"Mirativity" does not exist:
ḥdug in "Lhasa" Tibetan and other suspects

NATHAN W. HILL

Abstract

Largely through the efforts of Scott DeLancey the grammatical category "mirative" has gained currency in linguistics. DeLancey bases his elaboration of this category on a misunderstanding of the semantics of ḥdug *in "Lhasa" Tibetan. Rather than showing "surprising information", linguists working on Tibetan have long described* ḥdug *as a sensory evidential. Much of the evidence DeLancey and Aikhenvald present for mirativity in other languages is also susceptible to explanation in terms of sensory evidence or appears close to Lazard's "mediative" (1999) or Johanson's "indirective" (2000). Until an independent grammatical category for "new information" is described in a way which precludes analysis in terms of sensory evidence or other well established evidential categories, mirativity should be excluded from the descriptive arsenal of linguistic analysis.*

Keywords: evidential, inflection, information structure, mirative, syntax, Tibetan

> *nisi videro . . . non credam*
> – Doubting Thomas

1. Introduction

1.1. *Advent of mirativity*

Although Scott DeLancey did not coin the term "mirative"[1] he "was the first scholar to demonstrate that [. . .] there is enough data to postulate it as a distinct

---

1. As antecedents DeLancey acknowledges Jacobsen (1964: 630 et passim) and the "admirative" category of Balkan linguistics. However, Jacobsen uses "mirative" to describe a morphosyntactic category specific to Washo and does not promote "mirativity" as a crosslinguistic category.

semantic and grammatical category" (Aikhenvald 2004: 195). The cornerstone of DeLancey's analysis of mirativity is his description of *ḥdug* in "Lhasa" Tibetan. Although most researchers describe the Tibetan morpheme *ḥdug* as a sensory evidential (Bell 1905: 40, Yukawa 1966, Goldstein & Nornang 1970: 23, Chang & Chang 1984: 605, Tournadre 1996: 224–226, Volkart 2000, Garrett 2001: 52–93), DeLancey argues that *ḥdug* marks an utterance as containing information which is surprising to the speaker, a category which he dubs "mirative" (e.g., 1986, 1997: 44–45, 2001). Because most researchers working on Tibetan have failed to engage DeLancey's account of *ḥdug,* there may seem no need to argue against his interpretation.[2] However, DeLancey's elaboration of the "mirative" is influential beyond Tibetan and Tibeto-Burman, having gained a currency in linguistics at large.[3]

A few searches in Google Scholar (http://scholar.google.com) can be taken to approximately measure the extent of DeLancey's influence compared to other researchers who have written about *ḥdug*. DeLancey's two articles devoted to promoting "mirativity" crosslinguistically (DeLancey 1997, 2001) are cited 119 times and 56 times respectively (site accessed 17 May 2010, 15:03). Volkart's description of *ḥdug* (2000) garners a mere two hits (site accessed 17 May 2010, 15:17) and Google's database appears not to include Yukawa's (1966) study (site accessed 17 May 2010. 15:18). Given the extent to which the typological literature on "mirativity" depends on DeLancey's description of the Tibetan morpheme *ḥdug* this literature deserves to be re-examined. Other evidence for mirativity which DeLancey points to in Hare, Sunwar, Korean, Turkish, and other languages is equally well accounted for with grammatical categories other than mirativity, including sensory evidence. The further examples of mirativity which Aikhenvald points to are also generally best analysed otherwise. Since most instances of mirativity reported in the literature are best analysed other ways, mirativity should be withdrawn from the theoretical repertoire of descriptive linguistics.

1.2. *Previous sceptics*

DeLancey's elaboration of mirativity has not gone unchallenged. In particular, Lazard (1999) suggests that 'inference', 'hearsay', and 'unexpected observation/immediate perception' are but three semantic uses of a broader "mediative" grammatical category and that "mirativity as such is only rarely and

---

2. DeLancey's work makes no appearance in the bibliography of Volkart (2000); the writings of Denwood (1999), Garrett (2001), Chonjore (2003), and Tournadre (2008) appear to have been uninfluenced by DeLancey's thoughts on this topic.

3. In addition to work on Tibetan (e.g., Zeisler 2000) "mirativity" has been employed in the descriptions of Magar (Grunow-Hårsta 2007), Tsafiki (Dickinson 2000), Hindi/Urdu (Montaut 2006), and many other languages.

dubiously grammaticalized" (Lazard 1999: 91). In general I find Lazard's argument persuasive. However, he accepts DeLancey's analysis of the Tibetan data (Lazard 1999: 104), which I do not. Furthermore, in describing the third semantic use of the "mediative" Lazard sometimes uses terms such as "unexpected observation" and sometimes "immediate perception". The latter, sensory evidence, certainly is a grammatical category; it is the category which Tibetan *ḥdug* encodes. In contrast, "new information", although it may occur, as one non-grammaticalized use of a broader "mediative" category as Lazard suggests, is not a valid grammatical category.[4]

Curnow (2001) also expresses scepticism at elements of DeLancey's account. Specifically, he argues against the explanation of conjunct/disjunct systems as grammaticalized mirativity. Posing the question of whether or not conjunct/disjunct systems can derive from mirativity implicitly accepts that "conjunct/disjunct" and "mirativity" are correct characterizations of certain linguistic phenomena. Tournadre (2008) has already convincingly argued that "conjunct/disjunct" is an ill-advised conceptual apparatus for descriptive linguistics and I avoid here discussion of Tibetan or other languages in such terms. The goal of this essay is to show that looking for mirativity in the world's languages is equally ill-advised. In this respect, my disagreement with DeLancey is more substantial than Curnow's.

2.   Tibetan *ḥdug* and mirativity

2.1.   *Overview of the "Lhasa" Tibetan verbal system*

2.1.1.   *Verbal categories and constructions.*   Ideally one should draw a distinction among the language of the city of Lhasa itself, other dialects of Central Tibet, and the *lingua franca* of the Tibetan diaspora (Miller 1955, Róna-Tas 1985: 160–161). However, because previous authors, including DeLancey, do not clearly maintain these distinctions, it is not possible to do so here. In order to keep the ambiguity of the underlying language in focus I write "Lhasa" with double quotes. The defence of *ḥdug* as a sensory evidential presented here makes use of no original fieldwork. The existing literature on "Lhasa" Tibetan is ample enough for the goal at hand.[5]

The verbal system of "Lhasa" Tibetan exhibits a three-way paradigmatic contrast within the forms of the verb 'to be' and across all of affixes encoding tense categories. I refer to these three categories as "personal", "factual",

---

4. The "mediative" is not a category which is relevant to the "Lhasa" Tibetan verbal system, although it may be for other languages.

5. A study of available examples using corpus tools may shed great light on the evidential system of "Lhasa" Tibetan in a way impossible through elicitation.

Table 1. *The verb 'to be'*

	Existential	Copula
Personal	*yod*	*yin*
Factual	*yod-pa-red*	*red (yod-pa-red)*
Testimonial	*ḥdug*	*red-bźag (ḥdug)*

Table 2. *Verbal auxiliaries*

	Future	Present	Past	Perfect
Personal	*V-gi-yin*	*V-gi-yod*	*V-pa-yin / byuṅ*[a]	*V-yod*
Factual	*V-gi-red*	*V-gi-yod-pa-red*	*V-pa-red*	*V-yod-pa-red*
Testimonial	—	*V-gi-ḥdug*	*V-soṅ*	*V-bźag*

a. The form *V-pa-yin* is used in volitional sentences whereas the form *V-byuṅ* is used in non-volitional sentences (cf. Tournadre 1996: 231–235).

and "testimonial" (Table 1).[6] The forms in parentheses do occur as copulas, but they are rare and their usage is not well understood (Garrett 2001: 70, 91; Chonjore 2003: 207). However, it is clear that *ḥdug* as a copula is restricted to use with adjectival predicates (Garrett 2001: 68). The morpheme *ḥdug* paradigmatically contrasts with *yod* and *yod-pa-red* in three constructions: the copula and existential verb 'to be', and the present auxiliary. In addition, because the morpheme *bźag* is negated as *mi-ḥdug,* the perfect can be added as a fourth context in which *ḥdug* contrasts with *yod* and *yod-pa-red*. Before attempting to specify the semantics of *ḥdug* and the testimonial, of which it is an exponent, it is useful to provide examples of these four grammatical contexts.

2.1.2.   *Verbs of existence.*   In the first construction these morphemes serve as full verbs indicating existence: *yod* (1), *yod-pa-red* (2), and *ḥdug* (3).

(1)   a.   *khyod-kyi   ra   ṅaḥi   rtsar   yod.*[7]
              /khyöʔ-kyi   ra   ngaɪ   tsər   yöʔ/
              you-GEN   goat   me-GEN   place-OBL   exist-PER
              'I have got your goat.' (Lewin 1879: 10)

---

6. In non-finite clauses the difference among these three is often neutralized in favour of the personal (cf. Chang & Chang 1984: 607–608; DeLancey 1990: 298).

7. I have unified the transliteration of Tibetan examples throughout, provided a transliteration when none was provided in the original and tacitly corrected spelling mistakes. When a source provides a phonetic transcription, I have given this also. I have adjusted these transcriptions to make them more consistent. This I have done by implementing the conventions of Tournadre for velars, retroflex consonants, vowels, and nasalization, but using *-ʔ* for the glottal stop

b. *ṅa-tshor   phyu-pa gsar-pa yod*
/ˋngantsɔɔ   ´chupə   ´saapa   yöʔ/
me-PLR-OBL clothes[8] new   exist-PER
'We have new clothes.' (Goldstein & Nornang 1970: 31)

(2) *bod-la   ḥbrog-pa maṅ-po yod-pa-red*
/ˋphöʔ-lə   ˋtrokpa   ˋmənku   ˋyɔʔreʔ/
Tibet-OBL nomad   many   exist-FAC
'There are many nomads in Tibet.' (Goldstein & Nornang 1970: 20)

(3) a. *thab   ḥdiḥi   steṅ-la   ña   skam-paḥi phyir-du*
/thəb   dii   teng la   nya kəm-pö[9]   chir-tu
hearth this-GEN above-OBL fish dry-GEN   in.order.to
grab   mi-ḥdug
təb[10]   mi duʔ/[11]
method   not-exist-TES
'There are no shelves over the fire for the drying of fish.' (Lewin 1879: 71)

b. *sman-khaṅ pha-gir   ḥdug*
/´mänkan   ´phəkèė   tuʔ/
hospital   over-there exist-TES
'There is a hospital over there.' (Goldstein & Nornang 1970: 10)

2.1.3. *Copula verb.* The copula exhibits a total of five forms: *yin* (4), *red* (5), *yod-pa-red* (6), *red-bźag* (7), and *ḥdug* (8).

(4) *rkun-ma zin   mkhan   ṅa   yin*
thief   catch the.one.who me is-PER
'I am the man who caught the thief.' (Bell 1905: 36)

(or falling tone) and doubled letters rather than a colon (:) for long vowels. When a source includes more vowels, consonants, or tones than Tournadre I leave them as they are, unless it is straightforward to substitute their notation with symbols from the International Phonetic Alphabet. I have surely introduced errors in some cases; the reader should consult the original in cases of doubt.

In the translation of Tibetan a hyphen is used to transliterate a specific Tibetan character called the *tsheg* which marks the boundary between two syllables. (This punctuation also occurs between words, but it is only transliterated word-internally.) Normally (more than 80 % of the time) the *tsheg* corresponds to morpheme breaks, but some morpheme breaks are not marked off. We follow this Tibetan studies convention here, rather than the rules for morphemic glossing.

8. This word refers to a specific traditional Tibetan garment.

9. One expects /kəm-paɪ/ rather than /kəm-pö/.

10. One expects /trəb/ rather than /təb/.

11. One expects /minduʔ/ rather than /mi duʔ/.

(5)   *ḥdi   deb   red*
       /ˊti   `thep    `reʔ/
       this   book   is-FAC
       'This is a book.' (Goldstein & Nornang 1970: 3)

(6)   *spraṅ-po   skyid-po   źe-drags   yod-pa-red*
       /ˊpanko   ˊkyipu   `sheˊtraa    `yɔʔ`reʔ/
       beggar   happy   very   is-FAC
       'Yes, the beggars are very happy.' (Chang & Chang 1984: 615)

(7)   *chu   red-bźag*
       /ˊchu   `reʔ-shaʔ/
       water   is-TES
       '[Tiens], c'est de l'eau. [(Here,) it's water.]' (Tournadre 1996: 238)

(8)   a.   *źim-po   ḥdug*
             /shimpo   duʔ/
             tasty   is-TES
             'It is pleasing.' (Lewin 1879: 18).
       b.   *ja   ḥdi   źim-po   ḥdug*
             /ˊcha   `ti    `shimpo   `tuʔ/
             tea   this   delicious   is-TES
             'Ce thé est excellent. [This tea is excellent.]' (Tournadre 1996: 225)

2.1.4.   *Present auxiliaries.*   In the second construction these morphemes serve as auxiliary verbs which indicate that the verbal action is ongoing at the time of the utterance:[12] *yod* (9), *yod-pa-red* (10), *ḥdug* (11).

(9)   a.   *ṅa   ḥgro-gi-yod*
             /nga   dro-gi-yö/
             I   go-PRS-PER
             'I go' (de Roerich & Phuntshok 1956: 50).
       b.   *ṅa   bod-skad-kyi   slob-deb   klog-gi-yod*
             /ˊnga   ˊphöökääʔ-khi   ˊlɔktep   ˊlöökiyöʔ/
             I   Tibetan-language-GEN   textbook   read-PRS-PER
             'I'm reading a Tibetan textbook.' (Goldstein & Nornang 1970: 106)
       c.   *ṅa   pha-gir,   a,   sdod-kyi-yod*
             /ˊnga   ˊphəkėė,   an,   `tüüˊki    `yöʔ/
             I   over-there,   ah,   stay-PRS-PER
             'I'm, ah, staying over there.' (Chang & Chang 1984: 606)

---

12. Hoshi (1994) provides a detailed analysis of the tense and aspect uses of this construction.

(10) a.   *lo   bźi tsam   ḥgro-gi-yod-pa-red*
           /lo   shi-tsə   dro-gi-yö-wa-re/
           year   four about   go-PRS-FAC
           'it is about four years' (de Roerich & Phuntshok 1956: 50)

      b.   *za-chas   btsoṅ-gi-yod-pa-red*
           /ˈsapcääʔ   ˈtsunkiˋyɔʔreʔ/
           food-stuffs   sell-PRS-FAC
           'They are selling foodstuffs.' (Goldstein & Nornang 1970: 104)

(11) a.   *khyed-raṅ   phebs-kyi-ḥdug*
           /khye-rang   phe-gi-du/
           you   go-PRS-TES
           'you go' (de Roerich & Phuntshok 1956: 50)

      b.   *kho   sṅa-po   laṅ-gi-ḥdug-gas?*
           /ˈkho   ˈngapo   ˋlənki ˋtukėėʔ/
           he   early   get-up-PRS-TES
           'Does he get up early?' (Goldstein & Nornang 1970: 104)

2.1.5. *Perfect auxiliary.*   In the third construction these morphemes serve as auxiliary verbs which indicates that the verbal action is complete at the time of the utterance: *yod* (12), *yod-pa-red* (13), *ḥdug* (14).

(12) *bris-yod*
      /ˈthriʔyöʔ/
      write-PRF-PER
      'I have written it.' (Goldstein & Nornang 1970: 88)

(13) *spu-gu kha-śas   gcig   slebs-yod-pa-red*
      /ˈpuku ˈkhashäʔ chi   ˈlėʔ ˋyɔʔ ˋreʔ/
      boy   some   one   arrive-PRF-FAC
      'Several boys have come.' (Chang & Chang 1984: 622)

(14) a.   *tsam-pa zas-mi-ḥdug*
           /ˈtsanpa ˋsäʔmintuʔ/
           Tsampa   eat-not-PRF-TES
           'He hasn't eaten Tsam-pa.' (Goldstein & Nornang 1970: 84)

      b.   *ri-boṅ   ni   zin-mi-ḥdug*
           /ˈreˈkon   ˈni   ˋsim ˋminˈtuʔ/
           Rabbit   TOP   catch-not-PRF-TES
           'As for the rabbit, you haven't caught him.' (Chang & Chang 1984: 621)

2.2. *The traditional explanation of* ḥdug*: A sensory evidential*

Most researchers understand *ḥdug* as marking direct perception as the source of information for the knowledge conveyed in an utterance. Bell (1905: 40)

was the first to draw attention to the use of *ḥdug* as a visual evidential, writing that "*ḥdug* means 'I saw it there but am not sure whether it is still there or not' ".[13] Yukawa (1966: 78) confirms the significance of visual evidence in distinguishing *ḥdug* and *yod-pa-red* as existential copulas:

> duu はその事物が話し手から見えている場合に用いられ´yoo-reeは見えないが、何からの理由でその事物があるということを話し手が知っている場合に用いられる。
>
> [*ḥdug* is used in the case where the speaker is able to see the object, and *yod-pa-red* is used in the case where the speaker knows that the object is there for some other reason.]

Yukawa's explanation is based on the following two examples:[14]

(15)   a.   *btsoṅ-khaṅ   ḥdir   deb   yag-po   yod-pa-red*
            /´tsonkan   `dee   ˆteb   `yago   yoo-ree/
            shop   this   book   good   exist-FAC
            [Speaker A says to speaker B, when neither can see the book before entering:] 'This shop has good books.' (Yukawa 1966: 78)

       b.   *ḥdir   deb   yag-po   ḥdug*
            /´dee   ˆteb   `yago   duu/
            here   book   good   exist-TES
            [Speaker A says after they have entered the shop while looking at the book:] 'Here is a good book.' (Yukawa 1966: 78)

Yukawa (1966: 78) further observes that "duu が用いられるのは見える場合だけではなく、他の感覚で認識しうる場合もある [*ḥdug* is not only used in the case of being able to see, there are also cases where the recognition occurs through some other sense]", as in the following example where "子供たちが外で遊んでいる声を聞けば、姿は見えなくても [one can hear the voices of children playing outside even without seeing their forms]" (Yukawa 1966: 78).

(16)   *phyi-logs-la   spu-gu-tsho   ḥdug*
       /´chilooʔ la   ´bugu-tso   duu/
       outside-OBL   child-PLR   exist-TES
       '外に子供たちがいる. [The children are outside.]' (Yukawa 1966: 78)

---

13. Bell does not provide examples to demonstrate this claim.

14. In fact he writes "A氏がB氏を案内して«この店にはいい本がある»という場合（その本はまだ見えていない。）" for (15a) and "その店にはいってその本を見ながら、«ここにいい本がある»という時" for (15b).

Yukawa tests the hypothesis that *ḥdug* is a sensory evidential also for *ḥdug* and *yod-pa-red* used as present auxiliaries (Yukawa 1966: 82–83) and as copula verbs (Yukawa 1966: 79–81), finding that direct perception accounts for the use of *ḥdug* rather than *yod-pa-red* in all cases.

Much more briefly Goldstein & Nornang (1970: 23) also remark that as opposed to constructions with *yod-pa-red* those with *ḥdug* "imply ACTUAL VISUAL knowledge" (emphasis in original).[15] Although Chang & Chang do not invoke evidentiality as a category per se their description of *ḥdug* as an existential copula describes clearly the importance of visual evidence: "[t]he speaker commonly uses *ḥdug* when referring to either that at which he is looking at the moment or that which he has seen in the past" (Chang & Chang 1984: 605).[16]

(17) a. *ḥdir, mtshan-tho   kha-shas raṅ ḥdug*
          /ʰtėė, ´tshänto   ´khasheʔ `ran  `tuʔ/
          there name-register some   even exist-TES
          [A prospective guest is looking at the list of those invited to a picnic:] 'And then, there are quite a few others on the list of names, too.' (Chang & Chang 1984: 605)

      b. *da   lhag-ma   brgya-daṅ gsum bźi-tsam   cig ḥdug*
          /ʰtėė, lhamaʔ   `kya thə   sum   `shitsə   chi `tuʔ/
          now   left-overs hundred   and   four-some a   exist-TES
          [A trader knows how many bags of fabric he has because he has counted them:] 'Now, there are a hundred and three or a hundred and four left over.' (Chang & Chang 1984: 605–606)

Tournadre associates each of the morphological categories presented above with an evidential meaning, employing the terminology "egophoric" (*yod*), "factual" (*yod-pa-red*),[17] and "testimonial" (*ḥdug*). The egophoric (*yod*) reflects knowledge the speaker has through personal involvement (Tournadre 1996: 220–224), the factual knowledge which is well known (Tournadre 1996: 227–231), and the testimonial knowledge gained through direct perception (Tournadre 1996: 224–226). I substitute the term "personal" for "egophoric" because it is elegant to have all three names end with *-al*, similar to how the terms for mood used in Indo-European languages "indicative", "optative", and "subjunctive" all end in *-ive*. Two of Tournadre's examples exhibit the testimonial meaning of *ḥdug* clearly.

---

15. Because of their use of the word "constructions" one can assume that this description holds true as much for the use of these morphemes as existential copula verbs as for their use as auxiliary verbs.

16. They think that visual evidence is however not primary and that the major factor is "certainty".

17. Tournadre used to prefer the term "assertative" (1996: 227, 2003: 412–413) but now finds "factual" a more appealing term (Tournadre 2008: 295).

(18)   a.   *ja   ḥdi   źim-po   ḥdug*
             /ˈcha `ti   `shimpo `tuʔ/
             tea   this   delicious   is-TES
             'Ce thé est excellent. [This tea is excellent.]' (Tournadre 1996:
             225)

       b.   *ltos-daṅ   Lha-mo   pha-gir   ga-re   byed-gi-ḥdug*
             /ˈtöʔ-ta   ˈlhamo   ´phakir   `khare   `cheʔ-kituʔ/
             look-IMP   Lhamo   over-there   what?   do-PRS-TES
             'Regarde, que fait Lhamo là-bas? [Look, what is Lhamo doing
             over there?]' (Tournadre 1996: 225 citing Hu Tan et al. 1989: 74)

In a study of the morpheme *ḥdug* across several Central Tibetan dialects,
Volkart (2000: 142–143) concludes that a meaning 'I can see it' was "the
unified original meaning of the evidential auxiliary morpheme *ḥdug*". Garrett
(2001: 2003) characterizes the testimonial (which he calls "direct") as indi-
cating "direct perceptual evidence". Chonjore (2003: xxv) describes *ḥdug* as
showing "first-hand knowledge of an incident" or an "eye-witness account of
an event". This survey of previous scholarship on *ḥdug* makes clear that there
is a widespread consensus that *ḥdug* is a sensory evidential.

   Although all of the examples of *ḥdug* presented in this summary of previous
literature are 3rd person, when semantically called for *ḥdug* is used with any of
the three persons. Use with the 3rd person is most common because one rarely
has need to invoke sensory perception of the speaker or the addressee. How-
ever, when context calls for such uses they are not eschewed. Several examples
of the testimonial with the 1st person are discussed below; cf. (28), (40a, b),
(41). Here are two examples of *ḥdug* used with the 2nd person.

(19)   a.   *khyed-raṅ-la   ca-lag   gaṅ-yaṅ   ḥdug*
             you-OBL   things   whatever   have-TES
             'You have everything [all kinds of things].' (Chonjore 2003: 131)

       b.   *khyed-raṅ-tsho   dpeḥi   yag-po   ḥdug*
             you-PLR   very   good   are-TES
             'You are extremely / really very good.' (Chonjore 2003: 131)

In sentence (19b) the speaker compliments the addressee by saying that the
speaker himself has direct evidence of the addressee's goodness, rather than
merely knowing of his goodness by reputation. The use of *ḥdug* with any of
the three persons shows that it is a mistake to analyse it as part of a con-
junct/disjunct system (cf. Tournadre 2008 contra DeLancey 1990, 1992, 2001).

2.3. *Possible objections to the traditional account:* ḥdug *in future and hearsay contexts*

Two contexts in which *ḥdug* occurs may at first blush appear difficult to analyse in terms of sensory evidence. The "Lhasa" Tibetan testimonial does not occur in the future tense. Instead, sentences in the future are restricted to personal and factual forms (Tournadre 1996: 245, Garrett 2001: 65–66). This lack of a testimonial future is quite natural; it is impossible to directly perceive future events through the senses. However, there is one construction using *ḥdug,* which could be understood as referring to future time.

(20) *de-riṅ ñi-ma skyid-po ltas-pa-ḥdug*
today sun pleasant appear-TES
'Today the weather will be good.' (Garrett 2001: 90, cf. Agha 1993: 227)

Such usage does not conflict with the analysis of *ḥdug* as a sensory evidential. As Agha explains, in such cases there is "a direct appeal to an external or 'objective' evidentiary sign which serves as the warrant for the prediction" (Agha 1993: 227 quoted in Garrett 2001: 90). An English translation which captures this meaning might be 'It looks like it will be nice and sunny today'.

In the second usage which seems at odds with sensory evidence, *ḥdug* is used with the 1st person to indicate hearsay.

(21) a. *1959-la ṅa chuṅ-chuṅ red / de-dus ṅa a-ma-lags*
1959-in me small is-FAC that-time me mother
mñam-du lha-sar ḥdug
together Lhasa-in exist-TES
'In 1959 I was young. At that time I was in Lhasa with [my] mother.' [she told me] (Chonjore 2003: 129)
b. *ṅa sṅon-ma slob-grwar yod-dus slob-sbyoṅ yag-po*
me previous at.school was-time study good
byed-kyi-mi-ḥdug
do-PRS-not-TES
'I didn't study well when I went [used to go] to school.' [my father told me] (Chonjore 2003: 186)

Such examples are instances of indirect discourse. Because his parents witnessed their son's youth it is natural for them to report facts about his childhood with the testimonial. When the speaker restates these sentences in indirect discourse, he leaves unchanged the original evidential marking. Although pronouns are realigned in "Lhasa" Tibetan indirect discourse, evidential markers are not realigned (Tournadre & Dorje 2003: 215).

(22) a.   *ṅa   em-chi   yin*
           me   doctor   is-PER
           'I am a doctor.'

      b.   *khoṅ   em-chi   red*
           he   doctor   is-FAC
           'He is a doctor.'

      c.   *khoṅ   em-chi   yin   zer   lab-soṅ*
           he   doctor   is-PER   RSM   said-PST-TES
           'He~i~ says he~i~ is a doctor.' (cf. Tournadre & Dorje 2003: 214–216)

In cases where more context is provided, this context makes clear that indirect discourse is the correct interpretation of such apparent instances of hearsay.

(23) *ṅa   lha-sar   bsdad-dus   tshoṅ-khaṅ-gi   las-ka   byed-kyi-ḥdug*
      me   Lhasa-OBL   stay-time   store-GEN   work   do-PRS-TES
      a-ma-lags-kyis   ṅar   ḥdi-ḥdra   gsuṅ-gi-ḥdug
      mother-ERG   me-OBL   like-this   say-PRS-TES
      'When I was living in Lhasa [I] was working in a store. My mother told me that.' (Chonjore 2003: 189)

The use of *ḥdug* in future and hearsay contexts is fully consistent with this morpheme's overall meaning as a sensory evidential.

2.4.   *DeLancey's presentation of* ḥdug*: Mirativity*

DeLancey has not published a complete account of his understanding of *ḥdug* or its place in the "Lhasa" Tibetan verbal system overall. Across his publications he sometimes gives contradictory accounts without stating which of his former views he no longer holds. For example, although he writes that "the mirative distinction [. . .] can be made only for first persons" (DeLancey 1997: 45), one of the examples he initially used to introduce mirativity is the 3rd person sentence 'There are yaks in Tibet' (DeLancey 1986: 205). In the absence of an overall account of DeLancey's views, a historical survey of his contributions will serve best to characterise his understanding of *ḥdug*.

In his first contribution treating the semantics of *ḥdug* DeLancey (1985: 70) presents *yod* and *ḥdug* as instances of "direct" knowledge and *yod-pa-red* as showing "indirect" knowledge. In a contribution from 1986 he further specifies this contrast as one of "old/new knowledge" but not yet using the term "mirative", which makes its début in DeLancey's writings in 1992. In that paper however he mentions a conference presentation on "mirativity" from 1989. In articles in 1997 and 2001 DeLancey shifts his focus from the description of *ḥdug* in "Lhasa" Tibetan to the promotion of "mirativity" as a crosslinguistically valid category of which *ḥdug* is but one instance.

DeLancey acknowledges Goldstein & Nornang's comment that *ḥdug* "constructions imply actual visual knowledge" (Goldstein & Nornang 1970: 23 quoted in DeLancey 1986: 205), but presents the following pair of examples which he states prove that "eyewitness knowledge is not the relevant criterion" (DeLancey 1986: 205).

(24) a. *Bod-la*   *g.yag yod*
          Tibet-OBL yak   exist-PER
          'There are yaks in Tibet.'
      b. *Bod-la*   *g.yag ḥdug*
          Tibet-OBL yak   exist-TES
          'There are yaks in Tibet.' (DeLancey 1986: 204)

DeLancey (1986: 205) points out that "[a]lthough both sentences are grammatical, a Tibetan, who has actual visual knowledge of the presence of yaks in Tibet cannot use *ḥdug* to report this fact", and therefore suggests that the important factor is not "the source of the speaker's knowledge, but rather its relative novelty" (DeLancey 1986: 205), which explains why the second sentence is appropriate as "a response of someone who was fascinated with yaks but knew nothing of where they existed until visiting Tibet and encountering one" (DeLancey 1986: 205). As Garrett (2001: 102–103) observes, the translation DeLancey provides for example (24a) is in error; possible translation include 'I have yaks in Tibet' or 'My yaks are in Tibet'.

DeLancey sees a confirmation for his analysis in the use of *ḥdug* with the 1st person, which often includes a sense of astonishment.

(25) a. *ṅaḥi*   *khaṅ-la*   *źi-mi yod*
          me-GEN   house-OBL cat   exist-PER
          'There's a cat in my house.' (DeLancey 1986: 212)
      b. *ṅaḥi*   *khaṅ-la*   *źi-mi ḥdug*
          me-GEN   house-OBL cat   exist-TES
          'There's a cat in my house.' (DeLancey 2001: 373)

In the first example "the cat is presumably mine" (DeLancey 1986: 212) whereas the context for the second is that "I come home and unexpectedly find a strange cat wandering about" (DeLancey 1986: 212).

In 1992, at the point where he introduces the term "mirative", DeLancey refers to the following two sentences, quoted here from his more thorough presentation of mirativiy in 1997.

(26) a. *ṅar*   *dṅul   tog-tsam yod*
          me-OBL money some   exist-PER
          'I have some money [e.g., I brought some with me].' (DeLancey 1997: 44, cf. DeLancey 1992: 44)

b. *ṅar   dṅul   tog-tsam ḥdug*
    me-OBL money some   exist-TES
    'I have some money [quite to my surprise]!' (DeLancey 1997:
    44, cf. DeLancey 1992: 44)

In his most recent contribution on the topic DeLancey adds one further pair of
example sentences:

(27)   a. *ṅar   deb   de   yod*
            me-OBL book that exist-PER
            'I have that book.'
        b. *ṅar   deb   de   ḥdug*
            me-OBL book that exist-TES
            'I have that book.' (DeLancey 2001: 374)

The first example can be said "in answer to someone asking me whether I
own a particular book" (DeLancey 2001: 374), whereas the second is more
appropriate if, believing I did not own the book, "I returned home and found it
on my shelf" (DeLancey 2001: 374).

All of DeLancey's examples of *ḥdug* as a mirative marker are instances of
this morpheme as an existential verb. He does not however make clear whether
he thinks this semantic description applies only to this one syntactic use, or
rather is characteristic of *ḥdug* in general. His hypothesis that conjunct/disjunct
systems derive from mirativity (DeLancey 1992: 57) suggests perhaps that mi-
rativity is characteristic of *ḥdug* in all contexts.

2.5.   *The case against "mirativity" in Tibetan*

I generally do not disagree with DeLancey's interpretation of the meaning of
the sentences he cites. However, the characterization of *ḥdug* as 'new infor-
mation' is incorrect. Although this description captures part of the meaning of
some examples, it is inadequate to capture the *Gesamtbedeutung* of this mor-
pheme, and is flatly contradicted by some examples. Even those examples most
susceptible to analysis in terms of "mirativity" have been equally convincingly
explained through an analysis of *ḥdug* as a sensory evidential.

2.5.1.   *"Mirativity" leaves some examples of* ḥdug *unaccounted for.*   Several
examples clearly demonstrate that *ḥdug* reports visual information even when
the information reported is in no way new. Consequently, even if *ḥdug* encodes
"mirativity" this category insufficiently accounts for the morpheme's use to
suggest the independence of "mirativity" from "evidentiality" as a grammatical
category.

Denwood (1999: 150) points out that a verb "+*gi- ḥdug* with first-person
subject is unusual, but is heard in cases where the speaker is seeing him/herself

from an outside viewpoint, for instance in a film, photograph, or dream" (Denwood 1999: 150). He provides the following example:

(28) *ṅas   las-ka byed-kyi ḥdug*
      /ˈngää   ˋlägə   ˋchiigɪduu/
      me-ERG   work   do-PRS-TES
      'I (saw that I) was working (in my dream).' (Denwood 1999: 150)

At the moment of reporting a dream to someone else the information in the dream is no longer new or surprising. In this example therefore *ḥdug* cannot be analysed as a "mirative" marker. The reason for the use of *ḥdug* in such as example is that I have come to know about my working through SEEING it in a dream. Visual evidence alone is sufficient to account for the semantics of this example.

In the case of involuntary verbs of experience used for the 1st person *ḥdug* is the default option. In a well-known case acknowledged by DeLancey the normal way of reporting illness is with *ḥdug*.

(29) *ṅa   na-gi-ḥdug*
      me   sick-PRS-TES
      'I'm sick.' (DeLancey 1985: 66, 1986: 207, cf. also Tournadre 1996: 225, Garrett 2001: 79)

It would be hard to argue that whenever someone uttered the sentence 'I am sick' he is stressing the novelty of this information.

DeLancey appears to believe that *ḥdug* is called for in this case because illness is "beyond control" (1986: 207), whereas *yod* is used with verbs "which require some degree of control on the part of the subject" (1986: 207).

(30) *ṅa   las-ka byed-kyi-yod*
      me   work   do-PRS-PER
      'I'm working.' (DeLancey 1986: 207)

An account of *ḥdug* versus *yod* in terms of the controllability of the action is however not posssible, because as Denwood points out, *na* 'to be sick' is compatible with the suffix *gi-yod*.

(31) a. *ṅa   na-gi-yod*
          /ˈnga ˋnʌgəyöö/
          me   sick-PRS-PER
          'I'm chronically sick.' (Denwood 1999: 151, cf. Tournadre 1996: 223)[18]

---

18. DeLancey, probably overlooking this interpretation, suggests that this sentence is ungrammatical (DeLancey 1990: 300, example 28).

b.   *ṅa   na-gi-ḥdug*
      /ˈnga `nʌgəduu/
      me   sick-PRS-TES
      'I'm sick at the moment.' (Denwood 1999: 151)

Denwood introduces the feature of "generality" to account for such exam-
ples.[19] This new category is however also unnecessary. The morpheme *yod*
is employed to mark information which one knows through direct personal
(usually intentional) involvement whereas *ḥdug* marks information which one
comes to know through the senses. Saying *ṅa na-gi-yod* suggests that one has
come to know of one's illness in a similar way to how one knows of one's own
actions or long term acquaintances.

(32)   a.   *ṅa   yi-ge   ḥbri-gi-yod*
             me   letter   write-PRS-PER
             'I am writing a letter.' (cf. Tournadre 2003: 133)
       b.   *khoṅ   ṅo-śes-gi-yod*
             him   recognize-PRS-PER
             'I know him.' (cf. Tournadre 2003: 189–191)[20]

If one says *ṅa na-gi-ḥdug* it shows that one knows one's illness through direct
experience; such examples either reflect an internal sense (endopathic, cf. Tour-
nadre 1996: 226, Garrett 2001: 77–82) or illness is grammatically something
that one realizes with the senses, like the presence of a stray cat.

   The examples of illness and dreams show that *ḥdug* does not always coin-
cide with "mirative" meanings. In contrast, sensory evidence is fully sufficient
to account for these examples. Mirativity is at best insufficient to capture the
meaning of *ḥdug*.

2.5.2.   *"Sensory evidence" suffices to account for all of DeLancey's examples.*
Even if *ḥdug* occurs in a number of circumstances which cannot be analysed
as "new information", the category could perhaps be salvaged if it is required
in some, albeit not all cases. In fact, all of DeLancey's examples, surprise at
yaks, cats, money, and books, are better explained as visual evidence. Yukawa
explains three of DeLancey's examples (books, yaks, money) in exactly this
way.

---

19. In the case of *yod, yod-pa-red*, and *ḥdug* used with involuntary verbs Denwood (1999: 150)
    provides six classifications based on four factors, viz. "person", "evidentiality", "viewpoint",
    and "generality". He gives equally elaborate analysis of these morphemes with voluntary
    verbs (Denwood 1999: 149) and as copulas (Denwood 1999: 124). While this analysis ex-
    plains the use of these morphemes in a very wide number of contexts it is needlessly complex.
20. These two examples do not fully characterise the meaning of *yod*, which is unnecessary for
    the topic at hand. For more detail consult Tournadre (1996: 223–224, 2003: 145).

In (15), Yukawa's example of two people discussing books in a shop, *yod-pa-red* is used when the knowledge is derived from reputation (15a) whereas *ḥdug* is used when one has physically set eyes on a book (15b). In contrast, DeLancey's example of a book (27) employs *yod* when the speaker is describing the content of his own library (27a) and *ḥdug* when he is shocked to find a particular book on his shelf (27b). Yukawa's explanation of *ḥdug* to show visual evidence can easily account for DeLancey's example. When describing the content of my library, as in (27a), I know which books I have because I was directly involved in their procurement. Because of this direct personal involvement the "personal" verb *yod* is called for. When describing my shock at the discovery that I own a particular book, as in (27b), my knowledge comes not from my personal involvement (which I have lost track of) but rather from the visual evidence of the book on my shelf. The implication of surprise arises as a result of using a sensory evidential in a circumstance when the use of the personal would be more conventional.

Yukawa (1966: 79) interprets DeLancey's example of yaks, not as showing new information, but rather as showing that *ḥdug* "は過去のことについても そのままの形で用いられう [can be used in the same form with reference to a past event]".

(33) *bod-la   g.yag maṅ-po ḥdug*
      /ˆpöö la   ´yaʔ   `manggo duu/
      Tibet-OBL   yak   many   exist-TES
      'チベットにはヤクが多い. [In Tibet there are many Yaks.]'
      (Yukawa 1966: 79)

Such sentences occur in "過去にその事物を見た（は他の感覚で認識 した）場合 [situations where one has seen (or recognized through another sense) that thing in the past]" (Yukawa 1966: 79). Visual evidence, not new information, is key. DeLancey's observation (1986: 205) that "a Tibetan, who has actual visual knowledge of the presence of yaks in Tibet cannot use *ḥdug* to report this fact" misunderstands the relationship among the three-termed evidential system. A Tibetan would normally know of the presence of yaks in Tibet, through his personal involvement, through the general knowledge available to him and his culture, and through direct sensory observation. Yet when uttering a sentence he must choose exactly one of these three means of knowledge to present to his audience as the source of his information. It is certainly not the case that *ḥdug* must be used obligatorily for all situations for which one has sensory evidence, far from this proving that *ḥdug* is not a sensory evidential it demonstrates only that sometimes there is more than one way to say something. By presenting his knowledge of yaks in Tibet as deriving from the evidence of his senses a speaker implies a lack of personal involvement or gen-

eral knowledge; it is this implication which results in the connotation of "new information".

In the case of money, Yukawa gives the following example to demonstrate that the bearing witness through the senses marked by *ḥdug* can occur based on senses (in this case touch) other than the visual.

(34)   *ḥdir   dṅul   ḥdug*
        /ˎˊdee   ˊngüü   duu/
        here   money   exist-TES
        'ここにお金がある. [Here is some money.]' (Yukawa 1966: 79)

A person usually knows that he has money because he put it in his pocket himself (26a). But sometimes, having forgotten he has done so, he learns that he has money in his pocket form the sensory evidence of touching it (26b, 34). In those cases where "new information" is included in the pragmatic use of a sentence containing *ḥdug* it is contextually derived from its opposition to the other epistemic moods. Rather than a grammatical category in its own right "mirativity" is a pragmatic effect in certain uses of sensory evidence.

An implication of surprise arising from the presentation of knowledge as deriving from visual evidence occurs in English just like in Tibetan. This is clear if one translates DeLancey's examples *ṅar dṅul tog-tsam ḥdug* (DeLancey 1997: 44) and *ṅaḥi naṅ-la źi-mi ḥdug* as 'I see I have some money' and 'I see there's a cat in my house' or *Bod-la g.yag ḥdug* 'I see there are yaks in Tibet'. In these English sentences the visual component of the evidence is obvious from the etymological meaning of the verb *see*, however, the pragmatic force of such a sentence is not to comment on what I see, but rather to emphasize the shock of either having money or there being a cat in the house. One would usually know about one's money or cat because it is one's business to know; one would usually know about the fauna of Tibet because it is well known. By invoking sensory evidence instead of one of the other potential evidential categories the speaker emphasizes that he did not expect what he sees. The grammatical meaning of *ḥdug* is sensory evidence, not new or surprising information.

2.6.   *Conclusion*

The morpheme *ḥdug* is an evidential. Although it is most characteristically used for visual evidence,[21] it can also be used with sound (16), taste (18a),

---

21. If one saw "mirative" as derived from Latin *mirō* 'I see' it would be an apt term for the Tibetan testimonial. However, "mirative" in fact is derived by clipping "admirative", itself derived from *admirō* 'to wonder'. This terminology appears to originate in Dozon's Albanian grammar, in which he uses "admiratif" as a translation for ἀπροσδόχητοι 'unexpected' (Dozon 1879: 226).

touch (34), and smell.[22] When used in a context where another modal auxiliary would be expected it can have an implication of surprise. This implication is however not a part of the morpheme's grammatical meaning.

DeLancey himself accepted visual evidence as the meaning of *ḥdug* in 1985 writing that "the sentences with the DIRECT gloss report information which the speaker has obtained through direct sensory perception (through any sense channel)" (DeLancey 1985: 65).

(35)   *bsod-nams-gyis   thang-ga   ḥgel-gyi-ḥdug*
     Sonam-ERG   thangka   hang-PRS-TES
     'Sonam is hanging a thangka/thangkas [direct perception].'
     (DeLancey 1985: 65)

It appears that in 1986 DeLancey became aware of several examples which made him change his mind. After finding discussions of "admirative" and "mirative" in other languages, he chose to analyse *ḥdug* in similar terms. Unbeknownst to DeLancey, Yukawa had already analysed in terms of "visual evidence" the same examples which turned DeLancey against visual evidence. Subsequent typological research, such as Aikhenvald (2004), has accepted DeLancey's account of *ḥdug* at face value without recourse to the larger body of secondary literature on *ḥdug*.

In her survey of morphological categories used for mirative meaning Aikhenvald (2004: 210) concludes that "any evidential except for visual and firsthand, can acquire mirative extensions". In fact, "Lhasa" Tibetan *ḥdug*, the touchstone for the entire typological discussion of mirativity, is a visual and first-hand evidential which has acquired mirative extensions; *ḥdug* is a highly atypical example of the very category invented to describe it.

3.   Mirativity in other languages

Under the influence of DeLancey's writings morphemes in many languages are now thought of as mirative markers; it is not feasible to discuss and refute every such case in an article of reasonable length. Instead, it must suffice to treat the terminological antecedents of DeLancey's use of "mirativity" and the phenomena outside of Tibetan which he describes as mirative. In order to give due consideration to arguments for mirativity presented after DeLancey's (2001) most recent relevant contribution, an additional section considers the phenomena which Aikhenvald (2004) connects with mirativity.

---

22. I have not come across an example with smell discussed in the previous literature. In a letter however (12 April 2010), Nicolas Tournadre draws my attention to this example: *dri-ma kha-gi-ḥdug* 'The odour is bitter.'

3.1.   *Antecedents of DeLancey's mirativity*

DeLancey associates his description of *ḥdug* as a "mirative" in Tibetan, with previous descriptions of the "admirative" in Albanian and the "mirative" in Washo. If one investigates the "admirative" and "mirative" in these two languages this similarity disappears. Friedman (1986: 180), whom DeLancey cites, writes as follows about the admirative in Albanian:

> Although the admirative is traditionally defined as a mood expressing surprise, it is also used to express irony, doubt, reportedness, etc. In all its uses the admirative somehow refers to the speaker's present or past nonconfirmation of the truth of a statement.

In an earlier paper Friedman (1981: 12) writes more explicitly of the Albanian admirative that "surprise is clearly not its basic or invariant meaning". The following example demonstrates that both surprise and first-hand testimony are not the core meanings of the Albanian admirative.

(36)   *në lidhje me pohimi që forma analitike e përmbysur e tipit "qëne kam"*
       paska pasur dikur vlerën e së ardhmes
       'in connection with the idea that the inverted analytic form of the type "qëne kam" was supposed to have had at one time the value of the future' (Friedman 1982: 22)

In (36) "the author is using the perfect admirative *paska pasur* in a quotative fashion which emphasizes his nonacceptance of the truth of what he is reporting without irony or sarcasm" (Friedman 1982: 22). In his most recent contribution on the Albanian admirative, Friedman (2003: 190) refers to it as "nonconfirmative", "for which 'surprise' (mirativity) is one of the contextual variant meanings" (Friedman 2003: 192).[23] The admirative in Albanian, reporting the nonconfirmation of the speaker, is the direct opposite of *ḥdug* in Tibetan which indicates explicitly that the speaker can confirm the truth of a statement with his senses.

Jacobsen (1964: 630) writes that in Washo the mirative "indicates that the speaker knows of the action described by the verb, not from having observed it occur, but only inferentially from observation of its effects".

(37)   *díme ˀ ˀíhu ḱáˀyiˀi*
       'The spring has dried up.' (Jacobsen 1964: 630)

---

23. If "nonconfirmation" is the basic meaning of the Albanian admirative, it is a bit surprising that Friedman's examples include direct observation on the basis of vision (2003: 197, example 15), smell (2003: 197, example 16), and taste (2003: 200, example 23). Perhaps, following the implication of Friedman's discussion of Turkish as comparable to Albanian, one may suggest that Albanian like Turkish exhibits a "mediative" (Lazard 1999) or "indirective" (Johanson 2000) meaning rather than "nonconfirmation" per se (see Section 3.2.4 below).

The Washo "mirative" exists in paradigmatic contrast to "visual" and "auda-tive" evidentials (Jacobsen 1964: 626–629). Again, in direct contrast to Tibetan the Washo mirative implies lack of observation rather than direct sensory per-ception. Inference is one use of Tibetan *ḥdug* among many, but in Tibetan the interpretation of inference is a consequence of combining the evidential mean-ing of direct witness with the perfect tense. Aikhenvald (2004: 210) concludes that the Washo mirative is not a mirative in DeLancey's sense, but rather an "inferential evidential".

   DeLancey accepts and cites the analyses of Friedman and Jacobsen and builds his own conception of "mirativity" in Tibetan on analogy to their de-scriptions. However, not only is there no ground for such an analogy; the admirative in Albanian and mirative in Washo are quite at odds with the meaning of "Lhasa" Tibetan *ḥdug*. Tibetan *ḥdug* reports the sense experience of the speaker, the Albanian admirative and Washo mirative report the non-confirmation or lack of observation; none of the three exhibit a grammatical category for surprise or new information; none of the three are mirative mark-ers.

3.2. *DeLancey's other examples of mirativity*

In his 1997 article proposing mirativity as a crosslinguistic category, in ad-dition to Tibetan, DeLancey discusses evidence from Hare, Sunwar, Korean, Turkish, and Kalasha, and lists but does not discuss "several languages with mirative-like constructions" (DeLancey 1997: 47).[24] Even if Tibetan *ḥdug* is not a mirative marker, and neither the "admirative" in Albanian nor the "mira-tive" in Washo are mirative markers, perhaps the evidence DeLancey presents from these five languages compels the acknowledgement of an independent grammatical category to encode the speaker's surprise.

3.2.1. *Hare.*   According to DeLancey the Hare suffix *-lõ* is typically used in inferential and hearsay contexts, but can be used with mirative force when a person directly perceives an event (DeLancey 1997: 38). All of the examples which DeLancey provides are easily accounted for in terms of visual evidence.

(38)   *júhye   sa   k'ínayeda   lõ*
       hereabout bear walk.around.IMPF   *lõ*
       'I see there was a bear walking around here.' (DeLancey 1997: 38, cf. DeLancey 2001: 375)

---

24. Several of the Hare examples reoccur in his 2001 article.

As DeLancey's English translation indicates, *lõ* could as easily indicate that the source of the information is visual evidence as to indicate that the stated conclusion required inference.

(39)   *libo   sĩtł'   lõ*
        cup   drop.PERF   *lõ*
        'I dropped a cup.' (DeLancey 1997: 39)

Example (39) can be used "if the speaker were watching TV with a cup in her hand, and when the show was over looked down and saw the cup on the floor, without having been aware of it slipping from her grasp" (DeLancey 1997: 39). DeLancey notices that *lõ* is used with the 1st person only with "a context involving inattention or lack of consciousness" (DeLancey 1997: 38). The interpretation of *lõ* as a sensory evidential accounts sensibly for such usage. It is only when one acts involuntarily that it is sensible to describe sense preception as the source of the knowledge of one's own actions. Unsurprisingly, the Tibetan testimonial (*soṅ* rather than *ḥdug* being the marker in the past tense) is also used to describe the speaker's unobserved or accidental actions.

(40)   a.   *ṅas   śa   bzas-soṅ*
                /⌐ngäʔ   ´sha   `säʔ-song/
                I-ERG   meat ate-PST-TES
                '(Dammit) I ate meat.' (Tournadre & Dorje 2003: 167)
        b.   *ṅas   ḥbu   bsad-soṅ*
                /⌐ngäʔ   `pu   ´säʔ-song/
                I-ERG insect killed-PST-TES
                'I killed an insect [accidentally].' (Tournadre & Dorje 2003: 167)

DeLancey (1997: 45) notes this use of the Tibetan testimonial in an example which is very similar to the Hare example (39). Without noting the similarity between the two examples, he analyses the Hare example as inference (DeLancey 1997: 39), whereas the Tibetan example he analyses as mirative (DeLancey 1997: 45).

(41)   *ṅas   ja   bos-soṅ*
        I-ERG   tea   spilled-PST-TES
        'I spilled tea [inadvertently].' (DeLancey 1997: 45)

I interpret the similarity between (39) and (41) as showing that both Hare *lõ* and the testimonial in Tibetan encode visual evidence.

In the following example, an ogre is speaking about a man who had been throwing branches at him. DeLancey presents this sentence in order to show that inference or hearsay cannot sufficiently account for Hare *lõ* and instead mirativity is at play.

(42)   *heee, gúhde   daweda! ch'ifi dach'ída lõ!*
      hey   up.there sit   guy   sit   *lõ*
      'Heey, (he's) sitting up there! The guy is sitting up there!' (DeLancey
      1997: 39, cf. DeLancey 2001: 376)

Although it is not possible to see *lõ* as a marker of inference of hearsay, because "the context explicitly makes clear that the sentence reports direct perception on the part of the speaker" (DeLancey 1997: 39), there is no obstacle to analyse *lõ* as a sensory evidential.

   Other examples which DeLancey points to as mirative are equally well accounted for by sensory evidence.

(43)   *Mary   e-wé'   ghálayeda   lõ*
      Mary   its-hide   work.IMPF   *lõ*
      'Mary is working on hides.' (DeLancey 1997: 39, cf. DeLancey 2001:
      376)

Such a sentence is most plausible "when the speaker has just gone to Mary's house and found her working on a hide" (DeLancey 1997: 39). Although he emphasizes the newness of the information, DeLancey (1997: 39) explicitly mentions that in such an example "the speaker has first-hand knowledge".[25]

   Sentences in which the actor is 2nd person "virtually always have the sense of surprise at an unanticipated situation" (DeLancey 2001: 376).

(44)   *e-wé'   ghálayĩda   lõ*
      its-hide   work.2SG.SUBJ.IMPF   *lõ*
      'I see you're working on hides.' (DeLancey 2001: 376)

In this example, again the English translation draws attention to the possibility *lõ* encodes visual evidence rather than surprise. The fact that "a statement about the addressee is generally conversationally relevant only if it is new information to the speaker" (DeLancey 2001: 376) is what gives the visual evidential its connotation of surprise, i.e., mirativity is a pragmatic effect and not a component of the grammatical meaning.

   DeLancey finds compliments particularly diagnostic of mirativity, but in this situation also sensory evidence is equally persuasive.

(45)   *deshĩta   yedaníyie   lõ*
      bush   smart   *lõ*

---

25. Although first-hand knowledge is present in all of the examples of Hare *lõ* provided here, Aikhenvald (2004: 197) analyzes the morpheme as a "non-firsthand marker" which can be used "to cover new information". She does not elaborate on the reasons for her analysis.

> 'You're smart for the bush [i.e., are competent at bushcraft and good
> at dealing improvisatorily with situation that come up in the wild]!'
> (DeLancey 1997: 40, cf. DeLancey 2001: 377)

DeLancey (1997: 40) suggests that such a sentence "might be said to some-
one who has just demonstrated more wilderness knowledge than the speaker
thought". I am unfamiliar with the social mores of the Hare, but if *lõ* is indeed
a marker of "new information" its use in compliments would always suggest
low initial expectations and consequently only shabby compliments of the "not
bad for a girl" variety. I instead suggest that *lõ* indicates that the speaker can
testify to what he is complimenting through first-hand experience. A simple
test could adjudicate between DeLancey's analysis and that proposed here. A
Hare speaker attends a concert of Itzhak Perlman playing the Paganini solo vi-
olin caprices and, introduced to Mr Perlman at a reception after the concert,
says 'You play the violin well'. Mr Perlman's skill at the violin is not new in-
formation. DeLancey would predict that *lõ* would not be grammatical in this
sentence, whereas if *lõ* is a sensory evidential, it would be called for in this
compliment also.

DeLancey does not give an example of *lõ* to mark hearsay. Rice (1989: 410)
describes one use of this morpheme as 'apparently, reported, uncertainty'. The
four examples she gives of this usage however in her own explanation rely on
visual (46a, b, c) or auditory evidence (46d).[26]

(46)   a.   *t'así   whehkw'ę́le lǫ́*
            something 3.hears.NEG DUB
            's/he apparently does not hear anything' [accompanying a picture
            of a sleeping boy and a raven crowing] (Rice 1989: 410)
       b.   *ʔabá mị̃ dahetl'į̃   lǫ́*
            father net 3.is.setting DUB
            'my father is apparently setting nets' [accompanying a picture
            where the man seems to be setting nets, but since the speaker is
            not there, he could be doing something else] (Rice 1989: 410)
       c.   *Margaret ledí ʔariyuné xadéhts'e   nǫ́*
            Margaret tea all   3.drank.up DUB
            'Margaret apparently drank up the tea.' [the speaker sees that
            there is no more tea and surmises that since Margaret is the only
            one around, she must have been the one to drink it] (Rice 1989:
            410)

---

26. (46c, d) come from another dialect in which the same morpheme is pronounced *nǫ́*.

d. *Ɂeyáhdi netsilia   nágokeyee nǫ́*
    ball   3.is.small 3PL.play   DUB
    'They are apparently playing Indian ball' [speaker can hear the
    ball game and guesses that a ball game is going on] (Rice 1989:
    411)[27]

Rice describes *lõ* as an evidential, giving examples of inference (1989: 408–
409, examples 39 through 46), i.e., where it "specifies that the outcome of an
event is an observed fact although the event that actually lead up to this out-
come was not itself observed" (Rice 1989: 408) and involuntary 1st person
action (Rice 1989: 409–410, examples 50 through 54). In addition, she gives
three examples (Rice 1989: 409, examples 47 through 49) in which *lõ* "indi-
cates that some activity other than the one that had been expected will take
place" (Rice 1989: 409). This usage appears to come close to mirativity. How-
ever, since none of DeLancey's examples of *lõ* (or other morphemes which he
analyses as a mirative) refer to future time, it is hard to know whether he would
analyse these examples as miratives.

(47) *hį̦dú xéhts'ę́ sho Ɂadee gha sónį̦ yenehwhę̦ įlé*
      now   evening show 3.go COMP doubt 1SG.think PST
      Ɂeyáhdi hé   nágokeyee gha nǫ
      ball   with 3PL.play   FUT evidential
      'I thought that there would be a show this evening but they'll play ball
      instead.' (Rice 1989: 409)

Such a usage is still consistent with an explanation in terms of sensory evi-
dence. One makes a prediction about the future on the basis of visual evidence,
similarly to the Tibetan example (20) predicting the weather. Such an analysis
is made clear by a translation like 'I thought that there would be a show this
evening but it looks like they will play ball instead'.

All of DeLancey's and Rice's examples of *lõ*, whether indicating direct ob-
servation, a compliment, future predictions, inference, or involuntary 1st per-
son actions, can be explained as examples of sensory evidence. Hearsay might
be difficult to explain as sensory evidence, but conveniently no examples of
hearsay are available. It is best to conclude that, like *ḥdug* in Tibetan, *lõ* is a
sensory evidential.

3.2.2. *Sunwar.* DeLancey's evidence for mirativity in Sunwar comes from
the distinction between two copula verbs /tshə/ and /ˊbaak-/. Whereas /tshə/
"indicates a proposition which the speaker knows simply because he knows

---

27. Compare the very similar Tibetan example (16).

it" /ˊbaak-/ expresses "information which the speaker knows only by recent discovery" (DeLancey 1997: 41).

(48)   a.   *Tangka   Kathmandu-m   tshaa*
            Tangka   Kathmandu-LOC   *tshǝ*.3SG
            'Tangka is in Kathmandu.' (DeLancey 1997: 41)
       b.   *Tangka   Kathmandu-m   ˊbaâ-tǝ*
            Tangka   Kathmandu-LOC   exist-3SG.PST
            'Tangka is in Kathmandu.' (DeLancey 1997: 42)

While (48a) "could be said by someone who has been living in Kathmandu, and is aware that Tangka has been there for some time" (DeLancey 1997: 41), (48b) "would be said by someone who had seen Tangka in Kathmandu, not having known previously that he was there" (DeLancey 1997: 41), or in some cases when this information has been gained through hearsay. DeLancey singles out as an example "a situation in which the speaker has just learned of Tangka's whereabouts through a telephone conversation" (DeLancey 1997: 42). He does not specify how long after the speaker has learned of Tangka's whereabouts sentence (48b) remains grammatical. If two weeks after seeing Tangka or learning of his whereabouts through a telephone conversation a speaker is still permitted to say (48b), the morpheme /ˊbaak-/ does not express "new information" in the same sense as an exclamation of surprise at seeing a strange cat in one's home (25b) or a strange book on one's shelf (26b). Seeing Tangka with one's own eyes can be accounted for by analysing /ˊbaak-/ as a sensory evidential in (48b). Such an analysis also accounts for the following example, which is comparable to example (28) of Tibetan *ḥdug* given above.

(49)   *go   Kathmandu-m   ˊbaâ-ti*
       I   Kathmandu-LOC   exist-1SG.PST
       'I saw myself in Kathmandu [as in a dream].' (DeLancey 1997: 42)

In this instance DeLancey chooses to express the component of visual evidence in his translation and admits that "we associate evidentiality" (DeLancey 1997: 42) with such examples. However, for reasons he does not make explicit he prefers to analyse this example as mirative. It is not possible to understand a dream as new information at the time of relating it another person, and for this reason I gave example (28) of Tibetan *ḥdug* as counterevidence to DeLancey's account of mirativity in Tibetan.

Mirativity in Sunwar has not been confirmed in more recent work; in her Sunwar grammar Dörte Borchers writes that his "analysis of the difference between the copulas *bācā* and *cha* does not fit the data collected from speakers of Sunwar from Rāmechāp" (Borchers 2008: 164). I conclude that mirativity is no more helpful in describing Sunwar /ˊbaak-/ than it was in accounting for the use of Tibetan *ḥdug* or Hare *lõ*.

3.2.3. *Korean.* DeLancey's evidence for mirativity in Korean is drawn from the analysis of the morpheme *-kun* by Ho Sang Lee (1985, 1993) and Kyounghee Ko (1989). Of these three sources only Lee (1993) is available to me. DeLancey (1997: 45) stresses the following two examples as "illustrating the irrelevance of evidential categories per se to the use of *-kun*".

(50) a. *cikûm   i   sikan oppa-nûn   class-e   tûlô-ka*
          now   this   hour brother-TOP class-LOC enter-go
          iss-kess-kun
          be-CONJ-NI
          [A note left by someone who had come to visit the addressee
          and found him not at home:] 'Right now, you must be in class.'
          (DeLancey 1997: 45, after Lee 1993: 147)
      b. *cəny'ək   tɯ-si-nɯn-kun-yo*
          dinner   take-HON-PRES-NI-DEF
          [Said by a visitor who enters the house to find the family at din-
          ner:] '(I see) you are eating dinner.' (DeLancey 1997: 45)

Both of these sentences are easily interpreted as cases of visual evidence. DeLancey's translation of (50b) suggests this immediately and a translation such as 'I see you must be in class now' for (50a) demonstrates that in English as much as in Korean, the visual evidence of a person's absence can in an appropriate context constitute evidence that the person is in some specific other place. Lee himself explicitly adds either 'I see' or 'I saw' to the glosses of six of the eight examples of *-kun* he discusses (his examples 17f, 19h, 22, 23, 24, 25).[28] The description of *-kun* as a sensory evidential coincides with Sohn's account that *-kun* "denotes one's instantaneous perception" (Sohn 1999: 356). Until some linguist specifically argues against the feasibility of analysing *-kun* as a sensory evidential, Korean should not be taken as evidence for the existence of "mirativity". Lazard (1999: 104) and Aikhenvald (2004: 214) also reject the analysis of *-kun* as a mirative marker.

3.2.4. *Turkish.* Already in the eleventh century al-Kāšğarī described the distinction between the past tense markers *-mIş* and *-dI* as an opposition between unwitnessed and witnessed events (Dankoff 1982: 412, quoted in Friedman 2003: 189). The terminology for the distinction in Ottoman and Republican grammatical literature conforms to the same analysis (Bazin & Feuillet 1980: 12). Bazin (1968: 78–80) refers to the two morphemes respectively as the "parfait de non-constatation" and "parfait de constatation". Aikhenvald (2004:

----

28. Of the two remaining examples, one is the example here numbered (50a), which I have just
     argued is easily analysable in terms of visual evidence.

210) regards Turkish *-mIş* as a "non-firsthand" evidential. The difficulty with this tradition of analysis is that *-mIş* occurs with direct observation.

(51) a. *Bu çocuk ne de güzel-miş*
           DEM child QUANTIF pretty-*mIş*
           'Qu'il est beau, cet enfant! [How beautiful this child is!]' (Meydan 1996: 135)

       b. *Baksana! Ne kadar kar yağ-mış!*
           DEM QUANTIF snow fall-*mIş*
           'Regarde comme il a neigé! [Look how it has snowed!]' (Meydan 1996: 137)

       c. *Çorba çok güzel ol-muş*
           soup   very good is-*mIş*
           'This soup is [as I perceive by tasting] very good.' (Johanson 2000: 82)

A number of scholars divide the uses of *-mIş* into three categories: hearsay, inference, and surprise (Slobin & Aksu-Koç 1982: 187, Meydan 1996: 127, Johanson 2000: 65–66). However, this tripartite categorization is a heuristic and not an elaboration of three morphosyntactially distinct structures. For example, inadvertent 1st person actions are equally amenable to an explanation as inference or surprise.

(52) a. *Uyu-muş-um*
           sleep-*mIş*-1SG
           'I must have fallen asleep.' (Slobin & Aksu-Koç 1982: 192)

       b. *Dirseğ-im-i vur-muş-um.*
           elbow-1SG.POSS-ACC hit-*mIş*-2SG
           'I must have hit my elbow.' (Slobin & Aksu-Koç 1982: 192)

DeLancey follows Slobin & Aksu-Koç (1982, 1986)[29] in suggesting that the use of *mIş* to mark inference or hearsay are extensions of the morpheme's basic meaning to mark surprise. Lazard (1999) and Johanson (2000) hold that all three uses are instances of a larger category, which they refer to respectively as "mediative" and "indirective".

Considering the evidence which Slobin & Aksu-Koç (1982) put forward in favour of 'surprise' as the basic meaning, I like DeLancey am struck by the similarity to the "Lhasa" Tibetan testimonial. Tibetan demonstrates that examples

---

29. Because Slobin & Aksu-Koç (1986) is in the words of the authors "based on Slobin & Aksu 1982" to which "the reader is referred [...] for full details" (Slobin & Aksu-Koç 1986: 159), the later paper does not need to be considered here.

of inadvertent 1st person action such as (52a, b) are amenable to interpretation as sensory evidentials. Similarly to the Tibetan examples (40a, b) it is the evidence of "waking over one's books" or "feeling a bruised elbow" (Slobin & Aksu-Koç 1982: 192) which could provide the sensory evidence which motivates *mIş* in these two examples.

For both Slobin & Aksu-Koç and DeLancey, the supposition that surprise is the core meaning of *-mIş* relies particularly on one example, which cannot be interpreted as inference or hearsay.

(53) *kız-ınız   çok   iyi   piyano   çal-ıyor-muş*
       daughter-your very good   piano   play-PRES-MIR
       'Your daughter plays piano very well!' (DeLancey 1997: 38, Slobin &
       Aksu-Koç 1982: 197)

There is nothing to hinder an interpretation of (53) in terms of sensory evidence. As opposed to DeLancey's paraphrase "No matter how high my expectations might have been, what I have just heard exceeded them" (1997: 38) one could offer "I know because I have heard her excellent playing with my own ears" as Johanson (2000: 83) also suggests. Like in Hare one can distinguish between 'surprise' and 'sensory evidence' in the context of complimenting a well-known musician. I have put this question to Professor Balkız Öztürk-Başaran of Boğaziçi University, who in a letter (29 May 2011) confirms that "one can say this even if the piano player is a famous one" and provides an expanded version of the example which makes this context explicit: *Kızınız gerçekten çok iyi piyano çalıyormuş. Bu kadar meşhur olması çok doğal.* 'Your daughter really plays the piano so well. It is very natural that she is so famous.' This presumed premier instance of mirativity can be analysed in terms of "sense evidence" but not in terms of "mirativity".

The use of *-mIş* with the 1st person in the reporting of dreams is also similar to *ḥdug* as seen in (28) above.

(54) *Bu   gece   çok   güzel   bir   rüya   gör-dü-m.   Büyük   bir*
       DEM   night very pretty a   dream   see-*dI*-1SG big   a
       bahçe-dey-miş-im.
       gardin-LOC-*mIş*-1SG
       'Cette nuit, j'ai fait un très beau rêve. J'étais dans un jardin immense.
       [Last night I had a very beautiful dream. I was in a large garden.]'
       (Meydan 1996: 131)

Other examples demonstrate that an analysis of *-mIş* as a sensory evidential cannot be correct. Whereas *ḥdug* can be used in a sentence meaning 'it looks like it is going to rain' (20), *-mIş* cannot be.

(55)   *Yağmur   yağ-acak-mIş*
       rain(N)   rain(V)-FUT-*mIş*
       'It is reported that it will rain.' (Slobin & Aksu-Koç 1982: 193)

A sentence such as (55) cannot be used "on seeing a cloudy sky" but is "appropriate in predicting rain on the basis of hearsay" (Slobin & Aksu-Koç 1982: 193). If both *ḥdug* and -*mIş* WERE mirative markers, it is rather surprising that -*mIş* cannot be used in (55) to say 'I am surprised it is going to rain', since *ḥdug* can be used in the sentence 'it looks like it is going to rain' (20), which DeLancey would presumably have translated 'I am surprised it is going to be sunny'.

Another potential discrepancy between *ḥdug* and -*mIş* is the use of the endopathic. Lazard (1999: 100) cites Meydan (1996: 140) to the effect that "expressions of perception and feeling in the 1st person normally exclude the mediative or evidential [i.e., -*mIş*] in Turkish". In contrast, Tibetan *ḥdug* is obligatory in expressions of the endopathic; cf. (28). A close examination of the examples however shows that Meydan (1996: 140) prohibits -*mIş* with the verbs 'see' and 'hear' whereas the typical example of the endopathic in Tibetan is 'be sick'. The exact constraints of -*mIş* and *ḥdug* with *verba sentiendi* merit further study.

Because it is implausible that both members of a morphologically contrasting set mark the same grammatical category, the use of -*dI* to mark "hot news" (Csató 2000: 32, Johanson 2000: 83) proves that -*mIş* is not a marker of new information.

(56)   *Otobüs   gel-di!*
       bus   arrive-*dI*.PST
       'The bus has arrived!' (Csató 2000: 32).

The most substantial difference between -*mIş* and *ḥdug* is that, whereas *ḥdug* can only make limited appearance in hearsay contexts (which are best interpreted as indirect discourse, cf. Section 2.3) hearsay is a common function of -*mIş*.[30]

(57)   a.   *Fatma, garip   bir   rüya   gör-muş*
           Fatma   strange   a   dream   see-*mIş*
           'Fatma a fait une rêve étrange. [Fatma had a strange dream.]'
           (Bazin 1968: 79)

---

30. Johanson (2000: 65) argues against hearsay as the "central" meaning of -*mIş*, but the point here is merely that -*mIş* occurs frequently in hearsay contexts.

    b.   *Beni çekiştir mis siniz*
        me   pull   bad you.get
        'Vous avez dit du mal du moi (en mon absence). [You have spoken ill of me (in my absence).]' (Bazin & Feuillet 1980: 13)

The meanings of *ḥdug* and *-mIş* are thus quite different; such differences show that *-mIş* is neither a mirative nor a sensory evidential.

    Because it is "not possible to interpret the reportative and inferential uses as deriving from a central notion such as 'surprise'" (Johanson 2000: 83), the conclusion of Slobin & Aksu-Koç (1982: 198) that *-mIş* marks the speaker's "unprepared mind" cannot be followed. Instead, the initial suggestion of Slobin & Aksu-Koç (1982: 187) that *-mIş* is "used for a range of functions encoding events to which the speaker was not a direct or fully conscious participant" is more sufficient, the category thus described can be referred to as "mediative" following Lazard (1999) or "indirective" following Johanson (2000).

3.2.5. *Kalasha.*   In addition to making explicit arguments for mirativity in Tibetan, Kare, Sunwar, Korean, and Turkish DeLancey mentions "several languages with mirative-like constructions which are attested in the literature" (DeLancey 1997: 47). He discusses four examples from Kalasha showing inference (1997: 47, example 44), a compliment (1997: 47, example 46), and involuntary 1st person action (1997: 48, example 47). These uses are indeed similar to uses of Tibetan *ḥdug* and Hare *lõ*, suggesting that Kalasha too probably has a sensory evidential. DeLancey's example of "surprise" in Kalasha is also amenable to explanation as a sensory evidential.

(58)   *Amerika' bo   hu'tala dur   kai   śi'-an*
        America very high   house make PST.PERF-3PL
        hu'la
        become.PST.INFER.3
        'In America there are very tall buildings.' (DeLancey 1997: 47)

Such an example "could be said by someone who is returning from the wide world with stories for his fellow villagers" (DeLancey 1997: 47). In America the speaker would have had ample opportunities to gain first-hand sensory experience of tall buildings, and appeal to this experience when assuring his audience of the veracity of his fabulous account, but I do not understand how DeLancey sees this example as showing 'surprise'. The speaker may have been surprised by America's architecture some weeks ago when he first saw it, but his mind is now fully prepared for the now rather old information which he relates. The Kalasha form *-la'* may mark sensory evidence, but cannot mark 'unprepared mind' or 'new information'.

3.2.6.   *Conclusion: DeLancey's examples of mirativity outside Tibetan are unconvincing.*   A category to encode 'new information', 'surprise', or 'unprepared mind' is not necessary to account for any of the data DeLancey presents in order to posit mirativity as a grammatical category. In Sunwar (49) and Kalasha (58) the very sentences which DeLancey cites preclude interpretation as 'new' or 'surprising'. One may tentatively conclude that Hare, Sunwar, Korean, and Kalasha, like Tibetan, have a sensory evidential. The same analysis is inappropriate for Turkish, which is probably better described as having a "mediative" (Lazard 1999) or "indirective" (Johanson 2000).

3.3.   *Aikhenvald's evidence for mirativity*

Even if DeLancey's characterization of Tibetan *ḥdug* is mistaken and his evidence for mirativity in other languages is best interpreted otherwise, it is still imaginable that his characterization of a grammatical category encoding surprise provides a conceptual framework which is uniquely well suited for the description of a morphosyntactic category somewhere in some language. The Ptolemaic model described the astronomical data available to Copernicus more accurately than his heliocentric proposal, yet he was right in the end. Perhaps DeLancey has the perspicacity to perceive a valid grammatical category despite himself lacking evidence for it. In order to investigate this possibility one must turn to more recent work on mirativity, and observe whether or not the phenomena described as mirative subsequent to DeLancey's work better match his definition of the category than the evidence which he himself puts forward.

   Aikhenvald (2004: 210) hopes "to present examples demonstrating that mirativity can be independent of any other category". She mentions phenomena in eight languages (Kham, Cupeño, Tarma Quechua, Tariana, Makah, Choctaw, Wichita, and Tsakhur). Primarily her presentation relies on Watters' description of Kham (five examples discussed); she also discusses two examples from Tariana and one from Cupeño. She provides no examples or discussion for Quechua, Makah, Choctaw, or Wichita. I will treat the evidence of each language respectively.

3.3.1.   *Kham.*   David Watters provides a detailed discussion of *oleo* in Kham, which he labels "the mirative" (Watters 2002: 288). Although he devotes some discussion toward demonstrating that *oleo* is not an inferential marker (Watters 2002: 288–290), he does not give any examples inconsistent with an interpretation as sensory evidence.

(59)   *kãhbul*   *u-ri:h-zya-o*   *oleo*
       blanket   3SG-weave-CONT-NML   MIR
       'She's weaving a blanket!' (Watters 2002: 290)

Watters provides two possible contexts for sentence (59): either "upon entering an unoccupied room in Maya's house and finding a partially made blanket still attached to the loom" (Watters 2002: 289) or "when the speaker enters the room and finds Maya sitting at the loom weaving" (Watters 2002: 290). In either setting the speaker has recourse to the evidence of his own eyes.

In some of his examples the visual source of the evidence is very clear. For example, when "Tipalkya, the speaker, spots the leopard lying beneath a boulder" (Watters 2002: 291), he says to his companion:

(60) *mənlal-lai   tə   'e   babəi   mənlal   nə-kə   zə   ci*
       Manlal-OBJ   FOC   hey   man   Manlal   DIST-at   EMPH   CEP
       syã:-də   u-li-zya-o   oleo   sani'
       sleep-NF   3SG-be-CONT-NML   MIR   CONFIRM
       '(I said) to Manlal, "Hey man, Manlal, he's right there sleeping, see!"'
       (Watters 2002: 291)

Like in Tibetan, the evidence is not necessarily visual. Although Watters provides no specific context for example (61), presumably the speaker has just reached into his pocket and found his knife missing.

(61) *ŋa-khurja   ŋa-sə-məi-wo   oleo*
       my-knife   1SG-CAUS-lose-NML   MIR
       'I lost my knife! [I just discovered it]' (Watters 2002: 292)

In keeping with Yukawa's analysis of the Tibetan example (34) one is entitled to suggest that tactile evidence is what calls for *oleo* in this example.

Watters (2002: 296) claims that the mirative is also used when the source of knowledge is hearsay; he does not however provide examples of such a usage and the language does have a separate morpheme for reported speech. Because Watters does not present examples inexplicable in terms of sensory evidence, the prominent place Aikhenvald gives Kham in her argument for mirativity is unjustified.

3.3.2. *Cupeño.*   Jane Hill (2005: 66) describes the modal clitic *=(a)m* as "used to express that the utterance is based on unimpeachable firsthand knowledge". In addition to the mirative, such a description would be consistent with an explanation either as a sensory evidential or long standing personal involvement or familiarity of the type marked by the 'personal' in "Lhasa" Tibetan. The tendency of the clitic to be used "in the moment of discovery" (J. Hill 2005: 66) is probably the reason why Hill choose to adopt DeLancey's term "mirative". The following example "in which Coyote has arrived, uninvited, at a church service conducted by birds", Hill (2005: 66) draws attention to as a particularly clear case of a "firsthand, new discovery, surprise" meaning; Aikhenvald (2004: 213) also cites this example.

(62)   *Mu=ku'ut   "Isk-ly=am!"   pe̲-yax=ku'ut*
        and=REP   coyote-NPN=MIR   3SG-say=REP
        'And it is said, "It's Coyote!" he said it is said.' (J. Hill 2005: 66)

However, Hill is herself sceptical of the comparison with the phenomena
DeLancey described, which her choice of terminology invites, writing that the
"Cupeño clitic does not in every instance exactly satisfy this characterization"
(J. Hill 2005: 66). The use of *=(a)m* in a sentence such as the following, which
reports a general (and probably well-known) truth seems particularly at odds
with the interpretation of the morpheme as a mirative marker.

(63)   *Paana-t=am-el   ku-t-im*
        tarantula-NPN=MIR-3PL.ABS   fire-NPN-PL
        'Tarantulas are dangerous.' (J. Hill 2005: 67)

J. Hill (2005: 66) specifies that "*=(a)m* is restricted to contexts where the refer-
ent about which the conclusions are drawn is not a discourse participant". This
restriction sets *=(a)m* apart from many of the other phenomena which have
been labelled "mirative". Tibetan *ḥdug* (19a, b), Hare *lõ* (44, 45), and Korean
kun (50a, b) can be used with the 2nd person. Tibetan *ḥdug* (28, 29, 40a, b,
41), Hare *lõ* (39), Sunwar *`baak* (49), and Turkish *-mış* (52a, b) can be used
with the 1st person. Despite her stipulation Hill (2005: 67) gives the following
example of *=(a)m* used with the 1st person:

(64)   *Suplewet=am='ep   amay̲='ep   ne-miyax-wen   ne̲-ye*
        one=MIR=R   just=R   1SG-be-PIST   1SG-mother

        pe-na̲'aqwa.
        3SG-child
        'I was my mother's only child.' (J. Hill 2005: 67)

Whereas when in the languages discussed so far sentences with the 1st per-
son and a "mirative" marker have either the sense of observing one's self in a
dream (Tibetan *ḥdug* (28), Sunwar *`baak* (49)) or describe an inadvertent action
(Tibetan *ḥdug* (40a, b, 41), Hale *lõ* (39), Turkish *-mış* (52a, b)), both such con-
notations are lacking in this Cupeño example. Aikhenvald's appeal to *=(a)m*
in Cupeño as a demonstration of an unambiguous mirativity marker used inde-
pendently of evidentials (Aikhenvald 2004: 213) is unconvincing. Although the
clitic *=(a)m* occurs independently of evidentials and is labelled as "mirative"
by Hill, its use is quite distinct from the already heterogeneous assemblages of
morphemes which DeLancey used to define mirativity as a category.

3.3.3.   *Tarma Quechua.*   Willem Adelaar describes a "sudden discovery"
category in the verbal system of Tarma Quechua, which is marked with the
morpheme *-na-*. He writes that the "SUDDEN DISCOVERY series refers to events

which have been going on unnoticed and which are suddenly discovered by the speaker or by another person playing a central role in the narrative (English 'it turned out that...')" (Adelaar 1977: 96). Adelaar (1977: 98) provides three examples of this category. Without more context it is difficult to evaluate these examples.

(65)   a.   *yargara:rina: masya:du   karutam*
             we.had.climbed   very   far
             'We suddenly realized we had climbed very far.' (Adelaar 1977: 98)
        b.   *čawraqa   ča:qa   kakuna   alqu*
             then   that   he.was   dog
             'So it turned out that he was a dog.' (Adelaar 1977: 98)[31]
        c.   *tutumanya   intitam   muyuraya:nax*
             rainbow   sun   it.was.encircling
             'A rainbow was encircling the sun.' (Adelaar 1977: 98)

Although Adelaar's description of the semantics of *-na-* conforms very closely to DeLancey and Aikhenvald's proposed mirative category, positing mirativity on the basis of these three short examples would be premature.

3.3.4.   *Makah.*   Aikhenvald cites Davidson's mention of a "mirative" in Makah (Davidson 2002: 276). Davidson (2002) refers to an unpublished paper of Jacobsen presented at a conference in 1973. However, Jacobsen (1986: 19–20) also describes the suffix in question more recently; it is a form which "indicates that the speaker has only belatedly become aware of a fact or an event" (Jacobsen 1986: 19), although this description does suggest "new information" it does not necessarily imply "surprise". The two examples for which the source of information is made explicit show visual evidence.

(66)   a.   *capaca·škub*
             'It's a canoe [after you finally make out what it is].' (Jacobsen 1986: 19)
        b.   *hitaqeyala·su·škub*
             '[I see] you have arrived.' (Jacobsen 1986: 20)

Jacobsen (1986) does not choose to describe this form as a "mirative" although he invented the term in his description of Washo (1964); I defer to his judgement.

---

31. This example I have located in the texts provided (Adelaar 1977: 410).

3.3.5. *Choctaw.* In his description of Choctaw Broadwell (1991), never suggests that *-chih* is used to indicate new information or surprise, but only 'wonder'.

(67)　a.　*oba-tok-chih*
　　　　rain-PT-wonder
　　　　'I wonder if it rained.' (Broadwell 1991: 412)
　　b.　*Pam-at　tamaaha　iya-tok-chih*
　　　　Pam-NOM　town　go-PT-wonder
　　　　'I wonder if Pam went to town.' (Broadwell 1991: 417)

I do not know why Aikhenvald (2004: 214) mentions *-chih* in connection with mirativity; it reminds me of 〜かな *-kana* in Japanese.

3.3.6. *Wichita.* Rood identifies a verbal prefix *iskira-* in Wichita, which he dubs "exclamatory" (Rood 1976: 87, 1996: 589). He gives only one example *ískirá:rásis* which he translates 'There she goes, cooking it!' (Rood 1976: 95) and 'Look! She's cooking it!' (Rood 1996: 591). No conclusion is possible on the basis of such fragmentary evidence.

3.3.7. *Tsakhur.* Aikhenvald (2004: 214) draws attention to Tsakhur as a language with "mirative as a separate category". The title of Tatevosov & Majsak's (1999) chapter "Средства выражения адмиративной семантики [Means of expressing admirative semantics]" makes clear that they take "mirativity" for granted as a semantic category. Consequently, they do not devote any argumentation to prove that *-ōx=ud* and *-ëx=id* cannot be analysed as inferentials, sensory evidentials, or other categories. Many examples are consistent with an interpretation of visual evidence.

(68)　*"maIhammad-in　Gelⱼ　jug-qixa　　ejx-id!"　　–　haraj*
　　　Muhammad-a　　leg.4　good-4.be.PF　ADM=COH.4　　cry
　　　ha=w=ʔ-u　wuʒ-ë
　　　3=do-PF　himself.1-ERG
　　　'"Оказывается, нога Магомеда срослась!" – закричал он. ["It turns out, Muhammad's leg was healed!" – he shouted.]' (Tatevosov & Majsak 1999: 290)

In (68) the speaker "[в]ернувшихся друзей встречает товарищ, остававшийся со сломавшим ногу Магомедом [returning to friends meets his companion Muhammad who had been left behind with a broken leg]" (Tatevosov & Majsak 1999: 290).

In a similar unexpected encounter, if I "думал, Тимура на свадьбе не будет, но встретил его [thought that Timur would not be at the wedding but met him]" (Tatevosov & Majsak 1999: 291), I might say:

(69) *timur   ša   wo=r=ō̄x=ur=ī*
      Timur   there   was=1=ADM=COH.1=EM1
      'А Тимур там был, оказывается. [But Timur was there, it turns
      out.]' (Tatevosov & Majsak 1999: 291)

In example (70), "[м]не говорили, что в магазине есть мука. Однако я
сходил в магазин и выяснил [I was told that the store has flour. However, I
went to the store and found out]" (Tatevosov & Majsak 1999: 291).

(70) *XoI   deš-ōx-ub-ī   magazin-ë*
      Timur   not.be-ADM=COH.3=EM1   shop-IN
      'Муки-то ведь нет в магазине. [In fact there is no flour in the
      store.]' (Tatevosov & Majsak 1999: 291)

In one example however, the evidence comes from hearsay. "Мне сын
говорил, что на свадьбу не пойдёт. Но мне рассказали, что он там
был, и я ему говорю [My son said that he would not go to the wedding.
But they told me that he was there, and I tell him" (Tatevosov & Majsak 1999:
291):

(71) *Ru-na=r   ixa-ōx-ur-ī   ma.*
      you.1-NA=COH.1   1.be-ADM=COH.1=EM1   there
      'Ты там был, оказывается! [You were there, turns out!]' (Tat-
      evosov & Majsak 1999: 291)

Tsakhur as described by Tatevosov & Majsak demonstrates the danger of ac-
cepting that certain semantic classes exist *a priori*. Content to describe *-ōx=ud*
and *-ëx=id* as "admirative" markers, these two authors give little actual infor-
mation about their occurrence. Can they be used in compliments, in predica-
tions, as endopathics, in dreams? Some of the phenomena called "mirative" or
"admirative" have these uses and others do not. Assuming mirative rather than
arguing for it, does not, as Aikhenvald (2004: 214) claims, allow one to posit
the independence of this category.

3.3.8. *Tariana.*   Tariana has "a number of complex predicates with modality-
like meanings" (Aikhenvald 2003b: 152), one of which Aikhenvald calls the
"admirative" (2003a, 2003b) or "mirative" (2004). In examples (72a, b) the
form in question encodes the surprise not of the speaker but of the subject of
the sentence; the construction is thus not a marker of information "new to the
speaker" (DeLancey 1997: 36), and consequently not a "mirative" marker.

(72) a. *Oli   yarusi   ma-weni-de-ka   [du-ka-mhe*
          Oli   thing-NPOSS NEG-pay-NEG-SUB   3SG.F-see-ADM
          du-a-ka]
          3SG.F-AUX-REC.P.VIS
          'Olivia was surprised at things being so cheap [lit., Olivia, things being cheap, looked (at this) in admiration].' (Aikhenvald 2003a: 454, 2003b: 152, 2004: 213)

     b. *diha-dapana-se-pidana   naha matʃa-dapana-se*
          ART-CL.HAB-LOC-REMP.REP   they good/proper-CL.HAB-LOC
          kawhi   naka-niki   kawhi   naka
          wake.up 3PL.arrive-COMPL wake-up 3PL.arrive
          mẽda-pidana [na:ka-mhe   na:-da-niki]
          SO-REMP.REP   3PL.arrive-ADM   3PL.AUX-DOUBT-COMPL
          naka
          3PL.arrive
          'They woke up in a beautiful house, they woke up and could hardly believe their eyes.' (Aikhenvald 2003a: 454)

3.3.9. *Conclusion: Aikhenvald's evidence for mirativity is inconclusive.*   It is easy to agree with Aikhenvald's observation (2004: 210) that "[t]he term '(ad)mirative' is sometimes used for categories which have nothing to do with DeLancey's [...] semantics of mirativity". She mentions the "admirative" in Archi as one such inaptly named phenomenon. Cupeño, Choctaw, and Tariana are additional instances. Quechua, Wichita, and Tsakhur may have a grammatical category denoting surprise, but it would be hasty to conclude this on the basis of the available data.

   Table 3 compares the various uses of the morphemes in Tibetan, Hare, Sun-

Table 3. *Uses of morphemes in Tibetan, Hare, Sunwar, Korean, Turkish, and Kham which DeLancey and Aikhenvald describe as "mirative"*

	Tibetan	Hare	Sunwar	Korean	Kalasha	Kham	Turkish
Direct perception	✓	✓	✓	✓	✓	✓	?
In a compliment	✓	✓	?	?	✓	?	✓
In a dream	✓	?	✓	?	?	?	?
Predictions	✓	✓	?	?	?	?	×
Inference	✓	✓	?	✓	✓	✓	?
Involuntary 1st person	✓	✓	?	?	✓	✓	✓
Endopathic	✓	?	?	?	?	?	?
Hearsay	✓	?	✓	?	?	?	✓

war, Korean, Turkish, and Kham which DeLancey and Aikhenvald describe as "mirative". Tibetan *ḥdug* is a sensory evidential; its use in statements of direct perception requires no comment. In compliments the speaker relates his direct perception of the remarkable quality or achievement. When directly perceiving himself in a dream or photograph the speaker uses *ḥdug* to refer to his direct perception of himself. If the speaker directly perceives the evidence of future weather patters, he can employ *ḥdug* in reference to future time. Direct perception of his own physical or mental state also employs this form (endopathic). If the speaker directly perceives the result of past action, he bears witness to this evidence in the testimonial. In reference to the initial event which bore fruit in the evidence which is directly perceived, this usage can be regarded as inference. There is no obstacle to the speaker drawing inferences about himself. If he directly perceives the evidence of his own action he relates this with the testimonial. However, because in the case of volitional actions the speaker would know of them primarily through his own involvement and not through the evidence of his senses, this use is restricted to involuntary actions. Finally, in indirect discourse one can use *ḥdug* with reference to the speaker, if *ḥdug* is the evidential used in the direct discourse equivalent of a particular sentence. The non-alignment of evidentials in indirect discourse is a well-known feature of "Lhasa" Tibetan grammar. These seven seemingly disparate uses of the testimonial are direct consequence of the various pragmatic circumstances in which a speaker wants to appeal to the evidence of his senses.

The many question marks in Table 3 make clear that much research remains to be done on the evidential systems of Hare, Sunwar, Korean, Kalasha, Kham, and Turkish. The discussion presented here suggests that those phenomena regarded by DeLancey or Aikhenvald as mirative in Hare, Sunwar, Korean, Kalasha, and Kham are sensory evidentials. The use of *-mIş* in Turkish is more likely an instance of the "mediative". The case of Lhasa *ḥdug* makes clear that all of the "mirative" uses identified in these languages can be encoded by a sensory evidential. The range of pragmatic circumstances in which a sensory evidental can be deployed will naturally depend on the overall structural relationships which the category bearing the sensory evidential meaning is in opposition to. If, for example, a language has an explicit marker for inference, it would not be surprising to see a sensory evidential barred from this usage. The correct explanation of all of the phenomena which have so far been called "mirative" lies outside of my powers. The evidence hitherto presented in favour of portraying these phenomena as miratives is unsatisfactory.

3.4.   *Concluding methodological meditation: Does mirativity lurk yet some-
       where?*

When found inadequate, the technical terms of science are refined or rejected.
The term "planet" has been continually refined without losing utility. In the
Ptolemaic system the moon and the sun were planets, objects orbiting the earth.
With the advent of the heliocentric model the sun and moon lost their status, but
the earth became a planet. The nineteenth century saw the proliferation of ob-
jects discovered to orbit the sun, planets such as Juno, Ceres, Pallas, and Uranus
were born. The introduction of the term "asteroid" removed Juno, Ceres, and
Pallas from the company of the planets. Pluto was introduced as a ninth planet
in 1930, but the advent of the concept "dwarf planet" in 2006 moved Pluto,
Ceres, and the newly discovered Eris into this category. Improved understand-
ing of the solar system lead to profound changes to the notion "planet" but as
a term for astronomical inquiry it has not lost its salience. Perhaps "mirativity"
like "planet" captures an important notion, which however must be refined to
satisfy an increasingly nuanced understanding of linguistic reality.

   Mirativity as described by DeLancey is insufficiently precise and requires
refinement. Although it is defined as a category to encode information which is
"new or surprising to the speaker" (DeLancey 1997: 33) and for which he has
"no psychological preparation" (DeLancey 1997: 35), when reporting dreams,
as in (49), or trips to America, as in (58), the information reported has ample
opportunity to grow stale in the speaker's mind. To decide whether or not "mi-
rativity" is a useful addition to the repetoire of grammatical categories avail-
able to descriptive linguistis and typologists, one must first have an account of
mirativity which precludes such anomalies.

   I remain sceptical that reformulation of mirativity with an eye to greater pre-
cision will ultimately succeed. The linguist operates at a disadvantage when
compared to his colleagues in physics or chemistry; the semantic categories
employed in his analysis are not instrumentally verifiable. There is conse-
quently no way to be certain that a reformulation of a category is a refine-
ment. Perhaps the new formulation is just a different beast which implies dif-
ferent consequences. Lacking intersubjectibly verifiable minimal units of se-
mantic analysis,[32] when a linguist chooses to provide a semantic label to a
morphosyntactic phenomenon, he does this on analogy to the use of that label
in the description of other languages. There is a tendency in the minds of some
to believe a linguist directly apprehends a Platonic semantic reality which may
be present in other languages, like a geologist verifies the presence of sodium
in a certain rock. However, linguists lack labs or machines to determine the

---

32. With the possible exception of Wierzbicka's natural semantic metalanguage (Wierzbicka
    1988).

presence or non-presence of a particular purported meaning; in the words of Haspelmath (2007), "pre-established categories don't exist". Thus, if a student working on a far-flung language finds a grammatical phenomenon he is unsure how to describe, he rummages through the linguistic literature for analogues to serve as inspiration.

There is nothing wrong with inspirational analogues; notions like "perfect", although they have no Platonic existence outside of their application to the analysis of a specific languages, have demonstrated their utility. However, an analogy must be rooted in the description of a particular language or particular languages. In the absence of instrumental semantics, mooring a semantic term to a particular morphosyntactic phenomenon is the only means to ensure that the term denotes a thing in this world. The grammatical term "aspect" Carl Philipp Reiff (1860) first elaborated to capture the difference between pairs such as *smotret'* and *posmotret'* in Russian. By analogy to Russian other phenomena in other languages have come to be similarly described. However, some linguists, building their analogies from discussion of aspect in English and not Russian, have gradually allowed the *signifiant* to wander through a chain of analogies away from its *signifié*.[33] Dahl (1985: 69) has even come to the bizarre conclusion that Slavic aspect systems are "rather idiosyncratic". When "aspect" was unmoored from Russian, it came to mean all things to all men. Haspelmath (2006) shows how "markedness" has fallen prey to the same tragedy and consequently lost all predictive or explanatory power. If in a few decades of use the *signifié* of the technical term 'two' gradually drifted to what we currently call 'three', mathematics as a science would be crippled. Linguistics is frequently crippled by just this problem.

If the champagne from Champagne is not champagne, then the champagne from California cannot be. If the difference between *smotret'* and *posmotret'* in Russian is not one of "aspect", the difference between English *went* and *have gone* cannot be; the category has become meaningless. If DeLancey's understanding of *ḥdug* is incorrect, then the ensemble of phenomena in diverse languages, which have been held to the rubric "mirative" on analogy with "Lhasa" Tibetan *ḥdug* must fall their separate ways. This is all the more the case since NONE of the phenomena which DeLancey calls "mirative" are independent grammatical categories which encode "surprise" or "new information".

That morphemes around the world can be pressed into service in certain contexts to have a connotation of surprise, is hardly surprising; all languages must have some way for people to say that things are surprising. These "surprising" uses of morphemes should be described as part of a full description of their

---

33. See van Driem (2001: 648–661) for an excellent discussion of this *Irrweg*.

semantics, but do not suggest that there is a crosslinguistically valid category of "mirativity". All languages have some way of saying 'I did something', but only some languages have grammatical 1st person. All languages have some way to say 'I am disappointed that . . .', but "the disappointive" is not thereby a crosslinguistically independent grammatical category. A grammatical category exists only to the extent it is definable through structural morphosyntactic criteria within one language. The extent to which one can claim that two languages employ the same category (such as person), the claim is that both languages have structurally definable form classes whose semantics are similar enough that it is convenient to label the categories similarly. Perhaps there are languages which have a separate morphosyntactic category used for surprising information; I remain unconvinced. If languages are found which encode 'new information' in an identifiable morphosyntactic category of its own, in order to avoid the false analogies that the moniker "mirativity" would necessarily invoke, that category should bear some other name. Until the day such a languages comes to light we "must leave to philosophers the task of clarifying the status of semantic, i.e., conceptual categories considered independently of their linguistic embodiment" (Lazard 1999: 105).

The case of "mirativity" is less like "planet" and closer to aether or phlogiston. Relativity explains the behaviour of light without requiring clear, massless, yet rigid, luminiferous aether as a medium through which light travels. Holding out hope to find something for aether to explain would be quixotic and anti-empirical. The analysis of combustion as oxidization rather than the liberation of phlogiston from combustible substances explains, among other things, why magnesium gains weight as it burns. Like aether or phlogiston, "mirative" does not accurately describe the very phenomena it was invented to describe; it should, like aether and phogiston, be gently retired from scientific discourse. To insist that we may yet find a need for mirativity is similar to suggesting that some forms of combustion may yet be found for which phlogiston must be presumed. Of course this is always possible, but it is better for researchers to look for theories to account for realia than to look for realia to satisfy a pre-existing theory.

Received: 9 January 2011   *SOAS, University of London*
Revised: 6 December 2011

Correspondence address: Department of Linguistics, SOAS, University of London, Thornhaugh Street, Russell Square, London WC1H 0XG, United Kingdom; e-mail: nh36@soas.ac.uk

Abbreviations: 1/2/3 1st/2nd/3rd person; ABS absolutive; ADM admirative; ART article; AUX auxiliary; CAUS causative; CEP counter-expectancy particle; CL class; COMPL completive; CONFIRM confirmative; CONT continuous aspect; DEF definite; DEM demonstrative; DIST distal; DUB dubitative; EMPH emphatic; ERG ergative; FAC factual; FUT future; GEN genitive; HAB habitat; HON honorific; IMP imperative; INFER inferential; LOC locative; MIR mirative; NEG negative; NF non-final marker; NI new information; NML nominalizer; NOM nominative; NPN non-possessed noun (the Uto-Aztecan "absolutive suffix"); NPOSS non-possessed; OBJ object; OBL oblique; PER personal; PIST past imperfective stative; PL plural; PLR plural; POSS possessive; PRES present; PRF perfect; PRS present; PST past; PT past/perfect; QUANTIF quantifier; R realis; REC reciprocal; REMP remote past; REP reported; RSM reported speech marker; SG singular; SUB subordinating; SUBJ subject; TES testimonial; TOP topic; VIS visual. Any Tibetan noun phrase not specified for case should be construed as absolutive. Some abbreviations from original sources remain unresolved.

References

Adelaar, Willem F. H. 1977. *Tarma Quechua: Grammar, texts, dictionary*. Lisse: De Ridder.

Agha, Asif. 1993. *Structural form and utterance context in Lhasa Tibetan*. New York: Lang.

Aikhenvald, Alexandra Y. 2003a. *A grammar of Tariana, from northwest Amazonia*. Cambridge: Cambridge University Press.

Aikhenvald, Alexandra Y. 2003b. Evidentiality in Tariana. In Aikhenvald & Dixon (eds.) 2003, 131–164.

Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: Oxford University Press.

Aikhenvald, Alexandra Y. & R. M. W. Dixon (eds.). 2003. *Studies in evidentiality*. Amsterdam: Benjamins.

Bazin, Louis. 1968. *Introduction à l'étude pratique de la langue turque*. Paris: Maisonneuve.

Bazin, Louis & Jack Feuillet. 1980. L'opposition constatation / non constatation en turc et en bulgare. *Zeitschrift für Balkanologie* 16. 9–15.

Bell, Charles. 1905. *Manual of Colloquial Tibetan*. Calcutta: Baptist Mission Press.

Borchers, Dörte. 2008. *A grammar of Sunwar*. Leiden: Brill.

Broadwell, George Aaron. 1991. Speaker and self in Choctaw. *International Journal of American Linguistics* 57. 411–425.

Chafe, Wallace L. & Johanna Nichols (eds.). 1986. *Evidentiality: The linguistic coding of epistemology*. Norwood, NJ: Ablex.

Chang, Kun & Betty Chang. 1984. The certainty hierarchy among Spoken Tibetan verbs of being. *Bulletin of the Institute of History and Philology, Academia Sinica* 55. 603–635.

Chonjore, Tsetan. 2003. *Colloquial Tibetan: A textbook of the Lhasa dialect with reference grammar and exercises*. Dharamsala: Library of Tibetan Works and Archives.

Csató, Éva Ágnes. 2000. Turkish MIŞ- and IMIŞ-items: Dimensions of a functional analysis. In Johanson & Utas (eds.) 2000, 29–43.

Curnow, Timothy. 2001. Why 'first/non-first person' is not grammaticalized mirativity. In Keith Allan & John Henderson (eds.), *Proceedings of ALS2k, the 2000 Conference of the Australian Linguistic Society*, 1–10. http://www.als.asn.au/proceedings/als2000/curnow.pdf

Dahl, Östen. 1985. *Tense and aspect systems*. Oxford: Blackwell.

Dankoff, R. 1982. *Mahmud al-Kāšǧarī, Compendium of the Turkic dialects (Dīwān luǧāt at-Turk), Part I*. Edited and Translated with J. Kelly. Cambridge: Tekin.

Davidson, Matthew. 2002. *Studies in Southern Wakashan (Nootkan) grammar*. Buffalo: State University of New York at Buffalo doctoral dissertation.

DeLancey, Scott. 1985. Lhasa Tibetan evidentials and the semantics of causation. *Berkeley Linguistics Society* 11. 65–72.

DeLancey, Scott. 1986. Evidentiality and volitionality in Tibetan. In Chafe & Nichols (eds.) 1986, 203–213.

DeLancey, Scott. 1989. New vs. assimilated knowledge as a semantic and grammatical category. Presented at the Winter Meeting of the Linguistic Society of America, December 30, 1989.

DeLancey, Scott. 1990. Ergativity and the cognitive model of event structure in Lhasa Tibetan. *Cognitive Linguistics* 1. 289–321.

DeLancey, Scott. 1992. The historical status of the conjunct/disjunct pattern in Tibeto-Burman. *Acta Linguistica Hafniensia* 25. 39–62.

DeLancey, Scott. 1997. Mirativity: The grammatical marking of unexpected information. *Linguistic Typology* 1. 33–52.

DeLancey, Scott. 2001. The mirative and evidentiality. *Journal of Pragmatics* 33. 369–382.

Denwood, Philip. 1999. *Tibetan*. Amsterdam: Benjamins.

Dickinson, Connie. 2000. Mirativity in Tsafiki. *Studies in Language* 24. 379–421.

Dozon, Auguste. 1879. *Manuel de la langue chkipe ou albanaise*. Paris: Leroux.

Friedman, Victor. 1981. Admirativity and confirmativity. *Zeitschrift für Balkanologie* 17. 12–28.

Friedman, Victor. 1986. Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian. In Chafe & Nichols (eds.) 1986, 168–187.

Friedman, Victor. 2003. Evidentiality in the Balkans with special attention to Macedonian and Albanian. In Aikhenvald & Dixon (eds.) 2003, 189–218.

Garrett, Edward. 2001. *Evidentiality and assertion in Tibetan*. Los Angeles: University of California, Los Angeles doctoral dissertation.

Goldstein, Melvyn C. & Nawang Nornang. 1970. *Modern spoken Tibetan: Lhasa dialect*. Seattle: University of Washington Press.

Grunow-Hårsta, Karen. 2007. Evidentiality and mirativity in Magar. *Linguistics of the Tibeto-Burman Area* 30(2). 151–194.

Haspelmath, Martin. 2006. Against markedness (and what to replace it with). *Journal of Linguistics* 42. 25–70.

Haspelmath, Martin. 2007. Pre-established categories don't exist: Consequences for language description and typology. *Linguistic Typology* 11. 119–132.

Hill, Jane H. 2005. *A grammar of Cupeño*. Berkeley, CA: University of California Press.

Hoshi Izumi. 1994. On the nonperfect continuative aspect of the Lhasa dialect of modern Tibetan. In Kitamura Hajime et al. (eds.), *Current issues in Sino-Tibetan linguistics,* 985–991. Osaka: The Organizing Committee, the 26th International Conference on Sino-Tibetan Languages and Linguistics.

Hu Tan, et al. 1989. *Lha-saḥi kha skad klog deb* / 拉薩口語讀本 *Lasa kouyu duben*. Běijīng: 民族 出版社 Mi rigs dpe skrun khaṅ.

Jacobsen, William H. 1964. *A grammar of the Washo language*. Berkeley, CA: University of California, Berkeley doctoral dissertation.

Jacobsen, William H. 1986. The heterogeneity of evidentials in Makah. In Chafe & Nichols (eds.) 1986, 3–28.

Johanson, Lars. 2000. Turkic indirectives. In Johanson & Utas (eds.) 2000, 61–87.

Johanson, Lars & Bo Utas (eds.). 2000. *Evidentials: Turkic, Iranian and neighbouring languages*. Berlin: Mouton de Gruyter.

Ko, Kyounghee. 1989. The integrated/new knowledge markers in Korean. Eugene, OR: University of Oregon M.A. thesis.

Lazard, Gilbert. 1999. Mirativity, evidentiality, mediativity, or other? *Linguistic Typology* 3. 91–109.

Lee, Ho Sang. 1985. Consciously-known but unassimilated information: A pragmatic analysis of the epistemic modal -*kun* in Korean. In *Proceedings of the First Pacific Linguistics Conference*, 183–210. Eugene, OR: Department of Linguistics, University of Oregon.

Lee, Ho Sang. 1993. Cognitive constraints on expressing newly perceived information, with reference to epistemic modal suffixes in Korean. *Cognitive Linguistics* 4. 135–167.

Lewin, Thomas Herbert. 1879. *A manual of Tibetan*. Calcutta: G. H. House, at the Baptist Mission Press.

Meydan, Métiyé. 1996. Les emplois médiatifs de -*miş* en Turc. In Zlatka Guentchéva (ed.), *L'énonciation médiatisée*, 125–144. Leuven: Peeters.

Miller, Roy Andrew. 1955. The independent status of the Lhasa dialect within Central Tibetan. *Orbis* 4. 49–55.

Montaut, Annie. 2006. Mirative meanings as extensions of aorist in Hindu/Urdu. In Rajendra Singh (ed.), *The yearbook of South Asian languages and linguistics*, 71–86. Berlin: Mouton de Gruyter.

Reiff, Charles Philippe. 1860. *Grammaire française-russe, ou principes de la langue russe à l'usage des français*. Paris: Maisonneuve.

Rice, Karen. 1989. *A grammar of Slave*. Berlin: Mouton de Gruyter.

de Roerich, George & Tse-trung Lopsang Phuntshok. 1956. *Textbook of Colloquial Tibetan: Dialect of central Tibet*. Calcutta: The Government of West Bengal Eduction Department, Education Bureau.

Róna-Tas, András. 1985. *Wiener Vorlesungen zur Sprach- und Kulturgeschichte Tibets* (Wiener Studien zur Tibetologie und Buddhismuskunde 13). Wien: Arbeitskreis für Tibetische und Buddhistische Studien, Universität Wien.

Rood, David S. 1976. *Wichita grammar*. New York: Garland.

Rood, David S. 1996. Sketch of Wichita, a Caddoan language. In Ives Goddard (ed.), *Handbook of North American Indians*, Vol. 17: *Languages*, 580–608. Washington, DC: Smithsonian Institution.

Slobin, Dan & Ayhan Aksu-Koç. 1982. Tense, aspect, and modality in the use of Turkish evidentials. In Paul Hopper (ed.), *Tense and aspect: Between semantics and pragmatics*, 185–200. Amsterdam: Benjamins.

Slobin, Dan & Ayhan Aksu-Koç. 1986. A psychological account of the development and use of evidentials in Turkish. In Chafe & Nichols (eds.) 1986, 159–167.

Sohn, Ho-Min. 1999. *The Korean language*. Cambridge: Cambridge University Press.

Tatevosov, Sergej G. & Timur A. Majsak. 1999. Sredstva vyraženija admirativnoj semantiki. [Means of expressing admirative semantics.] In Aleksandr E. Kibrik & Jakov G. Testelec (eds.), *Elementy caxurskogo jazyka v tipologičeskom osveščenii*, 289–292. Moskva: Nasledie.

Tournadre, Nicolas. 1996. *L'ergativité en tibétain: Approche morphosyntaxique de la langue parlée.* Leuven: Peeters.

Tournadre, Nicolas. 2008. Arguments against the concept of 'conjunct'/'disjunct' in Tibetan. In Brigitte Huber, et al. (eds.), *Chomolangma, Demawend und Kasbek: Festschrift für Roland Bielmeier zu seinem 65. Geburtstag*, 281–308. Halle (Saale): International Institute for Tibetan and Buddhist Studies.

Tournadre, Nicolas & Sangda Dorje. 2003. *Manuel de tibétain standard.* Paris: Langues et Mondes, L'Asiathèque.

van Driem, George. 2001. *Languages of the Himalayas*. Leiden: Brill.

Volkart, Marianne. 2000. The meaning of the auxiliary morpheme `dug in the aspect systems of Central Tibetan dialects. *Linguistics of the Tibeto-Burman Area* 23(2). 127–153.

Watters, David E. 2002. *A grammar of Kham*. Cambridge: Cambridge University Press.

Wierzbicka, Anna. 1988. *The semantics of grammar*. Amsterdam: Benjamins.

Yukawa Yasutosi 湯川泰敏. 1966. チベット語のduuの意味. Chibettogo no duu no imi. [The meaning of Tibetan *duu*.] 言語研究 *Gengo Kenkyū* 49. 77–84.

Zeisler, Bettina. 2000. Narrative conventions in Tibetan languages: The issue of mirativity. *Linguistics of the Tibeto-Burman Area* 23(2). 39–78.