

EVIDENTIALS, INFERENTIALS AND MIRATIVITY IN NEPALI

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1. INTRODUCTION

Over the past few years, an increasing number of studies have appeared concerning a somewhat curious “evidential” category which does not in fact denote the source of knowledge, but rather that the knowledge has come as something of a surprise to the speaker. Some researchers, such as DeLancey (e.g. 1997), view this as a separate category which primarily indicates new information and refer to it as the “mirative”. Others, such as Lazard (e.g. 1999) prefer to treat the “mirative” as a subclass of a more general and abstract “mediative” category.

This phenomenon appears to be especially common in the Balkan region and also in the Himalayan area, where it is found in a large number of languages, ranging from the Dardic (Indo-Aryan) languages Kalasha and Khowar in the west (cf. Bashir, 1988) to Tibetan and further in the east (cf. the data in DeLancey, 1997), although it is by no means restricted to these regions.

The pattern which has emerged is in essence the following: a single category usually serves to mark hearsay, inference through results, surprise and admiration. By and large, Nepali also fits into this picture, albeit with some restrictions. It is my aim here to first briefly present the Nepali “evidential” system, propose a possible development from an erstwhile perfect construction, and use this information to see to what extent Nepali will be of help in further understanding the category “mirative”.

This paper is structured as follows: In section 2, I will briefly present the respective categories in Nepali, both their form and their range of meaning. As detailed data on Nepali have already been published elsewhere (cf. Michailovsky, 1996), this section will be very brief.¹ Section 3 summarizes the varying uses of the mirative/result-inferential category. In section 4, I suggest a possible path of

¹ Although I was unaware of the data in Michailovsky (1996) at the time of the conference, my classification of the Nepali data is largely the same as his. Thus, where our views are very similar I will merely list the various forms and give a very brief description of their function. For a more detailed account, the reader is referred to Michailovsky's article. The areas where our views differ the most are the analysis of the data and the treatment of the hearsay-evidential category. Hence, considerably more space will be devoted to these topics here.

development for this category from a one-time perfect construction, basing my arguments primarily on the data presented in Wallace (1982) as well as general paths of grammaticalization. This section also includes a new etymology of the hearsay marker *re*. On the basis of the Nepali data, I will present a somewhat different interpretation of the mirative in section 5 and discuss both its questionable status as a separate conceptual category as well as the fact that its marking is generally identical to that of the result-inferential. Section 6 comprises the conclusions and suggests areas for future research.

2. THE "EVIDENTIALLY" MARKED AND UNMARKED FORMS IN NEPALI

The Nepali aspectual system can be partially represented as follows:²

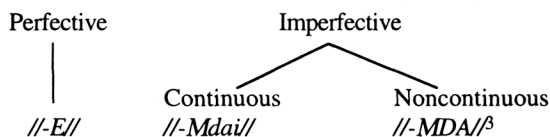


Diagram 1: The Nepali aspectual system (simplified)

Nepali has a binary aspectual opposition in the indicative, with both a perfective and an imperfective. Furthermore, the imperfective has an additional binary split between the continuous and the noncontinuous, both of which can appear in the past or nonpast. All three categories are indicated by the appropriate aspectual marker, which directly follows the verb stem. We will now take a very brief look at the verbal system with respect to evidentiality.

² The Nepali verb system still awaits a detailed analysis with respect to the exact value of the following categories. These topics will be treated elsewhere (cf. Peterson, in preparation). Here I will restrict my comments to the most basic facts with respect to both tense and aspect. Following a suggestion from B. Bickel (p.c.), I will refer to the two tenses of the imperfective as "past" and "nonpast", as opposed to the more common interpretation as "past" and "present", respectively. However, the remaining interpretation of the verbal system is my own and does not necessarily represent his views.

³ The distribution of *//MDA//* is as follows: $\emptyset$ after consonants, *-m* after diphthongs, and *-n* in conjunction with vowels. There are also the alternative "full" forms *-da* (after consonants) and *-mda* (elsewhere), which are mainly found in written Nepali. The continuous marker *//M dai//*, which consists of the noncontinuous marker *//MDA//* and the focus marker */-ai/*, is the same as that of the "full" forms of *//MDA//*. *//E//* is realized as *-e* or *-i* before consonants, and *-y-* in conjunction with vowels and diphthongs.

2.1 “Evidentially” Unmarked

In the imperfective, tense and person are indicated by an auxiliary which is identical in form with the copula. The imperfective is always unmarked with respect to evidentiality (cf. Michailovsky, 1996: 112, especially note 8).

Imperfective

Nonpast

Continuous

- (1) u kām gar-dai-cha
 3.S work do-CONT-NPT.3.S
 ‘s/he is working’

Noncontinuous

- u kām gar-da-cha / gar--cha
 3.S work do-NCNT-NPT: 3.S do-NCNT-NPT.3.S
 ‘s/he works’

Nonpast form of the copula: cha

Past

Continuous

- (2) ū kām gar-dai-thyo
 3.S work do-CONT-PT.3.S
 ‘s/he was working’

Noncontinuous

- ū kām gar-da-thyo / gar--thyo
 3.S work do-NCNT-PT.3.S do-NCNT-PT.3.S
 ‘s/he worked / used to work’

Past form of the copula: thiyo

Perfective

The status of what I refer to as the “perfective” marker //E// is a complex issue and can only be touched upon briefly here. (A more detailed analysis is in preparation.) It is used to form the following categories, among others.

Simple Past

When morphologically unmarked for tense, the perfective marker generally combines with person marking to form a portmanteau morph. This category is an aspectually neutral simple past⁴ and has an evidentially unmarked interpretation. As we shall see below, however, the TAM values of other categories marked by //E// have a quite different status. An example of the simple past:

⁴ The analysis given here differs somewhat from that given in Peterson (1999). Since then, following up on suggestions from Karen Ebert and Balthasar Bickel, I have been able to gather data which clearly show that this finite category is indeed not a perfective category but must be considered an aspectually neutral simple past tense. However, as argued in Peterson (1999:342f), the same marker //E// is clearly used to mark this category as well as categories such as the past perfective (cf. section 3 below) where it is obviously a perfective marker. A further discussion of this topic will be presented in a future study.

- (3) hāmī-harū-le kām gar-yaum⁵
 1-P-ERG work do-SPT.1.P
 'we worked'

Perfect:

The present-day perfect forms are based on the perfect participle ending in *-e-ko* 'PFV-NML'. This form is followed by an auxiliary which is homophonous with the copula:

- | <i>Present Perfect</i> | <i>Past Perfect</i> |
|-------------------------------------|------------------------------------|
| (4) us-le kām gar-e-ko cha | us-le kām gar-e-ko thiyo |
| 3.S-ERG work do-PFV-NML AUX:NPT.3.S | 3.S-ERG work do-PFV-NML AUX:PT.3.S |
| 's/he has worked' | 's/he had worked' |

Perfect forms of the copula: bha-e-ko cha (present perfect) and *bha-e-ko thiyo* (past perfect)

2.2 "Evidentially" Marked

2.2.1 The mirative and inference through results⁶

This category expresses both unexpected information and inference through results. The marking of this category is based on the perfective suffix *-e*, but unlike the "evidentially" unmarked simple past, the mirative/result-inferential makes use of an auxiliary to denote both nonpast tense and person:

- (5) us-le kām gar-e-cha
 3.S-ERG work do-PFV-NPT.3.S
 's/he works (unexpectedly)' or 's/he seems to have worked / to work'

However, when the auxiliary appears in the past, the verb form does not denote surprise or inference through results but rather a sudden action or one which immediately precedes another. In this respect it also differs from the past perfect discussed in 2.1 above, which does not denote suddenness:

⁵ That this category is indeed formed with the perfective marker *//-E//* can be seen in the negated simple past, where the negative marker *-n(a)* appears between *//-E//* and person marking. Example (3), when negated, would then be:

hāmī-harū-le kām gar-e-n-aum
 1-P-ERG work do-PFV-NEG-1.P
 'we did not work'

⁶ Michailovsky (1996) refers to this category simply as "l'inférentiel", due to its use in (result-)inference. However, as I believe the mirative to be a separate conceptual category, I will retain the somewhat cumbersome term "mirative/result-inference".

- (6) us-le kām gar-e-thyo
 3.S-ERG work do-PFV-PT.3.S
 's/he (suddenly) worked'

That is, despite the formal similarities to the mirative/result-inferential, the past perfective is evidentially unmarked,⁷ although there are also semantic similarities to the mirative. Cf. section 3.1.1 below for a more detailed discussion.

Mirative/Result-Inferential form of the copula: rah-e-cha 'stay-PFV-NPT.3.S'

The mirative/result-inferential form of the copula is based on the lexical verb 'stay, remain, live'.

Finally, as Michailovsky (1996: 113) notes, the (result-)inferential is commonly accompanied by the word *kyāre* 'I suppose', to which we will return in section 4.3.

2.2.2 Inference from reasoning⁸

This category is traditionally referred to (inappropriately) as the "future". Although it can be used with reference to future events, especially those which are considered less than certain, its main function is apparently to denote inference through reasoning, general knowledge, etc. As Michailovsky (1996: 113) notes, this category is frequently used in conjunction with *sāyad* 'perhaps, maybe' while Matthews (1992: 203) adds that it is also commonly found with *jasto cha* 'it seems'.

- (7) ū kām gar-lā
 3.S work do-FUT.3.S
 's/he'll (probably) work'

Reasoning-Inference form of the copula: holā

Often, this form of the copula simply denotes 'probably' and appears in sentence-final position, immediately following the verb. Here it is optionally marked for person, with the 3rd person singular being the default marking. Cf. the following two examples from Matthews (1992: 203, gloss added):

- | | | | | | | |
|--------|--------------------|------------|-------------|----|---------------------------|-----------------|
| (8) a. | mai-le | gar-eṃ | huṃlā | b. | ma jā-n-chu | holā |
| | 1.S-ERG | do-SPT.1.S | AUX:FUT.1.S | | 1.S | go-NCNT-NPT.1.S |
| | 'I must have done' | | | | probably (cf. 1.S: huṃlā) | |
| | | | | | 'I shall probably go' | |

⁷ Many thanks to Johanna Mattissen (p.c.) for calling this fact to my attention.

⁸ Michailovsky (1996:113) quite appropriately refers to this category as "l'hypothétique". Nevertheless, I will retain Willet's (1988) term "inference from reasoning" here to distinguish it from "inference through results".

2.3 Hearsay

While not a verb form, I will also include here the evidential marker *re*. This particle occurs in sentence-final position and denotes that the speaker has his/her knowledge through another person. Its form is not only reminiscent of the mirative and the result-inferential form of the copula (*rahecha*), but I will argue that it in fact derives from this form.

- (9) us-le kām gar-yo re
 3.S-ERG work do-SPT.3.S EVID
 ‘they say s/he worked’

2.4 Summary of “Evidentiality” in Nepali

In summary, the major “evidential” categories in Nepali are the following (all examples are in the 3rd person singular):

“Evidentially” unmarked

Lexical Verbs (*gar-* ‘do’)

Imperfective

Nonpast

Continuous

gar-dai-cha

Noncontinuous

gar--cha / gar-da-cha

Past

Continuous

gar-dai-thyo

Noncontinuous

gar--thyo / gar-da-thyo

Simple Past

gar-yo

Present Perfect

gar-e-ko-cha

Past Perfect

gar-e-ko-thiyo

Copula

Nonpast

cha

Past

thiyo

Mirative/Result-Inference

Lexical Verbs

gar-e-cha

Copula

rahecha

Reasoning-Inference

Lexical Verbs

gar-lā

Copula

holā

Hearsay

(Sentence with any verb form)

re

Table 1: A summary of the major verbal categories in Nepali with respect to “evidentiality”

We can provisionally arrange these categories using Willet's (1988: 57) classification, illustrating each one with the appropriate form of the copula:

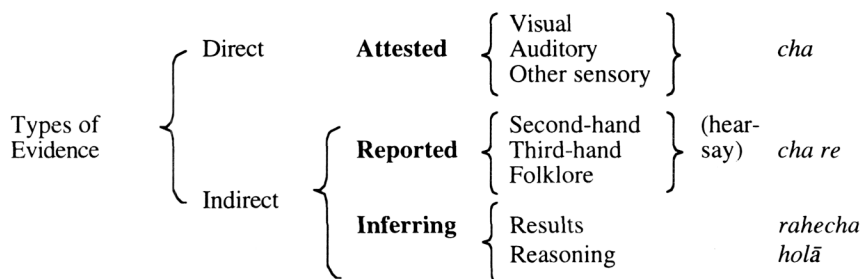


Diagram 2: "Evidentiality" in Nepali (based on the classificatory system in Willet, 1988: 57)

Unfortunately, as convenient as this system of representation is, it does not seem to allow us to include the mirative. The result-inferential function of this category DOES find an appropriate classification here, but if we also wish to include the mirative function in a unified scheme, an alternative classification is necessary. We will return to this topic in section 5.

3. THE FUNCTIONS MARKED BY -E+AUX

In this section we will take a closer look at the meanings of the category denoted by the ending -e+AUX, which we have so far been referring to by the somewhat cumbersome name "mirative/result-inference". In fact, this designation is also something of an abbreviation, as the category is used to cover a wide range of more or less related meanings.

3.1 "Mirative" Uses

Under the term "mirative" I will include anything denoting SUDDENNESS or SURPRISE, two closely related concepts.

3.1.1 Suddenness

When the auxiliary appears in the past, the verb form denotes a sudden event, but it does not indicate surprise. Thus, although this form is not connected to "evidentiality" *per se*, it is nonetheless closely related to the "true" mirative which denotes surprise only, since a sudden event is often unexpected. This fact will be of importance in the following section, where we discuss the historical development of the "true" mirative. An example:

- (10) kehī vyaktī-harū-ko tyo mūr̥ti dekh-nā-sāth
 some person-P-GEN that statue see-INF-with
- ḍar-le mṛtyū bha-e-thyo.
 fright-INST death become-PFV-PT.3

‘Several people, as soon as they saw the statue, dropped dead from fright.’ (Lit.: ‘With seeing that statue, some people’s death (suddenly) became through fear’) [Matthews, 1992: 191, gloss added]

Here, the use of the past “mirative” form merely denotes that the action occurred suddenly, although it does not overtly express surprise.

3.1.2 *Surprise*

Here, a young man is about to be beheaded and, very much to his dismay, sees that the eager executioner is his “friend”. Note that the auxiliary here appears in the nonpast.

- (11) tyo mānche us-ko mitra rah-e-cha.
 that man 3.S-GEN friend stay-PFV-NPT.3.S

[TD: 57]

‘That man was his friend!’

This example can only be considered one of surprise and not inference, since the young man who is supposed to be beheaded is witnessing the situation himself. It may also be considered “sudden” in the sense that the young man suddenly realizes who the executioner is. In fact, the notion of “suddenness” is an essential component of “surprise”.

3.2 “Evidential” Uses

Under the term “evidential” I include all types of indirect knowledge through which the speaker has come to learn of an event or a situation, whether this be by inference through results, or by the speaker’s interpretation of the actions of others (“thoughts and feelings of another person”) or what I refer to as “narrative”, which has similarities to “hearsay”. Note that inference through reasoning is not included here but is a separate category.

3.2.1 *Inference Through Results*

In the following, the notion of “inference through results” should be easily discernible, as the queen is making her judgments for quite obvious reasons:

- (12) “mahārānī! mai-le khānekurā khā-i-sak-em. [...]”⁹ -
 queen 1.S-ERG food eat-0-TEL-SPT.1.S

sarkār-le pi-i pani baks-e-cha.”
 sir-ERG drink-0 also AUX:HON-PFV-NPT.3.S

‘My queen! I have already eaten. [...] My Lord has [obviously] drunk as well.’
 [adapted from Michailovsky, 1996:113, quoted from *Seto Bagh*, 135]

3.2.2 Thoughts and Feelings of Another Person

The interpretation of what another person is feeling may be considered an extension of inference from results, since the actions or facial expressions of another person may be viewed as the result of his or her feelings.

In the following example, two men, travelling towards eastern Nepal on foot, have met along the way and spent an entire day walking together and talking to pass the time. When it comes time to say goodbye, one, a student, realizes that while he has come to consider the other, a soldier, to be a good friend, the soldier shows no emotion, and apparently will not miss the student in the least:

- (13) ma tyas-lāī sneha gar-na lāg-i-sak-e-ko thiern;
 1.S 3.S-OBJ love do-INF begin-0-TEL-PFV-NML AUX:PT.1.S
- tara tyas-lāī kas-ai-ko vāstā rah-e-na-cha.
 but 3.S-OBJ someone-FOC-GEN care stay-PFV-NEG-NPT.3.S

[VK: 63]

‘I had begun to “love” him, but he [obviously] didn’t care for anyone.’

3.2.3 Narrative

(first action in a story)

- (14) ek din bābu-le tyas chorī-lāī ... vāgdān gar-i-di-e-chan.
 1 day father-ERG that daughter-OBJ marriage.settlement do-0-TEL.BEN-PFV-
 NPT.3.S.HON

[TD: 58]

‘One day, the father ... settled the marriage for that daughter.’

Usages such as these appear to be very similar to the “hearsay” function, in that the author is expressing information which s/he has not directly witnessed, although this may also be due to other factors, such as what Michailovsky (1996: 118) refers to as the “subjective” function of the mirative/result-

⁹ Following a suggestion from B. Bickel, I refer to the morph *-i-*, which is used in the so-called “compound-verb construction” represented here by *khā-i-sak-em*, and which is homophonous with the sequential converb in *-i / -ī*, as a *Fugenelement* and will not analyze its function further here. This topic will be dealt with in more detail in Peterson (in preparation).

inferential in narration. That is, whereas the “evidentially” neutral categories describe an event in an objective tone, the mirative/result-inferential can be used to give a story an “informal and personal” touch (Michailovsky, 1996: 118). For a more detailed discussion of the narrative function of this category in Nepali, cf. Michailovsky (1996: 116-118).

4. SUGGESTED PATH OF DEVELOPMENT

4.1 *The Competing “Perfect” Constructions*

I will now suggest a development for the emergence of the mirative/result-inferential category in Nepali, based on an interpretation of the data in Wallace (1982). This analysis is still tentative and awaits further verification.

Wallace roughly divides the history of Nepali into three chronological stages:

1. Old Malla Nepali (ca. 1350-1450)
2. Old Shah Nepali (ca. 1500-1800)
3. Modern Nepali

As Wallace (1982: 154) notes, throughout the Old Malla period and into the Old Shah period, the perfect was formed exclusively on the basis of the participial marker *-yā* (which led to modern *-e*), followed by the auxiliary-copula. In addition, this form was also used attributively.¹⁰

In the 16th century, i.e., some time into the Old Shah Nepali period, we find a new construction used alongside this older perfect, which is formed by the participial ending *-yā-ko* (modern *-e-ko*). It is immediately found both with the auxiliary in a perfect-like construction as well as attributively. As Wallace (1982: 195ff) notes, it must certainly have first been used in an attributive function, from which it later spread to include the function of the main verb of the clause.

Finally, in the modern period, the form in *-yā-ko* (modern *-e-ko*) gradually ousts the form in *-yā/-e* from the attributive and unmarked perfect constructions completely. As of some time in the present century (Wallace, 1982: 201f), the form in *-yā/-e* takes on its modern use of denoting surprise.

Based on Wallace’s data, I suggest a path of development for mirative, hearsay and result-inferential marking in Nepali along the following lines:

¹⁰ The same suffix is also used to mark the “perfective past”, in Wallace’s terms, which I refer to here as the simple past, and the protasis of conditional sentences (cf. Wallace, 1982:154, 202). These two uses are also found in the following two periods and will not be discussed further as they are irrelevant to our present discussion.

1. In the first stage, we have a perfect construction formed by the perfect participle marked by the ending *-yā*, followed by the auxiliary.

2. In the 16th century, a new construction appears. It differs from the older perfect construction in a number of respects. Formally, it makes use of the older perfect participle in *-yā* to which the genitive postposition *-ko* is added, which functions here as a nominalizer/attributivizer (cf. also Genetti, 1992: 417ff on the status of *-ko* in this form). As of this point, the ending without the postposition (i.e., *-yā* or *-e*) begins to develop from a perfect participle to a perfective marker, in a cross-linguistically well-attested path of development (cf. Bybee & Dahl, 1989: 73-77).

In terms of function, the new construction (in *-yā-ko* / *-e-ko*) initially seems to be of a resultative nature, describing a STATE WHICH IS IMPLICITLY UNDERSTOOD TO RESULT FROM AN ACTION. This is different from the older perfect construction (in *-yā* / *-e*), which apparently denoted an ACTION RELEVANT TO A LATER POINT IN TIME.¹¹

3. In the course of time, both constructions develop further. What I am referring to as the resultative construction based on *-yā-ko* gradually becomes a full-fledged perfect, also a very commonly observed development (cf. Bybee and Dahl, 1989: 68-73).¹²

The difference between the older perfect in *-yā* and the newer, now full-fledged perfect construction in *-yā-ko* was most likely between sudden or unexpected actions on the one hand (*-yā* perfect) and the “evidentially” unmarked (*-yā-ko* perfect) on the other. The roots of this are undoubtedly already present in the earliest stages of the newer construction, where the participle in *-yā-ko* describes a STATE which results from an action, while the older perfect emphasizes the ACTION itself. As the newer construction focussed on the STATE, it seems natural that its use with sudden ACTIONS would have been extremely rare.

Recall also the discussion in 3.1 above. There we saw that the perfective suffix *-e*, when followed by an auxiliary, always implies some kind of suddenness, whether this be a sudden action (10) or a sudden realization (11). This is most obvious when the auxiliary appears in the past, as in (10).

¹¹ Cf. Bybee & Dahl's (1989:55) definition of “perfect” and their discussion of the similarities and differences between the perfect and the resultative (1989:68ff).

¹² This is by no means a new development in Indo-Aryan, and is well attested for the Middle Indo-Aryan period as well, where an originally resultative construction gradually came to fulfill the function of the perfect, while the older form of the perfect construction was itself further developing (for details, cf. the discussion in Peterson, 1998, chapter 6).

Note also that the interpretation of surprise is only possible when the auxiliary appears in the nonpast, as in (11) above. This is also compatible with the notion of suddenness. When an action is presented as a sudden event which is happening at the present moment, it would seem that an interpretation of surprise is by far the most likely interpretation.

At the same time as this development was taking place, the older perfect construction (in *-yā/-e*) also developed in a very different direction to denote (result-) inference, another well-attested development (cf. Bybee and Dahl, 1989: 73f).

Although these two developments of the older perfect construction (i.e., surprise and inference) may seem incompatible at first glance, a certain functional and formal overlap between the two is indeed quite common in the languages of the world.

For example, while there is no problem with being surprised at an action which is *now* taking place and which we are witnessing, even if we did not expect it, there is something very strange about being surprised at an action which has already taken place, unless of course we are just now witnessing its results. That is, surprise connected to a past action is surprise at the *inferred action*, which at the moment of discovery is suddenly being reconstructed in the mind of the speaker. In other words, if I am surprised that Rām has gone into the city, then I am most likely surprised to find him no longer at home. It is unlikely that I will still be surprised several hours after watching him leave. In fact, restrictions on this “time lapse” also seem to have become grammaticalized in a number of languages that mark mirativity (cf. DeLancey’s (1997: 46f) discussion of Korean).

Finally, the expansion from inference-through-results to inference through other channels to the outside world in general is made, to which we now turn our attention.

4.2 The Evolution of the Hearsay Marker *re* in Nepali¹³

It is at this stage, i.e., once the erstwhile perfect in *-yā / -e* had developed further to denote inference through results (as well as surprise), that I believe the older perfect form *rah-e-cha* (stay-PFV-NPT.3.S), previously used as the result-inferential copula, developed further to become the hearsay-marker *re* (EVID). That is, the copular form used for inference from situations in the outside world which the speaker has witnessed him-/herself (*rahecha*) spreads to denote

¹³ The particle *re* has an alternative form *are*. At the moment, I cannot specify the conditions under which each particle is used, although *re* is certainly the more common of the two in texts. For now I consider them to be free variants. Cf. also the discussion in section 4.3 below.

inference to the outside world through the reports of others (*re*) as well (cf. Bybee & Dahl, 1989: 73f for a more general discussion of the development from a perfect to result-inference and hearsay).¹⁴

While the use of *rahecha* in this function is not attested in modern Nepali itself, it is certainly conceivable that the copula could have originally functioned in this fashion, i.e. as a result-inferential copula following the sentence. Here it would then refer back to the entire utterance with a meaning something like 'It (= the situation) is apparently thus'. That is, the speaker indicates after he has uttered the sentence that he is not reporting what he himself has actually seen, but rather knowledge which has been arrived at indirectly.

This development is similar to the use of the 3rd person singular, reasoning-inferential copula *holā*, used sentence finally with the meaning 'perhaps, maybe'. Cf. (8b) above, where *holā* is used sentence finally and merely denotes 'maybe'. This usage of *holā* undoubtedly goes back to an original use of the reasoning-inferential copula as an afterthought, similar to what I am proposing for **rahecha* > *re*, with the meaning 'It (= the situation) will probably be thus.'. Hence, the use of the non-3rd person marking in 8(a) above would seem to be a further development, due to analogy with the main verb, whereas the 3rd person singular would have been the original form.

Occasionally we also find partial written evidence for a phonological development in Nepali such as the one I am proposing here, i.e. *rahecha* to *re*, as in the following example, taken from a short poem:

- (15) ānanda-kuṭī-mā pravacan-ko cal-i-re'-cha aṭūṭ upakram,
 Anandakuṭī-LOC speech-GEN go-0-PROG-NPT.3.S unbroken program
 'At Anandakuṭī there runs on/ An unbroken series of sermons...'
 [KM:178f]

The standard form of *cal-i-re'-cha* is *cal-i-rah-e-cha* (go-0-PROG-PFV-NPT.3.S) 'is going'.

The only phonological development which still needs to be accounted for is the loss of the auxiliary *-cha*, which is unproblematic, given the tendency for forms to "erode" phonologically as they further grammaticalize (cf. Lehmann,

¹⁴ Just as the development of a new perfect construction from an erstwhile resultative construction in Nepali had an earlier parallel in Middle Indo-Aryan, there is also a similar development of an erstwhile perfect to an evidential category in Old Indo-Aryan. As Whitney (1924:295f, §821a) notes, the "perfect" in Old Indo-Aryan was noted by Indian grammarians to be used for "the narration of facts not witnessed by the narrator" (cf. also the discussion in Peterson, 1998:202-207). What I am proposing here is that this development also occurred in Nepali, but only with the copula, which had scope over the entire clause and appeared sentence-finally.

1985: 307). This phonological reduction was undoubtedly furthered by the following:

- As the accent of *rahecha* falls on the penultimate syllable (i.e., *-he-*) (cf. Matthews, 1992: 18), the final syllable is unstressed and can thus have “eroded” more easily.
- The mirative/result-inferential was (and still is) a productive category and can be used with all verbs, whereas the hearsay function was undoubtedly restricted to one single verb form, i.e. *rahecha*, a fact which must certainly have fostered its further phonological development.
- The fact that the evidential use of the erstwhile perfect form is virtually restricted to sentence-final position, since it refers to an entire proposition which contains a finite verb form, also undoubtedly favored such a development.

Further evidence for this proposed development comes from various Kiranti languages of eastern Nepal. Consider for example the Camling sentence-final particle *raicha*, which Ebert (1997) glosses as a “report particle”, i.e. “hearsay” in my terminology (cf. e.g. Ebert, 1997: 66, ex. 68). The Camling form obviously derives from the Nepali mirative/result-inferential copula *rahecha*, although its function in Camling corresponds crucially to the Nepali hearsay-marker *re*, which I claim also derives from *rahecha*. Hence, in eastern Nepal we find at least indirect evidence for the development I am proposing for the hearsay marker *re* in Nepali. The fact that Camling *raicha* is still marked by the auxiliary *-cha* would seem to indicate that the deletion of *-cha* in the corresponding standard Nepali form is a rather recent development.¹⁵

4.3 The etymology of *kyāre* ‘about, roughly, I suppose’

If my proposed etymology for *re* is correct, it may be of some help in determining the etymology of *kyāre* as well, which Michailovsky (1996:113) notes is rather common with the result-inferential category.

First of all, *kyā* may be considered merely a variant of *ke* ‘what?’, since the alternation *-yā / -e*, which we noted above in the history of the Nepali perfect

¹⁵ Michailovsky (1996:119) takes a very different view of the hearsay marker *re* and argues that its presence is perhaps responsible for the fact that what I refer to as the mirative/result-inferential in Nepali did not further grammaticalize to include hearsay, as it did in so many other languages. While I take a very different view on the provenance of the particle *re*, I believe many of Michailovsky’s arguments nevertheless hold for Nepali and the mirative/inferential in general. Cf. section 6 below.

constructions, is common enough even in modern writing. The variation *ke* / *kyā* is also noted by Turner (1931: 103, under *ke* and p. 109, under *kyā*). If we assume that the etymology of *re* given above is correct, we then have the reconstructed form **kyā rahecha*, literally 'What might it be?'. Used frequently, I believe this set expression could easily lexicalize to assume its modern meanings 'about, roughly, I suppose'.

Note that Turner (1931: 109) also suggests a possible etymology with *kyāre* deriving from *kyā* and either *re* or *are*.¹⁶ He notes that it occurs sentence finally and defines it as 'perhaps'. On the other hand, Matthews (1992: 121) refers to it as 'a particle used to express doubt' and translates it as 'about, roughly, I suppose'. I believe the etymology suggested here can sufficiently explain the use, form and various meanings of this particle, while at the same time providing an indirect confirmation of the etymology of *re* given above. Finally, its felicitous use with result-inferentials is easily explainable if this form itself is considered to derive at least partially from the result-inferential form of the copula, which is however no longer recognizable as such.

5. SOME THOUGHTS ON THE STATUS OF THE "MIRATIVE"

In his recent article, Lazard (1999) proposes considering the mirative to be merely one manifestation of the more general "mediative", a kind of evidentially underspecified distancing device which separates the speaker, so to speak, from what s/he is saying. Speaking of the mirative and "evidential" forms, Lazard writes: "The real value of the forms in question is this abstract distance, not any consideration of the nature of the source of the speaker's knowledge of the facts." (Lazard, 1999: 95). He suggests as an alternative view that "[t]heir value is only 'as I see, as it appears'" (Lazard, 1999: 96) and adds that surprise is only a secondary interpretation which arises in the appropriate situation.

I believe it can be shown that the mirative is in fact a combination of what Lazard refers to as "true evidentiality" and inference, two categories which are often combined in the literature under the name "evidentials". Regarding "true evidentiality", Lazard (1999: 105) writes that this category presumably refers to

¹⁶ Turner (1931:540) defines *re* as "a particle (1) indicating that the preceding sentence is quoted; (2) used at the end of an interrogative sentence." While I am not familiar with this use of *re* in modern Nepali as an interrogative marker (although *ra* 'and' is commonly used in this function), its use is also compatible with that of an original 'It is apparently thus', if this is used as a question, i.e. 'Is it perhaps thus?'.
 More complicated is Turner's (1931:23) definition of *are* as an "exclamation of anger or disgust or disrespect; - it is also used to indicate that the preceding words are quoted from someone else." The two definitions obviously refer to two different, albeit homophonous, words. *are* as a hearsay marker is clearly derivable from the same form as *re*.

the source of knowledge, although he does not define it explicitly. Let us take a closer look at this issue.

Recall the information given above in Diagram 2 concerning the “evidential” categories in Nepali, based on Willet’s (1988: 57) classification, illustrated here in simplified form with the respective category’s copula:

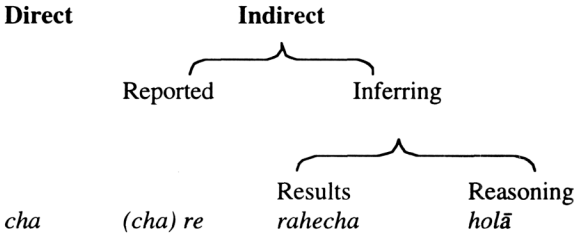


Diagram 3: A simplified version of Diagram 2

If we claim that the hearsay marker *re* derives from the mirative/result-inference copula *rahecha*, the data could also be rearranged as follows:

Direct	Result-Inference	Reported	Reasoning-Inference
<i>cha</i>	<i>rahecha</i>	<i>(cha) re</i>	<i>holā</i>

Now, despite Willet’s classification, there seems to be something intuitively wrong about including inferential forms as types of “evidence”. Strictly speaking, evidence in my sense refers to the SOURCE only, which we combine with our own world-knowledge and experience. I would thus separate these elements in the following way:

Evidence:	Speaker	Other	None
	1st-hand knowledge	2nd-, 3rd-hand, folklore	--
Witnessed Action/ Situation		“Hearsay”	--

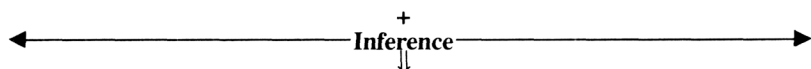
Properly speaking, the only types of “evidence” are first-hand, second-hand, third-hand, folklore and none. First-hand evidence consists of both actions and situations; all that is important is that the speaker him-/herself has witnessed the situation. We could add ‘visual’, ‘auditory’, etc. to these, but as these categories play no role in Nepali, we can skip over them here.

To this pure evidence we can add INFERENCE, i.e., what people do when confronted with *any* type of new information in order to understand it.

These two factors combine to give what I will refer to as the RECONSTRUCTED KNOWLEDGE OF A SITUATION. Summarizing, we have:

Evidence

<i>Speaker</i> 1st-hand knowledge	<i>Other</i> 2nd-, 3rd-hand, folklore	<i>None</i> -
Witnessed	Witnessed	
Action	Situation	"Hearsay"
		-



Reconstructed Knowledge of a Situation

Inference through Witnessed Actions	Inference through Witnessed Results	Inference through Hearsay/Folklore	Inference through Reasoning
<i>cha</i>	<i>rahecha</i>	<i>(cha) re</i>	<i>holā</i>

Diagram 4: An alternative to "Evidentials"

This reconstructed knowledge represents in effect our knowledge or belief about the likelihood of an event having taken place or a situation having existed. This is undoubtedly the reason that we seldom think of direct, first-hand evidence as involving inference, although we are all familiar with situations where we later realized that we misinterpreted what we saw. The fact that this type of information is presented as first-hand evidence of the actual action is considered by the speaker to be sufficient to establish the certainty of the conveyed message. However, I believe that the difference between it and result-inference is only one of degree and not of substance. Consider the following examples:

(16) 'A book is lying on the table.'

Here the amount of inference is essentially zero - when the speaker utters this sentence, s/he is simply stating the obvious.

(17) 'She's running to catch the train.'

Here, we might first be tempted to say that such an utterance is also free of inference, for example, when we observe that the doors of the subway are beginning to close, and we see a woman, with the proper facial expression, begin

to run very quickly in that direction. Needless to say, however, we do not directly SEE why she is running. For example, she could have seen a friend step out of the last train. However, half of the utterance is correct beyond a doubt: She is RUNNING, which is an observable fact.

(18) 'He's waiting for the bus.'

Is this an observable fact or an inference? Clearly, with certain verbs, such as 'wait', we will never be able to specify with certainty that they are true of other people. Here we can observe an "action" and give it a name, although it is inherently "inferential". That is, the person is obviously sitting, but we cannot be sure he is waiting for anything. Nonetheless, we probably would not want to term it "inference from results".

(19) 'Someone must have been in a hurry!'

Uttered upon finding a burning cigarette on the floor of a train station, this example above can easily be considered a case of result-inference. Nevertheless, comparing it with the previous three examples should be sufficient to show that the amount of inference in each case is simply somewhat greater than in the previous example. That is, the difference between "Inference through Actions" and "Inference through Results" appears to be merely one of degree and not of substance. However, for practical reasons, I will retain this distinction here.

It is of course an interesting question as to how languages divide this scale for practical purposes, i.e. how much information must be inferred before the result-inferential form is preferred over the unmarked category. This question will not be further pursued.

Similar comments also pertain to the remaining two categories. For example, I do not believe that the hearsay marker denotes merely the source of the knowledge which the speaker is uttering, but also his or her opinion as to the reliability of this information. It would seem that the SOURCE of reported knowledge is best given in the form of direct or indirect speech, as in the following example:

(20) us-le ma bholi āu-m-chu bhan-e-ra bhan-yo.
 3.S-ERG 1.S tomorrow come-NCNT-NPT.1.S say-PFV-and say-SPT.3.S
 'He said he would come tomorrow.'
 ('he, "I am coming tomorrow", having said, said')
 (Matthews, 1992:117, gloss added)

Here it would seem that the speaker is clearly stating that this information is only being repeated and no responsibility for its content is being assumed.

In contrast, I believe that a statement such as (21), despite the translation, denotes not only that the knowledge was reported by someone else, but also that the speaker, by phrasing it almost as a simple assertion, denotes that s/he gives it a certain amount of credibility:

- (21) us-ko khaltī-mā kehī pani chai-na re
 3.S-GEN pocket-LOC something FOC COP:NPT-NEG:3.S EVID
 'He says that he's got nothing at all in his pocket.'
 (Matthews, 1992: 87, gloss added)

Thus, in terms of Diagram 4 above, (20) is an example of "Inference through Actions" (i.e., the speaker personally HEARD him say he would come) whereas (21) is an example of "Inference through Hearsay", as the speaker has only indirect knowledge of the situation.

It is this RECONSTRUCTED KNOWLEDGE of a situation which then gives rise to certain expectations. In general, these will be highest to the left of Diagram 4 and lowest to the right, allowing for some variation. These expectations, on the other hand, may later be either confirmed or shown to be incorrect through one specific type of evidence: FIRST-HAND KNOWLEDGE.

This statement has a rather simple explanation: First of all, we are least likely to be surprised or confirmed in our expectations merely by inference through experiential knowledge, as there is no direct contact to any action/situation to provide us with evidence. Also, while it may surprise us to hear of an action/situation from others it is much less likely to still be a surprise when we report it to someone else at a later time by using the hearsay marker, unless of course it is immediately repeated.

Surprise thus seems to be virtually restricted to what is directly witnessed by the speaker him-/herself, whether through direct observation of an action or inference from a directly witnessed situation which typically results from a certain action. However, both types are clearly FIRST-HAND KNOWLEDGE. Thus, only the left-hand side of Diagram 4 is relevant here:

Witnessed	Witnessed
Action	Situation (typical results of an action $\Rightarrow$ Result-inference)

Hence there seems to be a natural limitation to the probable types of marking for surprise: either an "evidentially" unmarked form (i.e. Willet's "direct") or a form used to mark inference through results, as well as any other conceptual areas which are marked similarly to either of these. It thus comes as no surprise that the mirative is apparently most commonly found in languages which possess a (result-)inferential category.

Finally, there is the question of marking. For reasons of “economy”, it might be supposed that a single morphological marker could be used to mark both types of unexpected, first-hand knowledge, and that the marking of either of these two types serves to mark unexpected knowledge in general, since it is highly unlikely that there can be any confusion as to whether an action itself was directly observed or merely its (inferred) results, given the appropriate textual context. But which marking? Intuitively, marking an inferentially reconstructed action as directly observed is somehow less effective in conveying an element of surprise than marking an action which was clearly observed as being only inferred.

But why should this be so? I believe the answer can be found in what Michailovsky (1996: 118) refers to as the subjective or personalized character of the mirative/result-inferential as opposed to the objective character of the unmarked category.

That is, when I announce a fact and simultaneously indicate my surprise, regardless of how I do this, I am in effect providing a subjective view of my account. Similarly, when reporting an action which I did not witness but which I surmise from its apparent results, I am of course also providing a subjective view of things. That is, these two concepts are also MODAL in nature, not merely EVIDENTIAL (using my definition of “evidence”).

Also, as Michailovsky (1996: 120) notes, both a “mediated” and “immediated” interpretation are compatible with the mirative/result-inferential category, suggesting that it is improbable that the concept of “distance” alone will in fact be of much use in defining the semantics of this category, a view which I share. As we saw in Diagram 4 and the following discussion above, “true evidentiality” does play a role in defining this category, but so does inference. Thus, this category may be considered a combination of BOTH evidentiality AND inference.

6. CONCLUDING REMARKS

Based on the evidence from Nepali, it would seem that the status of the mirative as a separate conceptual category is justified to a certain extent. The fact that the mirative is generally marked identically to the result-inferential is simply because both functions are marked as “non-prototypically” witnessed actions despite the fact that both are indeed based on first-hand perception. In addition, the fact that both of these categories are clearly “subjective” in nature would appear to explain why the result-inferential marking is generally chosen if a language has this grammaticalized category, as opposed to the unmarked category which is much more “objective” in nature.

The Nepali data also provide us with other information on the process of grammaticalization. Thus, although I take a different view from Michailovsky (1996) on the history of the hearsay marker *re* in Nepali, I wholeheartedly agree with his conclusion that “le népalî nous fournit un argument pour placer le ouï-dire au bout de la chaîne de la grammaticalisation du parfait inférentiel” (Michailovsky, 1996: 119). That is, the main development of the one-time perfect must still be seen as towards the result-inferential category, while the mirative and hearsay functions are best considered extensions of this category, albeit in two very different directions. The result-inferential category thus occupies something of an intermediate position between the mirative on the one hand and hearsay on the other, having many more similarities with the mirative than with hearsay. We can summarize this relation in the following table:

Mirative	Result-Inference	Hearsay
Unexpected knowledge	(Often unexpected knowledge)	-
First-hand knowledge (of an action)	First-hand knowledge (of a situation)	-
Subjective information -	Subjective information Action not directly witnessed	(Subjective information?) Action not directly witnessed

Table 2: Similarities and Differences among the Mirative, Result-Inference and Hearsay

What binds the mirative to the result-inferential is the fact that both denote first-hand perception – in one case, perception of the action itself (mirative), in the other, perception of its results (result-inference) – and both are subjective in nature. On the other hand, hearsay and result-inference share one common characteristic – in neither case is the action itself directly witnessed. With result-inference, it is merely inferred, and with hearsay knowledge of the action is from a different person, who may or may not have witnessed it him-/herself.

Hence, while hearsay and the mirative seem to have almost nothing in common conceptually, the fact that both share at least some characteristics with the result-inferential would seem to explain their typically identical marking, although, as Nepali shows, this is by no means always the case.

There are many other aspects of surprise and its grammatical expression which are still in need of further study, such as the frequent superficial similarities to interrogatives. Cf. for example English “What a surprise!” with the synonomous French expression “Quelle surprise!” or the German “Was für eine Überraschung!”. Both the French and German expressions could, with

Another issue which seems to be almost entirely missing in the literature on mirativity is a discussion of the discourse-pragmatic status of the various sentence constituents, which is somewhat surprising in a discussion which is primarily devoted to the discourse-pragmatic status of the proposition as a whole. Which information is unexpected – the entire clause, the predicate, or the identity of one of the arguments? And does this play a role in the verb marking?

This is also true to some extent in Nepali. For example, in his discussion of the use of nominalizations in focalisation, Bickel (1995: 414f) notes that in Nepali, the verb may appear in the form of the perfect participle in *-e-ko* when it is used in focal constructions, for example (22), where the entire phrase is focussed:

- (23) kahām ga-e-ko?
where go-PFV-NML
'Where did (s/he) go?'

As we have been primarily concerned with the mirative/result-inferential category, these issues were not dealt with further here. Nevertheless, only when these connections are properly understood will we fully understand the nature of the mirative. Thus, although the mirative owes its discovery to the study of “evidentiality”, it seems likely that a proper understanding of its true nature will go far beyond evidentiality alone.

ABBREVIATIONS

0	<i>Fugenelement</i>	NCNT	noncontinuous
AUX	auxiliary verb	NML	nominalizer/attributivizer
BEN	benefactive	NEG	negational marker
CL	nominal classifier	NPT	nonpast
CONT	continuous	OBJ	objective (case)
COP	copula	P	plural
ERG	ergative	PART	pragmatic particle
EVID	hearsay marker	PFV	perfective
FOC	(additive) focus marker	PROG	progressive
FUT	“future” (i.e., reasoning-inference)	PT	past
GEN	genitive	PTCP	participle
HON	honorific	S	singular
INST	instrumental	TEL	telicity marker
LOC	locative	TEMP	temporal

REFERENCES

Primary Sources:

- [TD] DIVAS, Tulasī (ed.). 1975/76. *Nepālī lokkathā*. Kāthmāṇḍaṣṭam: Nepāl Rājākīya Prajñā-Pratiṣṭhān. Ne.Saṃ. 2032
- HUTT, Michael J. 1997. *Modern Literary Nepali: An Introductory Reader*. Delhi et al.: Oxford University Press. (SOAS Studies on South Asia)
- [VK] KOIRALA, Viśveśvar Prasād. c. 1938. “Sipāhī” in: Michael J. Hutt (1997: 55-63)
- [KM] MAN, KEDAR (‘VYATHIT’). pre-1958. “śilpa sādhanā” In: Michael J. Hutt (1997), 178-180.
- [LS] SIJAPATI, Lalitajaṅga (ed.). 21996/97. *Dantyakathā-Mālā*. Kāthmāṇḍaṣṭam: Sājhā Prakāśan. Ne.Saṃ. 2053

Secondary Sources:

- BASHIR, Elena. 1988. “Inferentiality in Kalasha and Khowar” in: Lynn MacLeod, Gary Larson, & Diane Brentari (eds.): *Papers from the 24th Regional Meeting of the Chicago Linguistic Society, Part One: The General Session*, 47-59.
- BICKEL, Balthasar. 1995. “Relatives à antécédent interne, nominalisation et focalisation: entre syntaxe et morphologie en bélharrien.” *Bulletin de la Société de Linguistique de Paris*. 90: 391-427.

- BYBEE, Joan L. & Östen DAHL. 1989. "The Creation of Tense and Aspect Systems in the Languages of the World." *Studies in Language* 13.1: 51-103.
- DELANCEY, Scott. 1997. "Mirativity: The grammatical marking of unexpected information." *Linguistic Typology* 1: 33-52.
- EBERT, Karen. 1997. *Camling (Chamling)*. (Languages of the World/Materials, 103.) München / Newcastle: Lincom Europa.
- GENETTI, Carol. 1992. "Semantic and Grammatical Categories of Relative Clause Morphology in the Languages of Nepal." *Studies in Language* 16.2: 405-427.
- LAZARD, Gilbert. 1999. "Mirativity, evidentiality, mediativity, or other?" *Linguistic Typology* 3: 91-109.
- LEHMANN, Christian. 1985. "Grammaticalization: Synchronic Variation and Diachronic Change." *Lingua e Stile* 20: 303-318.
- MATTHEWS, David. 1992. *A Course in Nepali*. London: School of Oriental and African Studies, University of London.
- MICHAILOVSKY, Boyd. 1996. "L'inférentiel du népali" in: Zlatka Guentchéva (éd.): *L'Énonciation médiatisée*. (Bibliothèque de l'Information Grammaticale.) Louvain - Paris: Éditions Peeters. 109-123.
- PETERSON, John. 1998. *Grammatical Relations in Pāli and the Emergence of Ergativity in Indo-Aryan*. (LINCOM Studies in Indo-European Linguistics, 1.) München: Lincom Europa.
- . 1999. "The Nepali subordinated verb" in: Yogendra P. Yadava & Warren W. Glover (eds.): *Topics in Nepalese Linguistics*. Kathmandu: Royal Nepal Academy. 337-370.
- . in preparation. *Nepali Predicates and the Interplay between Transitivity, Actionality and Volitionality* (working title).
- TURNER, Ralph Lilley. 1931. *A Comparative and Etymological Dictionary of the Nepali Language*. [Reprint: Bombay et al.: Allied Publishers Limited, 1996].

- WALLACE, William D. 1982. "The Evolution of Ergative Syntax in Nepali." *Studies in the Linguistic Sciences* 12.2: 147-211.
- WHITNEY, William Dwight. 1924. *Sanskrit Grammar. Including Both the Classical Language and the Older Dialects of Veda and Brāhmaṇa*. [Reprint of Fifth Edition, Leipzig. Delhi: Motilal Banarsidass, 1989]
- WILLET, Thomas. 1988. "A Cross-Linguistic Survey of the Grammaticization of Evidentiality." *Studies in Language* 12.1: 51-97.