Untangling Balinese Binding without Agreement[*]

Deniz Satık and Shannon Bryant, Harvard University
deniz@g.harvard.edu and sgbryant@g.harvard.edu

1   Introduction

Wechsler (1999) attempts to provide an argument supporting HPSG against GB and Minimalism based on the so-called "Balinese Bind," which concerns the binding of complex reflexives in Balinese.[1] Wechsler observes that movement to Spec,TP does not create new antecedents for binding in simple transitive constructions; within a GB/Minimalist framework, this suggests that Spec,TP comprises an A'-position. However, in raising constructions, binding from Spec,TP does appear possible, suggesting it is in fact an A-position, leading to a potential paradox.

The problem is illustrated as follows. Balinese, which has the standard Austronesian voice alignment, has an Agentive Voice (AV) with the SVO word order, and an Objective Voice (OV) with OVS word order. AV is marked with a phonologically conditioned nasal prefix, as in (1a), while the OV is morphologically unmarked, as in (1b):

(1)   a.   Tiang ngatap biu
           1SG   AV.cut banana
           'I cut a banana.'

      b.   Biu   gatap tiang
           banana OV.cut 1SG
           'I cut a banana.'

In AV, a complex reflexive that is coreferent with its coargument must be post-verbal; it cannot be pre-verbal, as seen in (2a)-(2b). In OV, the reflexive must instead appear pre-verbally; it cannot be post-verbal, as shown in (2c)-(2d). From the GB perspective, this suggests that Spec,TP is not an A-position in Balinese, such that binding relations are determined before movement:[2]

(2)   a. Ayu_i nyimpit awak-ne_i
           Ayu AV.pinch self-POSS.3SG
           'Ayu_i pinched $herself_i$.'

      c.   Awak-ne_i jimpit Ayu_i
           self-POSS.3SG OV.pinch Ayu
           'She_i pinched Ayu_i.'

      b.   * Awak-ne_i nyimpit Ayu_i
             self-POSS.3SG AV.pinch Ayu
             'She_i pinched Ayu_i.'

      d.   * Ayu_i jimpit   awak-ne_i
             3SG   OV.pinch self-POSS.3SG
             'Ayu_i pinched $herself_i$.'

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[1]Previous works, such as Wechsler (1999) and Levin (2014), have not noted that this issue is unique to complex reflexives; Balinese also has simplex reflexives, but these cannot occur in the constructions which Wechsler alleges are problematic to Minimalist approaches. We will introduce simplex reflexives after section 1. It should also be noted that Balinese has many different anaphors depending on registers. For simplicity, in this paper, we will focus only on the reflexives made up of the low register, simplex reflexive *awak*.

[2]There have been different analyses of *-ne* in the literature. We follow Haiduck (2014)'s analysis of *-ne* as a third person possessive suffix, who argues against the breaking up of *-ne* further.

But in raising constructions–for instance with the verb *ngenah* 'seem,' which does not undergo the AV/OV alternation–the raised NP subject appears able to bind an anaphor within an optional experiencer-PP adjoined to the matrix clause. We refer to this as the *Balinese Bind construction*:

(3) Ayu$_i$ ngenah sig awak-ne$_i$ jelek sajan.
     Ayu seem   to self-POSS.3SG bad   very
     'Ayu$_i$ seemed to herself$_i$ to be very ugly.'

Comparing simple transitive cases with raising constructions, it looks as though Spec,TP is both an A- and A'-position in Balinese. While this seeming contradiction poses a problem for proponents of a GB approach to binding, Wechsler claims that the distribution of complex reflexives in Balinese can be accounted for straightforwardly within HPSG, where binding relations are determined prior to the insertion of nominals into syntactic structure.[3]

In this paper, our goal is to present novel data on Balinese anaphora and argue that our account is preferable over two others not only Wechsler (1999)'s, but also Levin (2014)'s Agree-based solution, which is also in the Minimalist tradition. First, based on a wealth of novel data, we show that Balinese complex reflexives in fact do not pose a problem for GB/Minimalist approaches under Charnavel (2019)'s theory of logophoricity. We do so by showing that the complex anaphor *awakne* seen above can receive a logophoric interpretation in the absence of an overt local binder, the possibility of which previous work on Balinese does not explore.

Though many more tests will be presented in section 2, one illustrative example is provided below. Based on data from French, Charnavel and Sportiche (2016) demonstrate that seeming exemption from GB Condition A is unavailable for inanimate reflexives, which cannot receive a logophoric interpretation by virtue of lacking a sentient antecedent. We observe a comparable animacy contrast in Balinese: in (4a)-(4b), *awakne* can take an overtly non-local antecedent only when that antecedent is animate and, hence, a potential logophoric center:

(4) a. Yesus$_i$ nglalahin   anak sane kenyih   teken awak-ne$_i$.
         Jesus AV.influence person REL sensitive to   self-POSS.3SG
         'Jesus influences people who are sensitive to himself.'
     b. * Injil$_i$ nglalahin   anak sane kenyih   teken awak-ne$_i$.
         Bible AV.influence person REL sensitive to   self-POSS.3SG
         'The Bible influences people who are sensitive to itself.'

We argue that logophoricity is the key to unraveling the "Balinese Bind." More specifically, we propose that *awakne* in examples like (3) is bound not by the raised subject from matrix Spec,TP but, rather, by a phonetically null logophoric pronoun located within the minimal Spell-Out domain containing the experiencer-PP adjunct. We provide one illustrative example in (5a) below, in which we see that the reflexive experiencer must be read de se and, hence, is incompatible with contexts in which a de se attitude does not hold:

(5) Ayu sees a photo of herself and thinks she is ugly, though doesn't realize it is herself.

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[3]In particular, under the assumption that binding relations are determined within the argument structure (ARG-S) associated with the lexical description of a predicate, he argues that licensing of the reflexive in (3) follows from inclusion of the raised NP within the ARG-S of *ngenah*, where it a-commands the experiencer-PP. We refer the reader to Wechsler's paper for illustration of the ARG-S assumed for *ngenah* 'seem' along with further details regarding the assumptions of the HPSG approach to binding. As Wechsler rightfully notes, this sort of explanation is not tenable in a Minimalist framework.

a. # Ayu ngenah sig awak-ne   jelek sajan.
   Ayu seem   to self-POSS.3SG bad   very
   'Ayu seemed to herself to be very ugly.'

This obligatory interpretive constraint is predicted by Charnavel's theory, according to which logophorically interpreted anaphors require a de se reading. Crucially, it is not predicted by Wechsler's account, or Levin (2014)'s Agree-based solution of the Balinese Bind.

This, along with other data to be presented, lead us to propose the following syntactic structure of the Balinese Bind construction, where the complex reflexive *awakne* is anteceded by a perspectival center located within the Spell-Out domain of vP. If this structure is correct, then no stipulations regarding the status of Spec,TP are necessary to account for Balinese Bind constructions within a Minimalist framework:[4]

(6)   [$_{\text{LogP}}$ pro$_{\text{log-i}}$ OP$_{\text{LOG}}$ [$_{\text{vP}}$ [$_{\text{PP}}$ sig awakne$_i$] [$_{\text{v'}}$ ngenah jelek sajan]]]

We further discuss the consequences of the data in this paper. First, we make the novel observation that Balinese anaphora contradict a long-standing generalization in the literature that if a language has both simplex and complex anaphors, then the complex anaphor cannot receive a long-distance intepretation; this generalization is stated most clearly by Haspelmath (2008). We show that Balinese anaphors behave the opposite way: simplex anaphors must be interpreted locally while complex anaphors may have long-distance antecedents in any syntactic context.

Second, we argue that our solution is preferable over Agree-based approaches to the Balinese Bind, as in Levin (2014), as such approaches fail to predict *awakne*'s apparent logophoric properties. We raise further problems for the Agree-based theory of anaphora proposed in Rooryck and Vanden Wyngaerd (2011), upon which Levin (2014) is based.

The remainder of this paper is structured as follows. Section 2 presents tests from Charnavel (2019) to establish that *awakne* can be logophorically licensed. Section 3 extends these tests to Balinese Bind constructions. Based on our findings, we argue that *awakne* is obligatorily logophoric in this context–that is, it is locally bound by a covert logophor rather than the raised DP and, hence, presents no contradiction within a Minimalist approach, contrary to Wechsler's claim. Section 4 discusses Haspelmath's generalization and the similarities of Balinese anaphors to the anaphors of other languages. Section 5 argues against Levin (2014)'s account of the Balinese Bind and Agree-based theories of anaphora more generally. Section 6 concludes.

2   The Data

We introduce the reader to Charnavel (2019)'s framework of logophoricity in 2.1, which gives us various empirical tests to determine the presence of a perspectival center. Extending these tests to Balinese, in 2.2, we establish that *awakne* may optionally be interpreted logophorically, even when it is in an argument position. In 2.3, we turn our attention to the Balinese Bind construction, and we make the argument that the reflexive in that context must be anteceded by a perspectival center. In 2.4 we introduce the reader to the simplex reflexive *awak*.

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[4]We do not discuss the issue of whether Spec,TP is an A- or A'-position in Balinese further in this paper.

2.1 Background

It has long been noted in the literature that there are contexts in which anaphors are clearly subject to Chomsky (1986)'s Condition A, according to which anaphors must be bound within their local domain.[5] Such a context is illustrated in (7) with an example from Charnavel and Sportiche (2016:37(2)), who refer to well-behaved anaphors as in (7a) as plain anaphors:

(7)　a.　$[\text{The moon}]_i$ spins on itself_i.

　　　b.　* $[\text{The moon}]_i$ influences $[\text{people sensitive to itself}_i]$.

On the other hand, it has likewise been observed that there are circumstances in which anaphors appear to not be subject to Condition A. For example, *himself* can be bound by *David*, though under any definition of locality, *David* is the farthest possible antecedent for the anaphor in (8):

(8)　　David_i said to Mary that nobody would believe linguists like himself_i were necessary.

Seemingly exceptional anaphors such as *himself* in (8) are referred to as exempt anaphors. The goal of Charnavel (2019) is to account for why, in so many languages, plain and exempt anaphors are phonetically identical despite apparent differences in their licensing conditions. She argues that, contrary to appearances, plain and exempt anaphors are one and the same: though lacking an overt local antecedent, exempt anaphors are locally bound by a phonetically null logophoric pronoun, pro_{log}, that is identified with the individual whose perspective is adopted by the speaker. Hence, even seemingly exceptional anaphors satisfy Condition A, albeit covertly.

In support of this proposal, Charnavel observes that exempt reflexives are necessarily animate. For example, notice that (7b) improves significantly if *the moon* is replaced with an animate subject in (9a). A similar contrast is observed in (9b) and (9c), where we see that *the newspaper* cannot antecede a reflexive in the embedded clause despite being a source of information:

(9)　a.　Trump_i influences $[\text{people sensitive to himself}_i]$.

　　　b.　Caitlin learned from John_i that there was a story about himself_i on TV.

　　　c.　* Caitlin learned from $[\text{the newspaper}]_i$ that there was a story about itself_i on TV.

The effect of animacy is predicted under Charnavel's hypothesis: because only animate individuals are potential perspectival centers, only animate reflexives can be bound by pro_{log}. Crucially, though animacy is a necessary condition for logophoric binding, it is not sufficient. Charnavel (2019) makes two empirical generalizations:

(10)　a.　An exempt anaphor must be anteceded by an attitude holder or an empathy locus. This is its logophoric antecedent.

　　　　b.　The constituent containing an exempt anaphor has to express the first-personal perspective of its antecedent. This is its logophoric domain.

Further details of this hypothesis will be provided in section 3.1. Important for the present is Charnavel's taxonomy for exemption (i.e., logophoric binding), given in Table 1 below:

Table 1: Taxonomy for exemption

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[5]Different authors have different ideas of what this local domain is. We follow Charnavel and Sportiche (2016) in assuming that it is the Spell-Out domain of a phase head. For Chomsky, it was the domain containing the anaphor and a subject distinct from that anaphor.

Logophoric antecedent	Logophoric domain	Tests
Attitude holder	*De se* attitude	First-person morphology Anti-attitudinal epithets Double orientation
Empathy locus	First-personal perception	Emphatic 'his dear'

We now present some illustrative examples–from Charnavel and Zlogar (2015)–of some of the tests in Table 1 applied to English. The first, known as the epithet test, follows from Dubinsky and Hamilton (1998)'s observation that epithets–for instance, *the idiot*–cannot corefer with the perspectival center associated with the context in which the epithet occurs. Charnavel and Zlogar demonstrate that epithets may be used to detect antecedence by an attitude holder, defining the epithet test as follows:

(11) **Epithet test**: Replace the exempt anaphor with a co-referring epithet and check whether the sentence becomes unacceptable.

We illustrate the epithet test with an English examples in (12a)-(12b). Note that substitution of the reflexive *herself* with the epithet *the idiot* renders the sentence unacceptable.

(12) a. Lisa thinks that John saw a picture of herself.
      b. * Lisa thinks that John saw a picture of the idiot.

Another test is whether a de se attitude is required or not; obligatory de se interpretations have often been cited as a property of logophors by Anand (2006), Charnavel and Zlogar (2015) and Charnavel (2019), among others. In Charnavel and Zlogar (2015)'s example (13a) below, *John* is the attitude holder, and does not c-command the exempt anaphor that still refers to him:

(13) John is looking at a research article that he co-wrote with Ann many years ago, but does not recognize it as one of his own papers. Instead, he falsely assumes that Ann's co-author is a colleague of his who happens to have the same name as him.
      a. # According to John$_i$, the article was written by Ann and himself$_i$.

An additional test for attitudinal antecedents is proposed by Charnavel and Zlogar.

(14) **Double Orientation Test**: Replace the exempt anaphor with an evaluative expression and check whether it can be evaluated by both the speaker and the antecedent.

This test derives from the fact that an evaluative expression–for example, *a good man*–can be evaluated from the perspective of an attitude holder rather than the speaker if it occurs within an attitudinal context associated with that attitude holder. Charnavel and Zlogar illustrate this test with the examples in (15a)-(15b), noting that the author may be great in the eyes of either the speaker or the attitude holder, *John*; crucially, we see in (15b) that *a great author* occurs in an environment that can host an exempt reflexive anteced by John:

(15) a. According to John, the article was written by Anne and himself.
      b. According to John, the article was written by Anne and a great author.

Attitude holders are only one sort of perspectival center identified by Charnavel (2019) as a potential antecedent for seemingly exempt anaphora; as stated in the generalization in (10), empathy loci may likewise license exemption in some languages. Reflexives anteced by empathy

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loci occur in the absence of intensional operators and, as demonstrated by Charnavel and Zlogar (2015), behave differently than attitudinal anaphor with respect to the epithet and double orientation tests. Consider the English example in (16) from Charnavel and Zlogar (2015).

(16) Anonymous posts about herself on the internet hurt Lucy's feelings.

In this case, an evaluative expression included within the DP containing the anaphor can only be evaluated by the speaker:

(17) The horrible posts about herself on the internet hurt Lucy's feelings.

If we substitute the proper name *Lucy* with a pronoun in order to avoid violation of Condition C, we find that the reflexive in (16) may be replaced with a co-referring epithet:

(18) Anonymous posts about the idiot hurt her feelings.

Hence, *Lucy* does not appear to refer to an attitude holder in (16). Nevertheless, *Lucy*'s first-personal perspective is adopted by the speaker in uttering (16). This is revealed by Charnavel & Zlogar's *beloved* test, defined as in (19a) and deployed in (19b).[6]

(19) a. **Beloved Test**: Replace the exempt anaphor by *his/her beloved NP* and check whether the sentence is acceptable (under a non-ironic reading).
      b. Anonymous posts about her beloved son on the internet hurt Lucy's feelings.

In the sections that follow, we apply these tests to Balinese, in order to determine whether Balinese complex reflexives may likewise be exempt if and only if they take a logophoric antecedent and, if so, which sorts of logophoric antecedents are relevant to Balinese.

2.2 Balinese complex anaphors as potentially logophoric

We show that *awakne* can be anteceded by either an overtly local antecedent, whether animate or inanimate, or by the perspectival center of the sentence–the availability of which depends on discourse and syntactico-semantic factors, as in Anand (2006). These findings lay the groundwork for section 2.3, in which we argue that reflexive experiencers are bound not by the raised subject in raising constructions but, rather, are necessarily anteceded by a perspectival center.

As is common of anaphors in many languages, all anaphors in Balinese are derived from words meaning *body*.[7] We focus on the low register *awak*. Following Haiduck (2014), we take for granted that the third person complex anaphor is made of the possessive suffix *-ne* and the simplex anaphor. Unspecified for number, *awakne* can have either singular or plural antecedents.

We begin by establishing that *awakne* clearly obeys Condition A when it is a plain anaphor–and disobeys it when it is an exempt anaphor. As such, if *awakne* is bound locally by an overt DP, it can be bound regardless of animacy, as in (20a)-(20d).

(20) a. Injil ngrujuk   awak-ne
          Bible AV.reference self-POSS.3SG
          'The Bible references itself.'

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[6]We refer the reader to Charnavel and Zlogar (2015) and Charnavel (2019) for further details regarding motivation for the *beloved* test.

[7]See Faltz (1985) for the typology of anaphora.

    b.   Yesus ngrujuk   awak-ne
        Jesus AV.reference self-POSS.3SG
        'Jesus references himself.'

    c.   Ayu demen ajak foto-n   awak-ne.
        Ayu happy with photo-LNK self-POSS.3SG
        'Ayu likes a picture of herself.'

    d.   Buku-ne misi   foto-n   awak-ne.
        Book-DEF contain photo-LNK self-POSS.3SG
        'The book contains a picture of itself.'

However, this is not possible in an exempt position, as we see in the minimal pairs (21a)-(21b): inanimates may not antecede exempt anaphors.

(21)   a.   * Injil$_i$ nglalahin   anak sane kenyih teken awak-ne$_i$
          Bible AV.influence person REL sensitive to   self-POSS.3SG
          'The Bible$_i$ influences people who are sensitive to itself$_i$.'

    b.   Yesus$_i$ nglalahin   anak sane kenyih teken awak-ne$_i$
          Jesus AV.influence person REL sensitive to   self-POSS.3SG
          'Jesus$_i$ influences people who are sensitive to himself$_i$.'

Additional evidence that Balinese reflexives are subject to Condition A can be found in (22), in which awakne requires a c-commanding antecedent. Udayana (2013) points out that *awakne* is never interpreted as a pronoun; as such, in (22) below it is not possible for it to refer to its sub-commanding antecedent, or be interpreted as a pronoun:

(22)   [Bapan Ayu$_j$]$_i$ sing nemen-in   awak-ne$_{i,*j,*k}$
        Father Ayu   NEG AV.like-APPL self-POSS.3SG
        'Ayu$_j$'s father$_i$ does not like himself$_{i,*j,*k}$.'

But as predicted under Charnavel's logophoric binding hypothesis, we observe that *awakne* can optionally have a long-distance antecedent, when it appears in an attitudinal context created by an intensional verb such as *ngaden* 'think.' Note in (23) that *awakne* is the internal argument of a syntactic predicate; this fact runs counter to the predictions of the predicate-based binding theories put forth by Pollard and Sag (1992) and Reinhart and Reuland (1993).

(23)   Nyoman$_i$ ngaden Ayu$_j$ nanjung awak-ne$_{i,j}$
        Nyoman think   Ayu AV.kick self-POSS.3SG
        'Nyoman$_i$ thinks Ayu$_j$ kicked him/herself$_{i,j}$.'

There is a further contrast to be made in (23). Uttered in a context in which Ayu is very drunk and has unknowingly kicked herself, coreference between *awakne* and *Ayu* is nevertheless perfectly acceptable, revealing that *awakne* need not be read de se if bound by an overt local antecedent. However, we find that *awakne* must be read de se if its antecedent is not overtly local, for instance when anteceded by *Nyoman* in (23). This is made apparent by the unacceptability of coreference between *awakne* and *Nyoman* when (23) is paired with a context as in (24a):

(24)   Nyoman heard that Ayu accidentally kicked someone who had fallen asleep at a party. While he thinks this is true, he doesn't realize that he was the one who had fallen asleep.

    a. # Nyoman$_i$ ngaden Ayu$_j$ nanjung awak-ne$_i$
        Nyoman think   Ayu AV.kick self-POSS.3SG
        'Nyoman$_i$ thinks Ayu$_j$ kicked himself$_i$.'

The de se requirement is also observed of *awakne* in (25a)-(26a), in which the reflexive appears as the subject of the clausal complement of *ngorahang* 'say':[8]

(25)   Ayu sees a picture of herself, and is pleased by how beautiful she is.

    a. Ayu$_i$ ngorahang awak-ne$_i$ (ngenah) jegeg   sajan.
       Ayu AV.say   self-POSS.3SG (seem)   beautiful very
       'Ayu$_i$ said that she$_i$ looks very beautiful.'

(25a) is infelicitous in a context like (26a)'s, according to which Ayu does not realize that she is the girl in the photo who she thinks is beautiful:

(26)   Ayu sees a picture taken at a party. She remarks that one of the girls in the photo looks very beautiful, but she doesn't realize that she is the girl in the photo.

    a. # Ayu$_i$ ngorahang awak-ne$_i$ (ngenah) jegeg   sajan.
       Ayu AV.say   self-POSS.3SG (seem)   beautiful very
       'Ayu$_i$ said that she$_i$ looks very beautiful.'

The de se requirement for long-distance antecedence in (23)-(26a) suggests that the antecedent is in both cases an attitude holder, and that the reflexive falls in a de se attitudinal domain.

    Applying the double orientation test to the Balinese example in (26a), we find that the evaluative expression in (27a) can indeed be evaluated by the antecedent of the reflexive rather than the speaker. This is made apparent in the acceptability of a continuation that expresses a contradictory opinion on the part of the speaker, as in (27b).

(27) a. Ayu ngorah-ang anak sane masolah becik jegeg   sajan...
        Ayu AV.said-APPL person REL behave   good beautiful very

        'Ayu said that a good person is very beautiful...'

    b. ...nanging tiang ngerasa anak-e   ento tusing masolah becik.
        ...but   1SG feel   person-DEF DEM NEG behave good

        '...but I think that person isn't good.'

This receives further support from the unavailability of epithets identified with the attitude holder. We extend the test to Balinese by building upon (26a); we observe that substitution of awakne with a coreferent epithet is impossible:

(28)   * Ayu$_i$ ngorahang [idiot-e   ento]$_i$ (ngenah) jegeg   sajan.
       Ayu AV.say   idiot-DEF DEM (seem) beautiful very
       'Ayu$_i$ said that the idiot$_i$ looks very ugly.'

We thus conclude that attitude holders can antecede logophoric reflexives in Balinese.

    Long-distance interpretations of *awakne* are unavailable if the intended antecedent is not construed as the perspectival center associated with the domain in which the reflexive occurs. Consider the contrast in binding possibilities shown in (29a) and (29b). In (29a), we find that *awakne*

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[8]The possibility of subject reflexives is consistent with the absence of verbal agreement in Balinese.

can be anteceded by the subject of *ngorahin* 'tell,' whereas antecedence by the indirect object is dispreferred. Conversely, in (29b) we see that antecedence by the subject of *ningeh uli* 'hear from' is generally unavailable, but antecedence by the object of *uli* 'from' is fully acceptable.

(29) a. Nyoman$_i$ ngorahin Arta$_j$ Ayu$_k$ nanjung awak-ne$_{i,*j,k}$
    Nyoman AV.tell   Arta Ayu AV.kick self-POSS.3SG
    'Nyoman$_i$ told Arta$_j$ that Ayu$_k$ kicked him/herself$_{i,*j,k}$.'

   b. Nyoman$_i$ ningeh uli   Arta$_j$ Ayu$_k$ nanjung awak-ne
    Nyoman AV.hear from Arta Ayu AV.kick self-POSS.3SG$_{*i,j,k}$
    'Nyoman$_i$ heard from Arta$_j$ that Ayu$_k$ kicked him/herself$_{*i,j,k}$.'

It is worth observing also that, just as in English, sourcehood is not sufficient to license apparent exemption from Condition A. In particular, inanimate sources such as *surat kabar* 'newspaper' cannot antecede overtly non-local reflexives, as shown in (30).

(30) Nyoman$_i$ ningeh uli [surat   kabar]$_j$ Ayu$_k$ nanjung awak-ne
    Nyoman AV.hear from document news   Ayu AV.kick self-POSS.3SG
    'Nyoman$_i$ heard from [the newspaper]$_j$ that Ayu$_k$ kicked him/herself$_{*i,*j,k}$.'

The pattern that emerges from the examples in (29a)-(29b) are consistent with the long-standing observation that sources of information are more likely perspectival centers than recipients of information (Sells (1987), i.a.). When the source of information is not expressed, as in (31), antecedence by the recipient becomes possible:[9]

(31) Ia$_i$ ningeh cang$_j$ gedeg teken awak-ne$_{i/*j}$
    3SG AV.hear 1SG   angry with self-POSS.3SG
    '(S)he heard that I was angry with him/her.'   (Udayana, 2013, p. 199)

We now discuss the possibility of empathy loci licensing apparent exemption from Condition A in Balinese. Consider the examples in (32a) and (32b):

(32) a. Komen   sane jelek indik awak-ne$_i$ ring Instagrame ngae   Ayu$_i$ sebet.
    comment REL mean about self-POSS.3SG on   Instagram AV.make Ayu sad
    'Mean comments about herself on Instagram made Ayu sad.'

   b. Indik Nyoman$_i$ nyimpit awak-ne$_{i,j}$ ngegang Ayu$_j$ gedeg
    that   Nyoman AV.pinch self-POSS.3SG AV.make Ayu mad
    'That Nyoman$_i$ pinched himself$_i$/herself$_j$ annoyed Ayu$_j$.'

Here again we find *awakne* in the absence of an overt local binder; in fact, the reflexive in both cases lacks a leftward antecedent entirely. But like English *herself*, *awakne* does not fall within the scope of an overt intensional expression in (32a) or (32b). Moreover, Charnavel (2019) argues from English and French data that the subjects of psych-verbs and equivalent psychological constructions do not express the attitude of their object. Is *awakne* therefore anteceded by an empathy locus rather than attitude holder in these examples?

Applying the tests introduced above, we find that *awakne* actually does appear to be anteceded by an attitude holder. Illustrating with (33), we find that substitution of *awakne* with a co-referential epithet is not possible:

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[9]The astute reader will notice that *awakne* is not subject to the blocking effect, unlike with *ziji* in Chinese (see Giblin (2016)).

(33)　　* Indik Nyoman nyimpit [idiot-e　　ento]$_j$ ngegang Ayu$_j$ gedeg
　　　　　that　Nyoman AV.pinch idiot-DEF DEM　AV.make Ayu　mad
　　　　　'That Nyoman pinched [the idiot]$_j$ annoyed Ayu$_j$.'

An evaluative expression in the same context can be evaluated from the perspective of *Ayu* rather than the speaker, as shown by the compatibility of (34a) with the continuation in (34b):

(34)　a.　　Indik Nyoman nyimpit　ajak　　masolah becik ngegang Ayu gedeg...
　　　　　　that　Nyoman AV.pinch person behave　good　AV.make Ayu mad
　　　　　　'That Nyoman pinched a good person made Ayu mad...'

　　　b.　　...nanging tiang ngerasa ia　　tusing masolah becik
　　　　　　but　　　1SG　feel　　3SG NEG　behave　good
　　　　　　'...but I think (s)he is not a good person.'

These findings suggest that Balinese contrasts with English and French in that individuals may be identified as attitude holders even without intensional expressions. They also leave open the question of whether antecedence by an empathy locus is ever possible for exempt anaphors in Balinese. We leave further investigation of both points for future research, in addition to the open questions we discuss in the next subsection.

2.2.1　Some open questions

We have seen some variation between our native speaker consultants in their acceptance of the first-person morphology tests. According to Charnavel (2019), the speaker is always a salient attitude holder and, hence, that first-person anaphors like *myself* can always lack an overt local binder. For I Nyoman Udayana and I Wayan Arka (p.c.), it is very awkward for the first-person anaphor, *awak cange*, to be mentioned "out of the blue," as in (35). But (35) and similar examples were fully acceptable for another consultant:

(35)　　% Ayu ngenah sig awak cang-e　jelek sajan.
　　　　　Ayu seem　to　self　1SG-DEF bad　very
　　　　　'Ayu seems to myself to be very ugly.'

We are not able to answer why the first-person test is restricted in certain dialects.

An additional question is raised by the availability of partial antecedence for exempt anaphors in Balinese. Charnavel (2019) observes that while split and partial antecedents are not licensed for plain anaphors, both are possible with exempt anaphors. We find that awakne can take a split antecedent in logophoric contexts, as predicted:

(36)　　Ayu$_i$ ngorahin Nyoman$_j$ awak-ne$_{i+j}$　lakar malaib
　　　　　Ayu AV.told　Nyoman self-POSS.3SG will　run
　　　　　'Ayu$_i$ told Nyoman $_j$ that they$_{i+j}$ will run.'

However, it seems that the partial reading requires the adverb *ajak makejang* 'with all' in (37), otherwise it is ungrammatical. It is possible that this is due to reasons independent of binding, for instance disambiguation, as *awakne ajak makejang* is more specified:

(37)　　Ayu$_i$ ngorahang [awak-ne　　ajak makejang]$_{i+}$ lakar malaib
　　　　　Ayu AV.say　　self-POSS.3SG with all　　　　will　run
　　　　　'Ayu$_i$ said that they$_{i+}$ will run.'

10

Finally, we note that while *awakne* is reported to never behave as a pronoun, for at least one of the native speakers we have consulted, *awakne* does have the appearance of a pronoun in certain contexts, namely when its referent is previously established as the topic of conversation:

(38)   Tiang ningeh kabar indik Nyoman$_i$ ... awak-ne$_i$ demen ajak Ayu
        1SG   AV.hear news about Nyoman ... self-POSS.3SG like   with Ayu
        'I heard something about Nyoman$_i$ ... he$_i$ likes Ayu.'

Note in this case that the referent of *awakne*, *Nyoman*, is not likely the source of the information that follows. In fact, as we see in (39), matrix subject *awakne* cannot refer to an established source if a disjoint individual is established as topic:

(39)   Arta$_i$ ngorahin tiang kabar indik Nyoman$_k$ ... awak-ne$_{*i/k}$ demen ajak Ayu
        Arta AV.tell   1SG   news about Nyoman ... self-POSS.3SG like   with Ayu
        'Arta$_i$ told me something about Nyoman$_k$ ... he$_{*i/k}$ likes Ayu'

If it is the case that logophoric binding is responsible for the appearance of *awakne* in (38)-(39), then we must conclude that there exists a hierarchy in Balinese according to which topics block sources as perspectival centers; however, it must be noted that topics do not constitute logophoric centers within this framework. Alternatively, it is possible that a separate licensing mechanism is available in Balinese in addition to logophoricity, for instance binding by a null topic. Additional data is needed to adjudicate between these options.

2.3   The Balinese Bind Construction

Having established the distributive properties of awakne, we now return our attention to the Balinese Bind construction, repeated in (40).

(40)   Ayu$_i$ ngenah sig awak-ne$_i$ jelek sajan.
        Ayu seem   to self-POSS.3SG bad   very
        'Ayu$_i$ seemed to herself$_i$ to be very ugly.'

We have shown that *awakne* does not always require an overt local binder, in particular when it is anteceded by a perspectival center. This observation alone is sufficient to weaken Wechsler's claim that Balinese Bind constructions present a paradox for GB/Minimalism, as it is possible for *awakne* to appear in such constructions without being bound by the raised subject. This is exemplified in (41), in which *awakne* antecedes the overtly non-local attitude holder *Nyoman*.

(41)   Nyoman$_i$ ngaden Ayu$_j$ ngenah sig awak-ne$_{i/j}$ jelek sajan
        Nyoman think   Ayu seem   to self-POSS.3SG bad   very
        'Nyoman$_i$ thinks Ayu$_j$ seemed to himself$_i$/herself$_j$ to be very ugly.'

However, in this section we make a stronger claim. We argue that *awakne* in Balinese Bind constructions is never a plain anaphor bound by the raised subject but, rather, is in all cases anteceded by a perspectival center. We begin by observing that the reflexive experiencer must be read de se. Consider for example the unacceptability of (40) when paired with the context in (42).

(42)   Ayu is very drunk at a weekend party at her friend's house. She sees a portrait of herself that her friend has hanging up, and calls the woman in the portrait ugly, though she does not realize that she is the woman in the photo.

   a. # Ayu ngenah sig awak-ne   jelek sajan.
       Ayu seem   to self-POSS.3SG bad very
       'Ayu seemed to herself to be very ugly.'

We next extend the double orientation test to the Balinese Bind construction. As was stated prior, evaluative expressions that fall within an attitudinal domain can be evaluated by either the speaker or by the attitude holder; in all other contexts, only evaluation by the speaker is available. We may therefore appeal to the interpretative possibilities of an evaluative expression that is substituted for the reflexive experiencer in (41) in order to determine whether the antecedent of *awakne* is in fact an attitude holder.

Consider a context in which *Ayu*, the referent of the reflexive, thinks that a certain individual who holds a negative opinion of her appearance is a good person, whereas the speaker considers this same individual to be a bad person. Both (43a) and (43b) can be felicitously uttered:

(43)   a.   Ayu ngenah sig anak   bagus ento jelek sajan
             Ayu seem   to person good DEM bad very
             'Ayu seems to a good man to be very ugly.'

       b.   Ayu ngenah sig anak   jelek ento jelek sajan
             Ayu seem   to person bad DEM bad very
             'Ayu seems to a bad man to be very ugly.'

It is not clear to us why the experiencer would fall into an attitude context associated with the "seemer" (the subject of *seem*). After all, inanimates may be the subject of sentences with *ngenah*, as with *seem* in English so this may seem counterintuitive. Nevertheless, the acceptability of (43a) indicates that the raised subject can be interpreted as an attitude holder, in which case the experiencer PP falls within its attitude domain.

Crucially, the unacceptability of (42) does not arise from the incompatibility of the proper name with the perspective of the experiencer. This is made apparent in (44a)-(44b), which demonstrates that both de dicto (44a) and de re (44b) interpretations are available for the raised subject; in the latter case, Ayu does not recognize Nyoman as the person who strikes her as unattractive in the photo–just as she does not recognize herself in the context in (42)–and yet the DP *Nyoman* is still felicitous.

(44)   Ayu is looking through photos from a party last weekend. In one photo she recognizes Nyoman, who she thinks is very handsome. In another is someone she doesn't recognize, but who seems to be unattractive. In fact, the person in the other photo was also Nyoman!

       a.   Nyoman ngenah sig Ayu ganteng   sajan.
             Nyoman seem   to Ayu handsome very
             'Nyoman seems to Ayu to be very handsome.'

       b.   Nyoman ngenah sig Ayu jelek sajan.
             Nyoman seem   to Ayu bad very
             'Nyoman seems to Ayu to be very ugly.'

We therefore conclude that (42) is ruled out because the reflexive must receive a de se reading: it cannot be used in a context in which the referent does not recognize herself. Recall from section 2.1 that de se readings are obligatory only for exempt anaphors. If *awakne* could be locally bound by the subject in Spec,TP, then we would expect the de se interpretation to be optional, in which

case (42) would be acceptable, contrary to fact. Hence, the de se requirement observed in Balinese Bind constructions reveals that *awakne* is in this context exempt: licensed by antecedence by a perspectival center rather than overt local binding.

The data introduced in this section show that reflexive experiencers in Balinese Bind constructions are necessarily co-referent with a perspectival center, in particular an attitude holder. Assuming Charnavel (2019)'s proposal for logophoric binding, this reveals that the reflexive experience is bound not by the matrix subject, but by a null logophoric pronoun. Our findings thus eliminate the purported paradox of the Balinese Bind; in addition, Wechsler fails to predict these properties.

Before concluding this subsection, we would like to point out that in the BB construction, a pronoun or proper name cannot refer to the matrix subject:

(45)　　* Ayu$_i$ ngenah sig ia-(ne)$_i$/Ayu$_i$　　jelek sajan.
　　　　　Ayu seem　to self-(POSS.3SG) bad　very
　　　　　'Ayu$_i$ seemed to her$_i$/Ayu$_i$ to be very ugly.'

It is outside the scope of this paper to determine what the licensing conditions of Balinese pronouns are, however: we do not have enough data to conclude whether binding from matrix Spec,TP in this construction would be local or not, if it were possible.

2.4　The simplex anaphor *awak*

We have so far seen the properties of complex anaphors like *awakne*. It has not been noted in works discussing the Balinese Bind construction, such as Wechsler (1999) or Levin (2014) that Balinese also has simplex anaphors like *awak*. In these works, *awakne* has been glossed as 'self,' and the possessive and definite suffixes left unanalyzed. *Awak* alone has a very limited distribution; it is almost always restricted to the direct object position of AV verbs:

(46)　a.　Ayu$_i$ nyimpit awak$_i$　　　　　c.　* Awak$_i$ jimpit　Ayu$_i$
　　　　　Ayu AV.pinch self　　　　　　　　　self　OV.pinch Ayu
　　　　　'Ayu$_i$ pinched herself$_i$.'　　　　　'She$_i$ pinched Ayu$_i$.'

　　　b.　* Awak$_i$ nyimpit　Ayu$_i$　　　　d.　* Ayu$_i$ jimpit　　awak$_i$
　　　　　self　AV.pinch Ayu　　　　　　　　　3SG OV.pinch self
　　　　　'She$_i$ pinched Ayu$_i$.'　　　　　　'Ayu$_i$ pinched herself$_i$.'

Unsurprisingly, *awak* cannot appear in the Balinese Bind construction:

(47)　　* Ayu ngenah sig awak jelek sajan.
　　　　　Ayu seem　to self　bad　very
　　　　　'Ayu seemed to herself to be very ugly.'

As we saw prior, *awakne* may always have a long-distance antecedent. However, *awak* can never be interpreted logophorically, so this precludes it from receiving long-distance antecedents, as seen below. As we will discuss in section 4, this has interesting consequences on long-standing generalizations that have been made in the literature:

(48)　　Nyoman$_i$ ngaden Ayu$_j$ nanjung awak$_{*i,j}$
　　　　　Nyoman think　Ayu AV.kick self
　　　　　'Nyoman$_i$ thinks Ayu$_j$ kicked herself$_{*i,j}$.'

Udayana (2013) notes that there is one exception to *awak* appearing as an AV object: *awak* may also appear as the object of a preposition in idiomatic contexts. Note the contrast in (49a)-(49b) below: when *awak* is replaced with *awakne*, the idiomatic interpretation of (49a) disappears and the sentence therefore becomes ungrammatical:

(49)　a.　Ia　inget　teken awak.　　　b.　* Ia　inget　teken awak-ne.
　　　　3SG aware with　self　　　　　　　3SG aware with　self-POSS.3SG
　　　　'She was conscious.'　　　　　　　'She was conscious.'

One potential hypothesis we can make here is that *awak* must be incorporated, and that it can only do so as the complement of an AV verb. However, we must leave further investigation of *awak*'s properties open for future research.

3　Untangling the Balinese Bind

After having provided the empirical basis for our solution, we now focus on its theoretical aspects. Section 3.1 introduces the theoretical formulation of Charnavel (2019)'s account of logophoric binding. Section 3.2 presents an account of the basic binding and voice alternations in Balinese previously seen in (2a)-(2d). Section 3.3 provides a theoretical account of the Balinese Bind: appealing to covert logophoric binding allows us to sidestep the issue of whether Spec,TP is an A- or A'-position.

3.1　Charnavel (2019)

Having already presented the empirical basis of Charnavel (2019)'s framework for logophoricity in section 2, we now present how she accounts for this theoretically. As noted above, Charnavel (2019) argues that it is not coincidental for plain and exempt anaphors to be identical in all the languages that she discusses. For her, plain and exempt anaphors are one and the same: they both must have local antecedents, and the various properties of exempt anaphors–namely, their availability to take partial, split, and long-distance antecedents–are an illusion. The appearance of exemption rather arises from optional binding by a covert logophoric pronoun that syntactically realizes the perspectival center associated with the content of the domain containing the anaphor.

　　Charnavel adopts a phase-based formulation of Condition A, given in (50).[10]

(50)　**Phase-based formulation of Condition A:**
　　　　An anaphor must be bound within its smallest Spell-Out domain.

According to Charnavel, every Spell-Out domain optionally contains a logophoric projection, LogP, headed by a perspectival operator OP_{LOG}. This operator licenses a covert logophoric pronoun, pro_{log}, as its specifier and requires that its complement, schematized as P in (51a), is compatible with the first-personal perspective of the referent of pro_{log}, as captured in the denotation in (51a). The intuition behind this is that each phase can be specified as being presented from the perspective of a certain individual:

(51)　a.　$[_{LogP}$ $pro_{log\text{-}i}$ OP_{LOG} $[_P$ ...logophor$_i$... $]]$

---

[10]See Charnavel and Sportiche (2016) for motivation from French.

b. $[\![\text{OP}_{\text{LOG}}]\!] = \lambda P.\lambda x$: P from x's first-personal perspective

We schematize the difference between plain and exempt anaphors below, where Ph_0 refers to a phase head, and XP is the Spell-Out domain of Ph^0 in (52b), and LogP is the domain in (52a). This is to illustrate the very similar syntactic structure between the two, where the only difference between an exempt and plain anaphor is the binder: the former is covertly locally bound by a perspectival center while the latter is still locally bound, but not by pro_{log}. It should be noted that, like other forms of covert pro, pro_{log} does not require a local binder.

(52) a. **Exempt anaphor:** $[_{\text{PhP}}\ \text{Ph}^0\ [_{\text{LogP}}\ \text{pro}_{\text{log-i}}\ \text{OP}_{\text{LOG}}\ [_{\text{XP}}\ ...\ \text{exempt anaphor}_i\ ...]]]$
      b. **Plain anaphor:** $[_{\text{PhP}}\ \text{Ph}^0\ [_{\text{XP}}\ ...\ \text{DP}_i\ ...\ \text{plain anaphor}_i\ ...]]$

One more potential issue remains to be discussed. Notice that in a sentence such as *John kicked himself*, under the little v hypothesis *John* would be Merged to Spec,vP, which itself is the phase edge, and not inside the Spell-Out domain. This would have the unfortunate consequence, under Charnavel's approach, that anaphors can never be bound in such simple sentences, incorrectly predicting the ungrammaticality of *John$_i$ kicked himself$_i$*. Charnavel and Sportiche (2016) propose several arguments for a rethinking of the "vP edge"; they propose that the agent of vP is first Merged inside the Spell-Out domain, then attracted to Spec,vP as v^0 probes for the nearest DP, which is the agent. This applies to any XP with a subject, and not just vP. The reader is referred to Charnavel and Sportiche (2016) for further discussion on this matter.

3.2 The Balinese Voice Alternation

Prior to introducing our solution for the Balinese Bind, it is important to show that, like Levin (2014)'s Agree-based account of the Balinese reflexives to be introduced in section 5.2, our account is able to capture the basic distribution of reflexives in simple transitive sentences. Recall from section 1 data which is repeated in (53a)-(53d) below: complex reflexives like *awakne* must be post-verbal in AV constructions but pre-verbal in OV constructions:

(53) a. Ayu$_i$ nyimpit awak-ne$_i$
          Ayu AV.pinch self-POSS.3SG
          'Ayu$_i$ pinched herself$_i$.'

      c. Awak-ne$_i$ jimpit   Ayu$_i$
          self-POSS.3SG OV.pinch Ayu
          'She$_i$ pinched Ayu$_i$.'

      b. * Awak-ne$_i$ nyimpit Ayu$_i$
          self-POSS.3SG AV.pinch Ayu
          'She$_i$ pinched Ayu$_i$.'

      d. * Ayu$_i$ jimpit   awak-ne$_i$
          3SG OV.pinch self-POSS.3SG
          'Ayu$_i$ pinched herself$_i$.'

To account for this pattern, we take for granted Levin (2014)'s account of the Austronesian voice alternation, which itself is based on Aldridge (2008).[11]

Both Levin and Aldridge adopt Baker (1988)'s UTAH, according to which external arguments (EA) are always generated as the specifier of the verb, such as Spec,vP, while internal arguments (IA) are always generated as the complement of the verb. In other words, the sentences (54a)-(54b) below have the same syntactic structure at one point in the derivation:
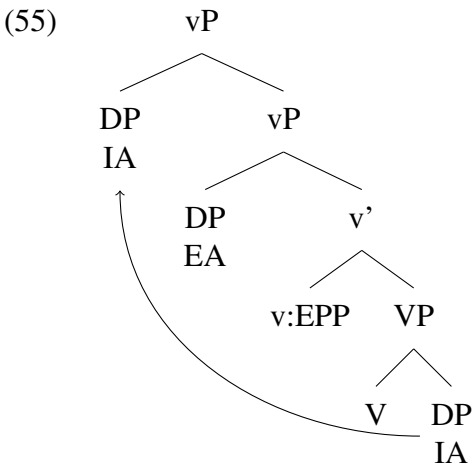
(54)

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[11]We reject Levin's account of the Balinese Bind in section 5, however.

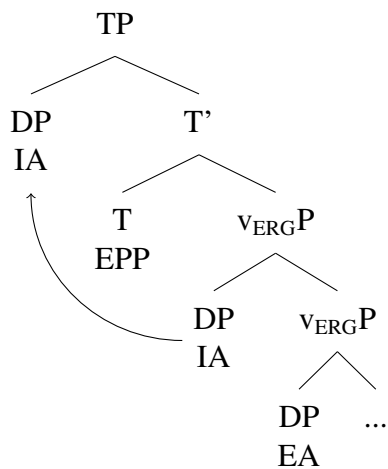| a.	Tiang ngatap biu	b.	Biu gatap tiang
	1SG AV.cut banana		banana OV.cut 1SG
	'I cut a banana.'		'I cut a banana.'

In addition, both voices have in common an additional movement step of the IA to Spec,vP above the EA. Under Levin's approach this is driven by an EPP feature on v. This will allow for the IA to move to Spec,TP in OV, which is illustrated in the tree in (55) below.
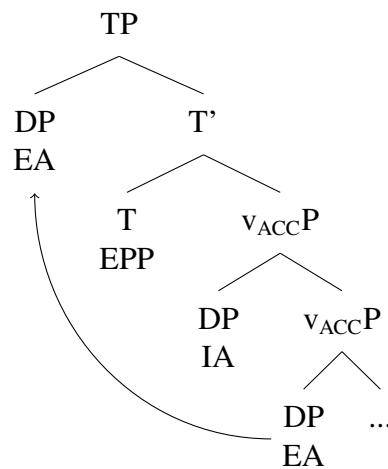
(55)

```
              vP
            /    \
         DP        vP
         IA      /    \
              DP        v'
              EA      /    \
                  v:EPP    VP
                          /  \
                         V    DP
                              IA
```

The difference between the two voices is Case assignment. AV clauses are argued to be similar to English, in that v^0 in AV assigns accusative case to the IA (v_{ACC}), rendering it Inactive. But v^0 in OV (v_{ERG}) does not assign ergative case to either the IA or EA. This means that the IA in OV will remain an Active goal in the sense of Chomsky (2001) and available for probing by higher functional heads; such that the IA is able to move to Spec,TP. By contrast, when accusative case is assigned to the IA in AV, it is rendered inactive for further probing by higher functional heads, and only the EA may move to Spec,TP. This is illustrated in the pair of trees in (56)-(57) below:

(56)   OV derivation

```
              TP
            /    \
         DP        T'
         IA      /    \
              T        v_ERG P
             EPP      /    \
                  DP        v_ERG P
                  IA       /  \
                       DP    ...
                       EA
```

(57)   AV derivation

```
              TP
            /    \
         DP        T'
         EA      /    \
              T        v_ACC P
             EPP      /    \
                  DP        v_ACC P
                  IA       /  \
                       DP    ...
                       EA
```

Two potential areas of concern remain. First, as Levin points out, the tree in (57) may be a violation of Rizzi (1993)'s Relativized Minimality. The first element that T^0 encounters is the IA, not

the EA. Levin's answer for this is that case-assigned elements have been rendered inactive to further syntactic operations; he also notes that common analyses of ergative-absolutive Case systems such as Legate (2008) also require that T^0 look past the IA.

Second, in the OV derivation, the EA argument never receives case. There are two potential explanations for this that render the OV derivation unproblematic. We might follow Kornfilt and Preminger (2015) in assuming that unmarked cases such as nominative and absolutive are just caselessness. Alternatively, Levin provides independent evidence that the post-verbal argument in OV incorporates, allowing it to remain unmarked for case.

With this background, we can now provide an account of the binding facts in (53a)-(53d) above. For (53a) and (53c), we follow Charnavel and Sportiche (2016) in assuming that in both cases the reflexive IA is c-commanded by its EA antecedent within the lowest Spell-Out domain prior to movement of the IA to Spec,vP. This gives us the desired result: Condition A is checked and satisfied prior to any movement operations.

The unacceptability of (53b) and (53d) likewise fall out of our account: in both cases, the complex reflexive is merged as the EA rather than IA and is not c-commanded by its intended antecedent within the minimal Spell-Out domain. While c-command is satisfied following movement of the IA to Spec,vP, this movement step renders the IA external to the Spell-Out domain containing the anaphor and, hence, inaccessible for local binding.

Before moving forward, it is worth recalling from section 2 that sentences such as (53b) are in fact acceptable for certain speakers when the reflexive is co-referent with a topic established previously in the discourse rather than the post-verbal argument:
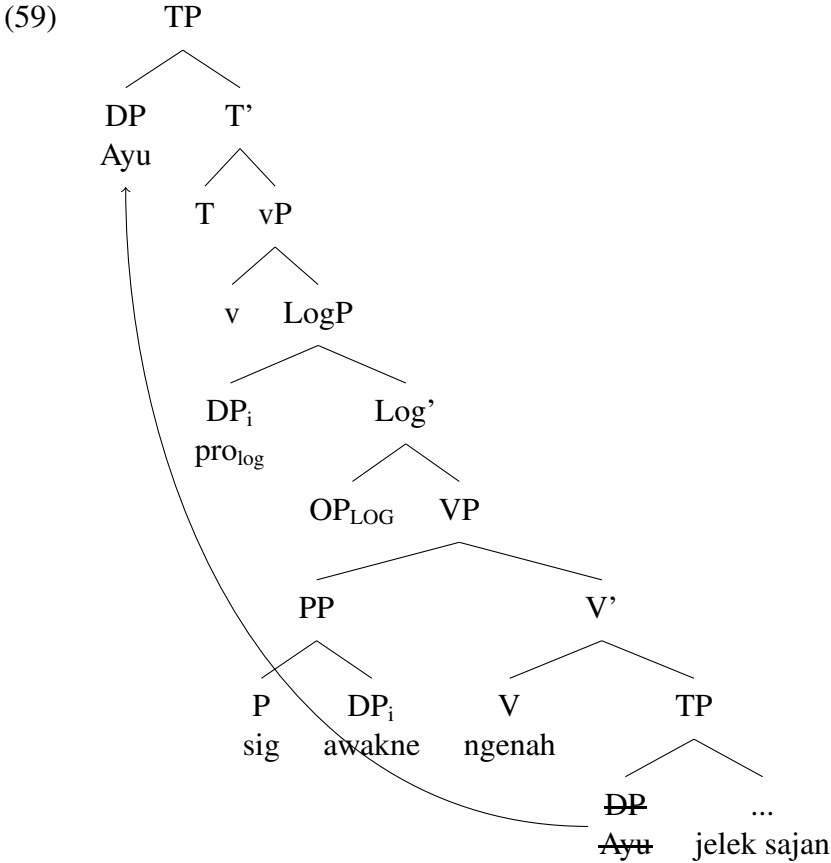
(58) Tiang ningeh kabar indik Nyoman$_i$ ... awak-ne$_i$ nyimpit Ayu
      1SG   AV.hear news about Nyoman ... self-POSS.3SG AV.pinch Ayu
      'I heard something about Nyoman$_i$ ... he$_i$ pinched Ayu.'

Under Levin's account, when *awakne* in (58) is acceptable, it would have to be analyzed as a logophoric pronominal as in Rooryck and Vanden Wyngaerd (2011)'s approach to binding. A logophoric pronominal is just like a pronoun in that it is fully valued for ϕ-features, but unlike a regular pronoun it is also specified for logophoricity. However, as noted in 2.2.1, Udayana (2013) reports that *awakne* does not have the distribution of a regular pronoun, unlike logophoric pronominals found in Turkish and Malay. We return to these issues in section 5.

3.3   The Solution

The data presented in section 2 indicates two things: first, that *awakne* may be logophorically interpreted in certain contexts, and second, that logophoric binding–and not binding by the raised DP–licenses reflexive experiencers in Balinese Bind constructions. In light of these findings, we propose the following syntactic structure for Balinese Bind constructions, where the experiencer-PP is a specifier of *seem*, and the experiencer anaphor is locally bound by pro$_{log}$.[12] The tree in (59) represents the BB construction; LogP is where binding occurs for Charnavel:

---

[12]Note that the precise location of the experiencer PP does not matter for our account as long as the PP occurs within the Spell-Out domain of vP, such that the PP is c-commanded by pro$_{log}$.

(59)

```
                    TP
                   /  \
                 DP    T'
                 Ayu   / \
                      T   vP
                         / \
                        v   LogP
                           /    \
                        DPᵢ      Log'
                        pro_log  /   \
                             OP_LOG  VP
                                    /   \
                                  PP     V'
                                 /  \   /  \
                                P   DPᵢ V    TP
                               sig awakne ngenah / \
                                              DP   ...
                                              Ayu  jelek sajan
```

The most natural location to insert the logophoric operator is the Spell-Out domain of vP. According to Charnavel (2019), each Spell-Out domain; for her, an XP with a subject, can contain a dedicated perspectival projection LogP. However, in light of Citko (2014)'s claim that PPs–with or without subjects–may also comprise phases, one may alternatively locate LogP within the experiencer PP. We leave consideration of this alternative for future research.
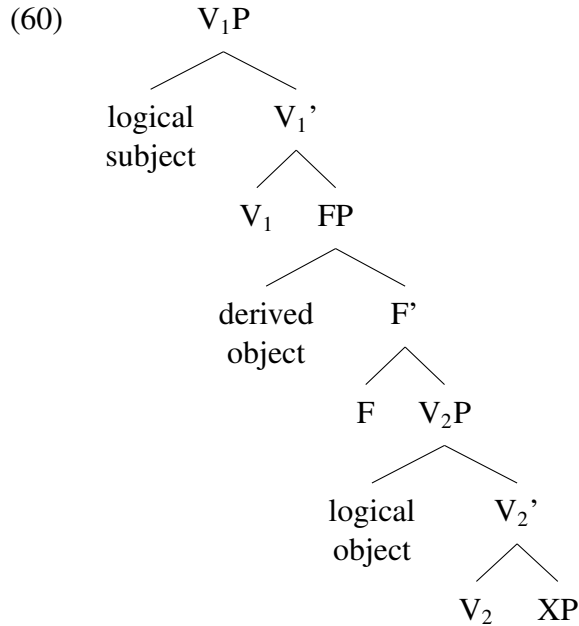
In short, we propose that the licensing of reflexive experiencers in the Balinese Bind construction arises not from binding by the raised subject but, rather, by a null logophoric pronominal located within the Spell-Out of vP. BB constructions do not contradict the observation that binding from Spec,TP is otherwise not possible. We now move on to discuss the implications of our data to claims that have been made in the literature, and Agree-based theories of anaphora.

3.4   Travis (1998)

Within the GB/Minimalist framework, a prima facie solution to the paradigm presented in (53a)-(53d) is to posit that only θ-roles are relevant for binding. Notice that in the paradigm presented in (53a)-(53d) above, the receiver of the Agent θ-role is always the binder of the reflexive, and the reflexive itself is the Theme. Indeed, another solution of the Balinese Bind could be to posit an account in which reflexive binding in Balinese is based on θ-roles. This is precisely what Travis (1998) and Travis (2012) suggest.

Travis argues that θ-positions are represented structurally. In accordance with the aforementioned UTAH, θ-positions are mapped onto articulated VP structures. The most up-to-date version of this account is found in Travis (2012), in which the VP is articulated as follows in (60) (p.

34). The functional projection F is meant to be generic; it houses derived objects such as those in raising-to-object constructions (ex. *Mary believes **herself** to be a genius*):

(60)

```
                V₁P
              /     \
      logical       V₁'
      subject      /   \
                 V₁    FP
                      /   \
              derived     F'
              object     /   \
                        F    V₂P
                            /    \
                     logical     V₂'
                     object     /   \
                               V₂   XP
```

The Agent θ-role is associated with Spec,V_1P whereas the Theme θ-role is associated with Spec,V_2P. Travis keeps the notion of A-positions, however, dividing this into two: θ-positions, which she calls T-positions, and T'-positions, which are not θ-positions. The specifier positions of all lexical categories must be T-positions; the specifier positions of functional categories cannot be T-positions. Binding is sensitive only to T-positions; Travis proposes that matrix Spec,TP in the Balinese Bind construction is a T-position so binding from it is possible. However, in OV sentences, Spec,TP is not a T-position, so binding is not possible from it.

    We believe that our account is preferable for a few reasons. This approach does not make any of the predictions we have observed in section 2 above; like Levin (2014)'s account to be discussed in section 5, it is a purely technical fix, shedding no further light on the nature of Balinese reflexives. In addition, we need not greatly complicate the notion of an A-position. But we also present one empirical problem for Travis from Levin (2014), who provides an argument for Spec,TP in both voices being A-positions–at least in control constructions.

    Notice that in Balinese control constructions, as shown in (61a)-(61d), PRO must be preverbal in the embedded clause regardless of whether the embedded verb is AV or OV. PRO of course must occupy a T-position, as PRO was originally posited to avoid θ-Criterion (for example, as defined in Chomsky (1981)) violations:

(61) a. Tiang edot PRO periksa   dokter.
            1SG   want PRO OV.examine doctor
            'I want to be examined by a doctor.'

      b. * Tiang edot dokter periksa   PRO.
             1SG   want doctor OV.examine PRO
            'I want to examine a doctor.'

c. Tiang edot PRO meriksa   dokter.
    1SG   want PRO AV.examine doctor
    'I want to examine a doctor.'

d. * Tiang edot dokter meriksa   PRO.
    1SG   want doctor AV.examine PRO
    'I want to be examined by a doctor.'

It could of course be possible for Travis to further argue that embedded OV Spec,TP in control constructions is not a T-position. However, as Levin points out, it does make her analysis less plausible–this would amount to saying that Spec,TP is an A-position whenever it needs to be. It seems difficult to provide independent arguments that would provide a satisfying answer to these problems. By contrast, the analysis provided here does not run into any of these problems, as we claim that the question of whether Spec,TP is an A-position or not is not relevant to untangling the Balinese Bind, and we make a great deal of correct predictions on the nature of *awakne* that are left unaccounted for under Travis's approach.

4 Looking past Balinese: monomorphemicity and homophony

In this section, we have two goals: first, we show in section 4.1 that Balinese contradicts a long-standing generalization in the literature: long-distance anaphors are morphologically less complex than local anaphors, if a language has different reflexive pronouns for local and long-distance contexts. Second, in section 4.2, we argue that long-distance anaphors in Balinese are not homophonous with logophoric pronominals, by comparison with Malay and Turkish.

4.1 Long-distance reflexives and monomorphemicity

A generalization has been long made in the literature, at least since Faltz (1985), that long-distance anaphors tend to be monomorphemic; for Pica (1987), they are required to be monomorphemic. A classical example of this, and perhaps the most studied, is the Chinese reflexive *ziji*.[13] *Ziji* can have long-distance antecedents as the syntactic object of the embedded verb:

(62)   Zhangsan$_i$ zhidao Lisi$_j$ xihuan ziji$_{i/j}$.
       Zhangsan know Lisi like self
       'Zhangsan$_i$ knows Lisi$_j$ likes himself$_{i/j}$.'   (Giblin, 2016, p. 58)

The dominant position in the literature–first argued for by Pica (1987) and later by Cole et al. (1990)–is that the availability of non-local binding in examples like (62) follows from the monomorphemicity of *ziji*. The reasoning is simple: the morphologically complex reflexive *ta-ziji*, made up of the addition of the third person pronoun *ta*, precludes the possibility of long-distance binding in any context; an illustration is given below:

(63)   Zhangsan$_i$ zhidao Lisi$_j$ xihuan ta-ziji$_{*i/j}$.
       Zhangsan know Lisi like 3SG-self
       'Zhangsan$_i$ knows Lisi$_j$ likes himself$_{*i/j}$.'   (Giblin, 2016, p. 58)

One explanation for this is given as follows. Cole et al. (1990) argues that long-distance reflexives are interpreted via head movement, and this can only occur with morphologically simplex anaphors. Complex anaphors are not capable of head movement, so they can only be bound locally.[14] But there are obvious problems with Pica (1987)'s too strong assertion that long-distance

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[13]See Reuland et al. (2019) for an argument for *ziji* actually being bimorphemic.

[14]For a more complete list of simplex anaphors which may have long-distance antecedents, and relevant references, the reader is referred to Chapter 5 of Charnavel (2019).

anaphors must be monomorphemic; as discussed in section 2.1 prior, English's *him/herself*, which seems to be a complex anaphor, can have non-local antecedents in certain contexts.

To avoid this issue, Haspelmath (2008) provides the most generous interpretation possible of this generalization. The definition is as follows (Haspelmath, 2008, p. 19):

(64)   **Haspelmath's Universal 7**: If a language has different reflexive pronouns in local and long-distance contexts, the local reflexive pronoun is at least as complex phonologically as the long-distance one.

In other words, if the local and long-distance reflexives in a language differ, long-distance pronouns must be simpler (or monomorphemic) and local pronouns must be more complex (bimorphemic or bigger). Here are some examples, repeated from Haspelmath (2008)'s Table 9, to which we have added Balinese in bold:

Table 2: Local and long-distance reflexives

	Local reflexive	Long-distance reflexive
Mandarin	(ta)ziji	ziji
Icelandic	sjalfan sig	sig
Dutch	zichzelf	zich
Telugu	tanu tanu	tanu
Bagvalal	e-b-da	e-b
Malay	diri-nya	diri-nya
English	him-self	him-self
Balinese	**awak**	**awak-ne**

As is made apparent in the table above, Balinese contradicts Haspelmath's Universal 7, exhibiting the exact opposite pattern than is predicted. The simplex anaphor is monomorphemic and can never be long-distance. On the other hand, the complex anaphor is bimorphemic, and yet behaves as an exempt anaphor. In addition, although the head movement account of long-distance reflexives has since been disputed, it is worth observing that Balinese provides a severe problem for such an approach, given that head movement would have to apply to complex anaphors but not to simplex anaphors, contrary to what the account claims.

4.2 Homophony is untenable for Balinese

In defense of Universal 7 against the potential counterexamples found in English as well as Malay, Haspelmath cites Cole and Hermon (2005), which argues that English and Malay anaphors are interpreted like a pronoun as they are pronoun-like, so they do not need to be interpreted via head movement. Put more formally, under this approach, English and Malay reflexives have the feature specification [+pronoun, +anaphor]; this allows for the possibility of both long-distance and local readings. But following Chomsky (1995)'s Minimalist program, we would prefer to avoid positing the existence of *ad hoc* features such as [±pronoun] or [±anaphor], deriving these properties rather than positing them.

A more modern approach is provided by Rooryck and Vanden Wyngaerd (2011) (R&W), who argue that seemingly long-distance anaphors are logophoric pronominal elements that enter a derivation with valued φ-features, just like regular pronouns. They further claim that there exists

homophony between the anaphor and logophor to account for the properties of the latter.[15] In the rest of this section, we consider an empirical argument against such homophony from Balinese anaphors, by comparing to Malay.[16] We will argue that Balinese complex anaphors, which may be logophorically interpreted, can never behave as a pronoun, contra R&W.[17]

In Malay, the third person reflexive is made up of *diri* 'self' and 3SG pronoun -*nya*. Like Balinese *awakne*, *dirinya* may have long-distance antecedents as seen below:[18]

(65)   Aminah tahu   saya memberi Siti buku tentang diri-nya.
        Aminah know 1SG give   Siti book about   self-3SG
        'Aminah$_i$ knew I gave Siti$_j$ a book about herself$_{i,j}$.'

The sentence below in (66) provides two pieces of evidence in support of its pronoun-like behavior. *Dirinya* merely needs a contextually salient individual to refer to, like a pronoun; nor does its antecedent need to appear within the same sentence:

(66)   [Bapak Siti$_j$]$_i$ tidak suka dirinya$_{i,j,k}$
        Father Siti   not   like self.3SG
        'Siti$_j$'s father$_i$ does not like him/herself$_{i,j,k}$.'

Further, like a regular pronoun, *dirinya* can have a strict interpretation under ellipsis:

(67)   John nampak diri-nya di dalam cermin; Frank pun.
        John see   self-3SG in inside mirror; Frank too.
        Strict: 'John saw himself in the mirror and Frank saw himself too.'
        Sloppy: 'John saw himself in the mirror and Frank saw John too.'

Putting aside the coincidental nature of this homophony, the data above shows that it might be possible to defend this approach in Malay. But this approach doesn't work in Balinese. Unlike *dirinya*, *awakne* cannot behave like a pronoun. First, unlike a pronoun, *awakne* must corefer with a c-commanding antecedent (repeated from (22) above):

(68)   [Bapan Ayu$_j$]$_i$ sing nemenin awak-ne$_{i,*j,*k}$
        Father Ayu   NEG AV.like self-POSS.3SG
        'Ayu$_j$'s father$_i$ does not like himself$_{i,*j,*k}$.'

Second, as expected of a reflexive, *awakne* can only have a sloppy interpretation under ellipsis, behaving in a manner similar to *ziji* in Chinese:[19]

(69)   Nyoman napukin awak-ne   di kacane lan Arta mase keto
        Nyoman AV.see   self-POSS.3SG in mirror and Arta also too
        'Nyoman saw himself in the mirror and Arta saw Nyoman too.' (sloppy only)

---

[15]It seems coincidental that there would be homophony between reflexives and logophors in not only English, but also Malay, Turkish, Chinese and many other languages, as Charnavel (2019) points out. Rooryck and Vanden Wyngaerd (2011) do not provide an explanation of this coincidence, but we will leave this issue aside to point out empirical problems with their approach.

[16]The data from Malay in this paper is from Cole and Hermon (2005).

[17]Udayana (2013) makes the same observation, though without illustrative data.

[18]The astute reader will notice that Malay's *dirinya* is not subject to first- or second-person blocking effect, like Balinese's *awakne* and unlike Chinese's *ziji*.

[19]See Büring (2005) for further details on the sloppy vs. strict contrast under ellipsis with anaphors and pronouns.

The complex reflexives in Malay and Balinese hence have different properties: Malay's behave like pronouns, Balinese's do not. So, what exactly would the Balinese anaphors be homophonous with under the R&W approach? If they cannot be homophonous with logophoric pronouns, then it is unclear what they could be homophonous with.[20]

5   Problems for Agree-based theories of anaphora

The final substantive section of this paper discusses a currently attractive approach to anaphors: Agree-based theories. We argue in this section that two of the most popular such accounts are not able to account for the distribution of Balinese anaphors. Section 5.1 provides a background as to why Agree-based theories of anaphora might be attractive. In section 5.2, we argue that our account is superior over Levin (2014), as the latter fails to predict the distribution and interpretive properties of *awakne*. Rooryck and Vanden Wyngaerd (2011) is discussed in section 5.3: in addition to Balinese, the existence of simplex anaphors in languages such as Turkish and Malay seem difficult to derive. Section 5.4 shows that Balinese anaphors cannot be classified as either SE- or SELF-anaphors, contra Reuland (2011).

5.1   Background

An attractive idea in the literature has been that anaphors, by their very nature, are deficient in terms of φ-features, and require φ-agreement to be licensed. The point of these approaches is to derive reflexive dependencies via independently motivated morphosyntactic operations without the need to posit independent theories of binding. One line of support for this is Rizzi (1990)'s Anaphor Agreement Effect, which seems to suggest a tight interaction between φ-feature agreement and binding:

  (70)   Anaphors do not occur in syntactic positions construed with agreement.

Since anaphors lack φ-features, they aren't able to participate in agreement relations, thus blocking anaphors from the subject position of finite clauses that exhibit subject-verb agreement (ex. **John thinks that himself loves Mary*). In light of this observation, authors like Rooryck and Vanden Wyngaerd (2011) and Reuland (2011) have tried to reduce the binding of anaphors to syntactic φ-features, and such approaches have become popular in Minimalist approaches to syntax.

Based on the AAE, we would expect that in languages without verbal agreement, anaphors may be allowed in the subject position of an embedded clause. Consistent with this prediction, Balinese has no verbal agreement and allows *awakne* in the embedded subject position, as seen in (71), similar to (26a) seen above in section 2:

  (71)   Nyoman$_i$ ningeh [awak-ne$_i$ lakar malaib].
         Nyoman AV.hear self-POSS.3SG FUT   MV.run

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[20]Providing an explanation of this under Charnavel's account would go beyond the scope of the paper. However, it is possible that like the pronoun-like nature of Malay reflexives is similar to that of Turkish complex reflexives, for which Major and Özkan (2018) provide an account. Major and Özkan (2018) argues that the pronoun-like nature of Turkish reflexives are possible only in certain contexts involving contrastive, emphatic or corrective focus, or honorific constructions. We have not been able to determine whether reflexives in Malay may have similar constraints.

'Nyoman$_i$ heard that he$_i$ would run away.'

Therefore, prima facie it may seem reasonable to extend an Agree-based approach to Balinese; indeed, Levin (2014) proposes that the Balinese Bind can be accounted for within R&W's theory of reflexive licensing. However, in the sections that follow we consider problems Balinese poses for the Agree-based theory of anaphora presented in Rooryck and Vanden Wyngaerd (2011).[21]

5.2   Levin (2014)

Taking up the task of defending Minimalist binding approaches against the objections raised by Wechsler (1999), Levin (2014) proposes a solution to the Balinese Bind that incorporates the Agree-based licensing mechanisms put forth by Rooryck and Vanden Wyngaerd (2011). Levin's account is similar to the approach proposed here in that it sidesteps the issue of whether Spec,TP is an A- or A'-position in Balinese by positing that binding takes place lower in the syntax of raising constructions. For our account, the anaphor is bound inside the Spell-Out domain of vP; in Levin's account, it is bound via Agreement in the edge of vP.

An illustrative tree of a derivation of the sentence *Pete invited himself* from Rooryck and Vanden Wyngaerd (2011) is given in (72) below, in which the subject and object are Merged into the expected positions. But there is one important difference: as in R&W's derivation of complex anaphors, under Levin's account, the anaphoric element raises to an adjoined position such as Spec,vP, at which point the anaphor ends up c-commanding its antecedent.

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[21]The only Agree-based theory of anaphora we will discuss in this paper is R&W, which Levin (2014) is based on. However, we have reason to believe that the Balinese facts may be equally problematic for Reuland (2011), which is a very different Agree-based theory. Reuland (2011) proposes that anaphors can be divided into two categories. The first category, the so-called *SE anaphors*, are those which are morphologically simplex:

(i)   SE anaphors: A non-clitic pronominal that is deficient in φ-features. It needs to be valued by Agree. If it is not syntactically bound, it is interpreted as a logophoric pronominal (and may have long-distance readings). Simplex (Chinese's *ziji*, Icelandic's *sig*, Dutch's *zich*, etc.
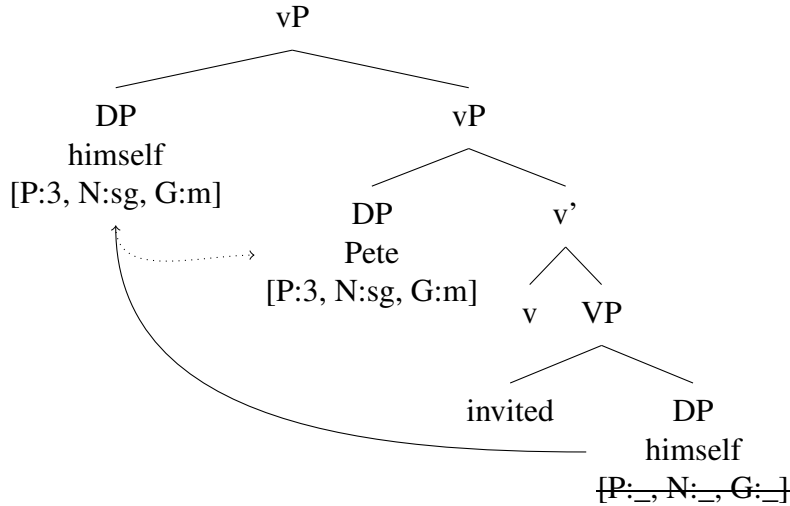
Reuland posits an operation of chain formation, based on Pesetsky and Torrego (2007)'s theory of uninterpretable features, between an SE anaphor and its antecedent for its φ-features to be valued. If the operation of A-chain formation does not take place–that is, the SE anaphor remains φ-feature deficient–the SE anaphor can be interpreted as a logophoric pronominal, which like the R&W approach assumes homophony between anaphors and logophoric pronominals, which do not lack φ-features.

The second category consists of morphologically complex anaphors, *SELF anaphors*, which often involve the addition of a pronoun, such as *taziji* in Chinese. This is defined below:

(ii)   SELF anaphors: Not deficient in terms of φ-features; they turn a predicate into a reflexive predicate. If it is not a syntactic argument (like the object of a transitive verb), it is interpreted as a logophoric pronominal (and may have long-distance readings. Morphologically complex (English's *himself*, Chinese's *taziji*

The problem for Reuland's approach is very similar to that of the problem raised for Haspelmath is section 4.2. Prima facie, none of Balinese's anaphors can be classified under Reuland's approach. We have shown in section 2 that *awak* is never interpreted logophorically, so it cannot be classified as an SE anaphor, and *awakne* cannot be classified as a SELF anaphor because it can be a syntactic argument and interpreted logophorically, as shown in (23).

(72)

```
                              vP
                  ┌───────────┴───────────┐
                 DP                        vP
               himself              ┌──────┴──────┐
            [P:3, N:sg, G:m]       DP             v'
                                  Pete         ┌───┴───┐
                             [P:3, N:sg, G:m]   v      VP
                                                    ┌──┴──┐
                                                 invited   DP
                                                         himself
                                                      [P:_, N:_, G:_]
```

R&W note that when the anaphor is the complement of a predicate, as in the tree above, and in sentences where the complex anaphor is the argument of a preposition, as in the Balinese Bind constructions, the anaphor does not, in the overt syntax, ever end up c-commanding its antecedent, hence the ungrammaticality of *Pete himself invited*. To avoid this incorrect result, the movement that takes place in (72) is taken to occur covertly in PF.

This is a counterintuitive result.[22] Regardless, the unvalued φ-features on the anaphor cause it to probe the antecedent that it ends up c-commanding, and its features are valued. At LF, the nominal that was valued during the derivation is interpreted as bound. The binding relationship is thus established between two elements, each of which are in Spec,vP, prior to T even being Merged, thereby obviating need to appeal to Spec,TP as a potential locus of binding.

In addition to accounting for the Balinese Bind, Levin's approach also correctly predicts the effect of voice alternation on the surface distribution of reflexives seen in examples (2a)-(2d) of section 1, since binding is established within vP prior to promotion of the pivot to Spec,TP.

While Levin's proposal is able to handle the data that have previously appeared in literature discussing the Balinese Bind, the primary issue with his approach is that it is a technical fix which does not predict the larger distribution of Balinese reflexive anaphors. Levin makes no mention of logophoric interpretations of Balinese complex anaphors, which are available even when the anaphor is a syntactic object. Like R&W, Levin would have to resort to stipulating homophony between the anaphor and the logophoric pronominal to account for the Balinese facts. In the next subsection, we point out that Levin's account does not seem able to derive the existence of simplex anaphors in Balinese.

5.3 Rooryck and Vanden Wyngaerd (2011)

In this subsection, we present R&W's derivation of simplex anaphors that is implicitly assumed by Levin (2014), given that it is based on R&W's account of Agree-based reflexive binding. As

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[22]R&W's approach fails to predict the overwhelming tendency of reflexives to surface as c-commanded by their antecedent and not vice versa, nor does it make clear why sentences such as *Himself invited Pete* should be ruled out. In the case of *Himself invited Pete*, R&W appeal to the Activity Condition: the v Probe of the matrix clause has already agreed with the DP *Pete* and rendered it inactive. The reader is referred to Rooryck and Vanden Wyngaerd (2011) for more details on this issue.

noted in 2.4, Balinese has simplex anaphors; Levin does not note this, and it remains an open question as to whether simplex anaphors in Balinese are derivable in the R&W account.

We will argue that the existence of simplex anaphors is not predicted under the R&W approach–not just in Balinese, but in other languages such as Turkish as well, where the complex anaphor is made up of a possessive affix. The problem can be stated very simply as follows: if R&W is correct in thinking that the simplex anaphor is possessed by its antecedent, then why do simplex anaphors in languages like Balinese and Turkish exist, where the complex anaphor is made up of a possessive suffix and the simplex anaphor? We now introduce the reader to R&W's account and our argument in more detail.

Recall that the third person complex anaphor *awakne* in Balinese is glossed as *self-3POSS*; in other words, it is made up of the simplex anaphor and a possessive suffix. This is the same suffix that is used in simple possessive constructions such as *pipis-**ne*** 'his/her money-3POSS.[23] Balinese is not the only language like this; in Turkish both the complex reflexive and simple possessive constructions bear a possessive suffix, but in Turkish it is much clearer that the suffix bears φ-feature agreement. The Turkish paradigm is given below:
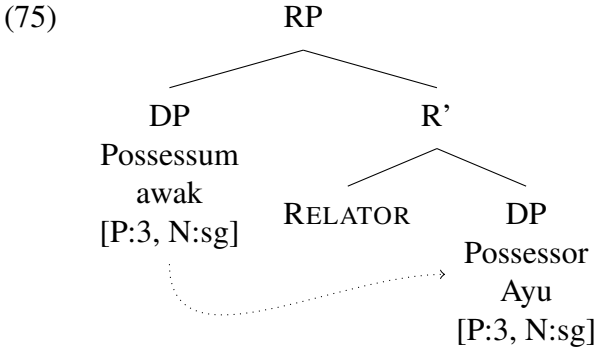
(73) a. *kendi-m* self-1SG "myself" vs. *para-m* money-1SG "my money"

b. *kendi-n* self-2SG "yourself" vs. *para-n* money-2SG "your money"

c. *kendi-si* self-3SG "him/herself" vs. *para-sı* money-3SG "his/her money"

With this in mind, we now present R&W's derivation of simplex anaphors, who argue that the simplex anaphor is possessed by its antecedent, and the anaphor receives its φ-features. To use the example of the Dutch simplex anaphor *zich*, in a sentence like (74a) below, the antecedent of the simplex anaphor is a possessor, much like how *Mary* is the possessor of *leg* in *Mary's leg*. But the antecedent is able to move to Spec,TP, as shown in (74b):
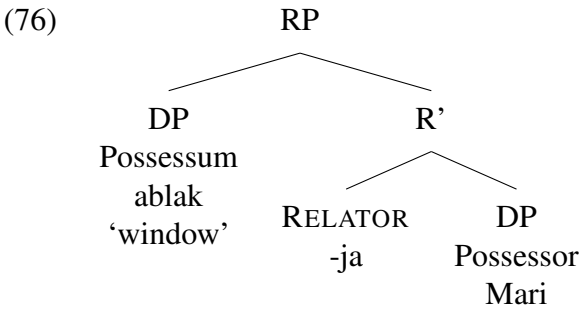
(74) a. Milo heeft zich bezeerd.
Milo has self hurt
'Milo hurt himself.'   (Rooryck and Vanden Wyngaerd, 2011, p. 55)

b. Milo$_{possessor}$ [hurt [$_{RP}$ [$_{DP1}$ self$_{possessum}$] [R [$_{DP2}$ ~~Milo~~$_{possessor}$]]]]

The structure in (74b) assumed by R&W is based on den Dikken (2006)'s structure of possessive constructions, in which the possessum originally c-commands the possessor and the head of the possessive construction is the functional projection RELATOR, as in (75) below. The reflexive *awak* enters the derivation with unvalued φ-features and it probes the Possessor, the antecedent (ex. *Ayu*), for its φ-features:

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[23]It is not clear if the first and second person anaphors and possessive constructions in Balinese have possessive suffixes. Although in Udayana (2013)'s glossing, even these anaphors and simple possessive constructions bear φ-feature agreement (ex. *cange* in *awak cange* is 1POSS) this conclusion could be mistaken. For Haiduck (2014), *cang-e* is glossed as 1SG-DEF. Regardless, the argument in this subsection still applies to the third person anaphor *awakne* in Balinese and to all Turkish anaphors.

(75)

```
                    RP
              ┌──────┴──────┐
            DP                R'
        Possessum        ┌────┴────┐
          awak       RELATOR       DP
        [P:3, N:sg]            Possessor
                                  Ayu
                              [P:3, N:sg]
```
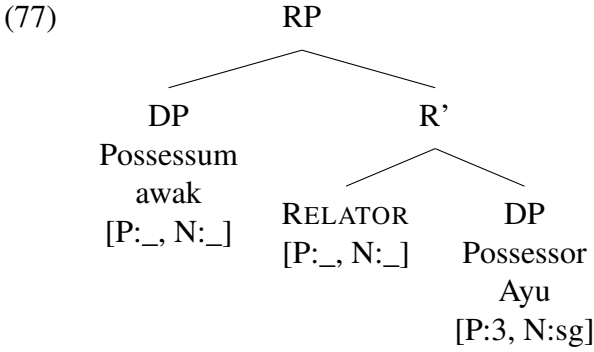
In languages with possessive suffixes, den Dikken (2006) proposes that the structure illustrated in (75) is found in simple possessive constructions; this is shown in (75) for the Hungarian example *Mari ablak-ja* 'Mari's window-POSS.3SG' in which the possessive suffix *-ja* is assumed to spell out the RELATOR. [24]

(76)

```
                    RP
              ┌──────┴──────┐
            DP                R'
        Possessum        ┌────┴────┐
          ablak      RELATOR       DP
        'window'       -ja      Possessor
                                  Mari
```

In this way, both simplex anaphors and simple possessive constructions originally have the same structure. Therefore, if the simplex anaphor truly is possessed by its antecedent, why does the simplex anaphor not have a possessive suffix in Balinese or Turkish? This is more troubling than it appears: it seems to incorrectly predict that simplex anaphors do not, or cannot, exist in these languages. Of course, it would be possible for R&W to stipulate that possessive affixes are not pronounced when the possessum is a reflexive. But this would not be an independently motivated answer to the problem at hand. Further, this might lead to Activity Condition violations.

Here is why. How is the possessive suffix spelled out in den Dikken's approach? He does not provide an answer to this, but one very natural answer is to stipulate the presence of a Poss functional projection in languages with possessive affixes such as Balinese, following Alexiadou et al. (2007) among others, which is unspecified for φ-features. Poss agrees with the possessor to represent its φ-features in the form of a possessive affix at PF. For simplicity, let us move these φ-features to RELATOR. Now, note that in (77) below, both the simplex anaphor and RELATOR have unvalued φ-features and each of them need to agree with the possessor:

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[24]We have simplified den Dikken's derivation for the sake of clarity, by removing unnecessary syntactic projections and the alienability vs. inalienability distinction. We have also removed the necessary movements to derive the correct word order in (76). Furthermore, Rakosi (2009) points out that reflexives in Hungarian are also made up of the possessive suffix, like possessive constructions.

(77)

```
                    RP
               ╱          ╲
           DP               R'
        Possessum        ╱      ╲
          awak      RELATOR       DP
        [P:_, N:_]  [P:_, N:_]  Possessor
                                  Ayu
                               [P:3, N:sg]
```

Following R&W's own account which necessarily assumes the Activity Condition–mentioned in fn. (22) as R&W's answer for the ungrammaticality of sentences like *Herself loves Caitlin*– the structure in (77) would not allow the ϕ-features of the anaphor to be valued. This is because RELATOR is able to Agree with the possessor before the simplex anaphor is even Merged. Once again, this leads to the undesirable consequence that simplex anaphors are predicted to not exist in Balinese, Turkish and Hungarian; in fact, they are underivable with the Activity Condition.

To recap, the existence of simplex anaphors in languages where the complex anaphor is made up of the simplex anaphor plus a possessive affix seems difficult to derive and would require an assumption that is not independently motivated. Finally, as discussed in section 4.2, another issue with R&W's approach is that they assume homophony between anaphors and logophoric pronominals; we have argued that such homophony is not suitable for Balinese.

6 Conclusion

As has been mentioned multiple times throughout the paper thus far, multiple questions remain open to future research. Perhaps the most pressing issue is what accounts for the pronoun-like nature of the Malay anaphor. But another very interesting question is how the findings of this paper apply to languages such as English.

Unlike Balinese, in English, it seems that the reflexive experiencer can never be logophorically bound. Some tests from Balinese that helped to establish the presence of a perspectival center do not work in English; *myself* is not freely allowed, nor can the reflexive be read long-distance, both of which would indicate the presence of an exempt anaphor. Based on our approach to Balinese, we would predict English to behave in the same manner, but it does not:

(78)   * (I think that) Lisa seems to myself to be very happy.

(79)   * John thinks that Lisa seems to himself to be very happy.

Regardless, we have tried to show that the Balinese Bind construction does not pose a problem to GB and Minimalist theories of syntax. In order to accomplish this, we have presented a wealth of novel data to demonstrate a property of Balinese complex anaphors like *awakne* that has previously gone unnoticed in the literature: they may be anteceded by a perspective center and, within Balinese Bind constructions, must be also anteceded.

Within the framework of Charnavel (2019), this indicates that *awakne* is actually bound by a null logophoric pronoun in Balinese Bind constructions. By showing that *awakne* in the Balinese

Bind construction is actually bound in the Spell-Out domain of vP, we have provided an alternate solution of the Balinese Bind. It is not relevant whether Spec,TP is an A- or A'-position in Balinese. If anything, the Balinese Bind construction is an argument in favor of Minimalist approaches to syntax, rather than HPSG, which makes no predictions on *awakne*'s properties.

In doing so, we have also attempted to shed light on other issues in the literature. Balinese provides a genuine counterexample to the generalization that has long been made in the literature; that if a language has both long-distance and local anaphors available, the local anaphor is at least as complex phonologically as the long-distance one. Balinese is literally the opposite, plainly contradicting this generalization. In addition, we have given multiple arguments against contemporary theories of Agree-based anaphora. To conclude, further study into the anaphora of understudied languages might shed light on current theories and ideas of reflexives.

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