

The essence of mirativity

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Abstract

The range of mirative meanings across the world's languages subsumes sudden discovery, surprise, and unprepared mind of the speaker (and also the audience or the main character of a story). Mirative markers may also convey overtones of counterexpectation and new information. The range of mirative meanings may be expressed through a verbal affix, a complex predicate, or a pronoun. Evidentials whose major function is to express information source may have mirative extensions, especially in the context of the 1st person subject. The mirative category appears to be susceptible to linguistic diffusion.

Keywords: areal diffusion, aspect, evidential, exclamative, inflection, information structure, mirative, person, reality status, syntax, tense

1. The mirative meanings: Taking stock

The concept of “mirativity” is a relatively recent arrival on the typological scene.¹ DeLancey (1997, 2001) defined it as “conveying information which is new or unexpected to the speaker”, with overtones of surprise. A similar range of meanings was captured by the term “admirative” first used in a grammar of Albanian written in French by Dozon (1879: 226–227) (see Friedman 2003: 192–193, 213; 2010; 2012, for the history, and the meanings of the term). A verb form with “admirative” meaning was described in grammars of Northeast Caucasian languages (e.g., Kibrik 1977, 1994a). Many grammars of Quechua

1. Neither “mirativity” nor “mirative” are mentioned in P. H. Matthews’s magisterial dictionary of linguistics (Matthews 2007). The *Oxford English Dictionary* (<http://www.oed.com>) defines *admirative* as “a word, sentence, etc., expressing surprise. Now chiefly: spec(ialized) (esp. in various languages of the Balkans) the admirative mood; an admirative verbal construction or a form [...] expressing surprise, unexpectedness, disbelief”.

languages (see Section 2.2.2) describe a verb form with a major meaning of “sudden realization or awareness” and “surprise” (Adelaar 1977, 2004, forthcoming).

The overtones of “surprise” and “new and unexpected information” are characteristic of other categories, including exclamatives and some evidentials in some systems. In his seminal work, DeLancey (1997, 2001; also 1986, 2003) put “mirativity” on the map as a separate linguistic category. In DeLancey’s (2001: 370) words, prior to this, mirative constructions were considered “simply an odd appendage to evidentiality”. There is now enough evidence to show that evidentiality and mirativity are different categories.

In many languages, expressions of mirativity have no grammatical connection to evidential systems. Markers with “mirative” meanings co-occur with evidentials, they occupy different positions in verb structure, and differ in their interrelations with other categories (such as negation, or counterexpectation).² In other languages, some evidentials may acquire mirative meanings in some contexts, and thus can be considered “mirative strategies” (this was discussed at length in Aikhenvald 2004: 195–216). Person marking systems and aspectual forms can have meanings associated with new and unexpected knowledge and surprise.

Evidentiality is grammatical marking of the nature of the information source, that is, the way in which information was obtained (see Aikhenvald 2004, 2006, 2007, full list of references in 2011, and Aikhenvald & Storch forthcoming; Lazard 1999, 2001).

Mirative meanings reflect “the status of the proposition with respect to the speaker’s overall knowledge structure” (DeLancey 1997: 33), or, as Hyslop (2011: 625) puts it, “expectation of knowledge”.³ In Watters’ (2002: 296) words, “mirativity [...] makes no claims about the source of information – it occurs with first-hand observation, inference, or hearsay”. A “mirative” meaning can be associated with information acquired through any means – be it “inferentially from observation” of the effects of the event, as in Washo (Jacobsen 1964: 630), or through first-hand observation, inference or hearsay as in Kham (Watters 2002: 300).

2. See summaries in Gates (2010), Aikhenvald (2004), and discussion by DeLancey (2001: 370–371).

3. Mel’čuk (1994: 166–167) includes admirative under a complex he names “reactivity” (*réactivité*) which specifies mental reaction of the speaker from the point of view of probability of an event (“Nous appelons catégorie de *réactivité* une catégorie dont les éléments spécifient la réaction mentale du locuteur à propos du fait en question Fⁿ du point de vue de la probabilité de Fⁿ”). Admirative is quoted as an example of “reactivity”, on a par with probabilitative (as in Finnish). In her reassessment of mirative meanings in Dardic languages, Bashir (2010) refers to mirative as “realizational”.

The term “mirative” and the notion “mirativity” have gained popularity over the past fifteen years (since DeLancey 1997). Most grammarians who use the term “mirativity” demonstrate how mirative constructions are different from evidentials, and from other grammatical categories. Arguing that the “mirative” complex of meanings is nothing but a kind of evidentiality is a step backward, not dissimilar from saying that ergative is a kind a passive, or that serial verb constructions are a kind of coordinate structures (see a concise account of ergativity in Dixon 1994; and the discussion of monoclausality of serial verbs in Foley & Olson 1985). The Appendix of the present article is devoted to arguing against one recent attempt to turn the wheel back as to mirativity.

More importantly, it is now time to reassess the range of mirative meanings and their expression across languages. The question I posed in Aikhenvald (2004: 215) was: How uniform is the semantic (and pragmatic) content of what is being referred to as “mirativity” across languages? Since then, many in-depth studies of how languages mark the mirative range of meanings have become available. The range of mirative meanings does show uniformity across languages.

The range of mirative meanings subsumes the following values included under the “mirativity” label:

- (i) sudden discovery, sudden revelation or realization (a) by the speaker, (b) by the audience (or addressee), or (c) by the main character;
- (ii) surprise (a) of the speaker, (b) of the audience (or addressee), or (c) of the main character;
- (iii) unprepared mind (a) of the speaker, (b) of the audience (or addressee), or (c) of the main character;
- (iv) counterexpectation (a) to the speaker, (b) to the addressee, or (c) to the main character;
- (v) information new (a) to the speaker, (b) to the addressee, or (c) to the main character.

The array of meanings subsumed under the notion of “mirativity” can be realized independently, through other categories, and also through lexical means. In a number of languages, different meanings within the mirative range are realized differently. This alerts us to the fact that “mirativity” is best applied as a category for which individual values have to be identified. When we describe linguistic categories – such as aspect, or tense, or gender, or evidentiality – we do not just say that a language has “tense”: we specify that it has present, past, and remote past; or past versus non-past. Along similar lines, it is not enough to say that a language has “mirativity”: one needs to specify the subset of the range of mirative meanings grammaticalized in the language.

I start with examples of special forms labelled “mirative”, or admirative, fully independent of evidentials or tense-aspect (Section 2). Some languages have different grammatical marking for different meanings within the mirative

range. There may be one grammatical form for ‘surprise’, and another one for ‘sudden discovery’. This is the topic of Section 3. Non-mirative categories with mirative overtones, or “mirative strategies”, and their semantic development, are discussed in Section 4.

The evidence for postulating mirativity – or “status of knowledge” – in its many meanings, as a valid category of linguistic analysis is summarized in Section 5.

2. A special form with a range of mirative meanings

The range of mirative meanings can be expressed through a dedicated complex verbal construction (Section 2.1). Other languages employ a special verbal affix or a particle, with the mirative range of meanings (Section 2.2). Some of the mirative meanings can be expressed through a special series of pronouns, and by other means (Section 2.3). Table 1 summarises the expression of the mirative range of meanings in the selection of languages discussed here. (For some languages, such as Caddo, limited information is available; this is reflected in gaps in the table.)

Most languages discussed here (with the exception of Hone) have evidential systems, marking information source. The differences between evidentials and the mirative constructions and forms are addressed where possible.

2.1. *Complex verbal constructions with a range of mirative meanings*

Complex verbal constructions with a mirative complex of meanings have been attested in a number of Tibeto-Burman languages, in Northeast Caucasian languages, and in Tariana, an Arawak language from Amazonia.

Magar, a Central Himalayish (Tibeto-Burman) language of Nepal, has a three-term system of evidentials covering an inferred evidential marker *-sa*, a marker for reported evidential *-ta*, and first-hand evidential (information obtained through seeing or hearing) which is formally unmarked (Grunow-Hårsta 2007: 156–165; in agreement with a general tendency across languages: Aikhenvald 2004: 72–74). Epistemic meanings are expressed with particles, such as *man* ‘truly’ which can occur with evidentials (similarly to many other languages where modal and evidential meanings are expressed with separate means: Aikhenvald 2004).

Just as in the closely related Kham (Watters 2002: 288–300), mirativity in Magar “is not concerned with the directness or indirectness of information source”: while a “non-mirative statement simply conveys information”, “a mirative statement conveys that the information is new and unexpected and is as much about this surprising newness as it is about the information itself”, the mirative marker “conveys surprise at what is ‘newly acquired and unintegrated’” (DeLancey 1997: 25, stressed by Grunow-Hårsta 2007: 174–175).

Table 1. *Mirative meanings across a selection of languages (Sections 2.2–2.3)*

Mirative meanings	Magar	Kham	Archi	Khinalug	Tsakhur	Tariana	Chechen	!Xun	Cantonese	Quechua
(i) sudden discovery, sudden revelation or realization				×						
(a) by the speaker	×	×	×		×			×		×
(b) by the addressee			×					×		×
(c) by the main character/generic	×		×							×
(ii) surprise				×						
(a) of the speaker	×	×			×		×		×	×
(b) of the addressee						×		×		×
(c) of the main character						×				×
(iii) unprepared mind										not always
(a) of the speaker	×	×			×		×	×		
(b) of the addressee						×		×		
(c) of the main character						×				
(iv) counterexpectation										not always
(a) to the speaker								×		
(b) to the addressee					×					
(c) to the main character					?	×				
(v) information new										not always
(a) to the speaker	×	×								
(b) to the addressee										
(c) to the main character										

Mirative meanings	Ndrapa	Tabo	Kuriöp	Shilluk	Hone	Ingush	Caddo	Haida	Litooet	Korean
(i) sudden discovery, sudden revelation or realization									×	
(a) by the speaker	×	×	×							×
(b) by the addressee										probably yes
(c) by the main character/generic			×							probably yes
(ii) surprise										
(a) of the speaker	×		×		×		×	×		×
(b) of the addressee					×					×
(c) of the main character			×		×					×
(iii) unprepared mind										
(a) of the speaker					×					
(b) of the addressee					×					
(c) of the main character					×					
(iv) counterexpectation										
(a) to the speaker			×		×					
(b) to the addressee					×					
(c) to the main character			×		×					
(v) information new										
(a) to the speaker		×								×
(b) to the addressee			×							
(c) to the main character			×							

Formally, the mirative in Magar is a complex predicate consisting of the verb stem plus the nominalizer *o* followed by a grammaticalized copula *le* (which also functions as an auxiliary and a marker of imperfective aspect). Nominalized predicates with a copula have mirative meanings in many Himalayan languages, including Kham and Chantyal (Grunow-Hårsta 2007: 176). The mirative construction is most frequently used in interactions between speech act participants. The “surprised” 1st person speaker is typically omitted, as it is understood from the context, as in (1). Here, and throughout this article, mirative forms and constructions are highlighted in bold:

- (1) *boi-e chitua-ke ŋap-o le*
 father-ERG leopard-DAT shoot-NMLZ IMPF.MIR
 [I realize to my surprise that:] ‘Father shot the leopard!’

The statement here is based on visual evidence (visually acquired information in Magar requires no formal marking). Other mirative statements may be based on inference and post-factum interpretation of the action judged by the results.

Mirative statements have no restrictions on person. Using a mirative to talk about oneself may appear counterintuitive: in DeLancey’s words (1997: 42), “information about the rest of the world may be surprising, but information about oneself should not be”. (We will see in Section 3 that this is similar to the “counter-intuitive” use of non-visual or non-firsthand evidentials with 1st person.) 1st person miratives in Magar occur if the speaker realizes something to their surprise. In (2), a woman “looks at her empty plate and, learning what was on it, realizes that she has eaten a prohibited meat”.

- (2) *ŋa-i i-din-ca sya ŋa-jya-o*
 1SG-ERG PROX-type-ATT meat 1.PRON-eat-NMLZ
le-sa-ŋ
 IMPF.MIR-INFER-1.PRON
 [I realize to my surprise that:] ‘Apparently I have eaten this type of meat!’

Here, the evidential (*-sa* ‘inferred’) and the mirative occur together. The inferred evidential indicates that the speaker has inferred that she’s eaten this type of meat. The mirative indicates her reaction – that of lack of earlier realization and concomitant surprise.

The mirative construction differs from evidentials in two further ways. Firstly, miratives in interrogatives have a force of a rhetorical question; evidentials do not. Secondly, miratives in Magar typically occur only with the non-past imperfective aspect – unlike evidentials which can occur with the full range of tense-aspect combinations.

3rd person mirative is used in narratives to express “an unexpected realization on the part of a character as told by the omniscient narrator”. The “omniscient narrator” reflects the reaction of the main character. Such impersonation often occurs in narratives told in 3rd person reflecting the point of view of the protagonist, identifying themselves with him or her. In addition, the mirative in Magar marks the surprising, and focal, points of the narrative.

Turning now to Kham, its mirative construction consists of the auxiliary use of the existential copular verb ‘be’ in 3rd person singular form; “both the auxiliary and the main verb occur in a nominalized form, and all inflectional categories occur on the main verb” (Watters 2002: 289). The essence of the Kham mirative is summarized by Watters (2002: 300) as follows:

The mirative is connected with newly discovered information; information not yet integrated into the speaker’s store of knowledge. It makes no claims about the source of information, but only about its newness and the speaker’s apprehension of it. As such, it can occur with first-hand observation, inference or hearsay.

The following pair of examples illustrates the contrast between the unmarked (3a) and the mirative form (3b):

- (3) a. *ma-hu-ke*
 NEG-come-PFV
 ‘He didn’t come’
- b. *o-ma-hũ-wo* *o-le-o*
 3SG-NEG-go-PFV.NMLZ 3SG-be-NMLZ
 ‘He didn’t come!’

Mirativity does not specify any information source. This is why we do not know what information source (3b) is based on – inference, vision, or auditory information. The mirative interpretation is consistent with either of these. The mirative is used if the event is “newly discovered”, and the information not integrated into “the speaker’s store of knowledge”. If the speaker had invited guests to his house, and Jhupurya shows up uninvited or unanticipated, the host would announce his arrival using the mirative. He can see Jhupurya, so the information is acquired through seeing:

- (4) *juhपुरya u-hũ:u-wo* *o-le-o*
 Jhupurya 3SG-come-PFV.NMLZ 3SG-be-NMLZ
 ‘Jhupurya has arrived!’

The complex mirative construction may involve a different kind of information source: speaker’s inference. In (5), the speaker infers that Maya had been weaving a blanket, based on finding a partially completed blanket attached to the loom in Maya’s room. The use of mirative is based on inference from

visible results, and not on actually seeing the event which is unexpected and surprising.

- (5) *kāhbul u-ri:h-zya-o o-le-o*
 blanket 3SG-weave-CONT-NMLZ 3SG-be-NMLZ
 ‘She’s weaving a blanket!’

As Watters (2002: 290) puts it,

it becomes clear that we are dealing with the mirative when we discover that exactly the same form [as in (5) – AYA] is used when the speaker enters the room and finds Maya sitting at the loom weaving. In this case, the speaker’s report is based on first-hand evidence, not on inference. What is relevant, then, is not the source of speaker’s knowledge but rather that the information is newly discovered – not yet integrated into the speaker’s store of knowledge.

The category of “admirative”, with the meaning of ‘surprise’ and ‘sudden discovery’, is a feature of a number of Northeast Caucasian languages. The admirative in Archi is an analytic construction consisting of a gerund (“deep-ričastie” in Russian) of a verb (with a lexical meaning) plus an inflected form of a semi-auxiliary *ǰos* ‘to come across (someone doing something), to discover’ (Kibrik 1977: 238–243; a brief summary of his analysis in English can be found in Kibrik 1994a: 338–389). The admirative is expressed differently from eyewitness/non-eyewitness marking forms, and the reported evidential (called “commentative” by Kibrik 1977). The markers of eyewitness/non-eyewitness and of reported evidentiality can occur together with admirative, if appropriate: one can discover and be surprised at something one sees, something one infers, or something one learns from a speech report.

The admirative construction stands apart from analytic tense-aspect forms in Archi, in terms of the expression of future, and also the marking of grammatical relations: the entity “discovered” takes the nominative case, and the “discoverer” appears in the dative. The “discoverer” can be the speaker as in (6) (Kibrik 1994a: 339). The meaning is that of “sudden discovery”.

- (6) *bez qlin e=b=ku-mat b-o-ǰor*
 I.DAT bridge.NOM.III PFV.CONT.III.ADM.CONSTR.be.destroyed
 ‘I find that the bridge is still destroyed.’

In (7), the admirative construction occurs with the non-eyewitness evidential (called “inferential” in Kibrik 1994a). The construction is marked as impersonal because, in Kibrik’s words, there is “no discoverer”:⁴

4. Kibrik (1977: 239–243) contains further examples of admirative constructions with the meaning of unexpected discovery, used with different persons. Additional examples can be found in Kibrik et al. (1977).

- (7) *qlin e=b=ku-li b-o-ǰo-li*
 bridge.NOM.III PFV.III.ADM.AORINFER.be.destroyed
 ‘It was found that the bridge had been destroyed.’

A set of forms with similar semantics was described by Kibrik et al. (1972: 187–188) and Kibrik (1994b: 393) as “unexpected mood” (“neožidannost-noe naklonenie” in Russian) for Khinalug, from the same family. The marker *-q’imif* indicates “the action, of the reality of which the speaker had been not previously known to the speaker”.

The admirative constructions in Tsakhur, another Northeast Caucasian language, show that the knowledge of the situation described is new to the speaker and not integrated in his worldview (Tatevosov & Maisak 1999a: 289). Admirative constructions may also have overtones of surprise. This is consistent with the concept of “admirative” as outlined by Kibrik (1977). One of these means involves an analytic construction with the auxiliary verb *ejxe* ‘become’ and the potential form of a lexical verb (Tatevosov & Maisak 1999a: 289–291), as shown in (8).⁵

- (8) *malhammad_{y-ē} allī-s iX-as ejx-e*
 Mohammed-ERG Ali-DAT 4.bash-POT 4.become-IMPF
 ‘(You don’t say so,) Mohammed is going to bash Ali.’

We will see, in Section 2.2 below, that “admirative” meanings in Tsakhur can also be expressed through a number of affixes and a particle. The mirative meanings – surprise and unexpected realization – are instantiated independently of information source (as the examples show).

In addition, a non-firsthand evidential in Tsakhur can be used as a mirative strategy, with mirative-like meanings defined as “pointing that the situation takes place against expectations of the speaker” (Tatevosov & Maisak 1999c: 233); we return to this in Section 4.

A special complex predicate in Tariana, an Arawak language from northwest Amazonia, expresses a range of mirative meanings: surprise, and information unexpected for the speaker or for the main character of a story. In this way, it is similar to Magar (Aikhenvald 2003b: 152, 2003c: 453–440). The Tariana admirative⁶ consists of a lexical verb plus suffix *-mhe* (grammaticalized

5. The meaning of “surprise” is rendered in the original through the Russian interjection *nado že* ‘you don’t say so!’ (according to Švedova & Ožegov 1997, an exclamation of surprise and astonishment). Other constructions with the same verb may have habitual or modal meanings (Tatevosov & Maisak 1999: 275–278). Further discussion of evidentiality and mirativity in Tsakhur is in Maisak & Tatevosov (2007).

6. Jovino Brito, a native speaker of Tariana, translated the construction into Portuguese as *ficar admirado* (‘be admiring’), *ficar sorprendido* (‘be surprised’), or *estranhar* (‘find odd or strange’) (1999). This is why I used the term “admirative” in the grammar.

from the stative verb *mhe* ‘showing off, be visible, do visibly’) accompanied by the auxiliary verb *-a* ‘become, go, let, give’. Both the lexical verb and the auxiliary receive same subject cross-referencing, and no constituent can intervene between them (which is why this is one predicate: see further arguments in Aikhenvald 2003c: 449–459). The construction cannot be negated. This is reminiscent of Quechua (as we will see in Section 2.2). The construction is most frequently, but not exclusively, used with verbs of perception (such as *-ka* ‘see, look’, *-hima* ‘hear’).

Tariana has five obligatory evidentiality terms (visual, non-visual, inferred based on visible traces, assumed based on logical deduction, and reported). None of these has any mirative overtones. As shown in Aikhenvald (2003c: 453–454), the mirative construction can occur with any evidential specification. In (9), the speaker was taken aback and surprised by his deduction that his interlocutor was scared of the big city:

- (9) *harame-mhe pi-a-sika*
 be.scared-APPEAR.MIR 2SG-AUX.MIR-RECPST.ASSUMED
hanu-yakale-nuku
 big-CLF.village-TOP.NON.A/s
 ‘You have been scared of the big city’ [assumed by the speaker, based on deduction, and to the speaker’s surprise]

The admirative, or mirative, complex predicate in Tariana appears to be a calque from a Tucano contiguous serial verb construction involving the verb *bahu* ‘appear, be seen, be visible’ (Ramirez 1997), whose meanings are similar to those of *mhe*.⁷

In summary, complex constructions with mirative meanings involve the verb ‘be’ or a grammaticalized copula (as in Kham and Magar), or the verb ‘become’, and ‘discover’ as in Northeast Caucasian languages, and in Tariana, accompanied by a nominalized verb. In Tariana, mirative meanings are expressed through a complex predicate consisting of a verb with an affix and an auxiliary. Gwendolyn Hyslop (personal communication, 2012) suggests that verbs ‘be’ and ‘become’ are the source of mirative markers in Kurtöp. A historical

7. See Aikhenvald (2000a, 2002a), for an in-depth analysis of contact-induced change in Tariana under Tucano influence, in particular, the development of serial verbs. Examples come from speakers of all generations; this suggests that the construction is not a recent innovation. This example comes from Aikhenvald and the Brito family (forthcoming); for the meanings of *mhe* see Aikhenvald (2002b). Currently, the mirative construction is declining in the Wamiarikune dialect of Tariana. It is not used in the Kumandene dialect (data from field research, April–May 2012). The only language in the Vaupés River Basin to have a mirative construction appears to be Hup, or Hupde, a Makú language, whose evidential system is similar to that of Tariana in its structure; the construction, with the meaning of surprise and counterexpectation is described by Carvalho & Carvalho (forthcoming).

perspective on the development of the mirative complex of meanings awaits further studies.

2.2. Verbal affixes and particles with a range of mirative meanings

Verbal affixes or particles with mirative meanings occur in a number of languages. Mirative meanings in languages with two-term evidential systems are addressed in Section 2.2.1. These include evidential systems with a distinction between firsthand and non-firsthand evidential (described as involving “mediativity”: Lazard 1999, also see Johanson & Utas 2000 and Comrie 2000). We discuss mirative extensions of evidentials in such systems in Section 4.2. In Section 2.2.2 we turn to the special expression of mirative meanings in languages with larger evidential systems. The topic of Section 2.2.3 are several mirative markers in complementary distribution since one language may have two or more mirative markers, with the same range of meanings, whose choice depends on verb semantics or the TAM value of the clause.

2.2.1. *Special marking of mirative meanings in languages with small evidential systems.* Chechen, a Northeast Caucasian language (Molochieva 2010: 248–250), has a “mirative” suffix *-q* added to the verb, if “the situation is unexpected and surprising for the speaker”. In Molochieva’s words, the mirative “does not depend on evidentiality or on the aspect and tense of the verb”. Chechen also has a small evidential system (firsthand versus non-firsthand; Molochieva 2010: 214).

The recent witnessed past is often used with the mirative suffix *-q* to mark an event “which the speaker has seen and which was unexpected for him/her” (Molochieva 2010: 217):

- (10) *hwazh-ahw, j-ied-iq iza*
 look.IMPF-IMPV.POL J-run.IMPF-RECWITPST-MIR 3SG.NOM(J)
 ‘Look! It has escaped.’ [Context: the children were playing with a chicken, putting it into a cage, and it escaped. The speaker and the addressee saw the event.]

The mirative suffix can also occur with non-firsthand (or unwitnessed) evidential forms. In (11), the speaker did not see the event, and did not expect that Zara would come. The auxiliary *xilla/xilliera* indicates that the event has not been witnessed by the speaker and the suffix *-q* indicates that the event was not expected by him/her. The speaker infers that Zara has (unexpectedly) been there based on the fact that her cookies are in the kitchen. This inferential meaning (with inference based on observable traces) is typical for non-firsthand evidentials world-wide (and especially so in Caucasian languages: Aikhenvald 2004: 29–31 provides further data and references).

- (11) *Zara j-ie-na xilla-q*
 Zara.NOM(J) J-come.PFV-CONV.ANT be.PFV.NONWIT-MIR
 ‘Look! Zara was here!’ [I can see her special cookies in the kitchen
 (unwitnessed coming; unexpected/new situation)]

“Admirative” meanings in Tsakhur can be expressed via affixation of *-ōx=ud* or *-ēx=id* (the two are described as synonymous). This admirative marking can co-occur with any realis forms (independently of information sources discussed elsewhere in the grammar, by Tatevosov & Maisak 1999a: 289–291), and also with potential modality.

- (12) a. *daḱ-ē čol ez-u-ēx=id*
 father-ERG field.CL4 4.plough-PFV-ADM=COH.4
 ‘It turns out that father has ploughed the field.’
 b. *daḱ-ē čol ez-as-ēx=id*
 father-ERG field.CL4 4.plough-POT-ADM=COH.4
 ‘It turns out that father is going to/has to plough the field.’

In each case, the information is new and unexpected to the speaker, irrespectively of how it was obtained. A particle *jī* ‘marker of acquisition of information by the speaker’ (Tatevosov & Maisak 1999b: 694–704, 1999a: 290–291) can be added to a verbal form marked for “admirative”. The effect is that of the speaker obtaining unexpected information about something which happened in the past:

- (13) *Timur ša wo=r-ōx-ur-ī*
 Timur there be=1=ADM-COH.1-EPIST.1
 [Speaker thought Timur won’t be at the wedding but he/she did encounter him there:] ‘Timur was there, it turns out.’

On its own, this particle can also be used in a similar meaning, ‘it turns out that’ (Tatevosov & Maisak 1999a: 290; 1999b: 692, examples 315–318). The exact differences in meaning between different ways of expressing mirative meanings in Tsakhur are a question for future study.

The two-term evidential system in Chechen is a type of system to which French scholars apply the term “*médiatif*” (see discussion in Aikhenvald 2004) – similar to Tsakhur. In both languages, mirative meanings are expressed independently from eye-witness/non-eyewitness evidentials.

!Xun, a Northern Khoisan language, also has a two-term system of first-hand versus non-firsthand evidentials, similar to that in Chechen and Tsakhur (König forthcoming; a comprehensive grammar is König & Heine forthcoming). Evidentials in !Xun are part of the verbal phrase. Unlike in some other languages (including Tariana, Tucano, and Quechua), they are not obligatory

and can be omitted if the information source is clear from the context. The non-firsthand evidential in !Xun covers any kind of information which the speaker did not witness. This evidential subsumes what one has inferred, assumed, or heard from another person. The firsthand evidential covers any type of sensory experience. Each evidential can occur with various markers of modality. The firsthand evidential in (14) reflects the speaker's visual source of information:

- (14) *ka məká kàhin*
 N4 FIRSTH be.good
 'It is good [as I saw].'

!Xun has a mirative particle *kohà* which follows the evidential and precedes the tense marker. This particle "signals surprise that something unexpected happens" (König forthcoming). The mirative marker "changes a neutral statement", in (15a), into a statement of surprise (15b) (where it occurs with a topic marker; the topic marker is omitted in other examples):

- (15) a. *ha má ha è*
 N1 TOP N1 DEM
 'He is here.'
 b. *à má kohà à è*
 2SG TOP MIR 2SG DEM
 'Oh you are here [surprise].'

The mirative particle can occur with the firsthand evidential, as in (16). The evidential signals the information source (speaker's firsthand experience). The mirative "highlights the fact that this statement is a surprise" to the speaker:

- (16) *mí məká kohà ke tcá*
 1SG FIRSTH MIR PST sleep
 'Oh, I slept! [I know – it is a surprise.]'

The mirative marker in !Xun can occur in questions and in statements. It often marks rhetorical questions. Within the narratives a mirative can mark "the main point of the story". In contrast, evidentials do not occur in questions. Evidentials in !Xun reflect the information source of just the speaker. In contrast, the "mirative" can also mark information as 'surprising' and 'new' to the addressee, and/or to the audience. In König's words (forthcoming), "it expresses new information for which the participant concerned is unprepared, a surprise [...] The surprise is 'objective'" – the event is not necessarily unexpected to the speaker "but to anyone involved in the conversation".

The "mirative" in !Xun is in complementary distribution with the counterexpectation marker *kò*. The latter is used if something expected fails to take place

(Section 3.5 of König forthcoming). Just like the “mirative”, the counterexpectation marker may reflect the reaction of the speaker, or the hearer, or both. A marker of counterexpectation cannot occur in the same verb phrase and the same clause as the mirative. This is unlike Kham, where the counterexpectancy particle occurs very naturally with the mirative (i.e., they may co-occur), as in (17) (Watters 2002: 296):

- (17) *aw-rə te zyɑ:h-rə ci o-le-o*
 this-PL FOC witch-PL CNTREXP 3SG-be-NMLZ.MIR
 ‘These are witches!’ [I had assumed they were little old ladies]

Cantonese, a Sino-Tibetan language, has just a reported evidential, *wo5* (that is, the language has an A3 evidential system with a distinction between reported and everything else, similarly to Kham: Aikhenvald 2003a, 2004). The quite different particle *wo3* in Cantonese expresses information which is “surprising or notable” (S. Matthews 1998: 330–331); it is used, inter alia, in “realizations”, “disconfirmations”, “informings and reminders”. Similarly to Magar and !Xun above, the mirative particle has the force of a rhetorical question.

Caddo, a Caddoan language from North America, has a special marker of admirative or mirative *hús-* indicating that “a situation is unexpected, or surprising to the speaker” (Melnar 2004: 90; Chafe 1995: 357–358, 2005: 339). This marker always occurs together with the irrealis, as in (18):

- (18) *hús-ba-ʔa=sa-yi-k’awih-saʔ*
 ADM-1.BEN.IRR-name-know-PROG
 ‘My goodness he knows my name!’

Caddo has a two-term evidential system, consisting of a firsthand and a quotative evidential (similar to A4 systems in Aikhenvald 2004). Evidentials, mirative, and a number of modality markers occupy the same slot within the verb form, i.e., they cannot co-occur in one word (Melnar 2004: 90–92, 52–53).

2.2.2. *Special marking of mirative meanings in languages with larger evidential systems.* A verbal affix with mirative meanings has been described for languages with larger evidential systems. The Mätra dialect of nDrapa (Qiangic subgroup of Tibeto-Burman) has a three-term system of evidentials: inferred, reported, and direct (which is formally unmarked, similarly to Magar) (Shirai 2007). A special sentence-final “admirative” particle *sa* indicates that “the speaker was astonished by that which he or she recently learnt” (Shirai 2007: 147). Example (19) “implies that the speaker was earlier unaware of the taste of the dish and found it to be very sour after tasting it”:

- (19) *ˈgoro ˈzo=sa*
 this sour/hot=ADM
 ‘This is sour/hot!’

A number of Quechua languages, spoken in the Andean area, have a special set of verbal forms “denoting surprise or lack of previous experience on the side of the speaker” (Adelaar 2004: 223). In Tarma Quechua, this set of forms termed “sudden discovery tense” “refers to events that 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). These forms “have the exclusive function of denoting surprise, unexpectedness or unawareness of an ongoing event or situation” (see also the definition in Adelaar 1977: 96). That is, they cover most values of the mirative range of meanings.⁸

In Adelaar’s (forthcoming) words, the “sudden discovery” series⁹ “stands in a paradigmatic relationship with other categories that convey temporal (and occasionally aspectual) functions, such as past, past habitual, present and future”. The mirative form is marked with *-naq* in the subdivision of Quechua known as Quechua I (Tarma Quechua, described by Adelaar 1977, is its southern representative). Just as in all the languages described in this section, “mirative” is a grammatical system in its own right and is independent of evidentiality and of aspects.

The mirative “sudden discovery tense” marker *-naq* can occur with any of three mutually exclusive aspect markers. In (20), it occurs with the exponent of the customary aspect:

- (20) *chawra-qa cha:-qa ka-ku-naq alqu*
 then-TOP that-TOP be-CUST-3.A/S.MIR dog
 ‘So it turned out that he was a dog [not a human being as he had appeared to be].’

8. Adelaar’s analysis of Tarma Quechua forms can be confirmed by further examples in the texts within the grammar. The same phenomenon is discussed and exemplified in Adelaar (2004) and numerous other references on Quechua languages there and elsewhere (including Weber 1989, Hintz 2007, Hintz 2008, to name a few).

9. The mirative marker in Quechua languages occupies the same slot as tense markers, but has no temporal meaning. Historically, it can be shown to have developed “out of the tense system”; synchronically speaking, in Quechua I varieties (such as Tarma and Pacaraos) mirative is an independent category (Adelaar forthcoming). The mirative range of meanings in other languages within Quechua I were described by Howard-Malverde (1988: 130–131), Weber (1989: 114–115), Hintz (2008: 77), and also Parker (1976: 111–112). In Ayacucho and Cusco Quechua, in Pacaraos Quechua, and in South Conchucos Quechua mirative meanings are an overtone of tense-like forms (Adelaar 1986, Hintz 2007: 16–18). This is also a feature of Aymara, and of a number of Andean Spanish varieties (Laprade 1981, Adelaar 2004).

As every Quechua language, Tarma Quechua has a transparent system of evidentials consisting of three mutually exclusive categories: direct (with overtones of certainty), reported, and conjectural (see Floyd 1999, Weber 1986, 1989, Adelaar 2004; a brief summary in Aikhenvald 2004). Evidentials are clausal clitics and do not have to attach to the verb. The mirative marker combines with the direct evidential in (21) (from Pacaraos Quechua, a variety close to Tarma). It shows that the presence of the evidential marker *-m* does not imply that the speaker has witnessed the event: in this instance, it reflects the certainty of speaker's knowledge:

- (21) *altu-êaw ka-yka-nqa-y-kama-m*
 highlands-LOC be-PROG-NMLZ-1.A/S-DELIM-DIREVCERT
intrega-rqa-ma:-ñaq mamá-y
 give.away-PFV-1.O/IO-3.A/S.MIR mother-1.POSS
 'While I was staying in the highlands, my mother had given me away
 [in marriage] (sudden discovery)'

The "sudden discovery" marker can be combined with the reported evidential in the same clause. The reported evidential marker *-sh(i)* is used here because the sentence is part of a narrative told using the reported evidential (as a mark of its genre).

- (22) *ima-sh ga-naq, rachak-shi kinra-n kinra-n*
 what-REP be-3.A/S.MIR toad-REP side-3.POSS side-3.POSS
êura-naka-ra-:ri-na[q] êaski-yubay-si
 place-RECP-PFV-PL-3.A/S.MIR relay.runner-CMPR-ADD
 'What had actually happened? The toads had posted each other on
 different spots along the track as in a relay-race.'

The "sudden discovery" has not been attested in combination with the conjectural evidential. As Adelaar (forthcoming) puts it, "this should not come as a surprise because conjecture and sudden awareness appear to be opposite sensations that exclude each other".

In most varieties of Quechua, the sudden discovery marker cannot be used in negative clauses (in contrast to !Xun and other languages). However, in Pacaraos and Cuzco Quechua this constraint does not hold (Willem Adelaar, personal communication, February 2012). This agrees with a general tendency across the world's languages that fewer categories are expressed in negative than in positive clauses (see detailed discussion in Aikhenvald & Dixon 1998).

The meanings of Quechua "sudden discovery" also cover situations which are out of the speaker's control. Actions performed during one's sleep or in a state of unconsciousness are described using this form. And so are dreams. In many languages of South America, non-firsthand, non-visual, or reported

evidentials are used in a similar function (see Kracke 2010, and summary in Aikhenvald 2012). But this does not make the Quechua sudden discovery marker into a kind of evidential. Unlike evidentials, the sudden discovery marker refers to the expectation of knowledge and the speaker's, or main character's, surprise reaction to it. Just like in !Xun, the mirative can occur in questions. However, in Quechua this is used to encourage the addressee to perform an experiment – that is, expressing an action with a yet unknown result (Adelaar forthcoming refers to this as “experimental mirative”).

The Quechua “sudden discovery” marker can refer to the information that is new and unexpected both to the speaker and to the addressee. In this way, it resembles the mirative in !Xun and other languages discussed so far. However, the Quechua “mirative” does not cover the exact same range of mirative meanings. In his reappraisal of the large corpus of literature, and his own extensive firsthand experience on Quechua languages, Adelaar (forthcoming) stresses that the Quechua mirative does not always refer to “the newness and the unexpectedness of the speaker's state of knowledge”; the mirative “can also indicate an expected surprise, the uncertain outcome of an experiment still to be undertaken or an impending revelation”.

In many examples, “the mind of the speaker is no longer unprepared at the moment of speaking”, and “at the moment of communication itself the element of surprise is more likely to affect the addressee or any other person rather than the speaker him/herself” (Adelaar forthcoming). These overtones differentiate the Quechua mirative from mirative markers in other languages (see Table 1).

The Quechua sudden discovery forms cannot occur in exclamative clauses: they are objective and non-emotional statements (also see Olbertz 2009 for a comprehensive description of exclamative clauses in Ecuadorean Highland Quichua).

This is another point in which the Quechua mirative appears to differ from other languages, including Kamsá, an isolate spoken in Colombia (Pache (no date), Howard 1977: 15; also see Meléndez Lozano 2000: 135–137, for a sketch of the language). Speaker's surprise as an emotional reaction, and “conclusion against expectation” is expressed with the marker *kwa-* which has no other meaning, and can combine with one of several evidentials. Along similar lines, the mirative in !Xun has been described as having overtones of disapproval or apology, and emotional reaction of the speaker.

2.2.3. *Several mirative markers in complementary distribution.* A few languages have several markers with mirative meanings in complementary distribution. Tabo is a Tibetan dialect spoken in the lower Spiti Valley in Himachal Pradesh, India (Hein 2007). Four evidentials, each having a set of different forms in present/imperfective, future/imperfective, present/perfective, and past/perfective, are: (i) “focus on speaker's involvement”, (ii) “focus on

speaker's unspecified knowledge", (iii) "focus on speaker's perception (visual or auditory)", and (iv) "focus on speaker's inferred knowledge". Tabo has two mirative markers. The morpheme *-saŋ* is used with non-control verbs and also with motion verbs. It shows "the speaker's surprise when discovering a state of affairs or development not noticed before"; "it always expresses the speaker's new knowledge". An example is in (23):

- (23) *ndaŋ g̃ø:mō khōŋ m̃indzūtāŋ-ne:su*
 yesterday night he.ABS bed.top-ABL
n̄q̃il-saŋ-nuk
 fall-MIR(NONCONTR)-INFERSVIS
 'Oh, he must have fallen out of his bed last night!' (Hein 2007: 210)

The reaction of "surprise" is based on inference (the results inferred by results one observes). As in many other languages, a mirative marker occurs together with an evidential: the two belong to two different grammatical systems, and have different meanings. The evidential tells us about the information source, and the mirative about the speaker's reaction to knowledge (surprise) and state of knowledge (the realization of new information).

The other mirative marker *-taŋ* combines with verbs referring to controlled and intentional actions. In (24), using *-taŋ* instead of *-saŋ* transmits an overtone of "intentionality" of falling out of bed.

- (24) *ndaŋ g̃ø:mō khōŋ m̃indzūtāŋ-ne:su*
 yesterday night he.ABS bed.top-ABL
n̄q̃il-taŋ-nuk
 fall-INTENT.MIR-INFERSVIS
 'Oh, he must have fallen out of his bed intentionally last night!'

Unlike the two miratives, evidentials in Tabo do not display any straightforward correlations with controlled versus non-controlled or intentional versus unintentional actions.

Mirative meanings – covering new and unexpected knowledge – in Kurtöp, a Tibeto-Burman language from Bhutan (Hyslop 2011: 588–619, 625–626), can be expressed in perfective aspect, in imperfective aspect, and in two types of copulas – existential and equational. Source of knowledge is expressed independently from tense-aspect, certainty of knowledge, and the mirative range of meanings subsumed under the category of "expectation of knowledge". The forms, and their meanings, are summarized in Table 2.¹⁰

10. This is adapted from Table 155 in Hyslop (2011: 625). I have added glosses used throughout Hyslop's grammar to the forms in this table (incorporating some changes suggested by Gwen Hyslop, personal communication).

Table 2. Information source, expectation of knowledge in Kurtöp (Hyslop 2011 and personal communication, 2012)

	Source of knowledge	Expectation of knowledge	Certainty of knowledge	
Tense-aspect	Perfective	- <i>mu</i> 'inferred; indirect evidence'	- <i>shang</i> (hearer not expected to share knowledge) - <i>na</i> 'mirative; new and unexpected information' - <i>pala</i> 'default'	- <i>para</i> 'presumptive; uncertainty'
	Imperfective	—	- <i>ta</i> 'mirative; new and unexpected information' - <i>taki</i> 'information which is neither new nor unexpected'	—
Existential copula	Affirmative	—	<i>ná</i> 'mirative; unexpected knowledge' <i>nawala</i> 'non-mirative; knowledge neither new nor unexpected'	<i>nawara</i> 'presumptive; uncertainty' <i>naki</i> 'dubitative'
	Negative	<i>mutle</i> 'inferential'	<i>mutna</i> 'mirative' <i>mú</i> 'non-mirative'	<i>mutla</i> 'dubitative'
Equational copula	Affirmative	—	<i>wenta</i> 'mirative' <i>wen</i> 'non-mirative'	<i>wenim</i> 'uncertain' <i>wenpara</i> 'presumptive'
	Negative	<i>minle</i> 'inferential'	<i>minna</i> 'mirative' <i>min</i> 'non-mirative'	<i>minla</i> 'dubitative'
Particles			= <i>sa</i> 'counterexpectation'	
		= <i>ri</i> 'reported, hearsay'	<i>shu</i> 'question particle used if the hearer is not expected to know the answer' <i>yo</i> 'question particle used if the hearer is expected to know the answer'	—

New and unexpected knowledge in perfective aspect is marked with the suffix *-na*. In (25), the speaker was not expecting “a line of people coming from the door”. This “new and unexpected knowledge” is marked with *-na*.

- (25) *ko=ni yoto jong gi=na*
 door=ABL DIRDOWN emerge go-PFV.MIR
 ‘(They) had come out of the door down there!’ (Hyslop 2011: 593)

The perfective mirative does not imply any information source – as shown in Table 2, these belong to different grammatical systems. Further examples are in Hyslop (2011).

Similarly to Kham and !Xun, Kurtöp has a marker of counterexpectation (a clitic =*sa*). In (26), the fact that the speaker would “actually like dogs is counter to [his] expectation, and thus he uses the morpheme =*sa*”. The counterexpectation marker occurs together with the imperfective mirative *-ta*. Co-occurrence of the mirative with the counterexpectation marker is reminiscent of (17), from Kham.

- (26) *ga-ta=sa khwi gapo*
 enjoy-IMPF.MIR=CENTREXP dog FOC.PL
 ‘I like dogs [against my expectation, as new information].’ (Hyslop 2011: 623)

Different mirative forms in Kurtöp, and in Taba, reflect the same range of mirative meanings. The expression varies depending on tense-aspect and polarity value, and the type of predicate. This is comparable to how the same gender values can be expressed differently on adjectives and on verbs (see Aikhenvald 2000b), or how past and future tense values can be expressed on verbs and on nouns in different ways (see Nordlinger & Sadler 2004, Aikhenvald 2012: 158–162). Along similar lines, future in imperatives is often marked differently from future in declaratives (see Aikhenvald 2010: 128–132).

2.3. *Mirative meanings in pronouns*

Mirative meanings expressed through a special set of personal pronouns refer to “unexpectedness” of the knowledge to the speaker.

Shilluk, a Western Nilotic language, has three evidentials: direct (used if the speaker saw the event happen), inferred (if the statement is based on speaker’s inference), and reported (Miller & Gilley 2007: 200). 3rd person independent “mirative” pronouns indicate “that there is something unusual about the O constituent”, if “the particular O is unexpected” or “when the agent should not have performed the action with respect to the goal”. A non-mirative pronoun in (27a) is contrasted with a mirative one in (27b):

- (27) a. *á-'kōbbì kīnnì 'kāl 'gé ká*
 PST-say.TBEN COMP take.TCF.IMPV 3PL.NEUT and
gé kālál'-é
 3PL.NEUT take.TCF-3SG
 'S/he said, "Take them away". And s/he took them away (as expected).'
- b. *á-'kōbbì kīnnì 'gé kó kāl ká*
 PST-say.TBEN COMP 3PL.NEUT NEGMOD take.TCF.IMPV and
gì kālál'-é
 3PL.MIR take.TCF-3SG
 'S/he said, "Don't take them away". And s/he took them away (unexpectedly or wrongly).'

In (27a), the pragmatic reading is neutral: "the action of the agent with respect to the goal is expected or unremarkable". In (27b), "the action of the agent with respect to the goal is unexpected".

Hone, a Jukunoid language from the Benue-Congo family, does not have evidentials. A series of pronouns in this language show that "an action was performed unexpectedly, surprisingly or in an unusual manner" (Storch 1999: 136–137, 2009: 133–134, 2012). The "mirative" pronouns are constructed with the conjunction *bə̀* 'with' and the personal pronoun base. They literally translate as 'I with me', 'you with you', 'he with him', etc., but actually express meanings such as 'I unexpectedly', 'you unexpectedly' (Storch 2009), as in (28):

- (28) a. *kū-yāk bə̀*
 NSP.3SG-PFV-cry MIR.3SG
 'He/she went on unexpectedly [despite the fact that it was forbidden].'
- b. *n-ŋ-βi-é kyèr-u [n-kyèr bəmù]*
 1SG-NEG.PFV-know-NEG cook-NMLZ 1SG-cook MIR.1SG
 'I didn't know yet how to cook, but cooked unexpectedly.'

The implication of the Hone mirative pronouns is that a particular person is performing an action, "even though s/he was not supposed to do so or was not expected to be capable of it", or not allowed to do it. Mirative pronouns only occur with verbs in perfective aspect, and have overtones of focus.¹¹

11. Storch (1999: 136–137) described what she later calls "mirative" pronouns as "focus pronouns". Mirative pronouns in Wapha, a Jukun language closely related to Hone, focus on the subject and "express an extraordinary and miraculous event that has been accomplished" by the subject. Similarly to Hone, mirative meanings are restricted to the perfective aspect (Storch forthcoming, example 15).

A special set of “addressee-dative” pronouns in Ingush, a North-east Caucasian language, has “mirative” connotations whereby “the speaker conveys unexpected but important news to the hearer (the news is known to speaker, unknown to hearer, known by the speaker to be important to hearer)” (Molochieva & Nichols 2011: 2).

These instances of mirative meanings in pronouns cover just one aspect of the mirative range, the “unexpectedness”.

2.4. *Mirative meanings through independent means: An interim summary*

As we can see in Table 1, not every meaning within the mirative range is expressed in every language. The most consistent one is (ii.a), surprise of the speaker, and (iii.a) unprepared mind of the speaker. This could be considered the core meaning of the mirative label (quite consistent with the etymology of the term).¹²

All the languages discussed in this section (with the exception of Hone) have evidentials, marking information source. The expression of evidentials is completely independent of the mirative markers. And in most languages – with the exception of Tsakhur and Quechua – evidentials do not have mirative extensions.

There may well be many more languages with special morphological means for the range of mirative meanings. A clitic with the meaning ‘after all, it turned out to be’ was described for Lillooet, a Salish language, by van Eijk (1997: 202–203). This clitic captures a “post-factum” discovery, by the speaker or the main character. (Lillooet also has an evidential system, referring just to information source.) The emphatic marker in Musqueam, from the same family, appears to convey surprise and counterexpectation (“an adversative quality”) (Suttles 2004: 387). In Haida (an isolate), surprise can be indicated by a nominalization containing a stative verb, or by a clitic homophonous with the interrogative marker (which can occur together with an evidential) (Enrico 2003: 156–168). “Exclamative tense” in Wichita, a Caddoan language (Rood 1996: 589), expresses the meaning of “surprise” (this form is independent of evidentiality marking in the language; also see Rood 1976).

The “apperceptive” marker *-kwun* (or *kun*) in Korean carries “the sense of simultaneous confirmation and exclamation at the speech time”; it occupies a different slot from evidentials (see Sohn 1994: 353–354). According to Martin (1992: 670), this marker “shows a sudden realization, confirmation, interest, delight, surprise, astonishment, or insistence” (also see DeLancey 1997:

12. The term “admirative” goes back to French *admiratif*, from French *admirer* in its meaning ‘to marvel at’. The French verb comes from the Latin deponent verb *miror* ‘to wonder, to be astonished; to admire, to look in admiration’ and its derivative *admīror* ‘to admire, to be astonished at, to wonder’ (see Friedman 2003, 2010, 2012 on the origins of the term).

46, Lazard 1999).¹³ All the sources (including Sohn 1986, 1994; Lee 1985, 1993; Ko 1989) stress that *-kwun* is not an evidential: it occupies a different slot within the verb, and has nothing to do with marking information source: it marks speaker's reaction to knowledge which can be acquired through any means. It does indeed express some of the mirative range of meanings.¹⁴

3. How many “miratives”?

In a number of languages, several forms – each independent of other categories, and distinct from evidentials – express different values within the mirative range of meanings.

Galo (a Tibeto-Burman language from Arunachal Pradesh; Post 2007: 626) has a particle *la(a)ka* which indicates a speaker's attitude of surprise or astonishment, usually at the information reported in the marked clause, but potentially also at the addressee in connection with some aspect of the marked information'. In (29), “the speaker is reacting in astonishment and disapproval at an event unfolding as he speaks” (this is reflected in Post's translation, ‘of all things!’).

- (29) *azèn=gə jesì tíi-díuu la(a)ka*
 friend=GEN urine imbibe-IMP MIR
 ‘(The pig) is drinking his friend's urine, of all things!’

In (30), “the speaker is not astonished at his own ‘speaking’, but rather at his addressee for his lack of awareness in asking him to discuss something which has already been discussed”. This is reflected in Post's translation with ‘what are you talking about’:

- (30) *əgə-m əgə-m mèn-tó-báa la(a)ka*
 ANIND-ACC ANIND-ACC speak-PFV-DIREVPFV MIR
 ‘What are you talking about, I already talked about all that!’

The expression of the mirative is independent of evidentiality. Galo has a set of evidential markers which occupy the same position in the verb phrase as does the mirative (and thus are in a paradigmatic opposition with it). The particle *ben* (Post 2007: 624–625) indicates that the statement is based on inference or deduction (for instance, if someone sees light emerging from a house as a sign that people are likely to be in the house, they will use *ben* to mark

13. The form *-kwun* belongs to the “intimate” register; the main discussion of the “apperceptive” by Martin (1992: 670) is under the form *-kwumen* categorized as “familiar” register.

14. According to an anonymous reviewer of this article, the exact interpretation of *-kun* as a marker of expected or of unexpected information depends on the context, and can be accompanied with different prosodic features and even facial expressions. A full analysis of this fascinating morpheme awaits further investigation.

inference). The absence of *ben* “would suggest that the speaker has in fact seen the people”. This agrees with the general crosslinguistic tendency for visual, or direct, evidentiality to be formally unmarked (Aikhenvald 2004: 72–74). The reportative *juu* (Post 2007: 623–624) marks information known to the speaker through speech report by someone else.¹⁵

In addition to these, there is a “discovery” marker *ji*, which follows a noun phrase or a copula (Post 2007: 638–639). It occupies position two among clause-final particles, while the surprise marker occurs in position one. The “discovery” marker expresses the information as “PREVIOUSLY UNKNOWN (whether to the speaker or to a 3rd person whose thoughts the speaker is modeling, as in a folktale) and/or UNEXPECTED and which just has been discovered, or which some unfolding set of circumstances (including a process of deduction) suggest to probably be the case”.

As such, it may also have an overtone of surprise – similar to *la(a)ka* – expressing “a shock-like reaction to an unfolding and/or unanticipated state of affairs”. In (31), *ji* marks “information which was previously unknown to the protagonist of the story and which has just been discovered by him”. The form is translated as ‘it turns out’:

- (31) *occik=go bə̀ə-tó-là(a) bə̀ə-m uŋŋàa*
 knife=INDV carry/hold-PFV-NF HDSTDOWN-ACC baby
bə̀ə-m kʰi-là(a) dó-düu-kú-nà=ə̀ə
 DSTDOWN-ACC slice-NF eat-IMPf-CMPL-NMLZ.SUBJ=COP.IMPf
ji
 DISC
 ‘Taking a knife, she slices off a piece of the baby and eats it, it turns out.’ (Post 2007: 647)

Dhimal, a Tibeto-Burman language spoken in southeastern Nepal (King 2009: 240–253), has two morphemes “having to do with the integration of information into a speaker’s store of knowledge”. The mirative *la* indicates that “the information presented is new or unassimilated”. The marker *sa* is employed when “the speaker suddenly becomes aware of some proposition and is surprised or in disbelief”.¹⁶

15. These are all clause-final particles in position one. There are also numerous epistemic markers, including “uncertainty” *pə̀* (also position one), assertive *da*, “direct declarative” *jiino* roughly translatable as ‘this is definitely known to me to be the case’ and “indirect declarative” *jiina* ‘this is definitely believed (by someone) to be the case’ (the latter three occupy position two in the clause-final particle slot) (in addition to further conjecture and uncertainty markers, in the same position; Post 2007: 624, 634, 639–640).

16. Called “apparentive” by King (2009).

Table 3. *Evidentials in Lisu*

Form	Meaning
Visual/eyewitness ma^{55} and mu^{55}	Information obtained through seeing
Non-visual dza^{33} , dzo^{33} , and dzo^{35}	Information obtained through hearing, tasting, smelling, or feeling
Inferred na^{55} , du^{33} , pa^{55} , and pe^{55}	Information obtained by reasoning or common knowledge through observing or hearing evidence of an event or state
Reported dzo^{21}	Information obtained from another person

Table 4. *Miratives in Lisu*

Form	Meaning
ye^{55}	New and unexpected information
le^{21} ‘only’ + topic marker + ye^{55}	Anti-expectancy
le^{21}	Question marker used to denote an inference or expected result, which the hearer is supposed to know while the speaker isn’t (may be assumed)
$be^{33} t^h e^{21}$	New and surprising information

Balti, a Western Tibetan language, has a particle *le* which expresses speaker’s surprise (Bashir 2010: 17–18, and further references there). Surprise is expressed independently of marking information source. The reported evidential *lo* can occur with *le* if the surprise comes as a reaction to reported information:

- (32) *salyim-e áta-si di naŋ-po bčhos lo le*
 Salim-GEN father-AG this house built REP SURP
 ‘Salim’s father built this house’ (surprise at reported information)

By using the “past mirative” particle *suk* “the speaker expresses that he was not fully informed of the fact he communicates in the sentence” (Lobsang 1995: 44), that is, that “the state of affairs referred to existed in the past, but has recently come to the awareness of the speaker” (Bashir 2010: 18). It appears that “surprise” and “new information”, “realization” and “discovery” are marked in a different way.

Lisu, also a Tibeto-Burman language (Yu 2005), has four evidentials: visual/eyewitness, non-visual, inferred, and reported (see Table 3). Evidential markers are optional. One clause can contain more than one evidential (see Aikhenvald 2004: 87–93 for an overview of similar instances).

Further four markers with various meanings within the label “mirativity” are listed in Table 4. Different miratives cannot occur together. The four miratives express different values of the mirative range. The mirative marker $\gamma\epsilon^{55}$ indicates new information “that is discovered by the speaker”, and unexpected information which goes against a presumption, as in (33):

- (33) $a^{55}sa^{33}mi^{55}$ gua^{33} $tho^{21}\gamma^{21}$ so^{33} tia^{55} si^{21}
 Asami(third daughter) that book learn DUR IMPF.yet
 $\gamma\epsilon^{55}$
 MIR
 ‘Asami is still studying [the speaker presumed that Asami would have finished her study].’

A compound sentence-final particle $b\epsilon^{33}t^h\epsilon^{21}$ consisting of the verb $b\epsilon^{33}$ ‘say’ and a tense-aspect-mood marker expresses ‘the sense of new and surprising information’:

- (34) ji^{35} $za^{21}n\emptyset^{33}$ gua^{33} na^{21} $t\tilde{o}^{55}sa^{55}bi^{21}di^{33}$ the^{215} go^{33}
 ONOMAT child that TOP caterpillar one.CLF pick
 $t\epsilon^{35}$ si^{55} ji^{55} $my^{21}ly^{35}$ ga^{33} xo^{21} a^{33} be^{33} je^{33} tia^{55}
 hold SEQ 3SG mouth LOC put STAT ADV do DUR
 $b\epsilon^{33}t^h\epsilon^{21}$
 MIR
 ‘Goodness! The child was holding a caterpillar and trying to put it into his mouth.’

The question marker le^{21} denotes “inference” which is against the speaker’s expectation:

- (35) na^{21} ba^{35} la^{33} le^{21}
 2PL father come Q.MIR
 ‘Did your father come [the speaker expected that someone instead of the father would come]?’

Information “opposite to what was expected or presumed” is indicated by le^{21} ‘only’ plus topic marker plus $\gamma\epsilon^{55}$. Similarly to !Xun, the counterexpectation marker cannot occur with the other markers along the mirative range: they occupy the same slot in the verbal phrase. This is unlike Kham (see example (17) above and Watters 2002: 296), and Kurtöp (22), where a counterexpectation marker is compatible with a mirative.

Evidentials and miratives can occur together. Yu (2005) remarks: “since mirative markers indicate new knowledge, ‘unprepared mind’, or unexpected and surprising information, while evidentials mark the source of information through seeing, hearing, tasting, smelling, feeling or inferring and so on, so

logically miratives precede evidentials”. In (36), the visual and the reported evidentials and the marker of new and unexpected information occur together:

- (36) $a^{55}sa^{33}mi^{55}$ gua^{33} tho^{21} y^{21} so^{33} tia^{55} si^{21}
 Asami(third daughter) that book learn DUR IMPF.yet
 ye^{55} ma^{55} dzo^{21}
 MIR VIS REP
 ‘Asami is still studying [the speaker was told that Asami had not finished her study as he expected].’

The four markers form one paradigmatic set and cannot occur together. This is the most elaborate expression of the mirative range of meanings by grammatical means which I have encountered so far.

We can conclude that, in the languages discussed here, different meanings within the mirative range acquire special expression, along the following lines. Firstly, in Galo and Balti, (i) (sudden discovery, sudden revelation or realization) is marked differently from (ii) and (iii) (surprise and unprepared mind). Secondly, in Dhimal, new or unassimilated information (iv) is marked differently from (i) sudden discovery associated with (ii) surprise. Finally, in Lisu, there are four markers covering different combinations of the range of meanings: (v.a,c) (new information for the speaker and 3rd person); (iv.a) (counterexpectation to the speaker); (v.b) (information new to the addressee); and a combination of (ii) (surprise), (iii) (unprepared mind), and (iv) (new information).

4. Mirative meanings through other means

Numerous verbal categories can acquire overtones of a speaker’s “unprepared mind”, sudden awareness, unexpected new information, counterexpectation, and concomitant surprise. These include a variety of tense and aspect, manner marking, reality status and mood categories (not connected to information source), evidentials, and person marking. “Surprise” is a semantic feature of exclamatory sentences. Most languages have lexical means to express various overtones associated with the mirative range.

The spectrum of meanings expressed through grammatical categories other than special “mirative-only” markers is what DeLancey (1997, 2001) refers to as “mirative as a semantic space”. Following the approach in Aikhenvald (2004, 2010), I refer to them as “mirative strategies” – that is, extensions of essentially non-mirative categories which acquire mirative meanings within a given context.

4.1. *Verbal categories not connected to information source as mirative strategies*

Tense categories may acquire overtones to do with surprise and information unexpected to the speaker. In Hindi/Urdu, the aorist (the verb form typically used as a narrative past) may express “surprise” of the speaker (see Montaut 2006). This meaning is mainly attested in “oral interaction”, and mostly with a “quasi-exclamative” intonation pattern. In (37), a couple and their fifteen year old son visit their old friend after a long time. The friend can hardly recognize the boy whom he had known as a child. The speaker is “confronted with an unexpected fact or situation (here the size of the boy)” and uses the “aorist” rather than the perfect or present, “which would only mean a neutral statement”. Note that “the use of the same form in the aorist would of course have a different meaning in a narrative, ‘he became very tall’ ” (Montaut 2006: 82):

- (37) *Are! kitnâ baRâ ho gayâ!* (?**ho gayâ hai*)
 Hey! how.much tall be go[become]-AOR be go-PRF
 ‘My! How tall he has become!’

In the variety of Spanish spoken in Andean countries, also known as *castellano andino*, some compound tenses have mirative overtones (without any link to information source) (e.g., Laprade 1981). In Peruvian Spanish, the pluperfect (*pluscuamperfecto*) is used this way (Escalante & Valderrama 1992: 118, Adelaar forthcoming):

- (38) *Así había.sido la voluntad del Taytacha*
 like.that be.3SG.PLUP ART.F will of.ART.M God
 ‘That is how God’s will turned out to be.’

In South Conchucos Quechua the past perfect (which also places the event in past time), or the continuous *-yka:* with the narrative past *na:*, or the narrative past *-na:* by itself; or, in very few instances, the recent past *-sh((q)a)* can indicate “surprise” of the speaker (Hintz 2007: 58–59, 171–174). In all Quechua languages, a three-term system of evidentials is independent of tense and aspect.¹⁷

In Semelai, an Aslian language with no grammatical evidentials, irrealis marking on a verb of perception or cognition, or of affective state, has a meaning of something “counter to expectation or normality”, “to X’s surprise” (Kruspe 2004: 286–290, Aikhenvald 2004: 211). The irrealis in Semelai may

17. Along similar lines, Cerrón-Palomino (2008: 142) shows that across the putative grouping known as Quechumara, that is, the totality of Quechuan and Aymaran languages, “narrative” or “mythical” past has a second usage, a “surprise” past which would have been adopted by Andean Spanish as an additional meaning of the *pluscuamperfecto*.

be used by the narrator “as a tool to mark unexpected events which are deemed, for whatever reason, as being counter to expectation or normality” (to the speaker or to the main character of a story) (Kruspe 2004: 290–291). This mirative strategy in Semelai is reminiscent of mirative forms in languages like Magar and Tariana which reflect the reaction, or the state of knowledge, of the main character and not just the speaker. As Kruspe (2004: 290) points out, irrealis is, by its nature, “negation of reality”. We can recall, from (18), that in Caddo the mirative marker which indicates “surprise” of the speaker always occurs with the irrealis. This is how Chafe (1995: 357–358) explains it: “although the event or state itself is real enough [...], the fact that it is contrary to the speaker’s expectation – a negation of normality – is what is responsible for the use of the Irrealis. It is as if the speaker were saying: ‘It’s unreal that he knows my name!’”. This highlights a semantic link between “surprise” and counterexpectation, and irreality, reflected in the use of irrealis as a mirative strategy in Semelai.

2nd person imperative forms in Russian may refer to unexpected and spontaneous actions, without any implication of a command (see references and discussion in Aikhenvald 2010: 248–250). This usage has been called “the dramatic imperative” by Isačenko (2003: 488–502; see Gronas 2006, for an overview of the literature). In Tatar, a Turkic language, the meaning of unexpected action and ensuing surprise of the speaker is conveyed by a 3rd person singular prohibitive accompanied by the interrogative particle *-me* (which does not have an interrogative meaning in this context) (Nasilov et al. 2001: 218).

- (39) *kič belän färid kil-ep ker-mä-sen-me*
 evening with Farid come-CONV enter-NEG-IMPV.3SG-INTER
 ‘Unexpectedly, Farid came in the evening.’

In Ashéninca Perené, an Arawak language from the Campa subgroup in Peru, the incomplete suffix *-it* can have an overtone of surprise (Mihás 2010, personal communication):

- (40) *kityonk-ak-it-ak-i pi-tavato*
 be.red-CAUS-MIRATIVE-PFV-RLS 2.POSS-shinbone
 ‘[The fire] caused your shinbone to turn red, unexpectedly.’

The suffix *-it* in Ashéninca Pichis (Payne & Payne 2005: 43) marks “rapid” action, and also indicates surprise. In Caddo, the infrequentative proclitic *wás=* in combination with irrealis has overtones of surprise: it “indicates that an event so rarely occurs that it is unexpected” (Melnar 2004: 54).

4.2. *Mirative extensions of information source markers*

That evidentials – information source markers – are associated with the mirative range of meanings, focused on surprise and the unprepared mind of the speaker (and just occasionally, of the addressee), was highlighted by DeLancey (1997, 2001).

Which evidentials would tend to have mirative extensions depends on the structure of the evidential system and the number and semantics of the terms within it. In small evidential systems, with firsthand (or eyewitness) evidential versus non-firsthand (or non-eyewitness evidential) evidential, non-firsthand typically acquires mirative meanings, especially in combination with 1st person (as in oft-quoted examples from Turkish, based on Slobin & Aksu-Koç 1982, Aksu-Koç & Slobin 1986).¹⁸

A small system of evidentials may consist of a non-firsthand evidential versus an “everything else” form (an A1 system in Aikhenvald 2004). A non-firsthand evidential typically covers the meanings of inference and speech report. This type of evidential is sometimes referred to as “inferential” (see Jacobsen 1986 on the history of the term, and further definitions and overview in Aikhenvald 2004: 29–31). It may acquire connotations of surprise.

Mapudungun, an isolate spoken in the Andean areas of Chile and west central Argentina, has an evidential marker *-rke-* which has a complex of meanings typical for non-firsthand evidential.¹⁹ In (41a) it refers to reported information; in (41b) the same *-rke-* describes what one has inferred based on existing evidence; and in (41c) this same evidential form can express speaker’s surprise at something unexpected:

- (41) a. *kuyfi miyaw-ürke-y mawida mew*
 long.ago walk-*rke*-IND forest through
 ‘Long ago s/he wandered through the forest [it is said].’
 b. *weðweð-pe-rke-la-y*
 crazy-PROX-*rke*-IND-3
 ‘He must be crazy [that one, he travelled through all that rain].’
 c. *miyaw-pa-rke-y mi*
 walk-CISLOC-*rke*-2SG.IND
 ‘So you are (around) here! [What a surprise!]’

In his classic description of Takelma, an isolate from south-western Oregon, Sapir (1922: 158, 200) outlines the “inferential”, which “implies that the action expressed by the verb is not directly known or stated on the authority of the

18. See further examples in Chapter 6 of Aikhenvald (2004: 196–207). This non-firsthand evidential is called “*médiatif*” by Lazard (1999), also Guentchéva (1996).

19. Smeets (2007: 246–247, 110), Zúñiga (no date).

speaker, but is only inferred from the circumstances of the case or rests on the authority of one other than the speaker". The same form is frequently used "in rhetorical questions of anger, surprise, wonder, and discovery of fact after ignorance of it for some time".

Non-firsthand evidentials can be used to refer to speaker's reaction of surprise at information acquired visually, or in any other way, in numerous languages, including Worrora, an Australian language (Clendon forthcoming), Gitksan, a Tsimshianic language (Peterson 2010), and Abkhaz (Chirikba 2003), to name a few. A mirative extension can be limited to one subclass of verbs: in Yukaghir, they are characteristic of verbs of internal properties (Maslova 2003a: 229; 2003b: 174). A mirative meaning can be strengthened by an additional, often optional marker: Abkhaz (Chirikba 2003: 249) employs an emphatic particle or an emphatic interjection.

The surprise may be that of the speaker or of the main character. Jarawara, an Arawá language from Brazil, has a two-term system of firsthand and non-firsthand evidentials (Dixon 2003, 2004: 203–206). The Jarawara story from which (42) is taken is told in far past firsthand. It is a personal reminiscence by the narrator about how he and his companions had gone up a strange river and come across a patch of forest full of game animals. Their surprise is through using the immediate past non-firsthand marking (Dixon 2003: 172):

- (42) *bani_s mee wina-tee-hani*
 animal(m) 3NONGS live-HAB-IMPST.NONFIRSTH.F
 'There were surprisingly many animals.'

(43) describes the surprise experienced by a 3rd person – Okomobi, the village chief – who thought he was given a cup of cane whisky but it turned out to be water:

- (43) *Okomobi faha hi-fa-hani ama-ke*
 Okomobi water o-drink-IMPST.NONFIRSTH extent-DECL.F
 'Okomobi (to his surprise) drank water.'

The surprise Okomobi experienced is coded through non-firsthand evidential. A mirative extension may imply new knowledge and surprise for both the speaker and the addressee. In Archi, the non-firsthand marker *li* (Kibrik 1977: 230–231) can be used if the speaker participated in a situation the meaning of which is unknown to the hearer, and turns out to be unexpected for the hearer.

Whether or not a visual or firsthand evidential can have mirative overtones is an interesting question. J. Hill (2005: 63, 66–69) describes the evidential clitic *=(a)m* in Cupeño as a mirative used "to express that the utterance is based on unimpeachable firsthand knowledge where the speaker is usually speaking in the moment of discovery". It is in a paradigmatic relationship with the other

evidential marker, the reportative =*ku'ut*. In J. Hill's (2005) analysis, the clitic =(a)*m* is both an evidential and a mirative. Cupeño is no longer actively spoken. J. Hill only turned her attention to mirativity while writing her grammar a long time after her fieldwork had been completed; the grammar was based on texts and notes collected decades ago when Cupeño still had some speakers or rememberers. There is unfortunately no way the exact status of =(a)*m* can be ascertained.

The status of the form *hdug* in Lhasa Tibetan as a sensory evidential, or as a visual evidential, remains controversial. The case for *hdug* as a marker of information source appears to be likely (and agrees with DeLancey 1985: 65). However, to make it fully convincing, it needs to be placed within the context of a full grammar of a language.²⁰ At present, Cupeño and Lhasa Tibetan are only LIKELY instances for visual and sensory evidentials with mirative overtones.

In larger evidential systems, mirative overtones tend to be associated with the inferred or the reported term (see Aikhenvald 2004, 2006 for an overview of systems attested so far). Washo (Jacobsen 1964, 1986: 8) has three evidentials: visual *-iye?*, auditory *-delem*, and *-á?yi?* 'inferential' which expresses an "post-facto inference with some connotation of surprise". The inferred evidential acquires mirative readings in many three-term systems, including Nganasan (Gusev forthcoming). The assumed evidential *-mein* in a four-term system in Shipibo-Konibo may be used when "the speaker is confused or surprised because what he experiences is totally unexpected or contradicts his knowledge of the world" (Valenzuela 2003: 48). Whether the evidential *-mein* has mirative overtones or not depends on the context. There are a number of other strategies to mark surprise: an emphatic suffix, a contrastive suffix, and a periphrastic verb form involving a doubled auxiliary. In Tsafiki, another language with four evidentials, the evidential marking inference from visible traces can indicate surprise of the speaker who has made an unexpected discovery (Dickinson 2000: 411).

A term in a larger evidential system can have a mirative extension. The Northern Nambiquara language Mamaindê (spoken in Brazil) has six evidentials: marking what one saw (visual); what one did not see but heard or smelt or tasted (non-visual); what one inferred based on visual traces or assumption; what belongs to "general knowledge"; what one knows as secondhand report; and what one knows as thirdhand report. The inferred evidential has mirative extensions, or "the additional function of expressing surprise" (Eberhard 2009: 466–467). An outsider returned to the village after many years of absence and

20. Discussion of this and related forms in grammars of various Tibetan varieties, e.g., Denwood (1999), is inconclusive as to their status as exclusive markers of information source. This is the reason why evidentiality in Tibetan varieties was hardly mentioned in Aikhenvald (2004).

has not forgotten the language. The inferred evidential is used in its “mirative” function:

- (44) *wa-sen-na-sa-leʔi-tu* *mamāinsa-a-haiʔki*
 2SG-speak-1PL-NCL:SOUND-PST-FIN Mamaindê-GEN-language
set-thahta-nu-sa-leʔi-tu
 speak-O1.PL-2.SUBJ-NCL:SOUND-PST-FIN
nakajuannūn-ʔna-jeʔ-le-Ø-nʔ-sihīn-wa
 forget-2.O-EMPH-1.PST-3.SUBJ-NEG-PST/INFER-DECL
 ‘Your old speech, the Mamaindê language with which you used to
 speak to us, you clearly have not forgotten it.’

The speaker’s surprise comes as a result of “deferred realization”. This is a post-factum inference made on the basis of something that the speaker had previously witnessed but only later could realize what it had meant. “Surprise” does not depend on the way in which information was acquired. A reported evidential can also acquire connotations of “surprise” and “after-the-fact” realization. In his incisive analysis of the use of the reported evidential in Quechua riddles, Floyd (1996: 919) pointed out a link between mirativity and “after-the-fact” realization. Similar meanings of the reported evidentiality marker *lĕk’eh* in Western Apache, and their overtones to do with speaker’s unprepared mind and surprise based on deferred realization, were discussed by de Reuse (2003) and summarized, within a typological perspective, in Aikhenvald (2004: 203–204).

A mirative overtone of a non-mirative category can depend on person value. Ladakhi (Tibeto-Burman; Bhat 1999: 73–74) has several evidentials, including “reported”, “observed”, “experienced” (e.g., by feeling), and “inferred” (in addition to four further markers distinguishing specific kinds of inference). A further suffix (*-tshuk*) is used with 3rd person subjects as a token of narrative past “in folk narrations, old stories, and historical, mythological and legendary narrations” (Koshal 1979: 217–225), in combination with the reported evidential. With 2nd person subjects, this same suffix, also accompanied by the reported evidential suffix, implies that the speaker is surprised that the subject did, or decided to do something which the speaker did not expect (the suffix *-tshuk* can occur with a number of tense-aspect forms):

- (45) *ñe-rəŋ-ŋə* *hindi* *khyen-nət-tshuk*
 2SG.HON.DAT Hindi know-REPPRES-NARR
 ‘So! You know Hindi [the speaker is surprised at it].’ (Koshal 1979:
 218)

In combination with 1st person subject, the suffix carries the implication that the “speaker would have done the action without realizing that it was inappro-

priate or wrong for him to have done it, but has realized his folly” (Koshal 1979: 218–219).

A non-firsthand evidential may have mirative overtones, even if the language has special admirative forms for marking new knowledge and surprise. In Tsakhur (Tatevosov & Maisak 1999c: 232–233), the non-firsthand evidential may acquire a mirative connotation if something happens contrary to the speaker’s expectation and much to their regret. The speaker has told his son not to go to a wedding. Nevertheless, the son is going to go. The speaker did not expect his son to disobey, and says (46).

- (46) *ru šā-qa ulq̄-a wo=r*
 you.1 there-ALL 1.go-IMPF be=1.NONFIRSTH
 ‘So you are still going there!’

If the speaker is talking about themselves, to employ a non-firsthand, non-visual, or inferred evidential appears counterintuitive: can’t I see – or have firsthand experience – of what I am doing, or feeling, myself? This is where an evidential acquires additional overtones (described as “first-person effect” in Aikhenvald 2004: 220), to do with lack of volition, intentionality, and generally lack of control or awareness of what had happened. These often have an overtone of surprise, new information, and “unprepared mind” of the speaker (see Aikhenvald 2004: 225–227, and examples there from Northern Khanty, Turkish, and Lithuanian). Along similar lines, in Kalasha (Dardic; Bashir 1988: 48–54) – with a distinction between firsthand and non-firsthand evidential – the non-firsthand with a 1st person agent “gives a sense of unconscious or inadvertent action” (Bashir 1988: 53–54) and ensuing “surprise”.

In Khwarshi, a Northeast Caucasian language, the past unwitnessed form can be used with 1st person subject. This refers “to a situation where the speaker is not conscious or the speaker suddenly realizes something as a surprise” (Khalilova 2009: 229), as in (47).

- (47) *do Ø-uh-un Ø-eč-un-ay-ko*
 1SG.ABS I-die-PFV.CONV I-be-PST.UNWIT-NEG-INTENS
 [Malla-rasan got up from the place where he was, thinking that he had died and then said:] ‘Apparently I had not died!’

A combination of non-firsthand evidential and 1st person, or 1st person and narrative enclitic (reported evidential) produces overtones of surprise to the speaker in Hinuq (Diana Forker, personal communication, 2011).

A morpheme on its way towards evolving into a grammaticalized reported evidential may develop semantic overtones similar to those of a true reported evidential. The reported particle *dizque* (literally, ‘(it) says that’) in Colombian Spanish is a case in point. An erstwhile marker of reported speech, it developed a variety of meanings associated with non-firsthand information and can

also refer to non-volitional and uncontrollable actions which go against the speaker's expectations (Travis 2006). An example of this mirative extension is in (48). To his disgust, the speaker has been given a job cleaning bathrooms. He lists a number of ways in which he is unsuitable for the job because he is oversensitive to cleanliness. He expresses his disbelief at finding himself in this position. This is where he uses *dizque*. In this example, *dizque* does not mark reported speech. Rather, it indicates that the speaker has no control over the situation. In Travis's words, "it also expresses an element of surprise, as though he has all of a sudden found himself in this terrible situation".

- (48) ...yo, que incluso algunas veces limpié la taza que otro había chapoteado para que quien usara el baño después de mí no fuera a pensar que el descarado había sido yo; yo, por Dios, *dizque* a limpiar baños
 '... me, who even sometimes wiped the toilet bowl that someone else had splattered so that whoever used the bathroom after me wouldn't think that the shameless one had been me; I, for God's sake, *dizque* to clean bathrooms' (Travis 2006)

As argued in Aikhenvald (2004), several interconnected semantic paths give rise to mirative readings of evidentials. The first path is shown in (49).

- (49) Lack of firsthand information → speaker's non-participation and lack of control → unprepared mind and new knowledge → mirative reading

This path explains the frequent link between non-firsthand specification, on the one hand, and new information and "unprepared mind" on the other. We have seen in the examples above that mirative overtones are often interconnected with the speaker's lack of control and lack of awareness of what's going on. The lack of control and lack of awareness is a characteristic effect of the use of 1st person with non-firsthand evidentials in small systems. This is why mirative extensions frequently occur in 1st person contexts.

An alternative semantic path is shown in (50).

- (50) Speaker's deliberate non-participation → distancing effect → presenting the information as new, unexpected and thus "surprising"

A deliberate "distancing" effect of an inferential evidential creates the possibility of presenting information as new and thus "surprising". The paths presented in (49) and (50) are interconnected: the main difference between them is whether the speaker does or does not exercise deliberate distancing or non-participation.

(51) involves the concept of “deferred” realization – whereby the speaker gives a post-factum interpretation to what they may have observed in some way. Deferred realization is an integral part of mirative meanings in all systems where mirativity is associated with inference. Deferred realization does not, however, necessarily imply a mirative reading (Maslova 2003b: 224). And it is also possible that in some languages – such as Western Apache (de Reuse 2003), where evidentiality is not a single grammatical category – “deferred realization” is a special semantic category overlapping with a putative evidential.

- (51) Deferred realization: speaker sees or learns the result but interprets it post factum → the newly understood result is unexpected and thus surprising

None of these paths are unique to any particular evidentiality system.

“Deferred realization” can be linked to the speaker’s surprise at the post-factum interpretation of what one had seen, or heard, or inferred. This interpretation is part of inference based on the erstwhile perception (which does not involve any other information source).

However, whether “deferred realization” always has to involve surprise remains an open question. One of the inferential evidentials, *-biw* in Kashaya (Oswalt 1986: 42), describes events or states perceived by some means and which have become interpretable later – for instance, if a woman saw a man approaching but could not recognize him until he arrived, she could say ‘it is *-biw* my husband’. We hypothesize that whether a newly discovered piece of information is indeed surprising or not may well depend on the context.

4.3. *Person marking as a mirative strategy*

In a number of Tibeto-Burman languages, e.g., Lhasa Tibetan, Akha, Chepang, and Newari (DeLancey 1997: 44), as well as in Tsafiki (Barbacoan; Dickinson 2000), the alternation between conjunct and disjunct person marking marks new information and surprise, especially in 1st person contexts. The disjunct person marking indicates something out of the speaker’s control, unexpected and thus surprising.

In Tsafiki (Dickinson 2000), conjunct markers are used with 1st person subjects in statements and 2nd person subjects in questions. (52a) is a normal way of saying ‘I have money’. The conjunct marking appears, as expected. The personal pronoun is omitted: 1st person reference is understood, based on the marking on the verb. If, however, the speaker suddenly discovers to his surprise that he has some money which he did not think he had, the disjunct marker would be used, as in (52b).

- (52) a. *kala ta-yo-e*
 money have-CONJCT-DECL
 ‘(I) have money.’
 b. *kala ta-i-e*
 money have-DISJCT-DECL
 ‘(I) have money! [What a surprise!]

As Curnow (2001) puts it, conjunct-disjunct person marking systems are not “grammaticalized mirativity”. This is a mirative strategy – a situation whereby forms whose meanings have nothing to do with the mirative acquire mirative overtones in a particular context.

Mirative meanings can be a “side-effect” of a variety of forms with other meanings and functions. Tabo (a Tibetan dialect; Hein 2007: 201) offers an option of employing polar questions to express speaker’s surprise (there is no information about the intonation pattern). A polar question may or may not be accompanied by an exclamatory *ōhō*:

- (53) *ōhō tū: nqul-uk-pa*
 oh.EXCLM boy walk-VIS-INTER
 ‘Oh, the boy is walking!’

In Shilluk (Miller & Gilley 2007: 201–202), if a participant acted counter to expectation, the ergative marker is omitted and the independent pronoun in the transitive function has low tone rather than normal high tone. Many languages have special markers of “counterexpectation”, and emphatic markers and constructions which cover some, if not all, of the mirativity range of meanings.²¹

4.4. *Mirative strategies: An interim summary*

The range of mirative meanings can appear as overtones of a number of verbal categories, among them tense, aspect, reality status, and evidentiality, and also person marking systems and interrogatives. “Surprise”, “lack of previous awareness”, and speaker’s “unprepared mind” can result from many kinds of information source, including visual, non-visual, inference, and speech report.

21. In a number of cases the status of a form with a mirative range of meanings appears to be problematic; see, for instance, the discussion of Kāmvirī, a Dardic language, by Bashir (2010: 6–7), and Strand (2010). Sunwar has an evidentiality system which is independent of mirative meanings; however, the analysis of mirative meanings in the language by DeLancey (1997) and Borchers (2008) are different (maybe due to dialectal differences). Some mirative meanings in Sunwar are expressed through an “unexpected action” construction (DeLancey 2011: 349). As pointed out by Gates (2010), the exact status of mirative meanings in Dzhongkha (Watters 2007), Dongwang (Bartee 2007), and Tshangla (Andvik 2010) also remains to be investigated. Possible semantic differences in different constructions with mirative meanings in Tsakhur and in Archi also require further study.

Reaction to the newly acquired information in the form of surprise, lack of expectation, revelation, and sudden discovery is likely to take place post factum – after the information has been acquired, and then understood and interpreted (described as “deferred realization”). This accounts for the predominance of inferred evidentials (especially those with inference based on visible results) as mirative strategies.

Inferential, non-firsthand, and reported evidentials in the context of 1st person may be associated with actions out of the speaker’s control – one of the bases for “deferred realization” and surprise as additional meanings of these in some languages discussed above; also see (49–51).

5. Mirative meanings in grammar: What can we conclude?

The range of mirative meanings acquires special marking in numerous languages, from various parts of the world. The grammatical category labelled “mirative” across languages subsumes the following values:

- (i) sudden discovery, sudden revelation or realization;
- (ii) surprise;
- (iii) unprepared mind;
- (iv) counterexpectation;
- (v) new information.

Each of these can be defined with respect to (a) the speaker, (b) the audience (or addressee), or (c) the main character.

In every language where mirative has been postulated as a separate category, it stands apart from other categories in terms of (i) semantics, (ii) combination with other categories, and (iii) position in the verbal word or verb phrase. We can recall, from Sections 2.2.1 and 2.2.2, that in Tariana and in most varieties of Quechua mirative forms cannot be negated. In !Xun they cannot occur together with the counterexpectation marker. And in Magar miratives occur with a limited choice of aspects.

As shown in Table 1, miratives in different languages make a choice of one or several mirative values. In the majority of languages in Table 1, miratives include surprise and unprepared mind of the speaker. In some – as in Quechua – this may not be the case (for others, e.g., Khinalug, we do not have the information). In numerous languages, including !Xun, Kamsa, Magar, nDrapa, and Shilluk, mirative forms have emotional values and overtones of regret or disapproval. In Quechua, they are “objective statements”.

A number of languages have two, or more, mirative markers. “Surprise” and “unprepared mind” of the speaker acquires different marking from “sudden discovery” in Galo and Balti. Information “new” to the speaker is marked differently from “sudden discovery” in Dhimal. Lisu has four special markers, covering different facets of the mirative range (see Section 3).

All this confirms DeLancey's (1997) thesis that mirativity is a special category which deserves recognition in the typological literature. Its semantic domain is "expectation of knowledge" (using Hyslop's 2011 term) or "the status of knowledge". Now, fifteen years on, we can refine DeLancey's proposal.

Mirativity is best viewed as a cover category with the values (i)–(v). When analysing a language, it is no longer enough to say that it has "mirativity": a grammarian would need to specify the values of the category.

In each case, miratives are different from evidentials, in their semantics, use, and occurrence with other categories. This follows from the meanings of the mirative range: "surprise", "unprepared mind", and "sudden realization" can be a reaction to information obtained through any source. Evidentials may acquire mirative overtones – typically, a combination of surprise, unprepared mind, and sudden discovery by the speaker. This agrees with the fact that evidentials primarily reflect the information source of the speaker. However, in Archi, the non-firsthand evidential with mirative overtones may reflect surprise of the addressee (Kibrik 1977: 230–231). Mirative range of meanings can also be expressed through person marking or aspect choice.

Mirative forms may have further discourse functions. The mirative in !Xun marks "the main point of the story" (König forthcoming). In Magar, the mirative can be used in narratives to mark the surprising and focal points of the narrative. This usage is comparable to the ways in which evidentials as mirative strategies may be manipulated to create special discourse effects. For instance, in Abkhaz, a Northeast Caucasian language, crucial and unexpected "asides" can be cast in the non-firsthand evidential (Chirikba 2003: 317, and a summary in Aikhenvald 2003a). In Magar, Cantonese, and !Xun, miratives can be used as markers of rhetorical questions (evidentials as a mirative strategy were used in a similar way in Takelma). The ways in which miratives are used in actual discourse is a matter for a further typological investigation.

The mirative category appears to be susceptible to linguistic diffusion. It is a feature shared by Quechua languages and Aymara, a genetically unrelated language which has been in contact with Quechua for a long time (Adelaar 2004, Cerrón-Palomino 2008). It has also made its way into Andean Spanish (Laprade 1981).

Mirativity appears to be more prominent in some language families than in others. It is a feature of numerous Tibeto-Burman languages, but appears to be a rare bird in South America, in Australia, and in New Guinea. This is one of the questions for future study.

Every language has a way of expressing sudden discovery, unexpected information, and concomitant surprise – that is, the mirative range of meanings. But this does not have to be encoded in grammar. There may be a verb 'to be surprised' (e.g., Tucano *mari* 'be surprised, admire'). Musqueam has a number of special exclamatory words (Suttles 2004: 468–470) used to express surprise.

Exclamative clauses usually have overtones of surprise and new and/or unexpected information (see Olbertz 2009). Surprise may be indicated through interjections, as in English *wow!* or Tariana *kwe!*, or through special exclamatory intonation – as in English, or Musqueam. This is akin to how every language has a way of referring to time as a real-world category. Many languages also have a grammatical category of “tense”. Words such as English *yesterday* or *last night* can hardly be treated as tense markers. Following the same principle, it would not be appropriate to extend mirative, or the grammatical category of “expectation of knowledge”, to lexical means.

A final remark is in order. As linguistic typology develops, our analytic tools and pool of categories become more fine-grained. The recognition of a separate concept of “mirative” or admirative by DeLancey (1997) has allowed typologists and grammar analysts to identify, and label, a range of meanings distinct from any other category. Mirativity is indeed a valid notion and a valid label. It will continue being used in typologically-informed grammars and typologies informed by them.

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Abbreviations: 1/2/3 1st/2nd/3rd person; A subject of a transitive verb; ABL ablative; ABS absolute; ACC accusative; ADD additive; ADM admirative; ADV adverbial marker; AG agentive; ALL allative; ANIND anaphoric individuator; ANT anterior; AOR aorist; AORINFER inferential aorist; ART article; ATT attributive; AUX auxiliary; BEN beneficiary; CAUS causative; CISLOC cislocative; CL class; CLF classifier; CMPL completive; CMPR comparative; CNTREXP counterexpectation; COH coherence; COMP complementizer; CONJCT conjunct; CONSTR construction; CONT continuous; CONV converb; COP copula; CUST customary; DAT dative; DECL declarative; DELIM delimitative; DEM demonstrative; DIRDOWN direction down; DIREVCERT direct evidential with overtones of certainty; DIREVPFV direct evidential perfective; DISC discovery; DISJCT disjunct; DSTDOWN distal downward direction; DUR durative; EMPH emphatic; EPIST epistemic marker; ERG ergative; EXCLM exclamatory; F feminine; FIN final nominal suffix; FIRSHT firsthand evidential; FOC focus; GEN genitive; HAB habitual; HDSTDOWN hyperdistal downward direction; HON honorific; IMPST immediate past; IMPF imperfective; IMPV imperative; IND indicative; INDV individuator; INFER inferred; INFERSVIS inferred visual; INTENS intensifier; INTENT intentional; INTER interrogative; IO indirect object; IRR irrealis; J J-noun class in Chechen; LOC locative; M masculine; MIR mirative; MIR(NONCONTR) mirative in

non-control verbs; N noun class in !Xun; NARR narrative; NCL noun class; NEG negation; NEGMOD negation modal; NEUT neutral; NF non-finite; NMLZ nominalization; NOM nominative; NONFIRSTH non-firsthand; NONSG non-singular; NONWIT nonwitnessed; NSP non-specified subject pronoun; O object; ONOMAT onomatopoeia; PFV perfective; PL plural; PLUP pluperfect; POL polite; POSS possessive; POT potential; PRF perfect; PROG progressive; PRON pronoun; PROX proximity; PROX proximal demonstrative; PST past; Q question; RECP reciprocal; RECPST recent past; RECWITPST recent witnessed past; REP reported evidential; REPPRES reported present; RLS realis; S subject of an intransitive verb; SEQ sequential; SG singular; STAT stative; SUBJ subject; SURP surprise; TBEN transitive benefactive; TCF transitive centrifugal; TOP topic; UNWIT unwitnessed; VIS visual.

Appendix: An unsatisfactory account

Nathan Hill's attempt (in this issue) to show that "mirativity does not exist" is highly unsatisfactory, representing a step backward rather than forward by suggesting that the "mirative" complex of meanings is nothing but a kind of evidentiality. Hill attempts to reanalyse the existing grammars and analyses, taking examples out of context, and trying to reinterpret them to suit his point.

From the very beginning of his attack on mirativity, Hill simplifies the concept, reducing it to simply "new information", presumably, based on reading DeLancey's (2001: 369) abstract. Many of Hill's criticisms are based on a selective reading of sources and ad-hoc reinterpretations of examples taken out of context. The list of semantic values of mirative in this paper (see Section 2.1) is based on DeLancey (1997, 2001), and the grammars discussed within this paper; this was summarized in Aikhenvald (2004: 197–215).

Watters (2002) provides a concise and explicit discussion of mirativity and the ways in which it differs from evidentiality (see Section 2.2.1 above). Hill attempts to reinterpret Watters' examples without having read the full grammar (his Section 3.3.1). Hill also misinterprets the structure of the Kham mirative construction: *oleo* is not a particle. As Watters (2002: 289) shows, the mirative construction in Kham consists of the auxiliary use of the existential copular verb 'be' in 3rd person singular form (*o-le-o*) and a nominalized form of the verb. This is a point of structural similarity between Kham, Magar, and a number of related languages, including Chantyal (Grunow-Hårsta 2007).

Hill attempts at reinterpreting example (5) from Kham (in Section 2.2.1 above) as a type of evidential expression are based on a selective reading of Watters's discussion of the meanings of this and other examples. Watters states very clearly that the information source is irrelevant here.

Hill's attack on the discussion of admirative and mirativity in Tsakhur, by Maisak & Tatevosov (1999a, b), is flawed. As A. E. Kibrik's students, Maisak & Tatevosov followed the Caucasianist terminological tradition of Kibrik and his other colleagues in using the term "admirative". Hill's claim that the title of the section on admirative "makes clear that they take 'mirativity' for granted as a semantic category" is questionable. It is indeed the case, as Hill points out, that Maisak & Tatevosov do not attempt to treat any of the numerous con-

structions with the mirative range of meanings as a type of evidential (nor do they attempt to treat it as a type of tense or type of aspect) – simply because evidentiality is expressed with different means, and is discussed in a different subsection of the same chapter. Misinterpretations such as Hill’s arise, if a section is taken out of context of the whole grammar.

Hill (his Section 3.3.3) rejects the treatment of the Tarma Quechua “sudden discovery” tense as a type of mirative under the pretext that Adelaar’s (1977) concise grammar does not provide enough examples, and that they are not supplied with contexts (see Section 2.2.2 above). Many more examples can be found in the texts in Adelaar (1977), in Adelaar’s other work (including 2004), and other grammars of Quechua varieties. It seems that Hill does not have the patience of looking at all the sources before coming up with a judgement.

Hill’s attempts (his Section 3.2.3) to equate *-kun* in Korean with a marker of visual or sensory evidence (based on a couple of examples taken out of context) are simply not supported by the existing grammars (such as Sohn 1994 and Martin 1992).

Hill’s criticism of DeLancey’s (1990, 1997: 47) analysis of Hare in his Section 3.2.1 is flawed and disregards the existing sources. The status of the “mirative” particle in Hare is problematic, but not along the lines of Hill’s attack.

Let’s have a look at a related language. Western Apache, also from the Athabaskan family, has several evidentials, including *noliḥ*, an inferential based on physical appearance, *golnī*, an inferential evidential based on assumption, and a “mirative/inferential” *lq̄q̄*, whose meanings always involve surprise (de Reuse 2003: 81). In (i), “the speaker had heard on the radio that a bear had attacked a woman. From the description of her wounds on the radio, he infers, using the mirative/inferential particle *lq̄q̄*, that she was dragged by the bear”. The particle “also implies that the speaker was surprised at the event”:

- (i) *Shash izdán oyinshōōd lq̄q̄*
 bear woman 3SG>3SG.PFV.drag MIR
 ‘A bear dragged a woman.’

The particle *lq̄q̄* can be used to express surprise at something one sees or hears here and now (as in de Reuse 2003: 81, example 7), or an event reported in a traditional narrative which is surprising to the main characters or the audience (de Reuse 2003: 83, example 13). The particle can occur with evidentials, and has no reference to information source. The Western Apache *lq̄a* is cognate with Hare *lq̄* described by DeLancey (1990: 153–158, 2001: 375–377), and functions “exactly like” it (de Reuse 2003: 81).

And now back to Hare. Numerous examples in DeLancey (1990, 1997, 2001) demonstrate that Hare *lq̄* covers the range of meanings typically subsumed by a non-firsthand evidential (a brief summary of what is meant by this

term, and why its use is appropriate for Hare and other languages is in Aikhenvald 2004: 29–31).

Hare is a dialect of Slave, an Athabaskan language from northern Canada, with a comprehensive grammar by Rice (1989). Examples of the particle *lq* cited by DeLancey, and by Rice (1989: 408–409), involve observation of the results and inference based on them. This is typical for an inferential, and not sensory, evidential.²²

However, another problem arises in the analysis of Hare. Most dialects of Slave, including Hare (de Reuse 2003: 98), have two particles with the segmental shape *lq*: the low-toned particle *lq* “indicates evidentiality”, specifying that “the outcome of an event is an observed fact although the event that actually led up to this outcome was not itself observed”, and the high-toned particle *lq̇* “indicates that an event apparently occurred or is reported to have occurred” (Rice 1989: 408–410). The situation is complicated by the fact that even speakers of the dialects where the distinction is not neutralized often “use just the low-tone form” (Rice 1989: 422).

De Reuse points out that the Slave cognate of the Western Apache mirative *laq* would indeed be a low-toned particle. It is difficult to decide which one of the two particles DeLancey (1990) is discussing (according to Keren Rice, personal communication in de Reuse 2003: 98). Hare does distinguish between the two particles. The question of the exact structure and meanings of evidentiality and mirative meanings in Hare remains open until more research is done on the exact meaning, and tonal form, of the particle, or particles, with the segmental form *lq*. Whether mirative meanings in Hare and perhaps other Slave dialects acquire a special expression or can be analysed as overtones of a primarily evidential marker with an meaning of inference based on perceivable results, or a non-firsthand evidential, remains an open question.

The “realizational” mood in Makah (Hill’s Section 3.3.4) is not a visual evidential, contrary to Hill’s claims (based on taking examples out of context): Jacobsen (1986: 19–20) appears to analyse it as a kind of inferential marker; Davidson (2002: 276) analyses it as a type of category distinct from evidentiality which describes facts “generally surprising and unexpected in some way”. The exact status of the “realizational” form in Makah requires further study.

Hill’s assertion that “the grammatical category ‘mirative’ has gained currency in linguistics, largely through the efforts of Scott DeLancey” is correct. To his credit, Scott DeLancey has indeed inspired and supervised many high quality graduates on Tibeto-Burman and also on other languages. Much of what we know about mirativity and other features of these languages is due to them.

22. See Aikhenvald (2004: 153–194) on differences in meanings between visual, non-visual, direct perception, and inference as semantic features in evidentiality systems.

An etymological remark is in order. The term “admirative” goes back to the Latin deponent verb *mīror* ‘wonder, be astonished; to admire, look in admiration’ and its derivative *admīror* ‘to admire, to be astonished at, to wonder’. Hill (his Footnote 21) suggests that “if one saw ‘mirative’ as derived [sic!] from Latin *mirō* ‘I see’ it would be an apt term for the Tibetan testimonial”. That is, if Latin had had a verb with such meaning and form. I haven’t been able to trace such a verb in Latin.

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