proposals.

<sup>29</sup> In this article I cannot treat the case of *soi* (≈ oneself), which would deserve its own paper and would require a deeper investigation of first and second person anaphors as I suspect *soi* to be a first person generic (cf. Moltmann (2006)'s analysis of *one*).

show that discourse participants do not have a specific status as far as exempt anaphora is concerned, but they behave like attitude holders or empathy loci.

First, we have observed and stated in principle (106) that several logophoric operators cannot be disjoint when they co-occur within the same TP. Accordingly, logophoric operators binding first and second person anaphors cannot be disjoint from other logophoric operators in the same TP as shown below: both instances of *même* cannot be present in (137), just like in (105).

- (137) Anne<sub>i</sub> a dit que [TP [DP mes (OpLOG<sub>i</sub>) multiples attaques contre elle<sub>i</sub>(-même) et son mari] étaient bien plus fréquentes que [DP ses (OpLOG<sub>k</sub>) méchants commentaires sur moi<sub>k</sub>(-même) et ma femme]].  
 ‘Anne<sub>i</sub> said that [TP [DP my (OpLOG<sub>i</sub>) numerous criticisms against her<sub>i</sub>(self) and her husband] were much more common than [DP her (OpLOG<sub>k</sub>) mean comments about my<sub>k</sub>(self) and my wife]].’

However, overlap is possible, just like in (101)a or (109):

- (138)[TP [DP Mes OpLOG<sub>i+k</sub> critiques de nous<sub>i+k</sub>-mêmes et de nos partisans] étaient bien moins graves que [DP tes OpLOG<sub>k</sub> méchants commentaires sur moi<sub>k</sub>-même]].  
 ‘[TP [DP My OpLOG<sub>i+k</sub> numerous criticisms of ourselves<sub>i+k</sub> and our supporters] were much less serious than [DP your OpLOG<sub>k</sub> mean comments about myself<sub>k</sub>]].’

Second, we have shown that a logophoric operator can refer to attitude holders or empathy loci in French. Discourse participants do not affect this categorization or yield any specific interaction effect: even in the explicit presence of a discourse participant in the sentence, a logophoric operator binding a third person exempt anaphor can still refer to an attitude holder or an empathy locus as illustrated in (139)-(140) and (141)-(142) respectively; conversely, even in the presence of an attitude holder or an empathy locus, an exempt first or second person anaphor can occur as exemplified in (143).

- (139) Julie<sub>i</sub> a raconté à tout le monde que {je/tu} va(i)s épouser son<sub>i</sub> propre cousin.  
 ‘Julie<sub>i</sub> told everybody that {I/you} would marry her<sub>i</sub> own cousin.’
- (140) Lucien<sub>i</sub> affirme que tout le monde est au courant de {mes/tes} critiques contre lui<sub>i</sub>-même et sa femme.  
 ‘Lucien<sub>i</sub> claims that everyone knows about {my/your} criticisms against himself<sub>i</sub> and his wife.’
- (141) Quant à Paul<sub>i</sub>, {je/tu} étais en train de l’interroger quand sa<sub>i</sub> propre maison et celle de son voisin ont été cambriolées.  
 ‘As for Paul<sub>i</sub>, {I/you} was/were questioning him when his<sub>i</sub> own house and his neighbor’s got burglarized.’
- (142) La tristesse de Paul<sub>i</sub> est due à {mes/tes} critiques contre lui<sub>i</sub>-même et sa femme.  
 ‘Paul<sub>i</sub>’s sadness is due to {my/your} criticisms against himself<sub>i</sub> and his wife.’
- (143) Julie a raconté à tout le monde que Paul va épouser {mon/ton} propre cousin.  
 ‘Julie told everybody that Paul would marry {my/your} own cousin.’

What these observations entail is that French does not exhibit blocking effects such as those observed with Mandarin Chinese *ziji*: in Mandarin, first and second persons are interveners for exempt *ziji* (Huang & Liu 2001, Anand 2006, a.o.). For instance below, *ziji* can only refer to the first person *wo* or the second person *ni* but cannot have the subject of the attitude verb *Zhangsan* as antecedent:

- (144) Zhangsan<sub>i</sub> danxin {wo/ni} hui piping ziji<sub>i</sub>.  
 Zhangsan worry I/you will criticize self  
 ‘Zhangsan<sub>i</sub> is worried that {I/you} might criticize {\*him<sub>i</sub>/myself/yourself}.’ (Huang & Liu 2001: (11a))

Note that this is not due to the fact that the speaker is a potential binder for *ziji* (which is not marked in person and could thus be bound by a first or second person pronoun) since the same holds if the first/second person occurs in a position where it could not bind *ziji*:

- (145) Zhangsan<sub>i</sub> zhidao Mali<sub>j</sub> gen ziji<sub>\*i/j</sub> shuo-guo ni<sub>i</sub> xiang qu Taiwan  
 Zhangsan know Mary with self say-EXP you want go Taiwan  
 ‘Zhangsan<sub>i</sub> knows that Mary<sub>j</sub> told {\*him<sub>i</sub>/herself<sub>j</sub>} that you want to go to Taiwan.’ (Cole *et al.* 2001)

This means that the absence of such blocking effects in French cannot be simply explained by the fact that French anaphors are marked for person, unlike Mandarin anaphors.

Since discourse participants do not yield any blocking effect in French, they can simply be considered as either of the two relevant types of logophoric centers (attitude holders or empathy loci depending on the cases). In fact, indexicals behave like attitude holders when explicitly construed as such as in (146)-(148) containing intensional expressions, and they behave like empathy loci otherwise as in (149): they do not prevent a third person exempt anaphor from being anteceded by another attitude holder as in (146) or another empathy locus as in (147)-(149). Note that as opposed to cases involving several third person logophoric centers, there is no possible ambiguity here due to the marking in person of exempt anaphors; this explains why the hierarchy *attitude* > *empathy* defined in (88) does not have to be respected in (148) (the empathic exempt anaphor *elle-même* is acceptable even in the presence of the attitude holder *moi* ‘me’).

- (146) Je pense qu’Agnès<sub>k</sub> a dit que l’avenir de Constant ne dépend que de {moi-même/elle<sub>k</sub>-même}.  
 ‘I think that Agnès<sub>k</sub> said that Constant’s future only depends on {myself/herself<sub>k</sub>}.’
- (147) J’ai expliqué que le courage de Paul<sub>i</sub> avait sauvé {ma/sa<sub>i</sub>} propre maison des flammes ainsi que celle du maire.  
 ‘I explained that Paul<sub>i</sub>’s courage saved {my/his<sub>i</sub>} own house from the fire and the mayor’s as well.’
- (148) Selon moi, l’avenir de Ninon<sub>i</sub> dépend de {moi-même/elle<sub>i</sub>-même}.  
 ‘According to me, Ninon<sub>i</sub>’s future depends on {myself/herself<sub>i</sub>}.’
- (149) Je mérite que le futur métier de Ninon<sub>i</sub> corresponde à {mes/ses<sub>i</sub>} propres aspirations plutôt qu’aux contraintes de la société.  
 ‘I deserve the fact that Ninon<sub>i</sub>’s future job corresponds to {my/her<sub>i</sub>} own aspirations rather than to the constraints of society.’

Thus the speaker and the addressee do not have a specific status as compared to third person logophoric centers for the reference of logophoric operators binding exempt anaphors.

Furthermore, manifestations of the speaker’s perspective in the absence of first person exempt anaphors do not affect binding of exempt anaphors by logophoric centers. Recall example (15) repeated below involving *son propre* and (151) containing *elle-même*.

- (150) [= (15)] Caroline<sub>i</sub> croit que [TP cet idiot de Nicolas OpLOG<sub>i</sub> a voté contre son<sub>i</sub> propre projet].  
 ‘Caroline<sub>i</sub> believes that [TP Nicolas the idiot OpLOG<sub>i</sub> voted against her<sub>i</sub> own project].’
- (151) Anne<sub>i</sub> pense que [TP [DP mes OpLOG<sub>i</sub> {méchants/gentils} commentaires sur elle<sub>i</sub>-même et son mari] sont inacceptables.  
 ‘Anne<sub>i</sub> thinks that [TP [DP my OpLOG<sub>i</sub> {mean/nice} comments about herself<sub>i</sub> and her husband] are unacceptable.’

In (150), Nicolas can be evaluated as idiot by either Caroline or the speaker: this was the result of the Double Orientation Test explained in subsection 1.2.2 showing that the embedded TP is an attitude context. In both cases, *son propre* is nevertheless an exempt anaphor referring to the attitude holder *Caroline*. Similarly in (151), *elle-même* can refer to the attitude holder *Anne*, whether the adjective within the same DP is evaluated by Anne (say, *méchants* ‘mean’) or by the speaker (say, *gentils* ‘nice’).

This suggests that the speaker’s perspective expressed by the evaluative expressions is not represented by a logophoric operator here; that’s why it does not give rise to a violation of principle (106) against conflicting perspectives in TP. Principle (106) should thus be reduced to apply for logophoric operators syntactically present in the same TP: such logophoric operators should not be disjoint, but they are compatible with the presence of the

speaker's perspective if it is coded in a different way, as in the case of evaluative expressions. Note that this possibility makes sense conceptually, given that the speaker's perspective is necessarily present as source of the discourse, as opposed to other perspectives, which the speaker may choose to integrate in his/her own discourse or not.

The only intervention effect caused by the speaker's perspective (thus because of the presence of an OpLOG coreferential with the speaker) in the absence of a first person anaphor is revealed in *de se* readings (cf. Chierchia 1989, Anand 2006). As shown by Anand (2006) for English pronouns in dream reports and Yoruba logophors, a *de se* anaphor cannot be bound by a *de re* pronoun. This *de re* blocking effect is also observed for French anaphors.

(152) [*Marie is listening to recordings of songs performed by members of her family. She recognizes the voice of her brother but mistakes her own voice for someone else's.*]

\*Marie pense qu'elle<sub>de re</sub> chante mieux que son<sub>de se</sub> propre frère et le frère de son mari.

\*Mary thinks she<sub>de re</sub> sings better than her<sub>de se</sub> own brother and her husband's.'

Here, the anaphor *son propre* 'her own' refers to the attitude holder *Marie* and must be read *de se*, while *elle*, which also refers to *Marie*, is intended to be read only *de re* in this context, not *de se*, that is, it reflects the speaker's perspective. This reading is unavailable. Anand (2006) derives this blocking effect from the combination of Rule H and logophoric binding: Rule H enforces local binding (by the *de re* pronoun) but this violates the syntactic binding condition that [log] elements must be bound by a logophoric operator. This explanation is however not compatible with the hypothesis adopted here that all anaphors are of the same type: exempt anaphors cannot be marked by a [log] feature since they do not differ from plain anaphors. Instead, I suspect that what is going on descriptively is that the speaker's perspective reflected by the interpretation of the *de re* pronoun interferes with the attitude holder's perspective: this happens when the attitude holder herself is evaluated by the speaker, as in (152) and unlike (150); similarly recall from subsection 1.2.2 that an epithet in an attitude context cannot refer to the attitude holder of that context even when it is intended to be the result of the speaker's evaluation. This means that the speaker and the attitude holder's perspectives can be mixed in the same TP in the absence of disjoint exempt anaphors, *unless the speaker evaluates the attitude holder*. The exact understanding of why this is so<sup>30</sup> is left for future work, but what we can already assume is that such pronouns read *de re* and not *de se* require the presence of a logophoric operator referring to the speaker and presumably binding them (roughly, *she<sub>de re</sub>* means *she according to me*).

In sum, the array of facts we have just presented leads us to the following conclusions:

- a- first and second person exempt anaphors must be bound by logophoric operators just like exempt third person anaphors; epithets and pronouns read *de re* but not *de se* also seem to require logophoric operators referring to the speaker.
- b- discourse participants do not have a specific status as compared to third person logophoric centers as antecedents of logophoric operators: they can also be attitude holders or empathy loci.
- c- but the speaker's perspective is not always coded by logophoric operators; when it is not (as in the case of evaluative expressions), it can be mixed with third person attitudinal or empathic operators in the same TP without violating principle (110).<sup>31</sup>

### 3. Conclusion

<sup>30</sup> This is probably related to the fact that in these cases (*de re* non *de se* pronouns, epithets referring to the attitude holder), there is no possible double orientation: the evaluation has to be made by the speaker, not by the attitude holder. This may force the presence of a logophoric operator referring to the speaker (some obligatory 'according to me').

<sup>31</sup> The hypothesis that perspective is not always encoded by logophoric operators is also necessary to explain why Condition B is not affected by the logophoric operator hypothesis. Recall (21)a and consider its counterpart involving a pronoun instead of an exempt anaphor.

8) a. [(21)a] Julie, pense que les touristes OpLOG<sub>i</sub> préfèrent son<sub>i</sub> propre hôtel à ceux de ses concurrents.

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

b. Julie<sub>i</sub> pense que les touristes préfèrent son<sub>i</sub> hôtel à ceux de ses concurrents.

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

In (8)a, the exempt anaphor *son propre* is bound by an attitudinal operator referring to Julie, subject of the attitude verb *pense* 'thinks'. The same sentence is also acceptable in the absence of *propre*: the pronoun *son* in (8)b can also appear in the attitude context and refer to the attitude holder Julie. Even if *son* refers to a logophoric center, we must however assume that there is no logophoric operator here; otherwise, Condition B would be violated. This means that perspective is not always coded by logophoric operators.

Furthermore, this predicts that an exempt anaphor and a pronoun cannot co-occur in the same domain: if a logophoric operator is present to bind the anaphor, Condition B is violated, but if a logophoric operator is absent to leave the pronoun free, Condition A is violated. Given that we have seen that a domain can be as small as a DP, it is however very hard to test this prediction.

In this paper, I have shown that there is only one type of anaphor: anaphors that seem to be exempt from Condition A are in fact not exempt; they are locally bound, just like plain anaphors. But because their binders - that is, logophoric operators - are silent and are coreferent with - not bound by - their antecedent, the structural constraints on exempt anaphors are not directly visible; only their interpretive requirements are: they have to be anteceded by perspective centers.

This hypothesis implies that perspective can be implicitly coded in language: silent logophoric operators referring to perspective centers can be present in certain constituents, in particular in the spellout domain of phases to bind anaphors. But this coding varies across languages. Specifically, a series of tests demonstrates that exempt anaphors – thus logophoric operators – can in principle be anteceded by three types of logophoric centers: intellectual (attitude holder), emotional (empathy locus), and perceptual (deictic center); the availability of these types is subject to crosslinguistic variation, along the implicational scale *attitude* > *empathy* > *deixis*.

In particular, logophoric operators can only refer to the first two types in French, the main language of investigation in this paper. I have indeed documented that French anaphors *son propre* and *lui-même* can lack an overt, local c-commanding antecedent, if and only if they refer to attitude holders or empathy loci. They contrast with English or Japanese anaphors that appear to be sensitive to all three types of perspective centers. It is further predicted that in some languages, exempt anaphors can only be anteceded by attitude holders. Detailed crosslinguistic work is needed to test this implicational hypothesis and more generally to shed further light on the implicit coding of perspective in language and its interaction with anaphora.

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