

(UNDER)SPECIFICATION COUNTS:  
WHEN NONLOCAL ANAPHORS  
ARE NOT EXEMPT  
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*Abstract:* We explore the proposal in Charnavel 2019, 2020 that nonlocal anaphor binding is only apparent and reduces to local binding by a silent pronominal element—*pro<sub>log</sub>*—as the subject of a logophoric operator  $OP_{LOG}$  in the left periphery of the anaphor's local domain. Like any pronominal, *pro<sub>log</sub>* can be valued by a distant antecedent and should license split antecedents and partial binding for the anaphor it binds. We show that  $\phi$ -deficient anaphors in different language families allow nonlocal binding, while disallowing split antecedents and partial binding, contra the main hypothesis of the *pro<sub>log</sub>* approach. We describe a Multiple Agree–based analysis that accounts for the patterns observed.

*Keywords:* (under)specification, nonlocal anaphors, exemption, split antecedents and partial binding, (Multiple) Agree

## 1 Introduction

Further developing ideas in Charnavel and Sportiche 2017, Charnavel (2019, 2020) develops a novel approach to nonlocal anaphor binding. She proposes that where anaphors appear to allow a nonlocal antecedent (informally, an antecedent beyond the nearest subject),<sup>1</sup> there is in fact a local binder in the form of a silent pronominal element—*pro<sub>log</sub>*—that is the “subject of a logophoric operator  $OP_{LOG}$  heading a logophoric projection LogP in the left periphery” (Charnavel 2019: 215) of the local domain containing the anaphor. In this *pro<sub>log</sub>* approach, then, the picture for long-distance anaphors in (1a) is replaced by the picture in (1b) (after Charnavel 2019:217, omitting irrelevant details).<sup>2</sup>

- (1) a. [<sub>CP</sub> DP ... V [<sub>Clause</sub> DP ... V ... [<sub>Governing category</sub> DP ... V Anaphor]]]  
Anaphor binding
- b. [<sub>CP</sub> DP ... V [<sub>Clause</sub> DP ... V ... [<sub>Governing category</sub> [<sub>pro<sub>log</sub></sub> [<sub>DP</sub> ... V Anaphor]]]]]  
Nonlocal antecedency relation      Local anaphor binding

The anaphor is locally bound by *pro<sub>log</sub>*, which is itself anteceded by the element appearing to act as the nonlocal binder of the anaphor. Since *pro<sub>log</sub>* is a pronominal, the latter dependency can be nonlocal. As

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<sup>1</sup> According to Condition A of the canonical binding theory, an anaphor must be bound in its governing category (see Chomsky 1981, 1986), redefined as the “Spell-Out domain” in Charnavel and Sportiche 2016 and subsequent work.

<sup>2</sup> Structures like (1b) have been proposed for Japanese (Nishigauchi 2014) and Tamil (Sundaresan 2012, 2018), without extending them to all nonlocal binding.

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1–16

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Charnavel (2019) shows, there is an animacy requirement on nonlocal antecedents. This requirement, along with further conditions on the antecedents' discourse status, is taken to be embodied in *pro<sub>log</sub>*, whose properties are dependent on the *logophoric operator*. In section 3 we come back to this, showing that the animacy requirement on nonlocal binding is in fact independent of logophoricity, and that logophoricity itself is not necessarily locally marked.

A key role in the discussion is played by an extension of the notion of *exemption*. Under the original notion of exemption, an anaphor is defined as exempt (Pollard and Sag 1992, 1994, Reuland 2011) or “logophoric” (Reinhart and Reuland 1991, 1993) when it occurs in a specific type of position, where properties of the *structure* prevent Condition A from applying and enforcing locality. Such an anaphor, then, allows a nonlocal antecedent, subject to discourse conditions, or may even lack a sentential antecedent.<sup>3</sup> Under the *pro<sub>log</sub>* approach, the notion of exemption is redefined: any anaphor with a nonlocal antecedent is hypothesized to fall under the notion of exemption, to be valued by the *pro<sub>log</sub>* element as in (1b), and as such is expected to exhibit the properties of a logophor. As Charnavel (2019:321) writes, “By and large, the results have confirmed that the null-hypothesis, according to which purported long-distance anaphors should be reduced to exempt anaphors, is viable—pending the exploration of further cross-linguistic cases.” Following up on this, we carried out such an exploration.

Crucially, the two-step process in (1b) predicts a general difference between locally and nonlocally bound/exempt anaphors, based on a well-known test for status as a “true anaphor” (see Bouchard 1985), as opposed to status as a pronominal, involving split antecedency and partial binding (Charnavel 2019:277). Pronominals can be valued as the join of two NP values (a split antecedent) or as a member of a coordinated NP (partial binding), as in (2) and (3).

(2) John<sub>i</sub> told Mary<sub>m</sub> that they<sub>i+m</sub> should leave.

(3) John<sub>i</sub> and Mary<sub>m</sub> were convinced that Suzy would help her<sub>m</sub>.

True anaphors, however, do not allow either split antecedents (Giorgi 1984, Bouchard 1985, Anagnostopoulou and Everaert 2013) or partial binding.

(4) \*John<sub>i</sub> believes Mary<sub>m</sub> to like themselves<sub>i+m</sub>.

(5) \*John<sub>i</sub> and Mary<sub>m</sub> enjoyed herself<sub>m</sub>.

Charnavel (2019, 2020) argues that, unlike true anaphors (plain anaphors in her terms), exempt anaphors allow split antecedents and partial binding because their dependency is mediated by a pronominal—*pro<sub>log</sub>*. This is borne out for French.

<sup>3</sup> See also Pollard and Xue 1998, Büring 2005, and Giblin 2016.

- (6) Christel<sub>i</sub> pense qu’Agnès<sub>k</sub> a dit que l’avenir de son fils  
[<sub>VP</sub> *pro*<sub>log-i+k</sub> dépend d’elles<sub>i+k</sub>-mêmes et de leurs chers  
parents].  
‘Christel<sub>i</sub> thinks that Agnes<sub>k</sub> said that her son’s future  
[<sub>VP</sub> *pro*<sub>log-i+k</sub> depends on themselves<sub>i+k</sub> and their dear  
parents].’  
(Charnavel 2020:712)
- (7) Zoé<sub>i</sub> et Paul font de l’ombre à sa<sub>i</sub> propre fille et à la fille  
de la voisine.  
‘Zoe<sub>i</sub> and Paul are shading her<sub>i</sub> own daughter and the  
neighbor’s daughter.’  
(Charnavel 2020:677)

A similar pattern obtains for exempt anaphors in English picture nouns, as illustrated by the split antecedent example in (8) (Charnavel 2019: 6, citing Lebeaux 1984:346).

- (8) John<sub>i</sub> told Mary<sub>k</sub> that there were some pictures of  
themselves<sub>i+k</sub> inside.

In the next section, we evaluate Charnavel’s null hypothesis against data involving  $\phi$ -deficient anaphors and show that (a) exemption as originally identified by Pollard and Sag (1992, 1994) and Reinhart and Reuland (1991, 1993) only applies to  $\phi$ -specified anaphors (anaphors whose  $\phi$ -features are fully valued)— $\phi$ -deficient anaphors do not show exemption effects; and (b) crosslinguistically, there is a class of  $\phi$ -deficient long-distance anaphors that do not show exemption effects either. These results indicate a typological distinction between  $\phi$ -deficient and  $\phi$ -specified anaphors, going against what the *pro*<sub>log</sub> approach leads one to expect. Hence, this approach cannot be maintained in the form given.<sup>4</sup>

## 2 Exploring the Hypothesis

### 2.1 A Restriction on “Exemption”

Consider Dutch, which shows the same pattern as English when the anaphoric element *hemzelf/henzelf* ‘PRON SELF’ is used in an exemption context; replacing *hemzelf/henzelf* with *zichzelf* (*zich* is underspecified for number and gender<sup>5</sup>) is ill-formed.<sup>6</sup>

<sup>4</sup> The facts in section 2 indicate that the notion “anaphor” cannot be a primitive.

<sup>5</sup> We take it to be uncontroversial that elements like Romance reflexive clitics and simplex reflexives in Germanic are underspecified for  $\phi$ -features (see, e.g., Burzio 1991, Fanselow 1990, 1991; but see also Charnavel 2019:340).

<sup>6</sup> (9a–b) are uncontroversial constructed examples and as such are compatible with the *pro*<sub>log</sub> approach. See, for example, Vanden Wyngaerd 1994, Anagnostopoulou and Everaert 1999, Everaert 2003, and Rooryck and Vanden Wyngaerd 2011 for further discussion.

- (9) a. Jan<sub>i</sub> zei tegen Marie<sub>m</sub> dat die foto's van henzelf<sub>i+m</sub>/\*zichzelf<sub>i+m</sub> verschrikkelijk waren.  
'Jan<sub>i</sub> said to Marie<sub>m</sub> that those pictures of themselves<sub>i+m</sub> were terrible.'  
b. Jan<sub>i</sub> en Marie<sub>m</sub> hopen dat Suzy die foto van hemzelf<sub>i</sub>/\*zichzelf<sub>i</sub> zal verscheuren.  
'Jan<sub>i</sub> and Marie<sub>m</sub> hope that Suzy will tear up that picture of himself<sub>i</sub>.'

In (9b), *Suzy* is the only admissible antecedent for *zichzelf*. As we will show, this pattern is more general: exemption is subject to a restriction, so far not systematically discussed and not expected under the *prolog* approach.<sup>7</sup>

(10) *An effect of underspecification (initial formulation)*

When the pronominal element in an anaphoric expression, in an exemption context as originally defined, is replaced by a  $\phi$ -deficient element, no exemption obtains and neither partial binding nor split antecedents are available.

In German, this pattern obtains in (11).

- (11) Die Königin<sub>i</sub> fordert, dass Bücher mit unvorteilhaften Beschreibungen von \*sich<sub>i</sub>/\*sich selbst<sub>i</sub>/ihr selbst<sub>i</sub>/ihr<sub>i</sub> SE/SE SELF/PRON SELF/PRON verbrannt werden.  
burned be  
'The queen demands that books containing unflattering descriptions of herself be burned.'  
(after Jackendoff 1972)

Both *sich* and *sich selbst* are impossible here.<sup>8</sup>

Next, consider Scandinavian. The Scandinavian languages have SE-anaphors,<sup>9</sup> such as Norwegian *seg* and Icelandic *sig*, which are underspecified for number and gender and allow nonlocal binding in a wider range of contexts than Dutch *zich* or German *sich* (see, e.g., Everaert 1986, Hellan 1988, 1991, Thráinsson 1979, 1991, 2007, and the references cited there). In contexts that are typical of exemption in English, the counterparts with  $\phi$ -deficient anaphors in Scandinavian are all ill-formed, just like their counterparts in Dutch and German. The Norwegian equivalent of Pollard and Sag's (1994) well-known

<sup>7</sup> Many Germanic facts are from the existing literature and from Reuland and Everaert 2023. To fill the gaps, we approached colleagues who are native speakers.

<sup>8</sup> For similar judgments on German, see for example Fischer 2015:473. Kiss (2012:156) notes that German and English differ on this point.

<sup>9</sup> We use the term *SE-anaphor* here in the sense used by Reinhart and Reuland (1993), to designate  $\phi$ -feature bundles/subtrees with at least one feature unvalued, close to  *$\phi$ -reflexives* in the sense used by Déchaine and Wilt-schko (2017).

example in (12a), given in (12b), is entirely impossible for *seg* and *seg selv*, as observed by Lødrup (2009:121).<sup>10</sup>

- (12) a. John<sub>i</sub> was going to get even with Mary. The picture of himself<sub>i</sub> in the paper would really annoy her, as would the other stunts he had planned.  
(Pollard and Sag 1994:270)
- b. John<sub>i</sub> skulle bli skuls med Mary. \*Bildet av John should get even with Mary picture.DEF of seg (selv)<sub>i</sub> i avisen ville virkelig ergre henne. SE SELF in paper.DEF would really annoy PRON  
'John was going to get even with Mary. The picture of himself in the paper would really annoy her.'  
(Lødrup 2009:121)

The same applies to Norwegian (13). According to our consultants, Icelandic does not show an exemption effect either; see (14).

- (13) \*Bildet av seg (selv)<sub>i</sub> i *Newsweek* dominerte Johns<sub>i</sub> picture.DEF of SE SELF in *Newsweek* dominated John's tanker.  
thoughts  
'The picture of himself in *Newsweek* dominated John's thoughts.'  
(Lødrup 2009:121)
- (14) Jón<sub>i</sub> ætlaði að hafna sín á Maríu.  
Jon intended to revenge SE on Maria  
Myndin af \*sér<sub>i</sub>/honom<sub>i</sub> í blaðinu myndi ergja picture.DEF of SE/PRON in paper.DEF would annoy hana mikið.  
her a.lot  
'Jon intended to revenge himself on Maria. The picture of himself in the paper would really annoy her.'  
(Reuland and Everaert 2023:(82))

In a nutshell, the class of exempt anaphors in the original sense is restricted: they must be fully specified for  $\phi$ -features. That SE-anaphors with or without a SELF-element are impossible in typical exemption contexts is surprising under the *prolog* approach, since the languages discussed all allow nonlocal anaphors; therefore, their lexical inventory is expected to contain *prolog*.<sup>11</sup> It is unclear, then, how this element could be prevented from being inserted in the environment of SE-(SELF) anaphors, yielding the wrong result.<sup>12</sup>

<sup>10</sup> See Klingvall 2018 on Swedish and Vikner 1985:30 on Danish.

<sup>11</sup> Charnavel (2019:sec. 5.6) discusses (12b) and (13), referring to Lødrup 2009, but offers no solution for Lødrup's observation.

<sup>12</sup> As noted by a reviewer, lack of exemption has also been argued to hold for a few (complex)  $\phi$ -specified anaphors such as Greek *o eafos tu* (Anagnostopoulou and Everaert 1999) and Hebrew *acm* (Bassel 2018), in the sense that they are mostly local.

## 2.2 Split Antecedents and Partial Binding

Next, consider nonlocally bound SE-anaphors, as in Norwegian (15) and Icelandic (16a) with infinitives and (16b) with a subjunctive.

- (15) Dronningen<sub>i</sub> bad Alex<sub>j</sub> PRO<sub>j</sub> la folket  
queen.DEF ask.PAST Alex PRO let.INF people.DEF  
vurdere seg<sub>i/j/\*i+j</sub>.  
assess.INF SE  
'The queen asked Alex to let the people assess SE.'  
(Helge Lødrup, pers. comm.)
- (16) a. Kóngurinn<sub>i</sub> bað Alex<sub>j</sub> að PRO<sub>j</sub> láta fólkið  
king.DEF ask.PAST Alex to PRO let.INF people.DEF  
meta sig<sub>i/j/\*i+j</sub>.  
assess.INF SE  
'The king asked Alex to let the people assess him.'  
(Höskuldur Thráinsson, pers. comm.)
- b. Jón<sub>i</sub> heldur að Haraldur<sub>j</sub> hafi sagt að María  
Jon believes that Harald has.SUBJ said that Maria  
eigi að þvo sér<sub>i/j/\*i+j</sub>.  
should.SUBJ to wash.INF SE  
'Jon believes that Harald has said that Maria should wash  
them.'  
(Everaert 1986:253)

Unlike what the *prolog* approach leads us to expect, split antecedents are impossible here.<sup>13</sup> Note that the Scandinavian languages have dedicated reflexive possessives, for example, Norwegian *sin* (deficient for number and gender). These SE-anaphors allow nonlocal binding, but do not allow partial binding, as the ill-formedness of the Norwegian and Icelandic counterparts of (7), in (17) and (18) respectively, show.<sup>14</sup>

<sup>13</sup> An anonymous reviewer suggests that the subject orientation of *seg* and *sig* could independently rule out a split antecedent interpretation in (15) and (16a). However, the lower envisaged binder is the nonlocal PRO subject, though controlled by *Alex*.

<sup>14</sup> Thanks to Helge Lødrup (pers. comm.) for these examples. In Faroese, split antecedents and partial binding are equally impossible (Hjalmar Petersen, pers. comm.). An anonymous reviewer suggests that examples (16)–(18) “given as showing that e.g. split antecedents are not allowed are insufficiently controlled. It must be shown that the clauses containing the anaphors can be seen from the joint perspective of the antecedents, else the conditions for logophoric binding are not met.” Note, though, that in (16) (as in (15)) the nonlocal subjects are each individually available as antecedents of the anaphor; only their join is not. The *prolog* approach hypothesizes that nonlocality is mediated by *prolog*. Hence, either the pattern goes against this hypothesis, or split antecedents do not provide a test for the presence of *prolog*. Both options go against the null hypothesis from Charnavel 2019:321. (17) and (18) are direct counterparts of (7), which exemplifies logophoricity in Charnavel 2020.

- (17) \*Zoé<sub>i</sub> og Paul<sub>j</sub> bad meg finne skygge for  
 Zoé and Paul ask.PAST me provide.INF shade for  
 sin<sub>i</sub> egen datter og naboens datter.  
 SE.POSS own daughter and neighbor's daughter
- (18) \*Anna<sub>i</sub> og Páll<sub>j</sub> báðu mig að gera skugga fyrir  
 Anna and Paul ask.PAST me to make shade for  
 dóttur sína<sub>i</sub> og dóttur nágrannans.  
 daughter SE.POSS and daughter neighbor's

This is not a quirk of  $\phi$ -deficient anaphors in Germanic. The same applies in Russian to the  $\phi$ -deficient anaphor *sebja* as well as the possessive *svoj* (see Klenin 1974). In (19), for instance, *Vanja*, *Anja*, and *sosed* ‘neighbor’ are all possible antecedents of *sebja*, but again not jointly; in (20), *sebja* cannot be valued as just *Anja* (or *Saša*).<sup>15</sup>

- (19) Vanja<sub>i</sub> prosil Anju<sub>j</sub> PRO<sub>j</sub> zastavit' soseda<sub>k</sub> PRO<sub>k</sub>  
 Vanya ask.PAST Anya PRO make.INF neighbor  
 sfotografirovat' sebja<sub>i/j/k/\*i+j</sub>.  
 photograph.INF SEBJA  
 ‘Vanya asked Anya to make the neighbor photograph  
 himself/her.’
- (20) [Anja<sub>i</sub> i Saša<sub>m</sub>]<sub>k</sub> zastavili soseda<sub>j</sub> PRO<sub>j</sub>  
 Anya and Sasha make.PAST.PL neighbor PRO  
 sfotografirovat' sebja<sub>i/\*m/j/k</sub>.  
 photograph.INF SEBJA  
 ‘Anya and Sasha made the neighbor photograph himself/  
 them.’

Extending the discussion to two rather different languages, facts from Mandarin and Vietnamese are informative as well.

Mandarin has a  $\phi$ -deficient anaphor *ziji*.<sup>16</sup> Nonlocally bound *ziji* allows neither split antecedents nor partial binding, as illustrated in (21a) and (21b), respectively (see, e.g., Giblin 2016:54, Y. Huang 2000:98, Wong 2021).

- (21) a. Zhangsan<sub>i</sub> renwei Wangwu<sub>j</sub> shuo Lisi xihuan zi-j<sub>i/j/\*i+j</sub>.  
 Zhangsan think Wangwu say Lisi like REFL-SELF  
 ‘Zhangsan thinks that Wangwu says that Lisi likes him/  
 himself.’
- b. [Zhangsan<sub>i</sub> he Lisi<sub>j</sub>]<sub>k</sub> renwei Wangwu xihuan  
 Zhangsan and Lisi think Wangwu like  
 zi-j<sub>i/\*i/\*j/k</sub>.  
 REFL-SELF  
 ‘Zhangsan and Lisi think that Wangwu likes them.’  
 (Giblin 2016:54)

<sup>15</sup> Thanks to Peter Zubkov (pers. comm.) for examples (19) and (20).

<sup>16</sup> *Zi-ji* is a complex anaphor; see Reuland, Wong, and Everaert 2020.

The same restriction applies to the  $\phi$ -deficient anaphor *mình* in Vietnamese, generally allowing nonlocal binding (Ivan and Bui 2019, Doan 2022), as in (22). *Mai* and *Nam* can antecede *mình* separately, but not jointly (Doan 2022).

- (22) Mai<sub>i</sub> thấy Nam<sub>j</sub> đặt một bông hồng bên cạnh mình<sub>i/j/\*i+j</sub>.  
 Mai see Nam put one CL rose beside body  
 ‘Mai saw Nam put a rose beside her/him.’  
 (Doan 2022:98)

As shown in (23), partial binding is impossible as well.

- (23) [Mai<sub>i</sub> và Hùng<sub>j</sub>]<sub>k</sub> thấy Nam đặt một bông hồng bên cạnh  
 Mai and Hung see Nam put one CL rose beside  
 mình<sub>\*i/\*j/k</sub>.  
 body  
 ‘Mai and Hung saw Nam put a rose beside them.’  
 (Quy Ngoc Thi Doan, Tue Trinh, pers. comm.)

While *mình* can be valued as [*Mai và Hùng*] ‘Mai and Hung’, valuation as just *Mai* or *Hùng* is ruled out.

### 2.3 Interim Summary

Languages that by the null hypothesis should be able to employ the *pro<sub>log</sub>* strategy, since they allow nonlocally bound anaphors, do not use it for  $\phi$ -deficient anaphors in contexts typical for the original exemption cases as in (11)–(14). And while under the *pro<sub>log</sub>* hypothesis long-distance anaphors are expected to be exempt, allowing split antecedents and partial binding, this does not obtain in the languages with nonlocal binding illustrated in (15)–(23). The pattern emerging from this overview warrants generalizing (10) to (24).

- (24) *An effect of underspecification (final formulation)*  
 When an anaphor is underspecified for  $\phi$ -features, neither partial binding nor split antecedents are available.

Since such  $\phi$ -deficient anaphors can in fact be nonlocally bound, this entails that the proposal to analyze all cases of nonlocal binding in terms of a two-step process involving a pronominal element *pro<sub>log</sub>* cannot be maintained in that form.

## 3 Toward an Account

We now sketch how an approach to  $\phi$ -deficient anaphors based on chain formation by Agree may account for the pattern in (24). Reuland (2005, 2011) provides an Agree-based analysis for Dutch *zich* and SE-anaphors in other Germanic languages, which builds on work by Everaert (1986).<sup>17</sup> This idea is elaborated for other  $\phi$ -deficient anaphors by Giblin (2016), and by Wong (2021) for Mandarin, Zubkov

<sup>17</sup> See also Kratzer 2009 for another type of Agree-based approach.



(2018) and Reuland and Zubkov (2022) for Russian, and Doan (2022) for Vietnamese; for details, see the works cited. Since under standard assumptions (e.g., Chomsky 1995, Pesetsky and Torrego 2007) syntactic chains are single-headed by virtue of the operation that gives rise to them, if binding of  $\phi$ -deficient anaphors is based on Agree, split antecedents for  $\phi$ -deficient anaphors are expected to be ruled out. Partial binding of  $\phi$ -deficient anaphors is equally incompatible with the process of chain formation. The assumption behind this line of research is that anaphor binding does not involve syntactic indices (in line with the Inclusiveness Condition; Chomsky 1995) and is effected by operations within the computational system of human language (Chomsky 1995). For  $\phi$ -deficient anaphors, binding is effected by shared copies of features in feature chains formed by the operation of Multiple Agree (Hiraiwa 2001, 2005, Chomsky 2008). Complex anaphors allow binding to be effected in the syntax by a reflexivizing operator applying to a predicate.

In line with Bošković 2007, it is assumed that (Multiple) Agree is not restricted by phases. Instead, it is restricted by Minimality (Zubkov 2018, Reuland and Zubkov 2022), finite C being an intervenor for Minimality, while infinitival C generally is not. Consequently, binding of  $\phi$ -deficient anaphors is not intrinsically limited to the Condition A domain of the standard binding theory (Chomsky 1981, 1986), or its kin in the *pro*<sub>log</sub> approach. The C-system plays a key role, as it mediates in the  $\phi$ -feature exchange between a subject DP providing feature values and an anaphor that is to be valued, unifying these occurrences (Pesetsky and Torrego 2007).<sup>18</sup>

We illustrate how this works for Mandarin *ziji*; see (25), from Reuland, Wong, and Everaert 2020:805, based on Giblin 2016.

$$(25) [C^0_{u\phi} [DP_{val\phi} [T^0_{u\phi} \dots [T^0_{u\phi} \dots zi\text{-}j_{i\phi} \dots ]]] \rightarrow [C^0_{val\phi} [DP_{val\phi} [T^0_{val\phi} \dots [T^0_{val\phi} \dots zi\text{-}j_{i\phi} \dots ]]]]$$

*Ziji* is  $\phi$ -deficient. As Giblin argues, the binding relation is mediated by a functional head ( $C^0$ ) c-commanding both the antecedent and the anaphor.  $C^0$  bears an unvalued person ([+participant]) feature (represented as  $u\phi$ ), which it seeks to value. It probes for a value and finds it in the local (subject) DP, and in a nesting of embedded TPs the  $\phi$ -features on  $C^0$  are shared with all lower (anaphoric) instances of  $T^0$  as well as with *ziji* by Multiple Agree. So, a dependency is syntactically represented by feature sharing and interpreted as binding. As to logophoricity effects, C.-T. J. Huang and Liu (2001) discuss how notions like SOURCE, SELF, and PIVOT can be subsumed under a *de se* requirement. This in turn can be argued to follow from the fact that

<sup>18</sup> This is in line with the conception of the C-system as a pivot in the relation between the syntactic system and the discourse system (e.g., Sigurðsson 2004, 2011, Delfitto and Fiorin 2008, Giblin 2016). This allows configurations where the antecedent does not c-command the anaphor provided both are in the domain of a functional element mediating the feature sharing (Reuland 2005, Chomsky 2008).

the feature shared between the chain members is [+participant], which also entails animacy/awareness.<sup>19</sup>

Doan (2022) derives binding of Vietnamese *minh* along similar lines, with a difference based on using the feature [+author] instead of [+participant]. Zubkov (2018) and Reuland and Zubkov (2022) present a Multiple Agree-based analysis for Russian. Nonlocal binding of *sebjā* and *svoj* also shows an animacy/awareness effect on the antecedent. Russian shows no logophoricity effects (Zubkov 2018). Rather, the animacy effect results from a shared [+person] feature. (For details, see the works cited.)<sup>20</sup> Coming back to the status of the animacy/awareness effect in nonlocal binding discussed by Charnavel (2019, 2020): important though it is, it is independent of logophoricity, as especially Russian and Vietnamese show.

Although for Germanic an Agree-based analysis has not been developed in the detail available for Mandarin, Vietnamese, and Russian, the Multiple Agree approach can in principle be extended to this family as well. One may assume a structure along the lines of (25) in finite clauses, with a C probing for a person feature (as in Russian; for more on subjunctives, see below). If so, SE-(SELF) anaphors will be visible to the C-probe, share the value the probe receives from the subject, and end up bound by the (local) subject. They will be visible to probing and be bound even when in positions in which their  $\phi$ -specified French and English counterparts are exempt.

For the sake of concreteness, consider the counterpart of Dutch (9b) in which *hem* is replaced by *zich*, structure is added as in (26), and the derivation is modeled on (25).

- (26) [ $C_{u\phi}^0$  [ $Jan_{val\phi}$  en  $Marie_m$ ] hopen [ $C_{u\phi}^0$  dat [ $Suzy_{val\phi}$  [die foto van  $zich_{u\phi}$  zelf] zal verscheuren]]]  $\rightarrow$   
[ $C_{u\phi}^0$  [ $Jan_{val\phi}$  en  $Marie_m$ ] hopen [ $C_{val\phi}^0$  dat [ $Suzy_{val\phi}$  [die foto van  $zich_{val\phi}$  zelf] zal verscheuren]]]  
' $Jan_i$  and  $Marie_m$  hope that  $Suzy_k$  will tear up that picture of SE SELF $_{k/*i/*m}$ .'

Here, only local binding obtains, since due to Minimality only the local C valued by *Suzy* is able to value *zich*.<sup>21</sup>

Given the key role of the logophoric operator in the *pro<sub>log</sub>* approach, we also sketch the representation of logophoric dependencies in the Agree-based alternative. The fact that *sig* in subjunctive contexts in Icelandic, as in (16b), does not allow split antecedents indicates that here too the dependency between *sig* and its antecedent is based on syntactic chain formation. This is supported by the pattern in (27).

<sup>19</sup> See C.-T. J. Huang and Liu 2001 on the relation between “awareness” and PIVOT.

<sup>20</sup> See Reuland 2020 for a demonstration that Preminger’s (2019) criticism of Agree-based analyses does not apply to the approaches discussed here.

<sup>21</sup> In (9a), with *zich* replacing *hen*, there is no local antecedent, but the matrix C+subject is unavailable due to Minimality; hence, no binding obtains.

- (27) Jón<sub>i</sub> segir [að María<sub>j</sub> viti [að Haraldur<sub>k</sub> vill  
 Jon says that Maria know.SUBJ that Harald want.IND  
 [að Billi heimsæki sig<sub>\*i/\*j/k</sub>]].  
 that Bill visit.SUBJ SE  
 ‘Jon says that Maria knows that Harald wants that Bill visit  
 him.’  
 (Thráinsson 1990:299)

As Thráinsson notes, despite being a potential perspective holder *Jón* is not available as an antecedent of *sig*; only the more local *Haraldur* is. This effect is unexpected under a local logophoric operator as in (1b), but quite compatible with an Agree-based approach. Specifically, one may assume a logophoric head  $L^0$  as a carrier of logophoricity in the left periphery of a clause with a subjunctive complement,  $CP_1$  and  $CP_2$  in (28).<sup>22</sup>

- (28) [ $CP_1$   $L^0_1$  [Jón<sub>i</sub> segir [að María<sub>j</sub> viti [ $CP_2$   $L^0_2$  [að Haraldur<sub>k</sub>  
 vill [að Billi heimsæki sig<sub>\*i/\*j/k</sub>]]]]]].

$L^0$  looks for a potential perspective holder, formally implemented as the valuation of a [+author] feature. Both *Jón* and *Haraldur* can be taken to bear a valued [+author] feature as subjects of a propositional attitude verb, but the presence of  $L^0_2$  prevents  $L^0_1$  from probing and valuing *sig* due to Minimality. The position of such an  $L^0$  also allows it to be valued by *Jón* in a structure like (29), accounting for binding despite lack of c-command (see Giblin 2016 for this configuration in Mandarin). For more discussion, see the online appendix ([https://doi.org/10.1162/ling\\_a\\_00526](https://doi.org/10.1162/ling_a_00526)).

- (29) [ $L^0$  [Skoðun Jóns<sub>i</sub>] er [að sig<sub>i</sub> vanti  
 opinion Jon's is that SIG.ACC lacks.SUBJ  
 hæfileika]].  
 talents  
 ‘Jon’s opinion is that he lacks talents.’

Returning to the original discussion of the difference in distribution between exempt and nonexempt anaphors, Agree-based approaches appear to make the right cut, predicting the pattern in section 2.2.<sup>23</sup>

<sup>22</sup> In response to an anonymous reviewer, we note that  $L^0$  differs from *pro*<sub>log</sub> in terms of its position (in the left periphery) and in being a probe instead of a pronoun.

<sup>23</sup> While the absence of split antecedents for Mandarin nonlocally bound *ziji* in (21a) is robust, Xue, Pollard, and Sag (1994) report that (i) allows *ziji* to be valued as the “aggregate entity” consisting of *Zhangsan* and *Lisi* as a discourse (split) antecedent inferred from the context (see Charnavel 2019).

(i) Zhangsan<sub>i</sub> de qian he Lisi<sub>j</sub> de shu dou bei ziji<sub>i;&j</sub> de pengyou  
 Zhangsan DE money and Lisi DE book both BEI self DE friend  
 touzole.  
 steal.ASP  
 ‘Zhangsan’s money and Lisi’s book were both stolen by their friend(s).’  
 (Xue, Pollard, and Sag 1994:441)

#### 4 Conclusion and Issues for Further Research

In this squib, we explored Charnavel's (2019:321) "null hypothesis" that "purported long-distance anaphors should be reduced to exempt anaphors." We showed that  $\phi$ -deficient anaphors in different language families allow nonlocal binding, without allowing split antecedents and partial binding. Thus, the hypothesis cannot be maintained as given. We sketched an Agree-based approach that provides a rather straightforward account for the properties of  $\phi$ -deficient anaphors. Note, though, that certain insights of the *pro<sub>log</sub>* approach may yet be applicable to  $\phi$ -specified anaphors. It is, then, an interesting issue for further research how insights of the *pro<sub>log</sub>* approach can be reconciled with the results obtained here.

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As Xue, Pollard, and Sag argue, neither *Zhangsan* nor *Lisi* is in a position to bind *ziji*; hence, it is exempt in their sense. However, Sally Wong and other native speakers we consulted report that the 'aggregate' reading in (i) is impossible. For some, a possible interpretation would be 'Zhangsan's money was stolen by his own friend and Lisi's book was stolen by his own friend'. But that is not a split antecedent interpretation; rather, it is a case of a disjunctive subcommand binding, in part triggered by the presence of *dou* 'both'. It seems significant that (i) is a coordination. A conceivable alternative construal—not given by our consultants—would be 'Zhangsan and Lisi's money and book (respectively) were stolen by *ziji*'s friends'. Here, *Zhangsan and Lisi* would not represent a split antecedent either.

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