On the Evolution of the Kham Agreement Paradigm¹

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Recent studies of the agreement systems of the "pronominalizing" Tibeto-Burman languages (Bauman 1974, 1975, 1979, DeLancey 1980, 1981a, 1983, Caughley 1982, Thurgood 1985) have established that the suffixed "pronominal" verb agreement paradigm, once considered to be a late secondary development in a few western branches of the family, is in fact widespread throughout the TB languages, and traceable to the Proto-Tibeto-Burman level. There is no reasonable doubt that most of the agreement paradigms found in the family represent common inheritance -- often, to be sure, with considerable reanalysis and secondary alteration -- of an original paradigm in which the ST pronominal roots *na '1st person' and *na(n) '2nd person' were suffixed to the verb in a split ergative pattern. (See DeLancey 1981b for a discussion of the notion of split ergativity and its relevance to some of the data discussed here). The suffixed personal indices in the original transitive paradigm patterned as follows:

UNDERGOER	1st	2nd	3rd
ACTOR 1st		(-na / -ŋ)	-ŋ
2nd	-ŋ		(-na)
3rd	- n	-na	[-u]

Table 1: The PTB suffixal paradigm

(The 3rd person *-u must certainly be reconstructed in at least the 3rd --> 3rd slot, and is attested in several other

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² With the exception of the present author, those who have looked at the problem tend to hedge a bit on this conclusion; thus e.g. Thurgood (1985:399) describes the suffixal paradigm as obviously "common to <u>most if not all</u> of Tibeto-Burman at one time" (emphasis original). I doubt very much that such caution is necessary, but the question is not directly relevant to the present argument.

3rd person forms, especially 3rd person object forms. It is not clear, however, that its original function was as a personal index rather than a deictic morpheme of some other kind (DeLancey 1981a); note that comparative evidence shows that it did not occur on intransitive verbs with 3rd person sub-In any case, while this etymon is clearly involved in the development of the peculiar pattern of 3rd person indexation found in Kham, both it and its Kham reflexes are peripheral to our present concern). The cause of the indeterminacy with respect to the indexation in the 1st --> 2nd and 2nd --> 3rd forms will be discussed briefly below. Note that there is no evidence suggesting the original existence of case distinctions in the agreement suffixes, which index simply the presence of a 1st or 2nd person argument of the verb. While some case distinctions can be found in some of the modern East Himalayan languages, they are clearly secondary developments.

There are, however, several languages which manifest agreement paradigms which seem quite aberrant in terms of this framework. Perhaps the most striking of these is Taka Kham, described by David Watters (1973):

UNDERGOER ACTOR	1 s t	2nd	3rd
1st		ŋa-V-ni-A	ηα-V
2nd	ne-V-na-A		ne-V
3rd	V-na-A-o	V-ni-A-0	V-A-0

The Taka transitive paradigm differs from the reconstructed paradigm given in Table 1 both in including distinct actor and undergoer indices (1st person Actor \underline{na} , Undergoer $\underline{-na}$, 2nd Actor \underline{ne} , Undergoer $\underline{-ni}$) and in possessing prefixal as well as suffixal agreement affixes. (Kham is, in fact, the only TB language to manifest two complete sets of role-marked agreement indices). These two innovations are obviously connected, since the Actor indices are prefixed, and the Undergoer indices suffixed. Note however, that the 1st actor prefix,

³ A complete set of indices, in the TB context, means both 1st and 2nd person indices; 3rd person indexation tends to be a rather haphazard matter. Thus for our purposes (and

both 2nd person indices, and even the 3rd Actor suffix <u>o</u> are so similar to morphological material found in the reconstructed paradigm as to suggest that the Kham paradigm represents some sort of restructuring of original material, rather than a completely novel development; note also the clearly split ergative organization of the paradigm (Watters 1975, DeLancey 1981b), which likewise suggests that the structure of the paradigm is at least in part based on the original PTB system.

Watters (1975) has presented an account of the development of the Kham paradigm from original TB materials. Roughly summarized, he hypothesizes an inherited subject-agreement paradigm, parallel to that found in the Kanauri-Almora languages but utilizing the original *- η and *- η suffixes, with all the rest of the paradigm representing innovative developments in or since Proto-Kham, primarily involving the affixation to relative forms of the verb of genitive and topical pronominal forms.

There can be no doubt that in many points -- e.g. the development of the non-singular 3rd undergoer indices -- Watters' account is correct, and we will not be concerned here with the Kham-internal details of number marking, or with the peculiar (though not quite unique) alternation between active and passive (or, in Watters' later formulation, "narrative" and "orientation") affixation patterns in the verb. are, however, reasons to be dissatisfied with the core of his hypothesis concerning the development of the personal para-In the first place, it is highly unlikely that a subject-agreement paradigm of the Kanauri type existed at any point in the development from PTB to Kham; the subject-agreement systems which do occur in TB (e.g. in Kanauri-Almora or Kuki-Chin) are secondary reanalyses of the original split ergative paradigm; since the Kham paradigm even in its most evolved (i.e. Taka) form is still organized on a split ergative pattern, and no reanalyzed subject-agreement system is to be found in any of Kham's closest neighbors and most probable cousins, it is awkward, at best, to imagine a history for Kham in which the original split ergative paradigm was reanalyzed into a subject-agreement system and then re-reanalyzed back toward its original form.

In the second place -- and this is the major point of this paper -- data from Mhai Kham, a more conservative dialect described by Watters in connection with his hypothesis, shows clear links between the Kham prefixes and a somewhat mysterious set of verb prefixes found in some other morphologically

most others, as suggested in DeLancey 1981b) the existence of a 3rd person Actor suffix <u>-o</u> in the "active" paradigm is not really inconsistent with the claim that Actor indices are prefixed, and Undergoer indices suffixed.

conservative TB languages, suggesting that the Kham prefixes may represent a reanalysis of an inherited set of prefixes rather than a complete innovation. The Mhai paradigm is:

UNDERGOER ACTOR	1st	2nd	3rd
1st		ŋa-V-n-A	V-ŋ
2nd	ne-V-n-A		ne-V-n
3rd	o-V-ŋu	o-V-nu	V-A-1

Table 3: The Mhai Kham active transitive paradigm

Note a crucial difference between the Mhai and the Taka paradigms: in Taka it is possible to describe the four 1st and 2nd person affixes very consistently as Actor and Undergoer indices; Mhai, in contrast, looks more like a typical TB system, with the <u>na-</u> prefix marking only one of the two 1st person Actor forms, an -n suffix in the 1st --> 3rd and 3rd --> 1st forms, and the -n suffix (or the -nu, which at least historically must be the 2nd person -n plus another morpheme) in all four 2nd person forms.

The essential data required for an adequate solution to the Kham puzzle have to do with a prefixal paradigm which, while not as well attested as the suffixal series, seems to be of PTB or near-PTB provenience; I will attempt to show that the most economical explanation for the data presented by Watters involves the reanalysis of these prefixes and their incorporation into the agreement paradigm. The clearest evidence for this prefixal series comes from the Rung languages 5

⁴ The behavior of this series in Chepang (Caughley 1982), and the occurrence of reflexes of it as suffixes in a number of languages (Bauman 1975, DeLancey 1980) suggest that in fact at the PTB level these were clitics of some sort, rather than being tied rigidly to pre-verbal position; however this question is not directly relevant to the Kham case.

⁵ I refer by this term to a grouping including Gyarong, the Nung languages, the Qiangic languages (including Primi), and Tangut. (Thurgood's statement that "convincing hard evidence for a Gyarung-Qiang connection with Tangut is lacking" (1984:341) I would consider a slight overstatement; the evidence presented in DeLancey 1983 (pp. 100-3) is certainly sparse, but reasonably hard. My Rung is a subset of the languages placed together under the name by Thurgood (1984, 1985).

and from Limbu; the transitive paradigms of these languages are (Gyarong data from Jin et. al. 1958, Trung from Sun 1983, Rawang from Barnard 1934, Limbu from Weidert and Subba 1985):

	Gyarong	Trung	Rawang	Limbu
1-2	te-a-V-ŋ	- 1 7	-ŋ	-ne
1-3	−ŋ	-ŋ	-ŋ-u	-uŋ
2-3	te- V(-u)	ne-	e-V -u	ke-V-u
3-2	te- V-n	ne-	e -	kε-V-a
3-1	u-V-ŋ	ne-V-n	e – V – n	-an
2-1	ke-u-V-ŋ	ne-V-ŋ	e-V-ŋ-a	ke-V-an

Table 4: Transitive paradigms in Rung and Limbu

Note that in all four languages there is a prefix which occurs in the 2nd --> 3rd, 3rd -- > 2nd, and 2nd --> 1st forms. In each of the Rung languages it occurs elsewhere as well: in Gyarong in the 1st --> 2nd form, and in the Nung languages in the 3rd --> 1st form. Except for these last forms (and a cognate form in Lakher), the prefixes are associated with 2nd person forms; in all four languages above the prefix (in Gyarong the te-) also mark intransitive 2nd person forms; and there are a number of other languages where a suffix apparently cognate to the te- or ne- prefixes occurs as the 2nd person index in place of or in addition to the *-n(a) suffix.

This cannot, however, be the original function of the series, for several reasons. In the first place, in the face of clear evidence for a PTB 2nd person suffix *na, such a function would be guite redundant. (It is clear, however, that the reason for the wide variation in the attestation of this suffix in modern paradigms, compared with the strong consistency in 1st person marking, is the redundancy introduced into the original paradigm by the association of the prefixal series with 2nd person forms). In the second place, there is good evidence that several different prefixes must be ascribed to the original system; the occurrence of k- forms in both Limbu and Gyarong suggest some antiquity for that form; the n- form in Trung is supported by forms in Chepang, Limbu (see Table 3) and Bunan, 6 as well as very strongly by

 $^{^6}$ Reflexes of our hypothesized *n form, probably reconstructible as *ne?, are difficult to identify with certainty because of their formal and distributional resemblance to the *na(η) morpheme, and in fact it is likely that at some pre-PTB level these two morphemes are related. Such evidence as I have comes from languages where reflexes of both *ne? and

an obvious cognate in Lakher; while the t- form has cognates in the East Himalayan language Chamling (Ebert ms.), as well as in 2nd person suffixes in a wide range of languages (Bauman (Note moreover that the Rawang forms suggest the possibility that the consonant-initial forms are originally bimorphemic; this hypothesis may be supported by suffixal forms found in some of the Rai languages and in Kaman (Sun In this case we have evidence for not three but four different morphemes in this complex). Thus the original function of the series must have been considerably more complex than simply 2nd person indexation. Finally, there is the evidence from the Nung languages for the occurrence of one of the prefixes in the 3rd --> 1st configuration; this cannot be dismissed as a local development because of the striking confirmation provided by the Lakher (Kuki-Chin) paradigm just published by Weidert (1985:929), which has a mysterious ne- prefix occurring only in the 2nd --> 1st, 2nd --> 3rd, and 3rd --> 1st forms of the transitive verb. ⁷

The actual original function of the series must remain obscure for the time being. Bauman's (1975) suggestion of an original evidential function, while receiving very interesting support from the description by Caughley (1982) of a morpheme te? in Chepang with almost precisely the function posited by Bauman, nevertheless does not easily account for the Nung-Lakher data, or for the number of morphemes which appear to have participated in the system. My earlier suggestion that these morphemes were part of a direction marking system (1980, 1981a), while likewise neatly accounting for the data from certain languages (particularly Gyarong), also seems inadequate in the face of the range of data now attested.

^{*}na occur and can be distinguished, such as Chepang, and where the position of an \underline{n} form in the verb distinguishes it from the ordinary pronominal series, as in Bunan. It may be that there is more evidence for the *ne? form than I have been able to find.

We will not pursue the implications of this striking discovery here, save to note that, at the same time that it provides important evidence for the existence and structure of the PTB prefixal paradigm, it simultaneously provides the missing link which allows us to trace the Kuki-Chin prefixal agreement paradigm, which until now has seemed to be entirely sui generis, to solid PTB roots.

⁸ In DeLancey 1980, I reconstructed only three morphemes in this complex, *-e-, *k-, and *t-, and suggested that the \underline{n} - forms of Trung and Chepang represented infection of the paradigm by analogy with the *-na form. At present I consider

I currently suspect that it may eventually be possible to demonstrate that at a pre-PTB level these were case-marked personal indices⁹ (i.e. that the very earliest reconstructible system may have resembled that of Taka Kham, save that the Actor indices were suffixed and the Undergoer indices prefixed). For the present, however, this remains speculative, as the attested prefixes do not appear to have any such function in the languages in which they occur. Thus we will have to utilize what we do know about the form and distribution of the prefixes without ascribing an original function to them.

Assuming that the system of which all these are reflexes did, as suggested above, involve (at least) three different prefixes, the obvious next question is that of their original distribution. Unfortunately the available evidence is not sufficient to allow a definitive reconstruction here, but we can infer the outlines of the system. Consider again the Rung and Limbu data, presented in Table 5 with only the prefixes; I have included relevant parts of the Lakher paradigm (Weidert 1985) for comparison, although as I have not here developed the argument for considering this an example of the older prefixal paradigm we will not base any argument on the Lakher data:

	Gyarong	Trung	Rawang	Limbu	<u>Lakher</u>
1-2	te-				e i -
1-3					e i -
2-3	tə-	ne-	e -	kε-	ne-
3-2	tə-	ne-	e -	kε-	
3-1		ne-	e -		e i -ne-
2-1	kə−	ne-	e -	kε-	e i -ne-

Table 5: Prefixal paradigms in Rung, Limbu, and Lakher

(The Gyarong <u>a-</u> and <u>u-</u> prefixes represented in Table 4 pertain to a different morphological series (DeLancey 1981a) and will not be further considered here). These data are certainly

this to be merely a cowardly attempt to reduce the size of the paradigm in order to make it easier to find functions for the various members.

⁹ Note that this hypothesis, should it turn out to be supportable, might provide a more satisfactory explanation for the occurrence and distribution of velar stop-initial 1st person pronouns in various TB languages than has yet been proposed.

not sufficient to establish with certainty which features of any given paradigm are inherited, and which represent reanalysis of the inherited system; but they do suggest some of the distinctions which were apparently made in the original system. It seems apparent that the 1st --> 3rd form had no prefix, and that the 1st --> 2nd and 3rd --> 1st forms were distinguished from the others (and from each other) either by a different prefix or by the absence of one, and possibly that the 2nd --> 1st form was distinguished by a different prefix.

Let us now compare the Mhai paradigm with two mixed prefixal-suffixal paradigms, Gyarong and Trung:

	Trung	<u>Mhai</u>	Gyarong
1-2	-ŋ	ŋa-V-n	te- V-n
1-3	−ŋ	-ŋ	-ŋ
2-3	ne-	ne-V-n	t ə -
3-2	ne-	(o)-V-nu	te-u-V-n
3-1	ne-V-ŋ	(o)-V-ŋu	u-V-ŋ
2-1	ne-V-ŋ	ne-V-n	ke-u-V-ŋ

Table 5: The Mhai paradigm in TB context

With the exception only of the \underline{na} - prefix in the 1st --> 2nd form, the $\underline{-n}$ suffix in the 2nd --> 3rd form, where the Rung languages have no suffix, and the 2nd --> 1st form, where the Rung languages have a 1st person suffix, and the final $\underline{-u}$ vowel in the 3rd Actor forms, there is nothing in the Mhai paradigm which does not have an exact match in one or both of the Rung languages. Two of these differences pose no particular comparative problem: there is good reason to trace the $\underline{-u}$ element to a somewhat problematic but indubitably real TB deictic element (DeLancey 1981a), and there is evidence elsewhere in TB for the occurrence of the 2nd person suffix in the 2nd --> 3rd form (in any case there would be nothing odd about the analogical extension of a 2nd person index into this form).

Thus the only problematic elements of the Mhai paradigm, from the point of view of comparative TB morphology, are the na- 1st --> 2nd prefix and the occurrence of 2nd person indexation instead of 1st in the 2nd --> 1st form. And it is precisely these two points which constitute the Proto-Kham innovation around which the novel Taka paradigm has crystallized. Compare now the two Kham paradigms, with a Rung system as a backdrop:

	Trung	Mhai	Taka
1-2	-ŋ	ŋa-V-n	ŋa-V-ni
1-3	-ŋ	-ŋ	ŋa-V
2-3	ne-	ne-V-n	ne-
3-2	ne-	(o)-V-nu	(o)-V-ni
3-1	ne-V-ŋ	(o)-V-ŋu	(o)-V-na
2-1	na-V-ŋ	ne-V-n	ne-V-na

Table 6: Kham paradigms in context

The distribution of the ne- prefix in the two Kham dialects is identical; the original Kham innovation from the original system is the restriction of this prefix to 2nd person Actor From the comparison of the Mhai and Gyarong paradigms (Table 5) we can infer the presence in Proto- or Pre-Kham of a prefix on the 1st --> 2nd form, distinct from the *n- prefix found in the other 2nd person forms. Let us imagine, hypothetically, that this was a velar initial form. Then the phonological similarity of the ne- prefix to the 2nd person independent pronoun might form the impetus for a reanalysis of the prefixes as pronominal indices, which could be accomplished simply by nasalizing the 1st --> 2nd prefix. 10 gets us to the Mhai paradigm; the next step, to the Taka system, requires an extension of the same analogy, with the new 1st person prefix extended to the other 1st person Actor form, resulting in a regular system of Actor prefixes.

This reinterpretation, however, makes the suffixal paradigm unsystematic and partially redundant. An obvious direction for regularization, consistent with the ongoing reinterpretation of the prefixal series as Actor indices, would be a reanalysis of the suffixal series as Undergoer indices, which is exactly what has happened. I strongly suspect that there are interesting things to be discovered concerning the part played in this reanalysis by the presumably deictic *-i and *-a elements which distinguish the Taka 1st and 2nd person suffixes, and for which there is a fair amount of fairly confusing evidence in various Rung and Rai languages, but at present I can do no more than to point out that what is necessary to move from the Mhai to the Taka system is only to innovate some morphological means of distinguishing the suffixes of the 1st --> 2nd and 2nd --> 1st suffixes, and then to ex-

¹⁰ I hardly think that this hypothesis falls if there should turn out to be reason to reconstruct something other than the velar prefix in this form for the relevant ancestor of Kham; the analogically-induced change in this case is somewhat greater, but certainly not implausibly great.

tend these new Undergoer indices to the 1st --> 3rd and 3rd --> 1st forms.

In any case, my purpose here is less to illuminate the post-Proto-Kham developments in the paradigm — a fascinating and worthwhile project, to be sure, but one which will require more comparative Kham data than are currently available — but to make the case for the more conservative Mhai system, and thus by inference at least the basic aspects of the superficially aberrant Kham paradigm as a whole, as being built out of inherited paradigmatic material. Of course, this demonstration allows for a bit of bootstrapping in further comparative work on TB morphology; for if we can demonstrate that the Kham system is one variation on a general TB theme, we then have, in the Kham system, one more source of data for the comparative reconstruction of the original system. 11

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We should note in this connection the suggestion by Thurgood (1984:341-4), based in part on evidence independent of the data considered here, that Kham may in fact be more closely related than one might expect to the Rung languages discussed here. The suggestion obviously cannot be dismissed out of hand on geographical grounds, and there has been little done so far in the way of systematic lexical comparison of Kham with either the Kiranti or the Rung (or any other) languages that would require us to reject the interesting morphological evidence which Thurgood presents. While I think that there is ample evidence that some form of what I have here called the prefixal series is reconstructible for PTB, the striking correspondence noted here between the Mhai Kham and the Gyarong-Nung paradigms may perhaps reflect a relationship shallower than PTB. Nevertheless, it remains clear, from the same evidence, that the Kham prefixal series represents an inheritance rather than an innovation within Kham.

