EVIDENCE AND CERTAINTY IN LISU*

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Abstract

This paper presents data on epistemic and evidential markers in three main varieties and several subvarieties of Lisu, a Tibeto-Burman language with over a million speakers in China, Burma, Thailand and India. It is shown that the original system had a number of epistemic markers and a reported speech marker, along with various imperative and question markers, all in clause-final position. These markers have similar meanings in those varieties which have not undergone change. In some varieties and subvarieties, evidential systems have developed separately over the last couple of hundred years, grammaticalising some verbs and redeploying some epistemics into evidentials. The corresponding systems in the most closely-related languages show cognates for the reported speech marker, some epistemic markers and some other final markers for imperatives and questions, and for the verbs which grammaticalise into evidentials in Lisu. It is clear that the direction of change in Lisu is from epistemic to evidential, and that these developments are relatively recent and separate, for example from the development of the evidential system of Akha.

Keywords epistemics, evidentials, Lisu, Akha, Ngwi

1. INTRODUCTION

Lisu is a language of the Ngwi (Yi, Loloish) subgroup of Tibeto-Burman; for a brief sketch see Bradley 2003. It has an interesting category of markers that occur in clause-final position in sentence-final clauses. These include a question marker, various imperative/hortative markers and various epistemic and evidential markers. There are very substantial internal differences in the epistemic and evidential systems of different varieties of Lisu; other areas of Lisu structure show much greater similarity across varieties (Bradley 1994, 1999, 2003; Bradley et al. 2006). The most frequent pattern is for a final clause to have only one such marker, though in some varieties there are possible sequences.

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This paper briefly notes the question, imperative/hortative and assertive markers and discusses the epistemic and evidential systems found in a number of varieties of Lisu: Northern Lisu, several subvarieties of Central Lisu, Southern Lisu and the literary compromise Lisu first used in Christian translations but now also becoming a spoken lingua franca among Christian Lisu. It should be noted that over the last sixty years there has been considerable contact between the various varieties. Some speakers are thus aware of the forms in other varieties, but usually do not fully understand their meanings or the differences in meaning of apparently similar forms. The most restricted system is found in the literary compromise variety, which uses only the strong assertion epistemic and the universal quotative marker found in all other varieties. Some epistemics have an alternative form used as a pair word in song language.¹

2. FINAL CLAUSE MARKERS

The final clause markers, as noted above, include a question marker, various imperative or hortative markers, epistemic markers and some evidential markers. In most varieties of Lisu, epistemic and evidential forms do not usually co-occur with each other or with other final-clause markers for questions or various subtypes of imperatives and hortatives. The main exception is that the reported speech marker may follow other final markers; other exceptions in one subdialect are further discussed below. The question marker is $/l\epsilon^{21}/.^2$ Imperatives and hortatives include the very frequent strong hortative or imperative $/l\epsilon^{33}/.$ the less frequent very strong imperative $/x\alpha^{21}/.^3$ the fairly infrequent permissive or first person future $/n\alpha^{35}/.^4$ and the fairly frequent polite imperative or hortative $/m\alpha^{21}/.^5$ Another universal form is the strong assertive $/n\alpha^{33}/.$ and its derived form $/n0^{33}/.$ With future meaning, both related to and derived from the equational copula $/n\alpha^{33}/.$ All these forms have widespread cognates within Ngwi outside Lisu.

¹ Song language is in two-line pairs with exactly parallel structure and semantics but with replacement lexicon in the second line. Sometimes these replacement forms are the normal form in another variety. Most lines in songs contain seven syllables, not counting vocative $/o^{21}/$, perfective $/o^{44}/$, or declarative $/o^{33}/$ attached to a preceding element.

Alternative forms $/lq^{21}/$, $/q^{21}/$, $/q^{21}/$. This is not obligatory in questions which contain a question word. The form is a regular reflex of Proto-Ngwi etymon 858 *la² (Bradley 1979: 378) as also found in Lahu, Akha, Burmese and so on.

³ Alternative forms $/x\underline{\alpha}^{21}/$, $/\hbar\alpha^{21}/$, $/\hbar\alpha^{21}/$ or $/\hbar\alpha^{21}/$ in various varieties; this is derived from Proto-Ngwi etymon 835B * $\int a^2$ (Bradley 1979: 374), with Lahu and other cognates elsewhere. This form is a bit rude in modern spoken Lisu.

⁴ Alternative form /nε³⁵/; translated as 'shall' or 'let me' by Lisu who know English; possibly cognate with Proto-Ngwi etymon 857 *nay¹ 'probable' (Bradley 1979: 378) also seen in Lahu.

⁵ Alternative forms /mɛ²¹/ or /mg²¹/ in various varieties; translated as 'please' by Lisu who know English. This is cognate with Proto-Ngwi politeness etymon 837 *Cma² (Bradley 1979: 376) also seen in Lahu and Akha.

⁶ The form $/\eta o^{33}$ / is a regular reflex of Proto-Ngwi etymon 698B, * η wa¹ (Bradley 1979: 360), and the form $/\eta o^{33}$ / is a fused form containing a following perfective marker, Proto-Ngwi * o^3 , Lisu $/o^{44}$ /.

Unlike most evidentials and some epistemics, these five question, imperative or hortative forms are found with similar meanings in all varieties of Lisu, and four have good Proto-Ngwi etymologies. In addition, there is a final question marker restricted to Northern and Southern Lisu, for a question with a positive response expected: Northern Lisu /sux³³/, Southern Lisu /hux⁵⁵/.

Examples are drawn primarily from Lisu traditional songs and stories, which reflect a somewhat more conservative variety of the language than modern spoken varieties.

3. LISU EPISTEMIC AND EVIDENTIAL SYSTEMS

3.1 Northern Lisu

Table 1 presents the Northern Lisu system, as used by Lisu in Fugong and Gongshan counties in Nujiang Lisu Autonomous Prefecture in China as well as in the Putao area of far northern Burma and in India. The Lisu migrated into the upper Salween area where Northern Lisu is now spoken from further south starting about 350 years ago, from there into the Putao area of Burma starting about 130 years ago, and thence into northeastern India starting nearly seventy years ago. Apart from the reported speech marker, this is a purely epistemic system. It is similar to the most archaic song language style of some other varieties. The Northern Lisu variety has a system with a five-step epistemic system and a reported speech marker.

EP1	/lo ⁴⁴ /	absolutely certain, based on personal knowledge
EP2	$/p^{h}a^{5521}/$	most likely but not certain
EP3	/bui ³³ /, /bo ³³ /	maybe so, not absolutely sure but fairly sure, used to
		think otherwise
EP4	$/do^{44}/$	appears to be, I guess so, not sure but think so
EP5	$/p^{h}e^{55}/$	uncertain, doubtful
QUOTE	$/d30^{21}/$	heard someone say it

Table 1. Northern Lisu epistemics and evidential

In the western subvariety of Northern Lisu spoken in Burma and India, $/lo^{44}/does$ not occur, and the forms used to express absolute certainty are $/\eta o^{33}/does$ and $/\eta o^{33}/does$, forms also present in other varieties with future and assertive meanings respectively, as seen above. Note that EP3 also contains the meaning that the fairly certain knowledge is new, and that the speaker used to think the opposite, as we will see for the meaning of corresponding forms in other varieties of Lisu.

The following examples are drawn from a blessing song of the /jo³⁵ j<u>i</u>²¹/ genre, widespread among the Northern Lisu and found under other names among other Lisu subgroups. This poetic style, presumably reflecting a slightly earlier stage of

⁷ This is one of many words with Northern Lisu /s/ and Southern Lisu /ħ/ before high or front vowels.

Northern Lisu; is nevertheless representative of the use of these forms in modern spoken Northern Lisu.

- (1) $z\alpha^{21}$ ti⁵⁵ $\int \gamma^{55}$ mo⁴⁴ $z\alpha^{21}$ $\eta\alpha^{33}$ lo⁴⁴ son sole farm work son be EP1 'The only son is certainly a farm worker.'
- (2) $y\underline{u}^{21}$ $k^h o^{33}$ $s_1^{55} ni^{44} ya^{33}$ hy^{33} $p^h a^{5521}$ fortune receive then chicken raise EP2 'It is very likely that you will have good fortune and raise chickens.'
- (3) $mu^{21} \quad \chi \underline{w}^{21} \quad t^h i^{21} \quad \chi \underline{w}^{21} \quad de^{21} \quad dz a^{44} \quad bw^{33}$ horse blessing one blessing beg help EP3 'You are fairly likely to help me to beg for the blessing of having horses.'
- (4) nu³³ ma⁴⁴ na²¹ bo⁴⁴ lo³⁵ la³³ do⁴⁴ you female buffalo pen full TO EP4 'Your mother's buffalo pen might become full.'
- (5) a^{55} k^hwi²¹ mwi²¹ kwa⁴⁴ ywi²¹ k^ho³³ p^he⁵⁵ door sill LOC fortune receive EP5/FIT 'It is doubtful that you will receive good fortune at the doorstep.'/ 'It is fitting to receive good fortune at the doorstep.'
- (6) ji^{55} $p^h\alpha^{21}$ $s\epsilon^{55}\underline{\epsilon}^{21}$ mi^{44} $\eta\alpha^{21}$ $\tilde{h}y^{33}$ dzo^{21} he male also but buffalo raise QUOTE 'It is said that his father also raised water buffalo.'

The epistemic $/p^he^{55}/$ is often followed by the perfective marker $/o^{44}/$ as in (7); in this it is unlike the other final markers in this category. It is also ambiguous with the homophonous posthead serial verb $/p^he^{55}/$ meaning 'fit to (verb)'.

(7) za²¹ ti⁵⁵ p^ha²¹ nu³³ pa⁴⁴ dʒa²¹ p^he⁵⁵ o⁴⁴ son sole male you hear EP5/FIT PERF 'It was doubtful that you, the only son, heard.'/ 'It was fitting for you, the only son, to hear.'

In Northern Lisu, but not in other varieties, it is possible for the /bur³³/ epistemic in its alternative /bura³⁵/ form with a fused declarative / a^{33} / to be followed by non-epistemic final markers such as /ma²¹/, /le²¹/ and the perfective / a^{44} / as in (8) to (10) below. It may also occur in nonfinal clauses followed by a nonfinal marker such as /pa⁴⁴/, as in (11).

- (8) ∫η⁵⁵ mo⁴⁴ dza³³ mw³³ la³³ bwa³⁵ ma²¹ farm work rice get TO EP3+DEC POLIMP 'Please do farm work and you will probably get rice to bring here.'
- (9) $nu^{33} \ y\underline{m}^{21} \ nwa^{33} \ y\underline{m}^{21} \ t\int^h o^{44} \ bua^{35} \ l\epsilon^{21}$ you fortune I fortune follow EP3+DEC Q 'Does good fortune probably follow both you and me?'
- (10) $\gamma \underline{\mathbf{u}}^{21}$ $t^h \epsilon^{21} s \mathbf{i}^{44} \gamma \underline{\mathbf{u}}^{21}$ $de^{21} dz^{44}$ but dz^{35} o^{44} fortune on top fortune beg help EP3+DEC PERF 'With good fortune on top of good fortune, probably you asked for help.'
- (11) $nu^{33} \ \gamma \underline{u}^{21} \ nwa^{33} \ \gamma \underline{u}^{21} \ dzo^{33} \ buua^{35} \ na^{44}$, you fortune I blessing have EP3+DEC IF 'Probably if you and I both have good fortune,

 mu^{21} ma^{44} no^{44} $n\epsilon^{44}$ dza^{21} la^{33} do^{44} horse female bean black eat TO EP4 the female horse might eat black beans.'

In Northern Lisu, it is possible to have a sequence of any of the non-epistemic final markers followed by the quotative marker, as in (12) which has a sequence of the imperative and the quote form.

(12) nu^{21} la^{33} $l\underline{\epsilon}^{21}$ dzo^{33} k^ho^{33} $\hbar a^{21}$ dzo^{21} guest come hand pair receive IMP QUOTE 'Someone said welcome and receive guests!'

It appears that Northern Lisu has three slots here: first the slot for an epistemic plus declarative /buuq³⁵/, then the slot for most final markers including other epistemics, imperatives or question marker, and finally the slot for the quotative marker. Very infrequently, sequences of two non-epistemic final markers, such as two imperatives, can also occur.

In nine long Lisu traditional songs published in Li et al. (1990), the question marker occurs in 33 line pairs, the polite imperative is found in 30, the strong imperative is found in 21, the strong assertive epistemic /lo⁴⁴/ is found in two, the reported speech form is found in 70, the medium-probability epistemic in its /bu³³/ form is found in 44 and in its /bo³³/ form is found in 26, while the /p^he⁵⁵/ and /p^ha⁵⁵²¹/ epistemics are not attested; these are rather infrequent in Northern Lisu. These texts also contain one pair of the sequence /bua³⁵/ plus the nonfinal marker /pi³³/, parallel to (11) above, and one pair with a sequence of two imperative markers, /le³³/ + /ha²¹/, with a stronger imperative meaning, it does not mean that someone is ordering someone else to urge a third person.

3.2 Transitional Northern Central Lisu

There is a northern subvariety of Central Lisu which is transitional between Central and Northern Lisu, spoken in Lushui County in southern Nujiang Prefecture. This is the point of origin of the migration of the Northern Lisu up the Salween. The system contains two evidentials, one epistemic, and one form which is both. This is the variety of Lisu represented by the very long song text, the Death Song text in Li et al. (1992). It has various final clause markers, including the question marker $/l\epsilon^{21}/$, the hortative marker $/l\epsilon^{33}/$, the polite request marker $/m\epsilon^{21}/$ or $/m\epsilon^{21}/$ and the epistemic and evidential forms listed in Table 2. Given that the data is from a text, it is possible that some additional infrequent forms which exist in this subvariety happen not to occur in this text, even though it is very long.

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EP1 /lo^{44}/ absolutely certain, based on personal knowledge VIS /mo^{55} o^{44}/ visual evidential INFER /bur^{33}/ inferential evidential (nonverbal/nonvisual evidence); less certain QUOTE /d3o^{21}/ heard someone say it
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Table 2. Transitional Northern Central Lisu epistemics and evidentials

The evidential of visual perception /mo⁵⁵/ is not yet fully grammaticalised into the evidential system; it is always followed by the perfective marker in the text, and the same sequence /mo⁵⁵ o⁴⁴/ also occurs less frequently as a nonfinal marker followed by /ne⁴⁴/ 'and so', which corresponds to /pi⁴⁴/ in other varieties of Lisu. The source of this innovative evidential of visual perception is the verb /mo³³/ 'see', with its tone changed to high level. The inferential evidential is derived from an epistemic of fairly low certainty, as in Southern Lisu. Conversely, several of the epistemic or evidential forms found in all three major varieties are missing from this variety. Examples drawn from the Death Song, Li et al. (1992), are given below.

- (13) a^{21} ga^{44} $t^h i^{21}$ lo^{33} $j\underline{\varepsilon}^{21}$ se^{21} lo^{44} burial ground one valley go.down still EP1 '(I strongly assert that you) still go down to the burial valley (although someone has denied it).'
- (14) ma²¹ te⁵⁵ dza³³ dza²¹ je⁴⁴ mo⁵⁵ o⁴⁴

 NEG pound rice eat AWAY VIS PERF

 (I) was seen eating unpounded rice.

- (15) lo³³ dʒa⁴⁴ so⁵⁵ za²¹ mo⁵⁵ o⁴⁴ ne⁴⁴ valley cold count DIM VIS PERF SO 'I was seen counting a cold valley a bit, 8 and so
 - ji²¹ dʒo³³ ni³⁵ dʒa⁴⁴ ŋwa³³ ma²¹ ŋo⁴⁴ elder.brother have heart cold I NEG hook I have elder brothers to long for, but I won't miss them.'
- (16) ħja²¹ ma²¹ dzo²¹ kwa⁴⁴ tho²¹ wa⁴⁴ bw³³ night NEG correct LOC build MUST INFER 'I infer that it must have been built on an inauspicious night.'

In this text, there are 55 pairs of lines which contain the visual evidential /mo⁵⁵/ plus perfective /o⁴⁴/, including 11 in sentence-medial position and 44 in sentence-final position. There are also 43 pairs with /bui³³/, 21 with /d3o²¹/ and four with /lo⁴⁴/. The nature of the text may account for the low frequency of epistemic /lo⁴⁴/ and evidential /d3o²¹/, which are more frequent in most other types of Lisu, and the unusually high frequencies of the other evidentials. Alternatively, the low frequency of /lo⁴⁴/ could reflect a transition to its extremely low frequency in Northern Lisu and its absence from western subvarieties of Northern Lisu.

3.3 Central Lisu

A system with six epistemics and the quotative form occurs in the main subvariety of Central Lisu, as shown in Table 3. Some of the forms in this system are different from those of the Northern Lisu system, but the meanings are mainly similar. This variety is spoken in most of Dehong Prefecture in China, south of Northern Lisu, and in the adjacent Northern Shan State and the southeastern part of the Kachin State in Burma. The coming of the Lisu into Burma from the east started about 150 years ago. Again, this is a system with multiple epistemics plus a reported speech marker. Curiously, the highest-probability epistemic in western central Lisu is related to the lowest-probability epistemic in Northern and Southern Lisu. The verbal source of this marker is discussed below. Note that the epistemics of the same numerical order have different semantic values in the different systems, as reflected by the different glosses in different tables.

⁸ That is, accepting one's death.

EP1	/p ^h ja ⁵⁵ /	it must be this way
EP2	/lo ⁴⁴ /	it is this way
EP3	/ba ⁵⁵²¹ /	it is this way (someone has claimed it is not)
EP4	$/bo^{35}/$ etc.	thought it was not this way, now found out that it is
EP5	/du ⁴⁴ /	it might be this way
EP6	/no ³⁵ /	don't know but guess it is this way
QUOTE	$/dz_0^{21}/$	heard someone say it

Table 3. Central Lisu epistemics and evidential

The following examples are from traditional stories collected in Burma. The meaning of the first epistemic is closer to its source, the posthead serial verb /phe⁵⁵/ meaning 'be fitting' plus fused declarative /a³³/, than the corresponding forms in other varieties of Lisu. The meanings expressed by the epistemics /ba⁵⁵²¹/ and /bo³⁵/ are much more certain than the meanings of corresponding forms elsewhere. Example (21) shows a pair of sentences from different speakers, the first expressing doubt, and the second confirming the certainty of the event.

- (18) ji⁵⁵ ma²¹ sui⁵⁵ p^hja⁵⁵ he NEG know EP1 'He certainly doesn't know!'
- (19) ji⁵⁵ a⁵⁵ tsη⁴⁴ tε⁵⁵ sw³⁵ sw²¹ xa²¹ tshe³³ gw²¹ a³³ lo⁴⁴ she elder.sister OBJ tree fruit pick fall GIVE DEC EP2 'She certainly did pick the fruit for her elder sister.'
- (20) a^{55} j a^{21} mo 21 a²¹ ma 33 t ϵ^{55} ji 33 dza⁴⁴ k^ho 21 la 33 ba 5521 grandmother old who OBJ water fetch TO EP3 'Possibly the old grandmother fetches water for everyone.'
- (21) $j\underline{i}^{21}$ la^{33} du^{44} $j\underline{i}^{21}$ la^{33} bo^{35} back TO EP4 back TO EP3 '(She) might come back home.'/'(She) does come back home!'
- (22) $p\underline{i}^{21} \int 1^{21}$ hi³³ wa⁴⁴ wa²¹ mu³³ wa²¹ je⁴⁴ no³⁵ vampire.lady house LOC work do work do EP5 'Maybe they worked in the vampire lady's house.'
- (23) nwa³³ xo²¹ kwi⁴⁴ ti⁵⁵ o⁴⁴ dzo²¹ up.there put.in PAST STAY PERF QUOTE 'He said that he put it in up there so it stayed.'

As in Northern Lisu, sequences of another final marker (including an epistemic) plus the quotative marker are possible in Central Lisu; however, this is infrequent.

In two long traditional songs in this subvariety from Tengchong County in China, the relatively infrequent EP1, EP3 and EP5 do not occur at all; EP2 is very frequent, occurring in 151 line pairs; EP4 is fairly frequent, with 31 pairs; and EP6 occurs once. The quotative form occurs in these texts, but infrequently, in only eight line pairs. Of the other final markers, various forms of polite imperative /ma²¹/ occur 105 times, assertive/future / η a³³/ and / η o³³/ occur 75 times, hortative / $l\epsilon$ ³³/ occurs 25 times, question /la²¹/ occurs 21 times, and imperative /ha²¹/ occurs once.

3.5 Southern Lisu

Southern Lisu is spoken in Thailand and various parts of the Shan State of Burma. These Lisu migrated south along the Salween into Burma and later into Thailand, probably separating from the other Lisu at least 150 years ago. The Southern Lisu system is shown in Table 4; it includes two forms related to Northern Lisu and Central Lisu epistemics, but with evidential rather than epistemic meanings. There are three Southern Lisu epistemics which have meanings similar to those of the corresponding Northern Lisu forms and unlike those of Central Lisu, suggesting that the meanings of these epistemics in Central Lisu are innovative. The three evidentials are reported speech, visual and inferential. It should be noted that the epistemic /lo⁴⁴/ is much less frequent in Southern Lisu than it is in Central Lisu. In Southern Lisu it is only used when the assertion has already been denied by someone else.

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VIS /bo<sup>35</sup>/, /bur<sup>35</sup>/ visual evidential

INFER /no<sup>35</sup>/, /du<sup>44</sup>/ inferential evidential (nonverbal and nonvisual evidence)

QUOTE /d3o<sup>21</sup>/ etc. heard someone say it

EP1 /lo<sup>44</sup>/ strong assertion (of something previously denied by another)

EP2 /phq<sup>5521</sup>/ maybe so (song word pair /bq<sup>5521</sup>/)

EP3 /phe<sup>55</sup>/ doubtful
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Table 4. Southern Lisu epistemics and evidentials

The following examples are drawn from the Betrothal Song, part of the life cycle series.

- (24) wo²¹ we⁴⁴ bja²¹ ma⁴⁴ dʒη²¹ tja³⁵ bo³⁵ vegetable flower bee female rule CONT VIS 'I saw bees caring for the vegetable flowers.'
- (25) ba³⁵ ba²¹ p^hi²¹ na²¹ gu⁴⁴ dʒo³³ a³³ dʒo²¹ father strip stop place have DEC QUOTE 'It is said that father has a place to put strips.'

- (26) mw²¹ t^hε²¹ ∫η⁴⁴ xw⁴⁴ mw²¹ dʒo³³ a³³ lo⁴⁴ girl on.top also girl have DEC EP1 'There are certainly other girls besides me (you have asserted that there are none).'
- (27) tsaj⁵⁵ xwa³⁵ α⁵⁵∫γ²¹ ma²¹ yw³³ o⁴⁴ p^ha⁵⁵²¹ again time what NEG lack PERF EP2 'Perhaps again nothing is lacking,

 ts^ho^{33} $d3o^{33}$ ni^{35} $k^hwa^{21} extstyle 10^{44}$ le^{44} o^{44} ba^{5521} person have heart satisfy COMP PERF EP2 maybe people are satisfied.'

(28) a^{44} li⁴⁴ wa⁴⁴ dza²¹ ma²¹ da³³ p^he⁵⁵ which GET.TO eat NEG MAY EP3/FIT 'Perhaps I can't get anything to eat.'/
'It is fitting not to be able to get anything to eat.'

Note that in Southern Lisu, as in Northern Lisu, /phe⁵⁵/ is ambiguous between a low-probability epistemic meaning and a serial verb meaning 'fit to (verb)' as seen in (28). In Southern Lisu, the epistemic and the full verb or serial verb /phe⁵⁵/ are usually followed by the perfective /o⁴⁴/. Only this epistemic may be preceded by some other non-epistemic final marker, so (29) can only have an epistemic meaning due to the presence of the preceding non-epistemic final marker /ne³⁵/. All these facts show that the grammaticalisation of /phe⁵⁵/ into the Southern Lisu evidential system is recent and still incomplete.

(29) $t \int^h a^{35} s \gamma^{55} p^h w^{33} la^{44} p \gamma^{55} n \epsilon^{35} p^h e^{55} o^{44}$ crossbow back carry FUT EP3 PERF 'Perhaps I shall carry my crossbow on my shoulder.'

No examples of the rare Southern Lisu inferential evidentials /no³⁵/ and /du⁴⁴/ are found in this song text; the following example of /no³⁵/ is from a Southern Lisu trickster story. The two forms have similar meanings, despite the difference in forms and their origins.

(30) ji⁵⁵ ma²¹ sw⁵⁵ he²¹ no³⁵ he NEG know STILL INFER 'I infer that he still does not know.'

As to the relative frequency of the various final markers in Southern Lisu, the Betrothal Song has 58 line pairs ending with the polite imperative $/m\alpha^{21}/$, 38 with the future $/n\epsilon^{35}/$, 25 with question $/l\epsilon^{21}/$, 25 with hortative $/l\epsilon^{33}/$ and one with the Southern Lisu final marker $/\hbar \omega^{55}/$ indicating a question with a positive answer expected. Of the evidentials, there are 18 pairs with $/p^h e^{55}/$ of doubt, 16 of which

are $/p^he^{55}$ o⁴⁴/ including the perfective. There are also 9 pairs with $/p^ha^{5521}$ / first and $/ba^{5521}$ / second, 17 pairs with $/bu^{35}$ / or a combination of $/bu^{35}$ / and $/bo^{35}$ /, 14 pairs with quotative $/d3o^{21}$ /, 8 with strong assertive $/lo^{44}$ /, and one pair which combines $/phe^{55}$ / with $/p^ha^{5521}$ /—demonstrating that $/p^he^{55}$ / is unambiguously an evidential here and that the meanings of these two evidentials are similar enough to pair them.

3.6 Northeastern Central Lisu

The Lisu variety with the most elaborate evidential system is the northeastern subvariety of Central Lisu, as spoken in parts of Tengchong County of Baoshan Prefecture and Yingjiang County of Dehong Prefecture in China. This is another part of the traditional home of the Lisu, just to the southeast of the Lisu in Lushui County. Table 5 shows the system, which is elaborated from the system seen in Table 2 for the transitional northern subvariety of Central Lisu by the fusion of perfective /o⁴⁴/ onto two forms, the semantic shift of some epistemic forms into evidentials, and the addition of some evidential forms from verbal sources. Data on this subvariety is from Yu (2003, 2005). Other Lisu find this subvariety difficult to understand, due to its extensive syllable fusion, other phonological differences, and various morphosyntactic and semantic differences, and it is in the process of converging back into Central Lisu under the influence of the literary language and increased contact with other Lisu.

EP1	/lo ⁴⁴ /	absolutely certain, based on personal knowledge
QUOTE	$/dz_0^{21}/$	heard someone say it
VIS	/ma ⁵⁵ /	visual evidential
VIS/PERF	/mu ⁵⁵ /	visual evidential, perfective
NONVIS	/dza ³³ /	hearing/smelling/feeling/tasting evidential
NONVIS/INCH	$/dz_0^{33}/$	hearing/smelling/feeling/tasting evidential, inchoative
NONVIS/PERF	/dzo ³⁵ /	hearing/smelling/feeling/tasting evidential, perfective
INFER	/na ⁵⁵ /	infer from external evidence
INFER/FUT	/pe ⁵⁵ /	infer from external evidence, future
GUESS/INTUIT	/du ³³ /	guess from intuition
GUESS/BKGD	/pa ⁵⁵²¹ /	guess from background knowledge

Table 5. Northeastern Central Lisu epistemics and evidentials

The origins of this system are further discussed below. The following examples are drawn from Yu (2005).

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(31) ji<sup>55</sup> t<sup>h</sup>o<sup>21</sup> yuu<sup>21</sup> ma<sup>55</sup> tja<sup>55</sup> lo<sup>44</sup>
he book teach CONT EP1
'He is teaching (I assert this; someone may have denied it).'
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(32)
$$ji^{55}$$
 ji^{333} $l\underline{\varepsilon}^{21}$ wo³³ ni^{33} o³³ dzo^{21} he water hand swim TRY PERF QUOTE 'Someone said that he has tried to swim.'

- (33) tho33 tsi55 my21 ha33 tja55 ma55 this time sky rain CONT VIS 'I see that is raining now.'
- (34) a^{55} yur⁵⁵ p^h a^{21} gwa³³ by³³ tja⁵⁵ dza³³ chicken male there crow CONT NONVIS 'I hear the rooster crowing there.'
- (35) $\alpha^{55}\gamma u r^{55}$ $p^h \alpha^{21}$ $gw \alpha^{33}$ by^{33} $tj \alpha^{55}$ $dz o^{33}$ chicken male there crow CONT NONVIS/INCHOATIVE 'I hear the rooster starting to crow there.'
- (36) a^{55} yw⁵⁵ p^ha²¹ gwa³³ by³³ gu³³ a²¹ dzo³⁵ chicken male there crow finish DEC NONVIS/PERF 'I heard the rooster crowing there.'
- (37) ji⁵⁵ ni⁵⁵ n²¹ dʒe³³ na⁵⁵ he today NEG go INFER 'I infer from evidence that he may not leave today.'
- (38) my²¹ ħα³³ ħα³³ lα³³ pε⁵⁵
 rain rain TO INFER/FUT
 'I infer from evidence that it's going to rain.'
- (39) ji⁵⁵ ni⁵⁵ n²¹ dze³³³ du³³ he today NEG go GUESS/INTUIT 'I guess from intuition that he may not leave today.'
- (40) ji^{55} ji^{55} ji^{21} dze^{33} pa^{5521} he today NEG go GUESS/BKGD 'I guess from background knowledge that he may not leave today.'

Like the /mo⁵⁵/ form in the transitional northern subvariety of Central Lisu, the visual evidential /mu⁵⁵/ occurs only followed by the perfective /o⁴⁴/, as in (41). It is unlike the northeastern Central Lisu visual evidential /ma⁵⁵/, which only occurs without a following perfective, as in (33) above.

(41) a^{55} na^{21} gwa^{33} do^{44} dze^{33} mu^{55} o^{33} dog there out go VIS/PERF PERF 'I saw that the dog has gone out (on the level).'

Unlike most other varieties of Lisu, in which no sequence of evidentials is possible unless the second one is the quotative, northeastern Central Lisu allows quite a range of combinations of two or three evidentials. The maximum sequence of evidentials which may occur in this subvariety has /na⁵⁵/ first, any evidential second and /dzo²¹/ last; these can be subsumed in the following schema:

$$/n\alpha^{55}/$$
 + EV + $/dzo^{21}/$
INFER OUOTE

Such sequences do not occur in other types of Lisu. Not all possible combinations of three evidentials together are attested. Most frequent are sequences in which the reported speech marker follows some other evidential, as in (42). Others occur in which the visual evidential plus perfective /mu⁵⁵ o³³/ is found after some other nonvisual evidential, without a final reported speech marker as in (43), or with it as in (44). Such sequences are very infrequent.

- (42) a⁵⁵sa³³mi⁵⁵ gwa³³ t^ho²¹ γw²¹ so⁴⁴ tja⁵⁵ si²¹ γε⁵⁵ ma⁵⁵ dzo²¹ Asami there book study CONT STILL MIR VIS QUOTE 'Someone said that it was surprising for them to see that Asami is still studying there.'
- (43) nu³³ dze³³ na⁵⁵ mu⁵⁵ o³³
 you go INFER VIS/PERF PERF
 'Someone inferred from visual evidence that you went.'
- (44) nu³³ dze³³ na⁵⁵ mu⁵⁵ o³³ dzo²¹
 you go INFER VIS/PERF PERF QUOTE
 'Someone said that they inferred from visual evidence that you went.'

In several cases it can be seen that the northeastern Central Lisu forms have evidential meanings closely related to the epistemic meanings in other varieties; the epistemic meanings are also included in the meanings of these evidentials here. Note also that an evidential need not be first person if it is embedded inside the reported speech marker, as seen in (42) to (44).

⁹ Example (42), which is example (30) in Yu (2005), also contains a mirative /yε⁵⁵/ after the durative /si²¹/ and before the visual evidential /ma⁵⁵/. Note that some sequences of final marker plus evidential also occur in Northern Lisu as in example (12) above, in Central Lisu, and in literary Lisu as in example (45) below. Similar sequences in which the second member is anything other than the reported speech form or with a sequence of three such forms do not occur outside northeastern Central Lisu.

3.7 Literary Lisu

Between 1915 when Lisu was first written in the so-called Fraser script ¹⁰ and the stabilisation by the late 1920s of what is usually called /tho²¹ yuu²¹ yo²¹/ 'book language' in Lisu and the 'Bible dialect' in English, the missionaries and the Lisu on the initial translation committee wisely chose not to use most of the epistemic and evidential markers, with three exceptions: the strong assertion epistemic /lo⁴⁴/, the 'now I know' epistemic /buu³³/ or its fused alternative /buu³⁵/ and the reported speech marker /dʒo²¹/. As in most kinds of Lisu, an epistemic and the quote marker can be combined in this order, as in (45).

(45)
$$ji^{55}$$
 $b\epsilon^{44}$ a^{33} lo^{44} $d3o^{21}$ he say DEC EP QUOTE 'He definitely said it, it is said.'

However, it is much more frequent in the most formal literary Lisu not to use the reported speech marker. Every quotation of Jesus in the most recent 1999 edition of the New Testament is embedded by a following $/b\epsilon^{44}$ α^{33} $lo^{44}/$ or with some other form containing the verb /be⁴⁴/ 'say' or some other speaking verb; the reported speech form simply is not used. In this edition, there are 628 separate quotes of Jesus, of which 357 are followed by $\frac{1}{5}$ be $\frac{1}{5}$ are followed by $/b\epsilon^{44}$ gui²¹ α^{33} lo^{44} / 'say to', and 17 are followed by $/b\epsilon^{44}$ / plus some other nonfinal marker or final marker. Nearly all of the rest of the quotes are embedded by the complementiser /be⁴⁴/ plus one of nine speaking verbs, including 42 tokens of /nq⁴⁴ ni⁴⁴/ 'ask', 13 redundantly with /be⁴⁴/ 'say', nine with /po³⁵/ 'answer' and so on. Elsewhere in literary Lisu, the reported speech marker is used much more often. What is also remarkable and different about literary Lisu is the extremely high frequency of the epistemic /lo⁴⁴/, which is so great as to have weakened its meaning considerably. This has also influenced the speech of those Northern and Southern Lisu speakers who are Christian; the form is being reintroduced into Northern Lisu in Burma and India, and its frequency greatly enhanced in Southern Lisu.

4. COMPARISON OF LISU EPISTEMIC AND EVIDENTIAL SYSTEMS

Judging from the distribution of the modern systems, shared meanings between different systems, and the dates of separation due to migration, it appears likely that the evidential system is a relatively recent innovation, having developed over at most the last couple of centuries. Some of the forms which are now evidentials in some varieties of Lisu derive from earlier epistemics, while others derive from verbs such as 'fit', 'see', 'listen', 'come out' and 'know'. Table 6 shows the

¹⁰ James Outram Fraser was a China Inland Mission member who devised a Lisu orthography in late 1914 in co-operation with J. G. Geis and Ba Thaw; it uses upper case letters, upright and inverted, for segments and various punctuation marks for tones. See anonymous (1999) and Li et al. (1990) in the references for some examples.

overall pattern of epistemics and evidentials; the numbers after epistemics refer to the most to least probable within each system, from EP1 which is the most likely.

	Northern	Central	NE Central	N Central	Southern	Literary
/d3o ²¹ / etc.	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE
$/p^{h}ja^{55}/$		EP1				
/lo ⁴⁴ /	$EP1/\Lambda$	EP2	EP1	EP1	EP1	EP1
$/p^{h}q^{5521}/$	EP2	(EP3)			EP2	
/ba ⁵⁵²¹ /	(EP2)	EP3			(EP2)	
/pa ⁵⁵²¹ /			EV			
/bui ³³ / etc.	EP3	EP4		EV	EV	EP2
$/do^{44}/$ etc.	EP4	EP5	EV		EV	
$/p^{h}e^{55}/$	EP5				EP3	
/no ³⁵ /, /na ⁵⁵ /		EP6	EV		EV	
/mo ⁵⁵ / etc.			EV	EV		
/pe ⁵⁵ /			EV			
$/dza^{33}/, /dzo^{33}$	3/35/		EV			

Table 6. Epistemic and evidential forms in Lisu

The only evidential marker shared by every variety of Lisu is the reported speech marker ('somebody told me'), which could be regarded as a direct quotation marker rather than an evidential if one prefers to analyse varieties lacking any other evidentials as having no evidential system. The form is /dzo²¹/ or a phonological equivalent. This is usually an extremely frequent marker, and occurs very widely in all styles including archaic song language and modern literary language. It has alternative forms in some varieties due to phonological changes: /dzo²¹/ in Central Lisu, /dzo²¹/ in Northern Lisu and variation between [dzo²¹], [dzo²¹] and [do²¹] in Southern Lisu. This has no song word pair, a solid etymology, and no obvious verbal grammaticalisation source. It is among the cognates of the reconstructed quotative marker, Proto-Ngwi etymon 861 *jay^{1/2}, related to the Lahu form /tçe⁵³/ and Akha /dze⁵⁵/ among others. ¹¹

The epistemic /lo⁴⁴/ is present in nearly all varieties of Lisu, and where it occurs, it is the highest-probability epistemic in all varieties apart from Central Lisu, where it is second-highest. Its meaning ranges from strong assertion of something that has been denied by someone else in Southern Lisu to an attenuated assertive meaning due to very frequent use in literary Lisu. In most kinds of Lisu, it has a meaning of strong assertion. It is the only pure epistemic in northern and northeastern Central Lisu, and also by far the most frequently-used epistemic in literary Lisu. The copula verb forms / $\eta\alpha^{33}$ / and / ηo^{33} / are also used in clause-final position for strong assertion in every variety of Lisu.

Another very widespread but not quite universal final marker is an epistemic which usually has a meaning of uncertainty. Speakers of Lisu who know English usually translate it as 'maybe' or sometimes with the tag 'isn't it?'. In Northern and Southern Lisu, the usual spoken form is $p^h a^{5521}$ and the song word pair form

 $^{^{11}}$ Initial and tone correspondences are regular, but not the Lisu rhyme correspondence, which may reflect a fused $/o^{44}/$ perfective.

is $/ba^{5521}/$, while in most of Central Lisu the usual spoken form is $/ba^{5521}/$ and the song word pair form is $/p^ha^{5521}/$. The form in northeastern Central Lisu is $/pa^{5521}/$ with an evidential meaning of guessing from background knowledge, but no corresponding form is found in northern Central Lisu. Unusually among such markers, it could be regarded as being two syllables long; the second syllable could be derived from fusion of the reduced form $/a^{21}/$ of the final question marker. However, sentences containing these forms are not questions.

The epistemic /p^he⁵⁵/, the lowest-probability epistemic in Northern and Southern Lisu, as well as the highest-probability /p^hja⁵⁵/ fusional form in Central Lisu and possibly the inferential future evidential /pɛ⁵⁵/ in northeastern Central Lisu, are all derived from the verb /p^he⁵⁵/ which means 'be fitting, fit together' and which also occurs as a posthead serial verb with the meaning 'fit to (verb)'. Thus, as we have seen in (5), (7) and (28) above, in varieties of Lisu which use the unmodified form /p^he⁵⁵/ as an epistemic, some sentences may be ambiguous between the epistemic /p^he⁵⁵/ and the earlier serial verb /p^he⁵⁵/ meanings. Another reflection of its recent grammaticalisation is that it is often followed by the perfective /o⁴⁴/, unlike other epistemics.

Another marker found in all Lisu varieties but with different meanings has various slightly different forms all starting with /b/, followed by /w/ in most varieties or with /o/ in subvarieties which replace some /u/ with /o/ after voiced bilabial and velar stop initials, ¹² or sometimes with $/\gamma$ / instead. There is a $/^{33}$ / tone form in most varieties, also an alternative /35/ tone form in some. In Northern Lisu the forms include /bui³³/, /bo³³/, /by³⁵/ and /buia³⁵/; this is an epistemic of lower degree of certainty than /phq5521/ or /bq5521/ in Northern and Central Lisu. In Central Lisu the forms include /bui³³/, /by³⁵/ /bo³⁵/ and /buia³⁵/. In Northern, Central and Literary Lisu, the meaning is also that one used to think the opposite, but has now found out that something is this way; an epistemic of changed knowledge. In northern Central Lisu, the form is an inferential evidential of nonverbal, nonvisual evidence. In Southern Lisu the forms /bx³⁵/ and /bo³⁵/ or rarely /bm³³/ are used interchangeably as a visual evidential. Notice that the visual evidential in northeastern and northern Central Lisu is derived instead from the verb /mo³³/ 'see', and that the meanings of the /b/-initial evidential form in northern Central and Southern Lisu are quite different. In the northeastern subvariety of Central Lisu, which has developed the most extensive evidential system of any variety of Lisu, there is no corresponding /b/-initial form at all. Overall, this form is quite frequent in Northern, Central and literary Lisu in its epistemic changed-knowledge meaning and in northern Central Lisu in its evidential meaning, and fairly frequent in Southern Lisu in its quite different evidential meaning.

The final form found in most varieties of Lisu is /do⁴⁴/ (homophonous with and most likely derived from a verb meaning 'come out') in Northern Lisu, /du⁴⁴/

 $^{^{12}}$ Another example is the verb 'give', $/guu^{21}/$ throughout Lisu, but also $/go^{21}/$ in some Northern subvarieties.

in Central Lisu, /du³³/ in northeastern Central Lisu and /du⁴⁴/ in Southern Lisu. ¹³ In Northern Lisu, /do⁴⁴/ means 'it appears to be/I guess so', an epistemic of rather low probability, not confirmed, and not based on personal knowledge. In Central Lisu, it has a similar low-probability epistemic meaning 'it might be so'. In northeastern Central Lisu, /du³³/ has a related evidential meaning of guessing based on intuition; it also contains a similar epistemic meaning to that of the other two varieties with this form. In Southern Lisu, it is one of two evidentials of inference with similar meaning; the other is /no³⁵/.

The /no³⁵/ form is found as an epistemic of very low probability or guessing in Central Lisu and as an inferential evidential in Southern Lisu. This may be connected with the northeastern Central Lisu form /na⁵⁵/ which is also an inferential evidential; the latter is clearly derived from the verb /na³³/ 'listen'; the forms elsewhere with /o/ may contain a fused perfective /o⁴⁴/; note also the future forms ./na³⁵/ and /ne³⁵/.

The visual evidential $/\text{mo}^{55}/$ found in northern Central Lisu and the corresponding $/\text{mu}^{55}/$ of northeastern Central Lisu has an obvious verbal source, the verb $/\text{mo}^{33}/$ 'see'. ¹⁴ The meaning is the same as the /b/-initial evidential in Southern Lisu. The forms $/\text{mo}^{55}/$ and $/\text{mu}^{55}/$ are syntactically unusual among these markers in that they must have a following perfective $/\text{o}^{44}/$, which is not usually possible for other final markers in this class. In northeastern Central Lisu, the $/\text{mu}^{55}$ o³³/ form contrasts with a non-perfective form $/\text{ma}^{55}/$ with a fused $/\text{a}^{33}/$ declarative and no possibility of a following perfective $/\text{o}^{44}/$.

In addition to the above forms which are found in two or more kinds of Lisu. the evidential system in northeastern Central Lisu, briefly described in Yu (2003, 2005), has more members, and may have sequences of two or three evidentials. A perfective marker /o⁴⁴/ or a fused declarative marker /q³³/ may follow some evidentials, as in northern Central Lisu. Various one-syllable forms such as /mu⁵⁵/ and /dzo³⁵/ are probably already the result of fusion with the perfective. Similar fusion is widespread in this subvariety: number plus general classifier, some twosyllable kinship terms, plural pronouns and many other areas of lexicon also show fusional patterns. In addition, the perfective vision evidential /mu⁵⁵/ is usually followed by an additional perfective marker /o³³/. Other fused forms in northeastern Central Lisu include the hearing, tasting, smelling or touching evidential $\frac{dz}{dz}$ (imperfective) from $\frac{dz}{dz}$ + $\frac{dz}{dz}$, $\frac{dz}{dz}$ (inchoative) or /dzo³⁵/ (perfective) from /dza²¹ + o⁴⁴/, derived from the bound verb /dza²¹/ 'know'. The form $/p\epsilon^{55}$ / 'infer that something is about to happen' may be related to the epistemic /phq⁵⁵/ with / ϵ ⁵⁵/ 'only' fused onto it instead of /q²¹/ 'question', or to the serial verb and epistemic /phe⁵⁵/; in either case, the lack of aspiration is unexplained. Finally, there is the form $/nq^{55}/$ which, like $/p\epsilon^{55}/$, is an inferential

 $^{^{13}}$ It is not unusual for the distribution of $/^{33}/$ and $/^{44}/$ tone and /o/ and /u/ to differ between varieties of Lisu.

The tone of the evidential is not unexpected; there is a regular process in which $[^{55}]$ tone replaces $/^{33}/$ or $/^{44}/$ tone (and $[^{35}]$ tone replaces $/^{21}/$ tone) in a final verb, as a result of fusion of a following declarative $/\alpha^{33}/$.

evidential, but is not inchoative; this may be derived from the verb $/nq^{33}/$ 'listen' and may be related to $/no^{35}/$, an inferential evidential in Southern Lisu and an epistemic of doubt in western Central Lisu, and possibly also to future forms such as $/nq^{35}/$ and $/n\epsilon^{35}/$.

It is striking that varieties and subvarieties of Lisu which are easily mutually intelligible should have such diverse systems, ranging from systems with a quotation marker plus a multi-member epistemic system to a fully-developed evidentiality system retaining only one pure epistemic, and that the syntactic constraints on these markers also differ. Some varieties may also have a sequence of one other evidential plus the quotation marker. One Central Lisu subvariety allows various sequences of up to three evidentials and some varieties permit or require a following perfective marker after recently-grammaticalised evidentials. Though some speakers know some of the forms of final markers in other varieties, almost none are aware that other subvarieties have such different systems. This leads to unrecognised cross-dialectal miscommunication about epistemic status and/or evidentiality. It is therefore just as well that the standard literary language, a new composite variety devised by foreign missionaries and Lisu translation committees in the 1920s and 1930s, used in Scripture materials and taught to Christian Lisu, uses only the quotation marker /d30²¹/, the strong epistemic /lo⁴⁴/, the changed-knowledge epistemic /bui³³/ or /buia³⁵/ and the imperative/hortative and question markers, but not the various other epistemic or evidential markers. However, these other markers do appear in printed materials which represent traditional Lisu songs, stories and so on.

5. EPISTEMICS AND EVIDENTIALS IN RELATED LANGUAGES

The well-described language most closely related to Lisu is Lahu (Matisoff 1982: 369-395, 467-470), which has two sentence-final epistemics, $/h\epsilon^{35}/$ of doubt and $/n\epsilon^{21}\sigma^{11}/$ of probability, and one reported speech form, $/t\epsilon^{53}/$, as well as various question and imperative markers. Unlike Lisu, the epistemics can combine in the sequence $/h\epsilon^{35}$ $n\epsilon^{21}\sigma^{11}/$, which can then be followed by the quotative $/t\epsilon^{53}/$. The reported speech form is cognate with the Lisu form, though the rhyme correspondence is irregular.

Akha (Hansson 2003: 247-251, Kya Heh 2003: 10-48), fairly closely related but less so than Lahu, has a system of clause-final markers, including epistemics and evidentials, many of which can combine in various ways. In the dialect spoken in Burma and described by Kya Heh, the epistemics include a first person (or second-person question) certainty marker /ma/, a non-first person certainty marker /me/, a positive high-probability marker /te²¹a³³/ preceded by a nonnegated verb, a negative high-probability marker /ja⁵⁵/ preceded by a negated verb, a probable marker /dze²¹/ which must be followed by another epistemic or evidential, a possible marker /dze²¹/ which must be followed by another epistemic or evidential, a possible marker /dze²¹/ preceded by a non-negated verb, and a non-possible marker /pa²¹/ preceded by a negated verb; the last is cognate with the Lisu epistemic /pha⁵⁵²¹/, but in Lisu the form occurs after negated or non-negated verbs. The Burma Akha evidentials include a visual /na⁵⁵/, a nonvisual (auditory,

tactile, olfactory, gustatory) /mi⁵⁵a³³/ and a reported speech marker /dze⁵⁵/; the latter may follow any sequence of other clause-final markers. In the dialect spoken in Thailand and described by Hansson, the visual evidential is /ŋa/, the evidential /mia/ is only auditory, there is an additional tactile etc. evidential /na/ as well as the reported speech form $\frac{3}{4z}e^{55}$ and a direct quote marker $\frac{3}{12}e^{55}$. The epistemics in Thailand Akha include /ma/ and /mɛ/ as in Burma. There are also high probability, first person /te/ and non-first person /ta/; high negative probability, first person /le/ and non-first person /la/; there are also what Hansson calls prediction markers: certainty /ma⁵⁵/, doubt /m⁵⁵/ (homophonous with the verb 'do'), fear /a⁵⁵/ and threat /pa⁵⁵/. The tones of all the markers shown without a tone indicate tense: high for non-past, low for past. The source of the Akha visual evidential appears to be the equational copula /nw⁵⁵/ or /na⁵⁵/, which also still occurs in its copula use. The nonvisual evidential may be related to the verb /mi⁵⁵/ 'catch', and the Thailand Akha tactile evidential may be related to the posthead serial verb /na³³/ 'be able'. The only Akha evidential with a cognate in Lisu is again the quotative, but as in Lahu, the Akha form shows an irregular rhyme correspondence, with in addition an irregular tone correspondence.

At another step of genetic remoteness, but still fairly close within Tibeto-Burman, Burmese, like Lahu, has a variety of epistemics but only one candidate for evidential status: the reported speech marker. In literary Burmese this is /hu⁵⁵/, derived from an archaic verb /hu²²/ 'say'. In spoken Burmese, it is /lo⁵⁵/, which is am embedding device which also means 'because' among other things (Okell and Allott 2001: 209-212); the spoken form may be derived from the nominal /lo²²/ 'way/manner'. Thus the Burmese reported speech markers are not cognate with the Lisu, Lahu or Akha forms and appear to be independently developed.

Overall, no more or less closely related language shows parallels for the evidential system of some varieties of Lisu, which appears to be a separate and recent innovation found only in some varieties, and different in each.

6. CONCLUSION

There is a reported speech form in all varieties of Lisu, with cognates in other Ngwi languages but not in Burmese. It is not clear that varieties which have complex epistemic systems in which this is the only candidate for being called an evidential should be said to have an evidential system at all. In such a system, a reported speech marker is a quotation-embedding device, not a full-fledged evidential system on its own; all languages have quotation embedding strategies. In Lisu, the reported speech marker also has some epistemic meaning: something which one has heard second-hand is inherently less certain.

The various distinct Lisu evidential systems appear all to have developed within the last couple of hundred years, since the dispersion of the Lisu into the upper Salween, Burma and Thailand. It is clear that the direction of development has been from epistemic toward evidential systems, along a variety of paths utilising a variety of epistemic and other lexical material including verbs and fused final particles. Some Lisu epistemics also have more or less transparent

grammaticalised verbal origins. Unlike most other final markers including imperatives, question markers, some epistemics and the reported speech marker, all Lisu evidentials are derived from epistemics or from grammaticalised verbs.

Lahu, a language very close to Lisu genetically, has only a reported speech marker and a reported speech marker. Apart from the reported speech marker, the evidential system of somewhat more distant Akha is a completely independent development. At the next genetic remove, Burmese again has only reported speech markers, with recently-grammaticalised forms. Thus, contrary to the general claims in Aikhenvald (2004), Lisu is a clear example of the recent development of rather different evidential systems based in part on epistemic forms.

ABBREVIATIONS

AWAY direction of action away
BKGD background knowledge
TO direction of motion toward

CONT continuous action

DEC declarative DIM diminutive

EP epistemic (numbered in order of decreasing probability: EP1, EP2,

etc.)

EV evidential

FIT.TO posthead serial verb 'fit to'

FUT future

GIVE posthead serial verb 'do for'

GUESS/INTUIT evidential of guessing from intuition

IF conditional IMP imperative INCH inchoative

INFER inferential evidential

INTUIT intuition LOC locative

MAY posthead serial verb 'may'

MIR mirative

MUST posthead serial verb 'must'

NEG negative

NONVIS nonvisual evidential

OBJ object

PAST posthead past tense

PERF perfective

POLIMP polite imperative

Q question

QUOTE reported speech

SO	sequence and consequence
STAY	posthead serial verb 'so it stays'
STILL	action continuing up to present
TO	direction of action toward
TRY	posthead serial verb 'try to'
VIS	visual evidential

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