

### A Minimalist Account of Balinese Binding

**Problem.** Voice alternation in Balinese interacts with reflexive binding in a way that Wechsler (1999) argues is problematic for Minimalist theories of binding. Balinese transitive verbs appear in two voices: Agentive Voice (AV), in which the external argument is promoted to grammatical subject (1), and Objective Voice (OV), in which it is instead an internal argument that raises (2).

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| (1) Ia ngatap biju<br>3SG AV.cut banana<br>'(S)he cut a banana.' | (2) Biju gatap ia<br>Banana OV.cut 3SG<br>'(S)he cut a banana.' |
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A coargument-bound reflexive must appear post-verbally in AV (3) but pre-verbally in OV (4). In Minimalism, this suggests that Spec,TP is an A'-position in Balinese, such that movement to Spec,TP does not create new antecedents for binding.

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| (3) Ia <sub>i</sub> ngatap awak-ne <sub>i</sub><br>3SG AV.cut self-3POSS<br>'(S)he <sub>i</sub> cut herself <sub>i</sub> .' | (4) Awak-ne <sub>i</sub> gatap ia <sub>i</sub><br>Self-3POSS OV.cut 3SG<br>'(S)he <sub>i</sub> cut herself <sub>i</sub> .' |
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However, this conclusion seems to be contradicted by raising constructions like (5), in which a DP promoted from the embedded clause to matrix Spec,TP appears to bind an anaphor within a matrix experiencer-PP, as if Spec,TP is in fact an A-position: this seems problematic for GB.

- (5) Ia<sub>i</sub> ngenah sig awak-ne<sub>i</sub> jelek sajan  
3SG seem to self-3POSS bad very  
'(S)he<sub>i</sub> seems to herself<sub>i</sub> to be very ugly.'

According to Wechsler, HPSG circumvents this apparent paradox—what he dubs the "Balinese Bind" (BB)—by defining binding relations over argument roles irrespective of surface syntax.

**Proposal.** We build upon Udayana (2013)'s HPSG proposal that *awakne* has logophoric properties with novel data and a Minimalist analysis. We provide new evidence that *awakne* is necessarily logophoric in sentences like (5), and we propose a Minimalist solution to the BB that extends Charnavel (2019)'s hypothesis of logophoric binding to Balinese. Specifically, we argue that the anaphor in (5) is bound not by the subject in Spec,TP but, rather, by a null logophoric pronoun located within vP. We compare and contrast our solution of the BB to Levin (2014)'s, which assumes an Agree-based theory of anaphora.

**Data.** We first observe that *awakne* can be logophorically licensed when anteceded by an attitude holder: *awakne* can corefer with a non-local DP denoting the source of information in (6) but not the matrix subject, whose perspective is less readily associated with the content of the embedded clause. (7) shows that sourcehood is not sufficient to license apparent exemption from Condition A in Balinese; animacy is also required, in line with Charnavel & Sportiche (2016):

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| (6) Nyoman <sub>i</sub> ningeh uli Arta <sub>j</sub> Ayu <sub>k</sub> nanjung awak-ne <sub>*i,j,k</sub><br>Nyoman AV.hear from Arta Ayu AV.kick self-3POSS<br>'Nyoman <sub>i</sub> heard from Arta <sub>j</sub> that Ayu <sub>k</sub> kicked him/herself <sub>*i,j,k</sub> .'                              |
| (7) Nyoman <sub>i</sub> ningeh uli [surat kabar] <sub>j</sub> Ayu <sub>k</sub> nanjung awak-ne <sub>i,*j,k</sub><br>Nyoman AV.hear from document news Ayu AV.kick self-3POSS<br>'Nyoman <sub>i</sub> heard from [the newspaper] <sub>j</sub> that Ayu <sub>k</sub> kicked him/herself <sub>i,*j,k</sub> .' |

Reflexive experiencers of *ngengah* 'seem' can also be anteceded by non-local attitude holders (8):

- (8) Nyoman<sub>i</sub> ngaden Ayu<sub>j</sub> ngenah sig awak-ne<sub>i/j</sub> jelek sajan  
Nyoman think Ayu seem to self-3POSS bad very  
'Nyoman<sub>i</sub> thinks Ayu<sub>j</sub> seems to himself/herself<sub>i/j</sub> to be very ugly.'

We argue that the reflexive experiencer of *ngengah* is **always** logophorically licensed. Unlike in cases of overt local binding as in (3)–(4), *awakne* must be read *de se* in (5), as shown by the incompatibility with the context in (9). This is not predicted if *awakne* is even optionally bound

from Spec,TP as overt local binding does not require de se readings. Crucially, (10) shows that the unacceptability of (9) does not arise from the unavailability of de re readings of raised subjects in Balinese ‘seem’ constructions; the problem lies with interpretation of the reflexive.

(9) Context: Intoxicated, Ayu looks at a picture of herself but doesn’t realize it’s her.

# Ayu<sub>i</sub> ngenah sig awak-ne<sub>i</sub> jelek sajan  
 Ayu seem to self-3POSS very bad  
 ‘Ayu<sub>i</sub> seems to herself<sub>i</sub> to be very ugly.’

(10) Context: Intoxicated, Ayu looks at a picture of Nyoman but doesn’t realize it’s him.

✓ Nyoman ngenah sig Ayu jelek sajan.  
 Nyoman seem to Ayu bad very  
 ‘Nyoman seems to Ayu to be very ugly.’

Further, replacing the reflexive with an evaluative expression in (11), we find that the expression can be evaluated from Ayu’s perspective rather than the speaker’s: (11) is felicitous when Ayu considers the experiencer a good person whereas the speaker considers the same individual a bad person. This is predicted only if Ayu is an attitude holder, as Charnavel (2019) argues.

(11) Ayu ngenah sig anak bagus ento jelek sajan  
 Ayu seem to person good DEM bad very  
 ‘Ayu seems to that good man to be very ugly.’

**Analysis.** Concluding from (9)–(11) that a reflexive experiencer must be logophoric in Balinese ‘seem’ constructions, we adopt Charnavel (2019)’s framework, according to which logophorically licensed anaphors are in fact locally bound—in accordance with Minimalist Condition A—by a covert logophoric pronoun,  $pro_{log}$ , which is introduced into the syntax as the specifier of a logophoric operator,  $OP_{LOG}$ . This is schematized in (12) below:

(12) [<sub>LogP</sub>  $pro_{log-i}$   $OP_{LOG}$  [<sub>P</sub> ...anaphor<sub>i</sub>... ]]

We account for binding in Balinese ‘seem’ constructions with the structure in (13), where the experiencer-PP merges as the specifier of *ngenah* and the reflexive is locally bound by  $pro_{log}$ :

(13) [<sub>TP</sub> Ayu<sub>i</sub> ... [<sub>vP</sub> [<sub>LogP</sub>  $pro_{log-i}$   $OP_{LOG}$  [<sub>vP</sub> [<sub>PP</sub> sig awakne<sub>i</sub>] [<sub>V</sub> ngenah [<sub>TP</sub> t<sub>i</sub> jelek sajan]]]]]]  
*Awakne* is not bound from Spec,TP in sentences like (5), and so no paradox arises. Furthermore, as Charnavel (2019) shows, Condition B violations do not apply to  $pro_{log}$ : one possibility is to adopt Reinhart & Reuland (1993)’s coargument-based approach for pronouns.

**Conclusion.** Our approach and Levin’s are able to account for the BB by proposing that binding in all cases occurs within vP. This lets us treat Spec,TP as an A’-position. But Levin’s account and ours give rise to different predictions regarding the general behavior of *awakne*. Our approach correctly predicts the interpretive properties of *awakne* in (5) and elsewhere where *awakne* takes a non-local antecedent. Levin would need to stipulate homophony with a logophor.

We close noting that our data above all involve complex anaphors; Balinese also has simplex anaphors like *awak*. Balinese challenges a long-standing generalization which Charnavel (2019) has argued is likely to be false. Simplex anaphors cannot have long-distance antecedents (14) while complex anaphors can, in direct contradiction of Haspelmath (2008), among others.

(14) Nyoman<sub>i</sub> ngaden Ayu<sub>j</sub> nanjung awak<sub>\*i,j</sub>/awak-ne<sub>i,j</sub>  
 Nyoman think Ayu AV.kick self/self-3POSS  
 ‘(Intended) Nyoman<sub>i</sub> thinks Ayu<sub>j</sub> kicked himself.’

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