Typological Studies in Language (TSL)

A companion series to the journal *Studies in Language*

General Editor   Michael Noonan

Assistant Editors   Spike Gildea, Suzanne Kemmer

Editorial Board

Volumes in this series will be functionally and typologically oriented, covering specific topics in language by collecting together data from a wide variety of languages and language typologies. The orientation of the volumes will be substantive rather than formal, with the aim of investigating universals of human language via as broadly defined a data base as possible, leaning toward cross-linguistic, diachronic, developmental and live-discourse data.

Studies in Evidentiality

Edited by

Alexandra Y. Aikhenvald

R. M. W. Dixon

Research Centre for Linguistic Typology, La Trobe University

Table of contents

Contributors

Alexandra Y Aikhenvald
Research Centre for Linguistic Typology
La Trobe University
Victoria, 3086
Australia
a.aikhenvald@latrobe.edu.au

Wilhem J. De Reuse
422 Magnolia St, Denton, TX, 76201
USA
rwd0002@unt.edu

R. M. W. Dixon
Research Centre for Linguistic Typology
La Trobe University
Victoria, 3086
Australia

Sally McLendon
Deapartment of Anthropology
Hunter College and the Graduate Center
City University of New York
695 Park Avenue
New York, NY 10021
USA
smclendo@hunter.cuny.edu

Victor Friedman
Department of Slavic Languages
and Literatures
University of Chicago
1130 East 59th Street
Chicago, IL 60637
USA
vfriedm@midway.uchicago.edu

Vjacheslav Chirikba
Institute of Comparative
Linguistics (VTW)
Faculty of Arts
Leiden University
Postbox 9515
2300 RA Leiden
The Netherlands
V.A.Chirikba@let.leidenuniv.nl

Prof. Michael Fortescue
Linguistics
University of Copenhagen
Strandgade 100 H
DK-1401
Copenhagen K,
Denmark
fortesq@hum.ku.dk

Lars Johanson
Turkic Languages
Seminar fuer Orientkunde
Universitaet Mainz
D-55099 Mainz,
Germany
johanson@mal.uni-mainz.de

Brian Joseph
Dept of Linguistics
Ohio State University
222 Oxley Hall
Columbus, OH 43210
USA
bjoseph@ling.ohio-state.edu

Elena Maslova
Department of Linguistics
Stanford University
Stanford
CA 94305-2150n
USA
maslova@ips.net

Ruth Monserrat
Av Oswaldo Cruz 73/701
Flamengo
Rio de Janeiro, RJ
22250-960
Brazil

Pilar Valenzuela
Jr. Libertad 162
Lima 4
Peru
pvalenzu@darkwing.uoregon.edu

Randy LaPolla
Department of Chinese, Translation
and Linguistics
City University of Hong Kong
Tat Chee Av
Kowloon
Hong Kong
PRC
ctrandy@cityu.edu.hk

Preface

This volume includes revised versions of presentations at the International Workshop on 'Evidentiality' organised by the Research Centre for Linguistic Typology at La Trobe University, 6–11 August 2001. The discussion was organised around the issues raised in Aikhenvald's position paper (a revision of this is Chapter 1 below) but in fact ranged well beyond it. Contributors had a list of relevant issues and questions to address.

The week of the Workshop was an intellectually stimulating and exciting time, full of exchange and cross-fertilisation of ideas. All of the authors have experience in intensive investigation of languages, as well as in dealing with linguistic typology, historical comparative issues and problems of areal diffusion.

We thank all of the authors included here for taking part in the Workshop, for getting their papers in on time, and for revising them according to recommendations of the editors.

We owe a large debt of gratitude to Siew Peng Condon and Abby Chin, Executive Officers of the Research Centre for Linguistic Typology who organised the workshop with care and good humour. Thanks go to our Publication Assistants Anya Woods and Tania Strahan, for carefully proof-reading the contributions.

This Workshop would not have been possible without the constant support and encouragement of Professor Michael Osborne, Vice-Chancellor and President of La Trobe University.

CHAPTER 6

Evidentiality in Tariana

Alexandra Y. Aikhenvald

1. Preliminaries

Tariana, an endangered North Arawak language spoken in the multilingual linguistic area of the Vaupés,[1] distinguishes at least four evidential specifications fused with non-future tense-marking enclitics: visual, nonvisual, inferred and reported. The system in Tariana was developed under the areal influence of East Tucanoan languages, mostly Tucano, which is now rapidly gaining ground as a lingua franca of the whole Brazilian Vaupés. Younger speakers of Tariana are developing a fifth, 'assumed', evidential, to match a corresponding structure in Tucano. Normally, omitting an evidential results in an ungrammatical sentence. A reduced set of evidentials is found in interrogative clauses, in commands, in apprehensive clauses and in purposives.

A brief typological overview is in order. Tariana is a polysynthetic language which combines head-marking morphology with elements of dependent marking. The open classes are nouns, verbs and adjectives. Tariana distinguishes simple predicates, serial verb constructions, and complex predicates. Every verbal root is either ambitransitive of A=S_a type (prefixed) or intransitive of type S_o, or of type S_io (both prefixless). Person markers are used only with transitive and active intransitive verbs; no markers occur on prefixless stative verbs, in agreement with the general active-stative profile inherited from Proto-Arawak. The same set of prefixes marks possessors on inalienably possessed nouns (prefixes and personal pronouns are in Table 1). Simple predicates have one prefix position and up to nine suffix positions. Unlike most other Arawak languages, grammatical relations are also marked by cases, on a nominative-accusative basis.

The tense-evidentiality enclitics in Tariana occupy a fixed slot in the structure of the verb shown in Diagram 1. Slot 15, reserved for evidentiality and tense, is in bold. The tense-evidentiality specification is obligatory in ev-

Table 1. Person, gender and number prefixes and corresponding pronouns in Tariana

	Prefix	Pronoun		Prefix	Pronoun
1sg	nu-	niha	1pl	wa-	waha
2sg	pi-	piha	2pl	i-	ihya
3sgnf	di-	diha	3pl	na-	naha
3sgf	du-	duha			
Impersonal	pa-	paha			

Diagram 1. Verb structure in Tariana

Prefix
1. Cross-referencing prefixes (A/Sₐ) (3 persons in singular and in plural), or negative ma-, or relative ka-
2. ROOT
3. Thematic syllable
4. Causative -ita
5. Reciprocal (rarely: reflexive) -kaka
6. Negative -(ka)de
7. -ina 'almost, a little bit'

Suffixes
8. Topic-advancing -ni, or passive -kana, or purposive nonvisual -hyu or visual -karu
9. Verbal classifiers
10. Benefactive -pena
11. Relativizers or nominalizers
12. Intentional 'be about to' =kasu
13. Mood and modality (imperative, declarative, frustrative, conditional, apprehensive, etc)
14. Aspect 'zone' I
  14a. Habitual prescribed =hyuna 'what you do and what you ought to do'
  14b. Customary =kape
  14c. Habitual repetitive =nipe
  14d. Anterior =nhi

Enclitics
15. Evidentiality and tense, e.g. =mhana 'nonvisual-remote.past'
16. Epistemic =da 'doubt', =pada 'isn't it true that'
17. Aktionsart (manner or extent of associated action, e.g. 'split open', 'step on and feel pain', 'wag one's tail', 'away')
18. Degree (augmentative (also meaning 'indeed'), diminutive, approximative ('more or less'))
19. Aspect 'zone' II
  19a. Perfective =sita 'already accomplished'
  19b. Prolonged, ongoing =daka 'yet, still'
  19c. Repetitive =pita 'once again'
  19d. Completive =niki 'totally, completely'
20. Switch-reference and clause-chaining markers

ery clause. Like most enclitics in Tariana, the tense-evidentiality enclitics frequently—but not always—go onto the predicate; alternatively they may go onto any focussed constituent.

Tariana (like East-Tucanoan languages) distinguishes three tenses in most evidentials: present, recent past and remote past – see Table 2.

Not all moods cooccur with evidentials. Complex predicates express modality-like meanings such as apprehensive, 'indefinite' ('whatever'), admirative ('surprise'), epistemic ('probably'); they cooccur with the various evidentials in different ways – we return to this in §5.

As mentioned above, Tariana is spoken in the multilingual area of the Vaupés River basin. This area is known for its institutionalized multilingualism based on the language group exogamy operating between speakers of Tariana and of languages belonging to the East Tucanoan subgroup (including Tucano, Piratapuya, Wanano and Desano). Multilingualism is maintained through a strong inhibition against 'language mixing' viewed in terms of using lexical or grammatical morphemes from another language. However, this long-term interaction between East Tucanoan languages and Tariana has resulted in a rampant diffusion of patterns (not so much of forms) and calquing of categories. These include dependent-marking properties (that is, case enclitics for core arguments), classifiers, number marking, aspect, and tense-evidentiality.[2] Comparison of Tariana with closely related North Arawak languages (Baniwa/Kurripako and Piapoco) helps to distinguish patterns inherited from the protolanguage from those acquired through areal diffusion. Areal diffusion is crucial in establishing the origins of the Tariana evidential system.

The Tariana grammar as used by older and more traditional speakers differs in a number of quite dramatic ways from the structures found with younger and more innovative speakers (see details in Aikhenvald 2001). The main difference lies in the degree of East-Tucanoan influence. Younger people tend to speak mostly Tucano – an East-Tucanoan language which, for a number of historical reasons, is gradually becoming a lingua franca of the area. And innovative speakers tend to introduce new categories and constructions calquing

Table 2. Evidentials and tense in Tariana

	present	recent past	remote past
Visual	-naka	-ka	-na
Nonvisual	-mha	-mahka (from -mha-ka)	-mha-na
Inferred 'generic'	–	-si-ka	-si-na
Inferred 'specific'	–	-nihka (from -nhi-ka)	-nhi-na
Reported	-pida	-pida-ka	-pida-na

the patterns of East-Tucanoan languages; these innovations are not employed by more traditional people. The innovations are not as yet established in the language and can be considered instances of on-going change (using the terminology by Tsitsipis 1998:34). They contrast with the contact-induced categories which are fully accepted by speakers of all generations and can be viewed as instances of completed change.

One instance of on-going areally-induced change is the emergence of a fifth evidential term calqued from Tucano by innovative speakers of Tariana – see §2. Another is the treatment of the Tariana impersonal.

Tucano distinguishes between first person inclusive and first person exclusive; traditional Tariana had no such distinction. But younger speakers of Tariana employ the impersonal prefix and the impersonal pronoun in the meaning of inclusive 'we'. A construction *paha nawiki* (we:inclusive people) 'us (all the) people' is often used in general statements about what everyone does, while *waha nawiki* (we:excl people) 'us the people' may refer to a group that includes just the speakers, not the addressee (for instance, in dialogues between people and evil spirits). The impersonal prefix can thus have a first person ('we:inclusive') reference, and also a non first person reference ('everyone; one'). Evidentials help disambiguate these two meanings (see §5.2).

2. Organization of the system: Evidentials in affirmative clauses

In Tariana – just like in any East-Tucanoan language in the Vaupés area – every sentence must contain an indication of how the information was acquired by the speaker: whether they saw the event happen, or heard it, or know about it because somebody else told them, etc. This is achieved through a set of evidential markers fused with tense (see Barnes 1984, 1999; Malone 1988). In Tariana one cannot just say 'Cecilia scolded the dog'. This must be said in one of four ways, depending on the source of information. If one saw Cecilia scold the dog, (1) would be appropriate:

(1) *Ceci* *tfinu-nuku* *du-kwisa-ka*
Cecilia dog-TOP.NON.A/S 3SGF-scold-REC.P.VIS
'Cecilia scolded the dog' (I saw it: VISUAL)

If one just heard Cecilia shouting at the dog, one would say:

(2) *Ceci* *tfinu-nuku* *du-kwisa-mahka*
Cecilia dog-TOP.NON.A/S 3SGF-scold-REC.P.NONVIS
'Cecilia scolded the dog' (I heard it: NONVISUAL)

If one sees a very unhappy dog (looking abashed and hiding from people), the 'inferred' evidential is appropriate. Here, inference is based on general knowledge about how dogs behave.

(3) *Ceci* *tfinu-nuku* *du-kwisa-sika*
Cecilia dog-TOP.NON.A/S 3SGF-scold-REC.P.INFR
'Cecilia scolded the dog' (I inferred it: INFERRED)

And if one learnt the information from someone else, the reported evidential is the only choice:

(4) *Ceci* *tfinu-nuku* *du-kwisa-pidaka*
Cecilia dog-TOP.NON.A/S 3SGF-scold-REC.P.PREP
'Cecilia scolded the dog' (I have learnt it from someone else: REPORTED)

That is, traditional Tariana has a C1 type system. Innovative speakers are developing an additional term to match a construction found in Tucano – that is, the system is developing into a different type. This 'specific inferred' evidential results from reanalysis of anterior aspect marker *-nhi* and a non-present visual evidential, forming combinations *-nihka* (from *-nhi-ka*) and *-nhina* (from *-nhi-na*) (see §8).[3] The 'specific inferred' evidential is used to refer to something one has not seen, but which is based on obvious evidence which can be seen. For instance, if one saw angry Cecilia with a stick in her hand, and the scared dog running away, one could say (5), as an alternative to (3).

(5) *Ceci* *tfinu-nuku*
Cecilia dog-TOP.NON.A/S
du-kwisa-nihka
3SGF-scold-SPEC.INFR.REC.P (=ANT+REC.P.VIS)
'Cecilia scolded the dog' (I infer it on the basis of obvious evidence: SPECIFIC INFERRED)

The difference between the 'generic' inferred (as in (3)) and the 'specific' inferred (as in (4)) lies in access to direct evidence of something happening and to the degree of 'reasoning' involved. The less obvious the evidence and the more speaker has to rely on reasoning based on general knowledge (or common sense), the greater the chance that the generic inferred will be used (see §3).

3. Semantics and use of evidentials in affirmative clauses

The semantics of evidentials and their main extensions are summarised in Table 3.

Table 3. Semantics of evidentials in Tariana

Term	Information source
Visual – §3.1	1. Information obtained through seeing, or data on events which can be observed 2. Events for which speaker takes full responsibility and/or has a personal involvement 3. Generally known (and observable) facts
Nonvisual 'sensory' – §3.2	1. Events or states which the speaker has heard, smelt, tasted, or felt but not seen 2. Events or states never seen (but perceived in some other ways, also negative clauses: I did not see) 3. Accidental uncontrollable actions for which no responsibility is taken (hence use with verbs of obligation, feeling, illness, physical processes), as well as with verbs like 'be lost'; actions in dreams, descriptions of uncontrollable actions of evil spirits who cannot be seen but can be felt and heard
Inferred 'generic' – §3.3	Information obtained by reasoning or common sense through observing evidence of an event or a state without directly experiencing it (no present tense)
Inferred 'specific' – §3.3	Information obtained through observing direct evidence of an event or a state (no present tense)
Reported – §3.4	1. Information obtained through repetition of information related by someone else 2. A way of 'distancing' oneself from the responsibility 3. Preferred evidential in traditional stories

3.1 Visual evidential

Visual evidentials refer to information obtained through seeing. They are frequently used in pointing things out. The present visual evidential appears in captions for photographs (used as materials for the Tariana literacy workshop organized by the author in 2000). Here and elsewhere evidentials are underlined.

(6) hi-naka   iwi-taku-peni   talia-seni
    DEM:ANIM-PRES.VIS   salt-point-PL.ANIM   Tariana-PL
    ha-yakale   duhpani-yakale-naka
    DEM:INAN-CL:VILLAGE 3SGF+work-CL:VILLAGE-PRES.VIS
    'These are the Tariana of Santa Rosa (lit. 'Point of Salt')... this is the town where she works' (VISUAL)

Visual evidentials are also used to talk about generally known and observable facts, such as the change of seasons (7).

(7) hi   kuphe   ne-ya-naka
    DEM:ANIM   fish   3PL-spawn-PRES.VIS
    '(During this month) fish spawn' (VISUAL).

The visual evidential can be reinforced by lexical explanation ('I saw it myself'), as in (8). Here, the storyteller used the remote past visual evidential to stress that he had himself seen the stone – one of the traces of the Creator of Manioc – which is still there. The rest of the story is told in remote past reported (normal for a traditional story). This lexical 'reinforcement' provides additional evidence in favour of 'seeing' as the basic semantics for the visual evidential.

(8) di-ruku-i-ta-ka   diha kairiki-da
    3SGNF-go.down-CAUS-CAUS-SUB ART manioc-CL:ROUND
    idi-wha-na   nu-ka-na   nuha kasina-misini
    3SGNF-stay-REM.P.VIS 1SG-see-REM.P.VIS I now-TOO
    diha-da-nuku
    he-CL:ROUND-TOP.NON.A/S
    'Downstream from it (a rapid) there is the manioc stone (VISUAL), I have seen this (round object) nowadays, too' (VISUAL)

Autobiographical stories are told using the visual evidential. An extract from a story about how Raimundo Brito went looking for worms and got bitten by a rat illustrates the opposition between visual and nonvisual. To describe the noise he heard (he could not see what he thought were worms), Raimundo uses nonvisual; nonvisual is also employed to talk about 'being bitten' – something that is felt, not seen.

(9) haiku-na   pa-kenu-tuki   nu-thuka, nu-ruru
    wood-CL:VERT   one-CL:BRANCH-DIM 1SG-break 1SG-stick
    nuka-na   nese khameriku na-ni-mhana   nha
    1SG+get-REM.P.VIS   then make.noise 3PL-do-REM.P.NONVIS they

katanapiri nese-naku   nhupa   numa-tha-na
worms   then-TOP.NON.A/S   1SG-grab 1SG+look.for-FR-REM.P.VIS
nese nu-na   maya nu-kapi-da   "i-whida-na-tuki
then 1SG-OBJ good 1SG-hand-CL:ROUND INDEF-head-DER-DIM
niwhã-nhana-niki
3SGNF+bite-REM.P.NONVIS-CMPL
'I broke a branch of a tree and stuck (it into the hole) (VISUAL), then I grabbed (the stick) and looked (for worms) in vain (VISUAL). Then (the rat) bit me right on the tip of my finger' (NONVISUAL)

The visual evidential is used when the speaker knows something for a fact, e.g. *karu-ma-naka* (scare-EXC-PRES.VIS) 'it is very dangerous (to walk in the jungle at night)'. In the mouth of shamans and evil spirits, the visual evidential is associated with their omniscience. Visual and nonvisual evidentials are contrasted in (10): the son of the Creator uses the visual to describe what he could see, and nonvisual to describe what he couldn't see (but was supposed to):

(10) *pai*   *mesape-naki* *ma-keta-de-mahka*   *nuha*
      Dad:VOC turi-CL:BUNDLE NEG-meet-NEG-REC.P.NONVIS I
      mawari-mia-ka   *di-swa*
      snake-ONLY-REC.P.VIS 3SGNF-stay
      'Dad, I did not find the bundle of turi (NONVISUAL), there is only a snake there' (VISUAL)

3.2 Nonvisual evidential

The nonvisual evidential is used to talk about things one can hear but not see – as in the second line of (9), or something one can't see – as in (10), or something one can smell – as in (11).

The nonvisual evidential can be used to describe accidental uncontrollable actions for which no responsibility is taken, e.g. *wa-pika-mahka* (1PL-get-lost-REC.P.NONVIS) 'we got lost (accidentally)'; and physical states. (12) is a typical way of talking about one's own sickness.

(11) *iri*   *puisani-pu-mha*
      blood smell.of-flesh-AUG-PRES.NONVIS
      'There is a smell of (human) blood' (said the evil spirit) (NONVISUAL)

The use of a nonvisual evidential often implies 'less certainty than the use of visual (see discussion in §3.5).

(12) *nu-na* *adaki* *di-nu-nha-niki*
      1SG-OBJ fever 3SGNF-come-PRES.NONVIS-CMPL
      'I am overcome with fever' (NONVISUAL)

In (13), from a story where the nasty uncle let the traira fish eat the son of the Creator, the nonvisual evidential is used to downplay the responsibility of the culprit who 'overlooked' what had happened. This is an example of how an evidential can be manipulated to tell a lie. See §5.2.

(13) *ka:ru-ka* *nuha* [*nu-a-mahka*   *nu-hñã-niki*]
      fear-SUB I   1SG-let-REC.P.NONVIS 1SG-eat-CMPL
      'Being scared, I (accidentally) let (the giant fish) eat (your son)' (NONVISUAL)

3.3 Inferred evidentials

The innovative Tariana has two inferred evidentials: 'generic' and 'specific'. The 'generic' inferred is used to describe an event or a state which the speaker did not observe, but about which they have enough general knowledge or common sense to draw conclusions. The contrast between nonvisual and generic inferred is shown in (14) from the story about a woman who had married an evil spirit, who tricked the children from her first marriage decided to kill him by letting him drink poisonous manioc broth. He realises that something is wrong – the broth does not smell right (he comments upon this using a nonvisual evidential), and concludes that it has not been properly cooked (this is marked with an inferred evidential). She answers using the visual evidential – he trusts her, drinks the broth and dies.

(14) *kesani-ma-mha*   *diha* *phimaka-kade-sika*   *diha*
      smell-EXC-PRES.NONVIS   it   ready-NEG-REC.P.INFR it
      [...] *nu-ni-karu-wani*   *kayu-ka*   *nu-ni*   *nhua*
      1SG-do-PURP.VIS-ABSTR SO-REC.P.VIS 1SG-do I
      'It (the broth) has an excessive smell (NONVISUAL), it is (therefore) not cooked (INFERRED GENERIC) (he said), [...] I have made it as I always do (VISUAL) (she said).'

When Tiago, an indigenous politician, died, the general reaction was: *di-sa-do-naku ma:fi-sika* (3sgnf-spouse-FEM-TOP.NON.A/S bad-REC.P.INFR) 'it is bad for her (to be left on her own with seven children)'.

The generic inferred is employed in culturally important stories, such as the travels of the Tarianas' ancestors (who are supposed to have left 'signs', such as stones and caves, behind them); it is also used in translations. The specific

inferred is preferred when telling others about the result of one's inferences, as in (15) (a continuation of (9) above).

(15) *nese* *inari* *ma:ʃite* *di-ña*
then mucura.rat bad+NCL:ANIM 3SGNF-live

di-wapa-nihina
3SGNF-wait-SPEC.INFR.REM.P

'A nasty mucura rat lived there' (SPECIFIC INFERRED)

Neither of the inferred specifications has present tense forms (see §5.1). The nonvisual present forms can be used if one has to make inferences with reference to the present. Once, in the village, we were walking behind a man and couldn't quite see who he was; I asked whether it was Batista, and the answer was *diha-nha* (he-PRES.NONVIS) 'It is him (nonvisual) (we infer it because of his characteristic gait)'.

None of the inferred evidentials have any overtones of doubt or speculation. Specific inference is considered more reliable than generic inference based on reasoning -- this goes together with the preference for visually obtained information over any other (if there is a choice).

3.4 Reported evidential

The reported evidential is used for information obtained from someone else. The source of information may be explicitly stated, as in (16), but does not have to be.

(16) *inaru* *puimite-ka* *ke:ri*
woman menstruated+NCI:ANIM-SUB moon

ka-sa-do-pidaka *pedalia-pe* *na-sape*
REL-SPOUSE-FEM-REC.P.REP old-PL 3PL-say

'When a woman menstruates, she has been said to marry the moon, old people say' (REPORTED)

Most stories are told in remote past reported. The typical beginning of a hunting story is:

(17) *paita-pidana* *iʃiri* *ka-inu*
one+NUM.CL:ANIM-REM.P.REP game REL-kill

'There was one (man), a hunter' (REPORTED)

The reported evidential can be used if one wishes to avoid taking responsibility for the information. In (18), the wife of a man who did not come back from the

---

jungle tells his friends that he must have been eaten up by the evil spirit. She uses the reported evidential to describe to her husband's friends where he has gone; she does it because she is dubious about the whole business. Since she was there when her husband had gone to the jungle she ought to have used visual evidential; the reported here is a sign of distrust. He did not come back -- here she uses visual to describe her own experience; and when mentioning that he must have been eaten up she uses generic inferred: she had not heard (or seen!) him being eaten, and this is the logically obvious thing to have happened to someone who does not return from the jungle.

(18) *i-kesiri* *pune* *ka-kari* *ka-pida*
2PL-blood.relative caraná REL+go-PAST.REL REL+go-PRES.REP

hyukade-naka *diha* *ñamu* *nihya-sika-ñiki*
not.appear-PRES.VIS he evil.spirit 3SGNF+eat-REC.P.INFR-CMPL

di-na
3SGNF-OBJ

'Your friend (said that he) went to get caraná palm (from the jungle) (REPORTED). He is not here (VISUAL). The evil spirit has eaten him up (GENERIC INFERRED)'.

Tariana speakers have a varied degree of cultural knowledge -- this manifested itself very clearly during our work on Tariana place names. Speakers with good cultural knowledge were fully certain about place names and used visual evidentials; those who were not so certain used nonvisual; the least knowledgeable ones used reported. For obscure place names, the responses ranged from (19a) to (19c):

(19) a. *Manaka-taku-naka* *hipada* *nawiki* *nha*
açai-point-PRES.VIS stone people they

na-dana-nipe-naka
3PL-writing-NMLZ-PRES.VIS

'It is 'Açai-point', there is writing of stone people there (that is, petroglyphs)': VISUAL since the speaker knows it for a fact

b. *Manaka-taku-nha*
açai-point-PRES.NONVIS

'It is 'Açai-point'': NONVISUAL since this, younger, speaker is not sure

c. *Manaka-taku-pida*
açai-point-PRES.REP

'It is 'Açai-point'': REPORTED since this young speaker does not know; all he does is quote the old man

3.5 How to choose the correct evidential

How is an evidential chosen if one has access to more than one information source? The principles are:

i.   if there is visual evidence, the visual evidential is preferred;
ii. the nonvisual evidential is preferred if no visual evidence is available;
iii. the specific inferred is preferred if one can see the 'proof' that the action did take place;
iv. if there is enough evidence to make inference based on common sense or general knowledge, the generic inferred in appropriate.

The reported evidential must be used if the information has been obtained from someone else.

Here is an illustration. In Rafael's house in Santa Rosa (where we stayed) there was a cuckoo clock which would play a tune on the hour, and a little bird would appear. Inside the room, I was told to say (20), with the visual evidential, to describe this. Since we could see the clock in action, the use of a nonvisual evidential was considered strange.

(20)   keri-da   di-rapa-ka-sita
       sun/moon-CL:ROUND 3SGNF-sing/dance-REC.P.VIS-PFV
       'The clock has sung' (VISUAL).

When one heard the clock from outside the room (without seeing it), the way to describe it was:

(21)   keri-da   di-rapa-mahka-sita
       sun/moon-CL:ROUND 3SGNF-sing/dance-REC.P.NONVIS-PFV
       'The clock has sung' (NONVISUAL).

To say what time it was, one had to say (22a) if one could see the clock; (22b) would be correct for someone outside the room who could hear it (or was not looking at the clock); and (22c) would be correct if we hadn't heard the tune, for instance, but 'inferred' it from counting the number of strokes.

(22)   a. oito   hora-ka-naka
           eight hour-DECL-PRES.VIS
           'It is eight o'clock' (VISUAL)
       b. oito   hora-ka-mha
           eight hour-DECL-PRES.NONVIS
           'It is eight o'clock' (NONVISUAL)

---

       c. oito   hora-ka-sika
           eight hour-DECL-REC.P.INFR
           'It is eight o'clock' (GENERIC INFERRED)

The preference for visual information—if one has it—accounts for the preferred choice of the specific inferred – rather than the generic inferred – when telling others about one's inferences (as in (15) above).

Manipulating the choice of evidentials allows speakers to be inventive in telling lies. One can give the right information with a wrong evidential, as in (13); or the wrong information with the correct evidential, as in (23). In this story, a jaguar has actually grabbed a turtle by its foot; however, the smart turtle deceives the jaguar by telling him he had actually grabbed the root of a tree. The turtle uses visual evidential because both participants can see what is happening.

(23)   awiña   i-pari-nuku   phipa-naka
       wací.tree INDEF-ROOT-TOP.NON.A/S 2SG+grab-PRES.VIS
       'You are grabbing the root of a tree (not my leg, as you think)' (VISUAL)

4   Evidentials in other clause types

Tariana has a three-way evidentiality specification in interrogative clauses. Imperative clauses have just one evidential, while exclamatory clauses do not allow evidentials. Most dependent clauses (that is, complement clauses, relative clauses and subordinate clauses) have no separate tense-evidentiality marking.

4.1   Evidentials in interrogative clauses

Tariana includes a three-way evidential specification in its interrogative marking (like East-Tucanoan languages). The paradigm is given in Table 4.

Yes–no questions do not contain any question word; they are distinguished by rising intonation, and the choice of an evidential. Content questions contain

Table 4. Evidentials and tense in interrogative clauses in Tariana

	present	past	remote past
Visual	-nha	-nihka	-nihina
Nonvisual	-tha, -nha	-mha	(-mhana)
Inferred	–	-sika	-sina

a question word; for innovative speakers the use of evidential is then optional. Traditional speakers do not omit them. The morphemes -*mha* and -*tha* are variants for younger speakers; traditional speakers use just -*tha*.

The use of an evidential in a question presupposes the questioner's assumption about the answerer's source of information. A visual evidential in a question indicates that the person asking assumes the person asked saw the action. Every day in Santa Rosa my Tariana brothers would ask me, on seeing me coming back from the river with a wet towel:

(24) *pi-pita-nihka*   *phia?*
     2SG-bathe-REC.P.VIS.INTER you
     'Have you bathed?' (VISUAL)

Using visual evidential may imply an assumption on the part of the speaker about what the addressee knows. (25) is a question to which (13) is the answer. The Creator – whose son was killed through the criminal negligence of his nasty uncle – is sure that the uncle let the boy be eaten by a fish, and was to blame.

(25) *nuri*   *kani-nihka*   *di-a*   *diha*
     1SG+son where-PAST.VIS.INTER 3SGNF-go he
     'My son, where is he gone?' (VISUAL)

The uncle denies his crime by saying (13); but the Creator continues interrogating him using the visual evidential – as in (26). This sounds like an accusation.

(26) *kwe-nihka*   *kay-pi-ni-niki*   *phia*
     why-PAST.VIS.INTER thus-2SG-do-CMPL   you
     'Why did you do it?' (VISUAL)

Nonvisual interrogatives are used when the speaker presupposes that the addressee does not have access to any visual information. In (27) a present nonvisual interrogative evidential is used in a question about the origin of a peculiar sound.

(27) *kutie*   *yaphini-mha*   *kayu pimite*
     INTER+CL:ANIM thing-PRES.NONVIS.INTER thus sound+CL:ANIM
     'What thing (that we can't see) could have been making a sound like this?' (NONVISUAL)

Inferred evidentials in interrogative clauses are used if the person asking the question assumes that the person being asked has no knowledge whatsoever. When we arrived in Iauareté (a mission village) after a tiring journey of sev-

---

eral hours on an overcrowded canoe, it turned out that my classificatory mother Maria was gone, and had hidden the key to the house. The speakers' reaction was:

(28) *kani-se*   *du-sueta-sika*
     where-LOC 3SGF-stay+CAUS-PAST.INFR.INTER
     'Where on earth has she put it?' (INFERRED)

The preferences for evidentials in interrogative clauses follow similar lines to those in affirmative clauses. A visual evidential presupposes that the addressee has had direct experience; it is the preferred evidential since visual evidence is valued more than any other. However, it may be accusatory – since it implies an assumption on the part of the speaker which the addressee may not agree with (as in (13)). A nonvisual evidential presupposes less direct access to information, while an inferred evidential – which in fact covers any kind of indirect experience – implies that the questioner assumes that the addressee can hardly give an informed answer.

The semantic connotations of evidentials in interrogative clauses are shown in Table 5.

Since asking a question involves making assumptions about the source of the other person's information, it is not culturally appropriate to ask too many questions in Tariana. One asks a question if one is sure the 'responder' can provide the desired information. Otherwise, asking a question may presuppose the 'questioner's' insistence – which is readily interpreted as due to the fact that (s)he suspects that something is wrong.

Table 5. Semantic connotations of evidentials in interrogative clauses

Term	Semantics
Visual	1. You saw something which I also saw, or which I did not see
	2. I am sure you know
	3. You do know and/or you are responsible for the action: accusation
Nonvisual	1. You haven't seen it (you may have heard it, or smelt it)
	2. You may not know
	3. You are not really responsible
Inferred	1. You do not have any firsthand information about it
	2. You are not knowledgeable (You do not know enough)

4.2 Evidentials in imperatives

Of the nine imperatives in Tariana, only one — secondhand — has an evidential type of meaning. It is marked with the clitic -pida, also found in other reported tense-evidentiality specifications (see Table 2). Saying pi-nu-pida (2sg-come-IMPV.SEC) means 'come because somebody told you to'.

The secondhand imperative -pida can cooccur with other imperative markers, which cannot cooccur with each other.[4] It easily occurs with the proximate imperative and with the distal imperative, following either marker, e.g. hi-nuku pi-theta-kada-pida (DEM:ANIM-TOP.NON.A/S 2sg-correct-DIST.IMPV-IMPV.SEC) 'correct this (over there) (on her order)' and hi-nuku pi-theta-si-pida (DEM:ANIM-TOP.NON.A/S 2sg-correct-PROX.IMPV-IMPV.SEC) 'correct this (here, next to the speaker) (on her order)'. This cooccurrence shows that the secondhand imperative may be treated as a category distinct from other imperatives.[5]

4.3 Evidentials in non-affirmative clauses: a summary

We have seen that fewer evidentials are used in questions and in commands than in affirmative clauses. The three different subsystems are summarized in Table 6.

The distinction between reported and inferred evidentials is neutralized in interrogative clauses in Tariana (as well as in East-Tucanoan languages). Evidence for this comes from the 'conversation sustainer' question–response pattern. This is the most common strategy for showing a listener's participation in conversational interaction.

When A (speaker) tells a story, B (listener) is expected to give feedback, after just about every sentence, by repeating the predicate (or the last verb within a serial verb construction) accompanied by an interrogative evidential. These pseudo-questions do not have a question intonation. The existing correspondences are given in Diagram 2.

Table 6. Subsystems of evidentials in Tariana in different clause types

Type of system	Terms in the system	Clause type
traditional: C1 (four term)	Visual, Nonvisual, Inferred, Reported	Affirmative
innovative: five term	Visual, Nonvisual, Inferred 'generic,' Inferred 'specific,' Reported	
B2	Visual, Nonvisual, Inferred	Interrogative
A3	Reported (vs everything else)	Imperative

Diagram 2. Evidentials in question-response

A: VISUAL	→	B: VISUAL
A: NON-VISUAL	→	B: NON-VISUAL
A: INFERRED	→	B: INFERRED
A: REPORTED	→	B: INFERRED

A visual–visual pair is illustrated in (30), and a reported–inferred in (31).

(30) A: haw di-a-ka
OK 3SGNF-say-REC.P.VIS
'He said, "OK"' (VISUAL)
B: di-a-nihka
3SGNF-say-PAST.VIS.INTER
'He said it?' (VISUAL)

(31) A: heku-nuku du-nu-pidaka
yesterday-TOP.NON.A/S 3SGF-come-REC.P.REP
'She has been said to have come yesterday' (REPORTED)
B: du-nu-sika
3SGF-come-PAST.INFR.INTER
'She is coming?' (INFERRED)

5. Evidentials and other grammatical categories

In §§5.1–5.4 we consider interactions between evidentials and tense; evidentials and person; evidentials and negation; and evidentials and modalities. There are no restrictions on the cooccurrence of the Tariana evidentials with any of the numerous aspects and aktionsarts. Conditions under which evidentials can be omitted are discussed in §5.5.

5.1 Evidentials and tense

East-Tucanoan languages and Tariana distinguish three tenses in visual and nonvisual evidentials: present, recent past and remote past. These tenses refer to the time when the action or state started and to the time when the information was acquired. Present tense is used for the action or state which has just started and is ongoing; recent past is used for something which started a few minutes to a few days ago, and remote past is used when the action or state started a long time ago – either of these may, or may not, be finished. The clause itawhya alia-naka (canoe EXIST-PRES.VISUAL) means 'there is a canoe (I can

see it; and/or am pointing at it)'; *itawhya alia-ka* (canoe EXIST-REC.P.VISUAL) means 'there has been a canoe', or 'the canoe has been here for a little while' (from few minutes to a couple of days ago), and *itawhya alia-na* (canoe EXIST-REM.P.VISUAL) means 'there was a canoe (I saw it, it is gone now)' or 'there is a canoe (and it has been here for a long while; I can see it and saw it before)'.

Neither of the inferred specifications has present tense.[6] This makes sense because one can only infer something after it has happened.

The reported evidential differs from other evidentials in that tense specification refers exclusively to the time of the report; the time of the actual happening is irrelevant. (32) was said immediately after we heard a radio message about the untimely death of the indigenous politician Tiago (he had died a few days prior to the message).

(32) *Tiago   di-ñami-pida*
      Tiago 3SGNF-die-PRES.REP
      'Tiago has died'

A couple of days later, another speaker arrived from the mission village; he had learnt the sad news a couple of days prior to his arrival, and said:

(33) *Tiago   di-ñami-pidaka*
      Tiago 3SGNF-die-REC.P.REP
      'Tiago has died'

(34) was said by a speaker who learnt about it a week or so before the time of the utterance.

(34) *di-ñami-pidana*
      3SGNF-die-REM.P.REP
      'He died'

Present reported is often used like a quotative marker, when something someone just said is repeated. During our work on place names, if I couldn't quite hear the name, José Luis (a younger speaker) would repeat it after his father Cândido using -*pida*, e.g. *manaka-taku-pida* (açai-POINT-PRES.REP) '(the name is) Point of Açai (he says)'.

No evidentials are distinguished in future tense. However, reported evidentials allow a 'double tense' specification whereby one can describe future events reported by someone else. Future nominalizations are used then:

(35) *du-ñami-karu-pidaka*
      3SGF-die-FUT.NOM-REC.P.REP
      'She was said (a short time ago) to be going to die (in the future)'

(36) *du-ñami-karu-pidana*
      3SGF-die-FUT.NOM-REM.P.REP
      'She was said (a long time ago) to be going to die (in the future)'

We have seen that the reported evidential differs from other evidentials in its tense reference, and in its correlations with clause types: there is no reported specification in interrogative clauses. The reported is unique among other evidentials in that it allows 'double' tense marking. These properties indicate separate visual-based and reported-based evidential subsystems in Tariana. There is also diachronic evidence for their separate development: the reported evidential is likely to be inherited from Proto-Arawak, while other evidentials emerged as the result of areal diffusion from Tucano languages. See §8.

5.2 Evidentials and person

There are no special correlations between the use of person and the visual evidential (though, when talking about one's own experience, the visual evidential is preferred). Nonvisual evidentials are preferred with verbs of mental and physical processes, wanting and feeling, when describing a state experienced by first person subject, as in (37) and in the second clause of (39).

(37) *nhesiri-mha   (mha)*
      like-PRES.NONVIS   1
      'I like it' (NONVISUAL)

Nonvisual evidentials are preferred with first person experiencers, as in (12) and (38), and to describe sensations in the speaker's body parts (39).

(38) *hape-pu-mha   nu-na*
      cold-AUG-PRES.NONVIS 1SG-OBJ
      'I am very cold' (NONVISUAL)

(39) *nu-sarni   kai-pu-mha   nu-na-thama*   *nu-wha*
      1SG-back ache-AUG-PRES.NONVIS 1SG-WANT-FR+PRES.NONVIS 1SG-sit
      'My back is aching, I want to sit down' (NONVISUAL)

Since one cannot 'feel what the other person feels', a normal choice for a non-first person subject would be a visual evidential if one can see the signs of a physical or mental state. (40) was used to describe a toddler who liked the way his grandfather was treating him: it was a comment on what one could see.

(40) nhesiri-pu-ka   diha
    like-AUG-REC.P.VIS he
    'He likes it' (VISUAL)

Inferred evidential can be used to describe a second or a third person's feelings if one did not see the person showing any signs of this; but could make inferences. One of the Tariana commented on how I appeared to feel on an overcrowded canoe:

(41) wepa-sika   duha
    be.numb(of.limbs)-REC.P.INFR she
    'She (that is, her limbs) must be numb' (INFERRED)

A minute later, Jovino complained (about himself), using nonvisual:

(42) wepa-pu-nhua   nu-a   nhua
    be.numb(of.limbs)-AUG-PRES.NONVIS 1SG-go   I
    'I (my limbs) are getting very numb' (NONVISUAL)

Similarly, the nonvisual evidential can be used to describe something that happened accidentally, as in (13). The choice of the visual evidential would imply volition and control on the part of the speaker; in contrast, nonvisual may imply that the action was done 'accidentally'. If the bad uncle in (13) had said nu-a-ka (1sg-let-REC.P.VIS), he would have been assuming full responsibility for his crime.

The first-person-like usage of the nonvisual evidential helps distinguish the two meanings of the impersonal prefix pa- and the corresponding impersonal pronoun. When the impersonal is used in the first person inclusive sense, 'us', the nonvisual evidential is used with verbs of feeling and wanting, as in (43).

(43) yaseni-ku-ne-mia-na   pa-sape-hyura
    Tucano-DER-INST-ONLY-REM.P.VIS IMP(1ST.INCL)-talk-CUST
    kapernani-mhana   pha
    feel.shame-REM.P.NONVIS IMPERSONAL(1ST.INCL)
    '(We) spoke only Tucano, we felt shame' (NONVISUAL)

But if the impersonal has a generic non-first person reference, the nonvisual evidential cannot be used to refer to the internal states or feelings; another evidential specification has to be used instead. (44) describes a general fact – and the visual evidential is appropriate here.

(44) hiku-naka   pa-rena   ifisi
    thus-PRES.VIS IMP-feel man
    'This is how a man feels' (VISUAL)

The nonvisual evidential occasionally occurs with a second or third person who the speaker is closely observing; this usage implies that the speaker identifies themself with the other person. It is functionally similar to using 'disjunct' markers with first person (where conjunct markers would be appropriate), to signal 'empathy' or 'engagement' with the speaker. (45) was a comment on Jovino's state: after he had stepped on a nail, he was lying in his hammock exhausted by fever. Everyone seemed to know how he felt.

(45) pa-kamia-nipe   Juvi-nuku   inuna
    IMP-illness-NMLZ Jovino-TOP.NON.A/S lazy,debilitated
    di-ni-mahka
    3SGNF-do-REC.P.NONVIS
    'Illness has made Jovino debilitated' (NONVISUAL)

Inferred evidentials are used with first person if the first person was unconscious of what was happening to them (and had to make inferences about their situation). I do not have any examples of reported with first person.

5.3 Evidentials and negation

Any evidentiality specification can occur in a negative clause. Nonvisual evidentiality is frequently used to describe what the speaker 'did not see', or 'did not do' – as in (9). (46) illustrates remote past visual in a negative clause (the use of visual is explained by the fact that the girl was doing this in front of the speaker):

(46) kaipeda   du-musu   kuripua-na   dhuma-niki
    all.the.time 3SGF-go.out not.at.all-REM.P.VIS 3SGF+hear-CMPL
    all (and still isn't)' (VISUAL)
    'She had been going out all the time, she had not been listening (to us) at

5.4 Evidentials and modalities

Except for the affirmative, which is unmarked, the declarative-assertive (marked with -ka), frustrative (-tha) and intentional (-kasu) show tense-evidentiality distinctions. The uncertainty marker -da and the counterexpectation marker -pada can cooccur with any evidential except for present visual. The uncer-

tainty marker with a nonvisual evidential is shown in (47); it occurs with inferred in (48).

(47) *weperi-pua-se*   *di-a-thama-da*
poison-CL:RIVER-LOC 3SGNF-say-FR+PRES.NONVIS-DOUBT
'He must have said "weperi-pua-se" (but I am not sure I heard it right)'
(NONVISUAL)

(48) *ai-tha-sika*   *na-yaketa-da*
here-FR-REC.P.INFR 3PL-get.together+CAUS-DOUBT
'It is here that they probably put it' (said the Eagle who inferred that people must have used their plates to store the down they had stolen from him, but he was not totally sure) (INFERRED)

The conditional-potential (-*bohta*) bears no evidentiality distinctions. Apprehensive and purposive have a separate system of evidentiality-like meanings, discussed in §§5.4.1–5.4.2.

Tariana has a number of complex predicates with modality-like meanings. Of these, 'admirative' – expressing surprise – can occur with any tense-evidentiality specifications. The admirative is expressed with a complex predicate of the following structure: lexical verb plus suffix -*nhe* plus auxiliary verb -*a* 'go, say, let, give'. Both the lexical verb and the auxiliary receive same subject cross-referencing; no constituent can intervene between the two. (49) describes Olivia's surprise based on visual evidence. Here and elsewhere complex predicates are in square brackets.

(49) *Oli yua-si*   *na-weni-de-ka*   [*du-ka-nhe*
Oli thing-NPOSS NEG-pay-NEG-SUB 3SGF-see-ADM
du-a-ka]
3SGF-AUX-REC.P.VIS
'Olivia was surprised at things being cheap' (lit. 'Olivia, things being cheap, looked (at this) in admiration') (VISUAL)

In (50), an admirative form is marked with nonvisual evidential since it describes the internal feeling of the speaker (cf. §5.2):

(50) [*hacane-nhe*   *nu-a-mhana*]
frighten-ADM 1SG-AUX-REM.P.NONVIS
'I could not believe my eyes' (I was scared in surprise) (NONVISUAL)

An epistemic complex predicate with repetition consists of two occurrences of the same verb with identical cross-referencing without any overt marking of syntactic dependency. Its meaning is 'maybe, probably'. It can cooccur with any

tense-evidentiality specification except for present visual. The evidential refers to the way the information on the event was acquired. If one cannot see what is happening, (51) is appropriate:

(51) [*tarada tarada-nha*]   *ma-yekana-de-nha*
alive   alive-PRES.NONVIS NEG-know+PASS-NEG-PRES.NONVIS
'It is not known whether he (a drunk lying in the street) is alive or not'
(NONVISUAL)

In (52) the evidence is visible to the people – who have doubt only as to how to interpret it:

(52) *hi*   [*di-pe-ka-nhi*   *di-pe-sita*]
DEM:ANIM 3SGNF-leave-REC.P.VIS-ANT 3SGNF-leave-PFV
'He must have left (the house and the utensils) already' (said the people who saw the house and the utensils left behind by the otter) (VISUAL)

And if one has enough general evidence to make an inference, a generic inferred would be appropriate. Rafael used to boast about being able to cure coughs by blessing. After one of his children actually stopped coughing, others commented incredulously:

(53) *kwe di-a*   [*di-ñapa*   *di-ñapa-sina*]
how 3SGNF-say 3SGNF-bless 3SGNF-bless-REM.P.INFR
ma-yekade-nha
NEG-know+NEG-PRES.NONVIS
'Whether he (Rafael) had done the blessing or not, (we) don't know'
(INFERRED)

The 'indefinite' complex predicate (meaning 'whatever') also combines with any evidential except for present visual. Such a predicate has the following structure: subordinator *kani* 'where' or *kwe* 'how' followed by two occurrences of the same verb. Just as in the case of epistemic complex predicates, the choice of evidential depends on the information on which the statement is based. Rafael said (54), when asked about his whereabouts the previous night. He obviously had visual information on where he had danced (but was not prepared to tell).

(54) [*kani*   *nu-napa*   *nu-napa-ka*]
where 1SG-dance 1SG-dance-REC.P.VIS
'Wherever I danced I danced (and this is none of your business)' (VISUAL)

Complex predicates of this kind are frequently used with non-visual evidentials, if one has no visual information. In (55), the speaker has no idea about where his sister is – but she must be somewhere. ⸱

(55) [kani alia   alia-mha]
where EXIST EXIST-PRES.NONVIS
'She must be somewhere (but I don't know where she is)' (NONVISUAL)

The inferred evidential is appropriate if there is sufficient reason to make an inference. Maria used to hide the key to the house whenever she went out for the whole day; she never lost it. This is good enough reason for an inference – she must have put the key somewhere, but we don't know where.

(56) [kani du-sue   du-sue-ta-sika]
where 3SGF-lie+CAUS 3SGF-lie+CAUS-CAUS-REC.P.INFR
(INFERRED)
'She must have put (the key) somewhere (but we have no idea where)'

The coocurrences between various modalities and evidentiality in Tariana discussed throughout this section – and summarized in Table 7 – show that evidentiality and modalities, especially epistemic ones, are plainly different categories. Present visual appears to be the specification having the most restrictions on its coocurrence with meanings related to uncertainty, doubt and so on. Presumably this has to do with the intrinsic certainty of immediately available visual evidence.

We will now turn to two further modalities which distinguish evidentiality-type meanings of different kinds, forming special subsystems within the language.

Table 7. Coocurrence of evidentials with modalities in Tariana

Modality	Evidentiality specifications used
Non-future indicative	all specifications
Declarative-assertive -ka	all specifications
Intentional -kasu	all specifications
Frustrative -tha	all specifications
Uncertainty -da	all except present visual
Counterexpectation -pada	all except present visual
Conditional -bohta	none
Admirative	all
Epistemic 'probably'	all except present visual
Indefinite 'whatever'	all except present visual

5.4.1 Evidentiality meanings in the apprehensive

The apprehensive ('lest something happen') does not combine with any tense-evidentiality markers. Instead, it has its own evidential-type distinctions. The enclitic -ñhina marks 'nonvisual apprehensive': it implies that, according to the speaker, the addressee cannot see what he or she is doing, or the speaker cannot see what the addressee is doing. Someone who is walking in front can say to a person behind them who might be not cautious enough:

(57) nu-pumi pi-pinita   mēda   pi-wha-ñhina
1SG-after 2SG-follow however 2SG-fall-APPR.NONVIS
'Do follow me, or else you might fall down (you are not looking)'

The visual apprehensive -da is used if both the speaker and the addressee can see what is happening:

(58) maña pi-ni   pi-wha-da
good 2SG-do 2SG-fall-APPR.VIS
'Be careful, lest you fall (we can both see what is happening)'

The apprehensive complex predicate, of the structure VERB-da say-SUBORDI-NATOR-ka, is employed if the speaker does not have firsthand information (then the warning is typically attributed to a third person). Or the danger could be common knowledge, as in (59); one does not have to see whether it is raining or not to know that the road will become slippery and one can fall down.

(59) *iya di-wha-ka   maña pi-ni [pi-wha-da   nu-a-ka]
rain 3SGNP-fall-SUB good 2SG-do 2SG-fall-APPR 1SG-say-SUB
'When it is raining, be careful, lest you fall, I am saying'

The three-term evidentiality-like distinction in apprehensive is a subsystem separate from evidentiality in other clause types. Cross-linguistically, a visual versus nonvisual opposition in apprehensives appears to be rare. A similar distinction is attested in Nivkh (isolate) (Gruzdeva 1992:60).

5.4.2 Evidentiality meanings in purposives

Purposive verb forms in Tariana mark the predicate of purpose clauses and of complement clauses for some verbs. Purposives cannot take the tense-evidentiality marking discussed in the main part of this paper. Instead, they distinguish visual and nonvisual. The visual purposive -karu is illustrated in (60), and the nonvisual purposive -hyu in (61).

(60)
wasā	taɾada-peni	wehta-kaɾu	wa
let's.go	alive-PL.ANIM	1PL+take-PURP.VIS	1PL+go

'Let's go and get the living ones (fish) (we can see them)'

(61)
taɾada-peni	duhta-hyu	du-a-pidana
alive-PL.ANIM	3SGF+take-PURP.NONVIS	3SGF-go-REM.P.REP

'She went to get the living ones (fish) (she cannot see them and they may not be there)'

5.5 Omission of evidentials

Tense-evidentiality marking is usually obligatory: for every sentence, tense and evidentiality should be specified. However, tense-evidentiality can sometimes be omitted. Firstly, if the time-and-evidence frame has been set in the previous clause, the whole sentence can receive just one marker – as is the case in the previous clause (46). Here, the first clause 'she goes out all the time' does not have any tense-evidentiality; the remote past visual marking goes onto the second clause. The two clauses form one sentence – this is marked through a fall-rise intonation on the predicate of the first clause.

Tense-evidentiality marking can be omitted in short answers, as shown in (62). (Incidentally, *haw* 'OK, yes' and *háida* 'I don't know' do not take any evidentiality markers; Tariana has no word for 'no.') Note that a more elaborate answer requires tense-evidentiality – as in (63).

(62)
kwe	pi-ni-ka-hna	phia?	na-ni-kade
what	2SG-do-DECL-PRES.VIS.INTER	you	NEG-do-NEG

'What are you doing?' (asked the jungle woman) 'Nothing (in particular)' (lit. 'do not do') (said the man)

(63)
nuhpani-ka-naka
1SG+work-DECL-PRES.VIS
'I am working (VISUAL)'

6. Evidentiality strategies

As often happens in large evidentiality systems, there are no evidentiality strategies as such: that is, no category acquires the meaning of source of information as an additional sense. We saw in §5.4 that modalities with the meaning of uncertainty or doubt do not have any evidential meanings by themselves; how-

ever, most of them can combine with all the evidentials except for the present visual. There are other ways of saying 'maybe' – one is a clause-like complex predicate *paɾpe -ni-* (maybe do) 'possibly' used to conjecture future events. If one is talking about one's opinion, an expression *nuha nu-hmeta-ɾi-nuku* (1sg-thin-REL-TOP.NON.A/S) 'to my mind, in my thinking' can be added: this expression is often used with nonvisual and inferred evidentials.

The 'lexical reinforcement' of evidentiality – illustrated in (8) – provides metalinguistic justification for associating evidentiality markers with particular sources of evidence. Frequently, if a speaker did see something and tells a story about it in visual evidential, but then realizes that their audience is a bit incredulous, they may choose strengthen their 'visual source' by saying 'I saw it'. The following example comes from a story told by the oldest living speaker of Tariana about a ritual no-one else has seen but him.

(64)
nha	aɾa-mia,	ina-nuku	na-musu-ita-thui
they	men-ONLY.women-TOP.NON.A/S		3PL-go.out-CAUS-all

na-niki	ina:	na-ka-kade-na,	mayakani-ya	nha
3PL+go-CMPL	women	NEG-see-NEG-REM.P.VIS	straight-CONF	they

kayu	na-ni-ka,	nu-ka-na
thus	3PL-do-SUB	1SG-see-REM.P.VIS

'There (were) only men, they drove women away, women did not see (the flutes), done in a correct way. I saw them do it' (VISUAL)

Along similar lines, nonvisual information could be reinforced by verbs like -*hima* 'hear, feel', or -*himeta* 'think, feel (sad, etc)'. The verb -*aiñita* 'think, be able to reason' describes inferences; and a 'lexical reinforcement' for reported is 'this is what people told me/us'.

7. Evidentials, semantic types of verbs and discourse

We have seen that verbs of feeling and wanting require nonvisual evidentials with first person, and visual or inferred with other persons. The choice of evidentials may contribute to a differentiation of lexical meanings of some, polysemous, verbs. The verb -*mañe* means 'get something wrong, forget' and also 'tell a lie, cheat'. If used with a visual evidential, it most likely will mean 'tell a deliberate lie' – who would ever get something wrong on purpose? So, when an evil spirit says (65) to a man (who breached a taboo: he went hunting on a Good Friday), he is plainly accusing the man of telling a lie:

(65) pi-mañe-ka-naka   phia   nu-na
     2SG-get.wrong,lie-DECL-PRES.VIS you 1SG-OBJ
     'You are lying to me' (saying that you did.not know today was Good
     Friday) (VISUAL)

The verb -himeta means 'think; say something in one's mind; feel (sad, scared, etc)'. When used with nonvisual evidentials and first person it necessarily refers to 'feeling'; and when used with visual evidentials, it is normally interpreted as referring to 'talking to oneself in one's mind'; cf. kawalikupeda nuhmeta-mhana (sorry 1sg+feel,think-REM.P.NONVIS) 'I felt sorry' and nu-kale-se nuhmeta-na (1sg-heart-LOC 1sg+feel,think-REM.P.VIS) 'I thought, saying to myself'.

The choice of evidential has to do with the genre of a narrative. Visual evidentials are used in accounts of one's own experience. Reported evidentials are used in folk tales and traditional stories. Generic inferred is used in stories which relate important mythological events that are known to have left tangible traces in the surrounding landscape. One such instance is the movements of the Tariana ancestors within the Vaupés area: their traces are there in the form of stones, rapids, and caves. (See Ramirez 1997:140, on a similar usage of evidentials in Tucano.) No full narrative is ever told using just the nonvisual or the specific inferred.

8. The origin of evidentials

Complex evidentiality systems are a salient feature of the East Tucanoan languages, and of the Vaupés linguistic area as a whole. Tariana is unique among North Arawak languages in having an elaborate evidentiality system. The Tariana evidentials are strikingly similar to the evidentials in East Tucanoan languages, especially in Tucano (see Aikhenvald 2002b).

Data from related Arawak languages indicate that, before the intensive language contact with the East-Tucanoans, Tariana was likely to have had an optional reported evidentiality specification, marked with the clitic -pida (which is still used as the only evidential in Baniwa, an Arawak language closely related to Tariana but spoken outside the Vaupés area).

After Tariana came in contact with East-Tucanoan languages, the existing optional tense and mood system was reanalyzed as obligatory tense-marking: the past/perfective -na was reanalyzed as a remote past marker, and the erstwhile declarative -ka as recent past marker. The unmarked form was reanalyzed as present.

The existing reported specification, -pida, came to be reanalyzed as having unmarked present reference. The newly evolved tense markers were added to it.

The generic inferred arose as the result of reanalysis of a dubitative marker, -si-ka (used as a marker of doubt and speculation in Piapoco, another Arawak language closely related to Tariana but spoken outside the Vaupés area in Colombia).

The nonvisual evidential developed via grammaticalization of a verb of nonvisual perception, -hima 'hear, feel, seem, perceive'. The visual specification remained formally unmarked.

The recent development of specific inferred involves reanalysis of the Tariana anterior marker -nhi (which many younger people pronounce as -ni) in combination with the visual evidential. This reanalysis is based on an analogy with a homophonous 'look-alike' used in a complex specific inferred construction in Tucano. Such a construction in Tucano involves a nominalization and the auxiliary nii 'do; be' which takes any visual evidential specification (see West 1980:75–76; Ramirez 1997:140–141, 291–292), as in (66), the Tucano version of (5):

(66) Ceci   diáyi-re   tu'tí-kî   nii-amo
     Cecília dog-TOP.NON.A/S scold-FEM.SG be-REC.P.VIS+3SGF
     'Cecília scolded the dog' (I infer it on the basis of obvious evidence)

The system of evidentials in Tariana is etymologically heterogenous — different specifications come from different sources. The origin of interrogative evidentials requires further investigation.

9. Evidentials and cultural attitudes

As I stated in the Position paper for the Workshop, the existence of evidentials in a language presupposes a certain requirement for explicitly stating the source of information, and may go together with certain cultural attitudes and practices.

Speakers' metalinguistic discourse in the form of comments on the source of information demonstrates awareness of evidentials and their psychological reality. Speakers of Tariana and of Tucano usually comment on how one has to be precise concerning how one 'knows' something in their languages; according to them, translations into Portuguese come out as vague and 'reduced'.

The use of evidentials correlates with cultural stereotypes and with conventionalized attitudes to information. Visual evidentials are associated with

'omniscience'. Shamans and evil spirits have access to supernatural knowledge and 'know it all'. They speak using the visual evidential; and the visual evidential is appropriate while talking about their knowledge. Jovino said (67) about the Wanano shaman, Jesús.

(67) thui maɨa di-ka-na
all well 3SGNF-see-REM.P.VIS
'He (the shaman) sees everything well' (VISUAL)

Facts which appear in shamanic visions – believed to be the most reliable source of information – are told using the visual evidential, as in the following example which relates a dream of a shaman who 'knows it all' with his power. In this case, visual evidential is used to describe the actions of an evil spirit which cannot be 'seen' otherwise' (see below).

(68) ne ta:puli-se di-ká-pidana-sita
then dream-LOC 3SGNF-see-REM.P.REP-PFV
wa-hwe-ri-ne ikasu-nuku masi-pu-naka
1PL-grandparent-MASC-FOC.A/S now-TOP.NON.A/S bad-AUG-PRES.VIS
diha, paita nawiki di-na-naka
he one+NUM.CL:ANIM person 3SGNF-OBJ-PRES.VIS
dhita-niki diha
3SGNF+take-CMPL he
'Then he (the shaman) saw (REPORTED: the evidential of the whole story) in his dream (which he told his wife): "Our grandfather is in a bad way right now (VISUAL), a man is taking him away (VISUAL)."'

In contrast, dreams by ordinary people are told using nonvisual evidential:

(69) nu-we-do-nuku Lurde-nuku
1SG-younger.sibling-FBM-TOP.NON.A/S Lurdes-TOP.NON.A/S
tapalisa-mahka nhua
dream-REC.P.NONVIS I
'I have dreamt about my younger sister, about Lurdes' (NONVISUAL)

Supernatural actions of evil spirits are described using 'nonvisual' evidentials – as in (70), from a story about what had happened in the jungle. The nonvisual remote past tense is used to refer to what the evil spirit had done to the two speakers (he nearly killed them); the visual remote past refers to what they did.

(70) amaku-pe wa-tutu wema-na wa-na
hammock-PL 1PL-tie 1PL+sleep/close.eye-REM.P.VIS 1PL-OBJ
kayu-mhana di-ni ñamu
thus-REM.P.NONVIS 3SGNF-do evil.spirit
'We tied our hammocks and went to sleep (VISUAL), this was what the evil spirit had done to us' (NONVISUAL)

New insights on evidentials could be obtained from the ways in which evidentials are used to describe newly emerging cultural practices. One such practice is reading. Literate Tariana speakers tend to use inferred – rather than reported evidential – when retelling stories they have just read, when translating Catholic prayers, or acting as Bible translators during church services. This is because the proof of the validity of the information can be seen as printed in the book.

We can recall that the reported evidential may have a connotation of 'unreliability' of information; this may explain why inferred is preferred in translations. However, in written translations of sacred texts – such as the Sunday service – descriptions such as 'Jesus Christ is among us' or 'Jesus Christ is good' are cast in visual. I did not dare ask questions about this: it is quite possible that statements of this sort are taken to be generally true facts (since all the Tariana, at least on the surface, are devout Catholics). But I suspect that there could be a certain influence of the tradition of translating Catholic texts into Tucano using visual evidentials – the Tariana who insisted that the prayers be translated into the Tariana language had access to the Tucano translation.

I have been able to observe Tariana speakers talking about what they had seen on television – they considered it equivalent to real seeing and believed everything they saw, and so the visual evidential was used. When a few speakers had talked on the phone (in Portuguese, refusing to use either Tariana or Tucano in this context) they described what they heard with nonvisual.

This precision of the source of one's statement goes together with a tendency to avoid assumptions about evidence that other people might have. Evidentials in Tariana do have a number of epistemic extensions – this also makes interpreting other people's sources of information more complex. This may (at least partly) explain the cultural inappropriateness of asking questions (see §4.1).

The Tariana use yet another strategy to avoid interpreting other people's sources of information. When reporting what someone else had said, the preferred strategy is a direct speech complement. This means that the speaker can avoid making a choice of an evidential for another person and run the risk of

undesired implications as to 'validation' of the other person's evidence. Thus, instead of saying, 'he is coming-reported', the speaker would prefer saying 'he said: I am coming-visual'.

Such attitude to information may be related to the fact that in Amazonian society it is held that there is an explicit cause (most often, sorcery) for everything that happens. So as not to be blamed for something that in fact they had no responsibility for, a speaker is careful always to be as explicit as possible about what they have done. This relates to the desirability of stating the evidence for everything that is said, visually obtained information being the most valuable.

An additional observation concerns emergent marking of evidence in Portuguese – the contact language in the Vaupés.

The majority of the Tariana speak Portuguese (only a very few old people claim that they don't). Portuguese has no evidentiality. But the speakers of Vaupés Portuguese 'make up' for this obvious gap by using an array of lexical strategies for different evidentiality specifications. Statements referring to information obtained visually is usually accompanied by a phrase *eu vi* 'I saw'. The expression *eu tenho prova* 'I have proof', or, more rarely, *eu tenho experiência* ('I have experience') can be used to 'replace' visual or specific inferred. Information obtained by hearing or by other sensory experience can be accompanied by *eu escutei* 'I heard' or *eu senti* 'I felt'. The way of marking inferred information is by saying *parece* 'it appears, it seems'. And *diz que* 'it is said that' is a conventional way of marking reported information.

The use of these expressions makes Vaupés Portuguese sound somewhat obsequious and hedging; and is often judged as weird by monolingual Brazilians from other areas. In Tariana, inferred evidentiality is used in translations and in rendering of what one has just read. But it does sound bizarre to native speakers of Standard Portuguese when an Indian who has just read an announcement about a football match in the Mission centre says: 'There is a football match on, it appears'.

The phenomenon of transference of evidentiality-type distinctions from one language to another has been documented. In the English spoken by the Yavapai and Paiute, 'they say' is effectively used to cover non-firsthand evidentiality specifications obligatory in the two languages (Bunte & Kendall 1981). In the Portuguese of the Vaupés area, *diz que* 'it is said' can also be extended to cover all non-firsthand evidentiality specifications. Thus, an Indian who has read an announcement, may just as well talk about it using *diz que* (which sounds equally bizarre for speakers of Standard Portuguese; since for them this

conveys a tinge of incredulity). Thus, the evidentials have made their way even into the contact language – albeit in a roundabout fashion.

We conclude that Tariana combines a number of evidentiality subsystems– C1 or D1 in affirmative clauses; B2 in interrogative clauses and also in apprehensives (albeit with unrelated marking), A3 in imperative, and A1 in purposive. Is this the largest possible number of evidential subsystems a language can have?

Notes

1. Tariana is currently spoken by about 100 people in two villages, Santa Rosa (also known as Juquira-ponta, lit. 'Point of Salt') and Periquitos, on the upper Vaupés. Language loss is more advanced in Santa Rosa. The two dialects are mutually intelligible (the difference is comparable to that between British English and American English; or Portuguese as spoken in Portugal and as spoken in Brazil). I have been working on Tariana since 1991, with over 90% of the speakers of Santa Rosa dialect, and with 70% of those from Periquitos. My corpus contains over 200 stories (about 1500 pages), and also conversations and wordlists. A detailed grammatical description is Aikhenvald (in press); Aikhenvald (2002a) is a dictionary. The fieldwork on which this paper was based was financed by a Wenner Gren Foundation Small Grants project. I owe a considerable debt to all my teachers of the Tariaha language: the Brito family of Santa Rosa and the Muniz family of Periquitos. Special thanks go to R.M.W. Dixon, David Beck and all the participants of the Workshop on Evidentiality for insightful comments, and to Elias and Lenita Coelho de Assis for invaluable support in the fieldwork situation. I am grateful to Anya Woods for editorial assistance.

2. A detailed study of the Vaupés linguistic area and patterns of areal diffusion there can be found in Aikhenvald (2002b); also see Aikhenvald (1996; 1999a, b).

3. Older people rarely use this construction. The anterior marker -nhi and the specific inferred evidentials can cooccur, in younger people's speech.

4. The other imperatives are: simple (unmarked) -∅; proximate ('do here') -si; distal ('do there') -kada; postponed ('do some time later') -wa; detrimental ('do to your own detriment') -tupe; conative precative ('please try and do') -thara; cohortative ('let's do') -da; and polite suggestion ('please do') -nha.

5. Like most evidential specifications, the secondhand imperative is a calque from Tucano. However, unlike Tariana, the Tucano secondhand imperative marker -ato has no connection with any of the evidentiality-tense paradigms (cf. Ramirez 1997:146), while the secondhand imperative marker -pida in Tariana is found throughout the reported evidential paradigm. I return to this in §8.

6. This is also true of the equivalent of the Tariana 'generic inferred' in Tucano.

7. Following a phonological rule (similar to Grassmann's law), the sequence of enclitics -tha +-nha becomes -thana.

References

Aikhenvald, A. Y. (1996). Areal diffusion in North-West Amazonia: the case of Tariana. *Anthropological Linguistics*, 38, 73–116.

—— (1999a). The Arawak language family. In R. M. W. Dixon & A. Y. Aikhenvald (Eds.), *The Amazonian languages* (pp. 65–105). Cambridge: Cambridge University Press.

—— (1999b). Areal diffusion and language contact in the Içana-Vaupés basin, North West Amazonia. In R. M. W. Dixon & A. Y. Aikhenvald (Eds.), *The Amazonian languages* (pp. 385–415). Cambridge: Cambridge University Press.

—— (2001). Language awareness and correct speech among the Tariana of northwest Amazonia. *Anthropological Linguistics*, 43, 411–430.

—— (2002a). *Dicionário Tariana-Português e Português-Tariana. Buletim do Museu Paraense Emílio Goeldi*, 17(1) (Special issue).

—— (2002b). *Language contact in Amazonia*. Oxford: Oxford University Press.

—— (in press). *The Tariana language of northwest Amazonia*. Cambridge: Cambridge University Press.

Barnes, J. (1984). Evidentials in the Tuyuca verb. *International Journal of American Linguistics*, 50, 255–271.

—— (1999). Tucano. In R. M. W. Dixon & A. Y. Aikhenvald (Eds.), *The Amazonian languages* (pp. 207–226). Cambridge: Cambridge University Press.

Bunte, P. A., & Kendall, M. B. (1981). When is an error not an error? Notes on language contact and the question of interference. *Anthropological Linguistics*, 23, 1–7.

Gruzdeva, E. Yu. (1992). Poveliteljnye predlozhenija v nivkhskom jazyke (Imperative sentences in Nivkh). In V. S. Xrakovsky (Ed.), *Tipologija imperativnyh konstrukcij* (The typology of imperative constructions) (pp. 55–63). Sankt-Peterburg: Nauka.

Malone, T. (1988). The origin and development of Tuyuca evidentials. *International Journal of American Linguistics*, 54, 119–140.

Miller, M. (1999). *Desano grammar*. (Studies in the Languages of Colombia 6.) Arlington: Summer Institute of Linguistics and the University of Texas at Arlington.

Ramirez, H. (1997). *A fala Tukano dos Yepâ-masa. Tomo I. Gramática*. [The Tucano language of Yepâ-masa. Volume 1. Grammar.] Manaus: Inspetoria Salesiana.

Tsitsipis, L. D. (1998). *A linguistic anthropology of praxis and language shift. Arvanitika (Albanian) and Greek in Contact*. Oxford: Clarendon Press.

West, B. (1980). *Gramática popular del Tucano*. [A popular grammar of Tucano.] Santafé de Bogotá: Instituto Lingüístico de Verano.

CHAPTER 7.

Evidentiality in Jarawara*

R. M. W. Dixon

1.   Introduction

The small Arawá family of southern Amazonia (quite distinct from Arawak) consists of five extant languages – Dení, Kulina, Sorowahá, Paumarí and Madi (see Dixon 1999). The Madi language consists of three closely related dialects: Jamamadi (with about 190 speakers), Banawá (about 80 speakers) and Jarawara (about 150 speakers, spread over eight jungle villages). The description of Jarawara given here is based on materials gathered in the course of six field trips, during 1991–1999.

This is a highly synthetic language, basically agglutinative but with developing fusion (particularly in the gender-marking forms of inalienably possessed nouns – see Dixon 1995).

Jarawara is head-marking, with the predicate including obligatory pronouns for S in an intransitive and for A and O in a transitive clause (3sg is always marked by zero). The only obligatory element in a clause is the predicate. It may optionally be preceded by core NPs marking the S argument (in an intransitive clause) and the A and/or O arguments (in a transitive clause);

Evidentiality is marked at three different places within the predicate in Jarawara: (i) a distinction between 'eyewitness' and 'non-eyewitness' is fused with the three past tenses; (ii) there is a 'reported' suffix; and (iii) there is a secondary verb (a kind of auxiliary) with the meaning 'it seems, it appears' or 'I think, I guess'. The non-eyewitness immediate past suffix also has a mirative sense.

The three types of evidential marking are dealt with one at a time, with discussion of their meanings, origin (where known), and interrelations both with each other and with other grammatical categories. But we first need to present some basic information about the language and its grammatical profile.