

Abstract

This paper outlines a new analysis of the syntactic structure and discourse function of a ‘prominent internal possessor construction’ (PIPC) in Chimane (unclassified, Bolivia) and compares it with an existing analysis of a different kind of PIPC found in Maithili (Indo-Aryan, India/Nepal). PIPCs in Chimane and Maithili involve an apparently non-local agreement relation between verbs and possessors which are internal to possessive NPs. In Chimane, it is argued that internal possessors are able to control object agreement via a clause-level ‘proxy’ of the internal possessor – see also Ritchie (under review). The paper goes on to compare this construction with PIPCs in Maithili, and shows that speakers use PIPCs in discourse to indicate the information structure role of the internal possessor. In the case of Chimane, it seems that internal possessors which bear the secondary topic role are more likely to control object agreement, while in Maithili, other semantic and information structural features of internal possessors are at play. The contributions of the various levels of sentence structure are modelled using the LFG architecture developed in Dalrymple & Nikolaeva (2005; 2011).

1 Introduction

Many languages have a means of syntactically promoting possessors.¹ This typically involves ‘raising’ of the possessor to an argument function, with concomitant demotion of the phrase headed by the possessed nominal. The motivation for possessor promotion is usually to indicate the prominent semantic and information structure (IS) role of the possessor.

This paper considers two cases of ‘prominent internal possessor constructions’ or PIPCs in two genetically unrelated languages: Chimane (or Tsimane’, unclassified, Bolivia) and Maithili (Indo-Aryan, India/Nepal). PIPCs are functionally similar to EPCs in that they are typically employed to signal the se-

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mantic/IS prominence of possessors. However, as their name suggests, PIPCs differ from EPCs in one fundamental regard: the prominent possessor in a PIPC remains internal to the phrase headed by the possessed nominal. Despite this, possessors in PIPCs can participate in phrase-external syntax, for example by controlling agreement on the verb.

Prominent internal possessors (PIPs) in both Chimane and Maithili can control verbal agreement. However, there are several differences between the two languages which are revealing with respect to their underlying structure. In Maithili, possessors internal to possessive phrases functioning as both subjects and objects can control verbal agreement, as illustrated in (1):

- (1) a. *dekha-l-thun*
saw.-PST-3H.2MH
'He (honorific) saw you (mid-honorific).'
- b. *tohər ba:bu Mohan-ke dekha-l-thun*
you.NH.GEN father Mohan-ACC see-PST-3H.2NH
'Your (non-honorific) father saw Mohan.'
- c. *o tora: ba:p-ke dekha-l-thun*
he.H you.NH.ACC father-ACC see-PST-3H.2NH
'He saw your (non-honorific) father.'

(Stump & Yadav 1988: 306, 309, 317)

In (1a), the subject controls the 'primary' agreement (on the left in the gloss) and the object controls the 'secondary' agreement.² Primary agreement in Maithili is always controlled by the subject, while secondary agreement can be controlled by a number of non-subject elements including internal possessors. Control of secondary agreement by a possessor internal to a subject can be seen in (1b), while in (1c), the possessor internal to the object NP controls the secondary agreement. Stump & Yadav provide evidence to show that these agreement controlling possessors are internal to the possessive phrase.

In a similar way, agreement is also possible between the verb and internal possessors in Chimane. In this case, however, the agreement pattern is more restricted; it can only occur between possessors internal to object NPs, and must be accompanied by an additional applicative-like verbal suffix.³

- (2) a. *Juan täj-je-' un mu' Sergio-s.*
Juan(M) touch-CLF-3SG.F.O hand(F) the.M Sergio(M)-F
'Juan touched Sergio's hand.'

²There are no overt arguments in (1a) but it is assumed here that the morphology on the verb functions as agreement morphology and not as incorporated pronouns.

³The verbs in the examples in (2) also feature verbal classifiers labelled as CLF. These are suffixes which obligatorily occur on most verbal roots to create inflectable stems. They have various meanings related to subject control and transitivity – see Sakel (2004; 2007).

- b. *Juan täj-je-bi-te un mu' Sergio-s.*
 Juan(M) touch-CLF-APPL-3SG.M.O hand(F) the.M Sergio(M)-F
 'Juan touched Sergio's hand.'
- c. **Juan täj-je-te un mu' Sergio-s.*
 Juan(M) touch-CLF-3SG.M.O hand(F) the.M Sergio(M)-F
 ('Juan touched Sergio's hand.')
- d. **Mu' vojity=yu naj-tye-ye / naj-bi-ye mi.*
 the.M brother(M)=my see-CLF-1SG.2SG see-CLF-APPL-1SG.2SG you
 ('My brother saw you.')

(Ritchie 2015)

(2a) shows object agreement with the feminine head of the patient-like possessive NP. In (2b), the verb appears to exhibit object agreement with the internal possessor, and it also exhibits the suffix *-bi*. (2c) shows that this agreement pattern is not possible if the *-bi* suffix is not present, and (2d) shows that it is not possible for possessors internal to subject NPs to control agreement on the verb, whether or not the *-bi* suffix is present. Just as in Maithili, syntactic tests can be used to show that the possessor in (2b) is internal.

This kind of configuration presents a challenge for linguistic theories, as it has hitherto been assumed that verbal agreement can only be controlled by the head of a noun phrase, and not by non-head subconstituents (cf. e.g. the Control Agreement Principle in Gazdar & Pullum 1982; Gazdar et al. 1985 and similar constraints in LFG). A further complication is the observed variance in languages which exhibit PIPCs. Maithili allows agreement with possessors internal to both subject and object (as well as other) arguments, while in Chimane the pattern is restricted to only occurring with possessors internal to objects. What these differences suggest is that PIPCs are not a homogeneous phenomenon and require different types of analysis for different languages.

A detailed analysis of the syntax of the Chimane PIPC can be found in Ritchie (under review). In Section 2, I will briefly summarise the analysis developed there and go on to show how information structure can be integrated with this analysis using the multi-level LFG architecture developed in Dalrymple & Nikolaeva (2011). In Section 3, I show how a different approach is required for the syntax and discourse function of the Maithili PIPC, principally following the analysis developed in Dalrymple & Nikolaeva (2005). A summary and areas for further research are identified in Section 4.

2 Prominent internal possessors in Chimane

This section provides a summary of the analysis of Chimane PIPCs set out in Ritchie (2015) and Ritchie (under review).

2.1 Possessive noun phrase

In possessive noun phrases, specifiers and modifiers, including possessors, agree with the gender of the head noun:

- (3) a. *mɔ' Juan-si' dār-si' ococo* b. *mu' Juan-tyi' dār-tyi' itsiquij*
 the.F Juan(M)-F big-F frog(F) the.M Juan(M)-M big-M jaguar(M)
 'Juan's big frog' 'Juan's big jaguar'

Possessors exhibit the same nominal agreement suffixes as adjectives and can co-occur with determiners in the phrase, suggesting that they function as modifiers (Lyons 1986). Heads and modifiers in the NP cannot precede determiners:

- (4) a. **ococo mɔ' mu'-si'* b. **mu'-si' mɔ' ococo* c. **dār-si' mɔ' ococo*
 frog(F) the.F his-F his-F the.F frog(F) big-F the.F frog(F)
 ('his frog') ('his frog') ('the big frog')

Apart from this restriction, the other constituents can occur in any order. This suggests that (i) the determiner occupies a higher structural position in the NP, and (ii) the rest of the NP has a flat structure.

There is also a type of bound possessor expression. Pronominals which do not exhibit agreement with the head noun must attach to the right of some NP constituent; there is a preference for them to attach to the right-most element of the NP, though they can also attach to other elements within the NP. Compare the lack of marking and positional restriction on the bound possessor in (5a) with the 'free' one in (5b):

- (5) a. *ococo=mu' / *mu' ococo* b. *ococo mu'-si' / mu'-si' ococo*
 frog(F)=his / his frog(F) frog(F) his-F / his-F frog(F)
 'his frog' 'his frog'

Bound possessors can also co-occur with free possessors:

- (6) a. *Juan-si' ococo=mu'* b. *mu'-si' ococo=mu'*
 Juan(M)-F frog(F)=his his-F frog(F)=his
 'Juan's frog' 'his frog'

Bound possessors which co-occur with free possessors will be termed 'doubling possessors' because they are anaphorically controlled by and therefore double the features of the free possessor.

2.2 Clausal syntax

There is no case marking of core arguments in Chimane. Subject and objects can be identified by a number of other properties, most prominently the fact that they can control subject and object agreement on the verb. Depending on

the combination of subject and object in transitive clauses, one or two suffixes indicate person, number, gender and clusivity features of the two arguments.

In double object constructions, the non-patient-like argument controls object agreement on the verb. In (7a), the monotransitive verb *tu-* ‘bring’ exhibits object agreement with the feminine patient-like argument. When a primary object argument expressing a beneficiary is added to the argument structure of this verb by the benefactive applicative *-ye*, as in (7b), the verb exhibits agreement with this argument:

- (7) a. *Judyeya’ mọ’ qui jejmitidye’ tu-i-’=in.*
 and the.F so cooked.food(F) bring-CLF-3SG.F.O=they
 ‘And they brought hot food.’
 b. *Judyeya’ qui ca jejmitidye’ tu-ye-te=in.*
 and so HRSY cooked.food(F) bring-CLF-BEN.APPL-3SG.M.O=they
 ‘And they brought him hot food.’

These examples show that Chimane exhibits secundative alignment with respect to agreement between verbs and patient- and non-patient-like arguments.

The object which controls agreement on the verb in a double object construction will be termed the primary object, while the other object is the secondary object. The primary object is the direct object of a monotransitive verb or indirect object of a ditransitive verb, while the secondary object is the direct object of a ditransitive verb (e.g. Bresnan 1982; Dryer 1986).

2.3 Evidence that PIPs are internal in Chimane

An obligatory property of PIPs is that they cannot control agreement on the verb if they do not exhibit nominal agreement with the possessed noun.⁴

- (8) *Yu nąj-bi-te mọ’ ococo Juan(*-si’)*
 I see-CLF-APPL-3SG.M.O the.F frog(F) Juan(M)-F
 ‘I saw Juan’s frog.’

This is a strong indication that possessors in PIPCs are internal to the possessive phrase, as only internal modifiers exhibit nominal agreement with the head of the phrase.

Constituency tests involving insertion of a clause-level adverb like ‘yesterday’ between the possessor and possessed noun do not provide clear evidence that the possessor is internal or external to the possessive NP, as Chimane exhibits free word order and discontinuous NPs are a possibility, as shown in (9):

⁴The verb in (8) does not feature an overt verbal classifier due to a process of morphophonological deletion. The phonological form of the stem *-tye* is similar to the agreement suffix *-te* and is therefore deleted due to a morphophonological rule, thus **nąjtyebite* is realised as *nąjbite*. See also Sakel (2007).

- (9) *Yu-ty na are'-yi pa'tyi'.*
 my-M FOC hurt-CLF.M.S fingernail(M)
 'My fingernails hurt.'

Another test is passivization. Chimane PIPs can function as the subject of the passive verb, as shown in (10a), where the passive verb exhibits subject agreement with the feminine possessor. However, just as in examples where the possessive phrase functions as the object of the verb, like (8), here again the possessor must exhibit nominal concord with the head noun in this construction, as shown by the ungrammaticality of (10b):

- (10) a. *Maria-ty vojity=mɔ' ja'-cat-bu-ti-'* (Juan)
 Maria(F)-M brother(M)=she PASS-hit-APPL-PASS-F.S Juan(M)
 Maria's brother was hit (by Juan).'
 b. **Maria vojity ja'-cat-bu-ti-'* (Juan)
 Maria(F) brother(M) PASS-hit-APPL-PASS-F.S Juan(M)
 Maria's brother was hit by Juan.'

This indicates that possessors cannot function as independent arguments in syntactic processes such as passivization, which constitutes further evidence that possessors in PIPCs are internal to the possessive phrase.

2.4 Mediated locality

One potential analysis of Chimane PIPCs is that the PIP has a representation or 'proxy' in the clause which stands in for it and functions as the object, and this is what enables the possessor to control object agreement. This idea has not been developed for PIPCs but appears in some analyses of long-distance agreement (LDA) constructions (e.g. Polinsky 2003).

The PIPC in Chimane exhibits one particular feature which may support this type of analysis. It is a common (though optional) feature of PIPCs that the PIP is doubled by a bound possessor:

- (11) *Mi naji-bi-te ococo Juan-si' (=mu').*
 you see.CLF-APPL-3SG.M.O frog(F) Juan(M)-F =him
 'You saw Juan's frog.'

If the doubling possessor in (11) is an overt expression of a proxy of the internal possessor which functions as the object of the verb, then it is possible to predict that this element can only occur in PIPCs and not in the corresponding internal possessor construction (IPC) in which the possessed noun controls object agreement. This prediction is borne out; the bound pronominal cannot easily occur in the default IPC. Its insertion in the IPC equivalent of (11) is considered strange or ungrammatical:

- (12) *Mi n̄ij-tye-’ ococo Juan-si’ (?*=mu’).*
 you see-CLF-3SG.F.O frog(F) Juan(M)-F =him
 ‘You saw Juan’s frog.’

This seems to indicate that the doubling possessor might be an overt expression of an external clause-level proxy of the internal possessor in the PIPC.

Another argument in favour of a mediated locality-type analysis of the Chimane PIPC is the fact that agreement between the possessor and the verb only occurs with objects. As shown in (2d), repeated in (13), possessors internal to subjects cannot control agreement on the verb:

- (13) **Mu’ vojity=yu n̄ij-tye-ye / n̄ij-bi-ye mi.*
 the.M brother(M)=my see-CLF-1SG.2SG see.CLF-APPL-1SG.2SG you
 (‘My brother saw you.’)

This is also the case for all other argument and non-argument functions apart from objects. This shows that Chimane exhibits a restricted paradigm of agreement between verbs and internal possessors, and these restrictions seem to be syntactic in nature. Chimane PIPCs are akin to applicative constructions in that a non-argument in the default counterpart of the construction functions as the object in the applicative construction. If the PIPC is akin to applicative constructions in these respects, then it also seems plausible to assume that the doubling possessor represents a clause-level proxy of the internal possessor which functions similarly to an applied object in an applicative construction.

Evidence that the PIPC may be similar to applicative double object constructions comes from its use with ditransitive verbs. Recall from Section 2.2 that the non-patient-like argument controls object agreement in double object constructions. In cases of ditransitive verbs featuring the *-bi* suffix, this argument appears to correspond to the possessor. The following example comes from a description of a picture of a girl giving a monkey its baby back after taking it away:

- (14) *Ji’-cañ-e-bi-baj-te qui ʔava’.*
 CAUS-return-CLF-APPL-again-3SG.M.O so baby(F)
 ‘So she [the girl] gives it [the monkey] back its baby.’

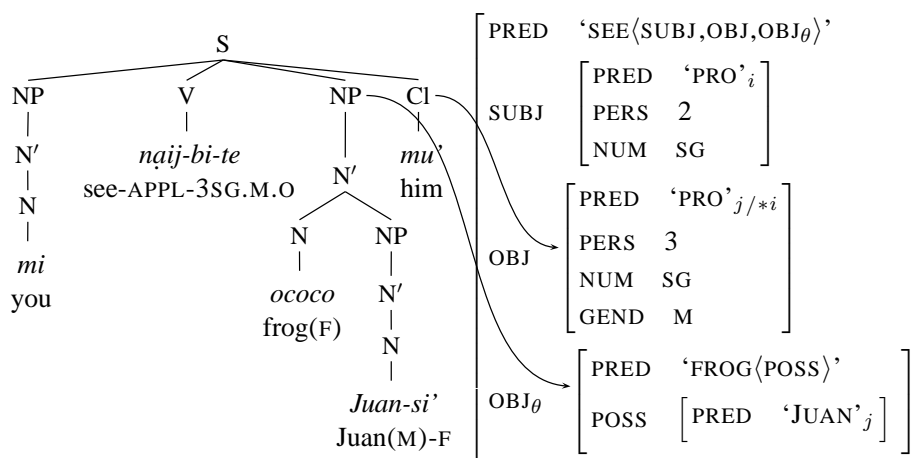
In all the examples of PIPCs discussed so far, PIPs control object agreement despite being internal to the single patient-like argument of a semantically monotransitive verb. In (14), the possessor appears to correspond to the recipient-like argument of the semantically ditransitive verb. This suggests that the possessor is an object of this verb as well as functioning as the possessor of the possessive patient-like argument, and that the possessor and possessive phrase may be associated with different object functions. This configuration with ditransitives may indicate that in fact all verbs in PIPCs subcategorize for both a primary

and secondary object function, with the possessor bearing the primary object function and the possessed noun the secondary object function.

The first point to note about this analysis is that the external representation of the PIP is not necessarily overtly expressed. Many of the examples of PIPCs presented do not feature the doubling possessor. Therefore, I will follow Bresnan & Mchombo (1987) in assuming that the agreement morphology on the verb functions as an incorporated pronoun and bears the grammatical function instead of the doubling possessor in such cases. A second point is the correspondence between PIPs and their external representations. When overt, the doubling possessor must match the features of the PIP one-to-one. Therefore, this element will be analysed as being anaphorically controlled by the PIP.

Taking all these features of the analysis of the PIPC together, it is possible to provide a formal representation of the construction using the LFG architecture. The type of PIPC which is represented in (15) is that featuring the doubling possessor. At c-structure, this element is analysed following Dalrymple (2001) as a non-projecting Cl(itic) function. As argued above, the doubling possessor is an overt realization of a clause-level proxy of the internal possessor which functions as the object of the verb. Therefore, it occurs directly under the clausal head at c-structure, and maps to the OBJ function at f-structure. The possessive phrase bears the OBJ_θ function, but otherwise has the same internal structure as other possessive phrases. The anaphoric control of the proxy object by the internal possessor is shown by the indices in the f-structures of these two elements. The necessarily disjoint relationship between the subject and object is also indicated by indices. Example (11) is repeated here as (15):

- (15) *Mi nāj-bi-te ococo Juan-si'=mu'.*
 you see.CLF-APPL-3SG.M.O frog(F) Juan(M)-F=him
 'You saw Juan's frog.'



The analysis in (15) explicitly shows the syntactically ditransitive nature of the Chimane PIPC. However, it is still unclear from this analysis what the conditions are under which the PIPC occurs in discourse.

2.5 Discourse function of PIPCs in Chimane

With the assumptions made in Section 2.4, we can now consider the contribution of semantics and information structure in determining when PIPCs are used in discourse. In order to uncover the discourse motivation for using PIPCs, I designed some picture description tasks.

In the animacy and alienability task, participants were shown a series of pictures which depicted a person acting on another person, animal or inanimate object, and a third person or animal looking angry about the situation. It was explained to the participants that the person, animal or object who was being acted on was the possession (i.e. the kin or alienable possession) of the person or animal who looked angry. The participant was then asked a question about the picture which either topicalized the possession or the possessor.

In the sibling story task, the participants were shown a series of pictures which developed the story of a brother and sister and their interactions with their parents and possessions and with animals and their possessions. The task was designed to elicit many examples of possessive constructions.

There are two results in the animacy and alienability task which may indicate that topicality of the possessor is an influencing factor in the decision to use the PIPC. In their descriptions of situations in which people act on other people's kin, the participants used the PIPC more often when the possessor was topicalized in the question. The results are shown in Table 1 (the topic in the question is highlighted in each case):

Situation	Question	PIPC	%
man grabs man's sister	Why is the man angry?	9/16	56
	What's happening to the man's sister ?	0/16	0
woman hits woman's son	Why is the woman angry?	12/16	75
	What's happening to the woman's son ?	4/16	25

Table 1: Animacy and alienability task – topicality of the possessor

The results in Table 1 show that the participants preferred to use PIPCs to describe a person acting on another person's kin when the second person (i.e. the possessor) is topicalized in the question. More data is needed to show if this is a significant tendency, but these results do seem to provide an initial indication

that topicality may be an influencing factor on the speaker's choice between the PIPC and the IPC.

Another type of evidence which may support the argument that PIPCs are used to express topicality comes from examples of the use of IPCs in the sibling story task. In the story, after the brother and sister interact with their mother and father, they leave for the forest. After this episode, they find a canoe. It was explained to the participants that this canoe belonged to the children's father. Some of the participants used transitive constructions with possessive objects to describe this situation. In such cases, they always used IPCs rather than PIPCs:

- (16) *Aty joba-'=in n̄ij-te covamba jen'-tyi'=in.*
 now leave-F.S=they see.CLF-3SG.M.O canoe(M) father(M)-M=their
 'Now they're leaving and see their father's canoe.'

The use of IPCs in this discourse context is revealing because of the topicality of the possessor. The possessor referent (the children's father) is not topical at this point in the discourse; several events separate this mention of him from the last mention, and this may be why the participants selected the IPC rather than PIPC to describe the situation.

These results provide some initial indication that PIPCs are preferred when the possessor is topical. This proposal is similar to the observations made for PIPCs in other languages, but no formal analysis of this type of construction involving information structure has been proposed. However, differential object marking (DOM), which is a related phenomenon as it also involves variability in morphosyntactic marking of arguments, has been formally analysed by Dalrymple & Nikolaeva (2011). They develop a formal architecture involving interacting levels of sentence grammar. It is the interactions which constrain DOM. Specifically, topicality constrains differential marking of objects. Topical objects are marked, while non-topical objects are not. If the observations given about the use of PIPCs in Chimane discourse are correct, then this constraint-based approach can also be applied to these constructions.

Unlike DOM constructions, in which the object either bears the topic role or not, in PIPCs, it is also necessary to consider the role of the possessed noun. In situations in which the possessed noun is marked, as in IPCs, it will be assumed that both the possessed noun and the possessor share a single information structure role which applies to the entire possessive phrase. In situations where the PIP bears the topic role, it is assumed here that the possessed noun bears a completive information structure role, as it is discourse-new but not in focus (Dalrymple & Nikolaeva 2011).

Before moving to the analysis of some specific examples of PIPCs, a formalization of the proposed general constraint is required. In their analysis of topical non-subject agreement in Tabassaran, Dalrymple and Nikolaeva offer

the following formalization of the general constraint that any nonsubject element which bears a topic role will control agreement on the verb (assuming that agreement is an explicit signal of topicality):

$$(17) \quad ((\uparrow [\text{GF-SUBJ}])_{\sigma} \text{ DF}) = \text{TOPIC} \quad (\text{Dalrymple \& Nikolaeva 2011: 122})$$

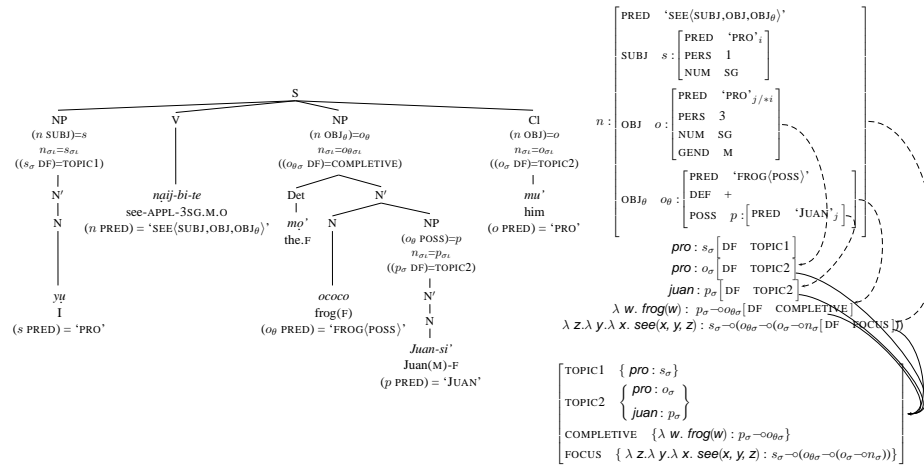
Adapting this kind of general formalization, the proposed analysis of the Chimane PIPC can be restated in the following terms: whichever element bears the secondary topic role at information structure will bear the object function at functional structure. This constraint can be represented as follows:

$$(18) \quad ((\uparrow \text{OBJ})_{\sigma} \text{ DF}) = \text{TOPIC2}$$

This constraint entails that in contexts in which the internal possessor bears the secondary topic role, it (or rather its proxy) must bear the object function. This also implies that the possessive phrase must bear a different grammatical function. Using this general constraint, it is now possible to provide a formal analysis of the syntax and information structure of PIPCs.

In (19), the possessor bears the secondary topic role, but since the possessed noun is not topical in this construction, it instead bears a completive information structure role. It is possible that it could bear another role, but the important point is that in this construction, the IS roles of the possessor and possessed noun are different. It is this difference in IS prominence which triggers the valency change and enables the external proxy of the possessor to bear the object function. Thus the conditions under which the verb agrees with the possessor in the PIPC, which was left unresolved in Section 2.4, are now clarified.

$$(19) \quad \begin{array}{l} Y\dot{u} \text{ } n\dot{a}ij\text{-}bi\text{-}te \quad \quad \quad m\dot{o}' \text{ } ococo \text{ } Juan\text{-}si' = mu' \\ \text{I} \quad \text{see.CLF-APPL-3SG.M.O the.F frog(F)} \quad \text{Juan(M)-F=him} \\ \text{'I saw Juan's frog.'} \end{array}$$



The representation in (19) demonstrates the integration of the c-structure and f-structure of the PIPC, in which the external proxy of the internal possessor bears the object function, with the s-structure and i-structure of the construction, at which it is specified that the possessor and its external proxy bear the secondary topic role while the possessive phrase bears a completive role (see Ritchie (2015) for more details on this analysis).

3 Prominent internal possessors in Maithili

Maithili exhibits SOV word order and both case marking on nominals and agreement on verbs. Nominals and pronominals are distinguished for nominative, accusative/dative and genitive case. It also has a system of honorificity involving four levels in the second person and two in the third person. The levels are High-Honorific (HH), Honorific (H), Mid-Honorific (MH), and Non-Honorific (NH) (Yadav 1996).

3.1 Possessive noun phrase

Possessors in possessive NPs generally stand in the genitive, as in (20a), but when the possessive phrase bears certain grammatical functions, for example the object function, possessors can also stand in the dative/accusative case, as in (20b):

- (20) a. *tohər bap æ-l-thun*
you.MH.GEN father come-PST.3H.2MH
‘Your (MH) father (H) came.’
b. *həm tora beta-ke dekha-l-iau*
I you.NH.ACC son-ACC see-PST-1.2NH
‘I saw your (NH) son.’ (Stump & Yadav 1988: 309)

The order of elements in the possessive NP is fixed as possessor-possessed noun. The opposite order is ungrammatical (all of the following examples come from a recent paper by Yadava et al. 2016):

- (21) **həm nokər-ke tohər pita-l-iau*
I servant-ACC you.NH.GEN hit-PST-1.2NH
(‘I hit your (NH) servant (NH).’)

Possessors can also co-occur with determiners. In such cases, the possessor can either precede or follow the determiner:

- (22) a. *i tohər nokər æ-l-ai*
this you.NH.GEN servant come-PST-3NH
‘This servant (NH) of yours (NH) came.’

- b. *tohər i nokər æ-l-au*
 you.NH.GEN this servant come-PST-2NH.NONNOM
 ‘This servant (NH) of *yours* (NH) came.’

Note the difference in emphasis indicated in the translations. When the determiner precedes the possessor, the focus is on the determiner. When the possessor precedes the determiner, the focus is on the possessor.

3.2 Clausal syntax

There are three verbal agreement paradigms: the nominative intransitive paradigm, the non-nominative intransitive paradigm and the cross-reference paradigm. Major features of nominals referenced by the paradigm are person and honorific grade.

Nominative intransitive agreement is controlled by the sole argument of an intransitive verb, while non-nominative intransitive agreement is controlled by non-nominative subjects on intransitive verbs, for example dative subjects. (23) shows examples of nominative and dative subjects of intransitive verbs:

- (23) a. *tu æ-l-æ* b. *tora bukh lagh-l-au*
 you.NH come-PST-2NH you.NH.ACC hungry feel-PST-2NH.NONNOM
 ‘You (NH) came.’ ‘You (NH) were hungry.’

The cross-reference paradigm consists of verbal agreement suffixes which cross-reference two referents in the clause: the ‘primary’ and ‘secondary’ referents. The primary referent is nearly always (but does not necessarily have to be) the subject. The secondary referent is the second most prominent referent in the clause, which can be the object but also obliques and, crucially, possessors internal to a number of terms and non-terms.

Secondary agreement is possible with single objects of monotransitive verbs, patient-like and non-patient-like objects of ditransitive verbs, and possessors internal to all of these:

- (24) a. *həm tora pita-l-iau*
 I you.NH.ACC hit-PST-1.2NH
 ‘I hit you.’ (single object of monotransitive verb)
 b. *həm tohər nokər-ke pita-l-iau*
 I you.NH.GEN servant-ACC hit-PST-1.2NH
 ‘I hit your servant.’ (possessor internal to object)
 c. *həm tora bəcha de-l-ie / de-l-iau*
 I you.NH.ACC baby give-PST-1.3NH give-PST-1.2NH
 ‘I gave you the baby.’ (direct or indirect obj. of ditransitive verb)
 d. *həm tohər guruji-ke bəcha de-l-iau*
 I you.NH.GEN teacher-ACC baby give-PST-1.2NH
 ‘I gave the baby to your teacher.’ (poss. internal to indirect object)

- e. *həm tohər bəcha guruji-ke de-l-iau*
 I you.NH.GEN baby teacher-ACC give-PST-1.2NH
 ‘I gave your baby to the teacher.’ (poss. internal to direct object)

Secondary agreement is also possible with oblique arguments, and with possessors internal to obliques:

- (25) a. *həm tohər sange khana pakau-l-iau*
 I you.NH.GEN with food cook-PST-1.2NH
 ‘I cooked with you.’ (oblique)
 b. *həm tohər guruji-ke sange khana pakau-l-iau*
 I you.NH.GEN teacher-ACC with food cook-PST-1.2NH
 ‘I cooked with your teacher.’ (possessor internal to oblique)

Agreement is also possible with possessors internal to subjects of intransitives. In such cases, the possessor triggers non-nominative agreement on the verb:

- (26) *tohər nokər əel-əi / əel-au*
 you.NH.GEN servant come-PST-3NH come-PST-2NH.NONNOM
 ‘Your (NH) servant came.’

Possessors internal to subjects of transitive verbs can also control secondary agreement. In such cases, primary agreement is controlled by the possessed noun. This means both elements of the possessive subject are referenced:

- (27) *tohər bhai həmra pita-l-kho*
 you.NH.GEN brother me hit-PST-3NH.2NH
 ‘Your brother hit me.’

These examples show that in Maithili, agreement is possible with possessors internal to (i) subjects of intransitive verbs, (ii) subjects of transitive verbs, (iii) direct and indirect objects of mono- and ditransitive verbs, and (iv) obliques.

3.3 Evidence that PIPs are internal in Maithili

One piece of evidence which suggests that possessors which control secondary agreement on the verb are internal to the phrase headed by the possessed noun is the fact that they cannot be separated from the possessed noun by a clause-level element. For example, it is not possible for a clause-level adverb to occur between the possessor and possessed noun.

- (28) **həm tohər khail nokər-ke pita-l-iau*
 I you.NH.GEN yesterday servant-ACC hit-PST-1.2NH
 ‘I hit your servant yesterday.’

(29) a. *o tora: ba:p-ke dekha-l-thun*
 he.H your.NH.ACC father-ACC see-PST-3H.2NH
 ‘He saw your (NH) father (H).’
 b. *tohar ba:p dekhāl ge-l*
 your father see.PST.PTCP go-PST.3NH
 ‘Your (NH) father (H) was seen.’
 c. **tō ba:p(-ke) dekhāl ge-le*
 you.NOM father-ACC see.PST.PTCP go-PST.2NH
 ‘Your (NH) father (H) was seen.’

(Stump & Yadav 1988: 317)

3.4 Trigger-happy agreement

The examples in Section 3.3 show that it is not only internal possessors which can control secondary agreement. Direct objects of ditransitive verbs and obliques can also control this agreement. This suggests that the controller of secondary agreement does not necessarily correspond to an unrestricted argument. Instead, secondary agreement can be controlled by whichever potential controller is most semantically or information structurally prominent in a given discourse context. The specific semantic and/or IS factors which determine the agreement controller are not immediately apparent, and different studies have argued for different factors (see Section 3.5). However, in terms of the syntax of the construction in which the possessor controls agreement, all that needs to be said is that there is no difference in the structure of the PIPC versus the default IPC. In both cases, the possessor is internal to the possessive NP. In the case that the possessor controls secondary agreement, one or a combination of prominent semantic and/or IS features of the possessor means that it ‘wins out’ in the competition for control of secondary agreement over other potential controllers. This type of pragmatically determined agreement system has been termed ‘trigger-happy’ by Comrie (2003), as the agreement target (in this case

the verb) can have more than one potential trigger or controller.

The f-structure of this kind of configuration has been analysed by Dalrymple & Nikolaeva (2005) as in (30):

- (30) *o tora: ba:p-ke dekha-l-thun*
 he.H you.NH.ACC father-ACC see-PST-3H.2NH
 ‘He (H) saw your (NH) father.’

	PRED	‘SEE(SUBJ,OBJ)’
SUBJ	PRED	‘HE’
	PERS	3
OBJ	PRED	‘FATHER’
	PERS	3
	POSS	PRED ‘YOU’
		PERS 2

Based on Dalrymple & Nikolaeva (2005: 87)

However, just as with Chimane, it is not possible to fully explain why PIPs are able to control agreement on the verb in Maithili without also considering the semantic and/or information structure features of the possessor.

3.5 Discourse function of PIPCs in Maithili

Based on the observations about secondary agreement in Maithili presented here, it must be stated that in Maithili, agreement controllers do not correspond one-to-one with grammatical functions, as they do in many other languages. Instead, predicate-‘argument’ agreement is conditioned by something else.

So far, analyses of Maithili have claimed that it is the functional prominence of internal possessors which enables them to control secondary agreement. Stump & Yadav (1988) claim that topicality is the main motivating factor for using a PIPC in discourse. Bickel et al. (1999) cite the interaction between the pragmatic concepts of ‘face’ and ‘empathy’ as the primary motivation for speakers’ choice between potential controllers of secondary agreement. Comrie (2003) and Dalrymple & Nikolaeva (2005) argue that the possessors will control secondary agreement when they bear the secondary topic role at information structure. Finally, Dalrymple & Nikolaeva (2011) argue that some notion of contrast may also be involved in conditioning the choice. In a more recent proposal, Yadava et al. (2016) argue that the motivation for the alternation is to index a combination of semantic and information structural features of possessors.

The semantic feature referenced by secondary agreement is the honorific grade of the possessor, or more specifically ‘face versus empathy’ (Bickel et al. 1999). Potential controllers which are higher in honorific grade will control secondary agreement, even if they are more ‘lowly’ in their syntactic status. For example, in a social context in which you are referring to an honoured person’s non-honorific possessions, and that person is present in the situation, it is infelicitous for the verb to show agreement with their non-honorific possession over them. This is despite the fact that the honorific referent is an internal possessor and the non-honorific possessed noun is the head of the object NP:

- (31) *tu hunak nokər-ke pit-l-ahunh / *pit-l-ahi*
 you he.H.GEN servant-ACC hit-PST-2NH.3H hit-PST-2NH.3NH
 ‘You (NH) hit his (H) servant.’ (Honorific possessor is present)

It is only felicitous to use the the variant in which the possessed noun controls secondary agreement if the honorific possessor is absent from the situation:

- (32) *tu hunak nokər-ke *pit-l-ahunh / pit-l-ahi*
 you he.H.GEN servant-ACC hit-PST-2NH.3H hit-PST-2NH.3NH
 ‘You (NH) hit his (H) servant.’ (Honorific possessor is absent)

This kind of judgement indicates that the need to respect honoured people is one of the factors motivating the choice between potential agreement controllers.

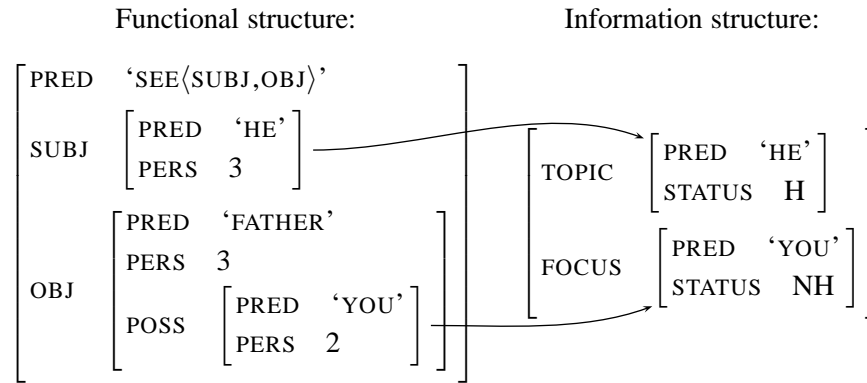
Agreement with honorific referents can also be ‘overridden’ if another potential controller is focussed. If a non-honorific possessor is focussed, it is possible for it to control secondary agreement:

- (33) a. *tu kəkər sikshak-ke pit-l-ahunh*
 you who.GEN teacher hit-PST-2NH.3H
 ‘Whose teacher (H) did you hit?’
 b. *həm tohər sikshak-ke pit-l-iau*
 I you.NH.GEN teacher hit-PST-1.2NH
 ‘I hit your (NH) teacher (H).’ (teacher absent, possessor in focus)

This indicates that it is possible for focus to override honorificity, enabling non-honorific possessors to control secondary agreement over honorific possessed nouns.

Adapting the analysis of Maithili developed in Dalrymple & Nikolaeva (2005), it is possible to integrate a level of information structure with the f-structure given in Section 3.4.

- (34) *o tora: ba:p-ke dekha-l-thun*
 he.H you.NH.ACC father-ACC see-PST-3H.2NH
 'He saw your (NH) father.'



Based on Dalrymple & Nikolaeva (2005: 87)

In a similar way to Chimane, the integration of a level of information structure into the analysis motivates the choice of the internal possessor as the controller of secondary agreement in Maithili.

4 Summary and further questions

In this paper, two different types of prominent internal possessor constructions have been presented. Certain features of the constructions indicate that despite their functional similarity, they have very different underlying structures. The fact that possessor agreement is restricted to only occurring with objects in Chimane, and only in the presence of applicative-like verbal morphology, leads us to conclude that a valency-increasing process is the best analysis for the construction. In this respect, the Chimane PIPC is close to EPCs proper, albeit with the added complication that it is not the possessor itself which is 'raised' to argument status but a clause-level representation of the possessor which is inserted into the argument structure of the verb by the applicative.

Maithili presents a very different syntactic profile. In this case, possessors internal to a number of different terms and non-terms can control agreement, and they share this property with other non-terms including obliques. This suggests that instead of some valency-changing process akin to that in Chimane, the best explanation for the PIPC in Maithili is that verbal agreement does not reference grammatical functions, but rather semantically or information structurally prominent referents.

Despite these very different syntactic profiles, there is a sense in which

PIPCs in Chimane and Maithili constitute the same type of construction. That sense is functional: in both cases, internal possessors take on the syntactically prominent property of controlling agreement on the verb when they are also semantically or information structurally prominent. Some initial evidence has been presented here to show that in Chimane, topical possessors are more likely to control verbal agreement. In Maithili, possessors which are higher in honorific grade and which bear the focus role are more likely to control secondary agreement, and these two features can interact, with focussed non-honorific possessors able to override honorific non-focussed possessors.

Further questions

On the analysis of Chimane: it is not clear what is the anaphoric binding domain of the negative constraint which specifies that the agreeing possessor is disjoint in reference from the subject. Further data is required to test this. It is also not clear how to capture this constraint in the formal representation.

More generally on the study of PIPCs crosslinguistically: two types have been presented in this paper, but there may also be other types of which have not yet been identified. For example, in his analysis of Jarawara (Arawan), Dixon (2000) claims that possessors which control verbal agreement may take on the function of the head of the possessive NP. Another type of explanation may be that PIPs occur in a more peripheral position within the NP than their non-PIP counterparts, and it is this more peripheral position which makes them 'visible' to the phrase-external syntax.

References

- Bickel, Balthasar, Walter Bisang & Yogendra P. Yadava. 1999. Face vs. Empathy: The Social Foundation of Maithili Verb Agreement. *Linguistics* 37(3). 481–518.
- Bresnan, Joan. 1982. *The Mental Representation of Grammatical Relations*. Cambridge, MA: MIT Press.
- Bresnan, Joan & Sam A. Mchombo. 1987. Topic, Pronoun, and Agreement in Chichewa. *Language* 63(4). 741–782.
- Comrie, Bernard. 2003. When Agreement Gets Trigger Happy. *Transactions of the Philological Society* 101(2). 313–337.
- Dalrymple, Mary. 2001. *Lexical Functional Grammar*. New York: Academic Press.
- Dalrymple, Mary & Irina Nikolaeva. 2005. Nonsubject Agreement and Discourse Roles. In *Oxford Working Papers in Linguistics, Philology, and Phonetics*, 73–94. University of Oxford: Centre for Linguistics and Philology.

- Dalrymple, Mary & Irina Nikolaeva. 2011. *Objects and Information Structure*. Cambridge: Cambridge University Press.
- Dixon, Robert M. W. 2000. Categories of the Noun Phrase in Jarawara. *Journal of Linguistics* 36(3). 487–510.
- Dryer, Matthew S. 1986. Primary Objects, Secondary Objects, and Antidative. *Language* 62(4). 808–845.
- Gadzar, Gerald, Ewan Klein, Geoffrey K. Pullum & Ivan A. Sag. 1985. *Generalized Phrase Structure Grammar*. Oxford: Blackwell.
- Gadzar, Gerald & Geoffrey K. Pullum. 1982. Generalized Phrase Structure Grammar: A Theoretical Synopsis. In *Proceedings of the Indiana University Linguistics Club*, Bloomington, IN: Indiana University.
- Lyons, Christopher. 1986. The Syntax of English Genitive Constructions. *Journal of Linguistics* 22(1). 123–143.
- Polinsky, Maria. 2003. Non-Canonical Agreement Is Canonical. *Transactions of the Philological Society* 101(2). 279–312.
- Ritchie, Sandy F. 2015. *Internal Possessor Prominence in Chimane*. London: SOAS, University of London Doctoral thesis.
- Ritchie, Sandy F. under review. Agreement with the Internal Possessor in Chimane: A Mediated Locality Approach .
- Sakel, Jeanette. 2004. *A Grammar of Moseetén*. Berlin: Mouton de Gruyter.
- Sakel, Jeanette. 2007. The Verbness Markers of Moseetén Complex Predicates. In Bernhard Wälchli & Matti Miestamo (eds.), *New Trends in Typology: Broadening the Horizons and Redefining the Foundations*, 315–338. Berlin: Mouton de Gruyter.
- Stump, Gregory T. & Ramawatar Yadav. 1988. Maithili Verb Agreement and the Control Agreement Principle. In Diane Brentari, Gary Larson & Lynn MacLeod (eds.), *Papers from the 24th Annual Regional Meeting of the Chicago Linguistic Society, Part Two: Parasession on Agreement in Grammatical Theory*, 304–321. Chicago: Chicago Linguistic Society.
- Yadav, Ramawatar. 1996. *A Reference Grammar of Maithili* (Trends in Linguistic Documentation 11). Berlin: Mouton de Gruyter.
- Yadava, Yogendra P., Sandy Ritchie, Irina Nikolaeva & Oliver Bond. 2016. The Syntax of Internal Possessors in Maithili. Paper Presented at the Workshop on Prominent Internal Possessors. SOAS, London, 22-23 September 2016.