Evidentiality and Epistemics in Australian Indigenous Languages

Rachael Skerritt

1 Introduction

Many Australian languages have linguistic forms that express the concept of information source, known as 'evidentials.' In this paper, I adopt Mushin's (2001) concept of 'epistemological stance', an approach that considers both information source (evidentiality) as well as the construal of speaker attitude to information (epistemic stance). Mushin's model defines five epistemological stances: personal experience, inferential, reportive, factual, and imaginative. In this paper, I will first show how these categories can be applied to Australian Indigenous languages, then explore the reportive epistemological stance in three languages, Martuthunira, Warlpiri, and Diyari, to highlight the similarities and differences between the three languages.

2 Background

2.1 Evidentiality and Epistemic Stance

There have been many different approaches to epistemics and evidentiality in the literature, and almost every scholar has a different approach, as well as their own terminology. Broadly sp eaking, evidentiality is the grammatical coding of information source in language (Aikhenvald, 2018; Boye, 2012; Jakobson, 1957; Mushin, 2012). However, many scholars argue that evidentiality is actually about indexing attitudes to information source, which is known as the broad definition of evidentiality (Chafe & Nichols, 1986). Speaker attitude or orientation towards knowledge is also known as epistemic stance (Heritage, 2012; Kockelman, 2004; Mushin, 2013; Sidnell, 2012) and epistemic modality (Palmer, 1986; Willett, 1988). Scholars using the broad approach include Chafe and Nichols (1986), Mushin (2001), Palmer (1986), Sidnell (2012), and Willett (1988). Proponents of a broad approach argue that using a narrow definition does not capture the range of pragmatically motivated ways speakers use markers of information source (Mushin, 2001).

2.2 Epistemological Stance

In this essay, I adopt the analysis of Mushin (2001), whose approach incorporates both evidentiality as well as epistemic stance. Mushin uses the term 'epistemological stance' to describe the stance that speakers take towards how they acquired information (information source – evidentiality), and as well as speaker attitude towards that information (epistemic stance).
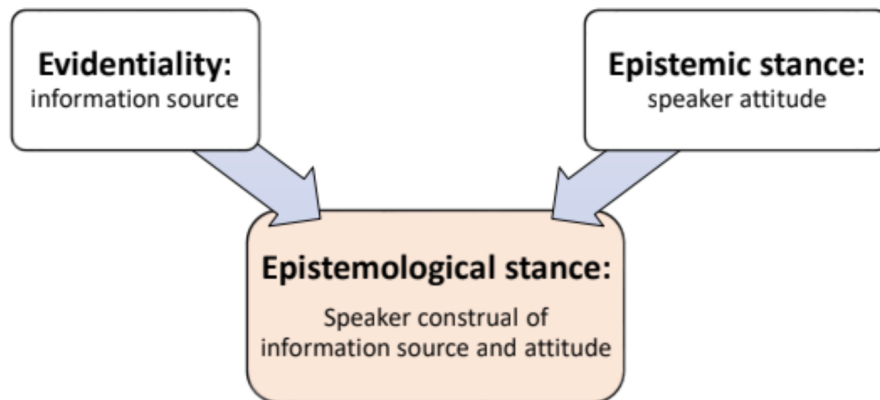
Figure 1: Epistemological stance combines evidentiality and epistemic stance

Even in languages with highly grammaticalised or compulsory systems of evidential encoding there is always construal of events by the speaker (Mushin, 2001, p. 58). Speakers can choose to construe events in different ways. Additionally, most languages that evidential markers can be used for other functions that do not specifically relate to information source (Mushin, 2001). For example, in several of the languages surveyed in this essay, reportive/hearsay particles are used for emphasis in imperative statements, even when the actual utterance is not hearsay. Additionally, evidential markers can be used for other functions such as irony and sarcasm, where the evidential is not actually encoding information source. The concept of epistemological stance captures the fact that information source and speaker attitude are two distinct components that influence how speakers construe information in discourse. Epistemological stance is assumed to be universal, but its actual manifestation in language and discourse will vary between languages and cultures. I have chosen to adopt this model because it captures the pragmatic motivations speakers have for choosing particular evidential forms in a way that a narrow model of evidentiality, such as Aikhenvald (2018), does not capture.

2.2.1   Evidentiality and Epistemics in Australian Languages

There has been very little typological discussion about evidentials and epistemic stance with a specific focus on Australian languages. Epistemic authority has been explored in Murrinh-patha (Mansfield, 2019), Warlpiri (Bowler, 2015), and Jaminjung/Ngaliwurru (Schultze-Berndt, 2017). Epistemic authority is the authority or right to speak about information, and ties into the cultural norms and systems that govern knowledge in many Australian Indigenous cultures (Mansfield, 2019). For example, in Warlpiri communities there are gender-segregated knowledge domains called men's/women's business. Warlpiri social norms govern who is allowed to know what, and members of one gender are not allowed to know the other's business (Bowler, 2015). Many Australian languages have particles, suffixes, or clitics that can encode information source and/or epistemic stance. Kayardild encodes evidentiality by using different types of finite subordinate clauses (Evans, 1995). The widespread presence of grammatical markers of evidentiality and of epistemic stance is perhaps a reflection of the importance of communication information source in Australian Indigenous cultures.

3   Epistemological Stance in Australian Languages

Recall that the term 'epistemological stance' describes the stance or attitude that speakers take towards how they acquired information (Mushin, 2001). Epistemological stance factors both evidentiality (information source) as well as epistemic stance (speaker attitude). I will now illustrate the types of epistemological stance that Mushin proposes, using examples from Australian languages.

3.1   Types of Stance

Personal experience: This epistemological stance construes information as coming from a speaker's direct personal experience with a high degree of certainty. Particles or clitics expressing this stance are found in languages such as Ngiyambaa (Donaldson, 1980) Diyari (Austin, 2013), Jaminjung/Ngaliwurru (Schultze-Berndt, 2017), and Garrwa (Mushin, 2012).

(1)   *ngapa   thalara   wakara-lha   ngana-yi-ku*
     water   rain.nom   come-fut   aux-pres-sense
     'It looks/feels/smells like rain will come'

Diyari (Austin, 2013, p. 190)

Inferential: An inferential stance construes information as being acquired by inference or deduction on the basis of evidence that the speaker has. This stance can represent information coming from a private state, such as personal sensations, and can also represent information coming from public experiences that the speaker directly witnessed, which others may have also witnessed. Languages with morphological forms expressing this stance include Murrinhpatha (Mansfield, 2019) and Mangarayi (Merlan, 1989).

(2)   *karinganta   Jakamarra   ngulaju   Napanangka-kurlangu*
     PP.ASSERT   Jakamarra   that is   Napanangka-POSS
     'I know he's a Jakamarra because his mother is a Napanangka.'

Warlpiri (Laughren, 1982, p. 145)

Reportive: This stance identifies the information as having been received from a third party. The level of certainty encoded by this stance varies between languages. Particles or clitics expressing this stance are found in languages such as Ngiyambaa (Donaldson, 1980), Diyari (Austin, 2013), Mparntwe Arrernte (Wilkins et al., 1989), Warlpiri (Laughren, 1982), Martuthunira (Dench, 1995), and Yankunytjatajara (Goddard, 1985). I explore reportives in greater detail in section 4.

Factual: This stance presents information as a verifiable fact. It conveys a high degree of certainty. Diyari has a suffix -matha 'identified information' that is used when the speaker wants to assert knowledge about a particular referent.

(3) *marnpi,*   *yani-ldra-matha*   *nhawu*   *yatha-lha* *ngana-yi,*
     pigeon.nom   like this-addinf-ident   3sgnf.nom   speak-fut   aux-pres
     mungka-rna-ldra-matha
     coo-imperfSS-addinf-ident
     'The bronzewing pigeon, it will call like this too, cooing as well'

(Austin, 2013, p. 187)

Imaginative: This stance involves a complete suspension of reality and a transition into an imaginary scenario. Many Australian languages encode this epistemological stance morphological using the irrealis. One example is Murrinhpatha, where the irrealis is used to express a range of hypotheticals, such as counterfactual statements, conditional statements, and negated statements.

(4) *mere* *ngurri-dha*   *Ngandimeli-yu*
     NEG   1SGS.GO(6).PSTIRR-PIMP   Ngandimeli-DM
     'I didn't go to Ngandimeli (yesterday).'

(Nordlinger & Caudal, 2012, p. 26)

4   Reportive Epistemological Stance

This epistemological stance involves construing information as being acquired from something someone else said (Mushin, 2001). It attributes the information to a third party, and completely distances the speaker from the information. This can either be direct, as in a direct quote, or indirect, as in a paraphrase. A direct reportive stance involves the optional use of a speech act predicate and reference to another speaker, as well as a shift in deictic centre from the time and space of the actual speech act (Mushin, 2001). This has typically been referred to as a reportive evidential in the literature. The reportive epistemological stance collapses the two categories of quotatives and reportives in Aikhenvald (2018) typology of evidentials. It also corresponds to an evidential based on hearsay under the typology of evidentials used by Palmer (1986). Reportive stances can also be used to distance oneself from the content on the utterance. A reportive stance can be construed as reliable or unreliable, depending on the source of the information.

4.1   The Surveyed Languages

Diyari: Diyari is a suffixing, typically SOV Pama-Nyungan language spoken by a small number of people in north-eastern South Australia (Austin, 2013). The language has several particles and inflectional suffixes, some of which express evidentiality or epistemic stance.

Martuthunira: Martuthunira was a Pama-Nyungan language that was spoken in the Pilbara region in Western Australia (Dench, 1995). The last speaker of Martuthunira died in 1995 (Ritz

& Dench, 2009). The language had several particles that Dench calls 'propositional modifiers', since the particles functioned to add pragmatic information about a given statement or proposition. The reportive clitic -nu behaved in a similar way to the particles. Dench (1995, p. 13) reported that conventions around classificatory kin relationships dictated what topics could be spoken about in the presence of different kin. Martuthunira had an avoidance register that was used around certain kin (either biological or classificatory).

Warlpiri: Warlpiri is a non-configurational Pama-Nyungan language spoken in the Northern Territory (Hale, 1983). Warlpiri has a range of propositional particles that encode speaker attitude towards the proposition. Some particles indicate source of information as well as speaker attitude. As previously mentioned, Warlpiri social norms govern who has access to certain knowledge and members of one gender are not allowed to know the other gender's business (Bowler, 2015). Warlpiri has an avoidance register that is used around certain kin, both biological and classificatory (Bowler, 2015).

4.2   Comparison of Reportive Stance in Diyari, Martuthunira, and Warlpiri

Diyari:

Pinthi: 'reportedly'

This particle means 'reportedly' or 'rumoured' and is used to indicate that the information or assertion that the speaker is talking about is not their own opinion, but is information that has come from someone else. In doing so they make no commitment to the truthfulness of the utterance. Unlike other particles in Diyari, *pinthi* can only ever be the first or last word of the clause it has scope over.

(5)   *pinthi   nhawu   wakara-yi*
      rumoured   3sgnf.nom   come-pres
      'They say he is coming'

(6)   *thana-li waru   mama-rna   wanthi-yi kupa   pinthi*
      3pl-erg   long.ago.loc steal-ptcple aux-pres   child.acc rumoured
      'It is said that they used to steal children long ago'

(Austin, 2013, p. 179)

Martuthunira:

-nu: 'reportedly, so they say'

This is a clitic that is used to indicate that the information or assertion is information that has come from someone else. This clitic is most commonly used for discussing information in the form of mythology. It is used when the speaker wants to distance themselves from the assertion they are making, as in the example below:

(7)   *Nhiyu-nu*   *yarta-lpurtu-nu*   *parla-nu*   *panyu paju.*
       this.NOM-QUOT   other-COMP-QUOT   hill-QUOT   good   REAL

       '(It is said) this hill is different, it's very good apparently.'

(Dench, 1995, p. 168)

Note how in the previous example, each element of the reported clause receives the suffix. This is reminiscent of the multiple case marking that occurs in Martuthunira. This is not always the case, however. The clitic is also used for direct orders and suggestions:

(8)   *Kartu-nu,*   *manyka,* *puni-layi-rru*   *thanuwa-a-rru*   *mungka-ru.*
       2SG.NOM-QUOT   son   go-FUT-NOW   food-ACC-NOW   eat-PURPss

       'Son, you're supposed to go and eat some food.'

(Dench, 1995, p. 168)

According to Dench (1995), the propositional modifiers have scope over the constituent that immediately precedes them. An exception to this is when the clitic -nu combines with the particle mir.ta 'not,' which is forward-scoping.

(9)   *Mir.ta-nu*   *jarruru kanarra* *patha-rralha.*
       not-QUOT   slowly   wind   blow-PST

       'The wind didn't blow slowly (so they say).'

(Dench, 1995, p. 167)

In addition, the clitic is used when someone is directly quoting speech, as in the following example:

(10)   *Ngunhaa*   *wangka-layi* *yartapalyu-u* *"Nhiyu-nu*   *wirra*   *ngathu*
       that.NOM   say-FUT   others-ACC   this.NOM-QUOT   boomerang   1SG.EFF
       yinka-rnu".
       chisel-PASSP

       'He says to the others, "This is a boomerang made by me."'

(Dench, 1995, p. 167)

Warlpiri:

Nganta: 'reportedly'

Interestingly, Warlpiri contains two reportive particles that have slightly different connotations (Harkins, 1986). Nganta is used to indicate that the information or assertion came from someone else. Nganta is used to distance oneself from the proposition, but implies that someone did

actually say the statement and it is being repeated (Laughren, 1982). Nganta also implies that the listener can recover where the information came from based on paralinguistic contextual clues. Laughren (1982, p. 139) states that "the use of nganta often involves a very high degree of co-operation or shared knowledge between speaker and addressee so that a specific value (referent) attaches to the role of original author". This differs from the two previously discussed reportive particles in Diyari and Martuthunira, which encode a more general concept of "so they say" or "it is said," which does not imply that the knowledge was gained from a specific person.

(11)   *Ngana-ngku   nganta   parkarnu?*
        who-ERG   PP1   hit-PST

        'Who reportedly hit him?'/'Who does she say hit him?[1]'

(12)   *Ngana-ngku   mayi   nganta   parkarnu.*
        who-ERG   eh?   PP-reportedly   hit-PST

        'I don't know who reportedly hit him.'/'I don't know who she says hit him.'

(Laughren, 1982, p. 140)

Nganta can also be used with imperatives for emphasis and is sometimes used to indicate that the speaker disagrees with the reported statement, sometimes in a sarcastic way:

(13)   *Yuntardi   nganta!*
        beautiful   PP1

        'She's beautiful, so they say!'

(Laughren, 1982, p. 141)

O'Shannessy (2005, p. 51) reports that nganta is also used in Light Warlpiri, a variety of Warlpiri that emerged from the code-mixing of Kriol, English, and Warlpiri. The meaning of nganta in Light Warlpiri is largely the same as found in Warlpiri.

Murra: 'reportedly'

Murra is used in a similar way to *nganta*, in that murra indicates that the information or assertion came from someone else, but *murra* also implies that the speaker agrees with the proposition (Laughren, 1982). It does not have the same connotations that *nganta* has of an actual utterance that a specific person said, nor can it be used in a sarcastic or sceptical way, as *nganta* can be. Laughren (1982, p. 158) notes that it tends to imply that the speaker agrees with the proposition, unlike *nganta* which tends to be used when the speaker disagrees with the proposition.

---

[1]Note that Laughren glosses the propositional particles as PP.

(14) *Murra-ja*   *ka-lu*   *nga-rni*   *kuyu.*
      PP.QUOT-EMPH   IMPF-3PL   eat-nonPST   meat.

      'Reportedly they eat it for the meat.'

(Laughren, 1982, p. 158)

5   Conclusions

In this essay, I have applied the concept of epistemological stance to several Australian lan-
guages. I first explored the concept of evidentiality (the grammatical encoding of information
source) as well as the concept of epistemic stance (the grammatical encoding of speaker at-
titude). I then explored the model of epistemological stance proposed by Mushin (2001) that
unifies these two concepts, and introduced the epistemological stances of personal experience,
inferential, reportive, factual, and imaginative. I applied these categories to several Australian
languages. I then explored the reportive stance in detail in Diyari, Martuthunira, and Warlpiri.
I have shown that it is not accurate to say that the sole function of reportive particles such
as *pinthi* (Diyari), *-nu* (Martuthunira), and *murra* (Warlpiri) is to encode information source,
since other functions occur, such as the expression of irony or incredulity. These morphemes
are also used in imperatives where the statement does not actually come from a third party.

Warlpiri has a general reportive particle (*murra*) as well as a specific reportive particle
(*nganta*) that is used to imply that the information was received from a specific person, the
identity of whom can often be recovered from the context. There is also some evidence that
murra is used when the speaker disagrees with the statement, and *nganta* is used when the
speaker agrees with the statement, giving clear evidence that these particles encode speaker
attitude as well as the source of information. More research is needed to elucidate whether
the two particles in Warlpiri are an example of an implicational hierarchy, and whether such a
distinction is found in any other languages. There is currently very little research specifically
addressing evidentiality and epistemic stance in Australian languages, and much more research
is required to fully elucidate these concepts.

References

Aikhenvald, A. Y. (2018). *The oxford handbook of evidentiality*. Oxford University Press.

Austin, P. (2013). *A grammar of diyari, south australia*. Cambridge: Cambridge University Press.
        http://ausil.org/Dictionary/Warlpiri/lexicon/index.htm

Bowler, M. (2015). Warlpiri evaluative morphology. *Edinburgh handbook on evaluative morphol-
        ogy* (pp. 438–447). Edinburgh University Press.

Boye, K. (2012). *Epistemic meaning: A crosslinguistic and functional-cognitive study*. De Gruyter
        Mouton. https://doi.org/doi:10.1515/9783110219036

Chafe, W. L., & Nichols, J. (1986). Evidentiality: The linguistic coding of epistemology.

Dench, A. C. (1995). *Martuthunira: A language of the pilbara region of western australia*. Dept.
        of Linguistics, Research School of Pacific Studies, The Australian National University.

Donaldson, T. (1980). Ngiyambaa: The language of the wangaaybuwan. *Cambridge Studies in Linguistics London*, (29), 1–345.

Evans, N. (1995). *A grammar of kayardild: With historical-comparative notes on tangkic.* Walter de Gruyter.

Goddard, C. (1985). *A grammar of yankunytjatjara.* Institute for Aboriginal Development.

Hale, K. (1983). Warlpiri and the grammar of non-configurational languages. *Natural Language & Linguistic Theory*, *1*(1), 5–47.

Harkins, J. (1986). Semantics and the language learner: Warlpiri particles. *Journal of pragmatics*, *10*(5), 559–573.

Heritage, J. (2012). Epistemics in action: Action formation and territories of knowledge. *Research on language & social interaction*, *45*(1), 1–29.

Jakobson, R. (1957). *Shifters, verbal categories, and the russian verb.* Harvard University, Department of Slavic Languages; Literatures.

Kockelman, P. (2004). Stance and subjectivity. *Journal of Linguistic Anthropology*, *14*(2), 127–150.

Laughren, M. N. (1982). *A preliminary description of propositional particles in warlpiri.*

Mansfield, J. (2019). Epistemic authority and sociolinguistic stance in an australian aboriginal language. *Open Linguistics*, *5*(1), 25–48.

Merlan, F. (1989). *The genetic position of mangarayi: Evidence from nominal prefixation.* London: Routledge.

Mushin, I. (2001). Evidentiality and epistemological stance. *Narrative retelling.*

Mushin, I. (2012). "watching for witness": Evidential strategies and epistemic authority in garrwa conversation. *Pragmatics and Society*, *3*(2), 270–293.

Mushin, I. (2013). Making knowledge visible in discourse: Implications for the study of linguistic evidentiality. *Discourse studies*, *15*(5), 627–645.

Nordlinger, R., & Caudal, P. (2012). The tense, aspect and modality system in murrinh-patha. *Australian Journal of Linguistics*, *32*(1), 73–113.

O'Shannessy, C. (2005). Light warlpiri: A new language. *Australian Journal of Linguistics*, *25*(1), 31–57.

Palmer, F. R. (1986). *Mood and modality.* Cambridge university press.

Ritz, M.-E., & Dench, A. (2009). Le futur en martuthunira, langue du pilbara dans le nord ouest de l'australie. *Faits de langues: revue de linguistique*, *33*, 221–227.

Schultze-Berndt, E. (2017). Shared vs. primary epistemic authority in jaminjung/ngaliwurru. *Open Linguistics*, *3*(1), 178–218.

Sidnell, J. (2012). "who knows best?": Evidentiality and epistemic asymmetry in conversation. *Pragmatics and Society*, *3*(2), 294–320.

Wilkins, D. P. et al. (1989). Mparntwe arrernte (aranda): Studies in the structure and semantics of grammar.

Willett, T. (1988). A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, *12*(1), 51–97.