PSEUDO NOUN INCORPORATION IN NEPALI

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This article provides a preliminary investigation of pseudo noun incorporation in Nepali, investigating scope, object-verb adjacency, case-marking, the availability of demonstratives, and number marking/number neutrality. We show that caseless objects have many of the typical properties of PNI as has been discussed in other languages. We make some tentative remarks regarding the precise characterization of number, suggesting that Nepali projects a NumP. We show that, despite an unclear understanding of number, there is strong evidence that PNI is found in Nepali and can be understood structurally by positing a reduced structure for the PNI object. Specifically, the PNI object is a bare NumP, while a full object is a KP.[*]

Keywords: Nepali, pseudo incorporation, number, DP structure, scope

1 Introduction

Pseudo noun incorporation (PNI) is a widely attested phenomenon in many languages around the world (van Geenhoven 1998; Massam 2001; Dayal 2011). We explain the concept in full below, but briefly PNI is a phenomenon in which a bare or nearly bare object (that is, an object with no demonstratives or case marking) exhibits distinctive syntactic and semantic properties, which we illustrate below. We show here that Nepali has some prototypical properties of PNI. We examine number neutrality, lack of demonstratives, low scope, and verbal adjacency. Several properties of PNI are found. PNI is analyzed as the verb taking a bare Number Phrase (NumP) as a complement rather than a full KP[1].

Number is analyzed following the proposal of Wiltschko (2008). Number is argued to be obligatorily present, as in English, but variably expressed.

The gist of the analysis is as follows. We show that caseless objects in Nepali exhibit many of the usual properties of PNI, including reduced mobility (but not strict adjacency with the verb), low scope with respect to higher operators in the sentence, lack of specificity, and lack of demonstratives. The issue of number is left open; however, based on the limited data at our disposal we tentatively suggest that NumP is projected in Nepali. These properties of PNI are accounted for if we assume that full nominal project to KP and PNI objects project only to NumP.

The remainder of this paper is organized as follows. Section 2 provides the relevant background, including a discussion on Wiltschko's (2008, 2014) proposal of projecting and non-projecting heads, properties of PNI in general, and some relevant background on Nepali syntax. Section 3 provides the results of our investigation into the properties of PNI in Nepali as mentioned above. Section 4 provides our analysis of the facts, including a tentative proposal for number in Nepali. Section 5 is a brief conclusion with some suggestions on future research.

2 Background

2.1 The representation of number

Wiltschko (2008; 2014) proposes that only some functional heads project, while others adjoin. She proposes, furthermore, that the distinction is

[1] The Case Projection, KP, originally coined by Lamontagne and Travis (1987) and Travis and Lamontagne (1992).

subject to cross-linguistic variation. Specifically here, we adopt her proposal of projecting and non-projecting number to examine the Nepali facts. Wiltschko provides several diagnostics to distinguish between projecting and non-projecting number; however, only two are shown here. The first concerns plural marking on the noun. In languages with projecting number, such as English, plural marking is obligatory on the noun for a plural interpretation to hold. Thus, *the dog* is obligatorily singular and *the dogs* is obligatorily plural.

I   Plural Marking on Noun

    a. projecting number: obligatory

    b. non-projecting number: optional

As an example of non-projecting number, Wiltschko provides the following Halkomelem (Salish) data (Wiltschko 2008, ex (3)). Note that number marking in Halkomelem is encoded by apophony.[2]

(1)   *te lhíxw swíweles*
    DET three boy
    'the three boys'

(2)   *te lhíxw swóweles*
    DET three boy.PL
    'the three boys'

The second diagnostic we consider concerns whether the plural noun triggers plural agreement on other elements in the noun phrase.

II   Number Agreement
    a. projecting number: obligatory
    b. non-projecting number: optional

We consider here determiners and demonstratives. In languages with projecting number like English, number agreement is obligatory with demonstratives.

(3)   English Demonstratives
    a. this book
    b. these books
    c. *this books

Again, Wiltschko shows that with Halkomelem number agreement on determiners is optional (Wiltschko, 2008, ex. (6)).

(4)   *t'ílém te swíyeqe*
    sing DET man
    'The man is singing.'

(5)   *t'ílém ye s-í:wí:qe*
    sing DET.PL men
    'The men are singing.'

(6)   *t'ílém te s-í:wí:qe*
    sing DET men
    'The men are singing.'

Thus, Wiltschko concludes that number in English projects and forms NumP as part of the extended nominal projection (in line with Ritter 1991; Ritter 1992). In Halkomelem, however, there is no NumP. Rather, the number head, Num, simply adjoins to a functional projection somewhere inside the extended nominal projection. For concreteness, we may assume it adjoins to *n*P, although Wiltschko leaves this up to cross-linguistic variation and, in particular, for Halkomelem argues that Num adjoins to NP.

When we apply these diagnostics to Nepali we observe contradictory results. Number marking in Nepali is by-and-large optional, suggesting that number does not project, as in Halkomelem. Note, however, that number agreement on demonstratives is obligatory (Turnbull 1982). Consider the following examples.

(7)   *ti dailaa-haru*
    those door-PL
    'those doors'

(8)   **tyo dailaa-haru*
    that door-PL
    ('those doors')

We return to the issue of number marking in Nepali in the discussion in section 4. We now introduce pseudo noun incorporation.

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[2] Abbreviations: ACC – accusative, AGR – agreement, AUX – auxiliary, DAT – dative, DET – determiner, ERG – ergative, IMP – imperfective, INF – infinitive, KP – case phrase, NumP – number phrase, PL – plural, PRS – present, PRT – particle, PURP – purposive, SG – singular

2.2 Pseudo noun incorporation

Pseudo Noun Incorporation (PNI) was first identified by Massam (2001) for the Austronesian language Nieuan. Dayal (2011) was the first to analyze PNI in an Indo-Aryan language, namely Hindi. Consider the following examples (Dayal 2011 ex. 7).

(9) *anu   har   bacce-*(ko)*
     Anu   every   child-ACC
     sambhaaltii hai
     look-after-IMP   be-PRS
     'Anu looks after every child.'

(10) *Anu   bacce*
     Anu   child
     sambhaaltii hai
     look-after-IMP   be-PRS
     'Anu looks after (one or more) children.'

(11) *Anu   bacce-ko*
     Anu   child-ACC
     sambhaaltii hai
     look-after-IMP   be-PRS
     'Anu looks after the child.'

Unlike noun incorporation in the sense of Baker (1988), the pseudo incorporated noun is not morphologically fused with verb. Prototypical properties of semantic incorporation include number neutrality, low scope of the PNIed noun, reduced morphosyntactic marking (no case, limited modifiers, etc.), and reduced mobility or strict adjacency with the verb.

2.3 Properties of Nepali

Nepali is a split ergative language (Li 2007; Poudel 2012; Lindemann 2019; Wallace 2019). The ergative case marker is *-le*, and the absolutive case marker is null. Ergative case marking can be found on unergatives (Li 2007; Wallace 2019), complicating our understanding of ergativity in Nepali. Animate or definite direct objects in Nepali are typically marked with the dative case marker *-laai* (Acharya 1991; Bal 2004). Some sources list -

laai as an accusative marker (in addition to its role as a dative marker). We note López' (2012) discussion, where he notes that in languages with differential object marking, the overt object marker is often equivalent to the dative case marker. As mentioned in section 2.1, Nepali has an optional plural marker *-haru* (Acharya 1991).

Previous work suggests that PNI is found in Nepali, despite lack of morphological evidence (Paudyal 2009). Paudyal offers the following examples as evidence (Paudyal 2009 ex. 32a,b).

(12) *us-le   bhaai-laai   maar-yo*
     he-ERG   brother-DAT   kill-PST.3SG
     'He killed the brother.'

(13) *us-le   bhaai   maar-yo*
     he-ERG   brother   kill-PST.3SG
     'He killed-brother.'

With this background in place we turn to our findings with respect to PNI in Nepali.

3 PNI in Nepali

In this section we provide some of the usual diagnostics of PNI on case-marked and caseless objects in Nepali. We begin with scope.

3.1 Scope

Observe in the following examples that the case-less object must scope low. The dative-marked object can scope either high or low.[3, 4]

(14) *Bibek-laai maanche-laai maar-na*
     Bibek-DAT man-DAT kill-PURP
     man-laag-ya-cha.[5]
     mind-stick-PERF-3SG.PRS
     [bibeklai mantselai maɾnʌ mʌnlagjʌtsʰʌ]
     'Bibek wants to kill the/a man.'

(15) *Bibek-laai maanche maar-na*
     Bibek-DAT man kill-PURP
     man-laag-ya-cha.
     mind-stick-PERF-PRS.3SG
     [bibeklai mantse maɾnʌ mʌnlagjʌtsʰʌ]
     'Bibek wants to kill a man.'

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[3] Note, however, that some speakers did not accept dative case on the direct object of *kill*.

[4] IPA transcriptions are provided only for the data we have elicited. Data from other sources are provided as

in the source document. IPA transcriptions are not included for cited data as we do not have access to the recorded data. IPA transcriptions are also not given for ungrammatical sentences as these were never spoken.
[5] Thanks to a reviewer for helping with the glossing here and in other examples.

In example (15), Bibek does not care who he kills. He just wants to kill someone. In (14), however, Bibek can have a specific person in mind. The following examples show the same property.

(16) *Bibek maanche kut-na caahan-cha.*
Bibek person hit-PURP want-AUX.
Jo kohi laai
[bibek mantse kutnʌ tsahʌntsʰʌ
dzo kohi lai]
'Bibek wants to hit a person.
He doesn't care who.'

(17) *Bibek maanche-laai kut-na caahan-cha.*
Bibek person-DAT hit-PURP want-AUX
#*Jo kohi laai.*
[bibek mantselai kutnʌ tsahʌntsʰʌ]
'Bibek wants to hit a (certain) person.'

(18) *Bibek-le gaaḍī bec-na caaha-yo*
Bibek-ERG car sell-PURP want-AGR
[bibek-le gaɽi betsnʌ tsaahʌjo]
'Bibek wants to sell a car.' (one of his) –
any car.

(19) *Bibek-le gaaḍī-laai bec-na caaha-yo*
Bibek-ERG car-DAT sell-PURP sell-AGR
[bibek-le gaɽilai betsnʌ tsaahʌjo]
'Bibek want to sell a car.' (one of his) –
Bibek has a specific car in mind.

Although there was some inter-speaker variation (see also footnote 3), the case-less noun takes low scope with respect to other operators in the sentence, while the case marked noun either takes wide scope or is free to take wide scope or narrow scope.

3.2 Adjacency

The bare object and verb must be adjacent in most cases, as is typical with PNI.

(20) *Bibek-le Ashmi-laai kitaab dieko thiyo.*
Bibek-ERG Ashmi-DAT book gave
[bibekle aʃmilai kitab djeko tʰijo]
'Bibek gave Ashmi a book.'

(21) *Ashmi-laai Bibek-le kitaab dieko thiyo*
Ashmi-DAT Bibek-ERG book gave
[aʃmilai bibekle kitab djeko tʰijo]
'Bibek gave Ashmi a book.'

(22) **kitaab Ashmi-lai Bibek-le dijo*
book Ashmi-DAT Bibek-ERG gave
'Bibek gave Ashmi a book.'

(23) *Ashmi-lai *(tjo) kitab yei Bibek-le*
Ashmi-DAT dem book PRT Bibek-ERG
dieko thiyo
gave was
[aʃmilai tjo kitab jei bibekle djeko tʰijo]
'Bibek gave Ashmi that book.'
– more natural

Observe in the following data, however, that a low VP-level manner adverb (*quickly*) may intervene between the verb and the bare object, whereas a temporal adverb (*yesterday*) cannot.

(24) *(hijo) Bibek-le (hijo) kitaab*
(yesterday) Bibek-ERG (yesterday) book
ra patrikaa (*hijo) pareokothiyo
and magazine (*yesterday) had read
[hidzo bibekle kitab ɽʌ patɽika pareokotʰijo]
or
[bibekle hidzo kitab ɽʌ patɽika pareokotʰijo]
'Yesterday, Bibek had read a newspaper
and a magazine.'

(25) *(*chiṭo-chiṭo) Bibek-le (*chiṭo-chiṭo)*
(*quickly) Bibek-ERG (*quickly)
kitaab ra patrikaa. (chiṭo-chiṭo)
book and magazine (quickly)
pareokothiyo
had read
[bibekle kitab ɽʌ patɽika tsʰiʈotsʰiʈo
pareokotʰijo]
'Bibek had read a book and a magazine
quickly.'

(26) *Ashmi-laai (chiṭo-chiṭo) Bibek-le*
Ashmi-DAT (quickly) Bibek-ERG
(chiṭo-chiṭo) kitaab (chiṭo-chiṭo) diyo
(quickly) book (quickly) gave
[aʃmilai tsʰiʈotsʰiʈo bibekle kitab dijo]
[aʃmilai bibekle tsʰiʈotsʰiʈo kitab dijo]
[aʃmilai bibekle kitab tsʰiʈotsʰiʈo dijo]
'Bibek gave Ashmi a book quickly.'

Note that while short scrambling is observed above with the intervening adverbs, long-distance scrambling of the PNI object is not permitted (except under a topicalized reading).

(27) *tjo gaaḍī-laai Bibek-le bec-na*
dem car-DAT Bibek-ERG sell-PURP
caaha-yo
want-PST.3SG
[tjo gaɽilai bibekle betsnʌ tsahʌjo]
'Bibek wants to sell a car.'

(28) *gaaḍī Bibek-le   bec-na caaha-yo
    car   Bibek-ERG sell-PURP want-AGR
    ('Bibek want to sell that car.')

3.3 Number neutrality

Number neutrality, also called general number (Rullmann and You 2006) is the lack of number specification (regardless of morphological expression) on a nominal. In English, number specification is usually obligatory. Note, though that in compounds, a nominal is compatible with either a singular or plural interpretation. Consider the following example.

(29)   *John is an elephant-washer.*

In this example, John could be in charge of washing several elephants or could be in charge of washing a single elephant.

Number neutrality is typically considered to be a prototypical property of PNI, although Dayal (2011) shows for Hindi that number neutrality is illusory. The issue is complicated for Nepali as the interaction between number marking and animacy is unclear and seems to be subject to variation. Consider the following two examples.

(30) *mai-le Bibek-laai   suntalaa di-ẽ.*
    I-ERG Bibek-DAT orange give-AGR
    [mʌile bibeklai suntʌla dijẽ]
    'I gave Bibek an orange/some oranges.'

(31) *Bibek manche kut-na chaahaan-cha.*
    Bibek person hit-PURP want-AUX
    Jo kohi laai
    [bibek mantsʰe kutnʌ tsʰahantsʰʌ]
    'Bibek wants to hit a person.
    'He doesn't care who.'

One speaker's comment was that in (30) *orange* could have either a singular or a plural reading, but in (31) *person* has only a singular reading and requires the plural marker to have a plural reading. Furthermore, it is unclear whether a PNI construction can host plural marking. Only one example was found so far; however, the full range of PNI diagnostics was not tested.

(32) *Bibek *(kehi) gaaḍī-haru bec-na*
    Bibek some car-PL   sell-PURP
    chahyo
    wanted

[bibek gaɽihʌru betsnʌ tsahʌjo]
'Bibek want to sell (some) cars.' (non-specific)

(33) *Bibek   gaaḍī-haru-laai   bec-na*
    Bibek   car-PL-DAT   sell-PURP
    chahyo
    wanted
[bibek gaɽihʌrulai betsnʌ tsahʌjo]
'Bibek want to sell some (specific) cars.'

The example in (32) appears to be PNI; however, this matter requires further research as it is the only example, and the relevant PNI diagnostics have not been tested on this example, yet.

4 Discussion

4.1 Summary of results

Number Neutrality was difficult to diagnose given optional number marking. For the speakers consulted, number neutrality found on inanimate nouns, but not on animate and human nouns. Case marking showed a definite correlation with PNI objects (as explained below). As mentioned above, it was unclear if plural marking is found on PNI objects. There is clear evidence that the PNI object scopes low. Case marked objects, however, have either low or high scope. Finally, caseless objects allow only short scrambling with intervening adverbs permitted. Long scrambling to a higher clause is not permitted. A PNI object also cannot scramble over a higher argument.

4.2 Analysis

Recall that number marking is often optional in Nepali, and is dependent on animacy and humanness. Inanimate nouns are less likely to be marked with the plural suffix. As mentioned this is a property of non-projecting number.

However, there is obligatory agreement on the demonstrative, a property of projecting number. We propose the following tentative idea. Number projects in Nepali, but is variably expressed. This idea is akin to definiteness marking in Spanish dialects. López (2012) suggests that case is variably expressed depending on animacy. Specifically, we propose that the plural suffix is represented rather coarsely as follows.

(34)   PL →   *-haru* / [+animate]
            -Ø / [-animate]

The precise representation will depend on other factors and speaker variation. To be clear, then, we are suggesting the Num in Nepali projects, as in English; however, its variable expression is due to a complex pattern of allomorph selection that depends on animacy (and likely other factors). Sometimes the form *-haru* is inserted; sometimes the null allomorph is inserted.

Pending further investigation, we propose that PNI in Nepali targets either NumP or *n*P. Recall from above that the plural marker was found in only one example of PNI, thus more work is necessary to determine if number marking is generally available in PNI in Nepali.

Since Diesing (1992) it has been argued that indefinite or low-scoping nominals reside within the VP. Definite objects must escape exitential closure and raise out of the VP. López (2012) formalized this syntactically by arguing that a full KP raises to a Case checking position, namely Spec*v*P. The facts presented here align very closely with the established analyses of PNI in the literature. Thus, we propose that the PNI object, a bare NumP, in Nepali must remain in VP, under the scope of the existential operator at the edge of *v*P, (35)b. A full KP raises to Spec*v*P to check Case, from which point it can undergo scrambling to higher positions in the clause, (35)a.

(35) a. $[_{TP} [_{vP} KP_{obj} [_{v'} [_{VP} t_{obj} V] v]] T]$

     b. $[_{TP} [_{vP} [_{v'} [_{VP} NumP_{obj} V] v]] T]$

Some of the typical properties of PNI fall out naturally from this (rather unsurprising) analysis. Specifically, case and demonstratives cannot appear with a PNI nominal, since both KP and DP are absent. The puzzling fact that remains (due to absence of sufficient data to make a robust descriptive generalization) is number neutrality. The account we have proposed predicts that number neutrality strictly speaking should not be found. We tentatively suggested, though, that in some cases (in particular with inanimate nouns) a null allomorph of the plural marker is permitted giving rise to the illusion of number neutrality.

5 Conclusion

There is much evidence for PNI in Nepali. PNI objects lack case and demonstratives and are typically adjacent to the verb or can be separated from the verb by only a low VP-level adverb. They exhibit low scope. These facts fall out from the standard analysis of PNI in which the PNI object lacks the outer layers of the extended nominal projection. In particular, while a full object is a KP, with the properties described in the previous section, a PNI object is a bare NumP, pending further investigation as outlined below.

As mentioned, an ultimate understanding of the interaction of PNI and number will have to await future research. We provisionally concluded that number projects in Nepali (as in English, but not as in Halkomelem). More tentatively, we proposed that number is variably expressed, giving rise to the illusion of number neutrality.

Future research will need to investigate how number varies with animacy, specificity, and definiteness to understand how it relates to PNI.

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