

Anaphoric Expressions in Javanese*

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1. Introduction

In this paper we examine three types of anaphoric expressions in Javanese: (i) pronouns, e.g. *deen* '3PSG', (ii) true reflexives, e.g. *awak+pronoun+dewe* and (iii) "pseudo-reflexives", e.g. *awak+pronoun*. We argue that the distribution of pronouns like *deen* and true reflexives like *awake deen dewe* follows from Principle B and A of the Binding Theory: namely, while pronouns cannot have a local c-commanding antecedent, reflexives must have a local c-commanding antecedent. The third type of anaphoric expression, *awak+pronoun*, constitutes a problematic case for the Binding Theory. Its distribution is peculiar in that it can take either a local or a non-local antecedent. These facts might appear to suggest that the typology of anaphoric expressions predicted by the Binding Theory does not hold in Javanese, and, hence, that the Binding Theory is not universal.

We argue that contrary to initial appearances, Javanese is not a counterexample to the Binding Theory. Anaphoric expressions in Javanese are subject to both Principle A and Principle B. We will argue that the complex forms *awak+pronoun* must be analyzed not as unusual anaphors which violate the definition of the standard binding domain for anaphors, but as pronominals which can have an unusual distribution, due to the fact that the noun *awak* has the syntactic effect of creating a binding domain for the pronoun. This analysis brings these forms in line with the analysis proposed for Malay *dirinya*

* Javanese is spoken by more than 75,000,000 speakers on the island of Java and is ranked 11th among the world's languages in terms of number of speakers. A characteristic of this language is the existence of clearly defined formal (*Kromo*) and informal (*Ngoko*) registers. The dialect of Javanese reported on in this research is a colloquial variety used for daily communication in the city of Semarang, the capital city of Central Java in Indonesia. Our consultants are ethnically Chinese, whose primary languages are Javanese and Indonesian. Our paper is a description of this basilectal variety and we make no claim about other dialects and registers of Javanese. We would like to thank our consultants, Eric Rabda and Lily Widjaja, for their help with the data, and Kozue Inoha, Li-May Sung, Yassir Tjung, and Satoshi Tomioka for giving us insightful comments.

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(*diri*+pronoun) in Cole and Hermon 1998, and the pronominal reflexive form (*kendi*+pronoun) in Turkish, discussed in Kornfilt 2001.

This paper is organized as follows. Section 2 deals with the pronoun *deen*, and shows that its distribution follows from Principle B. In section 3, we discuss the complex true reflexive *awake deen dewe*, and present some evidence showing that it is a true local reflexive. In section 4, we describe the distribution of the pseudo-reflexive *awake deen*. It will be argued that the peculiar distribution follows from the syntactic structure of this form. That is, the pseudo reflexive is just an NP with a pronominal possessor and *awak* has the syntactic role of creating a binding domain for a pronoun inside it. Section 5 summarizes and concludes this paper.

2. Pronoun

The distribution of Javanese pronouns is like that of their English counterparts. Pronouns in Javanese cannot have a local c-commanding antecedent¹:

- (1) a. *[ibue Tono]_j benci mbek *deen*_j.
 mother-E -3 Tono hate MBEK with 3SG
 ‘Tono’s mother hates him.’
- b. Tono_i pikir [Bowo_j benci mbek *deen*_{i/*j}].
 Tono think Bowo hate MBEK with 3SG
 ‘Tono thinks Bowo hates him.’

Pronouns can refer either to a non c-commanding antecedent as in (2a), a non-local c-commanding antecedent in (2b), or a discourse referent as in (2c):

- (2) a. [ibue [Tono]_i] benci mbek *deen*_i.
 mother-E -3 Tono hate MBEK with 3SG
 ‘Tono’s mother hates him.’
- b. Tono_i percaya [nek Bowo_j benci mbek *deen*_{i/*j}].
 Tono believe NEK that Bowo hate MBEK with 3SG
 ‘Tono believes that Bowo hate him.’
- c. Tono_i benci mbek *deen*_{*i/j}.
 Tono hate MBEK with 3SG
 ‘Tono hates him.’

The distribution of pronouns follows from Principle B of the Binding Theory, namely, a pronoun must be free in its binding domain. Preliminarily, the Binding Domain can be defined as the smallest IP which contains the pronoun, its governor, and a subject (or SUBJECT). Under this definition, pronouns in

¹ Soenjono Dardjowidjojo (pc.) has pointed out to us that *mbek* and *deen* represent a basilectal register. Our consultants used *deen* in place of the standard Javanese form *deweke*.

embedded subject position are predicted to be bound by matrix subjects. This prediction is shown to be correct out in the following examples:

- (3) a. Tono_i percaya [nek *deen_i* ganteng].
 Tono believe that 3SG handsome
 ‘Tono believes that he is handsome.’
 b. Tono_i pikir [*deen_i* benci mbek Siti].
 Tono think 3SG hate MBEKwith Siti
 ‘Tono think that he hates Siti.’

In addition to IPs, the standard definition of Binding Domain also predicts that only NPs which contain a subject constitute a binding domain, hence the contrast in (4a) and (4b):

- (4) a. Bowo_i cerita mbek Tono_j [sebuah ceritaan tentang *deen_{i/*j/k}*].
 Bowo tell MBEKwith Tono one story about 3SG
 ‘Bowo told Tono one story about him.’
 b. Bowo_i orak seneng mbek [bukune Siti_j tentang *deen_{i/*j}*].
 Bowo not like MBEKwith book-NE Sitee about 3SG
 ‘Bowo does not like Siti’s book about him.’

The minimal syntactic difference between sentences of (4) differ only with respect to the two examples is the presence or absence of the subject (possessor) within the object NPs. In (4b) the pronoun *deen* occurs within an NP which has a specified subject (the possessor, *Siti*), and *it deen* can be bound by the subject of the IP, *Bowo*. In contrast, *deen* in (4a) appears within an NP without a subject (possessor), and it cannot be bound by any of the NPs in the sentence. All this follows from the standard definition of binding:

- (5) a. Binding Condition B: A pronoun must be free in its governing category
 b. The Governing Category (cf. Huang, 1983 and Chomsky 1986):
 α is the governing category for β if and only if α is the minimal category containing β , a governor of β , and a SUBJECT of β .

3. True Reflexives

In this section, we examine the distribution of what we call ‘true reflexives’. These are expressions with the form *awak+pronoun+dewe* as shown in (6):

- (6) Tono_i benci mbek *awake deen dewe_i*
 Tono hate MBEKwith bodyself-E -3 3SG DEWEself
 ‘Tono hates himself.’

On the morphological level, the reflexive *awake deen dewe* consists of four morphemes; *awak* meaning ‘body’ (when it appears independently), *deen* ‘third

person singular pronoun', and *dewe* 'self'². When used as a component of anaphoric expressions, *awak* is semantically "bleached" and need not refer to physical attributes of the antecedent.³ The bound morpheme *-e*, which is a possessive marker, appears on the noun *awak* and marks third person agreement with the pronominal part of the reflexive.

As with English reflexives, the pronoun within the reflexive is determined by the number and person features of the antecedent as shown below:

- (7) a. Tono_i benci mbek *awake deen dewe_i*.
Tono hate MBEKwith bodyself-E -3 3SG DEWEself
'Tono hates himself.'
- b. Aku_i benci mbek *awakku dewe_i*.
I hate MBEKwith bodyself-1SG DEWEself
'I hate myself.'
- c. [Tono mbek Siti]_i benci mbek *awake mereka dewe_i*.
Tono and Siti hate MBEKwith bodyself-E -3 3PL DEWEself
'Tono and Siti hates themselves.'
- d. Kowe_i seharuse seneng mbek *awakmu dewe_i*.
2SG/PL should like MBEKwith bodyself-2SG/PL DEWEself
'You should love yourself/yourselves.'
- e. Dewe_i seneng mbek *awake dewe dewe/awake masing- masing_i*.
1PL like MBEKwith bodyself-E -3 1PL DEWEself/ bodyself-E -3
each each
'We love ourselves.'

Our claim that the NP of the form *awak* + pronoun + *dewe* is a true anaphoric reflexive is supported by based on its distribution. *Awake deen dewe* shows all the characteristics of a complex reflexive such as English *himself*. The reflexive form *awake deen dewe* must have an antecedent within the sentence in which it occurs, as illustrated in (8). That is, it cannot have a discourse antecedent:

- (8) Tono_i ngresiki *awake deen dewe_{i/*j}*.
Tono wash bodyself-E -3 3SG DEWEself
'Tono washed himself.'

Moreover, the antecedent must c-command the reflexive:

² According to Arka (1998), the forms *awak* and *dewe* can each be used as reflexives in Balinese. In Javanese, although most people agree that the simple forms such as *awak* and *dewe* cannot be used as reflexives, some speakers use more complex forms such as *awake dewe* or Pronoun+*dewe*. Since the form *awake deen dewe* is the most common form, we will concentrate on this form.

³ We therefore gloss *awak* as 'self', rather than as 'body'.

- (9) a. **Awake deen dewe*_i benci mbek Tono_i.
 bodyself-E -3 3SG DEWEself hate MBEKwith Tono
 ‘Himself hated Tono.’
- b. [*Iibue* [Tono]_i]_j benci mbek *awake deen dewe*_{*i/j}.
 mother-E -3 Tono hate MBEKwith bodyself-E -3 3SG DEWEself
 ‘[Tono_i’s mother]_j hates *himself_{*i}/ herself_j.’

In (9a), *awake deen dewe* cannot refer to *Tono* since the reflexive found in [Spec, IP] position is not c-commanded by the object *Tono*, which is embedded within a the VP. In (9b), *awake deen dewe* can only take *Ibue Tono* but not *Tono* as its antecedent because only the former c-commands the reflexive. In addition to the c-command requirement, the antecedent must be local:

- (10) a. Tono_i pikir [Bowo_jbenci mbek *awake deen dewe*_{*i/j}].
 Tono think Bowo hate MBEKwith bodyself-E -3 3SG DEWEself
 ‘Tono thinks Bowo hates himself.’
- b. Dokter_i percaya [nek Tono_j meh ngumbah *awake deen dewe*_{*i/j}].
 doctor believe that Tono will wash bodyself-E -3 3SG DEWEself
 ‘The doctor believes that Tono will be able to wash himself.’

As shown in the sentences of (10), the reflexive in the embedded clause cannot take the matrix subject as its antecedent; the only possible antecedent is the subject of its own clause.

The fact that *awake deen dewe* must have a local c-commanding antecedent follows from the hypothesis that it is a reflexive and, therefore, subject to Principle A of the Binding Theory: a reflexive must be bound in its binding domain, presumably the smallest clause or NP containing a subject and the anaphor.

Another piece of evidence providing further support for our claim that *awake deen dewe* is a reflexive comes from VP-ellipsis facts. It has been claimed in the literature that true anaphors only allow a sloppy reading in the VP-ellipsis construction (see Cole et al 2001, inter alia), and the facts from Javanese are in line with this observation:

- (11) Tono ketok *awake deen dewe* nggon koco, Siti yoyo.
 Tono sawee bodyself-E -3 3SG DEWEself in mirror, Siti too.
 ‘Tono saw himself in the mirror and Siti saw herself.’
 ‘*Tono saw himself in the mirror and Siti saw Tono.’

While the anaphor only allows the sloppy (bound variable) reading, pronouns like *deen* allow both a sloppy and a strict reading since the pronouns can be interpreted as either constants or bound variables:

- (12) Tono ngomong Bowo ketok *deen* nggon Jakarta, Siti yoyo.
 Tono say Bowo see 3SG in Jakarta, Siti too
 ‘Tono said Bowo saw Tono in Jakarta and Siti said Bowo saw Tono/Siti in Jakarta.’

In sum, all the evidence is inconsistent with the claim that *awake deen dewe* is a reflexive and, therefore, must be bound within a local domain.

We have suggested above that the binding domain of a reflexive can be formulated as the smallest clause or NP containing it, its governor, and a subject. However, this definition of binding domain for reflexives is too restrictive for Javanese. As shown below, reflexives in embedded subject positions can be bound by the matrix subjects:

- (13) a. Tono_i pikir [*awake deen dewe*_i ganteng].
 Tono think bodyself-E -3 3SG DEWEself handsome
 ‘Tono thinks that he is handsome.’
- b. Tono_i percaya [nek *awake deen dewe*_i ganteng].
 Tono believes NEKthat bodyself-E -3 3SG DEWEself handsome
 ‘Tono believes that he is handsome.’

The binding domain in these examples is extended from the subordinate to the matrix clause. However, Javanese is not the only language showing the pattern in (13). For example, in Chinese, as described in Sung 1990, the bi-morphemic local reflexive *taziji* is in general local but can take an antecedent in the higher clause when it itself is the subject of the IP:

- (14) a. Xiaoming_i xiangxin *taziji*_i neng kaoguo.
 Xiaoming believe himself can pass the exam
 ‘Xiaoming believes that he himself can pass the exam.’
- b. Zhangsan_i zhidao Wangwu_j hen *taziji*_{*ij}.
 Zhangsan know Wangwu hate himself
 ‘Zhangsan knows that Wangwu hates himself.’

The facts in Javanese then fall in line with facts in other languages⁴. The fact that equivalent sentences are ungrammatical in English follows from the standard binding theory since finite AGR is the SUBJECT which that determines the binding domain for the reflexive. However, if, however, there is no overt AGR in the embedded clause, the binding domain can in principle will be extended to the matrix clause. In fact, Javanese lacks overt subject-verb agreement as shown below:

- (15) a. Tono benci mbek Siti.
 Tono hate MBEKwith Siti
 ‘Tono hates Siti.’
- b. Aku benci mbek Siti.

⁴ The Korean complex reflexive *cakicasin* also shows a similar pattern:

- (i) *Chelswu-nun* [*cakicasin-i cal sengyessta-ko*] sengakhanta.
 Chelswu-TOP SELF-NOM well look.like-COMP think
 Chelswu thinks that he is handsome.’

1SG hate withMbek Siti
'I hate Siti.'

The form of the verb, *benci*, is not affected by the person and number features of the subject. Therefore, we can reasonably assume that there is no overt AGR in Javanese, playing which can play the role of SUBJECT in constituting a binding domain for anaphoric expressions⁵. This is in fact what Sung (1990) suggested proposed in order to account for the Chinese facts illustrated above. The binding domain is extended to the higher clause when the reflexive itself is in the embedded subject position. Since the reflexive cannot be coindexed with itself (the subject) and there is no AGR in the embedded clause, there is no accessible subject in the embedded clause. As a result, the binding domain is extended to the matrix clause. However, recall our claim in the previous section that the binding domain for pronouns in the embedded subject positions is still the lower IP. Compare the following two examples, which show that both pronouns and reflexives are possible in complement subject position below:

- (16) a. Tono_i percaya [nek *deen_i* ganteng].
Tono believe NEKthat 3SG handsome
'Tono believes that he is handsome.'
- b. Tono_i percaya [nek *awake deen dewe_i* ganteng].
Tono believe NEKthat bodyself-E -3 3SG DEWEself handsome
'Tono believes that he is handsome.'

We have just determined that there is no accessible subject in the embedded clause in (16b). However, we cannot extend the same analysis to the pronoun *deen* in (16a), since this would predict the sentence in (16a) to be ungrammatical, contrary to the fact. To resolve this conflict, we will follow Huang (1983) in assuming that accessibility condition only applies to reflexives, not to pronouns:

- (17) The Governing Category (Huang 1983)
 α is a governing category for β if and only if α is the minimal category containing β and a governor of β , and a SUBJECT that, if β is an anaphor, is accessible to β .

Under this formulation, the accessibility condition applies only in (16b). The reflexive *awake deen dewe* cannot count as the 'SUBJECT for itself. However, in (16a), the pronoun *deen* can count as the 'SUBJECT for itself since the SUBJECTsubject doesn't have to be accessible to the pronoun. Inside NPs, this predicts that the anaphor will have the NP as the domain if the NP has a subject which is not itself the anaphor. This prediction is again born out:

⁵ We do not commit ourselves to the claim that Javanese totally lacks AGR. We leave open the possibility that there could be a non-overt agreement system in the language. In this case, our claim amounts to saying that non-overt AGR is not sufficient to act as SUBJECT for purposes of calculating a binding domain.

- (18) a. Tono_i seneng mbek guyonane Siti_j tentang awake deen dewe_{*i/j}.
Tono likes MBEKwith joke-NE Siti about bodyself-E -3 3S
DEWEself
'Tono likes Siti's jokes about herself/*himself.'
- b. Soeharto_i waca tulisane Gunawan_j tentang awake deen dewe_{*i/j}.
Soeharto read article-NE Gunawan about bodyself-E -3 3SG
DEWEself
'Soeharto read Gunawan's article about himself.'

Before moving on to the next section, let us note the strong tendency of the Javanese reflexives to have take subjects as their antecedents:

- (19) a. Tono_i cerita mbek Siti_j tentang *awake deen dewe*_{i/*j}.
Tono tell MBEKwith Siti about bodyself-E -3 3SG DEWEself
'Tono told Siti about himself.'
- b. Tono_i ngirimi Siti_j kado nggo *awake deen dewe*_{i/*j}.
Tono send Siti present for bodyself-E -3 3SG DEWEself
Tono sent Siti a present for himself.'

As shown above, given a subject and a object as possible antecedents for a reflexive, only the subject can be the antecedent for the reflexive. This is quite interesting considering the fact that local reflexives like English *himself* generally do not show subject orientation. There could be several ways to analyze this asymmetry, but for reasons of space, we shall defer this topic to a later date.

4. Pseudo-reflexives

In this section, we examine what we call 'pseudo-reflexives'. These are anaphoric expressions of the form *awak*+pronoun, which constitute an apparent counterexample to the binding theory. That is, this form can take either a local antecedent or a non-local antecedent as shown below:

- (20) a. Tono_i mbunuh *awake deen*_i.
Tono kill bodyself-E -3 3SG
'Tono killed himself.'
- b. Tono_i percaya [nek aku benci mbek *awake deen*_i].
Tono believe NEKthat 1SG hate MBEKwith bodyself-E -3 3SG
'Tono believes that I hate him.'

It appears that as though pseudo-reflexives have a dual status, functioning as a reflexive in (20a) and as a pronoun in (20b). Although their 'dual status' does not necessarily entail a revision of the binding theory, it brings up some serious questions, since it is unclear what the source of the dual status is. In the rest of this section, we will consider some various possible analyses and argue that

awake deen is, just in fact, simply an NP with a pronominal possessor, and that its seeming dual status comes from the syntactic structure of the expression rather than from a dual feature marking of the lexical item as both a pronoun and a reflexive.

We shall now turn to why *awak*+pronoun can occur in both local and non-local environments. One of the possible solutions that comes to mind is to claim that these forms are long distance reflexives. As long distance reflexives, they could be bound by non-local antecedents as well as by local ones. This analysis might appear to explain the puzzling distribution noted illustrated in (20). However, the analysis cannot be maintained if we compare the distribution of *awake deen* with the distribution of typical LD anaphors. The LD reflexive analysis predicts that *awake deen* would show typical characteristics of LD reflexives. The description of typological characteristics of LD reflexives in Cole, Hermon, and Huang 2001 provides us with a useful tool to for evaluating the claim. First of all, LD reflexives are typologically monomorphemic. Second, they take subject antecedents. Third, since they are reflexives, they are required to have c-commanding antecedents⁶. Finally, they manifest blocking effects in languages without subject-verb agreement. For example, in a language like Chinese, in which there is no overt morphological agreement between subjects and verbs, the LD reflexive, *ziji*, is subject to a blocking effect as illustrated in (21):.

- (21) a. Zhangsan_i zhidao [Wangwu_j xihuan *ziji*_{i/j}].
 Zhangsan know Wangwu like self
 ‘Zhangsan knows that Wangwo likes himself/him.’
- b. Zhangsan_i renwei wo_j zhidao [Wangwu_k xihuan *ziji*_{*i/*j/k}].
 Zhangsan think I think Wangwu like self
 ‘Zhangsan thinks that I knows that Wangwu likes himself.’

Note the contrast between (21a) and (21b). In (21b), unlike in (21a), the intervening subject *wo*, whose person feature is different from that of the matrix subject, *Zhangsan*, blocks the coindexation of the reflexive and the matrix subject. Similarly, the lowest subject *Wangwu* whose person feature is different from that of the higher subject *wo* blocks the coindexation of *wo* and *ziji* in (21b). This is due to the blocking of intervening subjects whose person features are different from those of a higher subject⁷.

Given these tests, let us see if *awake deen* has the typological characteristics of a LD reflexive. First of all, it is evident that *awake deen* is not monomorphemic. It is bimorphemic with *awak* meaning ‘body’ in other contexts and *deen* ‘3 person singular pronoun’. Second, unlike typical long distance reflexives, *awake deen* is not subject oriented:

⁶ In some special restricted cases, LD reflexives can have discourse antecedents. For details, refer to see Cole, Hermon, and Huang (2001), inter alia and many others.

⁷ See Cole, Hermon & and Sung (1993) for a description of the blocking effect.

- (22) Tono_i ngasih tahu ibue_j nek *awake deen*_{ij} gagal.
 Tono give knowinformed mother-E -3 NEKthat bodyself-E -3 3SG fail
 ‘Tono informed his mother that (s)he failed.’

As we can see in (22), *awake deen* can be bound by the object *ibue* as well as by the subject *Tono*. Third, unlike typical LD reflexives, this form is not even required to have a c-commanding antecedent:

- (23) [ibue [Tono_i]]_j percaya nek Siti benci mbek *awake deen*_{ij}.
 mother-E -3 Tono believe that Siti hate MBEKwith bodyself-E -3 3SG
 ‘Tono’s mother believe that Siti hate him/her.’

As shown in (23), *Tono* is embedded within the subject NP, but it can still be the antecedent of *awake deen*. Furthermore, *awake deen* can take a discourse referent quite easily as shown in (24):

- (24) *Tono*_i njengkelke aku. Aku benci banget mbek *awake deen*_i.
 Tono irritate 1SG 1SG hate really MBEKwith bodyself-E -3 3SG
 ‘Tono irritates me. I really hate him.’

As is the case for pronouns, items like *awake deen* can refer to someone not mentioned in the sentence as long as the antecedent is somehow clear from the discourse. For example, in (24) *awake deen* can refer to someone not mentioned in the sentence, but prominent in the discourse. Finally, unlike Chinese *ziji*, *awake deen* does not show the blocking effect that is observed in languages which do not exhibit overt agreement:

- (25) Tono_i percaya nek *aku* benci mbek *awake deen*_i.
 Tono believe NEKthat I hate MBEKwith bodyself-E -3 3SG
 ‘Tono believes that I hate him.’

Javanese is like Chinese in that it does not have any overt morphological agreement between subjects and verbs. However, unlike Chinese, the intervening subject *aku*, whose person feature is different from that of the matrix subject, *Tono*, does not block the coindexation of *Tono* and *awake deen*. To summarize, *awake deen* does not have any of the typical characteristics of long distance reflexives. This observation leads us to conclude that *awake deen* is not a long-distance reflexive.

Another alternative solution is to claim that *awake deen* is a form indeterminate (undetermined) between a reflexive and a pronoun. In other words that is, whereas it is used as a reflexive when it has a local antecedent, it is used as a pronoun when it has a non-local antecedent. In the literature, Cole and Hermon (1998) have analyzed a seemingly similar form in Malay (*diri*+pronoun) as being underdetermined. They have argued that in local uses the form is a local anaphor, while in LD uses it is a pronominal. We shall argue that this is not an appropriate analysis for Javanese. One crucial piece of evidence comes from VP-ellipsis constructions. Under this indeterminacy analysis, *awake deen* is predicted to behave like an anaphor in a local use, but like a pronoun in a non-local use. Specifically, in VP-ellipsis contexts, *awake*

deen is predicted to allow only a sloppy reading (like a reflexive) (when used locally, like a reflexive), but to allow both strict and sloppy readings, (like a pronoun), when used non-locally. As predicted by the indeterminacy analysis, *awake deen* allows both strict and sloppy interpretations in a VP-ellipsis context as shown in (26), which illustrates the non-local use of *awake deen*:

- (26) Non-local use of *awake deen* in VP-ellipsis
 Tono ngomong nek Bowo ketok *awake deen* nggon Jakarta,
 Siti yoyo ngomong ngono.
 Tono say that Bowo see bodyself-E -3 3SG in Jakarta, Siti saidy also.
Strict: ‘Siti said that Bowo saw Tono in Jakarta’
Sloppy: ‘Siti said that Bowo saw Siti in Jakarta.’

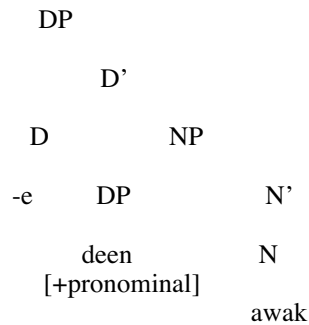
However, contrary to the prediction of the underdetermination indeterminacy analysis, even in a local use like that shown in (28), *awake deen* allows both strict and sloppy interpretations:

- (27) Local use of *awake deen*
 Tono ketok *awake deen* nggon koco dlan Siti iya ngono.
 Tono see bodyself-E -3 3SG in mirror and Siti didyes also
Strict: ‘Siti saw Tono in the mirror.’
Sloppy: ‘Siti saw Siti in the mirror.’

If *awake deen* were used as a reflexive in the local context, it should allow only the sloppy reading. However, this is not the case, as is shown in (27). To sum up, under VP-ellipsis, in both its local and non-local uses, the complex form *awak*+pronoun behaves like a pronoun rather than like an anaphor in both its local and non-local uses in VP-ellipsis contexts. We, therefore, conclude that *awake deen* is not an indeterminate between a reflexive and a pronoun.

We As a result, we therefore propose that syntactically the so-called pseudo-reflexive *awake deen* has the same syntactic structure and properties as a normal DP with a pronominal possessor, similar to *pensile deen*, ‘his pencil’. *awake* *Awake deen* differs from *pensile deen* in that *awak* makes no independent semantic contribution to the meaning of the sentence. Rather, it has the semantics of an identity operator. Thus, the interpretation of *deen* is the interpretation of the full DP. The proposed structure is given in (28):

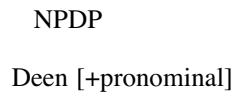
- (28)
- | | | |
|----|---------------|------|
| | DP | |
| | D’ | |
| | D | NP |
| -e | DP | N’ |
| | deen | N |
| | [+pronominal] | awak |



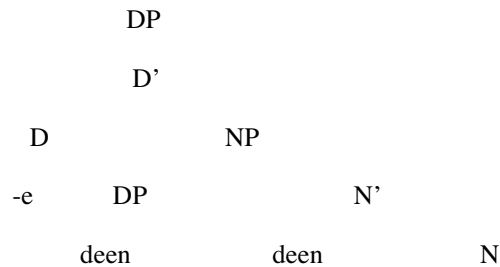
In (28), the morpheme, *-e*, is a possessive marker and the possessor is the third person singular pronoun *deen*, base-generated under the specifier of NP. The bound morpheme *-e* attracts the movement of *awak* 'body' from N to D deriving the surface word order *awake deen*. This proposed structure provides a natural explanation for the fact that *awake deen* can have either a local or a non-local antecedent. In this structure, only the pronoun *deen* is relevant for the Binding Theory, not the larger expression, *awake deen*. The binding domain for the pronoun *deen* is the whole DP, containing a subject, *deen*, and a governor, *awak*. That is, the pronoun in the anaphoric expression *awake+pronoun* is subject to Principle B, and Principle B is always satisfied within the DP *awake deen*. Thus, syntactically, the pronoun *deen* is free to refer to an antecedent outside the phrase, *awake deen*. This structure gives the appearance that *awake deen* has the dual status of being a reflexive and a pronoun, but in fact only *deen* is relevant for binding, and *deen* is always a pronoun. In addition to explaining the puzzling distribution noted illustrated in (20), this analysis also explains why *awake deen* does not have the typical characteristics of LD reflexives and why both sloppy and strict interpretations are always available in VP-ellipsis contexts, another welcome result.

Let us summarize the syntactic structures of the Javanese anaphoric expressions.

(29) a. *Pronoun*

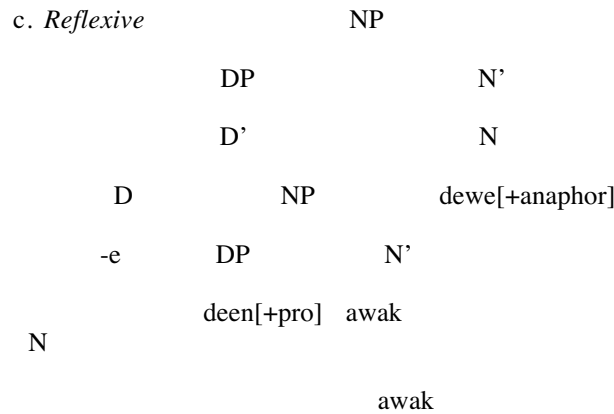


b. *Pseudo-reflexive*



[+pronominal]

awak



The pronoun *deen* is [+pronominal] and therefore must be free in its binding domain. *Awak*, as a governor, creates a binding domain for the pronoun inside it, but *awak*, which is interpreted as an identity operator, makes no contribution of its own to the interpretation of the expression.. The pronoun inside the pseudo-reflexive always satisfies Principle B since it does not have an antecedent within the binding domain created by the presence of *awak*. Therefore, it can take any NP outside this domain (or a discourse referent) as its antecedent. In (c), *deen*, being [+pronominal], should be free in its binding domain, the upper DP containing the governor *awak* and the subject *deen*.. Since *it deen* does not have an antecedent within this domain, it satisfies Principle B as was the case in the pseudo reflexive. Thus, *it deen* can have any NPs noun phrase outside this domain (or a discourse referent) as its antecedent. However, the DP *awake deen* is embedded within an NP whose head is *dewe*. *Dewe* is a reflexivizer, base-generated under N with the feature[+anaphoric]. The [+anaphoric] feature percolates up to its phrasal category, making the whole phrase subject to the Principle A. *Dewe* ‘self’ must have the same referent as its specifier, *awake deen*., sSo, As a consequence, it restricts the domain in which the antecedent for *deen* can be found is restricted to the local domain in which *dewe* must be bound.⁸ Hence, the whole expression, *awake deen dewe*, requires a local antecedent.

5. Conclusion

We showed that contrary to initial appearances, Javanese is not a counterexample to the Binding Theory. All of the Javanese anaphoric Javanese expressions are subject to both Principle A and B. Their distributions fall out from the syntactic

⁸ We do *not* assume that *awake deen* binds *dewe*. If that were the case, *dewe* would be locally bound by *awake deen*, and therefore, would not restrict the binding domain of *awake deen dewe*.

structures proposed for them. That is, the pronoun *deen* which is [+pronominal] requires a domain in which it must be free. In contrast, the true reflexive, *awake deen dewe*, in which the pseudo-reflexive is embedded, has *dewe* as its head. *Dewe* is [+anaphoric] and therefore causes the phrase it projects to be subject to principle Principle A. Hence, the whole expression *awake deen dewe* requires a local antecedent. Finally, the distribution of the seeming counterexample to the binding theory, *awake deen*, follows directly from our proposal that *awake deen* is just simply a DP with a pronominal possessor. We showed that the pseudo reflexive must be analyzed, not as an unusual anaphor which violates the standard binding domain for anaphors, but as a pronominal which can have an apparently unusual distribution due to the fact that syntactically the noun *awak* creates a binding domain for the pronoun.

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