

Hayu Typology and Verbal Morphology Boyd Michailovsky

O. Introduction

The following notes on Hayu are based on field work by Martine Mazaudon and myself in the village of Murajor, Ramechhap District, Nepal. Hayu is a Tibeto-Burman language with probably less than 500 speakers, all of whom speak Nepali, an Indo-Aryan language.

Hayu was studied in the last century by Brian H. Hodgson. His excellent work was published in the Journal of the Asiatic Society of Bengal 26 (1857) pp. 382-398, with errata in JASB 27 (1858) (at the end of the volume). This work was reprinted in Hodgson, B. H., Miscellaneous Essays Relating to Indian Subjects, London, 1880, vol. 1, pp. 161-319. The article in the Linguistic Survey of India (III.1: 382-398) by Sten Konow is entirely based on Hodgson's articles.

For the phonology of Hayu, see the appendix to this paper and also Michailovsky and M. Mazaudon, "Notes on the Hayu Language", Kailash 1.2 (Kathmandu, 1973), pp. 135-152.

The present paper is the first version of a grammatical sketch that I intend to eventually publish with a collection of texts. Criticism is welcome.

1. Hayu as an SOV Language

1.1 The basic word order of Hayu is subject-object-verb.

1. ga mi dzæmmə totop+ha ton+me+m
I-erg. he all(N) having beaten I'll-chase+them+M
'I'll beat them and chase them off.'
2. gon+ha gu ima ... xwan-xwan dza piŋ+suŋ ...
you-erg. I thus (adv) eat CAUSE+me ...
'You let me stuff myself like this [so bless you.]'

SOV order is not strictly adhered to, however. OSV is also permitted; in 3, the object is clearly focused on:

3. e kikki, inoŋ juŋkha lat+ji siŋtoŋ nakpu
hey grandpa, here down go+er man two
gon+ha jeŋ+ko ki ma?
you+erg saw or(N) not
'Hey grandpa, did you see two people going down this way?'

Note that the ergative marker on the subject of a transitive verb eliminates any ambiguity whether arguments are rearranged or deleted.

Even the final position of the verb is by no means obligatory. But when elements are placed after the verb and sentence particles, there is a marked drop in intonation. (This does not apply to vocatives, which often follow the verb.) In 4 and 5, I mark this fall in intonation by **:

4. mĩ:khen+ko mĩ+nog dog lak+tse+m**mii (mii = mi)
that+from that+at arrive go+3d-refl+M he
'Then he arrived there.'
5. "ma jen+kUg" pa "tha:tso ** ga+ko"
not I-saw unquote grandson I-erg+emph
'I didn't see them, grandson.' (response to 3)

In 4, I suspect that the postposed 'he' calls attention to a shift in topic. For the previous several sentences the narration had left the main character and was describing the situation at the place he was approaching. But I can't say exactly how this works.

In spite of this freedom of order, I would consider Hayu closer in typology to Japanese than, say, to Hindi, because there are no elements that are regularly postposed. In Hindi, quoted discourse regularly follows the verb, and the complementizer is placed before the quotation (like English 'that'). Hayu has no such construction, as we will see. (But see 22-23.) Occasionally a relative clause may be postposed, as in 6, where the postposed clause seems to be a relative with head noun 'sU:li thamji':

6. kolu sU:li tham+ji no+m it+tse ithara xUnta
one bran sell+er be they-say this-much big
le got+ji
foot have+er
'Once there was a bran-seller who had feet this big.'

Some other features that have been associated with SOV order in the literature are treated briefly below. In each case, Hayu seems to follow the pattern associated with regular SOV languages.

1.2 Postposition rather than preposition

All particles except negatives -- ma 'not'; tha 'don't!'; makhl 'not yet' -- and the vocative e (3) follow whatever is in their scope. This applies to postpositions marking case (1.21) as well as to sentence particles (1.22). A few of each will be illustrated.

1.21. Case-marking postpositions, etc.

(Pronouns have an oblique form used before most postpositions except -ha (instrumental), e.g. 1ps. an; 2ps. un; 3ps. a; (all singular) etc.)

-ha : instrumental (for ergative use, see 1-3; ga<
*gu+ha)

7. gon buti+ha ben ?
you food+inst had-enough (intr)
'Did you get enough food?'

8. top+caŋ+ha top+to ! (cf. 22)
beat+tool+inst beat-it
'Pound it with the pestle!'

-mu : genitive (possessive, material, etc.) (often
omitted)

9. aŋmU kikki pippi+mu piŋ
my grandfather grandmother+'s swing(N)
'my grandparents' swing'

10. rampi+mU lo
yam+of leaf
'a yam leaf'

-he : locative

11. kem+he 'at home'
12. lom+he 'on the road'

-khen : 'from' etc.

13. mĩ+noŋ+khen 'from there' (see 15)

14. ă+khen gu ram+sUŋ+ni
his+from I I-am-afraid
'I am afraid of him.'

-noŋ : sociative, locative

15. mĩ+noŋ 'there' (mi 'that')

16. ba:lu+noŋ sja
bear(N)+and jackal(N)
'a bear and a jackal'

17. i gaũ+noŋ 'in this village(N)'

-khata : plural (human); 'etc.' Precedes all case
suffixes; often omitted.

18. mĩ+khata+ha 'they-erg'

1.22. Sentence particles

There are a number of particles which are placed after
the main verb of the sentence.

-M (~ mĩ / C or (usually) #CV; ~ m elsewhere)
marks the main verb of a declarative sentence. For use,
see 1, 4, 6, 14. In 2, note that the whole sentence is
conjoined to a following one--I have used 'so' in the gloss,
but no conjunction appears in Hayu. But the -M is not

present. I don't know why -M does not appear on jenkü in 5. 3 and 7 are questions and 8 is an imperative, so -M is not used.

-ki (< Nep. ki 'or'); -ki ma : Yes-no question markers; optional. See 3.

-ro (-Nep. ra 'id.') : Rhetorical question marker

19. gon+ha+ko mItSI se ro ?
you+erg+emph what know RhetQ
'What do you know?'

-phen : Contrary to fact (both for protasis and apodasis)

20. totop+ha dulo pa+kü+phen
having-beaten dust(N) I-made+contrary-to-fact
'I'd have beaten him to dust.' or 'If I'd beaten him to dust...'

In addition, a number of particles (including many of the case-markers seen earlier) serve to subordinate sentences.

-pa/-paha : Quoted speech

21. ma dzo+no+m pa it+tom a:re
not I'll-eat-you+M unquote he-said they-say(N)
'He said, "I won't eat you."'

There seems to be some tendency to postpose -pa complements which report reasoning rather than actual speech.

22. arko ta+ko+m re aba ha:pa+mu don paha
other(N) he-put+M they-say(N) now(N) how+of come unquote
'He assigned another man, to see what would happen.'
23. mĩ+ha+ko ... dza:mai se+ko ine ine no+m paha
he+erg+emph all(N) knew here here is+M unquote
'He knew where everything was.'

R-ha : (reduplicates initial (c)V- of verbal root and adds -ha) 'having V-ed, he ...' or 'by V-ing he ...'-- normally with the same subject (sole argument) as the main verb. See 1 and 20.

-non : 'when' or conjunction

24. hana dzo+ke pa it+non
how eat+us unquote say+when
'If you want to know how they take advantage of us...'
25. khot+non khot+non khot+non mĩ+non+na don
walk+and walk+and walk+and there+emph arrive
'He walked and walked and finally got there.'

-he : 'when' tc.

26. mĩ+ha dza+he gon+le dzĩ+he de no
he+erg eat+on you+emph eat+refl (encouragement)
'Go ahead and eat when he eats.'

-khen : 'since'

27. dza ma bit+khen+ko haqa+mu dzã+tsUq ro ?
eat not permit+since+emph how+of I-eat-refl Qrhel
'How can I eat if they won't let me?'

1.3 Left-Branching

Many structures in SOV languages tend to be left-branching: modifiers precede nouns; lower predicates precede higher (modals, etc.)

1.31 Left-branching in the NP

For left-branching with genitive constructions, see 9, 10.

Adjectives:

28. uq xũ:ta putshi
your big head

Relative clauses:

29. mĩ+khen mĩ+ha ta:mi+ha cup+ta cu?wa+khata
that+from he+erg [daughter+erg worn] clothes+etc.
cup+po+m
he-put-on+M
'Then he put on the clothes the daughter had worn.'
30. um+be ima khot+na+khok hut+na+hut+mU gon ima+mU
now thus walking talking+of you thus+of
miskan it+tse
why say+refl
'Why do you, who are now walking and talking, speak so [i.e. saying that you will die]?'

(-ta, in 29, forms a past participle; where the verb is transitive, the participle is passive in sense and is used to relativize on object position. -mU forms a non-past participle, active in sense; -ji (see 6) is the third of the common relativizers.)

1.32 Left-branching in the VP

In the constructions illustrated below, verbs are found in series with nothing intervening except occasionally a negative. Only the last verb is inflected for person, tense, etc. Each verb has within its scope all the verbs to its left. The subject is shared; the lowest (leftmost) verb may have an object.

31. mi top dintsem
he pound begin-refl
'He began to pound it.'
32. mĩ+ha tok tsuttom
he+erg swallow he-finished
'He finished gulping it down.'

33. gu ghās pet laŋ [laŋ < laŋo(m)]
 I fodder(N) cut I'll-go
 'I'll go cut fodder.'
34. buti dza lat kin+noŋ
 meal eat go try+when
 'When he tried to go eat ...'

Causatives are a special case since the subject of the higher verb of causation, piŋ 'send', is not the same as that of the lower verb. The subject of the lower verb is then raised to the position of object of piŋ and appears in the unmarked case. In 35, this leads to doubling in object position of the combined VP pa pingsunŋmi. See also 2.

35. ga ba:lU kem pa pingsunŋmi
 I-erg brother house build I'll-cause+M
 'I'll have my brother build the house.'

1.4 Question Formation

There is no rule to front the interrogative word in WH-questions. See 19.

1.5 Conjunction Reduction

I have no data on the direction of verb-phrase deletion, if any.

2. Case and Arguments of the Verb

2.1 Hayu as an Ergative Language

The definition of 'ergative language' depends on the presence of a special case, the ergative case, used to mark the agent in a transitive sentence (Comrie's¹ 'ergative configuration') and not used to mark the sole argument of an intransitive verb. Hayu clearly meets this description. To illustrate, I have chosen a pair of verbs /bUk/ 'to get up (Intr.)' and /pUk/ 'to get someone up'. These verbs happen to be related by a no longer productive morphological process, but any two verbs, one intransitive and one transitive, would have done as well.

36. gu bUk+ŋo+m
 I rise+lsg.non-past+M
 'I will get up.'
37. mī+ha gu pUk+ŋo+m
 he+erg I rouse+lsg.non-past+M
 'He will get me up.'

1. Comrie, Bernard, The ergative: variations on a theme, Lingua 32 (1973), pp. 239-253

38. ga mi pUq+mi
I-erg he I'll-rouse+M
'I will get him up.'
39. mi bUk+mi
he rise+M
'He'll get up.'

The definition of 'ergative language' adopted here leaves room for great variation in the realization of the ergative construction among ergative languages. The features of Hayu enumerated below seem to place Hayu on the more consistently ergative side typologically of three criteria observed to cut across ergative languages.

1. There is no accusative case. The object of a transitive verb is marked (or unmarked) precisely as the sole argument of an intransitive verb. This characteristic is clearly of typological importance, and many writers have taken it as necessary for the definition of an 'ergative language'. However, some languages use both the ergative and the accusative--e.g. Nepali (in the past tense).

2. The ergative case is used in all tenses (unlike the Indo-Aryan ergatives).

3. The verbal morphology operates largely on the same ergative principles as the marking of case. Thus, pUknom 'he will get me up' is precisely the same form of the verb pUk as bUknom 'I will get up' is of the verb bUk, and quite different from the form of bUkmi 'he will get up' or of pUqmi 'I'll get him up.' (Note, however, that the latter two do not agree in form. The generalization applies to first person forms and to second person forms not involving the first person.)

2.2 Deep and Syntactic Case: Subject and Object

Students of ergative languages are prone to regard the syntactic categories 'subject' and 'object' with some suspicion. One reason for this is that in non-accusative ergative languages it is not the subject but the object of a transitive verb that appears in the same surface case as the subject of an intransitive verb. This has led some linguists to claim that surface (morphological) case should be derived directly from deep (semantic) case in the analysis of ergative languages without an intermediate syntactic level on which subject and object would be defined. Comrie has argued against this claim for a variety of languages. Since I find the syntactic notion 'object' particularly useful in thinking about Hayu, I will not hesitate to use both 'subject' and 'object'. It seems correct to observe, however, that in Hayu this syntactic level carries a lower functional load than it does, for example, in English, since the deep cases eligible to be chosen as object (patient,

beneficiary) are never chosen as subject, and the case eligible to be chosen as subject (agent) can never become object. Of course, in English, with passivation, flip, etc., any of the three deep cases mentioned can become either subject or object.

The morphology of the verb in Hayu is complex. In many cases, the form of a transitive verb reflects the person and number of two of its arguments (never three). Since agreement seems to me to be a syntactic phenomenon, I will call the two arguments that a transitive verb agrees with, the 'syntactic arguments of the verb'. One of these syntactic arguments is invariably the underlying agent; I call it the subject, and it is marked in the ergative case. The other, the object, is either an underlying beneficiary or patient. Although the principles governing the choice between beneficiary and patient as object are not fully understood, I call whichever one is chosen the 'syntactic object'. It appears invariably in the unmarked case. The syntax and semantics of object selection are discussed further below (2.3).

Since intransitive verbs have only one syntactic argument--i.e. no opposition between the categories subject and object--it should not be a matter of great importance what this argument is called. I will call it the 'argument of an intransitive verb'. It appears in the unmarked case, thus patterning with the object of a transitive verb rather than the subject. But in some constructions it patterns with the subject of transitives, for example, in the formation of verbal adjectives/substantives expressing agent--sItji 'killer' (not 'victim') alongside khotji 'walker'. Another case might be the left-branching VPs (31-34) where all the verbs must share the same subject if transitive, the sole argument if intransitive. Thus in 40, it is the subject, not the object of top that must be read as plural (although the object may be as well).

40. mĩ+khata top diq+tsẽ+me+m (cf 31)
 they beat begin+refl+pl+M
 'They began to beat him/it/them.'

On the other hand, the participle in -ta treats the argument of an intransitive and the subject of a transitive together: metta 'dead' and sItta 'murder victim', from net 'die', sIt 'kill'.

2.3 Object Selection and Object Formation

I have mentioned that a transitive verb may choose either an underlying patient or an underlying beneficiary as syntactic object (marked by agreement). Consider the following examples:

41. ga gon pJk+no+m
 I-erg you rouse+lag.subj;2ps.obj+m

- a. 'I'll get you up.'
 b. 'I'll get him up for you.'
42. ga (gon) tso pUk+no+m
 I-erg (you) child I'll-rouse-rou+M
 'I'll get the child up for you.'
43. mĩ+noq le:si ga gon pUk+no+M
 for-him I-erg you I'll-rouse-you+M
 'I'll get you up for him.'
44. *ga gon pUq+mi
 I-erg you I'll-rouse-him (ndn-benefactive)+M
45. *ga gon pUk+tUq+mi
 I'll-rouse-him (benefactive)+M
46. ga gon sIt+no+m
 I-erg you kill+1sg.subj;2ps.obj+M
 'I'll kill you.'
 *'I'll kill him for you.'
47. ga uq+mu le:si mi sIn+mi
 I-erg for you he I'll-kill-him+M
 'I'll kill him for you.'
48. *gu pUk sIt+sUq
 I pig kill-me!
49. gu sek sIt+sUq
 'Kill my lice for me!'
50. sIt+sUq
 'Kill me!'
51. sIt+to
 'Kill it!'

First we may examine the syntactic aspect of the question, taking the choice of either patient or beneficiary as syntactic object as given. If the patient is chosen, then the beneficiary (if any) is put into a dative construction (genitive + *le:si*) leaving only the patient in the unmarked case (43, 47). If the beneficiary is chosen, then both it and the patient appear in the unmarked case (42, 49). In addition, the choice of beneficiary as object is marked in the verb by the use of a benefactive form in those parts of the paradigm for which distinct benefactive forms exist (below, 3.7; no distinctive benefactive forms were available for 41, 42, 49.)

Note that in any sentence without ellipsis of any verbal argument, if there are two arguments in the unmarked case, the one the verb agrees with is the beneficiary. The use of a distinctive benefactive form may also make it clear that the object is a beneficiary even where only one unmarked argument is present. In 42 and 49, the 1st-person agreement of the verb would make it clear that beneficiaries,

and not the patients tsə or sək, were the syntactic objects, even if gon and gu were deleted. However, 41 with the reading b can only be disambiguated by the restoration of the missing underlying patient mi.

To sum up, once the choice of object is made, the syntactic realization of sentences with both a patient and a beneficiary presents no difficulty. The problem that remains is predicting which of the two will in fact be chosen as syntactic object of the verb. In this respect, pUk 'rouse' shows a different pattern from sIt 'kill'; the key examples are 41 and 46. My first elicitations of forms with sIt had convinced me that it always chose the victim as object, putting the heirs into the dative. But finally 49 popped up unexpectedly, leaving the generalization valid only down to somewhere between a pig and a louse in the animal kingdom. Presumably this information is to be recorded in the lexicon.

Although I have no general solution to the problem of object selection, I believe that the following generalization is valid:

Object Selection Rule A:

A first or second person patient is always chosen as syntactic object.

Of course this rule leaves many cases uncovered. Various attempts to revise or supplement it, particularly by using the kind of hierarchy I introduce below in treating verbal morphology, have not been particularly successful. I do not have good data on cases with a second person patient and first person beneficiary, which Rule A predicts would choose the second person as object. If in fact the first person beneficiary is ever chosen over a second person patient, then Rule A' might turn out to be better:

Object Selection Rule A':

A more dominant patient (according to the ranking 1st ps. > 2d ps. > 3d ps.) is always chosen as object over a less dominant beneficiary.

In addition to the peculiarities of the verb sIt 'to kill', other facts as well must be recorded in the lexicon. A good number of verbs seem to take only the beneficiary as object. Examples are ha 'give' and tsat 'throw (something) at' (which takes a maleficiary). Note that in neither case is the patient likely to be human. Another type of phenomenon is the fact that the benefactive verb form pUktUmi is probably the normal way of saying 'I will get him up' in spite of the existence of the non-benefactive pUmi (38). Both are acceptable. In using the benefactive form, an underlying structure like 'I will do him_i a favor by getting him_i up' seems to be suggested, but of course this observation has no predictive value. Perhaps verbs using benefactive forms in such cases will have to be marked in the

lexicon. (See 67-68, and also 69b, 70b, 71b where the benefactive form does not necessarily mean that a beneficiary distinct from the patient is involved.)

3. The Hayu Verbal Paradigms

3.1 Introduction to the Paradigms

The verbal forms are presented in the form of paradigms. Although the forms themselves are, I believe, trustworthy, the system reflected in the arrangement of the paradigms cannot be regarded as the last word on the morphology as a system. In the following sections I will discuss some of the regularities and subregularities that are either brought out or obscured by the arrangement chosen. Naturally, if I could have found an arrangement, rules, or a flow chart that seemed to express all of the observable regularities, I would have presented it. However, in the absence of such a system, I have not been tempted to try for a series of ordered rules or far-fetched curly bracketings to present the data. Although it is certainly worth trying, I see no reason to believe that entirely regular and reasonably well-motivated synchronic systems can be constructed. Rather the system as we find it is the result of historical processes such as phonological merger and morphological leveling acting upon systems that may never, taken as wholes, have been more regular than the present one. Clearly, comparison must be attempted with the twenty-odd most closely related languages (called 'Rai' and 'Kiranti') with similar systems. However, the present paper is the first description of any one of these systems to be written since 1857-58, when two good descriptions (one of Hayu) were published by R. H. Hodgson.

3.2 A Dominance Hierarchy?

A dominance hierarchy based on person and number regardless of deep or syntactic case is useful in studying the verbal paradigms, although how fundamental it is remains unclear. The hierarchy is as follows:

- 1st person (most dominant)
- 2d person
- 3d person (most recessive)

The following principles apply in verbal person and number agreement:

- a. An intransitive verb agrees in person and number with its argument.
- b. (1st and 2d person only.) A transitive verb shows the person and number of its dominant argument. If that number is singular, then the following markers are added to show the number of the recessive argument.

(I give them here because they are simple, unlike the dominant number markers.)

Singular: -Ø
Dual: -tshe
Plural 2ps: -ne
3ps: -me

The recessive number marking does not seem to be used entirely consistently with 2d person dominant forms, particularly the dual marker (Paradigm V part 2.) For number agreement in forms involving third person arguments only, see 3.6.

Examples:

52. gu top + sUq + mi
I hit + lsg.past + M
'He/You hit me.'
53. gu top + sUq + tshe + m
'They2/You2 hit me.'
54. gu top + sUq + me + m
'They hit me.'
55. gu top + sUq + ne + m
'Y'all hit me.'
56. ga top + kUq + mi
I-erg hit + lsg.subj;3ps.obj + M
'I hit him.'
57. ga top + kUq + tshe + m
'I hit them2.'
58. ga top + kUq + me + m
'I hit them.'

Using the person hierarchy, I have interpreted the markers presented above as marking the number of the recessive argument of the verb. This interpretation covers their use to mark the number of 2d person arguments (where the 1st person is also involved) and many of their 3d person uses. In fact, these markers are used to indicate the number of all third person arguments throughout the system. It may be that historically they belong to the 3d person and have been partly generalized to the 2d person. In many other parts of the system, 2d person and 3d person forms are identical. I have not assembled the materials for an historical study of the morphological system, however.

3.3 Intransitive and Object-Dominant Transitive Forms (paradigms I, II, V)

As I pointed out in the discussion of the ergative construction (2.13 above), one of the basic facts about the verbal morphology, reflecting the ergative character of the language, is the similarity between 1st and 2d person intransitive forms and transitive forms with 1st and 2d person

dominant objects (according to the hierarchy, 3.2). No doubt it was this resemblance that led Hodgson to call the latter forms "passive, as far as that voice can be said to exist"¹ -- the obvious objection being that there are no corresponding active forms. In any case, in organizing the paradigms (I, II) I have put intransitive forms in the left-hand column and object-dominant forms next to them. I have put subject-dominant forms separately, since their connection to the others is less clear.

Note that for the 2d person past intransitive and object-dominant forms (II), the root of the verb is modified by a process morpheme I have called N₁, which converts final stops into homorganic nasals. (The roots in vowel-finals and in nasals are unmodified.) The same modification of the root occurs in past 3d person intransitives (V).

59. bUk
'You/he will get up.'

60. bUŋ
'You/he got up.'

3.4 Agreement Markers for Dominant Non-Singular Arguments

The endings (see table) are essentially person and number markers, but in the first person we see a final -k in the non-past (missing in the inclusive plural) alternating with an -ŋ in the past forms, as well as an alternation between front and back vowels for inclusive and exclusive respectively. Thus we have:

		1st person		2d person		3d person
		non-past	past	non-past	past	(intrans)
dual	incl.	tshik	tshiŋ	tshik	tshe	tshe
	excl.	tshok	tshoŋ			
plural	incl.	ke	(ki)keŋ	ne	ne	me
	excl.	kok	(ki)koŋ			

The second person past and third person forms are identical to the number markers for recessive arguments (3.2b).

In the next set of paradigms, the subject-dominant forms (Paradigms III, IV), note that the forms are identical to the object-dominant forms, as long as the dominant subject is non-singular. Thus:

61. pUktshiŋ
'He/they got us2.up' or 'We2 got him/them up.'

1. JASB 27 Errata p. 12 (ad JASB 26, 442)

3.5 Forms with Dominant Argument Singular

These are the forms that mark the number of the recessive arguments as well (3.2b). Once again, the intransitive and object-dominant forms are parallel. We have the following markers before the addition of the recessive number markers, which I represent by +R):

	1st person	2d person
non-past	no + R	R
past	sUŋ + R	N ₁ + R

These endings, however, unlike the object-dominant ones, do not carry over into the subject-dominant part of the paradigm. There we have, again for singular dominant subjects:

	2d person object	3d person object
non-past: 1ps. subj.	no + R	N ₂ + R
2ps. subj.	--	R
past: 1ps. subj.	N ₁ + no + R	kUŋ + R
2ps. subj.	--	ko + R

N₂ is another process morpheme. It changes final stops (of the verb root) into homorganic nasals, adds -ŋ after a vowel-final, and adds -sUŋ after nasal finals.

62. ga dzaŋ+mi (< dza 'eat')
'I'll eat him.'

63. ga piŋsUŋmi (< piŋ 'send')
'I'll send him.'

I have classified the endings above by object (columns) (Paradigms III, IV) for two reasons:

- The N₁-morpheme for 2d person past object reappears here (cf. 3.3), making N₁no appear to be a 2d person rather than a 1st person form.
- It seems likely that the equation N₂:Ø :: kUŋ:ko points to a morpheme kU/ko, essentially representing the 3d person object, past tense. I suspect that the -ki that appears in 1st person past plural forms has a similar history, but got generalized to the object-dominant forms as well. Thus we have:

64. pUk+kUŋ
'I got him up.'

65. pUk+ki+keŋ
'We (incl) got him/them up.'
'He/they got us (incl) up.'

66. pUk+ko
'You/he got him up.'

Thus it appears that subject-dominant forms are related to the rest of the paradigms in two different ways, according to whether the subject is singular or non-singular. The forms with non-singular subjects seem to be related to other forms of the same person and number as their subjects (cf. 61), whereas the forms with singular subjects are related to other forms of the same person as their objects (cf. a and b above). Perhaps some leveling has occurred.

3.6 Transitive Forms with only 3d Person Arguments (VI)

So far I have not mentioned transitive forms with only 3d person arguments. Here there is no question of object-dominant vs. subject-dominant since both arguments are of the same person; in fact there turns out to be only one set of forms, using the root for non-past and the affix -ko for past tense (also associated with 3d person in 3.5b above), and adding number-markers. Thus these forms resemble the forms for 2d-person-singular-subject; 3d-person-object -- another case where 2d and 3d person are not fully distinct in the system.

Number agreement has nothing to do with person, but is decided by majority rule: the verb reflects the number of whichever argument is greater in number, bearing in mind that in Hayu only humans (and talking animals in fables) have grammatically significant number. (Hodgson's paradigms for these forms show subject agreement; my data clearly diverges from his on this point.) (Paradigm VI.)

67. mĩ+ha tso dip+to+m
he-erg child throw+benefactive;s+o3d ps.+ M
'He threw/will throw the child.'

68. dip + to + tshe + m
'They2 threw/will throw him/them2.'
'He/they2 threw/will throw him.'
(at least one argument dual; none plural)

3.7 Benefactive Forms

Many transitive verbs have distinctive benefactive forms, usually for 3d person objects only, which are used when the beneficiary is chosen as object. Since the existence of a distinctive benefactive form does not guarantee that the beneficiary will in fact be chosen as the object (43, 45), I prefer to regard object-selection as primary and the use of a benefactive verb form, where one exists, as an automatic consequence of the choice of the beneficiary as object. (For a further complication see the end of 2.3 and note the use of benefactive forms in 67-68.)

Perhaps half of the Hayu transitive verbs have no distinctive benefactive forms at all. Of these verbs, most appear to always use what are morphologically benefactive forms, never using the corresponding non-benefactive forms; some, however, use only the non-benefactive forms, never using benefactive ones. Thus we have three groups of verbs,

which would have to be marked in the lexicon:

1. Verbs with distinct benefactive and non-benefactive forms.
2. Verbs with no benefactive-non benefactive opposition:
 - 2a. Verbs using only morphologically benefactive forms.
 - 2b. Verbs using only morphologically non-benefactive forms.

Except for verbs in -t, which I treat separately below, the benefactive system applies only to forms with 3d person objects. Although the benefactive forms are identical for past and non-past tense (except the 1st ps. plural forms in -ti where tense is marked by ke/ken//kok/kon as in non-benefactives), they appear to be formally related to the past tense forms with -k- discussed above (3.5b), differing from them by the substitution of -t- for -k-:

- 69a. pUk + ki + ken + mi (non-benefactive)
'We (incl) got him/them up.'
- 69b. pUk + ti + ken + mi
'We (incl) got him/them up (for him/them/).' (The non-past has -tike; the exclusive plural -tikon (past) and -tikok (non-past).)
- 70a. pUk + kUq + R + M (non-benefactive)
'I got him/them up.'
- 70b. pUk + tUq + R + M (benefactive)
'I got/will get him/them up (for him/them).'
- 71a. pUk + ko + R + M (non-benefactive)
'[3d ps or 2d sg] got him/them up.'
- 71b. pUk + to + R + M (benefactive)
'[3d ps or 2d sg] will get/got him/them up.'

The above forms constitute the full set of benefactive forms for all verbs except those in -t. (See Paradigms IV, VI.)

The benefactive-non-benefactive distinction for verbs in -t is observed throughout the paradigm and is not restricted to the forms illustrated in 69-71. Non-benefactive forms are formed by removing the -t from the root and conjugating throughout like a verb in a final vowel. Benefactive forms retain the -t of the root, but restructure the morphology slightly so as to maintain a distinction of tense in the areas where ordinarily there is none (69b, 70b, 71b above). Thus instead of serving for both tenses (70b), the morpheme tUq is restricted to the past tense, and the non-benefactive future endings are used (still with the benefactive stem in -t) for the future benefactive. Thus:

72. ga buq+mi (non-benefactive; root but > bu+N2)
'I'll carry it/him.'
73. ga bu+kUq+mi (non-benefactive)
'I carried it/him.'
74. ga bun+mi (benefactive; root but+N2)
a. 'I'll carry it for him.'
b. 'I'll have him carry it.' (The b. reading here and below is peculiar to the verb but, which is the only verb to form a causative without using the auxiliary piq (2, 35).)
75. ga but+tUq+mi (benefactive; root but)
a. 'I carried it for him.'
b. 'I had him carry it.'

Similarly, for the third person:

76. mĩ+ha bu+m (non-benefactive root bu)
'He'll carry it/him/you.'
77. mĩ+ha bu+ko+m (non-benefactive root bu)
'He carried it/him.'
78. mĩ+ha but+mi (benefactive root but)
'He'll carry it for him/you.'
79. mĩ+ha but+to+m (benefactive root but)
'He carried it for him.'

Note that the -t- affixes are restricted to the past tense here, further suggesting a relationship to the -k- affixes as shown above in 69-71. In addition to the forms with 3d person object illustrated above, the whole paradigm of -t roots shows the same benefactive-non-benefactive distinction, e.g.:

80. mĩ+ha bu+sUq+mi
'He carried me.'
81. mĩ+ha but+sUq+mi
'He carried it for me.'

Like other verbs, many verbs in -t have no distinct benefactive forms; then the whole conjugation either follows the non-benefactive type (dropping -t from the root) or the benefactive type. The verbs in -t which always use the non-benefactive root can be distinguished from roots in vowel-finals, however, because the -t appears in participial forms in -ta, -ji, etc.

Curiously, intransitive verbs with -t in the participial forms also fall into two groups, one of which conjugates as if the root had no final consonant. Thus phit 'to come', conjunctive participle phiphit+ha 'having come' but gu phi:nem 'I'll come' etc., cf. gu metnom 'I'll die' from met. I suspect that those conjugating as vowel-roots may actually be so in origin, as there are very few intransitives in vowel roots. But the question must be left open.

A final kind of morphology, also seemingly related to the benefactive-non-benefactive distinction, is ablaut of a to o in the roots of four verbs: pa 'do', ba 'fetch', dza 'eat' and ta 'place'. I have not studied the phenomenon in detail.

3.8 Reflexive Forms

The reflexive forms are presented in Paradigm VII for the transitive verb dza 'eat'. With this verb, reflexive forms are normally used for eating a meal; presumably the eater is regarded as the beneficiary as well (26-27). Where the victim is human (21, 24) or a party other than the eater profits or loses by the action, non-reflexive forms are used. In general, reflexive forms are used wherever the agent and patient or the agent and beneficiary are identical. The agent of a reflexive verb is always in the unmarked case, never the ergative. Note that it is perfectly possible for a reflexive form of a transitive verb to have two unmarked arguments -- the agent and the patient (where these two are not identical.) There is no reflexive pronoun; deletion is obligatory. The dual reflexive forms may also be used for reciprocal actions.

I have no way of predicting the use of reflexive forms with intransitive verbs (5, 31). din 'begin' (31) is one of several verbs that use reflexive forms exclusively.

Appendix: Phonology and Transcription

The following notes on phonology are intended mainly for readers who may wish to compare the forms given here with those given by Hodgson in a less abstract notation (comparable to that of the table, below).

The phonology of Hayu on which the present transcription is based is presented in Michailovsky and Mazaudon, 'Notes on the Hayu Language 1: Hayu Phonology', Kailash 1.2 (Kathmandu, 1973).

The only difference between the system presented there and the present system is in the matter of vocalic length. Length is only distinctive in open initial syllables of polysyllabic words; there is good evidence that the long vowels are unmarked phonologically in that position. In the present transcription, any initial-syllable vowel immediately preceding a morpheme boundary (+) should be read as long unless it is marked short. Where there is no morpheme boundary, long vowels are marked long (:) as in the article cited.

The phonetic notation presented in the article and used here is somewhat abstract. Without going into too much detail, the following phenomena occurring at syllable boundaries may be noted: (There are 8 syllable-final consonants in Hayu: p, t, k, m, n, ŋ, r, l.)

1. Rules of Dissimilation (Allophony):

Final stops are realized [x] before homorganic initial stops.

Final stops are realized [ʔ] before homorganic initial nasals and liquids.

Final nasals are realized as vowel nasality (with long vowel before homorganic initial stop or sibilant).

2. Neutralization of velar/labial:

After labial finals, the opposition velar/labial is neutralized in favor of initial labials.

Example: (56): top+kUŋ → /toppUŋ/ → [toxpUŋ]

3. Deletion of Finals

t is deleted before s, leaving a short vowel
(80: [busUŋmi] vs. 79: [bu:sUŋmi])

Nasals are deleted before identical nasals, leaving short vowels.

Nepali loan words are marked (N); their phonology is Mayu, however.

The following table illustrating the phonetic realization of verbal forms is from Michailovsky and Mazaudon 1973. [Based on IPA, with italic n for nasal vowel (phonetically long).]

TABLE 4: Verbal Root + Affix Combinations in Broad Phonetic Transcription

affix gloss:		'—him!'	'he—'d us'	'he'll— you'	'I'll— you'	'he'll— me'	'—me!'
affix:		—to	—koŋ —poŋ	—mi	—nom	—ŋom —mom	—suŋ
root gloss:	root:						
'arouse'	puk	pukto	pukkoŋ	pukmi	puknom	puʔŋom	puksuŋ
'send'	piŋ	piŋto	piŋkoŋ	piŋmi	piŋnom	piŋom	piŋsuŋ
'spread a mat for'	put	putto	putkoŋ	putmi	puʔnom	putŋom	pusuŋ
'wash dishes for'	tshun	tshunto	tshunkoŋ	tshunmi	tshunom	tshuŋom	tshunsuŋ
'pin in wrestling'	dip	dipto	dixpoŋ	diʔmi	dipnom	diʔnom	dipsuŋ
'give food to'	mum	mumto	mumpoŋ	mumi	mumnom	mumom	mumsuŋ
'give to'	ha	ha:to	ha:koŋ	ha:mi	ha:nom	ha:ŋom	ha:suŋ
'thin out a crop for'	sel	selto	selkoŋ	selmi	selnom	selŋom	selŋuŋ

1st Person: Intransitive and Object Dominant

Person Number	Intransitive	Transitive: 1st person object		
		Subject sg.	dual	plural
<u>PAST TENSE</u>				
1st lar	-ŋo bUkŋo 'I'll get up.'	-ŋo pUkŋo 'He/You sg will get me up.'	-ŋotshe pUkŋotshe 'They/you 2 get me up.'	-ŋame/-ŋone pUkŋame/ne 'They/you pl get me up.'
1st give	-tshik bUktshik 'You sg + I'll get up.'	-tshik pUktshik 'He/They will get us 2incl up.'		
1st sive	-tshok bUktshok 'He + I'll get up.'	-tshok pUktshok 'He/They/You will get us 2excl up.'		
1st sive	-ke bUkke 'We incl will get up.'	-ke pUkke 'He/They will get us pl-incl up.'		
1st sive	-kok bUkkok 'We excl will get up.'	-kok pUkkok 'He/They/You will get us pl-excl up.'		
<u>PRESENT TENSE:</u>				
1st lar	-sŋ bUksŋ 'I got up.'	-sŋ pUksŋ 'He/You sg got me up.'	-sŋtshe pUksŋtshe 'They/you 2 got me up.'	-sŋame/-sŋone pUksŋame/ne 'They/you pl got me up.'
1st sive	-tshin bUktshin 'We 2incl got up.'	-tshin pUktshin 'He/They got us 2incl up.'		
1st sive	-tshon bUktshon 'We 2excl got up.'	-tshon pUktshon 'He/They/You got us 2 excl up.'		
1st sive	-(ki)kon bUkkikon 'We pl-incl got up.'	-(ki)kon pUkkikon 'He/They got us pl-incl up.'		
1st sive	-(ki)kon bUkkikon 'We pl-excl got up.'	-(ki)kon pUkkikon 'He/They/You got us pl-excl up.'		

11: Second Person: Intransitive and Object Dominant

Number of 2d Person Argument	Intransitive	Transitive	
		Subject sg or dual	plural
<u>NON-PAST TENSE</u>			
Singular	Ø bUk 'You sg will get up.'	Ø pUk 'He/They 2 will get you sg up.'	<u>-ne</u> pUkne 'They pl will you sg up.'
Dual	<u>-tshik</u> bUktshik 'You 2 will get up.'	<u>-tshik</u> pUktshik 'He/They will get you 2 up.'	
Plural	<u>-ne</u> bUkne 'You pl will get up.'	<u>-ne</u> pUkne 'He/They will get you pl up.'	

PAST TENSE

Singular	<u>-N₁</u> bUŋ 'You sg got up.'	<u>-N₁</u> pUŋ 'He/They 2 got you sg up.'	<u>-N₁ne</u> pUŋne 'They pl got you up.'
Dual	<u>-N₁tshe</u> bUŋtshe 'You 2 got up.'	<u>-N₁tshe</u> pUŋtshe 'He/They got you 2 up.'	
Plural	<u>-N₁ne</u> bUŋne 'You pl got up.'	<u>-N₁ne</u> pUŋne 'He/They got you pl up.'	

III: Subject-Dominant Forms with Second Person Objects

Number of Subject	Object singular	dual	plural
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NON-PAST TENSE

1st person singular	<u>-no</u> pukno 'I'll get you sg up.'	<u>-notshe</u> puknotshe 'I'll get you 2 up.'	<u>-none</u> puknone 'I'll get you pl up.'
1st dual exclusive	<u>-tshok</u> puktshok	'We 2 excl will get you up.'	
1st plural exclusive	<u>-kok</u> pukkok	'We pl excl will get you up.'	

PAST TENSE

1st person singular	<u>-N₁no</u> pu ^h no 'I got you sg up.'	<u>-N₁notshe</u> pu ^h notshe 'I got you 2 up.'	<u>-N₁none</u> pu ^h none 'I got you pl up.'
1st dual exclusive	<u>-tshon</u> puktshon	'We 2 excl got you up.'	
1st plural exclusive	<u>-kikon</u> pukkikon	'We pl excl got you up.'	

Forms $\langle \text{where } \dots \rangle$

Forms $\langle \text{where} \rangle$ $\langle \text{where} \rangle$ $\langle \text{where} \rangle$

[illegible]

[illegible]

IV(cont): Subject Dominant Forms with Third Person Objects:

Part II: Second Person Subjects

Number of 2d Person Subject	3d Person Object	Benefactives (where distinct)
Object sg/du/pl	plural	Object sg dual plural

NON-PAST FORMS

Singular	Dual	Plural
<p><u>-to</u> you 'You'll sg get him/then 2 up.'</p> <p><u>-to</u> you 'You'll sg get them up.'</p> <p><u>-to</u> house (him/then for) him.</p> <p><u>-to</u> house (him/then for) them 2.</p> <p><u>-to</u> house (him/then for) them.</p>	<p><u>-to</u> you 'You 2 will get him/then up.'</p> <p><u>-to</u> you 'You pl will get him/then up.'</p>	<p><u>-to</u> you 'You sg roused (him/then for) him.'</p> <p><u>-to</u> you sg rouse (him/then for) them 2.</p> <p><u>-to</u> you sg rouse (him/then for) them.</p>

PAST FORMS

Singular	Dual	Plural
<p><u>-to</u> you 'You sg got him/then 2 up.'</p> <p><u>-to</u> you 'You sg roused (him/then for) him.'</p> <p><u>-to</u> you 'You sg roused (him/then for) them 2.'</p> <p><u>-to</u> you 'You sg roused (him/then for) them.'</p>	<p><u>-to</u> you 'You 2 got him/then up.'</p> <p><u>-to</u> you 'You pl got him/then up.'</p>	<p><u>-to</u> you 'You sg roused (him/then for) him.'</p> <p><u>-to</u> you sg rouse (him/then for) them 2.</p> <p><u>-to</u> you sg rouse (him/then for) them.</p>

V: Third Person Intransitives

Number

NON PAST

Singular	\emptyset	buk	'He'll get up.'
Dual	<u>-tshe</u>	buktshe	'They 2 will get up.'
Plural	<u>-me</u>	bukme	'They will get up.'

PAST

Singular	<u>N₁</u>	bun	'He got up.'
Dual	<u>N₁ tshe</u>	buntshe	'They 2 got up.'
Plural	<u>N₁ me</u>	bunme	'They got up.'

VI: Transitives with 3d Person Subject and Object

Non-benefactive

NON-PAST

Benefactive (not glossed separately)

\emptyset	puk	<u>-to</u>	pukto
'He'll get him up.'			
<u>-tshe</u>	puktshe	<u>-totshe</u>	puktotshe
'They 2 will get him/them 2 up.'			
'He'll get them 2 up.'			

<u>-me</u>	pukme	<u>-tome</u>	puktome
'They'll get him/them up.'			
'He'll get them up.'			

PAST

<u>-ko</u>	pukko	<u>-to</u>	pukto
'He got him up.'			
<u>-kotshe</u>	pukkotshe	<u>-totshe</u>	puktotshe
'They 2 got him/them 2 up.'			
'He got them 2 up.'			

<u>-kone</u>		<u>-tome</u>	puktome
'They got him/them up.'			
'He got them up.'			

VII: Reflexive Forms

n of ent:	Number of Argument: singular	dual	plural
	<u>N₃tslŋ</u> non-past incl: <u>-natshik</u> <u>dzantslŋ</u> <u>dzanatshik</u> 'I'll eat/ I ate.'	<u>-natshik</u> <u>dzanatshik</u> 'We 2'll eat.'	<u>N₃tsike</u> <u>dzantsike</u> 'We'll eat.'
	excl: <u>-natshok</u> <u>dzanatshok</u> 'We 2'll eat.'	<u>N₃tsikok</u> <u>dzantsikok</u> 'We'll eat.'	
	past incl: <u>-natshiŋ</u> <u>dzanatshiŋ</u> 'We 2 ate.'	<u>-natshiŋ</u> <u>dzanatshiŋ</u> 'We 2 ate.'	<u>N₃tsiken</u> <u>dzantsiken</u> 'We ate.'
	excl: <u>-natshoŋ</u> <u>dzanatshoŋ</u> 'We 2 ate.'	<u>-natshoŋ</u> <u>dzanatshoŋ</u> 'We 2 ate.'	<u>N₃tsikon</u> <u>dzantsikon</u> 'We ate.'
	<u>N₃tse</u> non-past: <u>-natshik</u> <u>dzantsem</u> <u>dzanatshik</u> 'You'll sg eat/ You sg ate.'	<u>-natshik</u> <u>dzanatshik</u> 'You 2'll eat.'	<u>N₃tsine</u> <u>dzantsine</u> 'You pl'll eat/ You pl ate.'
	past: <u>-natshe</u> <u>dzanatshe</u> 'You 2 ate.'	<u>-natshe</u> <u>dzanatshe</u> 'You 2 ate.'	
	<u>N₃tse</u> <u>dzantsem</u> 'He'll eat/ate.'	<u>-natshe</u> <u>dzanatshe</u> 'They 2 will eat/ ate.'	<u>N₃tsime</u> <u>dzantsime</u> 'They will eat/ ate.'

serts n (realized as vowel nasality before the homorganic ts
 al) after a vowel only.