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9.1 Introduction

In this Unit, we discuss different kinds of agreement patterns that are available in South Asian languages. As mentioned earlier, South Asian languages exhibit a variety of agreement patterns from null agreement to very rich agreement. Tibeto-Burman languages permit the incorporation of quantifiers, NPIs and we provide examples to illustrate the phenomena. We also discuss the cases of incorporation in polysynthetic languages and semi-polysynthetic languages. We provide a discussion of Long-Distance Agreement in South Asian languages.

9.2 What are semi-polysynthetic languages?

According to Subbarao (2012:103), there are languages in which incorporation of pronominal clitics, quantifiers, negative polarity items, take place. In Kuki-Chin languages for example 1 and 2 person pronominal clitics and postpositions are 'incorporated' in the verb, and the pronoun may be overtly present, or it may be covert.

According to Subbarao (2012:103), "the verb may or may not include an expression of each of the main participants obligatorily in the events described by the verb." Hence, he labels them as 'semi-polysynthetic languages'. In addition to Tibeto-Burman languages, Northern Munda languages such as Santali, Mundari and Ho and the Mon-Khmer Khasi too exhibit this phenomenon. Postpositions too are incorporated in the verb and we shall see that Postposition

Incorporation increases the valence of the verb just as causatives do. Incorporation of quantifiers, NPIs (negative polarity items), adverbs do not either increase the valence, nor do they decrease the valence of a predicate in Tibeto-Burman languages.

Pronominal Clitics

Hmar is a sister language of Mizo and while it shares many structural similarities with Mizo, it does differ in some syntactically significant ways.

We provide an example from Hmar (Kuki-Chin) to illustrate our point. Unlike Mizo, Hmar does not exhibit Subject-Object Asymmetry with regard to agreement. In Hmar, the Principle of Pronominal Strength Hierarchy with regard to subject –direct object agreement does not operate. Note that when the direct object is in 1st person, the subject agreement marker of 3rd person is overtly present (1) below.

Hmar (Kuki-Chin, Tibeto-Burman)

1. zara- in pro a- **mi-** hmu
Zara- erg (me) 3sg **1 sg (me)-** saw
'Zara saw me.'

(Subbarao 1998)

We provide another example from Hmar (Kuki-Chin) to show that indirect object in 1 person triggers pronominal suffixal agreement. The indirect object is *mi* 'me'.

Incorporation of Pronominal suffixes in the verb –Incorporation of the Indirect Object

Hmar

2. lala- In pro lekhabu a- **mi-** pek- tah

lala- Erg (me) book 3sg 1 sg (me)- give- pst
 'Lala gave a book to me.'

In Kuki-Chin languages the pronominal clitics of the subject in 1, 2 and 3 person occur in the verb. In addition, these languages permit the occurrence of the pronominal clitics of the direct object, indirect object and even an oblique object with postposition when it is incorporated.

Mizo, a Kuki-Chin language of the Tibeto-Burman language family, the 1 person direct object clitic occurs to the left of verb stem as in (Y) and the 2 person object clitic occurs to the right of the lone verb stem or the tense marker, if the verb stem is followed by the future tense marker as in (Y). The 3rd person subject agreement marker is *a-*, and it is not overtly present in (Y) for reasons which we explicate below. We have marked the absence/non-occurrence of the 3rd person subject agreement marker by \emptyset for expository reasons.

Mizo (Kuki-Chin)

3. *lali- n \emptyset min- ei- pui- aŋ*
3 sg Erg (3sg SAM) 1 sg DO (OAM) eat with- Fut
 'Lali will eat with me.'

SAM is Subject Agreement marker and OAM is Object Agreement marker.

In Hmar, an ergative marker *-n/a* occurs with the subject, when the verb is [+transitive].

The verb also agrees in number and person with the subject and with 1 and 2 person direct and indirect object in Hmar. In (4) the verb agrees with the subject Zovi.

Hmar (TB)

4. *zovi a- Fe*

Zovi 3 sg- go/went

(nom)

'Zovi went/goes.'

Athpahariya, aka, Athpari, a Tibeto-Burman language of the eastern group Kiranti subgroup, spoken in Nepal also exhibits the incorporation of pronominal clitics in the verb.

5. pro Pro yaŋ- a- had- i- t- i
(2 pl) (1 sg) 1 sg- 2 - bite- pl- nonpst- copy

'You (pl) bite me.'

(Tumbahang 2011:91)

In Hmar (Kuki-Chin) the comitative PP which is an oblique argument can be incorporated as a pronominal clitic.

Incorporation of the Comitative PP

Hmar - Incorporation with a [-transitive] verb: [-transitive] verb > [+transitive] verb

6. lalii- in Proj in- t̚ʃuŋ- pui- ka- ti- ce
Lali-erg (you) vref- sit- with- 1sg- fut- 2sg

'Lali'll sit with you.'

Another interesting feature of the Kuki-Chin languages is that adverbs can be incorporated.

9.3 Incorporation of adverbs, NPIs, quantifiers etc.

In Mizo, adverbs are incorporated to the right of the verb as shown below. Such incorporation shows that the verb is not the final constituent after incorporation.

7. lali- tsu a- tlai- ziah
Lali Def 3sg late- always

"Lali is always late."

In Mizo intensifiers indicating quantity are incorporated in the verb.

8. lali- n a- chiar- tlem
Lali- erg 3sg- read- less

'Lali studies less.' (Subbarao & Laiitha Murthy 1997)

Adverbs are incorporated in Hmar too. The adverb *fast* for example is incorporated in Hmar.

In sentence (9) in Hmar the adverb *hra^t* 'fast' is incorporated.

Hmar (Kuki-Chin)

9. lali a- tla^n hra^t
Lali 3sg- run fast

'Lali runs fast.'

However, when the adverb is in the scope of an intensifier, then, incorporation is **not** permitted as (10) below illustrates.

Incorporation not permitted of an adverb with intensifier

10. lali hra^t takin a- tla^n
lali fast -ly/very 3sg- run

'Lali runs very fast.'

An intensifier as such can be incorporated as the example from Mizo (Kuki-Chin) shows. The intensifier *emem/hle* is incorporated in the verb in (11).

Mizo (Kuki-Chin)

11. lala- lo- kal a- hmuh cuan lali- cu- a- hlim- emem/hle
Lala towards go 3sg- see cpm Lali- def 3sg- happy- intensifier

'Seeing Lala coming, Lali felt very happy.'

(Lydia Kiangte, 2015)

Negative Polarity items are incorporated in Khasi (Mon-Khmer). Recall that Khasi is a verb-medial language. The NPI *pat* 'yet' occurs to the right of the negative morpheme *-m-* 'not'. A negative c-commands the NPI and it C-Commands the NPI in (39).

Khasi (Mon-Khmer)

12 ka-kayt [ba- la- bām u- khinna?] ka-m-
f-banana adjr- pst- eat m-child 3fs-neg-
pat- i?
yet(NPI)- Ripe

‘The banana that the boy ate was not yet ripe.’ (Grace Tansen p.c.)

Quantifiers too can be incorporated in the verb in Kuki-Chin languages.

The universal quantifier *vāy.in* ‘all’ occurs in the subject position in the phrase *an- vāy.in* ‘all of them’ and also in the verb as the verbal quantifier *vek* ‘all’.

Mizo (Kuki-Chin) No incorporation of the quantifier - Free quantifier

13 a. kholāy.ah kan- vāy.in kan- ṭṣu-
outside 1pl- all 1 pl- sit-
‘We all are sitting there.’

Incorporation of the quantifier - Bound quantifier

13 b. kholāy.ah kan- ṭṣu- vek
outside 1 pl- sit- all
‘We all are sitting there.’

Quantifier Doubling

13 a. kholāy.ah kan- vāy.in kan- ṭṣu- vek
outside 1pl- all 1 pl- sit- all

'We all are sitting there.'

Another significant feature of Hmar agreement is that the possessor of direct object exhibits agreement with the verb. Note that possessor is neither a subcategorized argument, nor is it a non-subcategorized argument.

Hmar (Tibeto-Burman)

14. zova- n ka- kut a- mi- sɔ:p- pek

Zova- erg my- hands 3s- 1s- washed- oben

'Zova washed my hands.'

(Subbarao 1998)

The possessor is ka 'my' and the verb carries the corresponding 1 person object agreement marker which is *mi*.

Possessor agreement is found in Munda languages too.

As mentioned earlier, Sora is a polysynthetic language. In Sora too, the possessor of the direct object is incorporated as sentences (15) show. *jēŋ* 'legs' is the direct object of the verb *lēm* 'bow' and the possessor of the direct object is incorporated as *am* 'your'.

Sora (Munda)

15. pro lēm- jēŋ- t- am

(I) bow- legs- [-pst]- your

'I bow to your legs.'

(Ramamurti 1931: 43)

In Ho (Munda), the possessor of the indirect object *ote* 'field' is incorporated, as *mi* 'your' in the verb.

Ho (Munda)

16. jema_i aye- ʔa Ote ria daʔa ama_j ote-
 Jema he- Gen Field gen water Your field-
 e_i- em- aɖ- *mij-* a
 3s- give- pstperf- 2s- fin

‘Jema had given his field’s water to your field.’

(Subbarao, 2012:105)

Santali (Munda) too exhibits a similar phenomenon.

Santali (Munda)

17. kora- dɔ kuri- (y)e dal- ke- d- e- ti- ɲ- a
 boy- topic girl- 3s beat- pst- [+tr]- 3s- gen- 1sg- fin

‘The boy beat my girl.’ (*‘My boy beat the girl.’)

(Macphail, *ibid*)

The genitive of the direct object *-ti-* ‘of’ is incorporated in the verb, and so is the 3 singular subject clitic *-e-* ‘3sg’ and the possessor of the direct object *-ɲ-* ‘1 sg’. Note that the agreement marker of the subject *-(y)-e* ‘3sg’ occurs twice, once on the pre-verbal constituent which is *kuri* ‘girl’ and to the left of the declarative or finite marker.

9.4 Postposition Incorporation and Valence Increase

We shall discuss Postposition Incorporation in Hmar. We shall discuss the effects of postposition incorporation on the transitive nature of the verb. We shall also discuss the phenomenon of Pronominal Strength Hierarchy found in agreement.

As the verb *ʃʂuŋ* 'sit' is [-transitive], the subject in (18) is nominative case-marked, and the nominative case marker in Hmar is null. The oblique object is comitative case-marked by *-le*. However, when there is a comitative PP in 1 person, the verb exhibits agreement with the comitative PP in 1 person plural. The 3 person subject agreement marker does not occur, as 1personComitative PP is stronger than 3 person subject. The Principle of Pronominal Strength Hierarchy operates in verb agreement in many Kuki-Chin languages, where

19. 1 person > 2 person > 3 person.(Subbarao 1998, 200 XX, 2012).

Another interesting feature is the agreement marker is in 1 person plural, as the 3 person subject and 3 person comitative PP together constitute the plural. Hence, the agreement marker is in 1 person plural in (18)

Hmar (TB)

18. zovi kei- le- cau kan- *Fe*
 Zovi I- with- only- 1pl- go/went
 (nom)

'Zovi went/goes only with me.'

In (19) too, the agreement marker is 2 person plural, as the 3 person singular and 2 person singular together trigger plural agreement and the agreement marker is 2 person 2 p plural is stronger than 3 person singular.

19. Zovi *naŋ-* *le* cau in- *fe*
 Zovi you- with only 2pl- go/went
 (nom)

'Zovi go/went only with you.'

Kuki-Chin languages permit postposition incorporation. The postposition *le* 'with' is the comitative/associative case marker in Hmar. When incorporated in the verb, it takes a different form, and it is *pui* 'with'. Thus, *le* 'with' has the allomorph *pui* 'with' verbs. Needless to mention, the postposition *le* 'with' and the verbal clitic *pui* 'with' are in complementary distribution, though they occur with different constituents, namely, *le* 'with' with a noun and *le* 'with' with the verb. When incorporation takes place, the incorporated postposition occurs to the right of the verb *fe* 'go'. Due to incorporation the valence of the [-transitive] verb *fe* 'go' is raised by one and consequently, *fe.pui* 'go.with' becomes a [+transitive] verb. Once the predicate gains the status of a transitive verb, the subject Zovi is ergative case-marked, as [+transitive] verbs require their subject to be ergative marked in all three persons, tenses and aspects. Once the postposition is incorporated, we only have bare pronouns *kei* 'I' and *nan* 'you' in (20) and (21) and they gain the status of direct objects. Since they are direct objects in 1 and 2 persons respectively at this stage in the derivation, they are incorporated as pronominal clitics in the predicate –*mi*- '1 person DO' and –*ce*' 2 person DO' as in (20) and (21) below.

POSTPOSITION *le* 'with' INCORPORATED INTO THE VERB

20.	<i>zovi-</i>	N	<i>kei</i>	<i>cau</i>	a-	<i>mi-</i>	<i>fe-</i>	<i>pui</i>
	Zovi-	erg	I	only	3s-	1s-	go/went	with

'Lali goes/went only with me.'

21.	<i>zovi-</i>	N	<i>nan</i>	<i>cau</i>	a-	<i>fe</i>	<i>pui-</i>	<i>ce</i>
	Zovi-	erg	you-	only	3s-	go/went	with-	2 s

'Zovigoes/wentonly with you.'

In sentences (20) and (21), the following are worth noticing:

- (i) the subject carries the ergative case marker *-n*,
- (ii) 1 and 2 person pronominal clitics occur to the right of the verb *ʔʂuŋ'sit'*, and
- (iii) The pronouns *kei'l'* in (20) and *naŋ* 'you' in (21) are accusative case-marked, and they are not comitative PPs, in contrast to (17) and (18).
- (iv) the pronouns *kei'l'* in (20) and *naŋ* 'you' in (21) can overtly occur in spite of the occurrence of the incorporated verbal clitic *-ce* 'you.sg', as the pronouns *kei'l'* in (20) and *naŋ* 'you' in (21) are in the scope of a limiter such as *cau* 'only'.

Thus, the [-transitive] verb of (18) and (19) is 'transitivized' in (20) and (21) after the incorporation of the comitative postposition *le*. Since the pronouns *kei'l'* and *naŋ* 'you' are in *derived direct object position* in (20) and (21) by virtue of not having the postposition *le* 'with', the pronominal clitic *mi* '1 singular clitic' in (20) and *ce* '2 singular clitic' in (21) occur with the verb.

Interestingly, if *cau* 'only' is not present, then, *kei'l'* or *naŋ* 'you' cannot occur.

22. zovi- N (*kei) a- mi- fe- Pui
Zovi- erg I 3s- 1s- go/went With

'Lali goes/went only with me.'

23. zovi- N (*naŋ) a- fe pui- Ce
Zovi- Erg you- 3s- go/went with- 2 s

'Zovi goes/went only with you.'

In (22) above, the 3 person subject agreement marker cannot occur as 1 person agreement marker is stronger than 3 person singular. This is due to the Principle of Pronominal Strength Hierarchy that operates in Mizo in this case and the other Kuki-Chin languages in general. The pronominal clitic of the direct object in 1 person is *min-* in (Y).

Mizo (Kuki-Chin, Tibeto-Burman)

24. *lali- n a- ei- pui- aŋ tse*
Lali- Erg 3sg- eat- with- Fut 2sg
"Lali will eat with you."

(24) shows that Principle of Pronominal Strength Hierarchy is not operative, when the DO is in 2 person, as 3 person agreement can co-occur, when 2 person agreement marker occurs.

The Principle of Pronominal Strength Hierarchy is also operative, when the indirect object is in 1 person.

We shall now attempt to demonstrate that postposition incorporation enhances the valence of the verb or adjective by one argument. That is, if the verb or adjective is [-transitive], it becomes [+transitive], once the postposition is incorporated.

It must be mentioned here that in Tibeto-Burman languages adjectives behave like verbs in that they take agreement markers, non-finite complementizer, they participate in incorporation just as verbs do, they take causative suffixes that enhance their valence etc.

In (1) below, the adjective *hlim/lom* 'happy' is [-transitive] and hence, the subject *Zovi* does not take the ergative marker and it is in the nominative case. *kei-le* 'I-with' is an adverbial phrase and it is a subcategorized argument.

25. *Zovi kei- le- cau kan- hlim/lom*
Zovi (nom) I- with- only- 1pl- happy
(nom)

'*Zovi* is happy only with me.'

In (25) below, the postposition *pui* 'with' is incorporated in the verb. The following processes take place.

- (i) The subject is marked with the ergative case marker.
- (ii) Since *le* 'with' is incorporated as a verbal clitic, *le* 'with' does not occur in (2).
- (iii) The bare pronoun *kei* 'I' acts as the object for the newly-formed predicate *hlim- pui* 'happy-with', as it is [+transitive] due to incorporation. *kei* 'I' is incorporated as a pronominal clitic *mi* '1 sg' reflecting the direct object.
- (iv) The occurrence of *kei* 'I' is optional and in fact, the native speaker prefers not to retain it.

Postposition *pui* 'with' incorporated in the verb

26. *zovi- N (kei) a- mi- hlim- pui*
Zovi- erg (I) 3sg- 1 sg DO- happy- with

'*Zovi* is happy with me.'

We've seen that just as verbs permit incorporation, adjectives also permit incorporation. Adjectives behave precisely the same way that verbs do. We can conclude that adjectives are in fact verbs.

9.5 Long-Distance Agreement (LDA)

Agreement generally is a local phenomenon and it takes place within a simplex sentence. Just like Long-Distance Anaphora, agreement may also take place beyond the sentence in which the constituent that triggers agreement. Such a phenomenon is called Long-Distance Agreement (LDA). Just as in long-distance anaphoric binding, in long-distance agreement too, the embedded clause ~~that contains the antecedent~~ must be [-finite]. LDA is a phenomenon that is found in Dravidian, Indo-Aryan and Tibeto-Burman languages.

We provide first the cases of LDA *inobject complements* from Hindi-Urdu, Punjabi and Marathi (Indo-Aryan).

The direct object in the embedded sentence [_{S2}PRO *sākil*calānī_{S2}] ‘cycle drive-inf’ is *sākil* ‘cycle’ which is feminine in Hindi-Urdu, and it triggers agreement on the matrix verb *ā* ‘come’ yielding *ātīthī* ‘used to come’.

Hindi-Urdu (IA)

Long-distance agreement with the embedded object *sākil* ‘cycle’:

27. rām ko [_{S2}PRO *sākil*_i calā- n- *tī*_{S2}] ā- tī_i thī_i
 Ram dat cycle drive- inf- F come- imperf.f pst.f
 ‘Ram used to know how to ride a bicycle.’

In Hindi-Urdu there is another possibility where the infinitive *calā.nā* ‘drive.inf’ in the embedded clause does not exhibit agreement with *sākil* ‘cycle’, the embedded object. As a result, the matrix verb exhibits default agreement.

No Long-distance agreement with the embedded object *sākil* ‘cycle’:

28. rām ko [_{S2}PRO *sākil* calā- n- ā_{S2}] ā- Tā Thā

Ram dat cycle drive- inf- m come- imperf.m pst.m

‘Ram used to know how to ride a bicycle.’

Punjabi (Indo-Aryan)

Long-distance agreement with the embedded object *sāikil* ‘cycle’

29. prakāš nū [s₂PRO sāikil_i calā- ṅ- ū_is₂] ā- ndū- sī

Prakash Dat cycle drive- inf- f come- imperf- pst

‘Prakash used to know how to ride a bicycle.’

In Marathi too, LDA is permitted. *gāḍī* ‘vehicle’ is feminine, singular. Unlike in Hindi-Urdu, Marathi has masculine, feminine and neuter gender for nouns. Since *gāḍī* ‘vehicle’ is feminine, singular, the verb *yete* ‘came’ in (30) exhibits agreement in feminine, singular.

Marathi (Indo-Aryan)

30. rām- lā [s₂PRO gāḍī tsālavtā_{s2}] Yete

Ram- dat vehicle.sg.f drive.inf.f come.pst.sg.f

‘Ram can drive a vehicle’=‘Ram knows how to ride a bicycle.’

In (31) below, *gāḍyā* ‘vehicles’ is feminine, plural and hence, the verb *yete* ‘came’ exhibits agreement in feminine, plural.

31. rām-lā [s₂PRO gāḍyā tsālavtā_{s2}] Yetāt

Ram-dat vehicle.pl.f drive.inf.f come.pst.pl.f

‘Ram can drive vehicles’

In Hindi-Urdu there is another option that some speakers prefer, namely, the embedded infinitive does not show agreement with the embedded subject, and it is only the matrix verb that manifests agreement with the embedded subject.

32. ek ghanṭe mẽ frij cal- Nā
one hour In refrigerator.f.s. start inf.m.s.defagr
 šurū ho jāegī
start become will.f.s

We now provide examples of from subject complements, where the subject of the embedded clause is raised to the position of the subject of the matrix clause. Note that just as in object complements, the verb of the embedded clause is [-finite].

SUBJECT COMPLEMENTS (NONFINITE)

Hindi-Urdu (IA)

33. [_{S2}ḍepo Se basē nikal- nī_{S2}]
 bus station from buses f, p start- inf, f, s
 šurū Ho gayī
 start Be went f, p

'The buses began to start from the bus station.'

34. [_{S2}šādī kī taiyāriyā ho- nī_{S2}] šurū ho gayī
 wedding of plansf,p be- inf, f, s start be wentf,p

'Plans for the wedding got started.'

(Subbarao *et al* 2007:315)

We provide an example from Telugu (Dravidian). *vāḍu* 'he' is the subject of the embedded clause. It triggers masculine, singular agreement on the matrix verb *unnāḍu* 'is'.

LONG-DISTANCE AGREEMENT

35. [_{S2}vāḍu_i manci- vāḍu_{S2}] lā unnā- ḍu_i

he good- 3 s,mpron suffix comp be.pres- 3s,m

'He appears to be a nice fellow.'

(Subbarao 2001: 483) is the subject of the matrix verb.

In Mizo (Tibeto-Burman) the matrix verb *a-ni* '3 singular-be' is in the singular, as the entire embedded sentence S_2 is the subject of the matrix verb in (36).

Mizo (TB)

36. [s_2 amirikā Mite cu_i *an_i*- thau tak- tak s_2] $_j$ *a-* ni $_j$

American People def 3p- fat very- very 3s- be

'It is the case that Americans are very fat.' (a slightly modified version from the original- the intensifier *very* is added in sentence translation)

(Subbarao 2001:481)

(36) Literally means: '(That) Americans are very fat is the case.'

In (37), the subject of the embedded clause raises to the position of the subject of the matrix clause, as a result of which the matrix verb exhibits agreement in 3 plural. In Mizo and Hmar and possibly, in the other Kuki-Chin languages, adjectives and verbs do not manifest agreement markers if the subject is not overtly present. Hence, the adjective carries a null (\emptyset) agreement marker, which we've indicated by \emptyset . Now that the embedded subject is in the derived subject position of the matrix clause, the matrix verb manifests plural agreement marker as the newly-derived subject triggers agreement on the matrix verb [see Subbarao 2001 for further discussion].

37. amirikā Mite cu_i \emptyset - thau tak- tak *an_i*- ni

American People def *fat* very- very 3p- be

'It is the case that Americans are very fat.'

9.6 Conclusion

In this chapter we've discussed the nature of semi-polysynthetic languages. We have also discussed Postposition Incorporation and shown that it raises the valence of the predicate by one argument. We've also discussed incorporation of adverbs, NPIs, quantifiers etc. in Tibeto-Burman languages and Khasi. We've shown how long-Distance agreement works in South Asian languages based on evidence from Indo-Aryan languages, Tibeto-Burman languages, and Dravidian languages.

