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PART IV

# Conflicting hierarchical patterns and how to deal with them

CHAPTER 10

# Deictic and sociopragmatic effects in Tibeto-Burman SAP indexation

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The study of hierarchical argument indexation systems shows that while the ranking of both 1st and 2nd person over other arguments is robust and reliable, it is impossible to find any compelling crosslinguistic evidence for one or the other ranking of the two Speech Act Participants, and rare to find a consistent ranking even within a single language. This paper assembles and reviews historical changes in the indexation of the "local" categories  $(1 \rightarrow 2 \text{ and } 2 \rightarrow 1)$ in a number of Tibeto-Burman languages. We see that the fundamental deictic ranking SAP > 3 is conservative, and inverse marking to emphasize that ranking has been reinvented several times in the family. Changes in the marking of local categories are more diverse, but two phenomena recur independently in different languages and branches: a tendency for the  $1 \rightarrow 2$  form to be uniquely marked, sometimes with forms which are not synchronically relatable to anything else in the paradigm, and a contrasting tendency for the  $2\rightarrow 1$  form to merge with the marking of  $3\rightarrow 1$ . I propose that these tendencies reflect what I call SOCIOPRAGMATIC effects, i.e. the socially delicate nature of any and all natural utterances involving both the speaker and the addressee.

### 1. Introduction

The term HIERARCHICAL INDEXATION (or AGREEMENT) is used to refer to argument indexation paradigms in which the choice of which argument of the verb in a transitive clause is indexed is determined not by the grammatical role of the two arguments, but by their relative position on a person hierarchy. The characteristic feature of a hierarchical paradigm is that if one argument is a SPEECH ACT PARTICIPANT (SAP) and the other is not, the SAP is indexed, regardless of its grammatical role. An example is Khroskyabs (also called Lavrung), a Rgyalrongic (Tibeto-Burman) language of Sichuan (Lai 2015):

- ηό α-νψ-η
   I DIR-go-1sg
   'I go up'.
- (2) nó ætà næ-vdá-ŋ
   I s/he AOR-see<sub>2</sub>-1sg
   'I saw him'.
- (3) ætà ya ŋó næ-u-vdá-ŋ
   s/he ERG I AOR-INV-see<sub>2</sub>-1sG
   'He saw me'.

The  $-\eta$  suffix indexes the 1sG S argument in (1), the 1sG A argument in (2), and the 1sG O argument in (3).<sup>1</sup> A 3rd person argument is never indexed in Khroskyabs. Example (3) also illustrates INVERSE marking, indicating that the indexed argument is the O; forms where the A is indexed lack such DIRECTION marking, as in (2). Hierarchical indexation in this sense is found in a number of Tibeto-Burman (TB) languages.

The term "hierarchical" reflects the idea that this kind of paradigm reflects a universal hierarchy of referent types, as suggested by Silverstein (1976) or DeLancey (1981a). This notion of a referential hierarchy was introduced at a time when split ergative "alignment" was first being recognized as a typologically significant pattern, and inverse marking and hierarchical indexation were still thought of as rare and exotic. But in the intervening years, and especially the last decade or so, these phenomena have been the subject of considerable research and discussion. Recent attention has focused particularly on the "irregularity" of hierarchical paradigms, i.e. forms in a paradigm which cannot be predicted on the basis of a simple person hierarchy. Certain specific kinds of unpredictability are characteristic of hierarchical systems, and pose problems for the idea of a hierarchy of person as an explanatory model for supposedly hierarchical patterns. (For reviews of the literature see Filimonova 2005; Zúñiga 2006; Lockwood & Macaulay 2012).

The basic deictic distinction between SAP's and 3rd persons, as exemplified in Examples (2)–(3), has proven to be robust, although complicated by unexplained effects of number.<sup>2</sup> But any ranking of the two SAP's ends up being applicable only

<sup>1.</sup> These are obviously elicited examples; in Khroskyabs (Gyu Lha, personal communication) and, as far as I know, all other languages discussed in this paper, independent pronouns tend to occur in connected discourse only in emphatic or contrastive function.

<sup>2.</sup> It is likely that some of these effects may be explainable in the same kind of sociopragmatic terms developed here.

language by language, and often only construction by construction (Macaulay 2009; Zúñiga 2006; 2008). Indeed in many languages we can find specific constructions which give us ambiguous indications of ranking of 1st and 2nd person. The category of problem which I will deal with in this paper centers around the treatment in many languages of the LOCAL scenarios, i.e. transitive forms with one SAP as A and the other as O. While the behavior of the SAP's relative to 3rd person is consistent cross-linguistically, languages, and constructions within the same language, show a bewildering range of treatment of the local categories, such that it is often difficult or impossible to rank 1st vs. 2nd even within a particular language (see Gildea & Jansen, this volume).

These problems are insoluble in the most popular version of the hierarchy, 1 > 2 > 3. They are not quite so immediately devastating for a SAP > 3 ranking in which neither SAP intrinsically outranks the other (DeLancey 1981a; Zúñiga 2006); in fact just this kind of problem was the original motivation for the claim that there is no universal ranking of the SAP's. But while the 1 = 2 > 3 ranking, unlike 1 > 2 > 3, is not automatically refuted by the unpredictable behaviors of the local categories, it fails to offer any explanation for them, and to that extent is inadequate as an account of hierarchical indexation patterns. The purpose of this paper is to present some patterns of indexation of the local categories across Tibeto-Burman and an interpretation of them in terms of SOCIOPRAGMATIC considerations, i.e. issues of social interaction which automatically exist between two individuals who are talking to one another.

Hierarchical indexation, sometimes with explicit inverse marking, is found in many TB languages (Caughley 1978; 1982; DeLancey 1981a; b; 2010; 2011b; Ebert 1987; 1990; 1991; 1994; Watters 2002; Sun & Shi 2002; Bickel 2008; LaPolla 2010; Witzlack-Makarevich et al. 2016; Jacques 2010; 2012; Jacques et al. 2012; Boro 2017; Bickell et al. 2013; Gong 2014; Lai 2015; Sun & Tian 2013, inter alia). There is still no generally-accepted classification of the Tibeto-Burman languages. We will be dealing with languages of four groups whose status as clades is uncontroversial: Rgyalrongic, Northern Naga, Kiranti, and Nungish. Since our concern here is with innovative rather than archaic constructions, problems of higher-order relations among these groups and others are not important.

In Section 2 I will outline the issues which will be discussed in the remainder of the paper. Sections 3 and 4 will present comparative evidence showing that distinct processes of analogy and grammaticalization, in different subgroups, conspire to produce particular paradigmatic patterns. Unsurprisingly, we will see in Section 3 clear evidence for the persistent effect of the deictic SAP>3 ranking. But the main point of the paper is to show that applying the same kind of reasoning to anomalous patterns of marking the local categories helps to discern the underlying logic behind this kind of cross-linguistically common "irregularity". Section 4 will show the recurrent independent development of two phenomena: a tendency for the  $1\rightarrow 2$  form to be uniquely marked, sometimes with forms which are not synchronically relatable to anything else in the paradigm, and a contrasting tendency for the  $2\rightarrow 1$  form to merge with the marking of  $3\rightarrow 1$ . In Section 5 I will argue that these tendencies can be interpreted as reflecting a tendency to draw attention to the 2nd person argument in a  $1\rightarrow 2$  scenario, and to deflect attention from the 2nd person argument in  $2\rightarrow 1$ , and suggest that this tendency is best explained in sociopragmatic terms.

#### 2. Problems of hierarchy

#### 2.1 The structure of hierarchical paradigms

The defining characteristic of a hierarchical indexation system is that the choice of which argument(s) to index is at least sometimes determined by the intrinsic nature of the referent rather than by the nature of its participation in the situation denoted by the clause. Both DIRECT (SAP $\rightarrow$ 3) and INVERSE (3 $\rightarrow$ SAP) verb forms index the SAP in preference to the non-SAP argument, as illustrated in Examples (2)–(3). But languages show considerable variation in the marking of the local categories. The idea of a hierarchy implies that a hierarchical system will always select one local category to be direct and the other inverse, but things are often not that simple. A hypothesis of universal hierarchy predicts not only that all languages will treat one local category as direct and the other as inverse, but also that all languages will make the same selection.

In other words, the problem with the idea of "hierarchical" indexation is that any universal account of the relevant hierarchy predicts a single answer to the question of the relative ranking of the SAP's, and there is no such single answer. The issue arises from patterns of marking of the LOCAL scenarios  $1\rightarrow 2$  and  $2\rightarrow 1$ . A consistent 1 > 2 ranking would require 1st person indexation for both local scenarios:

0			
Α	1sg	<b>2</b> SG	<b>3</b> sg
1sg		1	1
2sg	1		2
3sg	1	2	

**Table 1.** Indexation following a 1 > 2 > 3 hierarchy

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A consistent 2 > 1 ranking would require 2nd person in both:

0			
Α	<b>1</b> \$G	<b>2</b> sg	<b>3</b> 8G
1sg		2	1
2sg	2		2
3sg	1	2	

**Table 2.** Indexation following a 2 > 1 > 3 hierarchy

Both these patterns are rare in Tibeto-Burman. Much more common is the pattern in Table 3, where the O argument is indexed in both local forms:

Table 3. The typical TB indexation pattern

0			
Α	1sg	2sg	3sg
1sg		2	1
2sg	1		2
3sg	1	2	

Here indexation in the direct and inverse forms is hierarchical, but in the local forms it is apparently determined by the role of the argument rather than rank, that is, by syntax rather than by hierarchy. In Section 5 I will suggest that this apparent intrusion of syntactic factors is illusory. The motivation for this pattern has nothing to do with argument structure or grammatical role; rather it is about emphasizing the participation of the addressee in a typical  $1\rightarrow 2$  event and minimizing their involvement in  $2\rightarrow 1$ .

#### 2.2 Problems of local indexation

Let us examine a relatively simple example of the problem. The paradigm of Wobzi Khroskyabs (with singular arguments only) looks like this (Lai 2015):<sup>3</sup>

<sup>3.</sup> In this paper I will consider, and show, only forms with all singular arguments. Number distinctions are often a complicating factor in "hierarchical" paradigms (Bickel 2008); TB languages show extra complexities, since number indexation is often partially separate from the person paradigm – so that, for example, in some languages, a verb may agree in person with one argument, and in addition show non-personal dual or plural marking if it is applicable to either argument.

	0			
S	А	1sg	2sg	3sg
Σ-ŋ	1sg		Σ-n	Σ-ŋ
Σ-n	2sg	u-Σ-ŋ		Σ-n
	3sg	u-Σ-ŋ	u-Σ-n	u-Σ

Table 4. Indexation of singular arguments in Wobzi Khroskyabs

Note that a SAP argument is always indexed in preference to a 3rd person, which is the essential characteristic of a hierarchical system. The inverse prefix *u*- occurs in every form in which the O argument outranks the A on a 1 > 2 > 3 hierarchy. (The obligatory inverse marking of  $3 \rightarrow 3$  is a recent result of simplification of the paradigm, see Section 3.1). However, the pattern is not purely hierarchical. A consistent 1 > 2 ranking would predict 1st person indexation in the  $1\rightarrow 2$  form, but instead we find the 2nd person O argument indexed. This is the commonest pattern in Tibeto-Burman, and is usually described in syntactic terms, by saying that scenarios involving a SAP and a 3rd person argument are indexed hierarchically, while the local forms index the O. But then it is not clear what we are saying about the overall "alignment" of the system – is it hierarchical, or split between hierarchical and ergative, or what? And more importantly, why?

Wobzi gives us a very simple and transparent example of the basic problem with explaining these indexation patterns in terms of a hierarchy: the ranking of SAP's is not consistent even within the same language. (This is not unique to Tibeto-Burman, see Macaulay 2009). Many TB languages show the rest of the problem – in many languages the marking of the local categories is not only unexpected, but morphologically irregular. Compare the Wobzi with another Rgyalrongic language, Zbu Rgyalrong (Gong 2014):

	0			
S	Α	1sg	2sg	<b>3</b> SG
Σ-aŋ	1sg		te-Σ	Σ-aŋ
tə-Σ	2sg	tə-wə-Σ-aŋ		tə-Σ
	3sg	wə-Σ-aŋ	tə-wə-Σ	$\text{e-}\Sigma \sim u\text{-}\Sigma$

Table 5. Indexation of singular arguments in Zbu Rgyalrong

Again SAP arguments are indexed in preference to 3rd person, and the distribution of the inverse prefix *w*<sub>2</sub>- (cognate to Khroskyabs *u*-) reflects a hierarchy of 1 > 2 > 3. And like its cousin Khroskyabs, Rgyalrong indexes the 2nd person O argument in 1 $\rightarrow$ 2, and the 1st person O in 2 $\rightarrow$ 1. But the 2 $\rightarrow$ 1 form also has the 2nd person prefix, and thus, uniquely in the paradigm, indexes both the A and O arguments in the same form. The Zbu paradigm also illustrates a third variety of non-hierarchical marking of a local category, in the irregular vocalism of the 2nd person prefix in the 1 $\rightarrow$ 2 form. We find a more striking example in Japhug Rgyalrong (Jacques 2004; 2012):

	0			
\$	А	1sg	<b>2</b> sg	3sg
Σ-a	1sg		ta-Σ	Σ-a
tu-Σ	2sg	kɯ-Σ-a		tuı-Σ
-	3sg	γ-Σ-α	tu-γ-Σ	$\Sigma \sim \gamma\text{-}\Sigma$

 Table 6. Indexation of singular arguments in Japhug Rgyalrong

Japhug, like Zbu, has anomalous vocalism in the 2nd person index in the  $1\rightarrow 2$  form. It also has a different prefix instead of the regular 2nd person form in  $2\rightarrow 1$ . This form cannot be synchronically explained in terms of other elements of the paradigm, and thus cannot easily be interpreted in terms of a notion of "hierarchy". It is not at all clear that the unique marking of the two local categories reflects any ranking of 1st and 2nd person. In fact it seems that the local categories are marked as standing outside of the hierarchy which determines the indexation of direct and inverse forms.

The other essential question posed by these paradigms is, where does the distinct marking of the local categories come from? Jacques (this volume) proposes that both unsystematic local forms in Rgyalrong derive from agent-suppression constructions: the  $2\rightarrow 1$  form in ku- derives from a generic person construction, and the anomalous vowel in the  $1\rightarrow 2$  from an agentless passive.<sup>4</sup> Here we have a first clue to the mysteries of anomalous local category indexation: the language appears to want to avoid direct reference to an SAP A argument acting on the other SAP. This suggests that the pan-TB pattern of O indexation in local forms is sociopragmatically rather than syntactically motivated – it is not about "alignment", but about avoiding reference to the A.

The Rgyalrongic languages show the normal situation across Tibeto-Burman, where we rarely find consistent hierarchical patterns of indexation. The SAP > 3

<sup>4.</sup> Jacques is cautiously tentative about both proposals, but both are plausible, and the hypothesis that the  $2\rightarrow 1$  form derives from an impersonal construction is well-supported (see J. Sun 2014).

ranking is supported by most of the available data, though even that is complicated by examples of extra 3O indexation which will not be dealt with here. But the strong tendency in the family is that paradigms which consistently reflect the deictic ranking in direct and inverse forms have some kind of anomalous marking in one or both local scenarios. A consideration of a range of different patterns of local marking in TB languages will show two very consistent tendencies: the  $1\rightarrow 2$ form is always different from  $1\rightarrow 3$ , and usually different from  $3\rightarrow 2$ ; in contrast, while the  $2\rightarrow 1$  form is always different from  $2\rightarrow 3$ , there is a strong tendency for it to not be distinguished from  $3\rightarrow 1$ .

#### 2.3 Accounts of hierarchy

There are three broad approaches to accounting for hierarchical phenomena: a formal interpretation in terms of markedness (Kuryłowicz 1964; Silverstein 1976), a cognitive interpretation in terms of deixis and perspective (DeLancey 1981a; Zúñiga 2006), and a functional interpretation in terms of topicality (Thompson 1990; Givón 1994; Gildea 1994; Payne 1994). This is not the place to discuss the relative merits of these approaches; all that is relevant to my present argument is that none of them offer a satisfactory account of the problems of local category indexation. In its favor, the deictic approach has the advantage of making no predictions about marking of local categories, while any hypothesis involving a ranking of the two SAP's makes predictions which turn out to be incorrect. Thus the kinds of data discussed here explicitly disconfirm the interpretation in terms of topicality; indeed, it is quite dubious that the notion of "topicality" can appropriately be applied to the SAP's at all, especially in conversational discourse (see Section 5.2). But if my own earlier work is less inadequate than other proposals, it is still not adequate to the problems of local indexation. To make no predictions is to offer no explanation, so more needs to be said about local marking, and that is my purpose in this paper.

Heath (1991; 1998) offers a very different perspective on the local categories. In two important papers he surveys languages of Australia and the Americas with complex argument indexation systems, and demonstrates a strong crosslinguistic tendency that in indexation systems where both (or either) S and O arguments can be indexed, the indexation of one or both local categories shows conspicuous irregularity, suppletion, or paradigmatic unpredictability. That is, it is not only that these forms tend to not be predictable in terms of any fixed hierarchy, they tend not to be synchronically predictable at all from the rest of the paradigm. This kind of variation is simply not predictable in terms of any universal functional or formal principles. Heath suggests, instead, that the chaotic patterns which emerge in this kind of typological survey need to be considered in terms of "social pragmatic" imperatives: I would stress the pragmatic delicacy and dangerousness of using first and second person pronouns (particularly singulars), and the particular delicacy of combining them in a noun phrase or sentence in a manner overtly specifying their relationship to each other. (Heath 1991: 78)

Reference to interaction between 1st and 2nd person is fraught with social peril. It is because languages devise means to avoid these delicate problems that "hierarchical" paradigms are not as paradigmatic as we wish they would be. If we think for a moment about real life rather than paradigms and artificial examples, there is a limited set of likely speech act types involving the two SAP's in a transitive scenario. These forms do not usually occur in narrative: we do not often have occasion to tell others about past events in which they were involved, whether as A or O. In actual interaction between human beings, a  $1 \rightarrow 2$  scenario is likely be a promise or a threat (King 2002), and  $2 \rightarrow 1$  is the realm of requests, demands and accusations.

Heath presents a list of manifestations of specialness found in local category marking in Australian and New World languages (Heath 1998: 85–86), and notes:

The assorted mechanisms ... have in common the fact that they obscure the "objective" relationship between speaker and addressee.

Thus, they are entirely comparable to the numerous ways in which personal pronouns, bad news, imperatives, and other delicate or dangerous phenomena are masked in everyday speech, being hinted at rather than overtly uttered.

(Heath 1991: 86)

Many of Heath's types of disguise are attested somewhere in TB. For example, the distinct vocalism of the 2nd person prefix in the  $1\rightarrow 2$  form in Zbu and Japhug (Tables 5 and 6) is an example of Heath's "marker disguised by partial phonological distortion", and the special  $2\rightarrow 1$  prefix in Japhug of his "one of the two markers expressed by isolated suppletive allomorph".

2.4 Sociopragmatic effects in Tibeto-Burman morphological change

There is a good deal of comparative evidence showing that avoidance strategies (in the sense of Frajzyngier and Jirsa 2006) for 1st or 2nd person reference are persistent sources for new paradigmatic forms in TB. The most conspicuous is the fact that we have to reconstruct two different 2nd person verb forms for PTB; a regular suffix \*-n, consistent in pronominal origin and syntagmatic position with the rest of the indexation paradigm, and a mysterious \*t- prefix, which must have originated as a sociopragmatically motivated substitute for the regular form (DeLancey 2014). (We see the regular \*-n in the Khroskyabs paradigm in Table 4 in Section 2.2 above, and the \*t- in the Rgyalrong paradigms in Tables 5 and 6). There is also evidence, though less systematic, for a third form used for 2nd person reference, with still discernable roots in an irrealis construction.

In another manifestation of sociopragmatic determination of analogical shift, we often find 1sG or 2sG, pronouns or verbal indices which appear to be reanalyses of PTB 1st plural inclusive \**i*. For example, consider the independent pronominal forms for Northwest, Northern, and Central Kuki-Chin languages (Moyon data from Kongkham 2010; Tedim from Henderson 1965; Bawm from Reichle 1981; Mizo from Chhangte 1993):

		1sg	1pl.excl	1pl.incl	2sg	2pl
NWKC	Moyon	ki	ken-no	in-no	nəŋ	nen-no
NKC	Tedim	kei	ka:	i:	1	naŋ
CKC	Bawm	kei	kar	-nih	nang	nang-nih
	Mizo	kéy	kéy	-ma?	naŋ	naŋ-ma?

Table 7. Independent 1st and 2nd person pronouns in N, NW and C Kuki-Chin

The inclusive and exclusive forms in the N and NW branches match those of Kiranti (Bauman 1975), and thus are inherited. So we see that the Central KC languages have collapsed the inclusive/exclusive distinction, retaining the original exclusive form for both functions. Now consider the possessive/subject index clitics in the same languages:<sup>5</sup>

		1sg	1pl.excl	1pl.incl	2sg	$2_{\rm PL}$
NWKC	Moyon	kə-	ken-	in-	nə-	nen-
NKC	Tedim	ka	1-	i-	n	9-
CKC	Bawm	ka-	ka-n-		na-	na-n-
	Mizo	ka-	ká-n-		i-	í-n-

Table 8. 1st and 2nd person possessive/subject proclitics in N, NW and C Kuki-Chin

We see the same pattern, but Mizo has an anomalous 2sG proclitic *i*-. It is hard to imagine any source for this form other than the erstwhile 1PL.INC, which we know from testimony of the other branches to have been inherited into PKC. Note that we cannot suppose that the inclusive form was lost in PCKC, and then re-introduced in Mizo. Rather, we must suppose that at least as far back as PKC, the inclusive form was sometimes used with 2sG reference, a cross-linguistically common phenomenon.

<sup>5.</sup> The Kuki-Chin languages inherited a hierarchical indexation system derived from the PTB paradigm, and innovated a prefixal subject-indexation paradigm consisting of possessive proclitics attached to the verb.

In the remainder of this paper I will present data from a number of Tibeto-Burman languages illustrating recurrent diachronic patterns which conspire to create paradigms characterized by three persistent patterns. We will see that TB languages consistently respect the SAP>3 split, and regularly innovate constructions which emphasize it. This, of course, is hardly surprising, but it is important to establish this deictic background for two other recurrent tendencies, which can be related to special, socially-motivated attention to the role of 2nd person. These can be illustrated by the patterns of merger in a typical paradigm of each of the four subgroups that we will look at – Khroskyabs (Rgyalrongic), Nocte (Northern Naga), Sunwar (Kiranti), and Trung (Nung):

 Table 9. Indexation of scenarios involving 1st person

	$1 \rightarrow 2$	1sg & 1→3	$3 \rightarrow 1 \& 2 \rightarrow 1$
Wobzi	Σ-n	Σ-ŋ	u-Σ-ŋ
Nocte	$\Sigma^{1}\epsilon$	$\Sigma^{1}$ an	$\Sigma^{1}$ h-лŋ
Sunwar	Σ-n	Σ-ŋ	Σ-yi
Trung	Σ-ŋ	Σ-ŋ	nш-Σ-ŋ

All three patterns of interest are evident here. First, note that intransitive 1sG and direct  $1\rightarrow 3$  always have the same form, consistent with SAP>3. Second, in all these languages the  $2\rightarrow 1$  form is marked identically to  $3\rightarrow 1$ . In contrast, the other local form,  $1\rightarrow 2$ , is always distinct from all others except in Trung; this is our third pattern of interest. (The Nungish languages have a more strictly hierarchical paradigm than any other branch; see Morse 1965; LaPolla 2010 for a detailed analysis of Rawang).

A similar arrangement of 2nd person forms (here with Zbu Rgyalrong substituted for Khroskyabs; both these paradigms will be discussed below) shows the same direct-intransitive merger, in keeping with SAP>3, and confirms the uniqueness of  $1\rightarrow 2$  marking. (Note that the further elaboration of the 2nd person category in Sunwar still leaves the unique  $1\rightarrow 2$  form):

				-	
	1→2	2→3	2sg	3→2	2→1
Zbu	Σ-n	Σ-ŋ	tə-Σ	tə-wə-Σ	u-Σ-ŋ
Nocte	$\Sigma^{1}\epsilon$	Σ ͻ?	Σ 22	Σ h-ɔ?	$\Sigma^1$ h-лŋ
Sunwar	Σ-n	Σ-yi	Σ-yi	Σ-yi	Σ-yi
Trung	Σ-ŋ	nu-Σ	nu-Σ	nu-Σ	nɯ-Σ

Table 10. Indexation of scenarios involving 2nd person

In Sections 3 and 4 I will show, by comparison of these languages with other near relatives, that at least two inverse constructions, and most or all of the examples of the other two patterns, are secondary developments, and further, that unique  $1\rightarrow 2$  forms have developed by four different diachronic paths, and merged 10 forms by at least three. These historical facts and observable tendencies are evidence from which we can try to infer the principles which underlie the phenomena of local indexation noted by Heath. In Section 5 I will follow Heath in suggesting sociopragmatic directions of explanation for these phenomena.

## 3. Deictic effects in hierarchical systems

Explicit inverse marking is attested in Rgyalrongic (DeLancey 1981b; Sun & Shi 2002; Jacques 2010; 2012; Gong 2014; Lai 2015); Chepang (Caughley 1978; 1982; Thompson 1990), and Northern Naga (DeLancey 1981a; 2011b; Morey 2016; Boro 2017), and vestigially and/or incipiently in Kiranti (Ebert 1990; 1991; Jacques 2012, inter alia). None of these languages have the same inverse form, and thus at most one of them can be original, and all others are secondary innovations – showing that TB languages have a recurrent tendency to find ways to mark this category. We will look at examples from Rgyalrongic, where something like the original PTB system is preserved, and Northern Naga, where we will find a system which is sufficiently new that we can identify its origin.

### 3.1 The original inverse in Rgyalrongic

The Rgyalrongic languages of western Sichuan preserve the original PTB inverse form, though the striking transparency and regularity of the Rgyalrongic paradigms suggests some secondary regularization in Proto-Rgyalrongic. Consider again the paradigms of Wobzi Khroskyabs and Zbu Rgyalrong, repeated here:

	0			
S	Α	1sg	2sg	3sg
Σ-ŋ	1sg		Σ-n	Σ-ŋ
Σ-n	2sg	u-Σ-ŋ		Σ-n
-	3sg	u-Σ-ŋ	u-Σ-n	u-Σ

Table 11. Indexation of singular arguments in Wobzi Khroskyabs

The *u*- / *w*- prefix shows a canonical inverse distribution in Zbu; Wobzi has simplified the original (at least Proto-Rgyalrongic, probably PTB) opposition between

0			
А	1sg	2sg	3sg
1sg		te-Σ	Σ-aŋ
2sg	tə-wə-∑-aŋ		tə-Σ
38G	wə-∑-aŋ	tə-wə-Σ	$\text{e-}\Sigma \sim \text{u-}\Sigma$
	A 1sg 2sg	A1sG1sG2sGtə-wə-Σ-aŋ	A     1sG     2sG       1sG     te-Σ       2sG     tə-wə-Σ-aŋ

Table 12. Indexation of singular arguments in Zbu Rgyalrong

inverse marking and its absence in  $3\rightarrow 3$  forms, reflecting the relative topicality of the two 3rd person arguments. This inverse prefix and its very canonical distribution in the paradigm can be reconstructed for Proto-Rgyalrongic; the form, at least, traces back to PTB. The Zbu paradigm shows some extra complexities stemming from its incorporation of forms with the #t-prefix<sup>6</sup> in place of the 2nd person #-n suffix. (The #t- prefix was originally something other than a person index (DeLancey 2014), and the form was not otherwise inflected; the Rgyalrong paradigm originated with the addition of this #t-, reanalyzed as a polite 2nd person index, to all the forms of a paradigm originally resembling that of Khroskyabs).

It is tempting to imagine that the original PTB system must have been something like this, and much of the variation which we find across the archaic languages can be explained in terms of this simple model. Of course, we see strong tendencies against this kind of systematicity, and it is entirely possible that we will need to attribute some similarly motivated unsystematicity to the proto-language (see Jacques & Antonov, this volume). Heath, who extensively documents that the local categories are inherently prone to irregularity, warns:

One way to defeat the messiness is to set up idealized, transparent, and symmetrical underlying forms ... A similar intellectual comfort can be achieved by reconstructing a "golden age" proto-language, where the transparency and symmetry were visible on the surface ... before undergoing sound changes or restructurings. One also encounters efforts to impose order on the  $1 \leftarrow 2$  subsystem by elaborating  $\{1,2\} > 3$  ... hierarchies as either 1 > 2 > 3 ... or 2 > 1 > 3 ... – whichever works better for a given language – but often at the cost of artificial segmentation and labeling of surface morphemes in opaque  $1 \leftarrow 2$  combinations, and at considerable risk of missing the general point. (Heath 1998: 102)

On the other hand, we have evidence from innovative systems for the naturalness of the regular canonical inverse pattern, which we find re-invented twice in

<sup>6.</sup> A form marked by # represents a morph whose general form and function can be inferred, but which has not been formally reconstructed.

the Northern Naga languages. In fact we will have to reconstruct for the protolanguage an ordinary language with an array of polite locutions and circumlocutions, many of them continued into some daughter languages, and re-invented in others, differentially grammaticalized in different modern languages.

#### 3.2 Innovative inverses in Northern Naga

The Northern Naga languages (also called "Konyak") are a thinly-documented group spoken in Northeast India and adjacent parts of Burma. Several of these languages (Wancho, Chang, Konyak, and others) lack argument indexation altogether; others, generally listed under the imprecise headings "Nocte", "Tangsa", and "Tutsa", have inherited agreement paradigms. These languages show a range of different paradigmatic configurations (Morey 2016); the most conservative have hierarchical indexation and a morphologically-conditioned alternation between nasal and stop forms of the person-number indices, both shared with the more distantly-related Jinghpaw (DeLancey 2011b). The Northern Naga languages also have innovative inverse marking, which Jinghpaw lacks. In fact in two languages, Nocte and Hakhun Tangsa, we can see the fading of one innovative inverse construction and the inception of another.

The paradigm of Nocte with singular arguments is given in Table 13. (Forms are from unpublished materials of Alfons Weidert; see also Weidert 1985). Forms with *t*- and the stop forms of the suffixes are past, the non-past forms show the nasal indices:

	0			
S	А	1sg	2sg	3sg
<sup>1</sup> лŋ t-лk	1sg		<sup>1</sup> ε t- i?	<sup>1</sup> лŋ t-лk
ว? t- ว?	2sg	<sup>1</sup> h-ոŋ <sup>1</sup> th- ոŋ		27 t- 27
-	3sg	<sup>1</sup> h-ոŋ <sup>1</sup> th- ոŋ	h-5? th-5?	<sup>1</sup> a t-a?

Table 13. Indexation of singular arguments in Nocte

For the argument in this section, the points to notice are the form of the inverse marker – |h-| in the non-past, and aspiration of the |t| past tense morpheme in the past – and its distribution, marking both basic inverse scenarios plus  $2\rightarrow 1$ . Thus we have a form which cannot plausibly be cognate with the Rgyalrongic inverse marker, but with the same distribution as that marker has in Zbu. So we see that Nocte has lost the original PTB inverse marking and replaced it with an innovative

form with exactly the same function. Note also the index  ${}^{1}\varepsilon \sim ii$  in the  $1 \rightarrow 2$  form, unique in the singular paradigm. This is originally the 1PL form, which is attested in other languages as a source for exceptional local marking (Heath 1998, and Section 4.1 below).

Hakhun Tangsa (Boro 2017), very closely related to Nocte,<sup>7</sup> also has inverse marking, but has innovated a new inverse form:

	0			
S	Α	1sg	2sg	3sg
<del>ა</del> t-ჯ?	1sg		স? t-স?	ზ t-ჯ?
0? t- 0?	2sg	r-ჯ th-ჯ		0? t-0?
-	3sg	r-ჯ th-ჯ	r-u th-u?	<sup>1</sup> a t-a?

Table 14. Indexation of singular arguments in Hakhun Tangsa

Comparing the Hakhun paradigm with Nocte, we see that they share the same inverse marking in the past tense. In the non-past, however, Nocte |h-| is replaced in Hakhun by |r-|. This is easily recognizable as a cislocative form, widely-attested across the family as a motion verb \**ra* and frequently as a grammaticalized cislocative (DeLancey 1985). It occurs as a cislocative throughout Jinghpaw and Northern Naga (DeLancey 2011b; Boro 2017), but in Nocte (at least as far as we know) it has not yet acquired the more grammaticalized inverse function which it has in Hakhun. The functional shift cislocative > inverse is attested elsewhere as well (Jacques and Antonov 2014), which underlines the fundamentally deictic nature of this category.

Thus in three different languages, two of them very closely related, we find three different canonical inverse paradigms. The Rgyalrongic inverse is probably old, and that is enough to show that the Nocte inverse must be a later innovation, probably replacing the original prefix.<sup>8</sup> At present I have no suggestion as to the source construction from which it grammaticalized. The Hakhun non-past inverse is transparently innovative, and thus represents a tertiary re-invention of the same category. (We might speculate that this reanalysis of the cislocative might

<sup>7.</sup> Hakhun /-𝒴/ < \*-*aŋ*.

<sup>8.</sup> There is a strong tendency across the southern branches of the family to lose prefixal morphology.

have been spurred by the phonetic indistinctness of an intervocalic [h]). So even in the very small Northern Naga microcosm we see a persistent tendency to recreate the canonical inverse pattern.

#### 4. Sociopragmatic effects in hierarchical indexation systems

Though the indexation systems of Rgyalrong, Northern Naga, Nung, and Kiranti are cognate, there is great divergence among and within these groups in the morphological and paradigmatic structure of the systems. Across this formal divergence, however, we can see a number of recurrent patterns which bear on the question of local category indexation. In this section we will see evidence for two tendencies which recur frequently in diachronic developments in TB indexation paradigms. There is a strong tendency, especially in Kiranti, to have unique, sometimes opaque marking for  $1\rightarrow 2$ . It is rare, and in Kiranti unattested, for this form to have completely identical marking to  $1\rightarrow 3$ . In contrast, the languages strive for the  $2\rightarrow 1$  form to be identical with  $3\rightarrow 1$ , usually by generalizing the original  $2\rightarrow 1$  form to also mark  $3\rightarrow 1$ , transforming it into a 10 index.

#### 4.1 Merger of 10 forms in Kiranti

In Section 3.1 we looked at three different inverse-marking paradigms, in closely-related Nocte and Hakhun and more distantly-related Rgyalrongic. One thing that all three paradigms have in common is that the  $2\rightarrow 1$  and  $3\rightarrow 1$  forms are identical, both having 1st person indexation and inverse marking. Since the 1sG index is the same in all three languages, we can take it to represent shared inheritance. Since the inverse marker is different in each language, we have evidence of independent innovation. A second point to note is that in Khroskyabs and Nocte the  $1 \rightarrow 2$  and  $1 \rightarrow 3$  forms are distinguished. In Khroskyabs, in  $1 \rightarrow 3$ the 1st person is indexed, as we would expect, but the  $1 \rightarrow 2$  form has 2nd person indexation. In Nocte,  $1 \rightarrow 3$  again has 1st person indexed, but  $1 \rightarrow 2$  has a special mark, originally a 1PL suffix. Again, since the distinguishing mark of  $1 \rightarrow 2$  is different in Khroskyabs (Table 4) and Nocte (Table 13), we see that the languages have developed this pattern independently. In this section we will look at further evidence from Kiranti languages which shows a recurrent tendency to conflate the  $2\rightarrow 1$  and  $3\rightarrow 1$  forms, and to distinguish  $1\rightarrow 2$  from  $1\rightarrow 3$  by some special marking.

Let us now look at three very closely-related languages, all from the Western subbranch of Kiranti, where we see several different variations on this same theme. First consider the paradigm of Wambule (Opgenort 2004):

	0			
S	Α	1sg	2sg	3sg
Σ-ŋu	1sg		Σ-ni	Σ-ŋu
Σ-nu	2sg	Σ-ŋi		Σ-nu
_	3sg	Σ-ŋati	Σ-nati	Σ-u

Table 15. Indexation of singular arguments in Wambule

The broad parameters of the paradigm are familiar. We see a hierarchical pattern, with the  $1\rightarrow3$ ,  $3\rightarrow1$ , and  $2\rightarrow1$  forms all showing the  $|\eta|$  which indexes 1st person, and  $1\rightarrow2$ ,  $2\rightarrow3$ , and  $3\rightarrow2$  all with  $|\eta|$  forms indexing 2. (Both of these are cognate to the corresponding morphemes in Rgyalrongic). We see incipient inverse marking once again in the *-ti* suffix in the  $3\rightarrow1$  and  $3\rightarrow2$  forms, but in contrast to what we saw in Khroskyabs and Northern Naga, here this incipient inverse form does not occur in either local form, and thus does not indicate any hierarchicization of the two SAP's. The point of particular interest in Wambule is the uniqueness of the two local forms; each has a form which seems to index the object, but with distinct vocalism. The shared vocalism of the two forms is coincidental. The *-ni* marking  $1\rightarrow2$  is apparently the ancient 2PL form, which occurs in this slot in other Kiranti languages as well. The  $3\rightarrow1$  index is a combination of the 1sG *-\etaa* and 1PL.INC*-i*.<sup>9</sup>

	0			
S	Α	1sg	2sg	3sg
Σ-ŋu	1sg		Σ-ni	Σ-u
Σ-na	2sg	Σ-ŋi	Σ-na	
-	3sg	Σ-ŋi	Σ-na	Σ-y

Table 16. Indexation of singular arguments in Thulung (non-past)

One way in which the Wambule paradigm differs from anything we have seen before is in the distinct marking of the  $2\rightarrow 1$  and  $3\rightarrow 1$  forms. In every language that we have looked at except for Zbu Rgyalrong, a single form marks both these configurations. In Zbu the forms are the same except for an added 2nd person

**<sup>9.</sup>** 1PL.INC \*-*i* is reconstructible at both the Proto-Kiranti and PTB levels; in Wambule it remains as an independent form only in the 1PL.INC $\rightarrow$ 3 form, elsewhere having merged with \*-*ka* 1PL.EXC in an innovative 1st person non-singular -*ki*. This may also be involved in the 2PL \*-*ni* form (van Driem 1993), but if so it is probably at a pre-PTB, and definitely at some pre-Proto-Kiranti level.

index in  $2\rightarrow 1$ . But in Wambule each form has a distinctive mark, the anomalous vowel in  $2\rightarrow 1$  and the incipient inverse *-ti* in  $3\rightarrow 1$ . Now compare the Wambule paradigm with Thulung (Lahaussois 2003):

The close relation of the Thulung paradigm to Wambule is evident. (And, among other things, attests to the novelty of the inverse -ti suffix in Wambule). Again, as we have seen in several other languages, the  $1 \rightarrow 2$  form is unique, though clearly related to the other 2nd person index, and sharing unexpected vocalism with the 10BJ forms. The most striking difference between Thulung and Wambule is the  $3\rightarrow 1$  form. Thulung has returned to the pattern which we see in the other languages, with a single index for both 1O forms, and it has done so by extending what was originally a very specifically local construction into the inverse domain. The 1PL origin of the -*i* element makes sense, and is typologically plausible, as a local  $2 \rightarrow 1$  index,<sup>10</sup> but makes less (if any) sense as a source for  $3 \rightarrow 1$  marking. Thus the motivation for this shift in paradigmatic structure can only be the desirability of having the same marking for both forms. What is striking about this shift is that, as we can see by comparison with Wambule, it is the presumably more marked  $2 \rightarrow 1$  form which has spread, and the original  $3 \rightarrow 1$  form which has disappeared. This conclusion is sufficiently counterintuitive that the reader may feel compelled to doubt the comparative argument, but in Section 4.2 we will see other examples of exactly the same thing occurring independently in other languages.

In both Wambule and Thulung the  $1\rightarrow 2$  form has a unique index, but in both it is easily relatable to other 2nd person indices in the paradigm. The importance of special marking for this configuration is underlined by a further development in one more Western Kiranti language, Sunwar (Genetti 1988):

	0			
S	Α	1sg	<b>2</b> sg	3sg
Σ-ŋ	1sg		Σ-n	Σ-ŋ
Σ-ye	2sg	Σ-yi		Σ-yi
-	3sg	Σ-yi	Σ-ye	$\Sigma$ -u

Table 17. Indexation of singular arguments in Sunwar

Sunwar has an innovative 2nd person suffix -ye, but the -yi in the 1O forms is probably derived from the  $-\eta i$  which we saw in Wambule and Thulung. The spread

<sup>10.</sup> The use of a 1PL form for one or the other of the local categories is attested elsewhere in and outside of Tibeto-Burman; we have already seen the cognate 1PL form in Nocte used to uniquely mark the  $1\rightarrow 2$  form (Table 13).

of -*yi* to the 2 $\rightarrow$ 3 form seems to represent further reanalysis, probably facilitated by the resemblance of the two originally distinct 2nd person indices. The main point to note in the Sunwar paradigm is that the original 2nd person -*n* remains unreplaced and unchanged in the 1 $\rightarrow$ 2 form, which as a result is strikingly distinct from any other form in the paradigm.

#### 4.2 The "marked scenario"

We see more evidence for a tendency to conflate the  $2\rightarrow 1$  and  $3\rightarrow 1$  forms in the "marked scenario" indexation pattern in Nungish and a few Kiranti languages. The transitive paradigm of Trung<sup>11</sup> (Nungish; Sun 1982; 1983: 25–6; see also Lo 1945) is as follows:

Table 18. Indexation of singular arguments in Trung

	0			
S	Α	1sg	2sg	<b>3</b> \$G
Σ-ŋ	1sg		Σ-ŋ	Σ-ŋ
nu-Σ	2sg	nɯ-Σ-ŋ		nu-Σ
-	3sg	nա-Σ-ŋ	nu-Σ	

Note that we have here our first truly hierarchical paradigm, in that the 1st person suffix  $-\eta$  occurs on any verb with a 1st person argument, with no exception. Thus the  $1\rightarrow 2$  and  $1\rightarrow 3$  forms are identical, a rare pattern in TB, and one which is contrary to the general tendency to uniquely distinguish  $1\rightarrow 2$  from everything else. But this pattern is consistent with our preconceptions about hierarchical systems, and thus not surprising in a broader typological context. More noteworthy in this paradigm is distribution of the prefix *nut*-, which occurs on intransitive 2nd person subject verbs, and in all transitive forms with a 2nd person argument except for the  $1\rightarrow 2$  form. The synchronic identification of this prefix as a 2nd person index is complicated by its occurrence in the  $3\rightarrow 1$  form, which has no 2nd person argument; we will return to this directly. Taking this as a 2nd person form for the moment, we then see that  $2\rightarrow 1$  is doubly indexed, almost exactly as in Zbu Rgyalrong.

We find prefixes with the same distribution throughout Nungish and in at least two Kiranti languages: Dumi *a*- (van Driem 1988; 1993; cp. Bynon 1998),

<sup>11.</sup> I take this spelling from Lo (1945), the first published report. The language is often referred to as Dulong, a transliteration of the Chinese version of the name. In previous publications I have also used Tarong, which represents the native pronunciation.

and Khaling 2i- (Toba 1979; Jacques et al. 2012). This distribution constitutes a descriptive and analytical problem for every scholar who has addressed it. LaPolla (2010), labels the equivalent prefix in Rawang, a very close cousin of Trung, the "non-first person actor" marker, and describes it as used whenever either SAP is mentioned in the clause, but the A is not 1st person. As a description of a grammatical category this seems a bit forced, but it is difficult to come up with any unified description which is not. Van Driem simply calls the Dumi equivalent the "marked scenario" form, which is simply giving up – all of these scenarios marked by the prefix are, by definition, marked; the question is why?

There is no question that the "marked scenario" pattern represents an analogical extension of what was originally 2nd person indexation. In Trung (H. Sun 1984), Dumi (van Driem 1993) and Khaling (Toba 1979) the prefix is identical to the 2nd person possessive prefix; Rawang apparently lacks possessive pronominal forms (Barnard 1934: 8), but the "non-first person actor" prefix *è*-can plausibly be associated with an original 1PL.INC index reanalyzed as a 2nd person form (DeLancey 2011a; we have seen a cognate 1PL.INC*i*- in Kuki-Chin in Section 2.4). Thus in each case – and presumably at least twice, and perhaps more, independently – the "marked scenario" distribution represents a secondary extension of a 2nd person form to index  $3\rightarrow 1$ . The idea of 2nd person indexation as the analogical basis for 3rd is counterintuitive, and so this pattern has caused some distress (Bynon 1998). But there is no other explanation for what we see in these languages. And we have already seen, in the previous section, a similar shift that can be accounted for no other way.

It seems likely that this shift was facilitated by the fact that the  $3\rightarrow 1$  form previously had a distinct prefix, the inverse \**u*- (Ebert 1990; 1991; DeLancey 2011a; Jacques 2012). We noted the similarity of the indexation pattern of Trung to that of Zbu Rgyalrong, but they are not quite identical; recall that in Zbu  $3\rightarrow 1$  has the inverse prefix, and  $2\rightarrow 1$  has both inverse and 2nd person prefixes:

	Zbu Rgyalrong	Trung
$2 \rightarrow 1$	tə-wə-∑-aŋ	nա-Σ-ŋ
3→1	wə-Σ-aŋ	nɯ-Σ-ŋ

Table 19. 10 forms in Zbu Rgyalrong and Trung

Other comparative data supporting this hypothesis with respect to the analogous patterns in Kiranti are presented by Ebert (1991) and Jacques (2012):

In the Bantawa dialect the distinction between inverse and 2nd prefix is blurred: u- sometimes corresponds to inverse u- and sometimes to 2nd a- in some

neighboring languages. This may be a first step toward a generalization of one prefix to all inverse and 2nd configurations (except 1>2), as found in Dumi and Khaling. (Ebert 1991: 83)

These similar developments in Trung and some Kiranti languages are not necessarily exactly either "shared" or "parallel" innovations. Presumably in PTB, as in any other language, there was a range of delicate locutions used for 2nd person or as humilific or self-effacing workarounds for 1st, probably including generic constructions, and other such avoidance strategies such that many different verb forms might in some circumstances be used in something other than their "literal" paradigmatic sense. If both Khaling and Nungish have an old 1PL.INC form functioning synchronically as 2sG, it is not that they both "innovated" a "shift", but rather that in both languages the same original polite locution has become the default.

# 5. Deictic and sociopragmatic effects

We have looked at three recurrent paradigmatic patterns – canonical inverse marking, unique marking of  $1\rightarrow 2$ , and conflation of  $2\rightarrow 1$  and  $3\rightarrow 1$  – developing independently, by distinct paths, in several different TB languages. The prevalence of inverse constructions reflects familiar factors, but the patterns which we have observed in the marking of the local categories require explanation.

# 5.1 Reviewing the evidence

The special status of the SAP's relative to all other referents is reflected in many different grammatical developments in TB languages. For example, several languages and branches with secondary subject indexation paradigms have independently innovated a form which indexes both 1st and 2nd person objects (DeLancey 2013; Konnerth 2015), as in Purum, a Northwestern Kuki-Chin language (Sharma & Singh 2011), where an innovative  $-n\partial$ - prefix occurs in all 1/2 O forms:

	0			
S	А	1sg	2sg	3sg
kə-	1sg		kə-nə-	kə-
nə-	2sg	nə-nə-		nə-
ə-	3sg	ə-nə-	ə-nə-	ə-

	Table 20.	Indexation	of singular	arguments in Purum
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In Section 3.1 we noted a persistent tendency in Nocte and Tangsa to reinvent canonical inverse marking, in at least one case from a cislocative motion construction. This tells us that the deictic ranking of SAP>3 is a persistent factor in diachronic change in these languages.

We have also seen several examples of innovation resulting in distinctive marking for the  $1\rightarrow 2$  category, distinguishing it from all other forms. In Rgyalrong this form has distinctive vocalism, perhaps reflecting an older passive prefix. In Nocte this form has 1PL indexation. Throughout Kiranti it has a distinctive index which originates as a 2 or 2PL marker; in Sunwar and many other Kiranti languages this form remains even when subsequent developments involve replacement of the older 2nd person index by a distinct index in all other forms (DeLancey 2014).

In Section 4 we saw several different paths by which TB languages collapse the indexation of the local  $2\rightarrow 1$  and the inverse  $3\rightarrow 1$  form. Most of these involve extension of an original  $2\rightarrow 1$  form to also index  $3\rightarrow 1$ . The most unusual and intriguing manifestation of this tendency is the "marked scenario" system of Nungish and a few Kiranti languages in which an original general 2nd person S/A/O index comes to mark the  $3\rightarrow 1$  form as well.

One last tendency, which we have remarked in passing, deserves more attention at this point: the tendency for one or both local categories to be indexed by a form which is originally an agent-suppressing construction, either a passive or an impersonal. There is a particularly strong tendency in TB languages to use an impersonal form for the  $2\rightarrow 1$  scenario. Since this form also tends to be identical with  $3\rightarrow 1$ , this often results in impersonal marking of all 10 forms:

Most SE Kiranti languages have impersonal forms for some or all 1st patient configurations, either grammaticized and integrated into the paradigm ... or as an optional variant. (Ebert 1994: 28)

(See also Bickel & Gaenszle 2015). But this is not always the case; recall that in the Rgyalrong languages it is only  $2\rightarrow 1$  which has the originally impersonal k- form (Section 2.2). And in general we have seen that unified 10 marking usually originates in the  $2\rightarrow 1$  form, so it is likely that in paradigms where unified 10 marking derives from an impersonal construction, it has done so through an intermediate stage like that which we see in Rgyalrong.

#### 5.2 Typology, genre, and person

Explanations of hierarchical effects in terms of topicality and reference management take for granted that 1st and 2nd person are simply two more referents, to be tracked through a discourse like any other. This assumption has not been, and probably cannot be, justified. As Mühlhäusler and Harré (1990) argue, 1st and 2nd person pronouns are very different in function from other nominals. NP's are referential, and 3rd person pronouns anaphoric, but SAP pronouns are neither. Rather, their function is indexical, invoking one or the other of the two selves which constitute the speech act situation. Other referents are necessarily contingent, but the speaker and hearer are intrinsic to the speech situation. They are not "participants" in the speech situation, they are the defining constituents of it. If these two referents are part of the system of information management at all, they must represent a distinct subsystem within it.

One problem with topicality approach to hierarchy is that most serious studies of topicality are based on the study of connected narrative. Dahl (2000) points out that SAP's are vanishingly rare in this genre, but extremely common in conversation. It seems likely that claims about topicality made on the basis of patterns found in narrative may be valid for "allophoric", i.e. 3rd person, reference, but not for "egophoric" reference to SAP's:

[T]he "topicality" of egophoric expressions is rather different from that of thirdperson pronouns ... Thus "topicality" cannot be used as a general explanatory notion; at best, it is a cover term for a number of different phenomena which tend to cluster, but only partially." (Dahl 2000: 66–67)

Since studies of topic continuity and referential management in the literature are based on tracking allophoric referents through narrative, any claims made about SAP's in this literature are at best speculative.

In fact it is likely that these two genres of speech are cognitively quite different, in ways which are directly relevant to the issues of hierarchical indexation. At one extreme, fictional narrative – the basis of most grammatical description – takes place in a conceptual space which the addressee must construct, on grammatically- and lexically-coded instructions from the speaker, and then move 3rd person referents around in as the narrative progresses. In this context, rather than a "shared" conceptual space or universe of discourse, we are really talking about a conceptual space built up by the addressee, hopefully approximating that which the speaker has in mind. At the other, face-to-face conversation, we have a literally shared space, mutually maintained by the two interlocutors, each of which is, in turn, speaker and then addressee. Notions of "topicality" in these two contexts cannot be the same, and may not even be commensurable.

#### 5.3 Patterns

The ranking SAP > 3 is universal by definition of the notion SAP – that is simply how the speech situation is. In contrast, any specific marking which distinguishes the SAP's is a choice among different possibilities, expressing one particular view of the speech situation out of a number of possibilities. Various strategies of local marking may emphasize one or another of these. Heath interprets these different strategies as avoidance strategies:

Such irregular and problematic combinations are more, not less, highly-valued than regularized alternatives would be; the latter would make life easier for grammarians, but more difficult for flesh-and-blood native speakers engaged in actual communicative acts. (Heath 1991: 86)

But we cannot explain the data in purely negative terms – we need to be able to describe a particular strategy in terms of what it accomplishes as well as what it avoids. We do not need to discuss further the persistent effect of SAP>3, which is easily explained in all of the current approaches. We do need to find a new way to think about local indexation, and in particular the tendency of TB languages to emphasize the uniqueness of the  $1\rightarrow 2$  category and to downplay or eliminate the uniqueness of  $2\rightarrow 1$ .

We have seen that diachronic tendencies in TB languages do not follow any consistent "ranking" of 1st and 2nd person. The tendency to uniquely mark  $1\rightarrow 2$ , often with an originally 2nd person index, could be interpreted as ranking 2 above 1, while the tendency to merge  $2\rightarrow 1$  and  $3\rightarrow 1$  could be interpreted as treating  $2\rightarrow 1$  as inverse, and thus ranking 1 above 2. Since most of the languages which we have looked at show both tendencies, we see that neither ranking is consistent. It is clear that the two SAP's do not have the same status in TB languages – different factors are revealed in changes relevant to the two persons – but these differences are not manifested as a hierarchical ordering comparable to the SAP > 3 ranking. So what we have is not really hierarchical agreement in any meaningful sense. Rather than trying to fit the two SAP's on some kind of a hierarchy, we should think in terms of the unique role which each plays in constituting the speech situation.

First consider the tendency to distinguish the indexation of  $1\rightarrow 2$  from any other form. In Rgyalrong and Kiranti this is a special 2nd person index which is distinct from any other 2nd person form. The Rgyalrong languages accomplish this by adding a mark, Kiranti languages in general by exempting this form from analogical or phonological shifts which change the form of all other 2nd person indices. Both strategies can be interpreted as means of drawing special attention to the addressee's role in the event. (In Kiranti these relict 2nd person suffixes are often synchronically opaque, so that they are often referred to as portmanteau forms in linguistic descriptions). Northern Naga has accomplished the same paradigmatic configuration by replacing the original 2nd person index with a form which originally indexed 1PL.INC. Northern Naga has replaced the original 2nd person index throughout the paradigm, but in all other forms the innovative form is a suffix #-o, probably arising through sociopragmatically-motivated circumlocution from a potentialis construction (DeLancey 2014). In contrast to developments in Rgyalrongic and Kiranti, Northern Naga ensures the uniqueness of the  $1\rightarrow 2$  form by using a construction which originally avoided direct reference to 2nd person rather than emphasizing it.

Since the  $1\rightarrow 2$  form is unique and irregular in the substantial majority of TB languages with hierarchical systems, and since we have seen several different routes to this paradigmatic state, we may consider it a relatively stable phenomenon. I will suggest below that this is because it in some way makes speakers' communicative lives easier, but the basic claim here is empirical, not speculative – the tendency for TB languages to evolve to this state, by whatever means are available, is considerably greater than any tendency which they might have (such as, for example, instantiating a 1>2 hierarchical ranking) which would lead to convergence of this form with any other.

Next consider the conflation of  $2\rightarrow 1$  with  $3\rightarrow 1$ . In Rgyalrongic and Northern Naga this results from the analysis of both forms as inverse, a path which is not inconsistent with an explanation in terms of a 1>2 ranking. But in Kiranti and Nungish it results from extension of an originally 2nd person form into the  $3\rightarrow 1$ , something which even in the small set of languages discussed here we see happening independently at least three different times, from at least two different source constructions. This kind of analogy is less easily interpretable in terms of hierarchy, although we could perhaps argue that eliminating a distinction between 2A and 3A amounts to putting them at the same hierarchical rank. On the other hand, by whatever pathway it develops, the resultant paradigm is one with an explicit 1O index, which highlights the speaker's involvement while directing attention away from the addressee's.

Note the difference between the reference made to the two SAP's in these forms. Both the local forms tend to index the O argument, but, while it has been standard in TB studies to characterize this pattern as consistent object agreement, we can see that functionally what is happening in the two forms is quite different. In the  $1 \rightarrow 2$  form, the O argument is emphasized, but the uniqueness of the form makes clear that this situation - one in which I am the instigator and you the recipient or victim – is different from any other. The speaker may not be explicitly indexed as the instigator, but since these forms are distinct from  $3 \rightarrow 2$ , it is explicit that the instigator is not someone outside the speech situation. In the  $2\rightarrow 1$  form, on the other hand, the O argument is emphasized in a way that avoids any implication of the identity of the instigator - the form gives no basis for any inference. Recall Jacques' suggested sources for the irregular local forms in Japhug (Section 2.2, Table 6). The  $1\rightarrow 2$  form is traced to a passive, that is, a form which implies an A argument but does not identify it, while the  $2\rightarrow 1$  form derives from an impersonal construction, i.e. one which makes no reference to agency at all.

#### 5.4 Sociopragmatic just-so stories: It's always about you

While the gross fact that both local categories tend to index the O argument suggests that they are being treated in the same way, we have seen that a closer examination shows something quite different. While no tendency is maintained in every language that we have looked at, the broad tendency is to mark the  $1\rightarrow 2$  category in a way that emphasizes the addressee's participation, and the uniqueness of this kind of situation, while the  $2\rightarrow 1$  category is generally treated as something happening to the speaker, with no indication that the addressee is involved, or that the situation is in any way unique. That is, languages conspire to emphasize reference to the addressee in  $1\rightarrow 2$  events, and eliminate any such reference in  $2\rightarrow 1$ . Thus both of the tendencies which we have tracked across the family are fundamentally about managing reference to the addressee's role in an event.

Obviously any explanation of this kind for diachronic changes inferred through morphological comparison is in the nature of a just-so story. The differential treatment of the two SAP's and the two local categories is an empirical claim, inferred from patterns in data, and testable by confrontation with more data. Hypotheses about why these categories are different are necessarily more speculative. But we have good reasons for thinking about the problem in sociopragmatic terms. Dahl (2000) notes that in his European language corpus SAP reference is rare in narrative but ubiquitous in conversation. This is hardly surprising. While there are circumstances in which I might inflict on you a tale of my own activities or complaints, the only sort of narrative that I might tell in which you would appear would be shared reminiscence. (Other marginal exceptions which come to mind – for example, someone telling you the morning after about your drunken behavior the night before - are even more dangerous). With this exception - and even this is potentially socially hazardous<sup>12</sup> – any reference to the addressee, and in particular to transitive events involving one SAP as A and the other as O, is the realm of bickering and badinage, of promises, threats, requests and cajolery, negotiations, offers and rejections. These are all matters which, in any culture, have to be done carefully, and every culture and language has indirect means which serve these purposes.

I have certainly not proven in this paper that sociopragmatics is the only possible direction in which to seek explanations for the common phenomenon or irregular and a-hierarchical marking of local categories in otherwise hierarchical paradigms. But I have provided a more detailed and nuanced account of the problem, and shown patterns which do seem to ask for sociopragmatic interpretation.

<sup>12.</sup> Imagine (or use Google) the kinds of things that might follow the sequence "Remember that time you ...".

#### Abbreviations

aorist
direct
ergative
exclusive
inclusive
inverse
singular

#### Also, for language names

TB Tibeto-Burman

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