ON THE SYNTAX OF AGREEMENT IN TIBETO-BURMAN

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ABSTRACT

Verb agreement in Tibeto-Burman languages follows a different principle than in other, especially Indo-European languages. Instead of limiting agreement to the unification of features of the agreement trigger with those of the target, Tibeto-Burman languages also allow NP features to combine with the features marked by the agreement morphology in an appositional ('as NP'), partitional ('NP of') or relational ('NP with regard to') structure. This possibility is shown to result from an associative principle in the syntax-semantics interface underlying Tibeto-Burman, and more generally Sino-Tibetan grammar, which is distinct from the more integrative design of Indo-European languages. These differences also manifest themselves in grammatical relations structure, role semantics, and discourse tendencies.

1. Introduction

Some languages of Tibeto-Burman stock, notably those classified as Kiranti, Kuki-Chin and Qiangic, show systems of verb agreement. In this paper I examine the nature of such systems and their syntactic structure. For agreement by no means universally consists of a simple 'unification' or 'matching' of the features of an agreement trigger with those of its target. There is indeed a variety of ways in which agreement features can be combined, and languages vary in this regard in principled ways (1999b, c, d). Even more than research on grammatical relations, the study of agreement systems has suffered from a heavy bias toward European languages. A notable exception to this is Hale (1983), who distinguishes between a 'merged' and an 'unmerged' (i.e. co-predicative or appositional) relationship between NPs and agreement clitics in the Australian language Warlpiri. In fact, there are more possibilities, and they characterize agreement throughout
Tibeto-Burman. I discuss these possibilities in Section 2, concentrating on two languages to which I have first-hand access through fieldwork or other native speaker consultations, and which are generally assumed to be related only distantly (Matisoff 1991): Belhare, a representative of the Kiranti group spoken in Eastern Nepal, and Lai Chin, a representative of the Kuki-Chin group spoken in Western Burma (Myanmar) and adjacent parts of Bangladesh. In Section 3, I compare variable agreement relations with at first sight similar phenomena in Indo-European languages, drawing a distinction between associative and integrative agreement systems. Section 4 relates this distinction to other typological features in semantics, syntax, and discourse. In all of these domains, languages with associative agreement show a greater separation of the nominal and the verbal encoding of arguments than languages with integrative agreement. This difference reflects a general choice in grammar principles that go beyond the mechanisms of agreement. There is evidence that a principle of associative grammar is also characteristic of those Tibeto-Burman languages that do not have agreement, and indeed extends throughout the Sino-Tibetan family. Section 5 summarizes these findings, and proposes that the principle of associative grammar can be consistent in a language family even if the family is heterogenous in the development of agreement morphology, as is the case of Sino-Tibetan.

2. Agreement relations in Tibeto-Burman

Table 1 gives a synopsis of the various agreement relations attested in Tibeto-Burman. Identificational corresponds to Hale’s (1983) terms ‘merged’ (or ‘argumental’), appositional to ‘unmerged’ (or ‘predicative’). ‘FN’ and ‘FV’ stands for referential features marked by nominals and verbal agreement markers, respectively.

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Description</th>
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<tr>
<td>FN = FV</td>
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<td>FV as FN</td>
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<td>FN re FV</td>
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Three of these possibilities are illustrated by examples from Belhare: the examples in (1) show identificational agreement, i.e. what corresponds to garden variety agreement in Indo-European.¹

(1) a. \textit{nka } \textit{thaï-2-ya}.
    1SG[ABS] go.up-NON.PAST-[1SG:S]EXCL
    ‘I’ll go up.’

b. \textit{han } \textit{i-na } \textit{riy } \textit{sa-a}
    n-lur-he-ga?
    ‘Who told you that story?’

The following set of examples illustrates appositional agreement, where the NP that bears the same thematic role as the agreement marker functions semantically as an apposition to this marker. The nominal features do not merge into a single referential expression with the conjugational desinence but instead predicate additional information about the referent. Therefore, there is no need for there to be a 1:1 matching between person features on the verb and those of the NP it agrees with:

(2) a. \textit{na-kha-ek-kha}
    DEM-NON,SG-LOC-NMLZR
    ka-y-piu-2-ni.
    [1PL]INCL:UND-3NON,SG:A-give-NON.PAST-NEG
    ‘They don’t give seats to us\textsuperscript{INCL} from here (only to long-distance passengers.)’
    (literally, ‘they-don’t-give-us locals’)

b. \textit{i-bay-ya } \textit{khuï-t-um-ma-ha}
    ‘[It’s] one that we\textsuperscript{INCL} can carry alone.’
    (literally, ‘we-can-carry-it [as] one-person’)

c. \textit{sap maaj khim-chi-a } \textit{ak-chitt-u-m}.
    all god house-NON,SG-ERG OPT-get-3[SG]UND-1PL:A
    ‘We\textsuperscript{INCL} should get [money] through all god-houses.’
    (literally, ‘we-get-it all [as] god-house-units’)

d. *daju-bhai mun-dhupt-a-chi!*
   ‘Talk to each other as brothers!’
   (literally, ‘you-talk [as] brothers!’)

e. *masiŋ=cha siŋ layŋ-e*
   old.woman[SG.ABS]=even wood plant-LOC
   climb-NON.PAST-[1SG]EXCL
   ‘Even as an old woman I climb trees.’
   (literally, ‘even [as] old-woman I-climb on-trees’)

The following examples, finally, illustrate ‘partitional’ agreement, where the NP denotes a subset of the referents denoted by the agreement marker. In this case, number features systematically disagree:

   (3) a. *sip-paŋ bajar khar-e-i-ŋa.*
      two-HUM bazaar[LOC] go-PAST-1PL[S]-EXCL
      ‘Two of usEXCL went to the bazaar.’
      (literally, ‘two we-go to the bazaar’)

b. *na kaxai-ŋa hit-ma*
   DEM[SG:ABS] who:EMPH[SG]-ERG see-INF
   3NON.SG[A]-NEG-can-NON.PAST-3[SG]UND-NEG
   ‘Not one of them gets to see her.’
   (literally, ‘whoever they-don’t-see-her’)

c. *sa-ti khar-e-i-ga?*
   who-SG:ABS go-PAST-2PL[S]-2
   ‘Who of you went?’
   (literally, ‘who you-go?’)

d. *i-baŋ pok-kheŋ-e-i-ga ki*
   one-HUM[ABS] rise-DIM-PAST-2PL[S]-2 SEQ
   up-yuk-na.
   beat.up-DEF-1[SG:A]>2[SG:UND]
   ‘If any of youPL rises a bit, I will beat him (lit., youSG) up.’
   (literally, ‘one-person you-rise-a-bit, and-then I-beat-you’)

e. *sum-baŋ u-tak-chi*
   three-HUM 3[SG]POSS-friend-NON.SG[ABS]
The same variety of agreement relations is found in Lai Chin. The set of examples in (4) illustrates identificational agreement, the one in (5) appositional agreement, and the one in (6) partitional agreement:²

(4) a. a-ma? a-ni:
3[SG]-DEM[ABS] 3[SG]s-laugh:Σ1
‘S/he laughs.’

b. Tsew Máŋ ni? lɔw thlɔw po:  a-pe:k-ña:
‘Tsewmang gave it to the farmers.’

(5) a. tsõn pia:k tu nì? lɔw
teach:Σ2 AFF NMLZR:A ERG field[ABS]
ka-thlɔ? vɛː:
1[SG]A-[3SG:UND]-work:Σ2 even
‘Even as a teacher I can work the field.’

b. lɔw kâl lɔw tsiː zɔː tɔn da? mì: nʉŋ fa:
field go:Σ2 NEG TOP what do Q person alive son[ABS]
kâ-n-rum tsɔk ła yay?
1-PL:S-exist:Σ1 all FUT
‘As the sons of humans, how can we manage (literally, ‘how can we at all exist’) without going to the field?’

(6) a. a-hâw da? nɔ-n-ra?:
3[SG]-who[ABS] Q 2-PL:S-come:Σ1
‘Who of you came?’
b. mìz pa-khat (loŋ) kà-n-rač.
   person CLASS-one[ABS] only 1-PL:s-come:Σ1
   ‘(Only) one of us came.’

Lai Chin, however, carries this further than Belhare and also uses non-
identificational agreement as a primary coding means in experience expres-
sions. Such expressions follow the general South East Asian model of
psycho-collocations (Matisoff 1986). The experiencer is expressed by a
possessor prefix on the experiential noun (see Van-Bik 1998 for the semantic
range of this construction):

(7)            ka-lùg    a-riŋ.
   ‘I am suspicious.’ (literally, ‘my-heart is-suspicious’)

If there is also a specific stimulus argument involved, this is coded by means
of a regular intransitive agreement marker:

(8) a. (nàŋ-maʔ)     ka-lùg      na-riŋ.
   ‘I suspect you.’
   (literally, ‘my-heart [F_N] re you [F_V]-suspicious’)  

b. (à-n-maʔ)       ka-lùg      à-n-riŋ.
   ‘I suspect them.’
   (literally, ‘my-heart [F_N] re them [F_V]-suspicious’)

Although from an Indo-European point of view one is tempted to understand
such constructions as ‘you/they [make] my heart suspicious’, the Lai verb is
clearly intransitive. The structure here is different. The verb is predicated of
kaluŋ ‘my heart’ (it is, after all, the first person referent that is suspicious in
the example), but it does not agree syntactically with this NP nor with its
possessor. Instead, the agreement prefix indexes the person with regard to
whom the psycho-collocation holds, i.e. the stimulus naymaʔ ‘you’ (8a) or
annaʔ ‘they’ (8b), respectively. Thus, a better approximation of the semantic
structure of (8) is ‘my-heart with regard-to-you/them, you/they, are-sus-
picious’, where agreement consists in establishing a relation (‘with regard to’,
‘re’) between the features F_N of the psycho-noun (kaluŋ ‘my-heart’) and the
verbal features F_V encoded by the conjugational prefixes (na- ‘you’ and an-
‘they’, respectively). Proof for the intransitive nature of the verb in (8) comes
from the fact that it cannot appear in what has come to be called the **second stem** \( \text{rin} \) and that ergative case on the stimulus NP is ungrammatical:

\[
(9) \quad \begin{align*}
\text{a. } & *(\text{-n-ma?} \text{'-n-m} \text{'-n} \text{-lù} \\
& \text{3-PL-Dem 1[SG]Poss-heart[ABS]} \\
& \text{À-n-rín.} \\
& \text{3-PLA-[3SG:UND]-suspicious:Σ2}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & *\text{À-n-ma? ni' ka-lùy} \\
& \text{3-PL-Dem Erg 1[SG]Poss-heart[ABS]} \\
& \text{À-n-rín.} \\
& \text{3-PLA-[3SG:UND]-suspicious:Σ2}
\end{align*}
\]

\[
\begin{align*}
\text{c. } & *\text{À-n-ma? ni' ka-lùy} \\
& \text{3-PL-Dem Erg 1[SG]Poss-heart[ABS]} \\
& \text{À-n-rín.} \\
& \text{3-PLA-[3SG:UND]-suspicious:Σ1}
\end{align*}
\]

Intended: ‘I suspect them’

Both options are possible only in truly transitive constructions. Such constructions do exist as versions of (8), but they involve explicit, derivational transitivization, marked either by glottalization (< Proto-Tibeto-Burman ‘directive’ *-t) or the causative particle ter (see Peterson 1998; Van-Bik 1999):

\[
(10) \quad \begin{align*}
\text{a. } & (\text{-n-ma? ni?} \text{'-n-m} \text{'-n} \text{-lù} \\
& \text{3-PL-Dem Erg 1[SG]Poss-heart[ABS]} \\
& \text{À-n-ka-rí'n.} \\
& \text{3-PLA-[1]SG:UND-suspicious:Σ2:CAUS}
\end{align*}
\]

‘[They behave as if they wanted to make] me suspicious of them.’

\[
\begin{align*}
\text{b. } & (\text{-n-ma? ni?} \text{'-n-m} \text{'-n} \text{-lù} \\
& \text{3-PL-Dem Erg 1[SG]Poss-heart[ABS]} \\
& \text{Àn-ka-rí'n tèr.} \\
& \text{3-PLA-[1]SG:UND-suspicious:Σ2 CAUS}
\end{align*}
\]

‘They made me suspicious [of them].’

(literally, ‘they cause my heart to be suspicious’)

In these examples, the undergoer agreement marker \textit{ka-} ‘me’ registers the possessor of the experience (\textit{ka-} ‘my’) following a pattern of external possessor (\textit{dativus possessivus}) coding that is characteristic throughout Tibeto-Burman (van Driem 1991). Another example with external possessor
agreement is (11a), an alternative to (11b):

(11) a. (ka-)tsa: uk a-ka-fiár.
    ‘She robbed me of my book.’

b. ka-tsa: uk a-fiár.
    ‘She stole my book.’

External possessor marking is standard identificational agreement, but the relevant features come from a dependent (the possessor ka- ‘my’) of the agreement-triggering NP rather than from its head (tsa: uk ‘book’). The general rule behind it is that an affected possessor can take precedence over its host in providing agreement features — a wide-spread phenomenon in the world’s languages (cf., e.g. Bally 1926; Shibatani 1994; König and Haspelmath 1998; Payne & Barshi 1999). However, just as the subject agreement marker can signal relational rather than identificational agreement, so can the undergoer marker index the stimulus to which the psycho-noun is related, instead of this nominal itself. This is the case in examples like the following, where the semantics is self-causative and conversationally implicates that ‘they start to suspect me on their own initiative, without having any good reason’ (Kenneth Van-Bik, p.c.):

(12) à-n-lùg à-n-ka-tiʔn.
    ‘They [are ready to] suspect me.’
    (literally, ‘they [FV(A)]-cause their-heart [FN] re me [FV(U)]-suspicious’)

The effect of this is that the same verb form, ankariʔn, can have opposite meanings: combined with kaluy ‘my heart’ in (10) it entails ‘I suspect them’; in (12), with anluy ‘their heart’, it entails ‘they suspect me’. In these examples, the form is disambiguated by the possessor prefix ka- ‘my’ vs. an- ‘their’ on the noun. However, if stimulus and experiencer have the same person and number features, ambiguity can arise between identificational and relational agreement (third person singular undergoer agreement is zero-marked):
In the first interpretation, undergoer agreement is identificational and is with the experiencer/possessor (a-) in the style of an external possessor construction. The second interpretation rests on relational agreement, where the undergoer marked on the verb registers the stimulus (law thlaw pa: ‘farmer’) with regard to whom ‘his/her heart is suspicious’.

A similar ambiguity arises in intransitive constructions of the type illustrated before in (7) and (8). This is shown in the following example noted by Van-Bik (1998: 203):

(14)   k-a-lù:  a-rí:.  
  a. ‘I am confused.’  
  b. ‘He made me confused.’ (literally, ‘I am confused because of him.’)

In (14a), agreement is taken to be identificational, whence the third person features merge with those of the subject NP kalu: ‘my head’. In (14b), agreement is understood as relational so that the verbal prefix (a-) denotes the stimulus argument.

These ambiguities are unexplained unless we recognize the difference between identificational and relational agreement.

3. Associative vs. integrative agreement

At first sight one might take the examples of non-identificational agreement discussed in the preceding for simple cases of agreement mismatches of the kind that is common in many Indo-European languages (e.g. Corbett 1983). However, disagreement in Indo-European is usually not exploited as a constructional resource. Instead, it commonly has to do with variation in the semantic construal of features in the NP and in the conjugational system.
In a case like English the government is/are ..., for example, the relation between the NP and the conjugational system is still one of identity: the variation results from whether or not government is taken to be a singular or a plural noun. Another source for variation arises from the way features are inherited in phrase structures. Consider the following data from English and Nepali (Indo-Aryan):

(15) a. *One of the boys are/is working on this.
   b. (hāṃhārau mādhye) ek jana
      1PL among one person[NOM]
      āu-nch-aū / āu-nch-a.
      come-NON.PAST-1PL come-NON.PAST-3SG
      ‘One of us will come.’

(16) a. *Of us, one are working on this.
   b. *ek jana āu-nch-aū, hāṃhārau mādhye.
      one person[NOM] come-NON.PAST-1PL 1PL among
      ‘One of us will come.’

Plural marking in (15) is reminiscent of the Belhāre and Lai Chin partitional constructions. However, for the English and Nepali constructions it is essential that one and ek jana are the heads of complex NPs containing the PPs of the boys and hāṃhārau mādhye ‘among us’, respectively — even if the PP is suppressed through ellipsis as is possible in Nepali (but not in English). It is these PPs that contain the agreement features reflected in the verb (as third person plural in (15a) and as first person plural (15b)). This is why plural agreement is blocked if the PPs are moved out of the NPs into a detached position, as shown in (16). This suggests that first person plural agreement in (15) results simply from ‘piping’ the relevant features from the PP to the NP-head, or in the absence of an overt PP, from conceptually construing the notion of ‘of us’ or ‘among us’ within the NP (construō ad sensum). This is different in the Tibeto-Burman constructions. Where an adverbial expression like the PPs in (15) is at all available, it does not form a subconstituent of the agreement-triggering NP. Hence, placing kankhua in ‘from our village’ in the following Lai Chin example into the afterthought or any other position does not interfere in any way with the agreement system:
(17) a. \( \text{kà-n-khùa} \) \( \text{in mì} \) \( \text{pa-khat} \)
\( \text{1-PL:POSS-village from person CLASS-one[ABS]} \)
\( \text{kà-n-ra:} \)
\( \text{1-PL:S-come:Œ1} \)
‘One from our village came.’

b. \( \text{mì} \) \( \text{pa-khat} \) \( \text{kà-n-ra:} \)
\( \text{person CLASS-one[ABS]} \) \( \text{1-PL:S-come:Œ1} \)
\( \text{kà-n-khùa} \) \( \text{in} \)
‘One came, one from our village.’

c. \( \text{mì} \) \( \text{pa-khat} \) \( \text{kà-n-khùa} \) \( \text{in} \)
\( \text{person CLASS-one[ABS]} \) \( \text{1-PL:POSS-village from} \)
\( \text{kà-n-ra:} \)
\( \text{1-PL:S-come:Œ1} \)
‘One from our village came.’

Often, however, such PPs are not even available: in neither Belhare nor Lai Chin are there adpositions like English as that would mark appositional readings. Moreover, as we saw in the Lai Chin experiencer construction in (8), lexical expression of the stimulus argument results in a free absolutive NP rather than in a subconstituent of \( \text{kalù} \) ‘my heart’. As shown by the following, the stimulus NP can appear anywhere in the clause, in synchrony with the contextually appropriate information structure:

(18) a. \( \text{nikúm} \) \( \text{a?} \)
\( \text{[NP} \) \( \text{lùw thlùw po:Œ1l]} \)
\( \text{last.year LOC farmer PL[ABS]} \)
\( \text{[NP} \text{ka-lùn]} \)
\( \text{Œ1} \)
\( \text{â-n-ripe:Œ1} \)
‘Last year I suspected the farmers.’

b. \( \text{[NP} \) \( \text{lùw thlùw po:Œ1l]} \) \( \text{nikúm} \) \( \text{a?} \)
\( \text{[NP} \text{ka-lùn]} \)
\( \text{Œ1} \)
\( \text{â-n-ripe:Œ1} \)
‘The farmers, I suspected them last year.’

This is different with true NP subconstituents which cannot be separated from their heads:
(19) a. *nikúm a? [k₁₉ ka-hòz₇ khù₇]  
   last.year LOC 1[SG]POSS-friend village[ABS]  
   ka-n₇u₇.  
   1[SG]A[-3SG:UND]-see:Σ2  
   'Last year I saw my friend’s village.'  

b. *[k₁₉ ka-hòz₇] nikúm a? [k₁₃ khù₇]  
   1[SG]POSS-friend last.year LOC village[ABS]  
   ka-n₇u₇.  
   1[SG]A[-3SG:UND]-see:Σ2  
   'I saw my friend’s village last year.'

Some cases of agreement mismatches in Indo-European languages have been compared to the kind of appositional (‘unmerged’) structures found in Australian languages (Jelinek 1984) and could thus also be compared to what we find in Tibeto-Burman. Consider the following examples from Spanish:

(20) a. Los español-es bebe-mos mucha  
   ART:PL:MASC spaniard(MASC)-PL drink-1PL:PRES much  
   cerveza.  
   beer  
   'We Spaniards drink a lot of beer.'

b. Los español-es bebé-is mucha  
   ART:PL:MASC spaniard(MASC)-PL drink-2PL:PRES much  
   cerveza.  
   beer  
   'You Spaniards drink a lot of beer.'

However, rather than representing true appositional agreement, this pattern is more likely to result from ellipsis of the agreement-triggering pronouns nosotros ‘we’ and vosotros ‘you (PL)’, respectively, which are much longer and prosodically heavier than their monosyllabic counterparts in the singular (yo, tú). This explains why disagreement is impossible with other person and number values in Spanish (21a). Also note that the pattern does not extend to partitional interpretations and is therefore incompatible, for instance, with question words (21b):

   ART:SG:MASC spaniard drink-1SG:PRES much beer  
   'As a Spaniard I drink a lot of beer.'
b. *¿Quién bebéis cerveza?
who:SG drink-2PL:PRES beer
‘Who of you drinks beer?’

As illustrated by the examples in the preceding section, there is usually no such constraint in Tibeto-Burman languages. A final Indo-European pattern that might constitute a *prima facie* parallel to the Tibeto-Burman agreement varieties comes from Maithili, an Indo-Aryan language spoken in the India state of Bihar and adjacent areas of Nepal. This language has a secondary set of non-nominative agreement markers which can register referents related to an NP (Yadava 1996; Bickel, Bisang and Yadava 1999). At first sight this could be thought of as relational agreement of the kind illustrated by Lai Chin in the preceding section:

(22) a.  
\[
\begin{array}{l}
\text{u} \\
3\text{NON,HON:DIST:NOM} \\
bhaig-je-t-auk. \\
3\text{NON,HON: NOM-2NON,HON:NOM} \\
\text{run-TELIC:FUT} \\
\text{‘He \text{DISTR:NON,HON} will run away (because he is afraid of you\text{NON,HON}).’} \\
\end{array}
\]

b.  
\[
\begin{array}{l}
\text{ham ekra} \\
1\text{NOM} 3\text{NON,HON:PROX:DAT} \\
m\text{ar-}\text{i}-\text{ah}. \\
\text{beat-PAST-1NOM-2MID,HON:NOM} \\
\text{‘I beat him\text{PROX:NON,HON} (who is related to you\text{MID,HON}).’} \\
\end{array}
\]

However, unlike in true relational agreement, the person inflection in (22) does not substitute for identificational agreement but instead introduces an additional, extra-thematic argument.\(^4\) This is similar to identificational agreement along the lines of affected possessor agreement that was illustrated by the Lai Chin examples in (10) and (11).\(^5\) Confirmation of this comes from the fact that agreement as in (22) is possible only with datives or other obliques. It is incompatible with the nominative type of agreement markers which is reserved for standard subject agreement:

(23)  
\[
\begin{array}{l}
*\text{u} \\
3\text{NON,HON:DIST:NOM} \\
bhaig-je-b-a. \\
3\text{NON,HON: NOM run-TELIC:FUT-2NON,HON:NOM} \\
\text{‘He \text{DISTR:NON,HON} will run away (because he is afraid of you\text{NON,HON}).’} \\
\end{array}
\]
In summary, while Indo-European languages often allow some variation in feature construal and inheritance as well as in ellipsis and argument addition, they do not seem to systematically exploit disagreement as a constructional resource in the way that is common throughout those Tibeto-Burman languages that have agreement systems. I propose the notion of associative agreement to terminologically fix this constructional resource; it contrasts with the integrative agreement typically found in Indo-European, where agreement triggers and targets are integrated with each other into a unified referential expression. It is important to notice that both associative and integrative agreement are grammatically constrained systems, but they are constrained in different ways. In integrative agreement, the basic condition that must be observed is that features are identified at some point and create one single referential expression. Individual languages may impose additional constraints on feature inheritance and construal, e.g. disallowing, as German does, plural agreement of the kind illustrated by (15a) in English. In associative systems, the combination of features must comply with the types of agreement relations that a specific construction allows, and this varies across languages. The relational type found in Lai Chin experience constructions, for instance, is not attested in Belhare. In addition to this, associative agreement can impose, just like integrative systems, additional language-specific constraints. In Belhare, for example, partitional agreement is possible only with human referents (24a). With non-human referents (24b) one has to resort to a circumlocution (24c).

(24) a. i-bay \[3\] Visible[3]-PAST
   one-HUM[ABS] 3NON.SG[3]-Visible-PAST
   ‘One could see one of them (people).’

b. *i-gira \[3\] Visible[3]-PAST
   one-NON.HUM[ABS] 3NON.SG[3]-Visible-PAST
   ‘One could see one of them (e.g. monkeys, houses etc.).’

c. sappe Visible[3]-Neg
   all[ABS] 3NON.SG[3]-Visible-PAST-NEG
   i-gira=etlo
   one-NON.HUM[ABS]=only [3SG:]Visible-PAST
   ‘One couldn’t see all. Only one was visible.’

Such a constraint reflects the low attention Belhare grammar affords to non-human referents — a phenomenon that is typologically comparable to cases
in integrative agreement system where human, or more generally animate NPs are better triggers of (identificational) agreement than inanimate NPs (as, e.g., in Russian dialects; see Corbett 1983: 110–11).

4. Toward a typological explanation

In one respect, the distinction between integrative and associative agreement seems to parallel the one drawn by Bresnan and Mchombo (1987) between grammatical and anaphoric agreement: the compositional nature of associative agreement suggests that the agreement markers have a referential function independent of their associated NPs, and this is also characteristic of anaphoric agreement. However, anaphoric agreement in Bresnan and Mchombo’s sense is incompatible with overt NPs in argument positions since the agreement markers absorb such positions in the syntactic structure of the clause. This is not so in associative agreement systems. As we saw in many examples in the preceding sections, associative agreement is fully compatible with overt NPs in argument position. Unlike what Bresnan and Mchombo find in the Bantu language Chichewa, there is no phrase-structural constraint against the appearance of overt argumental NPs in Belhare or Lai Chin clauses. For instance, word order possibilities in Belhare are entirely independent of whether or not there is object agreement:

(25)  a. *na-kha-ya iya*

\[ \text{DEM-NON.SG-ERG beer[ABS]} \]
\[ n-thuu-u. \]
\[ 3\text{NON.SG[A]-cook-NON.PAST-3[SG]UND} \]

‘These [people] make the beer (i.e. this specific beer here).’

b. *iya na-kha-ya*

\[ \text{beer[ABS] DEM-NON.SG-ERG} \]
\[ n-thuu-u. \]
\[ 3\text{NON.SG[A]-cook-NON.PAST-3[SG]UND} \]

‘The beer is made by these [people].’

(26)  a. *na-kha iya n-thuk-yu.*

\[ \text{DEM-NON.SG[ABS] beer[ABS] 3NON.SG[S]-cook-NON.PAST} \]

‘These [people] make beer.’
The presence of object agreement implies referentiality, its absence a generic use of the object NP. This semantic distinction has no consequence for the phrase structure, which exclusively reflects information structure (see Bickel, in press, for discussion).

While associative agreement can create an appositional semantics, the NPs are not *eo ipso syntactically* relegated to the position of an adjunct or an apposition in the way that is typical for many strictly head-marking languages (cf., apart from Bresnan and Mchombo 1987; DuPonceau 1819; von Humboldt 1836; Van Valin 1985; Mithun 1985; Baker 1996; and many others). This is confirmed by the following observation. One common characteristic of adjunct positions is that they form islands for extractions (cf., e.g. Chung 1998: 85). In line with this, it is impossible in Belhare to extract a constituent out of an adjunct (27). By contrast, extraction out of a subject NP is perfectly possible (28):

(27) a. [a-tak-ŋaha u-khimm-e] n-tupt-he.
   1SG:POSS-friend-GEN 3SG:POSS-house-LOC 3PL[SG]-meet-PAST
   ‘They met at my friend’s place.’

(28) a. [a-tak-ŋaha u-phu-ŋa]
   1SG:UND-[3SG:A-]tell-PAST
   ‘My friend’s elder brother told me.’

Associative agreement is therefore fully compatible with NPs in core argument positions. This suggests that the nonidentificational possibilities offered by such systems is not a typological concomitant of having argument positions absorbed by agreement markers, as is sometimes claimed in discussions of Australian languages (e.g. by Jelinek 1984 or Pensalfini, in press).
At least in Tibeto-Burman languages, the typological source is different. It is tied to a systematically loosened syntactic connection between semantic information represented by NPs on the clause level and semantic information contained in the predicate.

In Bickel (1999b,c,d) a fundamental typological distinction is proposed between the ways in which the interface between syntax and semantic is designed. In languages with an integrative interface, clause- and predicate-level information is simultaneously relevant for the definition of syntactic constraints. Applied to agreement systems, such constraints have the effect that referential features represented on the clause level, i.e. by NPs, are inherently tied to the features represented by the verbal agreement markers and must merge with them into a single unified set. Tibeto-Burman languages have an associative interface design, where clause-level information and predicate-level information are kept separate from each other. In agreement systems, referential features are therefore coded on NPs and verbs separately and are then linked together through the interpretational machinery of associative agreement. An associative syntax-semantics interface implies a general tendency to keep the nominal and the verbal encoding of argument roles separate from each other throughout the grammar. Such a tendency manifests itself in semantics, syntax, and discourse.

In semantics, the associative design principle has the effect that the semantic role structure of verbs is often distinct from that found in the case-marking system. In Belhare, for instance, the transitive actor (A) role of many verbs can be occupied by animate referents only (29a,b). The nominal A marker, i.e. the ergative case, by contrast, covers animate as well as inanimate referents (29b,c):

    cold-ERG [3SG:A]-kill-NON.PAST-3[SG]UND probably
    ‘The cold will probably kill him/her.’

b. a-tak-ŋa seiʔ-t-u
    probably
    ‘My friend will probably kill [the chicken].’

c. cuŋ-ŋa si-yu hola.
    cold-ERG [3SG:S]-die-NON.PAST probably
    ‘He will probably die from the cold.’
Accordingly, if a sentence like the following has a transitive verb form of such a lexeme, the inanimate ergative NP must be understood as instrumental and cannot be taken to fulfill the agentive role:

(30)  laghek-na sisa  her-e.
     stone-ERG  glass(window)[ABS]  [3SG:A-]break-PAST[3SG:UND]
     ‘Somebody broke the window with a stone.’
     Not: ‘The stone broke the window.’

Such differences between case and agreement semantics are usually not found in Indo-European languages, at least not in their most prominent case, i.e. the nominative.

Relational syntax too keeps NP and verb structure strictly apart. Belhare has one type of experience expression which is modeled after the pan-Indo-European and pan-South Asian experiencer-as-goal construction. In this constructional type, the experiencer NP appears in a goal-marking case, which corresponds in Belhare to the zero-marked absolutive (31a). The construction contrasts with experience expressions in the regular transitive scheme, as in (31b):

(31)  a.  han  ina  lim-yu  i?
     2SG[ABS]  beer[ABS]  [3SG:S-]be(come).tasty-NON.PAST Q
     ‘Do you like the beer?’ (lit., ‘is the beer tasty to you?’; cf. Nep. timlāi jād miṭho lägyo?, Germ. Schmeckt dir das Bier?, Russ. Pivo nravitsja tebe? or Span. ¿Te gusta la cerveza?)
     b.  han-na  tombhira  kīṭ-t-i-ug-a  i?
     ‘Are you afraid of the lynx?’

The experiencer, not the stimulus, qualifies in Belhare as the subject, following the universal Thematic Hierarchy (as proposed by, e.g. Foley and Van Valin 1984; Givón 1984; Bresnan and Kanerva 1989). It is immaterial for this whether the experiencer is in the absolutive (31a) or in the ergative (31b) case. Therefore, both absolutive and ergative experiencers can be relativized on in a participial relative clause (32a,b), a construction that is restricted to subjects (defined as the set of S ‘single intransitive arguments’ and A ‘transitive actors’), as shown by (32c–e) (cf. Bickel, in press, for further discussion):
(32)  a.  

\[ i \text{ ga, } \text{ka-lim-ba } ma'i \]


‘the man who likes the beer’  (A-Experiencer, ABS)

b.  

\[ \text{tombhira } \text{ka-kit-pa } ma'i \]


‘the man who is afraid of the lynx’  (A-Experiencer, ERG)

c.  

\[ \text{dhol } \text{ka-ten-ba } ma'i \]


‘the man who beats the drum’  (A-Agent, ERG)

d.  

\[ *\text{ka-ten-ba } \text{dhol } \]

\[ \text{ACT.PART-beat-MASC drum[ABS]} \]

‘the drum that [one] beats’  (UND-Patient, ABS)

e.  

\[ \text{asenle } \text{ka-pikga-ba } ma'i \]

lately ACT.PART-fall.down-MASC person[SG:ABS]

‘the man who fell down lately’  (S-Theme, ABS)

Thus, the constraint on participial relativization is exclusively sensitive to information from thematic roles on the verb level (i.e. to what Goldberg 1995 calls participant roles); clause-level case-marking on NPs (which corresponds to Goldberg’s argument role) is irrelevant. In Lai Chin too, constraints involving grammatical relations are not sensitive to NP-marking and are mapped directly from the semantic structure of the verb. Like Belhare, Lai Chin has a relative construction that is restricted to subjects (Lehmann 1997; Peterson 1998; Kathol and Van-Bik 1999; Bickel 1999b). Whether an experiencer is coded as a possessor as in the psycho-collocations discussed above or whether it is coded as a regular ergative argument is again irrelevant.

(33)  a.  

\[ a-\text{læng } \text{ka-rock } mi: \text{læw thlāw } \]


\[ pa: \]

MASC[ABS]

‘the farmers who are disappointed with me’  (A-Exp., POSS)

b.  

\[ a-\text{ka-thāy } mi: \text{læw thlāw } \text{pa: } \]

\[ 3[SG]A-1[SG]UND-know:Σ1 NMLZR farmer \]

MASC[ABS]

‘the farmer who knows me’  (A-Exp., ERG)

This is in stark contrast with Indo-European languages where grammatical relations not only rely on the hierarchy of verb-level thematic roles, but are
usually at the same time sensitive to the case-marking on NPs. In both German (34) and Marathi (35) (Indo-Aryan; Pandharipande 1990), for instance, experiencers qualify as subjects only if they are in the nominative. If they are in the dative as in experiencer-as-goal constructions, they typically fail to qualify as subjects (Bickel 1999b):

(34) a. Dem Lehrer
   schmeck-t Bier.
   be.tasty-3SG:NON.PAST beer(NEUT):SG:NOM
   'The teacher likes beer.'

b. *der Bier
   schmeck-end-e Lehrer
   be.tasty-ACT.PART-MASC:SG:NOM teacher(MASC):SG:NOM
   'the teacher who likes beer'

(35) a. mulgi-lâ sâdhî āvâd-te.
   'The girl likes the saree.'

b. *sâdhî āvâd-nârî
   mulgi
   girl(FEM):SG:NOM
   'the girl who likes the saree'

Thus, there appears to be a systematic typological distinction between Tibeto-Burman and Indo-European languages, and this distinction follows from different design principles in the syntax-semantics interface: the associative type of interface found in Tibeto-Burman implies that grammatical relations do not integrate clause-level information. Grammatical relations in languages with integrative interfaces as common in Indo-European, by contrast, are necessarily sensitive to clause-level information and cannot be reduced therefore to verb-level participant roles in Goldberg’s (1995) sense.

On the level of discourse, finally, the associative grammar design is manifested in Tibeto-Burman by the ease in which argumental NPs can be dislocated from the verb to which they semantically belong. It is not uncommon in these languages to find structures like the following (Belhare examples):
(36) a. i-gira  
    hott-he-ga  
    i? han-na i-gira  
    Q 2SG-ERG one-NON.HUM[ABS] 
    ‘You took one out, didn’t you? You — one?’

b. “abo yeti  
    n-ni-at-ni-ŋ?”

    now what[ABS] NEG-see-PAST-NEG[3SG:UND]-1SG:A 
    =bu lur-he,  
    raja-a khehuña  
    =REP [3SG:A]-tell-PAST[3SG:UND] king-ERG like this 
    bahuni-na  
    Brahmin(FEM)[ABS]-TOP

    ‘“Now what didn’t I see?” said the king to the Brahmin’s wife.’ (literally, ‘… he said, the king to the Brahmin’s wife’)

This is in line with a general discourse tendency to avoid clauses with overt NPs. In a narrative production experiment (Bickel 1999d), Belhare speakers produced on the average about 61% clauses with one or more overt NP, a figure which is significantly lower than the 69% and 77% that were characteristic of, respectively, Nepali and Maithili (also cf. Genetti and Crain, in press), Indo-European languages with integrative agreement (see above, Section 3) but otherwise similar syntax.

The associative design of the syntax-semantics interface and the disintegration of NP and verb structure it entails seems to be general even beyond the limits of those Tibeto-Burman languages that feature verb agreement and also manifests itself in Sinitic and Lolo-Burmese languages. Here, the disintegration between NPs and verbs is achieved through what has been called ‘topic-prominence’ since Li and Thompson’s (1976) seminal contribution. A recent study by Tao (1996) shows that only about half of Mandarin Chinese intonation units consist of verb-headed clauses. A substantial proportion (28.7%) of the rest are made up by bare NPs with various discourse-pragmatic functions, topics among them. (The remainder draws on adverbials and particles.) Thus, Mandarin appears to follow the principle of associative grammar by means of intonation, which tends to separate the verb-headed clausal core from NPs. It is likely that other Sinitic and Lolo-Burmese languages are similar in this regard, and this would suggest that an associative design of the syntax-semantics interface is indeed a general characteristic of Sino-Tibetan syntax. From such a perspective, associative verb agreement and topic-prominence are complementary reflexes of one and
the same general design principle in the syntax-semantics interface. This explains why those languages that make most use of verb agreement, such as Kiranti languages, do not generally employ Chinese-style topic constructions (Bickel 1993, 1999a), and why those languages that rely heavily on topic constructions, such as Sinitic and Lolo-Burmese languages (Li and Thompson 1976), lack verb agreement.

5. Conclusions

The principle of an associative type of syntax-semantics interface that underlies agreement in languages such as Belhare or Lai Chin imposes a strict distinction between NP and verb structure: features of NPs are established independently of those marked by the conjugational system; the two sets of features are combined through a complex mechanism that allows several types of agreement relations, each with different semantic entailments. This contrasts with agreement in languages with an integrative syntax-semantics interface where the features of NPs and verbal forms systematically merge into a unitary referential expression.

As suggested in Section 4, the principle of associative grammar holds generally for Sino-Tibetan languages and can manifest itself not only through agreement systems but also through a topic-prominent sentential syntax that tends to separate the nominal from the verbal domain by intonational phrasing. There is evidence, discussed in Bickel (1999b, c), that the difference between integrative and associative types of syntax-semantics interfaces is genetically stable to a remarkable degree and that it manifests itself in genetically related languages even when they are typologically extremely diverse in terms of word order, case alignment and other morphosyntactic parameters. From this perspective it does not come as a surprise that the similarity in interface principles between Belhare and Lai Chin is in no conflict with the fact that the actual agreement morphologies of these languages are very different from each other, and that there is as yet no conclusive evidence that they derive from a common system — indeed, it is possible that the morphologies evolved through independent but parallel cliticization and grammaticalization of pronominals. In Belhare, such cliticization appears to have occurred in the domain of predicate nominals, and the resulting agreement system follows exactly the same principles as verb
agreement. The following examples illustrate identificational (37a), apposi-
tional (37b), and partitional (37c) agreement in nominal sentences:

(37) a. \( \eta ka \ n-tak-\eta a. \)
1SG:ABS 2SG:POSS-friend-[1SG]EXCL
'I am your friend.'

b. \( m-phaj \ u-ch\eta a \)
2SG:POSS-younger.patrilineal.relative-[1SG]EXCL
'As your father’s younger brother’s son, I am your clan broth-
er.' (i.e., 'As your paternal uncle’s son, I belong to the same
patrilineage as you. ')

c. \( i\)-ba\(j \ co\r-chi-\gamma a. \)
'One of you is a thief.'

Whatever individual diachronic developments led to agreement morphology
in the nominal and verbal domain, the principle of associative syntax is the
same throughout.

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NOTES

1. The conjugational morphology of Belhare is discussed in Bickel (1995, 1996). Note that in the practical orthography (c) represents /ts/ and that automatic word-initial glottal stop is not written. The following abbreviations are used in examples: A 'actor, most agentive argument of transitive verb', ABL 'ablative', ACT 'active', AFF 'affected object', ART 'article', CAUS 'causative', CLASS '(default) classifier', DAT 'dative', DEF 'definitive future', DEM 'demonstrative', DIM 'diminutive', DIR 'directional case', DIST 'distant', EMPH 'emphatic', ERG 'ergative', EXCL 'exclusive', FEM 'feminine', HUM 'human (classifier)', IMP 'imperative', INCL 'inclusive', INTERJ 'interjection', LOC 'locative', MASC 'masculine', MID'HON 'mid-honorific', NEG 'negative', NON'HON 'non-honorific', NON'HUM 'non-human', NON'NOM 'non-nominal', NOM 'nominalizer', NOMSG 'non-singular', NLZIR 'nominalizes', OPT 'optative', PART 'participle', PL 'plural', POSS 'possessive', PROX 'proximal', Q 'interrogative', S 'single argument of intransitive verb', SEQ 'sequential', SG 'singular', TEMP 'temporary (aspect)', TOP 'topic', UND 'undergoer, most patientive argument of transitive verb', Σ 'stem form (in Chin)’. ‘>’ marks a transitive relation, ‘=’ signals a clitic boundary. Elements in square brackets are entailed by paradigm structure or obligatory opposition without being overtly marked (i.e. zero-marked).

2. Lai Chin morphology is discussed by Kavitskaya (1997) and Peterson (1998). Note that the standard Roman orthography of Lai Chin suggests that what I analyze here as agreement markers are independent pronouns. However, as demonstrated by Bedell (1995), this is at variance with their grammatical properties, and I adopt here an orthography that reflects this. In line with common practice in South-East Asian linguistics, I use spaces to demarcate prosodic rather than morphosyntactic words (which often comprise long series of prosodic words). As in Belhare (see Note 1), glottal stop is automatic in vowel-initial words and is not written here.

3. A literal translation of (10a) into German brings this structure to the fore: Sie machen mir mein Herz grün ‘they make my heart green for/on me’, where the first person pronoun mir in the dative marks the possessor as an affected participant.


5. Thus, a closer translation of (22a) is German Er rennt dir davon ‘he runs away on you’, with the second person pronoun dir in the dative representing an affected additional argument.

6. For the concept of head-marking, see Nichols (1992). Belhare and Lai-Chin are double-marking languages with both case and agreement systems signaling argument roles.


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