Logophoricity and Locality: a View from French Anaphors*

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Introduction

In a wide range of languages, we observe that the very same elements display two distinct behaviors: sometimes, they are subject to the locality conditions imposed by Condition A of the Binding Theory (Chomsky 1986, i.a.); sometimes, they are exempt from them. I will call the former *plain* anaphors (as in Charnavel & Sportiche 2016), and the latter *exempt* anaphors (as in Pollard & Sag 1992). This is for instance the case of English *himself* (Pollard & Sag 1992, i.a.), French *lui-même* and *son propre* (Charnavel & Sportiche 2016, i.a.), Icelandic *sig* (Maling 1984, i.a.), Mandarin *ziji* (Huang & Liu 2001, i.a.), Japanese *zibun* (Kuroda 1973, i.a.), Turkish *kendi si* or Uyghur *öz* (Major & Özkan 2018), among many others. I will only be concerned with such elements in this article.

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

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

The main goal of this article is to argue instead that a plain anaphor and its exempt counterpart are one and the same object. The observed duality of behavior is not due to the anaphors themselves, but to the nature of their binder. While the binder of a plain anaphor simply needs to satisfy a structural requirement (local c-command), what properties the binder of an exempt anaphor must have is less clear: a second goal – subordinated to the first one – is to examine in detail what binders qualify by revisiting the notion of logophoricity, reaching different

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conclusions than Sells' (1987) seminal work. The primary basis of investigation will be the behavior of French anaphors *lui-même* and *son propre*.¹

The unitary analysis of the plain/exempt dichotomy proposed in this paper takes all instances of anaphors to be plain: they must all obey Condition A. It thus argues that instances of anaphors that seem to be exempt are in fact locally bound via a silent logophoric operator, and all the differences between plain and exempt anaphors derive from the properties of their antecedents, an overt c-commander for plain anaphors, a covert c-commanding logophoric pronoun (introduced by a logophoric operator) for exempt anaphors. That they can have the same form in a variety of languages is therefore not surprising.²

Parsimony considerations make this proposal a desideratum. In this article, it will furthermore be empirically supported by two crucial observations (mainly about French), but ultimately, further crosslinguistic work will have to be done about the conditions governing the distribution of logophoric operators to confirm the hypothesis.

First, exempt anaphors must exhibit logophoric, i.e. perspectival, properties, as noted by many, at least in broad lines (Clements 1975, Sells 1987, i.a.): not only must they be anteceded by a DP denoting a perspective center, but crucially, they must also occur in a constituent whose content is expressed from the perspective of that center. This twofold generalization can be explained, as we will see, by the hypothesis that an exempt anaphor is bound via a covert logophoric operator, which syntactically encodes that the constituent in its scope represents the logophoric center's perspective.

The second observation is based on the surprising constraint holding of exempt anaphors co-occurring in the same local domain: they must exhaustively corefer. As I will explain, this provides independent evidence for the presence of a silent element (a logophoric pronoun) that exhaustively and locally binds all exempt anaphors of the domain. This thus shows that exempt anaphors are in fact subject to the binding conditions imposed by Condition A.

The article is organized as follows. Section 1 presents the issues surrounding exempt anaphora and outlines the proposed solution: apparently exempt anaphors can be distinguished from plain anaphors by five properties; the proposal, guided by parsimony considerations, is to unify these two anaphoric behaviors by reducing the apparent differences between them to the

¹ The French (reflexive) clitic *se* will not be investigated in this article as *se* is not itself an anaphor: *se* not only occurs in reflexive constructions in French, but also in other constructions such as middle or anticausative constructions (cf. Labelle 2008, Sportiche 2014, i.a.).

² The variety of lexical forms exhibiting this dual behavior in French (e.g. *lui-même*, *son propre*) and crosslinguistically (e.g. English *himself*, Mandarin *ziji*, Icelandic *sig*) makes it difficult to reduce this duality to the lexical make-up of anaphors, unfortunately (cf. Safir 1996 vs. Safir 2004, i.a.). In particular, it is not the case that only complex *self*-anaphors exhibit this dual (plain/exempt) behavior: other types of complex anaphors do too (*same*-anaphors or possessive anaphors), as well as simplex anaphors.

nature of their binders (overt DP vs. covert logophoric pronoun introduced by a logophoric operator).

Section 2 describes the interpretive restrictions on exempt anaphors (the first crucial observation above) in order to precisely specify the lexico-semantic properties on these logophoric operators, from which exempt anaphors inherit their interpretive properties. Using independent tests, I examine in detail and motivate what counts as logophoric conditions. This leads me, like Sells (1987), to distinguish between several types of logophoric centers (namely, attitude holder and empathy locus), albeit different ones from his: by excluding deictic perspective, I restrict the notion of logophoricity relevant for exemption (and potentially more generally) to mental perspective.

Section 3 further motivates the hypothesis that exempt anaphors are locally bound (via logophoric operators) as required by Condition A. In particular, exhaustive coreference constraints between exempt anaphors co-occurring in the same local domain (the second observation above) provide independent evidence for the presence of a unique local (logophoric) A-binder for them. The other properties apparently distinguishing exempt from plain anaphors derive from the presence of this (logophoric) binder, which crucially need not itself be bound by its own antecedent(s).

Section 4 concludes by presenting some crosslinguistic implications and remaining questions.

1. The issue of exempt anaphora

1.1. Identifying exempt anaphors

Anaphors such as English *himself* have been standardly defined as being subject to Condition A of the Binding Theory (Chomsky 1986, i.a.): they must be bound in a sufficiently local domain (which will be defined below) as illustrated in (1).

(1) a. [The moon]_i spins on itself_i.

- (Charnavel & Sportiche 2016)
- b. *[The moon]_i influences [people sensitive to itself_i].
- c. *The satellites of [the earth]; revolve around itself;.

But in a wide variety of languages including English, French, Icelandic, Mandarin, Japanese, Turkish or Uyghur, i.a. (see references above, as well as earlier references like Kuroda 1965, Ross 1970, Postal 1971, Jackendoff 1972, Kuno 1972, Cantrall 1974, i.a.), it has been observed that some instances of anaphors do not obey the locality constraints imposed by

Condition A: under any definition of locality, *himself* and *herself* in (2) are further away from their antecedents than *itself* in (1)b-c.

- (2) a. John_i said to Mary that nobody would doubt that physicists like himself_i were a godsend. (Kuno 1987)
 - b. The picture of herself_i on the front page of the Times made Mary_i's claims seem somewhat ridiculous. (Pollard & Sag 1992)

All attempts to redefine Condition A so as to capture the behavior of both plain and exempt instances of anaphors failed (see Huang & Liu 2001: 144-147 for a review). It is therefore necessary to elaborate a theory of exemption from Condition A (cf. Pollard & Sag 1992, Reinhart & Reuland 1993, i.a.).

This raises a methodological issue: given that plain and exempt anaphors have the same form, how can we tease them apart so as to identify the distribution of plain anaphors (which is required to define Condition A) and that of exempt anaphors (which is required to define a theory of exemption)?

I here adopt Charnavel & Sportiche's (2016) strategy to handle this problem, which consists of using a criterion independent of the definition of Condition A to distinguish between plain and exempt anaphors in a given sentence.³ A property that meets these conditions for French is inanimacy: inanimate anaphors are always plain anaphors. The reasoning behind this idea goes as follows. Many crosslinguistic generalizations have been proposed, showing that the antecedents of exempt anaphors are logophoric centers (Clements 1975, Sells 1987, Pollard & Sag 1992, i.a.). But the definitions of logophoricity proposed in the literature are too vague or too diverse (cf. Clements 1975, Sells 1987, Kuno 1987, Culy 1994, Schlenker 2003, Anand 2006, i.a.) to reliably identify exempt anaphors. Nevertheless, all these generalizations (implicitly) agree on one fact: the referent of the antecedent of an exempt anaphor must be a live person (capable of holding a perspective). This crucially means that conversely, inanimates cannot antecede exempt anaphors, and suggests that logophoric centers cannot be inanimate.

³ The predicate-based theories mentioned above (Pollard & Sag 1992, Reinhart & Reuland 1993; cf. Safir 2004, Reuland 2011, i.a.) attempt to, but do not successfully use independent criteria to distinguish between plain and exempt anaphors (see Charnavel & Sportiche 2016). Moreover, these theories make incorrect predictions for French inanimate anaphors, as shown in detail by Charnavel & Sportiche (2016): they are too weak in leaving unexplained why some anaphors predicted to be exempt according to their theory are in fact ungrammatical; they are too strong in wrongly ruling out all coargumental anaphors not bound by their coargument. It is for these reasons that this type of theory must be abandoned (at least for French). However, the theory of exemption presented in this paper remains indebted to its proponents for the idea of investigating exemption itself.

Inanimacy (used in sentence (1)) thus allows us (at least in French) to draw a dividing line between plain and exempt anaphors.⁴ First, the syntactic distribution of inanimate anaphors can be used as the empirical basis for determining the generalization to be explained by Condition A. This is Charnavel & Sportiche's (2016) strategy: based on the behavior of inanimate anaphors in French, they determine the generalization describing the distribution of plain anaphors, and this new generalization motivates a reformulation of Binding Condition A in terms of Phase Theory.

- (3) Descriptive formulation of Condition A (cf. Charnavel & Sportiche 2016:65) A plain anaphor must be bound within an XP containing it that is no larger than a tensed TP and where no subject intervenes between the anaphor and its binder.
- (4) Phase-based formulation of Condition A (cf. Charnavel & Sportiche 2016:71) An anaphor must be bound within the smallest spellout domain containing it.

Conversely, (in)animacy can be used to identify exempt anaphors and determine the generalization to be explained by the theory of exemption. But animacy itself is not sufficient (a logophoric center requires further properties, as we will see in section 2): we can only be certain that an anaphor is exempt if it occurs in a configuration disallowing inanimate anaphors. Specifically, given Charnavel & Sportiche's (2016) results, a French anaphor is necessarily exempt if it is not bound (i.e. if it is not c-commanded by its antecedent or if it does not have any antecedent in the sentence) or if its binder is outside its spellout domain (tensed TP or any other XP (vP, DP, etc) with subject).

- (5) Theory-neutral way to identify exempt anaphors An anaphor is exempt if it is animate and appears in a configuration disallowing inanimate anaphors.
- (6) Distribution of exempt anaphors based on Charnavel & Sportiche's 2016 results An anaphor is exempt if it is not bound or if its binder is outside the smallest spellout domain containing it.

We thus have a reliable way to empirically identify (some⁵) exempt anaphors in French. This will be our basis of investigation for elaborating a theory of exemption.⁶

⁴ See section 2.4 for diagnostics distinguishing between plain and exempt anaphors in languages that lack inanimate

At this point, nothing indicates that the sets of configurations for plain and exempt anaphors must be disjoint: it may well be the case that an exempt (logophoric) anaphor can also occur in a position allowing an inanimate anaphor. See section 2.4 for discussion about locally bound animate anaphors.

As mentioned in Charnavel & Sportiche (2016), there is one further caveat to take into consideration for the anaphor lui-même. We observe, as illustrated in (i) and (ii) below, that unless it is heavily stressed, lui-même is not acceptable when it can be replaced with a weaker form such as the clitic reflexive se (subject-oriented cliticizable argument) or the object clitics le and lui. This falls under a generalization discussed by Cardinaletti & Starke (1999): all else relevant equal, if a weaker form of the target element is available, it must be used, thus blocking the use of a stronger form.

1.2. Differences between plain and exempt anaphors

Plain and exempt anaphors are reported to superficially differ in five ways (cf. Bouchard 1984, Lebeaux 1984, i.a.). Below, these differences are illustrated in French using the strategy explained above: the plain anaphor cases use inanimate anaphors, the exempt cases animate ones.

First, by definition, plain anaphors are visibly subject to locality requirements, while exempt anaphors are not. For instance, the French inanimate anaphor son propre 'its own' must have an antecedent that c-commands it and appears in its local domain.

- (7) a. [Cette auberge]; fait de l'ombre à son; propre jardin et au jardin de la maison voisine. '[This inn]_i gives shade to its_i own garden and to the garden of the neighboring house.'8
 - b. *[Cette auberge]; bénéficie du fait que les touristes préfèrent son; propre jardin à ceux des auberges voisines.
 - '*[This inn]_i benefits from the fact that the tourists prefer its_i own garden to that of the neighboring inns.'
 - c. *Les gérants de [cette auberge]; s'occupent de son; propre jardin et de celui des auberges voisines.
 - "The managers of [this inn]; take care of its; own garden and that of the neighboring inns."

By contrast, exempt anaphors can escape such locality conditions.

Importantly, this condition is independent of both Condition A and exemption from it. For our purposes, this means that to observe the behavior of exempt *lui-même*, we need to exclude cases where *lui-même* occurs in configurations licensing se, le or lui. This will be taken into consideration in the rest of the article.

(i) a. Luc_i s_i'examine.

b. *Luc_i examine lui_i-même.

c. Luc_i pense que Lise {l_i'/*s_i'} examinera.

d. *Luc_i pense que Lise examinera lui_i-même.

(ii) a. *Luc_i se_i dépend.

b. Luc_i dépend de lui_i-même.

c. *Luc $_i$ pense que Lise $\{se_i/le_i/lui_i\}$ dépend.

'Luc_i is examining himself_i.' "*Luc; is examining himself;."

'Luc_i thinks that Lise will examine him_i(*self).'

"*Luc; thinks that Lise will examine himself;."

"*Luc_i depends on himself_i."

'Luc_i depends on himself_i.'

'*Luc_i thinks that Lise dépends on him_i(self).'

d. Luc_i pense que Lise dépend de lui_i-même. 'Luc_i thinks that Lise depends on himself_i.'

Furthermore, note that English *himself* is subject to a similar constraint: as shown in Ahn (2015), plain *himself* exhibits special prosodic properties in configurations that would license clitics. This implies that exempt himself, just like luimême, cannot appear in these configurations (see Charnavel & Sportiche 2016, Charnavel & Żlogar 2016).

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. Note that as explained in Charnavel (2012: chapter 1), the judgments of this kind of sentences were checked using a systematically controlled questionnaire administered to 86 native speakers of French, who had to provide grammaticality judgments based on a Likert scale. As is standard, the star (*) is used contrastively: starred sentences are significantly more degraded than corresponding sentences without a star. Statistical significance was calculated using t-tests and the traditional p-value of 0.05 was used as the cutoff for statistical

⁸ Throughout the paper, the English translations are simply meant as glosses of the French examples: the (absence of) stars indicated in the English translations reflect(s) the French judgments. No stand is taken here on the judgment of the corresponding English sentences.

- (8) a. Marie, fait de l'ombre à sa, propre fille et à la fille de la voisine.
 - 'Mary_i is in the light of her_i own daughter and the neighbor's daughter.'
 - b. Marie_i bénéficie du fait que les touristes préfèrent son_i propre hôtel à ceux de ses concurrents.
 - 'Mary_i benefits from the fact that the tourists prefer her_i own hotel to those of the competitors.'
 - c. Les parents de Marie, s'occupent de son, propre avenir et de celui de ses cousins.
 - 'Mary_i's parents take care of her_i own future and that of her cousins.'

Second, plain anaphors must be exhaustively bound, while exempt anaphors can have partial or split antecedents (see Helke 1970, Bouchard 1984, Lebeaux 1984, i.a.): the (im)possibility of inclusive reference distinguishes between plain and exempt anaphors, as shown by the contrast between (9) and (10).

- (9) a. *[L'auberge]_i qui jouxte [la crêperie]_k fait de l'ombre à leur_{i+k} propre jardin et au jardin de la maison voisine.
 - '*[The inn]_i that is next to [the creperie]_k gives shade to their_{i+k} own garden and to the garden of the neighboring house.'
 - b. *[L'auberge]_i et la crêperie font de l'ombre à son_i propre jardin et au jardin de la maison voisine.
 - '*[The inn]_i and the creperie give shade to its_i own garden and to the garden of the neighboring house.'
- (10) a. Marie_i, qui est à côté de Paul_k, fait de l'ombre à leur_{i+k} propre fille et à la fille de la voisine.
 - 'Mary_i, who stands next to $Paul_k$, is in the light of their_{i+k} own daughter and the neighbor's daughter.'
 - b. Marie_i et Paul font de l'ombre à sa_i propre fille et à la fille de la voisine.
 - 'Mary_i and Paul are in the light of her_i own daughter and the neighbor's daughter.'

Third, plain anaphors only give rise to sloppy readings in ellipsis and focus constructions, while exempt anaphors can also trigger strict readings (Lebeaux 1984, Reinhart & Reuland 1993, i.a.). This is illustrated using the French anaphor *elle-même* '≈herself' in (11) vs. (12). Apparent exceptions will be discussed in section 3.4.2.

- (11) a. [Ta page internet]_i contient beaucoup de liens vers elle_i-même, et la mienne aussi. '[Your webpage]_i contains many links towards itself_i and mine does too (contain many links towards {itself/*your webpage}).'
 - b. Seule [ta page internet] $_{i}$ contient des liens vers elle $_{i}$ -même.
 - 'Only [your webpage]_i contains links towards itself_i (the other webpages do not contain links towards {themselves/*your webpage}).'

- (12) a. Simone_i aime les photos d'elle_i-même et sa chère soeur aussi.

 'Simone_i likes pictures of herself_i and her dear sister does too (like pictures of {herself/Simone}).'
 - b. Seule Simone_i aime les photos d'elle_i-même.
 'Only Simone_i likes pictures of herself_i (the other people do not like pictures of {themselves/Simone}).'

Fourth, plain anaphors, unlike exempt anaphors, seem to be in complementary distribution with pronouns (Bouchard 1984, Lebeaux 1984, i.a.), on the basis of examples such as (13) vs. (14).

- (13) [La Terre]_i tourne sur elle_i-*(même). '[The earth]_i spins on it_i*(self).'
- (14) Marie_i subit l'influence des nombreux politiciens qui tournent autour d'elle_i-(même). 'Mary_i is subject to the influence of the many politicians that revolve around her_i(self).'

To these distributional properties distinguishing between plain and exempt anaphors, we can add – as noted in the previous section – an interpretive difference: unlike plain anaphors, exempt anaphors are characterized by their logophoric interpretation (Clements 1975, Sells 1987, Pollard & Sag 1992, i.a.). In the previous examples (i.e. 0b-c, (10), (12) and (14)), exempt *son propre* and *lui-même* are subject to perspectival conditions: the phrase containing the exempt anaphor must be understood as expressing the perspective of its antecedent, as will be detailed in section 2.

1.3. Unifying plain and exempt anaphors: the logophoric operator hypothesis

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

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

⁹ Focus or intensification, however, is neither sufficient nor necessary for exemption (*pace* Reinhart & Reuland 1993, Baker 1995, i.a.). Focus on inanimate anaphors (e.g. on *son propre* and *lui-même* in the examples above) does not make them exempt (see Postal 2006 for relevant examples with English *itself*). Conversely, exempt anaphors are not necessarily focused as shown by Zribi-Hertz (1995) based on *lui-même* and *himself*.

One possible type of account locates the plain/exempt differences in the anaphors themselves, e.g. by postulating that anaphors are optionally underspecified for *phi*-features or some referential feature (Hicks 2009, i.a.). When so underspecified, they must AGREE with an antecedent to become interpretable (the locality of AGREE guaranteeing the locality of binding). But this would say nothing as to why fully specified anaphors would have to be perspectival rather than akin to plain pronouns. A variant of this idea is to assume anaphors to be optionally marked as logophoric, e.g. [+log], and further assume that only [-log] anaphors are subject to locality requirements. But this would leave unexplained the correlation between locality and non-logophoricity and would require postulating massive homonymy of the same type in various unrelated languages. A combination of the two variants taking fully specified anaphors to be [+log] (cf. Sells 1987, Anand 2006, i.a.) would similarly stipulate the correlation between non-locality and logophoricity as we will see in more detail in sections 2.4 and 3.1.

The alternative defended here is to reduce all distributional and interpretive differences between plain and exempt anaphors to one – their binder. An anaphor is seen as plain if it has a local overt DP antecedent; it is seen as exempt if it is bound by a silent logophoric pronoun introduced by a syntactically represented logophoric operator. The correlation between logophoricity and non-locality follows: an exempt anaphor exhibits a logophoric interpretation because its binder is logophoric, and it superficially appears not to be locally bound because its local binder is silent. In other words, the illusion is created that an exempt anaphor need not be bound because the local binding dependency between the anaphor and its silent logophoric binder is misconstrued as a syntactically unconstrained relation between the anaphor and the antecedent of the logophoric binder (which need not be syntactically present, let alone be a c-commander).

From this point of view, there is a single anaphor which obeys Condition A in two different ways yielding the plain/exempt distinction. That plain and exempt anaphors are morphologically identical in so many languages is therefore unsurprising: they are one and the same element.

More specifically, given the formulation of Condition A provided in section 1.1, the present proposal consists in positing (the possibility of) a perspectival projection LogP in each spellout domain (TP, vP, DP and any other XP with subject, see Charnavel & Sportiche 2016), which can host a silent logophoric operator; the intuition behind this is that each phase can be specified as being presented from some individual(s)'s perspective (as will be detailed in section 3.3). This logophoric operator is a syntactic head OP_{LOG} that selects a silent logophoric pronoun prolog as

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¹⁰ This option, or the next one in the text would also say nothing as to why exempt anaphors within the same local domain must be exhaustively coreferential (as will be explained in section 3.2). Furthermore, see Charnavel & Sportiche (2016: section 5.2) for reasons casting doubts on an AGREE-based solution for anaphor binding.

subject and requires that its complement α be presented from the first-personal perspective of its subject (as will be specified in section 2).

(15) a.
$$[XP] [YP] [LogP] pro_{log-i} OP_{LOG} [\alpha ... exempt anaphor_i ...]]]]]$$
 \leftarrow

phase edge spellout domain

b. $[OP_{LOG}] = \lambda \alpha. \lambda x. \alpha$ from x's first-personal perspective

As shown in (15)a, an exempt anaphor is bound by the logophoric pronoun introduced by the logophoric operator in its spellout domain, thus obeying Condition A. This proposal is independently justified, as we will see in section 3.2, by the fact that an exempt anaphor must be exhaustively bound by its local binder (pro_{log}), just like a plain anaphor must.

The proposal in (15) also derives the interpretive constraints on exempt anaphors: an exempt anaphor refers to a logophoric center because its binder – the logophoric pronoun pro_{log} – does; the domain of an exempt anaphor must express the first-personal perspective of that center because the complement α of the logophoric operator (which contains the anaphor) must. As we will see in section 2, the referential value of the logophoric center is determined pragmatically, on the basis of discourse and syntactico-semantic factors (cf. Anand & Hsieh 2005, Anand 2006, i.a.). The logophoric operator thus provides a syntactic means of referencing the logophoric center and representing its first-personal perspective in each spellout domain.

This solution to exemption is inspired by several existing ideas in the literature (as we will see in more detail in sections 2.4. and 3.1). First, the idea of attributing the apparent violation of Condition A to an invisible mediation between exempt anaphors and their antecedents has been explored using the notion of movement (Pica 1987, Battistella 1989, Cole et al. 1990, Huang & Tang 1991, Huang & Liu 2001, i.a.). Second, the introduction of logophoric operators and/or perspectival projections has been proposed to account for the distribution of so-called logophoric pronouns (see Koopman & Sportiche 1989, Anand 2006, i.a.) and to syntactically represent point of view (see Jayaseelan 1998, Speas & Tenny 2003, Speas 2004, Nishigauchi 2014, Sundaresan 2012, i.a.); in the same vein, a covert attitude operator is postulated in Sharvit (2008) to deal with the properties of Free Indirect Discourse.

But to my knowledge, these two ideas have never been combined so as to simultaneously explain and correlate the logophoricity and the apparent non-locality of exempt anaphors (a partial exception being Huang & Liu 2001). Furthermore, all these accounts (including Huang & Liu

2001) fail, as they stand, to correctly derive the distribution of exempt anaphors (at least in French), as we will see in sections 2.4. and 3.1.

The rest of the paper will provide more detail and motivation for this proposal. The next section (section 2) examines the interpretive constraints on exempt anaphors to explain and motivate the logophoric nature of their binder. Section 3 provides evidence for the local binding relation between them.

2. The logophoric properties of exempt anaphors: what they are and how they are derived

As mentioned above, the idea that exempt anaphors are similar to logophoric pronouns in having to refer to the logophoric center of their domain is by no means new. After the term *logophor* was coined by Hagège (1974) to name specific pronouns in West-African languages referring to the author of thoughts in an indirect discourse, Clements (1975) noticed the resemblance of these pronouns with exempt anaphors: both types of elements refer to "the individual whose speech, thoughts or feelings are reported or reflected in a given linguistic context" (Clements 1975:141; for a review about the relation between logophoric pronouns and exempt anaphors, see Charnavel, Huang, Cole & Hermon, 2017: section 5). Since then (and even before), many have observed that the distribution of anaphors in various languages is constrained by discourse notions such as point of view or perspective (see Kuno 1972, Kuroda 1973, Cantrall 1974, Thráinsson 1976, Kuno 1987, Sells 1987, Zribi-Hertz 1989, Sigurðsson 1990, Iida 1992, Pollard & Sag 1992, Jayaseelan 1998, Huang & Liu 2001, Anand 2006, Oshima 2006, Sundaresan 2012, Nishigauchi 2014, i.a.). But all these studies suffer from at least one of the two following issues.

First, the distinction between plain and exempt anaphors is left unclear: in some cases (e.g. Kuno 1987, Nishigauchi 2014), it is even suggested that all anaphors are subject to perspectival conditions; when it is assumed otherwise (e.g. Sells 1987, Zribi-Hertz 1989), no independent criterion is proposed to reliably identify exempt anaphors. Second, most (but not all, see in particular Sells 1987 and Anand 2006) of these studies rely on vague and intuitive notions of logophoricity. As a result, we in fact do not know whether all exempt anaphors or just some of them have to be perspectival. Neither do we know precisely what it means to be perspectival.

The main goal of this section is to show that the intuition about exempt anaphors having to be perspectival is correct (in French) when all relevant factors are controlled and to specify the notion of perspective that is relevant for exemption (in French). As explained in the previous section, I have defined a strategy for identifying exempt anaphors; in this section, I will combine it with a variety of syntactic tests to nail down the precise notion of logophoricity involved with

exempt anaphors. As these tests will be performed on the understudied French anaphors *son propre* and *lui-même*, ¹¹ this will furthermore extend our crosslinguistic knowledge of exempt anaphors.

Specifically, I will show that exempt anaphors in French can be anteceded by two types of antecedents: attitude holders (including the speaker), which hold an intellectual perspective (see section 2.1), and empathy loci, which have a perceptual or emotional perspective (see section 2.2). Crucially, we will further see that only these two types of perspective centers qualify as antecedents of exempt anaphors; in particular, deictic centers, which are spatial points of reference, do however not license exempt anaphors (see section 2.3). The idea of distinguishing between different subtypes of logophoric antecedents for exempt anaphors is inspired by Sells (1987), but the specific subtypes proposed are distinct from his, which we will see are inappropriate (at least for French). Furthermore, exempt anaphors, I will show, can only take these antecedents if they occur in a syntactic domain expressing the first-personal perspective of these antecedents. I will establish this twofold generalization by designing and applying tests for identifying an attitude holder in its (*de se*) attitude context and an empathy locus in its empathy context.

- (16) Empirical generalizations to be established (logophoric interpretation of French exempt anaphors, see sections 2.1-2.3)
 - An exempt anaphor must be anteceded by an attitude holder or an empathy locus (logophoric antecedent).
 - The constituent containing an exempt anaphor has to express the first-personal perspective of its antecedent (logophoric domain).

(17) Taxonomy of logophoricity relevant for exemption in French (sections 2.1-2.3)

-		F^{****}	(200110112 = 100)	
	Logophoric antecedent	Logophoric domain	Tests	
	Attitude holder (section 2.1.)	De se attitude	First-person morphology Anti-attitudinal epithets Anti-attitudinal prepositional clitics (en/y)	
	Empathy locus (section 2.2.)	First-personal perception	Empathic son cher ('his dear')	

These interpretive constraints of exempt anaphors will lead me to propose (in section 2.4) that they are in the scope of a logophoric operator OP_{LOG} and that they are bound by the silent logophoric pronoun pro_{log} it introduces (as its subject). The binding of exempt anaphors by pro_{log} will derive their referential constraints, assuming that pro_{log} references in the syntax the value of the local logophoric center, which can be an attitude holder or an empathy locus. The occurrence

¹¹ To my knowledge, only Zribi-Hertz (1990, 1995) explores the potential logophoricity of one of these anaphors, namely *lui-même*. But she neither proposes an independent way of identifying exempt *lui-même*, nor precise tests for identifying a logophoric center. Another French element that has been examined as an instance of exempt anaphor is the generic reflexive *soi* (Pica 1987, Zribi-Hertz 1990, i.a.), but it has not been related to logophoricity in these studies (see Charnavel 2018a for a logophoric analysis of *soi*).

of exempt anaphors within the scope of OP_{LOG} will explain why they must occur in the logophoric domain of their antecedent, assuming that OP_{LOG} imposes the first-personal perspective of the local logophoric center on its domain (cf. Speas 2004, Anand 2006, Sharvit 2008, i.a.).

- (18) Analysis of exempt anaphors to be proposed (logophoric operator hypothesis section 2.4)
 - Logophoric domain: an exempt anaphor is in the scope of a logophoric operator OP_{LOG}, which imposes on its complement the first-personal perspective of the referent of its subject pro_{log}.
 - Logophoric antecedent: an exempt anaphor is bound by the logophoric pronoun prolog subject of OP_{LOG}, which refers to the local logophoric center.

By merging *de se* attitude holders and empathy loci into a single notion of logophoric center excluding deictic centers, my proposal is thus to restrict the notion of logophoricity relevant for exemption to mental, first-personal perspective (contrary to the most articulated study on the topic, Sells 1987). In section 2.5, I will suggest that this restriction can be naturally explained by the fact that only mental perspective has a linguistic content (expressed in the logophoric domain) and I will discuss the extension of this notion of logophoricity to other elements than exempt anaphors, which could independently justify this categorization beyond anaphora.

2.1. First subtype of logophoricity relevant for exemption: de se attitude

This subsection is devoted to establishing the following threefold generalization by using tests detecting attitude holders in their attitude contexts as well as *de se* readings:

- (19) Exemption under attitudinal logophoricity
 - An exempt anaphor can refer to an attitude holder.
 - There is no syntactic constraint as to where this attitude holder is structurally located (e.g. it need not be the closest attitude holder).
 - The domain of that anaphor must express the perspective of that attitude holder in a *de se* attitude.

Note that the use of "can" in the first point is due to the fact that another type of logophoric antecedent will be defined in the next subsection. Also, the notion of domain is left unspecified at this point: unless noted otherwise, it will be sufficient to use the smallest clause containing the anaphor as the relevant domain in this section, even if ultimately, that domain will be restricted to the spellout domain of the anaphor; evidence for this restriction will be provided in section 3.¹²

¹² In section 3.3, we will see that perspective shift within a clause is possible, but only if the discourse and syntactico-semantic conditions allow it. In this section, we will avoid these cases unless noted otherwise.

Finally, it will be straightforward to identify an anaphor as exempt in such cases, as attitude contexts are always explicitly or implicitly embedded in such a way that the attitude holder does not (overtly) occur in the local binding domain of the anaphor.

2.1.1. Speaker

In the absence of any intensional predicate, sentences express the speaker's attitude. This most primitive type of attitude holder can serve as an antecedent for exempt anaphors (cf. Ross 1970, Cantrall 1974, Kuno 1987, i.a., for English myself; Huang & Liu 2001, Anand & Hsieh 2005, i.a., for Mandarin ziji; Nishigauchi 2014, i.a., for Japanese zibun, i.a.). In French, it is easy to identify these exempt anaphors: they are morphologically marked as first-person. First-person morphology is thus a simple diagnostic identifying anaphors that are in appropriate logophoric conditions for exemption.

- (20) Les enfants de ma nouvelle compagne ne pourront jamais remplacer mes propres enfants. 'My new partner's children will never be able to replace my own children.'
- (21) Les gens comme moi-même vont être bien affligés de cette nouvelle. 'People like myself will be deeply distressed by the news.'
- (22) First-person test: 13 an anaphor can be exempt if it is marked first-person.

2.1.2. Third-person attitude holder

Third-person attitude holders are introduced by intensional verbs such as 'say' or 'think' (as their subjects) or by any other type of intensional expression like 'opinion' or 'according to' (or by contextual information such as free indirect discourse contexts, as we will see). The propositional complement of these expressions – the attitude context – denotes the mental attitude of the attitude holder. Attitude contexts have been thoroughly investigated in the philosophical and semantic literature on independent grounds (for a review, see Pearson, to appear, i.a.). In particular, several specific properties have been shown to characterize attitude contexts. First, substitution of coreferring terms within attitude contexts might change the truth value of the attitude report (Frege 1892): this is because attitude expressions give rise to the *de re/de dicto* distinction. Second, nonreferring terms (e.g. unicorn) do not necessarily make the sentence containing them false when

¹³ The tests designed in this section are meant to identify sufficient logophoric conditions for exemption. The use of 'can' nevertheless reflects the fact that any other condition (independent of binding or exemption) applying to the anaphor under investigation must also be met to make it acceptable. For instance, the use of lui-même (cf. himself) is subject to the constraint described in fn. 6. Furthermore, we will see in section 3.2 that co-occurrence of several exempt anaphors in the same domain must conform to exhaustive coreference constraints.

they are embedded in attitude contexts (Pearson, to appear, i.a.). Another property of these contexts is that evaluative expressions (e.g. epithets, expressives, appositives) contained in them can be evaluated either by the speaker or by the overt, third-person attitude holder (Sæbø 2011, i.a.).

All these properties can be used as tests to identify attitude contexts. For our purposes, this is insufficient: we must also show that (in the absence of other logophoric centers) an exempt anaphor must refer to the attitude holder of the attitude context containing it. We thus need a test that can specifically diagnose attitude holders in their attitude contexts. Such a test can be defined based on the observation that an epithet occurring in an attitude context cannot refer to the attitude holder of that context (cf. Ruwet 1990, Narahara 1991, Pica 1994, Dubinsky & Hamilton 1998, 14 Patel-Grosz 2012, Yashima 2015, i.a.). This is illustrated in (23)-(24) (the corresponding English examples are from Dubinsky & Hamilton 1998:688): the epithet *cet idiot* 'the idiot' cannot refer to John in (23)a-(24)a where John is the relevant attitude holder (subject of *parlait* 'told'; complement of *d'après* 'according to'), but it can in (23)-(24)b where John is not an attitude holder (subject of *a renversé* 'ran over'; complement of *à propos de* 'speaking of'). This minimal contrast shows that epithets are not subject to Condition C, but to anti-attitudinality, at least. 15

- (23) a. *Jean_i nous parlait d'un homme qui essayait d'indiquer le chemin à [cet idiot]_i.
 - "*John_i told us of a man who was trying to give [the idiot]_i directions."
 - b. Jean_i a renversé un homme qui essayait d'indiquer le chemin à [cet idiot]_i.
 - 'John $_i$ ran over a man who was trying to give [the idiot] $_i$ directions.'
- (24) a. *D'après Jean_i, [cet idiot]_i est marié à un génie.
 - "*According to John_i, [the idiot]_i is married to a genius."
 - b. A propos de Jean_i, [cet idiot]_i est marié à un génie. 'Speaking of John_i, [the idiot]_i is married to a genius.'
- (25) Anti-attitudinality of epithets: an epithet is unacceptable in an attitude context if it refers to the attitude holder of that context.

The following examples further demonstrate that epithets are prohibited from referring to attitude holders only if they occur in the corresponding attitude context: *l'idiot* 'the idiot' is

the few speakers who do accept epithets when evaluated from the speaker's perspective, this needs to be controlled for when using the epithet test.

15 Dubinsky & Hamilton (1998) claim that epithets are not only subject to antilogophoricity, but also to Condition B

into account to perform the epithet test.

(see also Patel-Grosz 2012, Yashima 2015, Nediger 2017, i.a.). This additional constraint on epithets must be taken

¹⁴ Dubinsky & Hamilton's (1998:689) "antilogophoricity" constraint on epithets states that "an epithet must not be anteceded by an individual from whose perspective the attributive content of the epithet is evaluated". But for most speakers, even if the attributive content of the epithet is intended to be evaluated from the speaker's perspective, not from the third-person attitude holder's, an epithet is still unacceptable when referring to that attitude holder: in (23)a and (24)a, *the idiot* is not acceptable whether it is intended to be evaluated by John or by the speaker. That's why their notion of antilogophoricity must be strengthened into that of anti-attitudinality, namely, epithets occurring in an attitude context cannot refer to the attitude holder of that context. This is the basis for my epithet test, but note that for

acceptable in (26)-(27) even if it refers to the attitude holder (subject of *penser* 'think'), because it is outside the (bracketed) domain denoting his attitude.

- (26) L'idiot pense que [les voisins l'aideront]. 'The idiot thinks that [the neighbors will help him].'
- (27) Le fait que Jean_i pensait que [les voisins l'aideraient] n'a pas sauvé l'idiot_i. 'The fact that John_i thought that [the neighbors would help him] did not save the idiot_i.'

The unacceptability of epithets can thus be used to detect third-person attitude holders in their attitude context and show that they can antecede exempt anaphors there: this can be guaranteed by replacing an unacceptable epithet with the anaphor, or by inserting the anaphor in the same domain as the epithet, namely – in standard cases – in the smallest clause containing it (but see footnote 12).

(28) Epithet test

- First variant: an exempt anaphor can be acceptable if replacing it with a coreferring epithet makes the sentence unacceptable. 16
- Second variant: an exempt anaphor can be acceptable if inserting a coreferring epithet in its domain makes the sentence unacceptable. 17

The two variants are respectively applied in (29)b and (29)c to test (29)a: the unacceptability of the epithet *cet idiot* 'the idiot' when it is intended to refer to Robert shows that the anaphor *son propre* in (29)a can be exempt because it is anteceded by the attitude holder of its domain.

(29) a. Robert $_i$ dit que $son_{i/k}$ rival a voté pour son_i propre projet.

'Robert_i says that his_{i/k} rival voted for his_i own project.'

b. Robert_i dit que son_{i/k} rival a voté pour le projet de [cet idiot]*_{i/k}. 'Robert_i says that his_{i/k} rival voted for [the idiot]*_{i/k}'s project.'

c. Robert_i dit que le rival de [cet idiot]*_{i/k} a voté pour son_i propre projet.

'Robert_i says that the rival of [the idiot]*_{i/k} voted for his_i own project.'

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¹⁶ The fact that it is an exempt anaphor (i.e. an anaphor that is not overtly locally bound) that is replaced with the epithet ensures that any unacceptability that may arise is not due to a Condition B violation (see fn. 15). Furthermore, note that the use of "can" in the definition of the test is not only due to the fact that other independent constraints on the anaphor under investigation must be obeyed (see fn. 13), but also that exempt anaphors referring to attitude holders must be read *de se* (see section 2.1.4). Given that epithets can refer to the attitude holder of their context in non *de se* contexts (see Schlenker 1999, Patel-Grosz 2012, i.a.), this latter point can be controlled for by keeping the reading constant when replacing the anaphor with the epithet.

¹⁷ Both variants of the test can be used for obligatorily attitudinal contexts: in these cases, the unacceptability (resp. acceptability) of the epithet indeed entails the acceptability (resp. unacceptability) of the anaphor. However, only the second variant is reliable for optionally attitudinal contexts: if a given clause can either be interpreted as attitudinal or not attitudinal (e.g. *because*-clauses in Charnavel 2018c), the acceptability of the epithet only entails the unacceptability of the anaphor (and vice versa) if the interpretation remains constant, which is guaranteed under the second variant of the test (see Charnavel to appear: chapter 3, for further tests to be used in such cases).

The same tests are applied in (30)b-c to test (30)a involving the exempt anaphor *lui-même*.

- (30) a. Selon Eric_i, ses_{i/k} enfants ne dépendent que de lui_i-même.
 - 'According to Erici, hisi/k children only depend on himselfi.'
 - b. Selon Erici, ses_{i/k} enfants ne dépendent que de [cet imbécile]*_{i/k}.
 - 'According to Eric_i, his_{i/k} children only depend on [the fool]*_{i/k}.'
 - c. Selon Erici, les enfants de [cet imbécile]*i/k ne dépendent que de luii-même.
 - 'According to Erici, [the fool]*i/k's children only depend on himselfi.'

Ruwet (1990) shows that the French prepositional clitics en and y (' \approx of him/her/it') are subject to the same anti-attitudinal constraint as epithets: ¹⁸ in the sentences below, *en* and *y* can only refer to Emile when Emile is not the attitude holder of their clause, as in (31)b-(32)b vs. (31)a-(32)a (the difference between the attitude verb *penser* 'think' and the non-attitude verb *mériter* 'deserve' was noticed by Ruwet 1990).

- (31) a. Emile_k pense que Sophie_i en*_{k/m} est amoureuse.¹⁹
 - 'Emile_k thinks that Sophie_i is in love with him*_{k/m}.'
 - b. Emile_k mérite que Sophie_i en_{k/m} tombe amoureuse.
 - 'Emile_k deserves Sophie_i falling in love with him_{k/m}.'
- (32) a. Emile_k pense que Sophie_i $y_{*k/m}$ pense.
 - 'Emile_k thinks that Sophie_i thinks about him*_{k/m}.'
 - b. Emile_k mérite que Sophie_i $y_{k/m}$ pense.
 - 'Emile_k deserves Sophie_i thinking about him_{k/m}.'

Another test specific to French can thus be devised on the basis of these clitics to identify attitudinal exempt anaphors. Note that the restrictive distribution of these clitics makes it less widely applicable than the epithet test.

- (33) French prepositional clitic test: an exempt anaphor can be acceptable if replacing it with a coreferring prepositional clitic *en* or *y* makes the sentence unacceptable.²⁰
- (34) a. Sonia; craint que Julien ne soit amoureux d'elle;-même.
 - 'Sonia; is afraid that Julien is in love with herself;.'
 - b. Sonia; craint que Julien n'en*i/k soit amoureux.
 - 'Sonia_i is afraid that Julien is in love with her*_{i/k}.'

 $[\]frac{18}{12}$ The demonstrative pronoun *ce* also seems to be subject to similar constraints (see Coppieters 1982).

¹⁹ Not all native speakers of French can use *en* or *y* to refer to human beings. Since this dialect (which is the prescriptive norm) is irrelevant for anti-attitudinal *en* or *y*, I ignore it here.

20 For the same reasons as in the case of epithets (see fn. 16-17), the interpretation must be kept constant to make the

test reliable in all cases.

Epithets and en/y clitics, which cannot refer to the attitude holder of their context, can thus be used as tests to reliably identify anaphors that are in attitudinal conditions for exemption, and the application of these tests to the exempt anaphors $son\ propre$ and lui-même confirms that they can be anteceded by the attitude holders of their context. As we will identify another type of logophoric antecedent for exempt anaphors, these tests are not bi-directional: the acceptability of epithets or en/y is not sufficient (but only necessary) to show that (co-occurring and coreferring) anaphors cannot be exempt. The following example, where any other type of logophoric center has been excluded, 21 nevertheless illustrates that the failure of the epithet test (i.e. the epithet is acceptable) can yield ungrammaticality of co-referring exempt anaphors.

(35) a. Luc a dit de Lise_i que les professeurs étaient contents d'elle_i-(*même). 'Luc said about Lise_i that the teachers were happy about her_i(*self).'

b. Luc a dit de Lise_i que les professeurs étaient contents de [cet ange]_i.

'Luc said about Lise_i that the teachers were happy about [that angel]_i.'

The notion of attitude holder as potential antecedent for exempt anaphors (cf. bearer-of-attitude in Giorgi 2006) merges and replaces Sells' (1987:457) notions of Source ('one who is the intentional agent of the communication') and Self ('one whose mental state or attitude the content of the proposition describes'). It is more adequate because attitude holders independently form a natural class and because it makes better predictions about exemption: first, subjects of verbs of saying behave like subjects of verbs of mental attitude as antecedents of (French) exempt anaphors (cf. (29) and (34)) so it seems unnecessary to distinguish between Source and Self;²² conversely, a Source, when it is not an attitude holder, does not license logophoric exemption (at least in French), as shown in (36).

(36) a. Irène tient de Paul_i qu'hier, plusieurs journaux ont parlé [du vantard]_i.

'Irene learned from Paul_i that yesterday, several newspapers talked about [the braggart]_i.'
b. Irène tient de Paul_i qu'hier, plusieurs journaux ont parlé de lui_i-(*même).

'Irene learned from Paul_i that yesterday, several newspapers talked about him_i(*self).'

²¹ Anticipating the next section, Lise is not an empathy locus in (35). Lise is not an attitude addressee either, as for some French speakers, attitude addressees can antecede exempt anaphors (cf. logophoric pronouns in Mapun (Frajzyngier 1985) or in Yoruba (Anand 2006:60), i.a.; exempt anaphors in English (Kuno 1987, i.a.) and marginally in Mandarin (Pan 1997, i.a.), Japanese (Nishigauchi 2014, i.a.) and Icelandic (Sigurðsson 1990, i.a.)). Due to the instability of judgments (cf. Ruwet 1990:64-65), I leave the full exploration of attitude addressees as logophoric centers for further research (see Charnavel (to appear: chapter 3, section 4.3) that reduces addressees to empathy loci). Note that addressees are restricted to second-person pronouns and objects of communicative verbs like *dire* 'say'. Objects of psychological verbs like *convaincre* 'convince', however, behave like attitude holders (cf. Stephenson 2007, Patel-Grosz 2012, Landau 2015, i.a.): they pass the epithet test and the French prepositional clitic test as illustrated in (iii).

⁽iii) Joël a convaincu Carole; que tout le monde voterait pour {elle;-même/*[cette idiote];}. 'Joël convinced Carole; that everybody would vote for {herself;/*[the idiot];}.'

The distinction between Source and Self may however have empirical correlates for logophoric pronouns (Culy 1994, i.a.).

Finally, the notion of attitude holder also includes centers of Free Indirect Discourse (FID), which are introduced by specific discourse conditions (see Banfield 1982, Schlenker 2004, Sharvit 2008, Eckardt 2014, i.a.). The epithet test shows that such centers can also serve as antecedents of exempt anaphors.

- (37) a. Mélanie_i était très inquiète. Comment allait-elle faire? Les enfants de [la pauvre femme]_{#i/k} et ceux du voisin refusaient de l_i'écouter depuis hier.
 - 'Mélanie_i was very worried. How would she manage? [The poor woman]_{#i/k}'s children and the neighbor's had been refusing to listen to her_i since yesterday.'
 - b. Mélanie_i était très inquiète. Comment allait-elle faire? Ses_i propres enfants et ceux du voisin refusaient de l'écouter depuis hier.
 - 'Mélanie_i was very worried. How would she manage? Her_i own children and the neighbor's had been refusing to listen to her since yesterday.'

The discourses in (37)a-b are intended to be read as FID conveying Mélanie's thought. In particular, the indexical *hier* 'yesterday' can be shifted and refer to the day before the day in which Mélanie (vs. the speaker) had her thought (see Banfield 1982, Schlenker 2004, i.a., for the claim that the shifting of time and location indexicals is a property of FID). Under this interpretation, the epithet *la pauvre femme* 'the poor woman' is unacceptable when referring to Mélanie in (37)a, which shows that Mélanie behaves as the attitude holder of the discourse. As predicted by the epithet test, the anaphor *son propre* can therefore be exempt in (37)b under that interpretation.

2.1.3. Multiple embedding of attitude contexts

When an exempt anaphor is contained in an attitude context that is embedded within another one, the anaphor can refer to either of the attitude holders.

- (38) [La mère de Julie]_i pense que {ma/sa_i} propre mère devrait être élue. '[Julie's mother]_i thinks that {my/her_i} own mother should be elected.'
- (39) Christel_i pense qu'Agnès_k a dit que l'avenir de Constant ne dépend que d'elle_{i/k}-même. 'Christel_i thinks that Agnès_k said that Constant's future only depends on herself_{i/k}.'

Sentences like (38) or (39) illustrate that French exempt anaphors need not refer to the closest attitude holder. This has also been observed, among others, for logophoric pronouns in Ewe (Clements 1975:173, Culy 1997:849-850, Pearson 2015:96) and Yoruba (Anand 2006: 59-60), as well as for exempt anaphors in Mandarin (Pan 1997, Huang & Liu 2001, Anand 2006, i.a.), Icelandic (Sells 1987:451, i.a.), Malayalam (Jayaseelan 1998:20), Tamil (Sundaresan 2012:15,38),

Latin (Solberg 2017:20-21) and English (Ross 1970:227, Cantrall 1974:95, Keenan 1988:223, i.a.). Thus, there is no syntactic constraint as to where the attitude holder is structurally located.

In sum, attitude holders constitute a first type of logophoric antecedent that can exempt an anaphor from Condition A. The attitude holder relevant for a given anaphor is determined on the basis of a combination of discourse and syntactico-semantic factors and can be identified using the three tests defined above.

(40) Referential possibilities of exempt anaphors: first generalization

An exempt anaphor can refer to the attitude holder of its domain, which is determined on the basis of discourse and syntactico-semantic constraints and can be identified by various tests (first-person test, epithet test and French prepositional clitic test).

2.1.4. De se attitude

When formulating the epithet and clitic tests, we have specified that exempt anaphors *can* be acceptable if they are anteceded by the thereby diagnosed attitude holders of their context. This is because these French exempt anaphors must furthermore be read *de se*. This *de se* requirement was also observed for other exempt anaphors (e.g. Mandarin *ziji*: see Pan 1997, Huang & Liu 2001, Anand 2006; Italian *proprio*: see Chierchia 1989; Japanese *zibun*: see Oshima 2006; i.a.) and logophoric pronouns (e.g. Yoruba *oun*, see Anand 2006, i.a., vs. Ewe *yè*, see Pearson 2015). It is illustrated in (41) and (42), where the (a) sentences (in which the context imposes a non *de se* reading) contrast with the (b) sentences (where the anaphor is read *de se*).

- (41) [At the beginning of the Marriage of Figaro, Marceline thinks that Figaro was born from unknown parents; at the end, she learns that he is in fact her son.]
 - a. Au début, Marceline, dit que Suzanne va épouser son_{i-de re} (#propre) fils.
 - 'At the beginning, Marceline; says that Suzanne will marry her_{i-de re} (#own) son.'
 - b. A la fin, Marceline $_{i}$ dit que Suzanne va épouser son $_{i\text{-}de\ se}$ (propre) fils.
 - 'At the end, Marceline, says that Suzanne will marry her,i-de se (own) son.'
- (42) a. [Sabine and her father Michel are listening to songs that they recorded, and Sabine is in admiration of the male voice that they take to be her student's. Unbeknownst to them, the male voice is actually Michel's.]

Michel_i a dit que Sabine était fière de lui_{i-de re}-(#même).

- 'Michel_i said that Sabine was proud of him_{i-de re}(#self).'
- b. [Sabine and her father Michel are listening to songs that they recorded, and Sabine is in admiration of Michel's voice.]

Michel_i a dit que Sabine était fière de lui_{i-de se}-(même).

'Michel_i said that Sabine was proud of him_{i-de se}(self).'

²³ *De se* readings are also reported to characterize shifted indexicals (Schlenker 1999, 2003, Anand 2006, i.a.) which are sometimes called logophors (Schlenker 1999, 2003). I do not use this notion of logophor here.

Furthermore, not only exempt anaphors referring to the attitude holder of their domain must be read *de se*, but all other perspectival elements of their domain have to be evaluated from the perspective of that logophoric center.²⁴ For instance, if the subject of the embedded clause in (43)a is presented from the speaker's perspective, thus licensing a first-person exempt anaphor, the adjective *affreuses* 'horrible' must be evaluated by the speaker and the noun *photos* must be read *de re*; if it is presented from the attitude holder Loïc's perspective as in (43)b, the adjective *beaux* 'beautiful' must accordingly be evaluated by Loïc and the noun *portraits* must be read *de dicto*. Mixing perspective is not possible, as illustrated in (43)c-d. In other words, the domain of an exempt anaphor (the subject constituent in (43)) can be logophorically ambiguous (because the logophoric center need not be the closest attitude holder as seen above in section 2.1.3), but cannot be logophorically heterogeneous. This is reminiscent of what happens in Free Indirect Discourse, where pronouns referring to the discourse center must be read *de se*, and *de re* non *de dicto* readings of definite descriptions are prohibited (see Sharvit 2008).

- (43) [Loïc mistakes photos of me (taken from behind) for portraits of himself and finds them beautiful while I think they are horrible]
 - a. Loïc espère que [les affreuses photos de moi-même] vont se vendre.
 - 'Loïc hopes that [the horrible photos of myself] will sell.'
 - b. Lo $\ddot{\text{c}}_i$ espère que [les beaux portraits de lu i_i -même] vont se vendre.
 - 'Loïc_i hopes that [the beautiful portraits of himself_i] will sell.'
 - c. *Loïc espère que [les beaux portraits de moi-même] vont se vendre.
 - '*Loïc hopes that [the beautiful portraits of myself] will sell.'
 - d. *Loïci espère que [les affreuses photos de luii-même] vont se vendre.
 - "*Loïc; hopes that [the horrible photos of himself;] will sell."

The same holds if the speaker is replaced with another third-person attitude holder as in (44).

This seems to include pronouns that corefer with exempt anaphors: examples such as (ivb) suggest that an exempt anaphor cannot co-occur with a coreferring *de re* pronoun in its domain when the pronoun does not c-command the anaphor (when the pronoun does c-command the anaphor, as in (iva), the anaphor may be plain and the presence of *de re* blocking effects depends on the definition of Condition A, cf. Sharvit 2010).

⁽iv) [Mary tells Paul that a certain man and his friends have a very bad influence on Paul's son. Unbeknownst to Paul, this man is Paul himself.]

a. [Paul tells Mary: "we must take this man away from my son"]

[?]Paul dit qu'il faut l'i-de re éloigner ti-de re de soni-de se propre fils.

[&]quot;?Paul_i says that one must take him_{i-de re} away from his_{i-de se} own son."

b. [Paul tells Mary: "we must take this man's friends away from my son"]
?Paul_i dit qu'il faut éloigner ses_{i-de re} amis de son_{i-de se} propre fils.

[&]quot;?Paul_i says that one must take his_{i-de re} friends away from his_{i-de se} own son."

The judgments are subtle, but the fact that (ivb) is no better than (iva) suggests that exempt anaphors behave differently from Anand's 2006 logophoric pronouns, including pronouns in dream reports: the *de re* blocking effects he describes only imply that a logophor cannot be bound by a *de re* element.

- (44) [Loïc mistakes photos of Marie (taken from behind) for portraits of himself and finds them beautiful while Marie thinks they are horrible]
 - a. $Lo\ddot{c}_i$ pense que Marie_k espère que [les affreuses photos d'elle_k-même] vont se vendre. 'Lo \ddot{c}_i thinks that Mary_k hopes that [the horrible photos of herself_k] will sell.'
 - b. Loïc_i pense que Marie_k espère que [les beaux portraits de lui_i-même] vont se vendre. 'Loïc_i thinks that Mary_k hopes that [the beautiful portraits of himself_i] will sell.'
 - c. *Loïc_i pense que Marie_k espère que [les beaux portraits d'elle_k-même] vont se vendre. '*Loïc_i thinks that Mary_k hopes that [the beautiful portraits of herself_k] will sell.'
 - d. *Loïc_i pense que Marie_k espère que [les affreuses photos de lui_i-même] vont se vendre. '*Loïc_i thinks that Mary_k hopes that [the horrible photos of himself_i] will sell.'

Thus, attitudinal exempt anaphors are not only subject to referential constraints, but to further interpretive constraints summarized below.

(45) Interpretive constraints on attitudinal exempt anaphors

The domain of an attitudinal exempt anaphor must express the de se attitude of its antecedent (i.e. all perspectival elements of its domain must be evaluated from the first-

antecedent (i.e. all perspectival elements of its domain must be evaluated from the first-personal perspective of its antecedent).

The same point can be made using appositives, the orientation of which is also sensitive to

The same point can be made using appositives, the orientation of which is also sensitive to the identity of the logophoric center (cf. Harris & Potts 2009, i.a.). In (46), the epithet *cette idiote* 'that idiot' can in principle be evaluated either by the speaker or by the third-person attitude holder *mes amis* 'my friends'. Which one it is determines what is the logophoric center of the appositive and forces the exempt anaphor to *de se* refer to the same logophoric center. For example, if the epithet expresses the speaker's opinion alone, the exempt anaphor in the appositive can only refer to the speaker, not to the attitude holder *mes amis* 'my friend' (and mutatis mutandis if the epithet expresses the attitude holder's opinion alone):

- (46) a. *[Mes amis]_i pensent que Lucie cette idiote_(according to speaker) amoureuse de leur_i propre fils plutôt que du mien est une fille remarquable.
 - '*[My friends]_i think that Lucy that idiot_(according to speaker) in love with their_i own son rather than mine is a remarkable woman.'
 - b. Mes amis pensent que Lucie cette idiote_(according to speaker) amoureuse de leur fils plutôt que de mon propre fils est une fille remarquable.
 - 'My friends think that Lucy that $idiot_{(according\ to\ speaker)}$ in love with their son rather than my own is a remarkable woman.'

In sum, these examples show that there is only one logophoric center in the domain of an exempt anaphor (which is smaller than the clause here, see section 3.3 for further discussion about this). This is one reason why several exempt anaphors in the same domain must co-refer (cf. Pollard & Sag 1992, Huang & Liu 2001, i.a.) as illustrated below. The other reason will be discussed in section 3.2.

- (47) *Julie_i pense que ma propre mère et sa_i propre mère devraient se parler. '*Julie_i thinks that my own mother and her_i own mother should talk.'
- (48) *Christel_i pense qu'Agnès_k a dit que l'avenir de son_i fils dépend à la fois d'elle_i-même et de son_k propre fils.
 - "*Christel_i thinks that Agnès_k said that her_i son's future depends both on herself_i and her_k own son."

2.2. Second subtype of logophoricity relevant for exemption: empathy

Since exempt anaphors in French (and in many other languages) can also occur in non-attitude contexts, they do not have to refer to attitude holders. This is illustrated in (49) and (50), where the epithet test applied in (b)-(c) shows that the anaphors in (a) are not contained in an attitude context even if they are exempt.²⁵

- (49) a. Le courage de Paul_i a sauvé des flammes à la fois sa_i propre maison et celle de ses voisins. 'Paul_i's courage saved from the fire both his_i own house and his neighbors'.'
 - b. Le courage de Paul_i a sauvé des flammes à la fois la maison de [ce héros]_i et celle de ses voisins.
 - 'Paul_i's courage saved from the fire both [the hero]_i's house and his neighbors'.'
 - c. Le courage de Paul_i a sauvé des flammes à la fois sa_i propre maison et celle des voisins de [ce héros]_i.
 - 'Paul_i's courage saved from the fire both his_i own house and [the hero]_i's neighbors'.'
- (50) a. Emile_k mérite que Sophie pense à lui_k-même et à sa famille.
 - 'Emile_k deserves Sophie_i thinking about himself_k and his family.'
 - b. Emile_k mérite que Sophie pense à [cette crème]_k et à sa famille.
 - 'Emile_k deserves Sophie_i thinking about [that sweetheart]_k and his family.'
 - c. Emile_k mérite que Sophie pense à lui_k-même et à la famille de [cette crème]_k. 'Emile_k deserves Sophie_i thinking about himself_k and [that sweetheart]_k's family.'

The notion of logophoricity relevant for exemption is therefore not necessarily related to attitude: there exists another type of logophoric center that can antecede exempt anaphor - the *empathy locus*, which is not created by attitude contexts. The goal of this subsection is to establish the following threefold generalization by using a test detecting an empathy locus in its context.

- (51) Exemption under empathic logophoricity
 - o An exempt anaphor can refer to an empathy locus.
 - There is no syntactic constraint as to where this empathy locus is structurally located (e.g. it need not be the closest empathy locus).
 - The domain of that anaphor must express the first-personal perceptual perspective of that empathy locus.

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²⁵ Recall that plain anaphors cannot be bound by possessors, as shown by (7)c, i.a.

2.2.1. Empathy locus

The linguistic notion of empathy was first discussed in the literature on Japanese (see Kuno & Kaburaki 1977, Kuno 1987, Kuno 2004, Oshima 2006, i.a.), where some items are lexically marked for perspective outside attitude contexts: for instance, the verbs of giving *yaru* and *kureru* share the same core meaning ('give') and case frame (nominative – dative), but *yaru* is used when the action is looked at from the referent of the subject's perspective or the neutral perspective, whereas *kureru* is used when the event is described from the referent of the dative object's perspective (cf. Malayalam verbs of giving, Jayaseelan 1998). Empathy has also been shown to be relevant in other languages (e.g. in Mandarin, see Anand & Hsieh 2005, Wang & Pan 2015, i.a.). Following this literature, I define the empathy locus as the event participant that the speaker empathizes with, i.e. identifies with from a sensory perspective. Empathy loci are thus perceptual 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 when the speaker adopts another individual's emotional or perceptual point of view. They partially overlap with Sells' (1987) notions of Self and Pivot.²⁷

Under logophoric conditions of empathy, the speaker puts herself in the empathy locus' shoes and reports his first-personal perception, namely, what he could say if he had to formulate his experience at the first-person. This is especially relevant for qualia, which are individual instances of subjective, conscious and direct experience (as opposed to propositional attitudes, which are beliefs about them). For instance, Kuroda (1973) argues that Japanese predicates of internal state in the adjectival form (e.g. *atui* 'be hot') can only be used in the first-person, unless they are (embedded under evidential markers or) used in the non-reportive style, in which the speaker adopts her character's point of view to report what this character feels spontaneously, not reflectively; in that case, the anaphor *zibun* can be exempt if it refers to that character. This is the empathy counterpart of FID: while FID is used to report the thoughts of a character (intellectual, reflective perspective), empathy perspective is used to report the first-personal direct experience of a character (perceptual, immediate perspective).

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²⁶ 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.

²⁷ Sells (1987:455, fn.14) explicitly relates his notion of Pivot ('one with respect to whose (space-time) location the content of the proposition is evaluated') to the notion of empathy. His notion of Self should also be partially equated to empathy as some of his Self examples involve psych-verbs, which do not create attitude contexts, as shown below in French by the epithet test:

⁽v) a. Les méchants commentaires des internautes sur lui;-même ont atteint le moral de Marc_i.

^{&#}x27;The net surfers' mean comments about himself_i have affected Marc_i's morale'.

b. Les méchants commentaires des internautes sur [le pauvre homme], ont atteint le moral de Marci. 'The net surfers' mean comments about [the poor man], have affected Marci's morale'.

In French, the expression son cher 'his/her dear' (cf. English beloved in Kuno 1987, Sells 1987) can be used as a diagnostic for identifying empathy loci: whether someone or something is dear to someone is subject to evaluation, and such an evaluation can only be directly made by the person experiencing the feeling (only I know whether someone is dear to me or not, nobody else really can although they may have grounds to believe it if I tell them or show some signs of it²⁸); in that sense, *cher* is both evaluative and first-personal. That's why the use of third-person *son* cher 'his/her dear' requires empathy: the speaker has to empathize with the referent of son cher (i.e. to adopt her emotional perspective), ²⁹ which therefore has to be human (or humanized) and alive. ³⁰ Son cher can thus be used to identify empathic exempt anaphors.

(52)Son cher test

- o First variant: an exempt anaphor can be acceptable if replacing it with coreferring son cher makes the sentence acceptable.
- o Second variant: an exempt anaphor can be acceptable if inserting coreferring son cher in its domain makes the sentence acceptable.

This test applied below to (49)-(50) confirms that the anaphors son propre and lui-même can be exempt because they are anteceded by an empathy locus. Note that the acceptability of a coreferring epithet in (55) further shows that the perspective relevant for son cher is not attitude.

(vi) Apparemment, Cécile est chère à Christophe. 'Apparently, Cécile is dear to Christophe.' But this evidential use is impossible for attributive *cher* in possessive DPs: *son cher* 'his dear' can only express an internal (cf. logophoricity) vs. external (cf. evidentiality) perspective.

29 Son cher is frequently used ironically, as illustrated in (vii) below. This indirectly supports the hypothesis that *son*

(vii) Jérôme_i va aller rendre visite à sa_i chère cousine (qui profite de lui). 'Jérôme, will visit his, dear cousin (who takes advantage of him).'

'As asked by [the Pharaoh], the embalmers will take care of his, own body and that of his wife when they die.'

'As was asked by [the Pharaoh]; when he was alive, the embalmers are taking care of his; (*own) body and that of his wife.'

²⁸ In other words, it is to some extent possible to deduce that someone/something is dear to someone using indirect evidence, and in fact, predicative cher 'dear' can be used in combination with markers of evidentiality like apparemment 'apparently' (just like predicates of internal states in Japanese, as mentioned in the text above).

cher expresses the internal, emotional 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 its referent's perspective and the speaker's: in (vii), the speaker contrasts her perspective with Jérôme's by suggesting that his perspective is illadvised (as made explicit by the content of the parenthesis). Note that this is different from evaluative expressions like cet idiot de Jérôme 'that idiot Jérôme': Jérôme can be evaluated as an idiot by the speaker or any other attitude holder irrespective of Jérôme's judgment; in (vii) however, the speaker has to take Jérôme's emotional perspective to evaluate his cousin as dear to Jérôme since it is Jérôme's internal feeling; but the speaker builds on it to add another layer of judgment, i.e. that Jérôme's feeling is unjustified, thus creating an irony effect.

³⁰ It is not necessary for the empathy locus to be alive at the time of utterance, as long as he is alive at the time of the event for which the speaker empathizes with him (as in viii) or at the time of evaluation (as in ixa vs. ixb). A more precise examination of the interaction between tense and perspective is beyond the scope of this paper (cf. Bianchi 2003, Sharvit 2008, i.a.).

⁽viii) Le courage de Franklin Roosevelt_i a sauvé sa_i propre vie et celle de millions d'Américains. 'Franklin Roosevelt_i's courage saved his, own life and that of millions of Americans.'

⁽ix) a. Comme [le pharaon], le demande, les embaumeurs prendront soin de son, propre corps et du corps de son épouse une fois qu'ils seront morts.

b. Comme l'avait demandé [le pharaon], de son vivant, les embaumeurs prennent soin de son, (*propre) corps et du corps de son épouse.

- (53) a. Le courage de Paul_i a sauvé des flammes à la fois sa_i propre maison et celle de ses_i chers voisins.
 - 'Paul_i's courage saved from the fire both his_i own house and his_i dear neighbors'.'
 - b. Le courage de Paul_i a sauvé des flammes à la fois sa_i chère maison et celle des voisins. 'Paul_i's courage saved from the fire both his_i dear house and the neighbors'.'
- (54) Emile_k mérite que Sophie pense à lui_k-même et à sa_k chère famille. 'Emile_k deserves Sophie_i thinking about himself_k and his_k dear family.'
- (55) Le courage de Paul_i a sauvé des flammes à la fois sa_i propre maison, celle de ses_i chers enfants, et celle des voisins de [ce héros]_i.

 'Paul_i's courage saved from the fire his_i own house, his_i dear children's house and [the hero]_i's neighbors' house.'

Furthermore, exempt anaphors need not refer to the closest potential empathy locus (just as in the case of attitude holders). The antecedent of *ses propres* can either be Christel or Ninon in (56).

(56) Christel_i mérite que le futur métier de Ninon_k corresponde à la fois à $ses_{i/k}$ propres aspirations et à celles de sa famille.

'Christel_i deserves the fact that $Ninon_k$'s future job corresponds to both $her_{i/k}$ own aspirations and that of her family.'

In sum, empathy loci constitute a second type of logophoric antecedent that can exempt an anaphor from Condition A. The empathy locus relevant for a given anaphor is determined on the basis of a combination of discourse and syntactico-semantic factors and can be identified using the *son cher* test.

(57) Referential possibilities of exempt anaphors: second generalization

An exempt anaphor can refer to the empathy locus of its domain, which is determined on the basis of discourse and syntactico-semantic constraints and can be identified by the son cher test.

2.2.2. Empathy domain

Like attitudinal domains, empathy domains must be logophorically homogeneous: coreference between *ses propres* and *sa chère* in (58) and between *lui-même* and *son propre* in (59) is obligatory (cf. Kuno & Kaburaki's 1977 ban on conflicting empathy loci).

(58) Christel_i mérite que le futur métier de Ninon_k corresponde à la fois à ses_k propres aspirations et à celles de sa*_{i/k} chère famille.

'Christel_i deserves Ninon_k's future job corresponding to both her_k own aspirations and that of $her_{i/k}$ dear family.'

(59) Emile_k ne mérite pas que les proches de Sophie_i comparent ce portrait de lui_k-même à celui de son_{*i/k} propre fils.

'Emile_k does not deserve Sophie_i's relatives comparing this portrait of himself_k to that of $\{his_k/*her_i\}$ own son.'

This shows that empathic exempt anaphors are subject to the same interpretive constraints as attitudinal exempt anaphors: their domain must be presented from the first-personal perspective of a unique logophoric center.

(60) *Interpretive constraints on empathic exempt anaphors*The domain of an empathic exempt anaphor must express the first-personal perceptual perspective of its antecedent.

2.2.3. Mixing empathy and attitude

In cases where a sentence contains both a third-person attitude holder and a potential empathy locus, the situation is more complex.

(61) [Le fils d'Antonin]_i a dit que le courage de Paul_k avait sauvé des flammes la maison de son propre fils_{i/?k}.

'[Antonin's son]_i said that Paul_k's courage saved from the fire his_{i/?k} own son's house.'

In (61), the exempt anaphor *son propre* can be anteceded either by the attitude holder Antonin's son or by the empathy locus Paul. Furthermore, in the latter case, either the speaker or the attitude holder Antonin's son can identify with Paul (cf. empathic perspective shift in Oshima 2006:175). But *son propre* preferably refers to Antonin's son, which argues for the following referential hierarchy.

(62) *Referential possibilities on exempt anaphors: preference hierarchy* attitude holder > empathy locus

This suggests that the domain of an exempt anaphor contained in an attitude context is preferably presented from the attitude holder's perspective, but if discourse and syntactico-semantic factors (including the features of the anaphor) forbid this option, it can be from the perspective of another individual the attitude holder can identify with (cf. Kuno's 1987 Empathy Hierarchy).

2.3. Irrelevance of other types of antecedents for exemption: the case of deictic centers

So far, we have established that an exempt anaphor can be anteceded by an attitude holder or an empathy locus relevant in its domain. The goal of this section is to show that these are the only

types of antecedents licensing exemption, namely that an anaphor with a different type of antecedent cannot be exempt.

This is not only the case of inanimate anaphors, as we have already seen, but also of animate anaphors that refer neither to the attitude holder nor to the empathy locus of their domain. In (63) for example, the attitude holder is the speaker and the empathy locus is Joël's son, the antecedent of *son cher*; consequently, third-person exempt *son propre* can only refer to Joël's son and cannot be anteceded by Joël or Joël's son's brother. In the second sentence of (64), the attitude holder is Eric, complement of *d'après* 'according to' and antecedent of exempt *lui-même*; however, *cet homme* 'that guy' is neither an attitude holder nor an empathy locus as shown by the unacceptability of *ses chers*; consequently, *ses propres* cannot refer to *cet homme*.

- (63) La générosité [du fils de Joël_m]_i s'adresse à [son_i cher frère]_k ainsi qu'à son_{i/*k/*m} propre fils.

 '[Joël_m's son]_i's generosity is aimed at [his_i dear brother]_k as well as his_{i/*k/*m} own son.'
- (64) Regarde [cet homme] $_i$ là-bas ! D'après $Eric_k$, ses_i {*chers/*propres} enfants dépendent de lui_k -même.
 - 'Look at [that guy]_i over there! According to Eric_k, his_i {*dear/*own} children depend on himself_k.'

The referential possibilities of exempt anaphors stated above can thus be strengthened into the following referential constraints:

(65) Referential constraints on exempt anaphors

An exempt anaphor must refer either to the attitude holder or to the empathy locus relevant in its domain.

This generalization is corroborated by the fact that anaphors with non-mental perspective centers as antecedents cannot be exempt. This subsection presents a detailed argument for this generalization by showing that in French, spatial perspective centers – call them, as in Oshima 2006, *deictic centers*³¹ – cannot antecede exempt *son propre* and *lui-même*. This suggests, as we will elaborate on in section 2.5, that the creation of logophoric domains licensing exempt anaphors is only possible in the case of mental perspective. Unlike attitude holders and empathy loci, deictic centers are indeed not mental in nature (they can be inanimate), but only need to be located in

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³¹ Oshima (2006) also distinguishes deictic centers from empathy loci, and observes – against Iida 1992 – that deictic centers, unlike empathy loci, cannot systematically antecede long distance *zibun*. This suggests that the facts are similar in French and in Japanese.

space and oriented. Sells' (1987) notion of Pivot should therefore be split into two categories: empathy loci, which can indeed antecede exempt anaphors, and deictic centers,³² which cannot.

(66) Sells's 1987 vs. the present taxonomy of logophoric centers relevant for exemption

Sells' hypothesis	Source	Self		Pivot	
the present hypothesis	Attitude holder		Empath	y locus	Deietie center

2.3.1. Types of deictic centers

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

As has long been observed in several languages (cf. Talmy 1975, Fillmore 1997, Oshima 2006, i.a.), motion verbs like French *venir* 'come' or *apporter* 'bring' require that the speaker or the addressee be located at (or associated with) the goal of the motion. This inference has been analyzed as a presupposition (Oshima 2006-2007, Sudo 2016, i.a.).

(67) Luc va venir à Lyon.

'Luc will come to Lyon.'

Inference: the {speaker/addressee} is {located at/associated with} Lyon.

Let's call the individual located at the goal of the motion (i.e. the speaker or addressee in (67)) the deictic center. In attitude contexts, the deictic center can shift to the attitude holder (cf. Oshima 2007, Sudo 2016).

(68) Luc espère que sa mère va venir à Lyon.

'Luc hopes that his mother will come to Lyon.'

Inference: the {speaker/addressee} or Luc is {located in/associated with} Lyon.

Furthermore, it has been observed (cf. Fillmore 1997, Oshima 2006, Sudo 2016, i.a.) that the deictic center need not be a discourse participant or an attitude holder in certain cases like (69). An explanation will be provided in section 2.5.

(69) Comme Luc vivait seul, son fils s'efforçait de venir à Lyon chaque semaine.

'As Luc lived alone, his son tried hard to come to Lyon every week.'

Inference: Luc lived in Lyon.

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³² Sells (1987) explicitly includes spatial centers of perspective into the Pivot category: "if someone makes a report with Mary as the pivot, that person is understood as (literally) standing in Mary's shoes" (Sells 1987:455).

Spatial prepositional expressions (cf. deictic angular expressions in Oshima 2006) like *derrière* 'behind' encode a spatial relation between two objects, and require a deictic center for their interpretation, as illustrated in (70) based on Figure 1 below.



Figure 1. Johannes Vermeer - Lady at the Virginal with a Gentleman, 'The Music Lesson'³³

(70) 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 in front of the young woman.' (from the woman's perspective)

These spatial expressions give rise to two types of interpretation depending on the identity of the deictic center. Under the intrinsic interpretation, the deictic center is the referent of the complement of the preposition (e.g. the woman in (70)b) and has to be intrinsically oriented (human beings have a back). Under the relative interpretation (cf. Levinson 2003, Rooryck & Vanden Wyngaerd 2011, i.a., for the intrinsic vs. relative distinction), the deictic center is a reference point (e.g. the speaker in (70)a) distinct from the two objects spatially located (the musical instrument and the woman), and in that case, the complement of the preposition does not have to be intrinsically oriented (for instance, it could be a ball).

These two types of interpretation are lexically distinguished in French in the case of spatial expressions involving the notions of right and left: à la gauche/droite de 'to the left/right of' (with a definite article) triggers the intrinsic interpretation as in (71)a, and à gauche/droite de 'on the left/right of' (without definite article) the relative interpretation as in (71)b.

³³ From Google Art Project. Retrieved Nov. 7th 2016 from:
https://commons.wikimedii.arg/wiki/File%3AJohannes_Vermeer_-
Lady at the Virginal with a Gentleman%2C 'The Music Lesson' - Google Art Project.jpg

(71) 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 (#la) gauche du professeur de musique.

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

2.3.2. Testing exempt anaphors in the presence of deictic centers

To test whether deictic centers license exemption, we need to guarantee that the antecedent of a given exempt anaphor is the deictic center but is neither an attitude holder nor an empathy locus. This is the case in (72)-(73) using the motion verb venir 'come': the neighbor seems to be interpretable as the deictic center (he is located at the goal of the motion, i.e. at the hospital), but cannot be construed as the empathy locus (the expression ma chère 'my dear' requires the speaker to be the empathy locus). The exempt anaphors son propre and lui-même referring to the neighbor are not acceptable, which shows that deictic centers do not as such license exemption.³⁴

(72) Pendant la maladie [du voisin]_i, ma chère mère et sa_i (*propre) mère sont souvent venues à l'hôpital où je le soignais.

'During [the neighbor]_i's disease, my dear mother and his_i (*own) mother often came to the hospital where I was treating him.'

(73) Pendant la maladie [du voisin]_i, ma chère fille amoureuse de lui_i-(*même) est souvent venue à l'hôpital où je le soignais.

'During [the neighbor]_i's disease, my dear daughter in love with him_i(*self) often came to the hospital where I was treating him.'

Similarly, exempt son propre and lui-même in the presence of spatial prepositional expressions are not licensed even when we guarantee that the antecedent is the deictic center by forcing the intrinsic interpretation. This is illustrated in (74)-(75) based on Figure 1, which are intended to be interpreted as neutral descriptions of the painting to prevent construing the antecedent as an empathy locus.³⁵

³⁴ These sentences are acceptable in the absence of *propre* and *même* (i.e. with pronouns instead of anaphors) given that the speaker is located at the goal of motion (i.e. at the hospital) and can thus be the deictic center. In fact, the further observations that we will make in section 2.5 reveal that only the speaker can here qualify as the deictic center because the deictic center of motion verbs (vs. spatial prepositional expressions) must be logophoric (i.e. it must either be attitudinal or empathic).

¹⁵ Cantrall (1974:146-147) notices the contrast between (xa), which is acceptable under the intrinsic interpretation (i.e. from the adults' perspective), and (xb), where the antecedent of the anaphor is inanimate.

(x) a. The adults_i in the picture are facing away from us with the children placed behind themselves_i.

b. The house, in the picture is facing away from us with an elm tree behind it, (*self). This suggests that deictic conditions alone are not sufficient in English either to exempt himself from locality conditions (cf. Zribi-Hertz 1989, Rooryck & Vanden Wyngaerd 2011, Charnavel & Zlogar 2016, i.a., for discussion about the distribution of English himself in deictic conditions). The reason why (xa) is acceptable, I argue, is because the adults can be construed as empathy loci, which may be favored by the passive placed suggesting that the adults took responsibility for the placement; in fact, the children can be replaced with their dear children.

- (74) a. A la droite du professeur_i, sa_i (*propre) élève semble jouer de l'épinette. 'To the right of the teacher_i, his_i (*own) student seems to play the virginal.'
 - b. A la droite du professeur_i, un portrait de lui_i(*-même) est accroché au-dessus de l'épinette.
 - 'To the right of the teacher_i a portrait of him_i(*self) hangs above the virginal.'
- (75) a. Devant [la jeune femme]_i est accroché un miroir où apparaît son_i (*propre) reflet. 'In front of [the young woman]_i hangs a mirror where her_i (*own) reflection appears.'
 - b. [La jeune femme]_i est à l'arrière-plan, avec une viole de gambe derrière elle_i(*-même). '[The young woman]_i is in the background, with a viola da gamba behind her_i(*self).'

The same holds with inanimates, which can in principle be deictic centers, since they can be located in space and oriented: examples like (76) show that even when they are deictic centers, inanimates cannot antecede exempt anaphors. Importantly, this further supports the generalization discussed in section 1.1, according to which inanimates can never antecede exempt anaphors because they can never be logophoric as they lack a mental state. The restriction of the notion of logophoricity pertinent for exemption to mental perspective (*pace* Sells 1987, i.a.) is thereby confirmed.

(76) [L'épinette]_i est à l'arrière-plan, avec le mur derrière (*elle_i-même).³⁶ '[The virginal]_i is in the background, with the wall behind it_i(*self).'

All these examples thus show that making the antecedent of *son propre* and *lui-même* a deictic center cannot exempt these anaphors: deixis does not create sufficient conditions for logophoric exemption.

(77) *Irrelevance of deictic centers for exemption*Deictic centers cannot exempt anaphors from Condition A by anteceding them.

2.4. Analysis: the logophoric operator hypothesis (part 1)

The generalization that we have now established using various tests is as follows: an anaphor can be exempt if it is anteceded by an attitude holder or an empathy locus and occurs in a domain expressing the first-personal perspective of its antecedent. This generalization can be derived by making the following hypotheses: (i) attitude holders and empathy loci form a linguistically relevant category: logophoric center; (ii) in a given domain (i.e. a spellout domain, as will be specified in section 3), the relevant logophoric center can be syntactically represented by a silent

³⁶ It could be objected that *elle-même* (just like *elle*) is unacceptable in (76) because it competes with the null pronoun, which is licensed by some prepositions like *derrière* 'behind' in French. But this issue does not arise in the following example, which makes the same point.

⁽xi) Le tableau à la gauche de [l'épinette]_i pourrait contenir une représentation d'elle_i(*-même). 'The painting on the left of [the virginal]_i could contain a representation of it_i(*self).

logophoric pronoun prolog introduced by a logophoric operator OPLOG (as its subject); (iii) OPLOG imposes the first-personal perspective of the logophoric center on its complement α (see (78)b); (iv) exempt anaphors are bound by pro_{log} (see (78)a).

```
(78) a. [ pro_{log-i} [OP<sub>LOG</sub> [\alpha ... exempt anaphor<sub>i</sub> ... ]]]
        b. [OP_{LOG}] = \lambda \alpha. \lambda x. \alpha from x's first-personal perspective<sup>37</sup>
```

The first part of the generalization (exempt anaphors must be anteceded by attitude holders or empathy loci) is thus derived by the hypothesis that exempt anaphors are bound by prolog, which refers to the local logophoric center. Indeed, I assume that the notion of logophoric center encompasses the notions of attitude holders and empathy loci. In each domain, the value of the logophoric center is determined on the basis of various discourse and syntactico-semantic factors such as the presence of intensional predicates or contextual clues construing an individual as perspectival center (cf. Sells 1987, Anand & Hsieh 2005, Sharvit 2008, i.a.). The role of prolog is to reference that value in the syntax (cf. Jayaseelan 1998, Speas 2004, i.a.), which can be identified using the tests defined above (e.g. first-person, epithet and son cher tests) that are independent of anaphoricity.

The second part of the generalization (exempt anaphors must occur in a domain expressing the first-personal perspective of their antecedent) is derived by the hypothesis that exempt anaphors are in the scope of OPLOG, which imposes the first-personal perspective of its silent subject pro $_{log}$ on its complement α (which can vary in size, as will be specified in section 3). Logophoric operators (first proposed by Koopman & Sportiche 1989) have already been argued to derive de se reading requirements of pronouns and anaphors (cf. Anand 2006³⁸). But we have further

³⁷ The formal details do not matter for our purposes, but note that the notion of first-personal perspective could be formalized using quantification over centered worlds. Furthermore, the presentation of α from the logophoric center's first-personal perspective is in effect added as a conjoined assertion here. An alternative would be to insert this contribution as a presupposition. I leave the choice between the two alternatives for further research as the behavior of exempt anaphors with respect to projection yields unclear results (see further discussion in Charnavel to appear: chapter 4, section 4.1). In particular, the perspectival contribution cannot be affected by negation in matrix clauses (example (xii) below cannot imply that it is not from John's first-personal perspective that Mary depends on him). But this can be derived by assuming either that the perspectival contribution is presuppositional (or not-at-issue) or that the logophoric operator scopes over the negation. In embedded contexts, it seems that the perspectival contribution can be affected by negation: (xiii) is felicitous in a typical non de se context where John thinks that Mary depends on him, but is not aware that the man Mary depends on is himself. But it has been observed that some presuppositions can in fact be cancelled in embedded contexts (Abrusán 2016, i.a.). See Korotkova (2016) for arguments for and against the presuppositional aspect of the contribution of evidential operators, which raise similar issues in this respect.

⁽xii)[Jean_i réfléchissait] Non, Marie ne dépendait pas de lui_i-même!

[John_i was thinking] 'No, Mary did not depend on himself_i!'

(xiii) Jean_i ne pense pas que Marie dépend(e) de lui_i-même.

'John_i does not think that Mary depends on himself_i.'

38 In Anand (2006:50), the logophoric operator is the immediate complement of a referential item CENTER, which denotes the de se center and gets its value from the index node which it takes as its complement. Our definition of logophoric operator is different in two main respects. First, our logophoric pronoun prolog does not directly get its value from the index (i.e. the context), but is determined pragmatically, because, as we have seen, the logophoric center is not necessarily an attitude holder; also, the logophoric domain can be smaller than the domain of a given

observed in section 2.1.4 that not only must attitudinal exempt anaphors be read de se, but all perspectival elements occurring in the same domain must match with exempt anaphors. Moreover, we have seen that in the case of empathy, a logophoric domain expresses the subjective perceptual perspective of the empathy locus. What unifies these observations, I propose, is the notion of firstpersonal perspective: in all cases, the content of the logophoric domain corresponds to what the logophoric center could (or did) express in a direct discourse at the first person, reporting his thoughts or formulating his experience (cf. Kuno 1972). The role of the logophoric operator is to impose this first-personal perspective on its complement. I therefore hypothesize that OP_{LOG} is similar to the Free Indirect Discourse operator (see Sharvit 2008), which forces all expressions in its scope to be interpreted from the FID center's perspective.³⁹

This analysis improves upon previous analyses for several reasons. I here concentrate on the aspects deriving the specific interpretation of exempt anaphors as compared to plain anaphors. In section 3.1, I will focus on the aspects deriving the local binding of exempt anaphors.

Instead of assuming that exempt anaphors inherit their referential constraints from a silent logophoric binder, some have proposed that they are lexically marked as logophoric by a feature [+log]. Under this hypothesis, exempt anaphors are pronouns intrinsically specified as referring to a logophoric center. A first version of this hypothesis, mentioned by Kuno (1987) or Sells (1987), among others, assumes that the feature [+log] is specified on some DPs such as the subjects of predicates of communication or consciousness, and exempt anaphors must be anteceded by such DPs due to their lexical marking. In other words, they are directly anteceded by an overt logophoric center, instead of being bound by a silent element (pro_{log}) referring to that center.

One issue with this hypothesis is that it is not sufficient to derive the logophoric interpretation of exempt anaphors as it does not derive the second part of the generalization. In fact, Kuno (1987:120) himself notes that it must be additionally specified that the anaphor must be in the corresponding logophoric domain. This property is what the presence of our logophoric operator derives, which imposes the first-personal perspective of its subject prolog on its complement.

The presence of a logophoric operator is inspired by the second version of the [+log] hypothesis, which is to suppose that exempt anaphors, like any element specified as [+log], must be bound via a logophoric operator (see Koopman & Sportiche 1989, Speas 2004, Anand 2006,

context, which is standardly a proposition (see section 3.3; see also fn.43). Second, the operator is not simply a lambda-

abstractor, but affects the whole constituent in its scope.

39 But there are some (irrelevant) differences with FID: in particular, FID shifts time and location indexicals (Schlenker 2004, Sharvit 2008, i.a., see (37)), while logophoric domains do not have to (cf. (90)-(91)). Also, FID has full sentences as domain (Banfield 1982, i.a.), while logophoric domains do not have to (see section 3.3).

i.a.). Specifically, most of these previous analyses suppose that the logophoric operator occurs in a dedicated left-peripheral projection, which is traditionally the locus of the syntax-pragmatics interface (cf. Rizzi 1997, Cinque 1999, i.a.), and that it specifies the CP in its scope as its logophoric domain. This guarantees that the exempt anaphor occurs in the relevant logophoric domain.

This second version of the [+log] hypothesis also faces several issues. First, some of its implementations constrain the logophoric center represented by the operator to be the closest attitude holder (Speas 2004, i.a.). As we have seen above, this undergenerates, as exempt anaphors in French (and in at least some other languages) neither need be anteceded by the closest attitude holder (see section 2.1.3), nor in fact by an attitude holder (see section 2.2). Instead, we must allow the operator to represent the perspective of a structurally unconstrained attitude holder or empathy locus: the operator is not lexically introduced by some attitude verbs, but references the logophoric center determined on the basis of a combination of discourse and syntactico-semantic factors.

Second, this type of hypothesis cannot deal with plain anaphors in a parsimonious way, given that exempt anaphors are intrinsically hypothesized to be marked [+log]. Under the strong parsimonious assumption that all instances of anaphors are lexically identical, inanimate anaphors of the same form as exempt anaphors are predicted not to exist. This is clearly too strong for French, among other languages. Under the weak parsimonious assumption that [+log] is limited to animate anaphors, all animate anaphors are predicted to be logophoric. This is what Jayaseelan (1998), Sundaresan (2012) and Nishigauchi (2014) argue is the case for Malayalam *taan*, Tamil *taan* and Japanese *zibun*, respectively. But this makes an incorrect prediction for (at least) French: locally bound animate anaphors and non-locally bound animate anaphors do behave differently. Indeed, the former can behave like inanimate anaphors in not having to be anteceded by a logophoric center.

The results of the previous subsections provide the diagnostics for showing this point.⁴⁰ The first diagnostic is that locally bound animate anaphors need not be anteceded by an attitude holder or an empathy locus (unlike non-locally bound anaphors, see examples (35) and (63)). This is illustrated in (79), where the context (description of a painting) and the use of *ma chère* preclude the antecedent of *sa propre* (the music teacher) from being an empathy locus.

⁴⁰ To test Jayaseelan's (1998), Sundaresan's (2012) and Nishigauchi's (2014) assumption that animate anaphors in their language are always logophoric, such diagnostics should be applied to Malayalam *taan*, Tamil *taan* and Japanese *zibun*. In particular, controlling for (the absence of) empathy and *de se* readings may reveal that some instances of *zibun* and *taan* are not logophoric after all.

(79) Sur ce tableau peint par ma chère tante, [le professeur de musique]_i est placé à droite de sa_i propre élève.

'On this painting by my dear aunt, [the music teacher]_i is placed on the right of his_i own student.'

The second diagnostic is that locally bound animate anaphors need not be read de se even when they are coreferential with the attitude holder of their context, unlike non-locally bound anaphors (see examples (41)-(42)).⁴¹ In (80) for instance, the anaphor *lui-même* referring to the attitude holder Michel and locally bound by the (de re) pronoun il 'he' is acceptable even if it is not read de se. 42 The same point can be made using intensional transitive verbs that take non-propositional complements behaving like attitude contexts (cf. Grodzinsky 2007, Schwarz, to appear, i.a.). 43

(80) [Michel is listening to songs that he and his students recorded, as well as the reactions of the singers afterwards. Michel claims: "one of the singers seems to be very proud of himself". Unbeknownst to him, that singer is actually Michel himself.]

Michel_i a dit qu'il_{i-de re} était fier de lui_{i-de re}-même. 'Michel_i said that he_{i-de re} was proud of himself_{i-de re}.'

- *Tests for identifying plain animate anaphors* (81)
 - If an animate anaphor is anteceded neither by an attitude holder nor by an empathy locus, it is plain.
 - If an animate anaphor in an attitude context refers to the attitude holder and is not read de se, it is plain.

Under [+log] hypotheses, the same form of anaphor (e.g. lui-même) must thus have two lexical entries, one of which is marked [+log] and the other [-log], and it must be stipulated that the [-log] feature comes with locality requirements. Given that the ambiguity between plain and exempt anaphors is present in many unrelated languages, the same stipulations must furthermore be made in many languages independently. It should be clear that our hypothesis does not make

⁴¹ Similarly, Pan (1997) and Huang & Liu (2001) propose (non)-obligatory de se readings as a diagnostic for distinguishing between plain and exempt ziji.

In fact, plain lui-même has to be read de re non de se here because its binding by a de re pronoun would otherwise trigger a de re blocking effect (see Sharvit 2010, cf. fn.24). However, plain anaphors can conversely be read de re when they are bound by a de se element (see Sharvit 2010): this pertains to the definition of Condition A (cf. Sharvit's 2010 Type-II covaluation).

This is for instance the case of the predicate *être fier de* 'be proud of' in French (i.e. it is characterized by the properties described at the beginning of section 2.1.2). Example (xiv) below shows that the plain anaphor *elle-même* contained in its complement (i.e. in an attitude context) need not be read *de se*.

⁽XIV) [Liliane Martin and her daughter Lise have entered a poetry competition. Liliane has not done so seriously, but simply to encourage her daughter to do it with her. When looking at the results, Liliane thus does not imagine one second that she could have won a prize: when she sees 'L. Martin' in the list, she immediately thinks that her daughter has won and she is very proud of her. In fact, it is Liliane, not Lise, who has won a prize.] Liliane, est très fière d'elle_{i-de re}-même.

^{&#}x27;Liliane_i is very proud of herself_{i-de re}.'

such a claim: the apparent ambiguity of anaphors derives solely from the nature of their binder, not of the anaphors themselves.

Third, the standard version of the [+log] hypothesis (Koopman & Sportiche 1989, Speas 2004, Anand 2006, i.a.) constrains the logophoric domain to be a CP. As we will see in sections 3.2 and 3.3, this is both too weak and too strong. This is too weak because the [+log] hypothesis, which in effect equates exempt anaphors to pronouns, predicts that they can be non-exhaustively bound. At first glance, this appears to be a good prediction, given that exempt anaphors can have partial or split antecedents, as mentioned in section 1.2. But in fact, this means that the hypothesis is not sufficient to derive exhaustive coreference of logophors in the same domain (see section 3.2). This hypothesis is furthermore too strong because logophoric domains can be smaller than CPs (see section 3.3).

The latter issue also arises with another type of hypothesis found in the literature (Huang & Liu 2001), which derives the perspectival interpretation of exempt anaphors by positing movement to perspectival projections at the left periphery of CPs (i.e. SourceP, SelfP, PivotP based on Sells' 1987 proposal). However, this proposal does not face the parsimony issues faced by [+log] hypotheses as it aims to reduce exempt anaphors to plain anaphors by arguing that exempt anaphors move to a position where they can be locally bound by their overt antecedent (see more details in section 3.1). But several points about how the logophoric interpretation of exempt anaphors is derived remain unclear: how to force exempt anaphors, but not plain anaphors, to move to such projections; how to allow several coreferring exempt anaphors to move to the same projection; how to disallow co-occurring exempt anaphors to move to different projections (e.g. SourceP and PivotP), which would wrongly permit disjointness; how to guarantee, in the case of multiple embedding, that the anaphor moves to the semantically adequate perspectival projection and is still in a position local to its antecedent. Under our hypothesis, the operator local to the anaphor instead simply references the relevant logophoric center in the local syntactic domain

In sum, the presence of a single logophoric operator in the domain of exempt anaphors, whose subject binds them, and the absence of logophoric marking on the anaphors themselves are two ingredients crucial to the present hypothesis as compared to previous ones. The other important ingredient that I will examine and motivate in section 3 is the restriction of the logophoric domain to the spellout domain of anaphors. Before doing so, I would like to offer some suggestions regarding why the notion of logophoricity should be restricted as it is to license exemption and how general the relevance of this notion is.

2.5. Towards grounding and extending our notion of logophoricity

On the basis of the behavior of French anaphors, we have established that the perspective centers that can antecede exempt anaphors are exclusively attitude holders and empathy loci, which implies, contra Sells (1987), that the notion of logophoricity relevant for exemption should be restricted to mental perspective. We have also seen that a crucial interpretive property of exempt anaphors is that they must occur in the domain expressing the first-personal perspective of their antecedent. I suggest that these two generalizations are directly linked: exempt anaphors must be anteceded by mental perspective centers because only mental perspective can create logophoric domains that can contain them. The reason for that is that only mental perspective has a content that can be linguistically expressed. This is directly reflected by the typical syntactic structure of mental attitudes, where the clausal complement of a verb (e.g. think) denotes the content of the perspective expressed by the verb (e.g. the content of the thoughts). The same happens even if the expression introducing the attitude is not a verb, but a noun (like opinion), an adverbial expression (like according to) or is covert (as in FID): the content of the attitude is denoted by a clause or a phrase. Similarly, all empathy contexts denote the content of emotions or perceptions and can thus be assimilated to clausal complements of verbs expressing emotions or perceptions. However, spatial perspective has no linguistic content. In fact, the only way to give some linguistic content to spatial perspective is to add a perceptual component to it (cf. see that), which thereby turns spatial perspective into empathy or attitude. No linguistic domain can therefore be created that would express the content of spatial perspective.

Exempt anaphors can thus only refer to perspective centers that can mentally represent the content of their perspective. This restriction has led me to hypothesize (in section 2.4) that the category of logophoric center defined as mental perspective center encompassing attitude holders and empathy loci is linguistically pertinent and can be syntactically represented via logophoric operators. If this is correct, we could reasonably expect that French anaphors are not the only elements sensitive to this notion. We have already seen in the course of section 2 that other anaphors (e.g. in Japanese, English, Mandarin) seem to behave similarly. I am now going to mention further facts that seem to confirm the expectation beyond anaphora and independently motivate the linguistic notion of logophoricity as just described.

The obvious candidates for conforming to this definition of logophoricity should be the elements at the origin of this notion, namely logophoric pronouns. The literature on logophoric pronouns in African languages is quite heterogeneous and does not reach a clear conclusion (for a review, see Charnavel et al. 2017: section 5). The generalization that seems to emerge from most

studies is that logophoric pronouns are licensed in attitude contexts where they refer to the attitude holder (Pearson 2015, i.a.). But many counterexamples to this generalization are documented. First, logophoric pronouns can appear in clauses that are not typical complements of attitude verbs, such as clauses following psychological constructions, adjunct clauses⁴⁴ or relative clauses, as illustrated in (82)-(84).

(82) E-do dyidzo na ama be yè-dyi vi. [Ewe]

PRO-put-forth happiness to Ama that LOG-bear child

'It made Ama happy that she bore a child.'

(Clements 1975: 163)

(83) Devi-a xo tohehe be yè-a-ga-da alakpa ake o. [Ewe] child-D receive punishment so_that LOG-T-P-tell lie again NEG
'The child received punishment so that he wouldn't tell lies again.' (Clements 1975: 160)

(84) Á Dīk tí māy mà:gā sẽ kó n sú: mònò. [Tuburi] he think to young_woman REL LOG see yesterday CORR 'He thinks about the young woman he saw yesterday.' (Hagège 1974: 299)

Second, (at least some) logophoric pronouns can appear in matrix clauses. This is for instance the case in Ewe when the logophoric pronoun $y\dot{e}$ is part of a complex reflexive (Pearson 2015). This is also the case of the logophoric n-pronoun in Abe as long as it refers to a human being and is disjoint from any co-occurring o-pronoun (Koopman & Sportiche 1989).

(85) % Kofi ponu nay yè dokui. [Ewe]

Kofi talk PRP LOG REFL

'Kofi talked to himself.' (Pearson 2015:95)

(86) O_i tEEwu foto n lE n*_{i/k} tE. [Abe] his enemy picture DET bother him PART 'The picture of his_i enemy bothered him*_{i/k}.' (Koopman & Sportiche 1989:569)

A careful reading of the literature suggests that such facts are more frequent than is usually assumed, but are obscured by the fact that in those cases, logophoric pronouns are often assumed to be homophonous with other elements such as independent pronouns, reflexives or emphatics (von Roncador 1992, i.a.). In view of such facts, a hypothesis that naturally arises is that (some) logophoric pronouns may in fact not only be licensed in attitude contexts, but also in empathy contexts: extending the notion of logophoricity defined as mental perspective rather than attitude to (some) logophoric pronouns could solve many empirical issues. Testing this hypothesis would

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⁴⁴ See Charnavel (2018c) for an argument that (some) adjunct clauses in fact qualify as attitude contexts.

require a detailed examination of logophoric pronouns that go beyond the scope of this paper, but this suggests that our definition of logophoricity may well be relevant beyond (French) anaphora.

Other pronominal elements besides African logophoric pronouns may also be sensitive to this notion of logophoricity. For instance, Malayalam *taan* is often described as an anaphor, but its compliance with Condition B seems to rather characterize it as a (logophoric) pronoun (Jayaseelan 1998, i.a.). Moreover, *taan* is not only licensed in attitude contexts, but also outside them in environments such as (87) which bear a striking resemblance to our empathy contexts.⁴⁵

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(87) tan<sub>i</sub>-te makkal-ude perumaattam John<sub>i</sub>-inc weedanippiccu. [Malayalam] REFL-GEN children-GEN behavior ACC pained 'His<sub>i</sub> children's behavior pained John<sub>i</sub>.' (Jayaseelan 1998:19)
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Finally, another type of facts that seem to independently motivate the notion of logophoricity as mental perspective relates to deictic perspective. We have seen in section 2.3 that deictic centers are irrelevant for exemption. But there is a complication that distinguishes between the two kinds of deictic expressions we discussed. Unlike spatial prepositional expressions, motion verbs do interact with logophoric exemption: in the presence of motion verbs, the deictic center must corefer with the antecedent of exempt anaphors. For instance, the attitude holder or empathy locus anteceding the exempt anaphor in (88)a and (89)a, respectively, must be the deictic center.

- (88) a. [Le fils de Claire]_i craint que le mauvais temps n'empêche {son_i propre fils/un ami de lui_i-même et de sa femme} de venir à Lyon.
 - '[Claire's son]_i is afraid that bad weather prevents {his_i own son/a friend of his_i and his wife} from coming to Lyon.'
 - *Inference*: Claire's son is located in (or associated with) Lyon.
 - b. [Le fils de Claire]_i craint que le mauvais temps n'empêche {son_i fils/un ami à lui_i et à sa femme} de venir à Lyon.
 - '[Claire's son] $_i$ is afraid that bad weather prevents {his $_i$ son/a friend of his $_i$ and his $_i$ wife} from coming to Lyon.'
 - *Inference*: Claire's son or the speaker/addressee is located in (or associated with) Lyon.
- (89) a. [Le fils de Claire]_i mérite que les conditions climatiques permettent {à son_i propre fils/aux amis de lui_i-même et de sa femme} de venir à Lyon.
 - '[Claire's son]_i deserves the fact that weather conditions allow {his_i own son/friends of his_i and his wife} to come to Lyon.'
 - *Inference*: Claire's son is located in (or associated with) Lyon.

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⁴⁵ Another potential candidate could be French *lui*, which triggers antilogophoricity effects when clustered with other clitics both within and outside attitude contexts (see Charnavel & Mateu 2015).

b. [Le fils de Claire]_i mérite que les conditions climatiques permettent {à son_i fils/aux amis à lui_i et à sa femme} de venir à Lyon.

'[Claire's son] $_i$ deserves the fact that weather conditions allow {his $_i$ son/friends of his $_i$ and his wife} to come to Lyon.'

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

This does not hold in the case of spatial prepositional expressions: son propre and lui-même anteceded by le fils de Claire 'Claire's son' – the attitude holder in (90) and the empathy locus in (91) – are exempt even if the use of \grave{a} droite de (without definite article) forces a relative interpretation, i.e. the speaker, not the antecedent, is the deictic center.

- (90) [Le fils de Claire]_i craint que son ennemi ne soit placé à droite de {son_i propre fils/lui_i-même} sur la photo.
 - '[Claire's son]_i is afraid that his enemy may be placed to the right of $\{his_i own son/himself_i\}$ on the picture.'
- (91) [Le fils de Claire]_i mérite qu'on place son ami à droite de {son_i propre fils/lui_i-même} sur la photo.
 - '[Claire's son]_i deserves the fact that one places his friend to the right of {his_i own son/himself_i} on the picture.'

The deictic center must thus refer to a mental perspective center in the case of motion verbs, but not in the case of spatial prepositional expressions. This difference can be explained by hypothesizing that motion verbs like *come* (unlike spatial prepositional expressions) lexically require their deictic center to refer to a logophoric center as defined above. The previously proposed presuppositional restriction of *come* can thus be reanalyzed as a selectional restriction: motion verbs take a silent logophoric argument, which must be bound via a logophoric operator, just like French exempt anaphors; in other words, *come* roughly means 'move to a location associated with the logophoric center'. Given that a given logophoric domain, as we have seen, cannot represent a mixed perspective, this explains why an exempt anaphor appearing in the same domain as *come* must corefer with the deictic center of *come*: both must be bound by the logophoric center of their domain (cf. Charnavel 2018b for a similar conclusion about Mandarin).

(92) Logophoric sensitivity of motion verbs

Motion verbs like *come* take a silent logophor as implicit argument, which must be bound by pro_{log}.

In sum, the behavior of several elements besides French exempt anaphors suggests that the notion of logophoricity as mental perspective is more generally linguistically pertinent, but further research would be needed to confirm this.

3. Further motivating the logophoric operator hypothesis: locality effects

Recall that under our hypothesis, exempt anaphors are reduced to plain anaphors because they are locally bound by a silent logophoric binder. In section 2, I specified and motivated the logophoric nature of their binder. The goal of this section is to independently justify the locality of their binder. After further specifying our logophoric operator hypothesis as compared to previous hypotheses in section 3.1, I will provide independent arguments for it in sections 3.2, 3.3 and 3.4.

3.1. The logophoric operator hypothesis (part 2)

I have explained in section 2.4 how binding of exempt anaphors via logophoric operators derives their interpretive constraints. The logophoric operator hypothesis can further explain why exempt anaphors are morphologically identical to plain anaphors if we hypothesize that the logophoric operator provides a local binder to exempt anaphors, thus reducing them to plain anaphors. This requires assuming that a logophoric operator can appear in the binding domain of anaphors, namely in their spellout domain (smallest tensed TP, vP, DP or any other XP with subject containing them) according to Charnavel & Sportiche's 2016 hypothesis (see section 1). I thus posit the possible presence of a logophoric projection LogP in each spellout domain, which is headed by a logophoric operator. This reflects the intuition (which we will support in section 3.3) that each phase can be specified as being presented from some individual(s)'s perspective. The logophoric operator takes a silent logophoric pronoun prolog as subject, which binds all logophors in its domain, including exempt anaphors.

(93) The syntactic status of logophoric operators

- Each spellout domain (tensed TP, vP, DP or any other XP with subject) can contain a dedicated perspectival projection LogP for OP_{LOG} in its left periphery.
- $\circ\quad \text{OP}_{\text{LOG}}$ is a head taking a logophoric pronoun pro_{log} as subject.

The logophoric pronoun pro_{log} thus provides an A-binder for exempt anaphors, which are thereby reduced to plain anaphors obeying Condition A.⁴⁷ The apparent difference between plain and

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⁴⁶ For my purposes, it is sufficient to assume that a projection hosting a logophoric operator appears in each spellout domain containing an exempt anaphor. I leave open the question whether each spellout domain contains a logophoric projection even in the absence of logophors. Note that Condition B cannot be informative if it is based on coargumenthood as in Reinhart & Reuland (1993): a pronoun referring to the logophoric center would never trigger a Condition B violation as a logophoric operator cannot be the coargument of a pronoun (see section 3.4.3). This question could instead be explored by examining Condition C effects (cf. section 3.3) and perspectival effects independent of anaphora.

⁴⁷ The anaphor is A-bound since its binder is within its spellout domain: as argued in Charnavel & Sportiche (2016: section 5.4.2.), the standard A/A-bar distinction should be redefined in terms of movement span, given the evolution of the theory; A-bar movement is movement to the edge of a phase, and A-movement is movement within the spellout domain. The other requirement for A-binding is that the binder be a phrase (XP), not a head (X). That's why the

exempt anaphors is due to the fact that plain anaphors are bound within their spellout domain by an overt binder (DP in (94)b) and exempt anaphors by a silent binder (pro $_{log}$ in (94)a). This silent binder neither need a binder, nor even an overt antecedent in the sentence ((DP) in (94)a) since pro $_{log}$ references the value of the logophoric center in the syntax, which is determined on the basis of discourse and syntactico-semantic conditions (see section 2.4). That's why the local binding relation between an exempt anaphor and its silent binder pro $_{log}$ can be misconstrued as an unconstrained relation between the anaphor and the antecedent of pro $_{log}$, which creates the illusion that the anaphor disobeys Condition A. In fact, plain and exempt anaphors are one and the same object obeying Condition A – visibly for the former, invisibly for the latter.

$$(94) \ a. \ \dots (DP_i) \dots \begin{bmatrix} x_P & [y_P [LogP \ pro_{log-i} \ [OP_{LOG} \ \dots \ exempt \ anaphor_i \ \dots]]]]] \\ & & & & & \\ phase \ edge & & & spellout \ domain \\ \\ b. \ \dots \dots & \begin{bmatrix} x_P & [y_P \ \dots \ DP_i \ \dots \ plain \ anaphor_i \ \dots]]]]] \\ & & & & & \\ phase \ edge & & & spellout \ domain \\ \\ \hline \end{pmatrix}$$

The next sections present arguments independently motivating the hypothesis that prolog serves as an A-binder for exempt anaphors. The coreferential constraints on co-occurring exempt anaphors shown in section 3.2 will demonstrate that prolog exhaustively and locally binds exempt anaphors. The possible shifts of logophoric centers within clauses described in section 3.3 will support the restriction of logophoric domains to spellout domains. Finally, the mediation of prolog between exempt anaphors and their apparent antecedents will be further justified in section 3.4 by the fact that it derives the other specific distributional properties of exempt anaphors (apparent non-exhaustive binding and strict readings).

We have seen in sections 1.3 and 2.4 that this hypothesis is superior to hypotheses attributing a [+log] feature to exempt anaphors, which have to postulate some kind of homophony between plain and exempt anaphors and stipulate the correlation between logophoricity and non-locality found in so many languages. It is also superior to the other type of hypothesis found in the literature that aims to reduce exempt anaphors to plain anaphors: instead of positing a silent binder for exempt anaphors,⁴⁸ they argue that exempt anaphors move to a position where they can be

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anaphor is not directly bound by the logophoric operator (as in Anand 2006, i.a.), but by its pronominal subject (the logophoric pronoun).

⁴⁸ The hypothesis that the presence of a silent binder can affect the binding of anaphors has also been made independently of the issue of Condition A. For instance, Anand & Hsieh (2005) derive the constraints on the long distance binding of *ziji* out of purpose clauses from the presence of a covert variable introduced by the purpose clause marker and denoting the affectee. Sundaresan (2012) and Nishigauchi (2014) assume the presence of a silent binder of anaphors mainly for perspectival reasons (cf. fn. 51).

locally bound by their overt antecedent. The first version of this hypothesis (Pica 1987, Battistella 1989, Cole et al. 1990, i.a.) reduces long distance binding to local binding by LF successive head movement. It is clearly inapplicable to French anaphors and the like, which are morphologically complex (they are not heads). The second version instead assumes XP-movement of the anaphor and XP-adjunction to the IP below its antecedent (Huang & Tang 1991) or to perspectival projections (SourceP, SelfP, PivotP) in the left periphery of the CP just below the antecedent (Huang & Liu 2001). All these versions of the movement hypothesis face important issues. First, it is unclear how this kind of hypothesis can derive the fact that exempt anaphors need not be c-commanded by their antecedent. Second, they predict that an exempt anaphor cannot have its antecedent outside an island containing it, which is incorrect, as illustrated below for French and discussed in Charnavel et al. (2017). Under our hypothesis, the anaphor is instead bound within the island by the logophoric pronoun introduced by the logophoric operator contained in its spellout domain.

(95) Claire_i espère que les voisins seront là [quand des lettres adressées à elle_i-même ou à son mari arriveront].

'Claire_i hopes that the neighbors will be present [when letters addressed to herself_i or her husband arrive].'

Third, in this family of proposals, the perspectival interpretation of exempt anaphors can only be explained under Huang & Liu's (2001) version, which is the only version constraining the movement of exempt anaphors to be driven by perspectival considerations (despite some issues, as seen in section 2.4).

These various issues thus show that in order to reduce exempt to plain anaphors, assuming the presence of a silent logophoric binder in their binding domain is more successful than assuming covert movement to the binding domain of their apparent antecedents.

3.2. Independent evidence for local A-binding from local exhaustive coreference

Recall that superficially, exempt anaphors allow partial or split antecedents (see section 1.2), or possibly even no syntactically represented antecedent at all (see section 2.1). As we have explained however, assuming that exempt anaphors are not lexically marked as logophoric and are bound by a logophoric pronoun in their binding domain reduces them to a subcase of plain anaphors. Given that plain anaphors cannot have partial or split antecedents (see section 1.2), this predicts that exempt anaphors must be exhaustively bound by this logophoric pronoun (but crucially not by

their apparent overt antecedent, see section 3.4.1).⁴⁹ This prediction is correct, as illustrated by (96).

(96) *Christel_i pense qu'Agnès_k a dit que l'avenir de son_i fils dépend d'elles_{i+k}-mêmes et de son_k propre fils.

'*Christel $_i$ thinks that Agnès $_k$ said that her $_i$ son's future depends on themselves $_{i+k}$ and her $_k$ own son.'

We have seen in section 2.1.4 that the perspective of a local domain must be homogeneous, so that only one logophoric center can be represented in the domain of *elles-mêmes* and *son propre*. But this ban on perspective conflicts should not exclude example (96) from being represented as (97), where the logophoric pronoun partially binds *themselves* and exhaustively binds *her own*: this corresponds to a direct discourse involving *we* and *I*.

(97) *Christel_i thinks that Agnès_k said that her_i son's future [_{vP} pro_{log-k} depends on themselves_{i+k} and her_k own son].

Indeed, the availability of a plural pronoun including a singular *de se* center is attested independently, in the case of logophoric pronouns (Hyman & Comrie 1981:32, Frajzyngier 1985: 26, Sells 1987:449, i.a.), partial control constructions (see Landau 2015, Pearson 2016, i.a.) and in FID (Eckardt 2014, i.a.): PRO, logophoric pronouns and pronouns referring to the FID center must be read *de se* (see section 2.1.4), and (98)-(100) show that these elements can be plural and partially refer to the logophoric center.

(98) John_i wanted PRO_{i+k} to assemble in the hall. (Pearson 2016: 692)

(100)(...) We simply must pay Cargill something! she_i thought. And tomorrow was the day of the Mothers' Union tea, and they_{i+k} had finished the novel that Miss Foote had been reading to them_{i+k}. The question was, what to get for them next?

Orwell, A Clergyman's Daughter, p. 269 (Eckardt 2014:2)

⁴⁹ The reason why plain anaphors must be exhaustively bound is discussed in Charnavel & Sportiche (2016: section 5.4.3): the most promising theories in this respect are movement approaches to anaphor binding. Further note that exhaustive binding of plain anaphors does not imply that they must exhaustively corefer in the same local domain: several disjoint antecedents can co-occur in the same domain as illustrated in (xv). It is because there is at most one logophoric operator per spellout domain that exhaustive coreference is predicted in the case of exempt anaphors.

(xv) A sa seconde édition, [le livre]_i a comparé [sa_i propre introduction]_k à une parodie d'elle_k-même. 'In its second edition, [this book]_i compared [its_i own introduction]_k to a parody of itself_k.'

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Exempt anaphors, however, cannot similarly partially refer to the logophoric center: (96) shows that two exempt anaphors in the same domain cannot be partially coreferent, which argues against representation (97), where *themselves* is partially bound by the logophoric pronoun. In other words, allowing exempt anaphors to be non-exhaustively bound (which previous hypotheses using logophoric operators in effect do, since they equate exempt anaphors to logophoric pronouns and pronouns can be non-exhaustively bound) overgenerates in giving rise to the possibility of partial coreference of exempt anaphors in the same domain. On the contrary, hypothesizing that exempt anaphors, just like plain anaphors, must be exhaustively bound correctly derives the contrast between (96) and (98)-(100).

This hypothesis also correctly rules out representation (101), where the logophoric pronoun is plural and partially binds *her own*.

(101)*Christel_i thinks that Agnès_k said that her_i son's future [_{vP} pro_{log-i+k} depends on themselves_{i+k} and her_k own son].

Just like (97), (101) would be overgenerated in the absence of this hypothesis, as plural logophoric centers are in principle available and are compatible with singular *de se* pronouns. The availability of plural logophoric centers is shown by (102), which contains a plural exempt anaphor, and is corroborated by the existence of plural logophoric pronouns (Hyman & Comrie 1981, Frajzyngier 1985, i.a.), authors of free indirect discourse (Banfield 1982:96), shifted indexicals (Laterza 2014, i.a.) and PRO (Laterza 2014, i.a.; cf. split control in Landau 2015, i.a.).

(102) Christel_i pense qu'Agnès_k a dit que l'avenir de son fils dépend d'elles_{i+k}-mêmes et de leurs parents.

'Christel $_i$ thinks that $Agn\grave{e}s_k$ said that her son's future depends on themselves $_{i+k}$ and their parents.'

The compatibility of singular *de se* pronouns with plural logophoric centers is illustrated by the following FID example.

- (103) A l'issue de leur entretien avec le magazine, [Jeanne_i et son frère]_k eurent un regain d'espoir. Demain, la photo d'elle_i si controversée allait enfin se vendre, et ils_k pourraient de nouveau manger à leur faim!
 - 'After their interview with the magazine, [Jeanne_i and her brother]_k had some renewed hope. Tomorrow, the controversial photo of her_i would finally sell, and they_k could again eat their fill!'

The FID in (103) has a plural author (Jeanne and her brother, cf. Banfield 1982:96), but contains a singular pronoun referring to one of its members (*elle* referring to Jeanne). Given that pronouns

referring to the author of FID must be read *de se* (cf. Sharvit 2008, 2010), this illustrates the availability of partial *de se* reference.

The hypothesis that exempt anaphors must be exhaustively bound by their logophoric binders also directly derives the unacceptability of disjoint exempt anaphors in the same domain illustrated in (48) repeated below (cf. (59) too).

- (104)*Christel_i pense qu'Agnès_k a dit que l'avenir de son_i fils dépend à la fois d'elle_i-même et de son_k propre fils.
 - "*Christel_i thinks that Agnès_k said that her_i son's future depends both on herself_i and her_k own son."
- (105)*Christel_i thinks that Agnès_k said that her son's future [$_{\text{VP}}$ pro_{log-i+k} depends both on herself_i and her_k own son]

If the representation shown in (105) were available, *elle-même* and *son propre* would each be partially bound by (or coreferential with) the plural logophoric pronoun and (104) should be acceptable, contrary to fact. Note however that in that case, a ban on perspective conflicts is sufficient to rule out (104) (as noted in section 2.1.4): unlike (96), (104) has no viable direct discourse counterpart, as two first-person pronouns in the same root clause cannot be disjoint.

In sum, exempt anaphors in the same domain have to be referentially identical, but the pragmatic constraints on perspective can only exclude cases of disjointness, not those of partial coreference. This demonstrates that exempt anaphors are in fact plain anaphors that must be exhaustively bound, and therefore provides independent evidence for the presence of a silent local A-binder (given that their apparent overt antecedents can be split or partial).

Finally, it also follows from this analysis that anaphors co-occurring in the same domain can however be disjoint if one of them has an overt local antecedent. (106) shows that this is borne out: *sa propre* can be bound by Cyril and *elle-même* by the logophoric pronoun (given that anaphors are not subject to intervention effects in their local domain).

(106) Solange_i pense que Cyril_k est [$_{vP}$ t_k pro_{log-i} fier d'elle_i-même et de sa_k propre fille]. ⁵⁰ 'Solange_i thinks that Cyril_k is [$_{vP}$ t_k pro_{log-i} proud of herself_i and his_k own daughter].'

3.3. Evidence for non-clausal logophoric domains

We have observed that in many cases, there is only one perspective per clause due to discourse and syntactico-semantic conditions. This is the intuition motivating proposals hypothesizing the

⁵⁰ The logophoric operator is here inserted lower than the trace of the subject so that its logophoric pronoun cannot count as an intervener for A-movement of the subject. But this precaution is probably unnecessary as intervention effects for A-movement depend on the type of probe (see Angelopoulos & Sportiche 2016, i.a.).

presence of at most one logophoric operator per CP (Koopman & Sportiche 1989, Speas 2004, Anand 2006, i.a.). Unlike these proposals, our hypothesis allows, but does not require a given CP to have a single perspective: perspective switch between phases is permitted (cf. Sundaresan 2012⁵¹) if the discourse and syntactico-semantic conditions allow it. As we now show, this is a desirable consequence, which has analytical implications.

First, recall from examples (43)-(46) that DPs or appositives within embedded attitude contexts can be presented from the speaker's perspective, while the rest of the attitude context is from the closest attitude holder's perspective; under our hypothesis, the logophoric operator(s) within such DPs or appositives can accordingly reference a logophoric center different from that referenced by the operator(s) in the rest of the attitude context.

(107) [Mes_k amis]_i pensent que Lucie – [DP prolog-k cette idiote amoureuse de leur fils plutôt que de mon_k propre fils] – [VP prolog-i ferait tout pour eux_i-mêmes ou leur proches]. '[My_k friends]_i think that Lucy – [DP prolog-k that idiot in love with their son rather than my_k own] – [VP prolog-i would do anything for themselves_i or their relatives].'

Second, new logophoric centers can be introduced within clauses. This is for instance the case when nouns with potential mental content like 'dream' or 'diary' in (108)-(109) occur within attitude contexts. In such cases, exempt anaphors can be disjoint within the same clause (*son propre* vs. *lui-même* in (108)-(109)) as long as they occur in different perspectival and spellout domains. Similarly, other perspectival expressions such as evaluative adjectives can also be relativized to different perspective centers: in (109), *étrange* 'strange' must be (at least) evaluated by Paul's daughter, and *ignobles* 'horrible' (at least) by Paul's granddaughter.

⁵¹ Sundaresan (2012, 2018) similarly proposes that there is one perspectival projection per phase. Her motivations are different from ours. First, her syntactic motivation for the locality of the silent perspectival center relies on the observation that taan in subject position seems to trigger agreement on the verb. Given the anaphor-agreement effect and the possible person mismatch in some cases (first-person agreement on the verb while taan is marked thirdperson), she concludes that the verbal agreement has to come from another local source – a silent perspectival pronoun locally binding taan. But this forces her to stipulate a mechanism ensuring agreement between T and this pronoun above TP. Second, the syntactic nature of taan binding is motivated, she argues, by anti-locality effects on taan (ban on clausemate subject antecedence): a general wellformedness condition on perspective-holding is assumed (but not explained), namely that the DP denoting the perspective holder cannot be embedded within the predication towards which its referent holds a perspective (under our analysis, this apparent perspectival constraint derives from Condition C effects, as shown in the rest of the section). Third, given that Sundaresan's perspectival projection does not have to be within the spellout domain, but within the phase containing the anaphor, this proposal cannot reduce exempt to plain anaphors (this reduction is not her goal for Tamil however, given that according to her (as noted in section 2.4), the Tamil anaphor taan is always perspectival - but see fn.40). Finally, Sundaresan motivates the restriction of perspectival domains to phases on the basis of non-mental, deictic perspective, which we showed is a different phenomenon (see fn.40 about ways of further testing this in Tamil).

- (108) [Le fils de Marie]_i pense que [_{TP} pro_{log-i} le rêve de [son_i propre fils]_k [_{vP} pro_{log-k} dit quelque chose sur lui_k-même]].

 '[Mary's son]_i thinks that [_{TP} pro_{log-i} the dream of [his_i own son]_k [_{vP} pro_{log-k} says
 - "[Mary's son]_i thinks that [$_{TP}$ pro $_{log-i}$ the dream of [his_i own son]_k [$_{VP}$ pro $_{log-k}$ something about himself_k]]."
- (109) [La fille de Paul]_i explique que [$_{TP}$ pro $_{log-i}$ l'étrange journal de [sa_i propre fille] $_k$ rapporte [$_{DP}$ pro $_{log-k}$ les ignobles remarques des médias sur elle $_k$ -même]]. '[Paul's daughter] $_i$ explains that [$_{TP}$ pro $_{log-i}$ [her $_i$ own daughter] $_k$'s strange diary relates [$_{DP}$ pro $_{log-k}$ the media's horrible remarks about herself $_k$]].'

This shows that a perspectival domain is not necessarily a clause, but can be a smaller constituent. This reflects the intuition that one cannot only hold a perspective about a tensed clause, but also about an event or an entity, which can be perceived in different ways (cf. Cantrall 1974, Coppieters 1982, about viewpoints within DPs).⁵² Moreover, these facts are compatible with the assumption that only predications (phrases of the form subject-predicate) can be relativized to the perspective of a logophoric center (cf. Zribi-Hertz's 1989 domain-of-point-of-view): our hypothesis indeed implies that there is at most one logophoric operator per spellout domain, and all spellout domains including DPs (see Svenonius 2004, Charnavel & Sportiche 2016, i.a.) have a subject and are therefore predications.

The hypothesis that logophoric operators can occur in each spellout domain has another consequence: it derives why Condition C need not be violated when the logophoric center of a clause is represented as a full DP in the clause containing the exempt anaphor. For example, (49) repeated below would be predicted to violate Condition C if the logophoric operator had to occur in the left periphery of the clause. Instead, our hypothesis implies that it can be lower, within the spellout domain of the vP phase containing *son propre*. This correctly avoids a Condition C violation.⁵³ Note also that we do not need to posit a coreferring operator in the TP phase: the subject here is presented from the speaker's perspective rather than from Paul's, which means that even if a logophoric operator was present at TP (see fn. 46), it would not take Paul as subject, but the speaker.

(110) [Le courage de Paul_i]_k [$_{VP}$ t_k pro_{log-i} a sauvé des flammes à la fois sa_i propre maison et celle des voisins].

'[Paul_i's courage]_k [$_{VP}$ t_k pro_{log-i} saved from the fire both his_i own house and the neighbors'.]'

Sportiche 2017, i.a.).

⁵² This is supported by the fact that expressions such as *according to x* do not only modify clauses, but also nouns. ⁵³ Condition C would not even be violated under the hypothesis that the logophoric binder is above the trace of the subject (see fn. 50) because A-movement can bleed Condition C violations (as long as reconstruction is not total, see

Similarly, our hypothesis correctly predicts that the apparent antecedent of the anaphor (the overt DP denoting the logophoric center) can be further embedded in the clause as in (111) or in (112) (repeating example (v) from fn. 27).⁵⁴ No Condition C violation is triggered because the logophoric operator is within the spellout domain of the DP phase in these cases, which is naturally construed as a logophoric domain under the discourse and syntactico-semantic conditions of the sentence.

- (111) Ces racontars sur le fils du voisin ramènent au souvenir de Marie, [DP prolog-i les ignobles propos des médias sur soni propre fils].
 - 'The gossip about the neighbor's son brings back to $Mary_i$'s memory [DP pro_{log-i} the media's horrible words about her, own son].'
- (112) [DP prolog-i Les méchants commentaires des internautes sur luii-même] ont atteint le moral de Marc_i.

'[DP prolog-i The net surfers' mean comments about himselfi] have affected Marci's morale'.

At the same time, our hypothesis allows an exempt anaphor to occur within the subject as in (38) repeated below:⁵⁵ the relevant logophoric operator is within the TP spellout domain in this case.⁵⁶

(113) [La mère de Julie]_i pense que [TP prolog-i sai propre mère devrait être élue]. '[Julie's mother]_i thinks that [TP prolog-i her_i own mother should be elected].'

3.4. Deriving the other properties of exempt anaphors

In the previous sections, I have presented independent evidence for the hypothesis that logophoric pronouns introduced by logophoric operators provide A-binders for exempt anaphors in their spellout domain, thus reducing them to plain anaphors. The goal of this last section is to show that this hypothesis also derives the three distributional properties (other than apparent non-local binding) apparently distinguishing between exempt and plain anaphors, namely non-exhaustive

⁵⁴ Even if we adopt Belletti & Rizzi's (1988) proposal about the structure of *psych*-verbs (where the object ccommands the subject at some level of representation, i.e. before movement of the subject when it is in the theme position), the anaphor lui-même is not plain here, since Marc is embedded within the object and thus cannot ccommand *lui-même* at any level of representation.

of this DP and thus does not have to be bound within it (see Charnavel & Sportiche 2016 for more details). This is consistent with some previous proposals. Cinque (1999) argues that the Speech Act, Evaluative, Evidential and Epistemic Mood projections, in which Speas (2004) positions logophoric operators, are (the highest) elements of the TP-space, given that they can follow focused and topicalized phrases of the CP-periphery space. Charnavel & Mateu (2015) demonstrate that the logophoric operator responsible for the Clitic Coference Constraint in some Romance languages can occupy a position below the nominative projection. Nishigauchi (2014) claims that the set of projections that he calls POV – point of view – lies below Tense. But even if they propose a lower position for the operator than the standard CP periphery, these proposals still seem to only allow one operator per clause.

binding (section 3.4.1), strict readings (section 3.4.2) and non-complementarity with pronouns (section 3.4.3).

3.4.1. Non-exhaustive binding

As observed in section 1.2, exempt anaphors, unlike plain anaphors, appear to be able to have partial or split antecedents. The presence of the logophoric operator accounts for this property: what we in fact observe is not non-exhaustive binding of the anaphor, which must in fact be exhaustively bound by the logophoric pronoun prolog (as seen in section 3.2), but non-exhaustive coreference (or binding) between prolog and the apparent overt antecedent(s) of the anaphor. Just like standard pronouns (including overt logophoric pronouns, see section 3.2), the silent pronoun prolog introduced by the logophoric operator can refer to the sum of two antecedents or to part of an antecedent. Split antecedence, schematized in (114), is illustrated in (115) (repeating (102)).

- (114) antecedent- 1_i ... antecedent- 2_k ... $[x_P$... $pro_{log-i+k}$... anaphor_{i+k}...]
- (115) Christel_i pense qu'Agnès_k a dit que l'avenir de son fils [_{vP} pro_{log-i+k} dépend d'elles_{i+k}-mêmes et de leurs chers parents].
 - 'Christel_i thinks that $Agn\grave{e}_{s_k}$ said that her son's future [$_{vP}$ pro_{log-i+k} depends on themselves_{i+k} and their dear parents].'

In (115), the exempt anaphor *elles-mêmes* refers to the sum of *Christel* and *Agnès*. This is because the pronoun introduced by the logophoric operator binding it refers to that sum, since these two attitude holders form the plural logophoric center of the domain; this is further confirmed by the availability of plural *leurs chers* 'their dear' (even in the absence of the exempt anaphor). Split antecedence of pro_{log} in (115) is thus similar to that of the overt pronoun *elles* 'they' in (116).

(116) Christel_i pense qu'Agnès_k a dit que l'avenir de son fils dépend d'elles_{i+k} et de leurs parents.

'Christel_i thinks that Agnès_k said that her son's future depends on them_{i+k} and their parents.'

Apparent split antecedence of exempt anaphors therefore arises when the discourse and syntacticosemantic conditions determine a plural value for the logophoric center, and that the parts of that plural center are represented as distinct overt DPs in the sentence. Partial binding can be explained in a similar way:⁵⁷ there is in fact no partial binding of the anaphor, but partial coreference (or binding) between prolog and its antecedent, as shown in (117)-(119).

```
(117)[antecedent<sub>i</sub> and x]<sub>k</sub> ... [x_P ... pro<sub>log-i</sub> ... anaphor<sub>i</sub>...]
```

- (118) [Christel_i et ses enfants]_k croient que l'avenir [$_{vP}$ pro_{log-i} ne dépendra que de ses_i propres efforts].
 - '[Christel_i and her children]_k believe that the future will [$_{vP}$ pro_{log-i} only depend on her_i own efforts].'
- (119) [Christel_i et ses enfants]_k croient que l'avenir ne dépendra que de ses_i efforts. '[Christel_i and her children]_k believe that the future will only depend on her_i efforts.'

In sum, exempt anaphors must be exhaustively bound, just like plain anaphors, but the illusion is created that they allow split or partial antecedents, because their silent binder does.

3.4.2. Strict readings

Another property that distinguishes exempt from plain anaphors, as mentioned in section 1.2, is the availability of strict readings in ellipsis and focus constructions: while plain anaphors are standardly assumed to only trigger sloppy readings, exempt anaphors can also give rise to strict readings (see Lebeaux 1984, Reinhart & Reuland 1993, i.a.).

This observation has been questioned in recent experiments (see Frazier & Clifton 2006, Kim & Runner 2009, Ong & Brasoveanu 2014, McKillen 2016, i.a.) showing that locally bound anaphors can trigger strict readings (see also Dahl 1973, Sag 1976, Fiengo & May 1994, i.a.). But in fact, it crucially remains valid after stricter control of the data, namely if we adopt our inanimacy strategy for distinguishing between plain and exempt anaphors⁵⁸ and if we incorporate Hestvik's 1995 and Kehler's 2002 discovery that anaphors in ellipsis behave differently in subordination and in coordination, as shown by the contrast between (120) and (121).

```
    (120) John<sub>i</sub> defended himself<sub>i</sub> before Bill did.
        i.e. ... before Bill<sub>k</sub> defended {himself<sub>k</sub>/him<sub>i</sub>}.
        (✓ sloppy/✓ strict reading)
        (cf. Hestvik 1995)
    (121) John<sub>i</sub> defended himself<sub>i</sub> and Bill did too.
        i.e. ... and Bill<sub>k</sub> defended {himself<sub>k</sub>/*him<sub>i</sub>} too.
        (cf. Hestvik 1995)
```

⁵⁷ It must nevertheless be noted that there is less independent evidence for the possibility of construing a logophoric center as part of an attitude holder (see (103)) than for that of construing a logophoric center as including an attitude holder (see (98)-(100)).

⁵⁸ All experimental papers mentioned above suffer from the same confound: all the anaphors used in the stimuli are animate, and can therefore easily be construed as being logophoric (and thus exempt).

Indeed, the contrast between (122) and (123) below, in which the ellipsis site⁵⁹ is in a subordinate clause, confirms that inanimate (thus plain) anaphors only exhibit sloppy readings, while animate anaphors can give rise to both sloppy and strict readings.

```
(122) [Ta page internet]<sub>i</sub> contient plus de liens vers elle<sub>i</sub>-même que [la mienne]<sub>k</sub>.

i.e. que [la mienne]<sub>k</sub> ne contient de liens vers {elle<sub>k</sub>-même/*[ta page internet]<sub>i</sub>}

'[Your webpage]<sub>i</sub> contains more links towards itself<sub>i</sub> than mine<sub>k</sub> (does).'

i.e. than mine<sub>k</sub> contains links towards {itself<sub>k</sub>/*[your webpage]<sub>i</sub>} (✓ sloppy/*strict)
(123) Coralie<sub>i</sub> possède plus de photos d'elle<sub>i</sub>-même que [sa soeur]<sub>k</sub>.

i.e. que [sa soeur]<sub>k</sub> ne possède de photos d'{elle<sub>k</sub>-même/Coralie<sub>i</sub>}

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

i.e. than [her sister]<sub>k</sub> owns pictures of {herself<sub>k</sub>/Coralie<sub>i</sub>}
```

Our logophoric operator hypothesis accounts for these facts, assuming that the ellipsis site contains a copy of the anaphor (unlike what is assumed under analyses based on vehicle change, cf. Fiengo & May 1994, i.a.). In the case of inanimates, only sloppy readings are available because the elided anaphor has to be locally bound by the overt antecedent, e.g. *la mienne* 'mine' in (122), as represented in (124).

```
(124) [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). (sloppy)

'[Your webpage]<sub>i</sub> contains more links towards itself<sub>i</sub> than mine<sub>k</sub> (does) (contain links towards itself<sub>k</sub>).'
```

In the case of animates, the elided anaphor can also be directly bound by the local antecedent as a plain anaphor, which gives rise to a sloppy reading as in (125)a. But crucially, an elided animate anaphor can also be anteceded by a silent logophoric pronoun if it refers to the logophoric center. A strict reading can therefore arise as long as the antecedent of the non-elided anaphor is the logophoric center in the ellipsis site. This is the case in (125)b, where the acceptability of *sa chère* 'her dear' shows that *Coralie* is an empathy locus. As required by the parallelism condition in ellipsis (see Takahashi & Fox 2005, i.a.), the anaphor in the antecedent is also bound by a logophoric pronoun in that case.

```
(125) a. Coraliei possède plus de photos d'ellei-même que [sa soeur]k (ne possède de photos d'ellek-même). (sloppy) 
'Coraliei owns more pictures of herselfi than [her sister]k does (own pictures of herselfk).'
```

_

⁵⁹ In French, only TP-ellipsis is possible, not VP-ellipsis.

b. Coralie_i [vP1 prolog-i possède plus de photos d'elle_i-même] que sa_i (chère) soeur [vP2 prolog-i (ne possède de photos d'elle_i-même)]. (strict) 'Coralie_i [vP1 prolog-i owns more pictures of herself_i] than her_i (dear) sister (does) [vP2 prolog-i (own pictures of herself_i)].'

The same holds for focus constructions as shown in (11)b-(12)b repeated in (126)-(127): the availability of strict readings depends on the presence of a logophoric operator.

Thus, the availability of strict readings depends on the possibility of construing the antecedent of the overt anaphor as a logophoric center in the ellipsis site. This can explain the contrast between subordination and coordination observed by Hestvik (1995) and Kehler (2002) as subordination favors this possibility. For instance, John, the highest subject of the sentence in (120) above, can easily be construed as the empathy locus of the whole sentence, including the subordinate clause. But in (121), it is hard to interpret John as the empathy locus outside the first conjunct: because of the symmetry of the coordinated structure, it is much more natural to construe Bill (the subject of the second conjunct) than John (the subject of the first conjunct) as the empathy locus in the second conjunct. This accounts for the contrast in French between (123), which involves subordination and licenses a strict reading, and (128), which involves coordination and only marginally licenses a strict reading: as indicated in (b), the logophoric pronoun does not (easily) have the right value for triggering a strict reading.

- (128) a. Coraliei a accroché de nombreuses photos d'ellei-même dans son bureau et Suzannek aussi (a accroché de nombreuses photos d'{ellek-même/??Coraliei}.
 - 'Coralie_i hung many pictures of herself_i in her office and Suzanne_k (did) too (hang many pictures of $\{\text{herself}_k/??\text{Coralie}_i\}$).'

 (\checkmark sloppy, ??strict)
 - b. Coralie_i [vP1 prolog-i a accroché de nombreuses photos d'elle_i-même dans son bureau] et Suzanne_k [vP2 prolog-k/??i (a accroché de nombreuses photos d'elle_{k/??i}-même) aussi]. 'Coralie_i [vP1 prolog-i hung many pictures of herself_i in her office] and Suzanne_k (did) [prolog-k/??i (hang many pictures of herself_{k/??i}) too].'

Coordination structures are nevertheless predicted to be able to give rise to strict readings if the antecedent of the overt anaphor is construed as a logophoric center in the ellipsis site. Example (129), where the expression *d'après* 'according to' makes Thomas an attitude holder in the whole sentence, shows that this is borne out. Example (130), where the subject of the second conjunct is inanimate, further illustrates this.

- (129) D'après Thomas_i, la police [_{vP1} pro_{log-i} fait souvent appel à lui_i-même et ses informateurs], et les services secrets [_{vP2} pro_{log-i} font souvent appel à lui_i-même et ses informateurs aussi]. (strict) 'According to Thomas_i, the police [_{vP1} pro_{log-i} often calls on himself_i and his informants and the secret service (does) [_{vP2} pro_{log-i} often call on himself_i and his informants too].'
- (130) Thomas [vP1 prolog-i a fourni une preuve contre lui_i-même] et le contenu de ses poches [vP2 prolog-i a fourni une preuve contre lui_i-même] aussi.

 'Thomas has [vP1 prolog-i provided proof against himself_i] and the content of his pockets (has) [vP2 prolog-i provided proof against himself_i] too.'

Similarly, the strict reading in (128) becomes available if the discourse and syntactico-semantic conditions allow Coralie to be a logophoric center in the ellipsis site. This is the case in (131), in which the presence of *sa chère* 'her dear' in the second conjunct favors the construal of Coralie as an empathy locus there: reference of *sa chère* to Coralie facilitates the interpretation where the logophoric center remains Coralie in the second conjunct instead of changing into the referent of the second subject.

(131) Coralie_i [_{vP1} pro_{log-i} a accroché de nombreuses photos d'elle_i-même dans son bureau] et sa_i chère soeur [_{vP2} pro_{log-i} a accroché de nombreuses photos d'elle_i-même dans son bureau] aussi. (strict) 'Coralie_i [_{vP1} pro_{log-i} hung many pictures of herself_i in her office] and her_i dear sister (did) [_{vP2} pro_{log-i} hang many pictures of herself_i in her office] too.'

3.4.3. Non-complementarity with pronouns

The last property that is usually assumed to distinguish exempt from plain anaphors is their distribution in free variation with pronouns, while plain anaphors are supposed to be in complementary distribution with pronouns (Bouchard 1984, Lebeaux 1984, i.a.; cf. Safir 2004).

As noted by Hicks (2009) and Charnavel & Sportiche (2016), this difference is less robust than the other ones. While some examples like (132) (repeating (13)) seem to support the existence of a complementarity between plain anaphors (e.g. *elle-même*) and pronouns (e.g. *elle*), many examples can be found where a plain anaphor can be replaced with a pronoun: this is generally the

case of plain *son propre* as illustrated in (133) (repeating (7)a); this is sometimes the case of plain *lui-même* as exemplified in (134).

```
(132) [La Terre]<sub>i</sub> tourne sur elle<sub>i</sub>*(-même). 
'[The earth]<sub>i</sub> spins on it<sub>i</sub>*(self).'
```

- (133)[Cette auberge]_i fait de l'ombre à son_i (propre) jardin et au jardin de la maison voisine. '[This inn]_i gives shade to its_i (own) garden and to the garden of the neighboring house.'
- (134) a. Marie_i parle souvent d'elle_i(-même). [also in non-*de se* contexts, see section 2.4] 'Mary_i often talks about her_i(self).' (Bouchard 1984, Zribi-Hertz 1995)
 - b. [Un camion]_i éclaire loin devant lui_i(-même).
 - '[A truck]_i shines its light far ahead of it_i(self).' (cf. Cantrall 1974)
 - c. [Cet aimant]_i attire des trombones vers lui_i(-même).
 - '[That magnet]_i attracts paper clips to it_i(self).' (cf. Minkoff 2000)

Such facts question the assumption that the binding domains for anaphors and pronouns are identical. They instead suggest that the domain for Condition B is smaller than the domain for Condition A, as argued by Huang 1983 and Chomsky 1986, among others, on the basis of examples like (133).

Regarding exempt anaphors, the question of how they are predicted to be in free variation with pronouns hinges on the exact definition of Condition B and how it could be violated in the presence of a logophoric operator. The full exploration of these questions must be left for further research, but a preliminary investigation of the relevant facts suggests that logophoric pronouns introduced by logophoric operators can never trigger Condition B effects as they always occur outside the relevant domain. That this is the case with possessive *son* directly follows from facts like (133) and is illustrated in (135) (cf. 0), where the curly brackets represent the most plausible domain for Condition B.⁶⁰

(135)[La fille de Marie]_i observe que la maison [$_{vP}$ pro $_{log-i}$ fait de l'ombre à (sa_i propre fille et) à {sa_i voisine}].

'[Mary's daughter]_i observes that the house [$_{vP}$ pro $_{log-i}$ gives shade to (her $_{i}$ own daughter and) {her $_{i}$ neighbor}].'

Furthermore, the facts shown in (133) and (134) also support the hypothesis that logophoric operators appear outside the binding domain of the pronoun *lui*. In particular, it seems that only binding by coarguments as in (133) (vs. (134)b) triggers Condition B violations, which suggests

⁶⁰ The presence of an exempt anaphor co-occurring with the pronoun in (135) guarantees the presence of a logophoric operator in their spellout domain. Under the hypothesis that logophoric projections are optional (see discussion in fn. 46), pronouns can otherwise be directly predicted to be in free variation with anaphors as long as we assume that logophoric projections are absent in the presence of pronouns.

that a coargumenthood-based analysis of Condition B à la Reinhart & Reuland (1993) is on the right track. In fact, robust Condition B effects in French mainly arise with clitics bound by their coarguments as shown in (136).⁶¹

```
(136) a. *Marie<sub>i</sub> la<sub>i</sub> regarde.
```

- "Mary is looking at her."
- b. *Marie_i lui_i parle.
 - "Mary is talking to her."
- c. *Marie_k le_i lui_i montre dans le miroir.
 - "Mary_k is showing him_i to him_i in the mirror."

These observations imply that binding of the pronoun *lui* by pro_{log} could never violate Condition B, given that prolog can never be the coargument of *lui* (or any other pronoun: the only possible coargument of prolog is the complement of OPLOG, which is of the form subject-predicate). Consequently, exempt anaphors are predicted to be in free variation with pronouns (putting aside interpretively driven complementarity that may follow from a general preference for more specified forms, see Schlenker 2005, i.a. 62).

4. Conclusion – Crosslinguistic implications and open questions

To sum up, the remarkable crosslinguistic homophony between exempt anaphors and plain anaphors is explained by assuming that they are the same objects: seemingly exempt anaphors are A-bound in their local domain by silent logophoric pronouns introduced by logophoric operators. This allows us to explain both the syntactic and the semantic specificities of exempt anaphors as compared to plain anaphors, without postulating a lexical difference between them.

In this paper, the logophoric operator hypothesis has been primarily motivated on the basis of French data. The hope is of course that this hypothesis explains the distribution of exempt anaphors more generally, i.e. in the many other languages where exempt and plain anaphors have the same form. As we have seen, this seems promising in cases like English himself, Japanese zibun, Mandarin ziji, among others, but a careful application of the logophoric tests and the other diagnostics mentioned will be necessary to confirm the predictions.

This does not mean that all these exempt anaphors will exhibit exactly the same characteristics as French ones. I leave open the possibility that other cases of morphologically

⁶¹ (134)a and c further show that the notion of coargumenthood relevant for Condition B must be restricted in a way to be determined as not all cases of coargumental binding trigger Condition B effects. Note that if Condition B effects are only triggered by clitics (but see (133)), free variation between exempt *lui-même* and pronouns directly follows given that exempt *lui-même* is in complementary distribution with clitics (see fn. 6).

To particular, exempt anaphors could be preferred over pronouns in *de se* contexts as they are specified for *de se* readings (due to their dependency on a logophoric operator, see section 2.4).

identical plain and exempt anaphors exhibit additional, language-specific properties not found with these French anaphors. For instance, it seems that English *himself* is subject to an additional prosody-related condition preventing exempt *himself* from appearing in weak positions such as the direct object position as suggested by Ahn (2015), Charnavel & Zlogar (2016) and Charnavel & Sportiche (2016: section 3.2.5). Also, Mandarin *ziji* seems to be subject-oriented, as opposed to French *son propre* and *lui-même*. Furthermore, some lexical factors that play a role in determining the value of logophoric centers may vary from language to language. For example, we have seen that verbs of giving are lexically specified for empathy in Japanese or Malayalam, but not in French or English. Fully explaining the behavior of plain and exempt anaphors in other languages will thus require an understanding of various factors that could interact with the logophoric operator hypothesis in ways to be determined.

Moreover, the present article does not say anything about languages where the two kinds of anaphors are morphologically distinct. In particular, it does not exclude the existence of more specified anaphors: some anaphors in some languages may well be more specified, e.g. [-log], so as to be unbindable by perspectival elements (such anaphors would only be plain; a potential candidate could be Dutch *zichzelf* (Rooryck & Vanden Wyngaerd 2011) or Hebrew *acmi* (Bassel 2018); or conversely, some anaphors in some languages may be more specified, e.g. [+log], so as to be necessarily perspectival (such anaphors would be logophors; potential candidates are Dutch *hemzelf* (Rooryck & Vanden Wyngaerd 2011) or Tamil *taan* (Sundaresan 2012 – but see section 2.5)). To determine the extent of such cases, it would nevertheless be necessary to apply to these anaphors the inanimacy strategy when possible, and otherwise the tests (described in section 2.4) distinguishing between logophoric and non-logophoric animate anaphors.

Furthermore, the focus of this article was on exempt anaphors that are not subject to any syntactic requirement (also sometimes called *free* anaphors). I did not aim to take a stand on the putative existence of so-called *long distance* anaphors (cf. Reinhart & Reuland 1993, Cole et al. 2006, Reuland 2011, i.a.), which are considered to be exempt from locality constraints (their antecedent can be outside the local binding domain defined by Condition A), but not from binding constraints (they still need to be bound). Such anaphors are also often assumed to be monomorphemic and subject-oriented, as opposed to complex anaphors such as French *son propre* and *lui-même*. The null hypothesis would be to reduce the behaviors of so-called long distance anaphors and free anaphors to a unique behavior (i.e. to capture both cases using the logophoric operator hypothesis). This would imply that long distance anaphors have the same distributional and interpretive properties as free anaphors, which is an empirical question. This question is investigated in Charnavel & Sportiche 2017, which show that the null hypothesis is in fact

supported for Icelandic *sig*. Further careful empirical investigation should decide the issue whether other long distance anaphors should be considered as a different category than exempt anaphors (see further discussion in Charnavel to appear: chapter 5).

Besides crosslinguistic investigations, further work needs to be done to address several remaining questions tied to the logophoric operator hypothesis. My goal was to reduce the behavior of exempt anaphors to that of plain anaphors by using independently existing tests and mechanisms (binding, logophoric operator). But of course, the logophoric operator hypothesis could be made more precise by further specifying these mechanisms it involves (which should be done on independent grounds): on the one hand, the discourse and syntactico-semantic conditions that determine the value of a logophoric center in a given domain; on the other hand, the binding mechanism for anaphors. Regarding the latter question, the logophoric operator hypothesis supports a Chomskian, antecedent-based theory of Condition A against predicate-based theories, which rely on the notion of coargumenthood, since logophoric operators are never coarguments of anaphors. But the nature of binding involved in Condition A remains to be specified. This is controversial, as some reduce it to Agree (Hicks 2009, Reuland 2011, Rooryck & Vanden Wyngaerd 2011, i.a.), and others adopt a movement approach (see discussion in Charnavel & Sportiche 2016: section 5). Regarding the former question, the precise examination of other types of logophors (besides exempt anaphors) should be crucially informative. In particular, it would be worth further investigating the behavior of motion verbs like *come*, which we have argued take a logophor as implicit argument.

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