UNIVERSITY OF CALIFORNIA

Santa Barbara

Marking the Unexpected:

Evidence from Navajo to Support a Metadiscourse Domain

A Thesis submitted in partial satisfaction

of the requirements for the degree

Master of Arts in Linguistics

by

Kayla Eisman

Committee in charge:

Professor Marianne Mithun, Chair

Professor Eric Campbell

Professor Wallace Chafe

September 2015

The thesis of Kayla Eisman is approved.

_____

Eric Campbell

_____

Wallace Chafe

_____

Marianne Mithun, Committee Chair

September 2015

ABSTRACT

Marking the Unexpected:

Evidence from Navajo to Support a Metadiscourse Domain

by

Kayla Eisman

In typological research on mirativity, discussion often centers on the relationship between mirativity, evidentiality, and epistemic modality (Chafe & Nichols 1987; DeLancey 1997, 2012; Aikhenvald 2004, 2012; Peterson 2010). However, in individual languages, speakers mobilize pragmatic extensions that may differentially blend the categorical distinctions. Athabaskan languages have played a particularly important role in this discussion (DeLancey 2001 cited in Peterson 2010) due to the presence of particles that are said to clearly encode mirativity independent of evidentiality, evidence that mirativity warrants a distinct grammatical category. This paper analyzes the function and distribution of the Navajo enclitic *lá* as it is used by speakers in interaction, based on the Navajo Conversational Corpus (Mithun ed 2015 NSF-DEL project 0853598). In its most frequent use, *lá* functions as an interrogative enclitic to mark information questions (Reichard 1951; Young & Morgan 1987; Willie 1996), however this same form may encode what has been described as mirativity. Like other miratives, *lá* may mark surprise, counter-expectation, discovery, and even reported speech (DeLancey 1990, 1997, 2001; Aikhenvald 2004, 2012).

Though the two are seemingly unrelated synchronically, a close examination of the pragmatic functions of these enclitics, as well as consideration of comparative Athabaskan evidence, shows that the two enclitics both provide metadiscourse commentary through contrastive focus on the unexpectedness of a proposition. These data contribute to the goal of better understanding how speakers mark new and surprising information in conversation (Aikhenvald 2004), and also support the interactional relevance of the semantic domain of expectation, subsuming both contrastive focus and surprise (Behrens 2012).

1. INTRODUCTION

The relatively recent recognition of miratives (Aksu-Koç & Slobin 1982; DeLancey 1997) has incited debate regarding the status of mirativity as an independent grammatical category. The issue is complicated by the oft-parasitic nature of mirative markers within evidential or modal systems. The relationship between mirativity and information structure has been less discussed, though in interaction mirativity and contrastive focus perform similar functions, as speakers provide metadiscourse commentary to achieve localized communicative goals.

In this paper, I present a corpus-based analysis of the Navajo enclitic *lá*. Using a recently compiled corpus of about 50,000 words (Mithun ed 2015 NSF-DEL project 0853598)[1], I investigate the use of *lá* in conversation and narrative discourse. Though quite rare in the monologic narratives, *lá* occurs more frequently in natural spontaneous conversation. As described in previous literature, I find that speakers mobilize *lá* for several functions ranging from information questions, to counter-expectation, surprise, and sudden discovery. Further, the enclitic appears in reported speech and contrastive focus constructions. Based on these various functions, as well as comparative data from related Athabaskan languages, I argue that Navajo has two polysemous *lá* enclitics, one marking mirativity, and one marking contrastive focus and interrogativity. These two markers have potentially developed from an Athabaskan inferential evidential and remain semantically linked through their status as metadiscourse counter-expectation markers, from which various pragmatic overtones may arise. These results add to the growing typological literature on mirative markers and their relationship to evidentials, epistemic modality, and information structure.

This paper proceeds as follows. In section two, I begin with a brief overview of relevant Navajo grammar. In section three, I provide theoretical background and establish a foundation for discussing the relationship between mirativity, evidentiality, epistemic modality and information structure. In section four, I explain my methods, and in section five, I present my results with explanations and illustrations of the different functions of *lá* in the corpus. Section six includes a discussion of these results along with their theoretical significance.

2. THE NAVAJO LANGUAGE

Navajo is a Southern Athabaskan language spoken by about 170,000 speakers in and around the Navajo Nation (Lewis et al. 2015). It is a polysynthetic, fusional language with individual verbs often constituting entire clauses. The best-known diagram of the Navajo verb is the template published in Young and Morgan's seminal grammar and dictionary (Young & Morgan 1987). In the template, pictured here in Figure 1, there are up to ten positions associated with different derivational and inflectional morphemes, grouped into what are often referred to as the disjunct and conjunct domains (Young & Morgan 1987). Navajo verbs must minimally comprise a verb-final stem preceded by a classifier (position IX) and subject (position VIII) and mode prefixes (position VII). Navajo also has many productive enclitics, which can phonologically attach to the verb stem (Young & Morgan 1987). Verbal meaning in Navajo is composite, with verb bases often consisting of discontinuous morphemes in the form of thematic prefixes in nonadjacent positions in the verbal template (Young & Morgan 1987; McDonough 2000). With few exceptions, verbs must contain at least two syllables and usually occur clause-finally (Young & Morgan 1987).

Disjunct domain	0	Object of Postposition
	I	Postposition, Adverbial-Thematic, Reflexive, Aspectual
	II	Iterative
	III	Distributive
Conjunct domain	IV	Direct Object
	V	Deictic Subject
	VI	Adverbial-Thematic
	VII	Mode, Aspect
	VIII	Subject
	IX	Classifier
	X	Stem

Figure 1. Verbal template (Young & Morgan 1987: 37-38)

In addition to the morphophonemically complex verbs, Navajo also contains many productive particles and enclitics that remain largely unstudied. Linguistic description of these Athabaskan 'little words' (Holton 2009: 320), continues to be limited with the result that 'little has been recorded about the semantic and distributional properties of these particles' (Willie 1996: 339). From the few studies that have focused on them, it is evident that Navajo particles carry a high functional load, especially in conversation wherein speakers rely on particles and enclitics to express modality and affect, among other pragmatic meanings (Young & Morgan 1987, 2000; Willie 1996). In the following sub-section 2.1, I describe what is known about one such 'little word', the Navajo enclitic *lá.*

2.1 NAVAJO LÁ

The Navajo simple enclitic *lá* may occur as an independent form or bound phonologically to the previous word. Previous descriptions of it cite two primary functions: interrogative and new knowledge or discovery (Young & Morgan 1987). The interrogative *lá* may be used to form information questions often collocating with another interrogative particle such as *haa*

'what'.[2] Alternatively, speakers may form information questions by using only the enclitics

=sh/=shạ' or *lá* without the additional interrogative particle. Navajo is rare in its absence of

phrase-level intonation specific to interrogative constructions (Gordon to appear), and thus

speakers rely heavily on interrogative morphology (McDonough 2002).[3] Previous literature

touches briefly on the use of *=sh, =ísh, =shạ'* versus *lá,* and opinions vary regarding how

interchangeable the two enclitics are (Schauber 1979).[4] One posited function of *lá* is to make

a question less direct and to indicate 'a desire for the other person's opinion in the matter'

(Young & Morgan 2000: 306). In this meaning, *lá* conveys 'the idea of "wonder"' (Reichard

1952: 319). The following examples (1-2) from the aforementioned corpus (Mithun ed 2015),

illustrate the use of *lá* in information questions.[5]

---

[2] The interrogative particle *haa* may also co-occur with the interrogative enclitic *=sh, =ísh, =shạ'*.

[3] Speakers form polar questions with clause initial *da'* and enclitic *=ísh* or *=sh* (Young & Morgan 1987).

[4] In an unpublished paper (Eisman manuscript) investigating this semantic difference, *lá* was found to be more frequent than *=sh* in information questions (59% as opposed to 41%; n=204). The small number of tokens and the high confidence intervals of the results make it difficult to generalize from this study, but a statistically significant interaction between the semantics of the verb and the attachment of the enclitic to another interrogative particle indicate that the two markers do not occur in free variation. Also, verbs of 'saying' were the most frequent semantic category of verbs in information questions (35%). The vast majority of verbs of 'saying' occur with *lá* (85%) rather than *=sh.*

[5] Examples from the corpus are cited by transcript number and transcriber. The top lines of the examples are not modified from the original transcription, and there is some variation between transcribers. I have modified and supplemented the interlinear glosses in order to show additional information about morpheme boundaries for the sake of this paper. Throughout the corpus examples I use the following abbreviations: CLF 'classifier', DEM 'demonstrative', DISTR 'distributive', DU 'dual', ENC 'enclitic', IMPV 'imperfective, INCEP 'inceptive', NEG 'negation', N 'neuter', OBJ 'object', PST 'past', PFV 'perfective aspect', Q 'question', SBJ 'subject', TAG 'tag question', THEM 'thematic prefix' TOP 'topic'. Inconsistencies may exist between glosses due to variation among transcribers or errors on my part. The enclitic *lá* is variably glossed according to its function.

(1) *Haalá*   *éí*   *wolyeene'?*
      haa=lá   éí   wo-l-ye=ne'
      What-Q   that   3-CLF-call=PST
      'What was his/her name?'   (M. Chee Nav 001)

(2) *Háájí*   *lá*   *ííyá*   *ńjiń.*
      háá=jí   lá   íí-yá   ji-ní-ji-ní
      Where=to   Q   3.SBJ.PFV-walk   3.SBJ-say-3.SBJ-say
      'She says, "I wonder where he has gone," it is said.'   (Silentman Nav 014)

In its non-interrogative function, *lá* is said to mark 'sudden discovery or an idea just brought to one's attention' (Young & Morgan 1987: 22; Young & Morgan 2000: 306).[6] According to Reichard, *lá* is used to express conviction similar to English phrases such as 'it is, I find it is, I have discovered, I am convinced it is' (Reichard 1952: 305). In example (3) *lá* indicates a discovery after a rock was originally thought to be something else.[7]

(3)   Navajo: Young & Morgan 2000: 306

      Díí   *tsé*   *'át'éé*   *lá.*
      díí   tsé   'á-t'éé   lá
      DEM   rock   3.thus-is   DISCOVERY
      'This (I find) is a rock.'

In addition to these functions, *lá* appears in a number of fixed lexicalized expressions (Reichard 1952) such as *haalá* 'therefore or because', the children's expression *lá jiní* 'let's play like' (Young & Morgan 2000: 308), and the construction *lá ni* where *lá* marks emphasis usually on a verb, followed by the emphatic particle *ni* (Young & Morgan 1987: 22).

---

[6] Another particle, *la'*, is said to express feelings, 'of consternation, puzzlement or surprise' (Young & Morgan 2000: 308). It is unclear if or how *lá* is related to *la'*. In the corpus, there are 45 tokens of *la*, but none transcribed as *la'*. In order to avoid potentially conflating the two, I only annotate and discuss the tokens transcribed as *lá*.

[7] I added the second and third lines of this interlinear gloss. In the case of other cited examples from published works, I leave the interlinear glosses as they appear in the original source.

5

Elsewhere *lá* has been described as an evidential that always occurs with *t'áá 'aaníí* to indicate that a sentence is true (Willie 1996; de Haan 2008).[8]

The non-interrogative uses of *lá* cited in the literature at first appear to align nicely with the range of established mirative meanings documented in other languages, but in reality a precise description of the function of *lá* proves more elusive. A transcript from the corpus of a language class of Navajo speakers discussing *lá* demonstrates the range of intuitions regarding the use of the enclitic. Participants in the class suggest various meanings for *lá* including discovery, compliments, counter-expectation, or past tense. This lack of consensus is echoed in the results below, whereby a single definition of *lá* as a mirative fails to fully account for the corpus data. Before turning to the results, first a deeper discussion of the relationship between mirativity, evidentiality, epistemic modality and information structure is necessary.

3. THEORETICAL BACKGROUND & FOUNDATION

3.1 MIRATIVITY

Miratives function to mark a proposition as new and surprising irrespective of information source (DeLancey 1997, 2001; Peterson 2010). It is common for a mirative reading to arise when speakers use indirect evidentials in situations of direct evidence (Olbertz 2009). Such is the case in Turkish, as shown in the following example of an often cited mirative. The usage of the suffix *mIş* in example (4b) may convey surprise when, for instance, a speaker suddenly sees Kemal, an unexpected visitor, walk into a room.

---

[8] There are no occurrences of *lá* with *t'áá 'aaníí* or the expression *lá jiní* in the corpus.

(4)   Turkish: Aksu-Koç & Slobin 1982 cited in DeLancey 1997: 37

     a.   *Kemal gel-di*
           Kemal come-PAST
           'Kemal came.'

     b.   *Kemal gel-mIş*
           Kemal come-MIRATIVE
           'Kemal came.'

Languages vary in how speakers employ mirative markers within discourse, and therefore 'one needs to specify the subset of the range of mirative meanings grammaticalized in the language' (Aikhenvald 2012: 437). The meanings associated with mirative markers often include: sudden discovery, surprise, unprepared mind, counter-expectation, deferred realization or information assumed to be new to the listener or discourse (Aikhenvald 2012). The meaning of surprise is often central to miratives, and 'occurs when a discrepancy occurs between a speaker's current knowledge state, and the realization of a new state, event or action' (Peterson under review: 16). Miratives, especially in situations of direct observation, function as implicatures, and in line with the Gricean Maxim of Quantity, they contribute an overtone of surprise, lack of involvement or control to an already felicitous assertion (Peterson 2001). Miratives may relay the importance of something previously known to the present situation (Comrie 2000), and may signal that information is important or unexpected without evaluating the information in an epistemic sense (DeLancey 2010). Several discourse functions and emotional attitudes are often associated with miratives, such as compliments, politeness, negative opinions, reported speech, and unintentional actions (DeLancey 1997; Aikhenvald 2012; Peterson under review).

Previous cross-linguistic research has documented mirative markers in many typologically diverse languages, and attempts have been made to establish mirativity as a

category distinct from evidentiality (DeLancey 1990, 1997, 2001, 2012; Aikhenvald 2012). However there remains a lack of formal criteria for identifying miratives (Bianchi et al. 2014), and mirativity may not be sufficiently grammaticalized to warrant a separate grammatical category (Lazard 1999). Mirativity is often parasitic on evidential markers, especially indirect evidentiality (Johanson 2000; Peterson 2010) and may additionally be expressed through the use of intonation, discourse markers, exclamations, or irreality mood markers (Chafe 1995; Peterson 2010). Miratives themselves encode no specific information source (Plungian 2001), and they can occur in situations of indirect or direct observation (DeLancey 2012). Besides often being extensions of other evidential markers, in individual languages miratives are also strongly associated with a particular tense or aspect, which in itself tends to imply a certain evidential reading (Peterson 2010; de Haan 2012). The relatively common semantic extension from an inferential evidential to a mirative marker may take place through the diachronic developments shown in Figure 2.

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

Figure 2. Mirative extension of an indirect evidential (Aikhenvald 2004: 208)

The example below from Hare Athabaskan shows this mirative extension of the otherwise inferential evidential, the sentence particle *lõ*. The particle is typically interpreted as having an inferential or hearsay meaning, but in contexts of direct access to the information, and in conjunction with the imperfective aspect, the particle has a mirative reading. The most felicitous context for example (5) is for a speaker to find Mary unexpectedly working on hides.

(5)   Hare: DeLancey 1997: 39

Mary   e-wé'   ghálayeda   lõ
Mary   its-hide   work.IMPF
'Mary is working on hides.'

Miratives are often polysemous not only with inferential evidentials, but also with hearsay markers (DeLancey 1997; Lazard 1999). In an attempt to account for languages with inferential, hearsay, and mirative synchronic interpretations of a single morpheme, it has been said that surprise may constitute the primary meaning, marking psychological distance or an unprepared mind, consistent with the epistemic distance frequently associated with inferential evidentials and hearsay markers (Aksu-Koç & Slobin 1982; DeLancey 1997). Lazard (1999) disputes the notion that surprise is the basic meaning of these three functions, and instead accounts for their unification with the mediative, a means of commenting on the discourse, with the meanings 'as I hear, infer, or see' (Lazard 1999: 95). He then considers mirativity to be a subcategory of the mediative with surprise as only a part of its meaning.

In addressing the question of typologically valid categories such as mirativity, I follow Behrens (2012) in taking a domain-centered approach that 'compares languages with respect to the interaction of lexical, grammatical, and pragmatic solutions' (Behrens 2012: 237). A domain-centered approach follows from a view of grammar as emerging whereby synchronic discourse is one moment in the constant ongoing processes of grammaticalization (Hopper 1987 cited in Behrens 2012). Therefore, grammar is constantly in flux, and a strict comparison of only the grammaticalized forms would obscure the complex relationships between the overlapping categories of mirativity, evidentiality, and epistemic modality (Behrens 2012). Behrens calls for a comparison of semantic spaces rather than the structural forms, which are likewise difficult to distinguish due to the parasitic and evolving nature of these categories. Though stable canonical miratives marking surprise may be identified and

described in some languages, most miratives arise from pragmatic extensions of other functions (Olbertz 2009), and therefore should not be analyzed in isolation. Due to the overlapping nature of miratives, evidentials, and epistemic modals, I now provide a brief description of the relationship between these domains.

3.2. EVIDENTIALS & EPISTEMIC MODALITY

Evidentiality is typically defined as the grammatical marking of information source (Aikhenvald 2004), which may be expressed lexically, morphologically, or prosodically. Evidentiality may also be parasitic on aspect, tense, mood or clause-type (Behrens 2012; Bruil 2014). Cross-linguistically, reportative evidentials are very common, though languages may distinguish more generally between indirect and direct evidentials, whereby the former indicates that a speaker lacks first-hand knowledge or experience regarding an assertion (Aikhenvald 2004). Among more elaborate evidential systems, speakers may also distinguish between visual, non-visual, or other sensory forms of direct access to information.

There is a strong association, and some would argue a formal overlap, between epistemic modality and evidential marking (Chafe & Nichols 1985; Peterson 2010) though some languages do have two distinct systems (Givón 2001). Regardless of their specific relationship to each other, speakers often use evidentials and epistemic modals similarly to express knowledge in relation to the information asserted (Bruil 2014). Mediated information marked by reportatives or hearsay is generally considered to be the least reliable, evoking the weakest epistemic stance, and direct information is generally considered to be the most reliable (Plungian 2001). This association reflects a type of evidentiality hierarchy, though in reality, speakers may not always take the strongest epistemic stance towards the most direct evidence due to prior knowledge or other available evidence (Behrens 2012). In some

languages indirect evidentials may also be employed to mitigate a speaker's responsibility for an utterance (Bruil 2014).

Languages vary in which kinds of evidence they choose to mark and the epistemic implications for particular evidentials. For instance, in Tibetan the indirect forms do not, as the evidentiality hierarchy would predict, signal doubt or uncertainty. Instead the indirect forms often indicate shared knowledge in the community, as shown in example (6).

(6)   Lhasa T.: Garrett 2001: 39 cited in Behrens 2012: 212.

sngon.ma   sngon.ma   gcig-la   spo'o   gcig   dang   rmo'o
before   before   one-LOC   man   old   and   woman

gcig   yod.red
old   [INDIRECT ELPA]

'Once, a long, long time ago, there was an old man and an old woman.'

In Tibetan, new discoveries are marked by direct forms, and when new discoveries differ from what is thought of as shared knowledge or expectations, one may get a mirative reading (Behrens 2012). In other languages such as Quechua, the mirative meaning arises when new discoveries contrast with individual rather than shared knowledge (Behrens 2012). Evidentials can also overlap with other pragmatic categories such as politeness, focus, viewpoint, and volition (Aikhenvald 2004), and interesting trends emerge on a language-specific level when evidentials are examined in interaction (Nuckolls & Michael 2014).

3.3. MIRATIVITY, FOCUS & METADISCOURSE

3.3.1 FOCUS

It is in the context of interaction that it becomes clear how thoroughly 'epistemic modality and evidentiality are entangled and relate to information structure and common ground manipulation' (Behrens 2012: 211). Focus has been described in various ways, but most work distinguishes between two kinds, the first defined as relating to information new to the discourse or topic, and the second serving to mark contrast in a comparison between two or more candidates (Chafe 1975; Watters 1979; Kiss 1988; Lambrecht 1994; Givón 2001). Though it is difficult to operationalize contrast precisely (Myhil & Xing 1996), in this paper I take contrastive focus as marking a constituent that contradicts the presupposed alternatives of the conversation participants (Lambrecht 1994; Givón 2001). Speakers may contrastively focus a constituent narrowly, or an entire proposition in relation to the rest of the sentence or to the larger discourse (Lambrecht 1994) with different ways of marking contrastive focus, including word order, prosody, or morphology. For instance, in the case of Italian, fronting constructions mark focus on an contrastively unexpected element by specific prosodic and syntactic means (Bianchi et al. 2014).

Previous literature describes the Navajo particle *ga'* as the contrastive focus marker (Elgin 1973; Young & Morgan 1987; McDonough 2002). However, there are only 40 tokens of *ga'* in the Navajo Conversational Corpus (Mithun ed 2015), and the rarity of *ga'* along with the lack of contrastive focus intonation in Navajo (McDonough 2002) suggest that Navajo speakers may mark contrastive focus another way. Example (7) shows the use of *ga'* occurring in second position after a contrastively focused demonstrative.

(7)   Navajo: Young & Morgan 1987: 22

Díí   ga'   chidí   nizhoní.
DEM   FOCUS   car   it.is.pretty
'*This* is the prettiest car.'

3.3.2 CONTRASTIVE FOCUS & MIRATIVITY

The marking of expectation is strongly associated with both mirativity and contrastive focus (Behrens 2012). In both contrastive focus and mirative constructions, speakers do not evaluate the truth value of the proposition, but rather their own expectations, a character's expectations, or shared expectations against a group norm. Contrastive focus functions to mark part or all of a proposition as contrasting with other expected options, while miratives mark a proposition as surprising with regard to general unmarked expectation. (Chafe personal communication, May 28, 2015) Very likely, all languages have some way of expressing counter-expectation (Heine et al. 1991), and while counter-expectation markers imply a comparison between what is asserted and what is presupposed or expected, (Heine et al. 2001), miratives similarly may be thought of as judgments about a speaker's expectations, and they 'mark the extent the speaker is ready to perceive [a proposition] P' (Plungian 2001: 355). Depending on the system, counter-expectation markers may compare information against individual expectations or socially accepted knowledge (Behrens 2012).

In this manner, both mirative and contrastive focus constructions are a type of metadiscourse allowing speakers to comment about the ongoing discourse itself, rather than expressing a modal or psychological state (Lazard 1999; Behrens 2012). For instance, in Athabaskan Hare speakers use the mirative to present information as an important fact without making an epistemic evaluation (DeLancey 1990). Metadiscourse markers emerge as especially relevant in interaction due to the socio-communicative goals of a conversation.

13

A formal overlap between focus and mirativity may exist, such as in Quechua, where the assertive evidential *–mi* may differentially have mirative or contrastive focus connotations. In fact, the contrastive meaning of the morpheme is acquired by children before the evidential or mirative meanings (Aikhenvald 2004). Similar to Navajo, the Quechua assertive marker may also be used in content questions (Behrens 2012). Likewise, the admirative in Albanian marks contrast between new discoveries and shared knowledge, and historically, its primary function was to signal verum focus, an emphasis on the truth of a proposition (Behrens 2012).

As detailed above, the overlapping nature of evidentiality, mirativity, and contrastive focus makes it difficult to define the boundaries of these semantic spaces within a language categorically. The association between contrastive focus and mirativity further suggests that mirativity should be considered within studies of expectation, together with studies of evidentiality and modality (Plungian 2001). The typologically attested connection between inferential evidential markers, as well as contrastive focus markers and miratives, will continue to be relevant as I turn to the present results from Navajo.

4. METHODS

For this paper I analyzed all 421 translated tokens of *lá* in the corpus[9]. The tokens occur in 46 transcripts, comprised of 21 dialogues and 25 monologic narratives. The narratives were collected largely from one female speaker, while the hour-long dialogues include conversations among several speakers, recorded on and around the Navajo Nation.[10] As

---

[9] There are 126 untranslated tokens in the corpus for a total of 547.

[10] The Navajo Nation covers a large area of land, and dialectal variation certainly exists. However, at this time, little research has systematically investigated relevant dialect variations, so the role of dialect in these data will not be addressed in this paper.

shown in Table 1, speakers use *lá* far more frequently in dialogues than in narratives. The recordings were transcribed by native speakers and linguists into intonation units, prosodic units of speech under a single intonation contour (Chafe 1979; Du Bois et al. 1993). The transcripts vary in the detail of their interlinear morpheme glossing and translations.

	Narrative	Conversation	Total
Tokens of *lá*	36	511	n=547
	7%	93%	

Table 1. Frequency of particle *lá* by genre

After compiling all the tokens of *lá*, I annotated them for position in the clause, verb semantics, and function. The results from annotating the position of *lá* within the clause will become relevant later on, while the annotation of verb semantics proves extraneous to the present discussion. In the analysis of my results in section 5, I focus primarily on the different functions of *lá* in the corpus. These functions include marking interrogatives, lexicalized phrases, contrastive focus, reported speech and miratives. As a mirative, *lá* functions to indicate counter-expectation, realization, surprise, and sudden discovery (Aikhenvald 2012).

5. RESULTS

Table 2 lists the results for the annotation of each token of *lá* by function. The most frequent usage of *lá* is as an interrogative marker in information questions, followed by the mirative functions that account for 27% of the tokens. The high frequency of the interrogative and mirative *lá* aligns with previous Navajo literature that defines the enclitic according to those two functions. However, the mirative and interrogative meanings do not transparently relate to the secondary functions of reported speech and focus seen in the corpus. In the following

15

sub-sections, I illustrate and exemplify each function of *lá* and propose a connection that encompasses the various pragmatic extensions.

Function	Tokens	Percentage
Interrogative	169	40%
Miratives	114	27%
Reported Speech	61	14%
Focus	54	13%
Lexicalizations	23	5%
Total	n=421	100%

Table 2. Tokens of *lá* by function

5.1. INTERROGATIVE CONSTRUCTIONS

As shown in Table 2, the most frequent function of *lá* is as an interrogative marker in information questions. As mentioned in sub-section 2.1 above, *lá* can occur bound to another interrogative particle as in example (1), as a free clitic immediately following an interrogative particle as in example (2), or in second position with a questioned noun occurring clause initially as in example (10). There are no clear prosodic or phonological differences between these three cases, and here I reproduce the examples with the enclitic written as bound or free according to how it was originally transcribed. In these data, the majority (84% n=120) of the information questions with *lá* occur with an interrogative particle in the first position of the clause. The following examples (8-13) show the use of *lá* in second position after a questioned word that is not another interrogative particle. Most of the examples below relate to the name of something or someone, and therefore by using *lá* the speaker is directing listener attention to the specific word in question.

16

(8)   *Parkerlá*   *éí*   *haahoolyé?*
      Parker=lá   éí   haa=hoo-l-yé
      Parker=Q   DEM   what=3.N.IMPV-CLF-call
      'How was it you say Parker?'   (M. Chee Nav 001)

(9)   *Diné*   *k'ehjílá*   *éí*   *haahǫǫlyééne'?*
      Diné   k'ehjí=lá   éí   haa=hoo-l-yé=ne'
      Navajo.people   way.of=Q   DEM   what=3.N.IMPV-CLF-call=PST
      'What was the name of that place in Navajo?'   (M. Chee Nav 001)

(10) *Plums lá*   *éí*   *haolyée*   *łeh?*
      plums lá   éí   ha-o-l-yée   łeh
      plums Q   DEM   what=3.N.IMPV-CLF-call   some
      'What are plums called?'   (M. Chee Nav 021)

(11) *Rough Rock*   *lá*   *éí*   *ha'át'áo*   *dayózhíi*   *ne'?*
      Rough Rock   lá   éí   ha'át'áo   da-yó-zhíi   ne'
      Rough Rock   Q   DEM   how.is.it   DISTR.name.it PAST
      'What did they call Rough Rock?'   (M. Chee Nav 002)

(12) *Éí*   *ałchíní*   *yázhí lá,*
      éí   ałchíní   yázhí lá
      DEM   children   little   Q

      ha'át'áo díí Bilagáana bizaad   t'éí   yee   yádaałti'?
      ha'át'áo díí Bilagáana bizaad   t'éí   yee   yá-daa-ł-ti'
      how.is.it DEM English   language only with.it THEM-DISTR-CLF-speak

      'So why is it children only spoke the English language?'   (M. Chee Nav 002)

(13) *Holbrook*   *lá*   *hxáa,*   *north*   *jo'?*
      Holbrook   lá   hxáa,   north   jo'
      Holbrook   Q   where.at   to.the
      'Where is Holbrook, to the north of there?'   (W. Chee Nav 010)

In its interrogative usage, *lá* functions to contrastively focus the interrogative particle or questioned word. The syntactic and semantic connection between information questions and contrastive focus is well-established (Kiss 1988; Lambrecht 1994; Givón 2001; Cruschina 2011), and in information questions, most of the sentence is presupposed except for the focal constituent, which is often but not necessarily an interrogative Wh- word. In her investigation of Navajo questions, Schauber (2007) suggests that *lá* may mark focus, and

17

these data likewise support a similar connection, as *lá* occurs as both an interrogative and a contrastive focus marker. Further, these Navajo corpus data confirm previous research that Navajo interrogative enclitics *lá* and *=sh* may contrastively focus non-interrogative constituents by occurring immediately after or bound to the questioned element (Barss et al. 1990).

Besides in the information questions shown above, speakers also may use *lá* in a statement that is followed by a tag question (11 tokens in these data), as in (14-17). The purpose of these sentences may be to seek confirmation of an already held idea, or perhaps to distance the speaker from an assertion, as has been said about tag questions in other languages (Babel 2009).

(14) *Ch'iyáán   nahá   nahásóołníí   lá   ya'?*
       ch'iyáán   nahá   nahá-sóo-ł-níí   lá   ya'
       food   2.DU   2.DU.PFV-CLF-buy   MIRATIVE   TAG
       'You two bought food, isn't it?'   (W. Chee Nav 005)

(15) *Ayóo   ne'akał   yistłee'   ńlįį   lá   ya'?*
       Ayóo   ne-'akał   yistłee'   ńlįį   lá   ya'
       very   you-leather stockings   2.to.be   MIRATIVE   TAG
       'My! You're a real cowboy, huh?'   (Silentman Nav 014)

(16) *Doo   chohoo'įįgóó   shįį*
       doo   chohoo'-įįg-óó   shįį
       NEG   very.hard-ENC-ENC   perhaps

       nahóółtaa   lá   jń   ya'?
       na-hóó-ł-taa   lá   ji-ní   ya'
       THEM-3.PFV.CLF-rain   MIRATIVE   it.is.said TAG

       'It had rained very hard, huh?'   (Silentman Nav 014)

(17) *Bee   na'nitin   lá   ya'?*
       b-ee   na'-ni-tin   lá   ya'
       it-with THEM-2-teach   MIRATIVE   TAG
       'So that is how you teach then?'   (M. Chee Nav 002)

18

In several information questions in the corpus, speakers use a fused form composed of the interrogative particle *haa*, the enclitic *lá,* and the neuter verb *wolyé* 'it is called'. This conventionalized form suggests the high frequency of this particular question, and the potential development of a new lexical item.

(18)   *Biroommate*   *haaláolyée*   *ne'?*
       bi-roommate   haa=lá-o-l-yée   ne'
       her-roommate   what=Q-3-CLF-call   PST
       'What was her roommate's name?'   (M. Chee Nav 002)

A final question type that appears with a similar information question construction is the conjectural question used when a speaker is wondering about something, but does not necessarily expect the listener to know the answer. Other languages make use of indirect evidentials or miratives to convey this meaning (Bruil 2014; San Roque et al. 2015). In Japanese for instance, conjectural questions are considered more polite when formed with indirect evidentials, and invite a response from the addressee (Aikhenvald 2004). In Cheyenne the conjectural markers also may function as third-hand reportative evidentials, again linking conjectural questions to indirect evidentials (Murray 2010). Examples (19) and (20) illustrate this use in the corpus.

(19)   *Néidídoolééł*   *lá*   *nisįįó.*
       néi-dí-doolééł   lá   nisįį=ó
       THEM-INCEP-it.will.be   Q   I.want=SUBORDINATE
       'I wonder how they will acquire it.'   (M. Chee Nav 007)

(20)   *T'óó*   *háájílá*   *jínzǫ.*
       t'óó   háá=jí=lá   jí-nz=ǫ
       just   where=toward=Q   4.SBJ-think=SUBORDINATE
       'He's just wondering where (the full basket of apples) went.'   (Mithun Nav 108)

19

5.2. MIRATIVE CONSTRUCTIONS

The second most frequent function of *lá* is to mark situations that fall under the general category of mirativity. In these data this includes counter-expectation, realization, and discovery. It is difficult to distinguish precise differences between these three categories, and so it is helpful to consider these 114 tokens as a single domain of mirativity. The following examples (21-23) illustrate the three main mirative functions in the corpus. Example (21) shows discovery, (22) counter-expectation, and (23) realization.

(21) *Akoshį́į́*   *hatł'aazh'éé'*   *shį́į́*   *náozdlaad*   *lá.*
      ako=shį́į́   ha-tł'aazh'éé'   shį́į́   náozdlaad   lá
      so.then=perhaps   3-pants   perhaps   3.to.tear   MIRATIVE
      'So his pants was torn.'   (Silentman Nav 014)

(22) *Nizhóní*   *lá.*
      nizhóní   lá
      it.is.good   MIRATIVE
      'It is great!'   (M. Chee Nav 021)

(23) *Áko*   *ayóo*   *nantłá*   *lá.*
      áko   ayóo   nantłá   lá
      so   very   it.is.difficult   MIRATIVE
      'So it turns out that it's very challenging.'   (M. Chee Nav 002)

In this corpus, miratives often occur in the punch line of jokes to mark the moment of discovery on the part of the character or the listener. Similarly the use of miratives in jokes occurs in other languages such as Magar, where speakers use the mirative to mark the focal part of narratives (Aikhenvald 2012). Beyond the general meaning of discovery or surprise, there also may be an undertone of lack of control in these sentences. Example (24) illustrates this meaning.

(24) *Aashį́į́*   *ákwe'é*   *naa'ajíílá.*
       aa=shį́į́   ákwe'é   naa'ajíí=lá
       there-perhaps   right.there   3to.fall.over-drunk-MIRATIVE
      'He fell over drunk.'   (Silentman Nav 014)

5.3. REPORTED SPEECH CONSTRUCTIONS

Another relatively frequent and previously undescribed function of *lá* is to mark reported speech. As displayed in Table 2, 61 (14%) of the total tokens of *lá* occur in reported speech constructions. Of these 61 tokens, 51 occurred with a clause-final *lá,* while the remaining 10 occurred post-predicately, but before the reporting verb. In examples like (25), where *lá* occurs before the reporting verb *ní* 'he/she says', the emphasis is said to be on *what* was said rather than who said it (Manavi personal communication, January 8, 2015). Example (26) shows *lá* occurring clause-finally.

(25) *Improvement   éí   álą́ąjį'   lá   ní.*
      improvement   éí   álą́ąjį'   lá   ní
      improvement   that   first   he.said
      'Improvement that is the priority he said.'   (M. Chee Nav 002)

(26) *Nít'ę́ę́'   Paul   ánii   lá,*
      nít'ę́ę́'   Paul   á-níi   lá
      then   Paul   thus-said
      'Then Paul thus said,'   (M. Chee Nav 016)

Of these constructions, 90% occur with the imperfective verb form *ní* 'he/she says'. [11] Navajo distinguishes direct discourse, indirect discourse, and quotations (Schauber 1975; Rice 1986; Saxon 1998), but only a subset of direct discourse verbs, including *ní,* allows direct quotation (Saxon 1998). The verb *ní* is the most frequent verb of saying and connotes the meaning of saying something aloud (Collins 1987). As expected, the verb *ní* appears as the most frequent strategy in this corpus for direct speech quotation.

One possible motivation for the frequent use of *lá* in direct speech reports is to distance the speaker from the quoted speech as a way of respecting the individual autonomy of the quoted participant, and downplaying the speaker's own epistemic authority. This

---

[11] When *lá* occurs immediately after *ní, ní* often lengthens to *níí* (Manavi January 8, 2015).

analysis aligns with the high value Navajo culture tends to place on individual autonomy (Witherspoon 1977). The enclitic *lá* occurs frequently in quoting third persons who are not present in what could be construed as gossip. Evidence from neighboring Western Apache, supports this interpretation as the cognate form *ląą̄* occurs both in tentative statements and in direct quotations. Also, as will be discussed further in sub-section 6.1, *lá* is possibly cognate with other inferential forms that may function as hearsay markers or tend to occur in direct speech reports. This comparative evidence supports the notion that speakers may be mitigating their own responsibility for an assertion by adding *lá* to the direct speech report. Besides quoting third persons not present, direct speech constructions are common in jokes and stories to quote characters or earlier thoughts or statements of the first person narrator as they come to realizations.

Prior studies of Navajo quotation strategies discuss a quotative/reportative evidential *jiní* 'they say' used by speakers to distance themselves from the information quoted or to mark hearsay (Willie 1991; de Haan 2008). In the conversation data however, *jiní* is largely restricted to a reportative function, used as a generic 'one', or to mark the narrative genre. Indeed, reportatives often occur in narratives or traditional stories cross-linguistically (Bruil 2014). Simultaneously, *ní* or often *ní lá* is mobilized in discourse in the lexical quotative construction without any obvious mirative interpretation. This distribution of *ní lá* and *jiní* suggests that *ní lá* may be replacing *jiní* as a quotative or hearsay form in conversation, while *jiní* moves towards a more restricted narrative function.

Example (27) is an excerpt from a joke and shows *lá* co-occurring with a phonologically reduced form of *ní* and *jiní.* The speaker here may be signaling the narrative joke genre with *jiní*, while also using the lexical quotative *ní* in order to mark the direct quotation. The enclitic *lá* marks mirativity as the characters realize to their surprise that their

22

tire has shattered. Variations on the fused form *ńjń* are frequent in the corpus and suggest that

ní and *jiní* may commonly co-occur and likely serve different purposes.

(27) *"Jó   nt'éé'   akee'ę́ę̨   sits'il   lá,"   ńjń.*
       jó   nt'éé'   akee='ę́ę̨   si-ts'il   lá,"   ní-ji-ní
       so   then   tire=PST   3.PFV- break   MIRATIVE   3.say-it.is.said
       '"So, then our tire is shattered!" he said.'   (Silentman Nav 014)

5.4. CONTRASTIVE FOCUS CONSTRUCTIONS

Beyond the functions presented above, the enclitic *lá* also marks contrastive focus in 55

tokens or 13% of the total occurrences of *lá*. Of these 55, 12 occur immediately following a

demonstrative, as speakers emphasize *this* or *that* option in contrast with others in the

discourse. Example (28) illustrates this construction. The remaining examples below (29-31)

further exemplify the various ways that *lá* may be used to contrastively focus either the entire

sentence or the first position constituent.

(28) *Díí   lá   béeso   doo   da   oh,*
      díí   lá   béeso   doo   da   oh
      DEM   FOCUS   money   NEG   oh
      'This money no oh.'   (M. Chee Nav 016)

In example (29) a boy answers his mother's question about how many people are

outside. The focus of the utterance is 'ten', which is both the new information in the sentence

and in contrast with other numbers of people. The word *neeznáá* 'ten' is also the punch line

of the joke due to its homonymy with a verb meaning 'they are all dead'.

(29) *Neeznáá   lá   shimá   ní   jń.*
      neeznáá   lá   shi-má   ní   ji-ní
      ten   FOCUS   my-mother   3. say   it.is.said
      'He says, "Ten, my mother."'   (Silentman Nav 014)

Example (30) is an exclamation about the great number of clouds, presumably in contrast to

one's normal expectations regarding clouds.

(30) *Dóólá*   *k'osda!*
      dóó=lá   k'osda
      many=FOCUS   clouds
      'Look at all those clouds!'   (W. Chee Nav 005)

The speaker in (31) describes an experience she had while reading in Navajo. She uses *lá* to mark the specific moment in which she correctly recognizes a particular word in contrast to what she had previously thought.

(31) *Saad*   *lá.*
      saad   lá
      word   FOCUS
      'A word.'   (M. Chee Nav 021)

A prevalent intuition from Navajo speakers is that *lá* only occurs phrase-finally (Paul A) except as an interrogative. Yet as shown in the above examples, *lá* occurs in second position in many of the non-interrogative contrastive focus constructions. The use of *lá* in second position in both contrastive focus constructions and interrogatives again reflects the syntactic link between the two functions, and notably differs from the clause-final position of the mirative and reported speech *lá* enclitics.

5.5. LEXICALIZATIONS

Beyond the pragmatic functions described above and cited earlier in sub-section 2.1, *lá* also occurs in a number of lexicalized phrases. Examples (32) and (33) illustrate such fixed expressions, while (34) and (35) show lexical items containing *lá*: *háílá* 'someone' and *háálá* 'although' or 'because'. A number of these lexicalizations internally comprise an interrogative particle *háá* 'what' and *lá*. This composition suggests that these forms perhaps developed from the frequent collocation of *lá* in second position after the interrogative particle in information questions.

24

(32) *Yáadi lá!*
      yáadi lá
      'Geez!'   (M. Chee Nav 021)

(33) *Doo   lá   dooda   da!*
      doo   lá   dooda   da
      NEG   no   NEG
      'Oh no!'   (M. Chee Nav 007)

(34) *Ligháí   ła'   háílá   éíyaa   shił   halne'oo.*
      nigháí   ła'   háí=lá   éí=yaa   shi-ł   ha-l-ne'=oo
      that.one one   someone   that.TOP   me.with   3-CLF-tell=ENC
      'Someone told me.'   (Begay Nav 011)

(35) *Háálá   díí   t'óó   ayoí   bee   nihee   anídáhazt'į'ígíí*
      háá=lá   díí   t'óó   ayoí   bee   nih-ee   anídáhazt'į'ígíí
      although DEM   still   much   with   about.us hardship

      dah   hólóónidi.
      dah   hólóónidi
      PARTICLE   there.are.some

      'Although we encounter many hardships,'   (M. Chee Nav 012)

6. DISCUSSION

Though perhaps seemingly disjointed, the various functions of *lá* are consistent with previous

documentation of similar markers in other languages and reflect the overlapping nature of the

relevant interrelated categories of mirativity, evidentiality, and contrastive focus. Like

Navajo speakers, speakers of other Athabaskan languages employ an extensive array of

particles or clitics to express modal, evidential, or epistemic meaning. The etymology of the

unanalyzable *lá* remains obscure, but possible cognates show up in a wide range of

constructions, with the precise uses varying by language. In sub-section 6.1, I turn to

comparative Athabaskan evidence to illustrate similar pragmatic extensions of cognate

particles in related languages with the caveat that particles and clitics may be difficult to

reconstruct due to their monosyllabic status, and the tendencies of transcribers to omit them (Mithun 1986).

6.1 COMPARATIVE ATHABASKAN EVIDENCE

In Western Apache, a Southern Athabaskan language neighboring Navajo, the mirative, inferential marker *lą̄ą̄* always involves a meaning of surprise: either surprising to characters in a narrative or surprise at something heard in a given moment (de Reuse 2003). This mirative particle may be used in tentative statements and questions, is common in direct quotations or complements of the verbs 'to think' or 'to say', and can co-occur with other evidentials (de Reuse 2003). Western Apache also has a particle *lę́k'eh*, a past deferred realization marker used when speakers have no awareness of something at the moment it occurred, but realize what had occurred at a later time in the past. This marker also functions as a quotative in narrative genres to emphasize that the information is not firsthand and to establish one's authority as a storyteller (de Reuse 2003). Lastly, Western Apache has a quotative *chinū̄* that was formerly frequent in traditional stories, but now has the connotation of gossip (de Reuse 2003).

The Western Apache particle *lą̄ą̄* is internally unanalyzable, but it does have cognates, such as the Hare particle *lǫ,* which is said to function similarly (DeLancey 1997), or the Sarcee inferential *–là,* also frequent with quotations (de Reuse 2003; De Haan 2008). Likewise, the Slave evidential or dubitative *lǫǫ* is used when the 'outcome of an event is an observed fact although the event that actually led up to this outcome was not itself observed' (Rice 1989: 408). The primary function of *lǫǫ* is to express uncertainty, but the particle can have a mirative meaning with certain aspects and can occur in questions.

Based on comparative sound changes (Leer 2005), another probable cognate to Navajo *lá* is the Dena'ina hearsay inferential evidential *łu*. This particle often occurs post-predicatively and with reported speech, though without conversation data, this remains to be definitively verified (Holton 2009). Dena'ina also has a mirative epistemic modal *lagi* that is associated with uncertainty and occurs in questions.

The Western Apache, Dena'ina, Slave, and Hare forms all appear to be inferential or hearsay evidentials. However, their core meanings have diverged, with Dena'ina and Slave prioritizing the encoding of uncertainty, while the mirative meaning is more central to Apache. Though there are pragmatic contexts such as reported speech that overlap between the languages, there are also variations in precisely what is conveyed by the cognate particles. In Apache, the language most closely related to Navajo, speakers distinguish past deferred realization from surprise, while in Navajo these senses are subsumed under the category of mirativity. Also, the Apache reportative *chinīī* has moved from more frequent use in narrative genre, to marking gossip while the Navajo reportative *jiní* seems to be undergoing the opposite shift.

If the indirect, inferential meaning of the enclitic was a Proto-Athabaskan trait, it appears that Navajo *lá* extended this earlier indirect meaning to counter-expectation marking as contrastive focus and mirativity. This development is quite expected typologically, as miratives are often polysemic with quotatives, hearsay or inferential evidentials in other languages (Plungian 2001). This indirect diachronic basis could further explain the semantic intuitions that speaker have of *lá* making a question more indirect (Young & Morgan 2000) though based solely on synchronic frequency, *lá* seems to occur in the unmarked information questions. In this more frequent though pragmatically indirect interrogative use, the function of Navajo *lá* diverges from a similar particle, the Apache mirative/inferential marker *lą̄ą̄,*

which is limited to non-prototypical, tentative questions.

Unlike the potential cognate forms with similar extensions in related Athabaskan languages, and despite a previous suggestion (de Haan 2008), there is no indication from these data that synchronically *lá* encodes information source. Though *lá* occurs frequently in reported speech constructions, which are in themselves a form of evidentiality (Li 1986), it may mark information that was acquired through direct or indirect means. The enclitic occurs in quotative constructions to present direct speech reports as surprising information and is mobilized at strategic moments to direct a listener's attention to surprising or unexpected information in narratives or jokes. In its other usages, speakers may use *lá* to morphologically focus a particular constituent as new or contrasting relative to the previous discourse or relative to shared or individual expectations.

6.2 A BROADER CHARACTERIZATION OF LÁ

Based on the various functions of *lá* in discourse, I argue that modern speakers mobilize two polysemous *lá* markers in Navajo. The first *lá* marks contrastive focus and information questions, and is largely confined to the second position in a clause. In information questions, its most frequent use, *lá* attaches or occurs after the interrogative particle or the questioned constituent. The second *lá* marks counter-expectation and mirativity, and typically occurs clause-finally. Both *lá* enclitics may be considered metadiscourse markers within the larger domain of counter-expectation, a meaning that potentially developed from an earlier inferential form.

In its primary meaning, *lá* makes no evaluative epistemic assertions beyond the information being newsworthy and contrasting with expectations. Speakers then mobilize several pragmatic extensions of this meaning to align with their contextual communicative

and interactional goals. Though it is tempting to describe *lá* exclusively as a mirative particle due to the salience of the surprise and discovery meaning to native speakers, the high frequency of the interrogative and contrastive focus usages appears to counter this intuition. Miratives do often mark counter-expectation, but it remains unresolved whether counter-expectation itself sufficiently constitutes mirativity (Olbertz 2009).

These results suggest that there may be validity to considering contrastive focus and mirativity within the scope of expectation marking rather than limiting the discussion of mirativity to its relationship with evidentiality, where it is often grouped. These data also point to a potential development of a Navajo quotative construction *ní lá* with hearsay connotations, accompanied by a semantic shift of *jiní* from a hearsay to a narrative marker.

7. CONCLUSION

The conversation and narrative data analyzed in this corpus-based study point to the varied functions of the enclitic *lá* beyond what has been documented in previous Navajo literature. The particular pragmatic extensions support the marking of expectation as a salient domain for Navajo speakers. An examination of how *lá* is mobilized in interactional discourse reveals that speakers are using *lá* as an optional marker to add a rhetorical effect of metadiscourse commentary through contrastive focus and mirativity in contexts such as reported speech, jokes, and gossip. In previous research, 'it is rarely the case that other expectation-based constructions such as focus constructions are explicitly linked to mirativity or even to evidentiality, although there is some evidence for such a pragmatic connection' (Behrens 2012: 236). These data provide concrete examples to support the link between contrastive focus and mirativity through the polysemous enclitic *lá*, and contribute to the categorical debate regarding mirativity, epistemic modality and information structure.

REFERENCES

Aikhenvald, Alexandra and R.M.W. Dixon (eds.). 2003. *Studies in Evidentiality.*
    Philadelphia: John Benjamins.

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

Aikhenvald, Alexandra Y. 2012. The essence of mirativity. *Linguistic Typology* 16. 435-485.

Aikhenvald, Alexandra. 2014. *The grammar of knowledge: a cross-linguistic typology.*
    Oxford: Oxford University Press.

Babel, Anna. 2009. Dizque, evidentiality, and stance in Valley Spanish. *Language in Society.*
    38(4).

Barss, Andrew, Ken Hale, Ellavina Tsosie Perkins, and Margaret Speas. 1992. In C.T. James
    Huang and Robert May (eds.) *Logical Structure and Linguistic Structure.* 25-47.

Behrens, Leila. 2012. Evidentiality, modality, focus and other puzzles. In Andrea C. Schalley (ed.)
    Practical Theories and Empirical Practice. Amsterdam: John Benjamins. 185-243.

Bianchi, Valentina, Giuliano Bocci, and Silvio Crushina. 2014. *Focus fronting,*
    unexpectedness, and the evaluative dimension. Draft.

Bruil, Martine. 2014. *Clause-typing and evidentiality in Ecuadorian Siona.* Ph.D.
    dissertation. Leiden University.

Bybee, Joan and Suzanne Fleischman (eds.).. 1995. *Modality in Grammar and Discourse.*
    Amsterdam: John Benjamins.

Chafe, Wallace L. 1976. Givenness, Contrastiveness, Definiteness, Subjects, Topics, and
    Point of View. In Li, Charles N. (ed.), *Subject and Topic.* New York: Academic Press Inc.
    27-55.

Chafe, W. 1979. The Flow of Thought and the Flow of Language. In Talmy Givón (ed.)
    Discourse and Syntax. Lund: Lund University Press. 159-181.

Chafe, Wallace L. 1982. Integration and Involvement in Speaking, Writing and Oral
    Literature, in Tannen, D. (ed.) *Spoken and Written Language.* Norwood, NJ: Ablex
    Publishing Corporation. 35-53.

Chafe, Wallace and Johanna Nichols (eds.). 1986. *Evidentiality: The Linguistic Coding of*
    Epistemology. Norwood, NJ: Ablex Publishing Corporation.

Chafe, Wallace. 1994. Discourse, Consciousness, and Time. Chicago: The University of
    Chicago Press.

Chafe, Wallace L. 1995. The realis-irrealis distinction in Caddo, the Northern Iroquoian languages, and English. In Joan Bybee and Suzanne Fleischman (eds.) *Modality in grammar and discourse*. Amsterdam: Benjamins. 349-388.

Clift, Rebecca. 2006. Indexing stance: Reported speech as an interactional evidential. *Journal of Sociolinguistics* 10. 569–95.

Collins, James. 1987. Reported Speech in Navajo Myth Narratives. In J. Verschueren (ed.) *Linguistic Action: some Empirical-Conceptual Studies*. Norwood, NJ: Ablex Publishing Corporation. 69-84.

Coulmas, Florian (ed.). 1986. *Direct and Indirect Speech*. New York: Mouton de Gruyter.

Cruschina, Silvio. 2012. *Discourse-Related Features and Functional Projections*. Oxford Comparative Studies in Syntax. Oxford and New York: Oxford University Press.

DeLancey, Scott. 1990. A note on evidentiality in Hare. *International Journal of American Linguistics* 56. 152-158.

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

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

DeLancey, Scott. 2012. Still mirative after all these years. *Linguistic Typology* 16 (3). 529-564.

Du Bois, John, Stephan Schuetze-Coburn, Danae Paolina and Susanna Cumming. 1993. Outline of discourse transcription. In: Santa Barbara papers in linguistics, Vol. 4. Santa Barbara: University of California, Department of Linguistics; and in Jane A. Edwards and Martin D. Lampert (eds.). *Talking data: Transcription and coding methods for language research*. Hillsdale, NJ: Erlbaum. 45-89.

Eisman, Kayla. 2015. *Alternations between Navajo Interrogatives: A Corpus Investigation*. Unpublished manuscript.

Elgin, Patricia Anne Suzette. 1973. *Some Topics in Navajo Syntax*. Ph.D. Dissertation. University of California, San Diego.

Eung-Do Cook and Keren D. Rice (eds.). 1989. *Athapaskan Linguistics: Current Perspectives on a Language Family*. New York: Mouton de Gruyter.

Faltz, L. M. 1998. *The Navajo verb: A grammar for students and scholars*. Albuquerque: University of New Mexico Press.

Fernald, Theodore B. and Paul R. Platero (eds.) 2000. *The Athabaskan Languages: Perspectives on a Native American Language Family*. New York: Oxford University Press.

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

Givón, Talmy. 2001. *Syntax: An Introduction.* Philadelphia: John Benjamins Publishing Company.

Goossen, Irvy W. 1967. *Navajo made Easier.* Flagstaff, AZ: Northland Press Flagstaff.

Gordon, Matthew. To appear. *Phonological Typology: The Cross-linguistic Study of Sound Systems.* Oxford*:* Oxford University Press.

Greenfeld, Philip J. Fall 1999. Some Special Morphological Characteristics of the White Mountain Dialect of Apachean. In *Anthropological Linguistics* 41 (3). 356-381.

Guldemann, Tom and Manfred Von Roncador (eds.). 2002 *Reported Discourse: A Meeting Ground for Different Linguistic Domains.* Amsterdam: John Benjamins Publishing Company.

de Haan, Ferdinand. 1999. Evidentiality and epistemic modality: Setting boundaries. *Southwest Journal of Linguistics* 18. 83–101.

de Haan, Ferdinand. 2001. The place of inference within the evidential system. *International Journal of American Linguistics* 67. 193–219.

de Haan, Ferdinand. 2008. Evidentiality in Athabaskan. *Coyote Papers: Working Papers in Linguistics* 16. 67–81.

de Haan, Ferdinand. 2012. Evidentiality and Mirativity. In Binnick, Robert I. (ed.) *The Oxford Handbook of Tense and Aspect.* Oxford: Oxford University Press.

Heine, Bernd, Ulrike Claudi, and Friederike Hünnemeyer. 1991. *Grammaticalization: A Conceptual Framework.* Chicago: University of Chicago Press.

Hill, Jane H. and Judith T. Irvine. 1993. Responsibility and Evidence in Oral Discourse. Cambridge: Cambridge University Press.

Hill, Nathan W. 2012. "Mirativity" does not exist: *hdug* in "Lhasa" Tibetan and other suspects. *Linguistic Typology* 16. 389-433.

Holton, Gary and Olga Lovick. 2009. Evidentiality in Dena'ina Athabaskan. Anthropological Linguistics 50(3-4). 292-323.

Hopper, Paul. 1987. Emergent grammar. *Berkeley Linguistics Society (BLS)* 13. 139-157.

Jelinek, Eloise, Sally Midgett, and Keren Rice (eds.). 1996. *Athabaskan Language Studies: Essays in Honor of Robert W. Young.* Albuquerque: University of New Mexico Press.

Johanson, Lars and Bo Utas (eds.). 2000. *Evidentials: Turkic, Iranian and Neighbouring Languages.* New York: Mouton de Gruyter.

Johanson, Lars. 2000. Turkish indirectives. In Johanson, Lars and Tas (eds.) *Evidentials: Turkic, Iranian and Neighbouring Languages.* New York: Mouton de Gruyter. 61-87.

Kiss. Katalin É. 1998. Identificational Focus versus Information Focus. *Language* 74(2). 245-273.

Lambrecht, Knud. 1994. *Information Structure and Sentence Form: Topic, focus and the mental representations of discourse referents.* Cambridge: Cambridge University Press.

Lazard, Gilbert. 1999. Mirativity, evidentiality, mediativity, or other? *Linguistic Typology* 3 (1). 91-110.

Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig (eds.), 2015. *Ethnologue: Languages of the World, Eighteenth edition.* Dallas, Texas: SIL International. Online version: http://www.ethnologue.com.

Li, Charles N. 1986. Direct and Indirect Speech: A functional study. Coulmas, Florian (ed.). *Direct and Indirect Speech.* New York: Mouton de Gruyter. 29-46.

McDonough, Joyce. 2000. How to use Young and Morgan's "The Navajo Language." In K.M. Crosswhite and J.S. Magnuson (eds.). *University of Rochester Working Papers in the Language Sciences, 1(2),* 195-214.

McDonough, Joyce. 2002. The Prosody of Interrogative and Focus Constructions in Navajo. In A. Carnie, H. Harley (eds.). *Formal Approaches to Functional Phenomena.* Amsterdam: John Benjamins.

Michael, Lev. 2014. Nanti self-quotation: Implications for the pragmatics of reported speech and evidentiality. In Nuckolls, Janis and Lev Michael (eds.) *Evidentiality in Interaction.* Amsterdam: John Benjamins. 155-191.

Mithun, Marianne. 1986. Evidential Diachrony in Northern Iroquoian. In Chafe, Wallace and Johanna Nichols (eds.). *Evidentiality: The Linguistic Coding of Epistemology.* Norwood, NJ: Ablex Publishing Corporation. 89-112.

Mithun, Marianne. 1991. *The Languages of Native North America.* Cambridge: Cambridge University Press.

Mithun, Marianne ed. 2015. Navajo Conversational Corpus, compiled with support from National Science Foundation DEL grant BCS-0853598.

Murray, Sarah E. 2010. Evidentiality and the structure of speech acts. Ph.D. dissertation. Rutgers, State University of New Jersey.

Myill, John and Janet Zhiqun Xing. 1996. Towards an Operation Definition of Discourse Contrast. *Studies in Language* 20 (2). 303-360.

Nuckolls, Janis and Lev Michael (eds.). 2014. *Evidentiality in Interaction.* Amsterdam: John Benjamins.

Peterson, Tyler. Under review. *Rethinking Mirativity: The Expression and Implication of Surprise.*

Peterson, Tyler. 2010. Examining the Mirative and Nonliteral Uses of Evidentials. In Tyler Peterson and Uli Sauerland (eds.) *Evidence from Evidentials. University of British Columbia Working Papers in Linguistics* 28. 129-159.

Plungian, Vladimir A. 2001. The place of evidentiality within the universal grammatical space. *Journal of Pragmatics* 33. 349-357.

Reichard, Gladys A. 1951. *Navaho grammar.* New York: Augustin.

de Reuse, Willem Joseph. 2003. Evidentiality in Western Apache(Athabaskan). *In* Alexandra Y. Aikhenvald and R.M.W. Dixon (eds.) *Studies of Evidentiality.* Amsterdam: John Benjamins. 79-100.

de Reuse, Willem. 2006. *A practical grammar of the San Carlos Apache Language.* Muenchen: LINCOM Europe/Muenchen.

Rice, Keren D. 1986. Some remarks on direct and indirect speech in Slave (Northern Athapaskan). In Florian Coulmas (ed.). *Direct and Indirect Speech.* New York: Mouton de Gruyter. 47-76.

Rice, Keren. 1989. *A Grammar of Slave.* New York: Mouton de Gruyter.

San Roque, Lila, Floyd, Simeon, and Elisabeth Norcliffe. 2015. Evidentiality and interrogativity. *Lingua.* http://dx.doi. org/10.1016/j.lingua.2014.11.003.

Saxon, Leslie. 1998. Complement clauses in Dogrib. In Pamela Munro and Leanne Hinton (eds.) *Studies in American Indian languages: Description and theory.* Berkeley, California: University of California Press. 204-211.

Schauber, E. 1975. *Theoretical Reponses to Navajo Questions.* Ph.D. diss. Cambridge, Mass.: MIT.

Speas, Margaret. 1999. Person and Point of View in Navajo Direct Discourse. In DeLacy and Nowak (eds.). UMass Occasional Papers #23: Papers from the 25th Reunion.

Slobin, D.I., and Aksu-Koç, A.A. 1982. Tense, aspect and modality in the use of the Turkish evidential. In P.J. Hopper (ed.) *Tense-Aspect: Between Semantics and Pragmatics.* Amsterdam: John Benjamins. 185-200.

Willie, Mary Ann. 1991. *Navajo Pronouns and Obviation.* Ann Arbor: University Microfilms International.

Willie, Mary Ann. 1996. On the Expression of Modality in Navajo in *Athabaskan Language Studies: Essays in Honor of Robert W. Young.* Albuquerque: University of New Mexico Press. 331-347.

Witherspoon, Gary. 1977. *Language and art in the Navajo universe.* Ann Arbor: University of Michigan Press.

Yopán, Rosa Vallejos. 2009. The Focus Function of =pura in Kokama-Kokamilla Discourse. *International Journal of American Linguistics* 75 (3). 339-432.

Young, Robert W., William Morgan, and Sally Midgett. 1992. *The Analytical Lexicon of Navajo.* Albuquerque: University of New Mexico Press.

Young, Robert W. and William Morgan. 1987. *The Navajo language. A grammar and colloquial dictionary.* Albuquerque: University of New Mexico Press.

Young, Robert W. and William Morgan. 2000. The Function and Signification of Certain Navaho Particles. In Fernald, Theodore B. and Paul R. Platero (eds.) *The Athabaskan Languages: Perspectives on a Native American Language Family.* New York: Oxford University Press. 288-319.

Young, Robert W. 2000. *The Navajo Verb System: An Overview.* Albuquerque: University of New Mexico Press.