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**Evidential strategies in narrative discourse:  
a contrastive approach**

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## Outline

1. Introduction.
2. Data & Method.
3. Results.
4. Discussion.
5. Conclusions.

# 1. Introduction

## Introduction

Evidentiality is a grammatical category signaling information source (Aikhenvald 2004).

## Introduction

### (1) Tariana (Arawakan; Brazil) [Aikhenvald 2004: 2–3; highlight added]

a. Juse irida        di-manika-**ka**  
 José football    3sgnf-play-REC.P.VIS  
 ‘José has played football (**we saw it**)’

d. Juse irida        di-manika-**sika**  
 José football    3sgnf-play-REC.P.ASSUM  
 ‘José has played football (**we assume this** on  
 the basis of what we already know)’

b. Juse irida        di-manika-**mahka**  
 José football    3sgnf-play-REC.P.NONVIS  
 ‘José has played football (**we heard it**)’

e. Juse irida        di-manika-**pidaka**  
 José football    3sgnf-play-REC.P.REP  
 ‘José has played football (**we were told**)’

c. Juse irida        di-manika-**nihka**  
 José football    3sgnf-play-REC.P.INFR  
 ‘José has played football (**we infer it** from  
 visual evidence)’

## Introduction

Evidentiality is a grammatical category signaling information source (Aikhenvald 2004); includes six possible information sources:

I. Visual;

II. Nonvisual sensory (auditory, olfactory, tactile, gustatory);

III. Inference;

IV. Assumption;

V. Reported;

VI. Quotative (Aikhenvald 2021: 14).

## Introduction

Five of the six information sources are associated with five senses: SIGHT, HEARING, TOUCH, TASTE AND SMELL.

I. Visual: SIGHT;

II. Nonvisual sensory: HEARING, SMELL, TOUCH, TASTE;

III. Inference: any (+ PROPRIOCEPTIVE FEELING);

V. Reported: primarily HEARING (but also SIGHT);

VI. Quotative: primarily HEARING (but also SIGHT).

## Introduction

*Table 1. The grouping of semantic parameters in grammatical evidentiality systems (Aikhenvald 2021: 14)*

		I. Visual	II. Nonvisual sensory	III. Inference	IV. Assumption	V. Reported	VI. Quotative
2 choices	A1	firsthand		non-firsthand			
	A1	firsthand	non-firsthand				
	A2	<evidentially unmarked>		non-firsthand			
	A3	<evidentially unmarked>				reported	
	A4	<evidentially unmarked>	auditory	<evidentially unmarked>			
3 choices	B1	direct		inferred		reported	
	B2	visual	nonvisual	inferred			
	B3	visual	nonvisual	<no term>		reported	
	B4	<evidentially unmarked>	nonvisual	inferred		reported	
	B5	<evidentially unmarked>				reported	quotative
	B6	<evidentially unmarked>	nonvisual	<evidentially unmarked>		reported	
4 choices	C1	visual	nonvisual	inferred		reported	
	C2	direct (or experiential)		inferred	assumed	reported	
	C3	direct (or experiential)		inferred		reported	quotative
	C4	visual	nonvisual	inferred		<evidentially unmarked>	
	C5	direct	inferred	assumed		<evidentially unmarked>	
	C6	<evidentially unmarked>		inferred		reported	quotative
5 choices	D1	visual	nonvisual	inferred	assumed	reported	



## Introduction

Languages differ with respect to the possibility to express evidentiality via grammatical means; lexical means are probably universal:

- (2) a. **We saw** that John was playing football. [visual]  
b. **We heard** that John was playing football [auditory or reported]  
c. **Apparently**, John was playing football. (His boots and ball are missing.)  
[inference]  
d. **Apparently**, John was playing football. (He has a training every Monday and Wednesday). [assumption]  
e. **Sue was like**: “John was playing football.” [quotative]

## Introduction

The ‘richness’ of the grammatical system of evidentiality can be influenced by extralinguistic factors:

- size and closeness of community (Aikhenvald 2004: 359; Bernárdez 2017: 452);
- cultural practices (Michael 2015; also see Aikhenvald 2004: 359);
- ecology: “[d]ifficulties in accessing the world around enhance the probability of developing evidentials” (Bernárdez 2017: 452).

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**Our hypothesis:**

The use of evidentials could correlate with speakers’ sensitivity to information source and its more frequent mention in discourse (cf. Slobin’s 1987 ‘Thinking for Speaking’ hypothesis).

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“Grammars code best what speakers do most” (Du Bois 1987: 851).

**Our hypothesis:** the use of evidentials could correlate with speakers’ sensitivity to information source and its more frequent mention in discourse (cf. Slobin’s 1987 ‘Thinking for Speaking’ hypothesis).

**Prediction A:** speakers of languages with grammatical encoding of information source should refer to this source more often in texts, using lexical or grammatical means;

**Prediction B:** reference to information source in texts should reflect universal extralinguistic biases or depend on extralinguistic factors.

**Aims:**

- investigate how sensory information source is coded in traditional narratives in five languages with differences in evidential systems;
- compare the way different sources of sensory information are represented in discourse;
- explore how linguistic and extralinguistic factors can explain the differences observed.

**Primary focus:** visual and auditory perception.

**Excluded:** verbal information sources (oral and written) as connected to auditory and visual perception by default.

## Research questions:

1. Is sensory perception of a particular type more prominent in languages with specialized grammatical evidential(s) at the lexical level than in languages without specialized evidential(s)?
2. Is sensory perception of a particular type overall more prominent in traditional narratives of languages with grammatical evidential(s) as compared to languages without them?
3. What (else) may cause differences in the distribution of evidential strategies across languages?
4. Are there any universals across languages with respect to the encoding of sensory information source?



### 3 Siberian languages:

- **Udihe** (Tungusic): grammaticalized mirative evidential particles marking visually and auditorily perceived information (Nikolaeva & Tolskaya 2001: 461–462):

(3) Udihe (Nikolaeva & Tolskaya 2001: 463)

<i>ŋene:-ni</i>	<i>nada-zi</i>	<i>käu-käu</i>	<i>maga:-ti</i>
go.PST-3SG	seven-INST	all-all	kill.PST-3PL
<i>gune</i>	<i>bube</i>		
PTCL.REP	PTCL.MIR		



‘She went (and **saw** that) all seven (of them) were killed.’ (K 177)

### 3 Siberian languages

- Udihe (Tungusic);
- Nganasan (Samoyedic): auditory evidential (Gusev 2007):

(4) Nganasan (Gusev 2007: 420)

a. *Nogutə-munu-ti miiʔa*  
 approach-AUD-3DU here

‘**It is heard**, those two are approaching.’

b. *Ma-tənu hihia kolj ŋeluaj-müñü-t’ü*  
 tent-LOC cooked fish smell-AUD-3SG

‘**It smells** of cooked fish in the tent.’



### 3 Siberian languages:

- Udihe (Tungusic);
- Nganasan (Samoyedic);
- Selkup (Samoyedic): auditory evidential mostly no longer in use, latentine mood with visual and auditory information (Urmančieva 2014):

(5) Selkup (Urmančieva 2014: 73)

<i>Monti</i>	<i>mat</i>	<i>ńeńa-mĭ</i>	<i>aj</i>
PTCL.INFER	1SG	sister-1	also
<i>nĭmtĭ</i>	<i>tap</i>	<i>ĭtĭ-ntĭ-∅</i>	
here	she	hang-LATENT-s3	

'As I can see, my sister is hanging here, too.'



## Introduction

2 languages with no grammatical encoding of information source:

- Chuvash (Turkic)



## Introduction

2 languages with no grammatical encoding of information source:

- Chuvash (Turkic);
- Wan (Mande).



## 2. Data & Method

## Data

*Table 2. Data sources and number of narratives analyzed*

<b>Language</b>	<b>Data source</b>	<b>Narratives</b>
Nganasan	Nganasan Spoken Language Corpus (Brykina et al. 2018)	61
Selkup	INEL Selkup Corpus (Brykina et al. 2020)	37
Udihe	SpeechReporting Corpus (Perekhvalskaya 2021); Udihe Folk Tales (Nikolaeva et al. 2002)	49
Chuvash	SpeechReporting Corpus (Nikitina 2022)	16
Wan	SpeechReporting Corpus (Nikitina in prep.)	82

## Method

### Procedure:

- extract reference to information source from traditional narratives, including all possible scenarios of sensory perception;
- annotate for mode of perception and means of encoding reference to information source;
- compare different types of reference and modalities of perception across the languages.



## **Encoding of the sensory information source in texts:**

1. Grammatical means
2. Lexical means
3. Information source implied in context.
4. Imitation of sound (and visual) effects (e.g., by onomatopoeias and ideophones).

## Grammatical expression of information source

Grammatical moods expressing **auditory** perception in Nganasan and occasionally in Selkup:

(6) Selkup (Uralic; Western Siberia)

*nin*      *šit-tal'*                      *na*      *ija*      *tü-l'či-kunä.*  
 then      two-ITER.NUM              this      guy      come-PRF-**AUD**

'Then the second time this boy comes, **one hears.**'

(NEP\_1965\_OrphanBoyAndPanOldMan1\_flk.086)

(7) Nganasan (Uralic; Northern Siberia)

*ban-u-ʔ*      *logiā-minəʔ*                      *bənti-ni*  
 dog-EP-PL      bark-**AUD**                      outside-LOC.ADV

'The dogs are barking, **as it is heard.**' (TKF\_990819\_SomatuShaman\_flkd.063)

## Grammatical expression of information source

Grammatical moods expressing **visual** perception:

(8) Selkup (Uralic; Western Siberia)

<i>razbojnig-la</i>	<i>tšaza-tdə</i>	<i>atdi(ə)-z'e i</i>	<i>t'ära-ttə:</i>	<i>qaj</i>
robber-PL	go-3PL	boat-INSTR and	say-3PL	what
<i>struška-la</i>	<i>(köu-da-ttə)</i>		<i>küu-ze</i>	<i>tša:zi-da-ttə.</i>
scob-PL	flow.quickly-LATENT-3PL		quick.stream-INSTR	go-LATENT-3PL

'There were robbers passing by in a boat, they said: "**What are those wood shavings in the current?...**"'  
(PVD\_1964\_UnfaithfulWifeAndRobbers\_flk.040)

(9) Nganasan (Uralic; Northern Siberia)

<i>Mađ-ə-mti</i>	<i>aniʔi-m-tü-batu-gəj</i>	<i>s'iti</i>	<i>s'iđi</i>	<i>bəbatəni</i>
tent-EP-ACC.SG.2DU.POSS	big-TRL-TR- <b>INFER</b> -3DU	two.NOM	two.GEN	bed-LOC
<i>taharīabə</i>	<i>i-t'ü-gəj.</i>			
now	be-PRS-3DU			

'**Apparently**, they made a bigger tent, they live separately.' (TKF\_990812\_EvilSpirit\_flkd.673)

## Grammatical expression of information source

Grammaticalized evidential particles expressing **auditory** perception:

(10) Udihe (Tungusic; Eastern Siberia)

<i>Emne</i>	<i>mafa</i>	<i>bua</i>	<i>xo:n-tigi-ni</i>	<i>ηene:-ni,</i>	<i>j'eu-ke</i>	<i>eme</i>
once	husband	forest	on-LAT-3SG	go.PAST-3SG	what-IND	come
<b><i>gune</i></b>	<i>kutututu</i>	<i>ono</i>	<b><i>gune</i></b>	<i>agdi</i>	<i>bede.</i>	
EV	INTJ	how	EV	thunder	like	

‘Once the old man went to the forest and **heard** something rattle like thunder.’ (Nikolaeva et al. 2002: 112)

## Grammatical expression of information source

Grammaticalized evidential particles expressing **visual** perception:

(11) Udihe (Tungusic; Eastern Siberia)

*Zugdi caa-la-ni ege-le-he-ti, ege-le-he-ni-de*  
 house behind-LOC-3SG go\_around-SG-PST-3PL go\_around-SG-PST-3SG-FOC  
*anci, gune!*  
 no EV

‘He went around the house – **nothing there!**’ (Udihe\_Baskakova\_III.04.151)

(12) Selkup (Uralic; Western Siberia)

*ninä inna šitä-ja qanti-tä monti i:l'e-ča.*  
 then up wake.up-CO dawn-3SG PTCL.INFER appear-RFL

‘Then he woke up, [**he sees that**] it’s getting light.’

(NEP\_1965\_FoolInSackCoat\_flk.065)

## Lexical expression of information source

**Auditory** perception: ‘hear’, ‘listen’

(13) Chuvash (Turkic; Central Russia)

*pyrt-re-x*                      *ilt-ën-et*

house-LOC-EMPH      hear-REFL-PRS.3SG

‘**It was audible** right in the house.’ (Chuvash\_Tam\_acha\_end.097)

(14) Selkup (Uralic; Western Siberia)

*sil’či pil’čit qəš*              *üŋul’-đi-mpe-ti*              *qaj?*

PN                              hear-TR-DUR-3SG.O      what

‘Sylcha Pylcha Kash **is listening** what is [there].’

(KAI\_1965\_SylchaPylcha1\_flk.083)

## Lexical expression of information source

**Visual** perception: ‘see’, ‘watch’, ‘be(come) visible’ (= Ngan., Sel. ‘appear’)

(15) Chuvash (Turkic; Central Russia)

*xër patša tit-sa pəx-atʲ ɕyɕ pörtɕ-in-e*  
 girl tsar grasp-CV\_COORD look-PRS.3SG hair unit-POSS\_3-ACC/DAT  
 ‘The tsar girl takes the hairs and **looks** at them.’ (Chuvash\_Grisha\_start.477)

(16) Nganasan (Uralic; Northern Siberia)

*Təndi-tʻi dʻübəədʻi ma-tə tʻii-ʔə,*  
 that-ACC.PL.3SG throw-DRV-INF tent-LAT come.in-PRF  
*nʻini-dʻə-gəj katʻəmi-ʔə-gəj barusʻa-ŋgu-mti.*  
 elder.brother-DYA-DU see-PRF-3DU devil-DIM-ACC.SG.3DU.POSS  
 ‘Having thrown it, he entered the tent, the brother and the sister **saw** their little devil.’ (POJ\_71\_Barusi\_flkd.053)

## Information source implied

Verbs expressing sound production ⇒ **hearing** implied

(17) Wan (Mande; Côte d'Ivoire)

*bé gbógló l̄gǎ bé b̀lè é gnù*  
 then hyena laugh then bird DEF fly

'Then the Hyena **laughed**, and the bird flew away.'

(Wan\_Hyena\_and\_his\_ugly\_hide.009)

(18) Selkup (Uralic; Western Siberia)

*Kana-t topip č'iq̄l-nɔ:-t, kanak l̄q-al'-n'a.*  
 dog-GEN leg.ACC step-CO-3PL dog dog.yelp-INCH-CO

(*Ira nil' nül'č'a, n'omal' porq̄i ira m̄ita.*)

'They [the sons] stepped on the dog's foot, the dog began to **yelp**. (The old man awakened, the Hare Parka old man.)' (NEP\_196X\_HareParka2\_flk.117)



## Information source implied

‘Footprints’, ‘traces’ ⇒ **seeing** implied

(19) Wan (Mande; Côte d’Ivoire)

è	zō	è	nē	ē	<b>cé</b>	<b>bī</b>	é	glā	tāííí
3SG	came	3SG	child	DEF	foot	trace	DEF	took	until

‘He went [and] followed his child's footprints.’

(The\_Child\_and\_the\_Caterpillar.035)

(20) Nganasan (Uralic; Northern Siberia)

<i>əm-ə-ni-ka-a-məni</i>		<i>d'oďü-l'i-ʔi-ďə,</i>	<i>maa</i>
this-ADJ-LOCPRON-PRMLZ-ADJZ-PROLAT		walk.FRQ-INCH-PRF-3SG	what
<i>əmti-rə</i>	<i>təʔ,</i>	<b><i>səd'əraaəđu</i></b>	<i>sir-a-jt'ü-tu.</i>
this-2SG.POSS	PTCL	trace-LIM-3SG.POSS	white-EP-DRV-PRS

‘He started going further away from the tent, what is this, there’s only a **trace** shows white.’ (ChND\_080722\_TwoFriends\_flk.028)

## Information source implied

Reported speech and thought expressing **auditory** or **visual** perception:

(21) Selkup (Uralic; Western Siberia)

*na tätti-p pontar kol'-alti-ptä:-qak qusa qaj oriče.*  
 this earth-ACC environs turn-TR-AN-LOC.1SG.POSS PTCL what say-US-LAT

'He walked around this place: **"Come on, who is speaking there?"**  
 (KAI\_1965\_SylchaPylcha1\_flk.026)

(22) Nganasan (Uralic; Northern Siberia)

*Tahariaa munu-ntu tahariaa: S'ejmi-rbi?ta-güa-t'ə tə?,*  
 now say-PRS.3SG now eye-AUG-EMPH-PL.2SG.POSS PTCL

*maa-gal'it'ə-gətə ηanuə-məni. Tu totu-ləgu-ʔ.*  
 what- EMPH-ABL real-PROLAT fire spark-SIM-PL

'[That one] says: **"Oh wow, your eyes, you know, they are like fire sparks."**  
 (MVL\_Hugabtadja\_flks.346).

## Sound imitation

(23) Wan (Mande; Côte d'Ivoire)

<i>yàá</i>	<i>dṓj</i>	<i><b>kpló-kplá-kpló</b></i>	<i><b>kpló-kplá-kpló</b></i>	<i>cīñ</i>	<i>pānī</i>
3SG+COP	right.away	IDPH	IDPH	rain	dirt

*é tā*

DEF on

'[The Hyena woke up from his sleep] – **clomp-clomp-clomp!** – [he went running] through the mud! (Wan\_Hyena\_and\_his\_ugly\_hide.021)

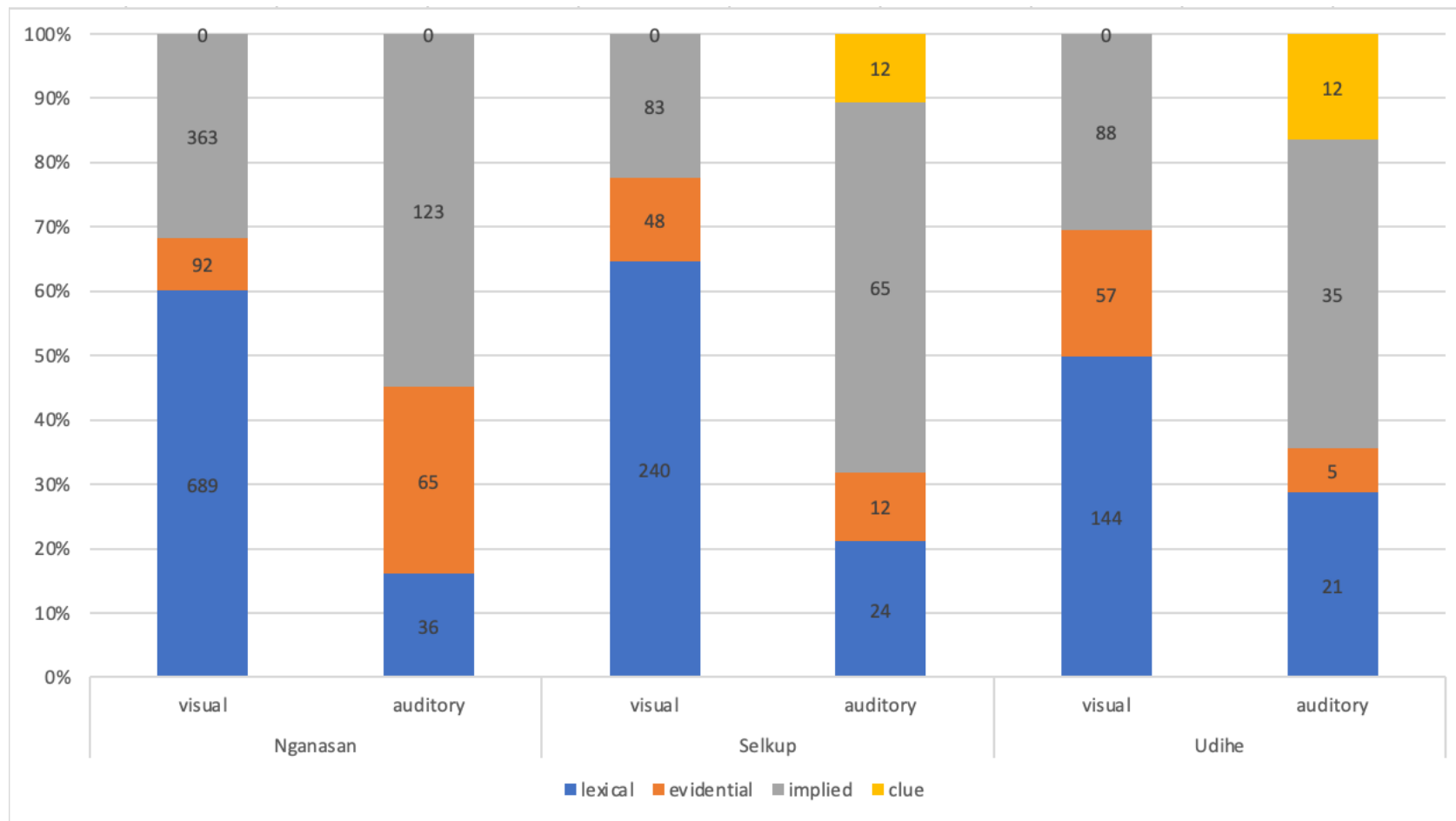
## 3. Results

## Results: Roadmap

1. Sensory perception in the three Siberian languages.
2. Comparison with Chuvash and Wan.

## Sensory perception in the three Siberian languages

Figure 1. Sensory perception in Nganasan, Selkup, and Udihe.



## Sensory perception in the three Siberian languages

In all three languages:

- Visual perception prevails over auditory;
- Visual perception: lexical > implied > evidential;

## Sensory perception in the three Siberian languages

Evidential particles are used with both modes of perception in Selkup and Udihe but occur more frequently with visual perception:

(24) Selkup (Uralic; Western Siberia)

*Monti mita tatt̄i, tatt̄i kini-mmi-nt̄i.*

PTCL.INFER as.if earth earth stretch-RES-LATENT

‘It is land that spreads.’ (NEP\_196X\_NenetsAndWhiteBear2\_flk.083)

(25) Udihe (Tungusic; Eastern Siberia)

*Ei, wali dieli: dieli-wesi: bubu.*

INTERJ raven fly-PRP fly-DIV.PRP PTCL.EVID

‘She saw a raven flying here and there.’ (Nikolaeva et al. 2001: 103)



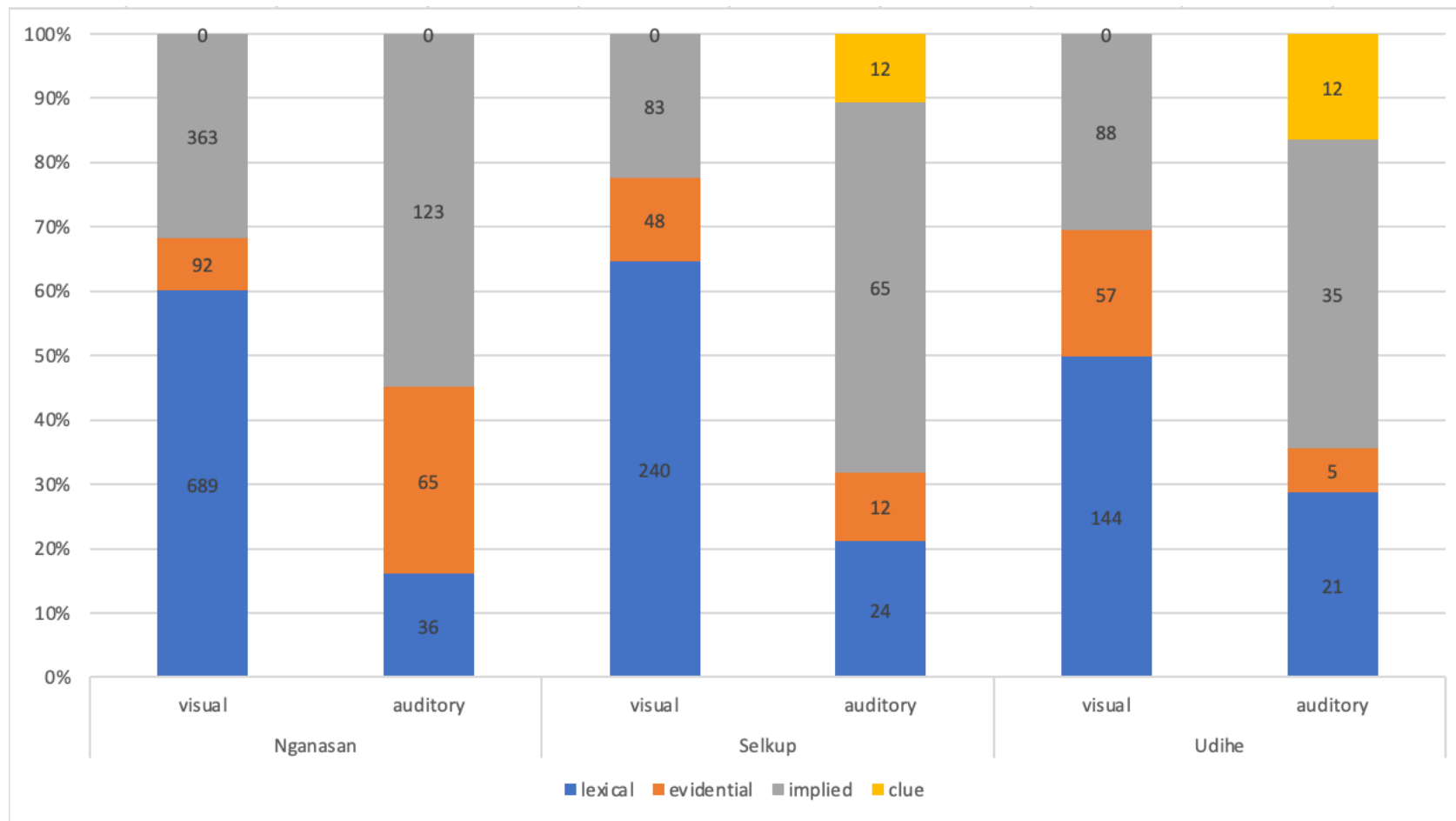
## Sensory perception in the three Siberian languages

In all three languages:

- Visual perception prevails over auditory;
- Visual perception: lexical > implied > evidential;
- Differences in encoding auditory perception, but implied meaning is the most frequent across three languages:
  - Nganasan: implied > evidential > lexical;
  - Selkup: implied > lexical > evidential > clue;
  - Udihe: implied > lexical > clue > evidential.

## Sensory perception in the three Siberian languages

Figure 1. Sensory perception in Nganasan, Selkup, and Udihe.



## Sensory perception in the three Siberian languages

Auditory clues in Selkup and Udihe:

(26) a. Selkup (Uralic; Western Siberia)

*(l'osi qarra qol'l'imol'l'ä kurrol'na (qanna) ütti a:l'ča.)*

*mita qurr qä:š.*

as.if IDPH IDPH

'(The devil, having turned to the bank, ran [away], and fell into the water.) As if **glug** [into the water].' (KAI\_1965\_SylchaPylcha1\_flk.092)

b. Udihe (Tungusic; Eastern Siberia)

*“Kon-kon” wali dieli:-ni.*

croak-croak raven fly-3sg

*“Croak-croak”* (said) the raven as it flew.' (Nikolaeva et al. 2001: 104)

## Sensory perception in the three Siberian languages

In Siberian Uralic languages, the auditive mood is traditionally used in contexts where visual perception is not available; otherwise: the meaning is mainly implied.

(27) Nganasan (Uralic; Northern Siberia)

*Ou, tə nəŋhə tə, maa-t'ə-küə tcoəbtə-riāa*  
 INTERJ PTCL bad PTCL what-EMPH-EMPH also-LIM

*tuj-huā-munu-t'üŋ.*

come-INT-AUD-3PL

(*S'üartu d'a munu?ə: Bəndi ŋon'd'i?, kat'aməkəiŋ maagüə, kət'i ŋua biāril'aaməi səŋül'əkəiŋ.*)

“Oh, it's bad, **someone is coming, it is heard.**” (He says to his friend: “Go outside, **look** around, or just open the door and **look.**”)

(ChND\_080722\_TwoFriends\_flk.260)

## Sensory perception in the three Siberian languages

Change in the evidential system of Nganasan (cf. Il'yina 2014);

Auditive is used more often with speech verbs where interlocutors see each other (365 occurrences with speech verb 'say' vs. 111 elsewhere):

(28) Nganasan (Uralic; Northern Siberia)

*N'üagəj əmənīə n'inditi ŋanua t'elməgüəʔ.*

'They came very close to them.'

*Tə, munumunut'i: əi, taharīāa n'ükü, maad'əəri n'üəriəi, kuniðə iməd'əəri?*

'They say (**as it is heard**): Hey, guys, where are you from?'

*əi, tənīʔīā munurusa n'inibtīāʔkud'üm munumunut'ü: əi, siðirhobta ŋəðitəndiŋ!*

'When they were asked, the older brother says (**as it is heard**): "Oh, you are right!..."' (MVL\_090807\_Bebtie\_flk.300–302)

## Sensory perception in the three Siberian languages

In Selkup: rare use of the auditive mood (29a), compensated by latentine (29b):

(29) Selkup (Uralic; Western Siberia)

- a. *Tü-l'č'i-qıŋä*      *na*      *ɔ:ta-m-ti*      *to*      *sora*  
 come-PFV-**AUD**      this      reindeer-ACC-3SG.POSS      away      bind

*ɔ:ta-m-ti.*

reindeer-ACC-3SG

'Having come (**as one hears**), he bound his reindeer.'

(NEP\_196X\_OrphanBoyAndPanOldMan2\_flk.120)

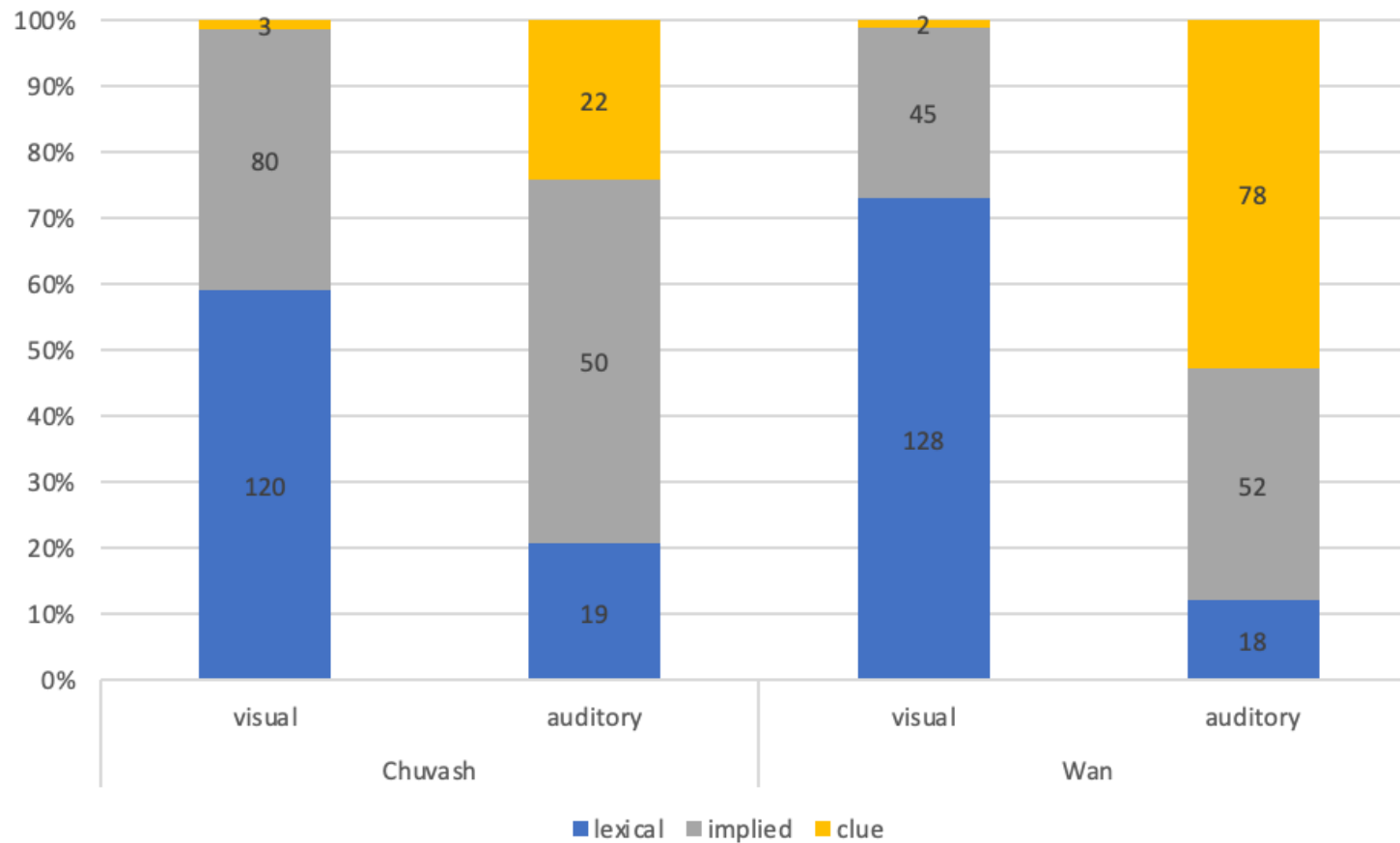
- b. *ondə*      *t'e:rba-n:*      *qaj*      *nat'en*      *raqsimi-nt.*  
 self.3SG      think-3SG      what      there-LOC      rattle-**LATENT**

'He thought to himself: "What is **clanking** over there?"

(PMP\_1961\_PlayingWithEyes\_flk.89)

## Sensory perception in languages without grammatical evidentials

Figure 2. Sensory perception in Chuvash and Wan



## Sensory perception in languages without grammatical evidentials

Ideophone refers to the object's **visual** characteristics

(30) Wan (Mande; Côte d'Ivoire)

*tē bú è filà á téń-téń-téń*

fire powder DEF be.white ADJ.FOC IDPH-IDPH-IDPH

'The cinder is sparkling white!' (Bachelor\_and\_the\_Cinder.007)

(31) Chuvash (Turkic; Central Russia)

*iltam tös-lë kor[ə]nat' jəltar-jəltar-jəltar-jəltar-jəltar*

gold gold-PROPR see-REFL-PRS.3SG IDPH-IDPH-IDPH-IDPH-IDPH

*ta, vo:t.*

and PTCL

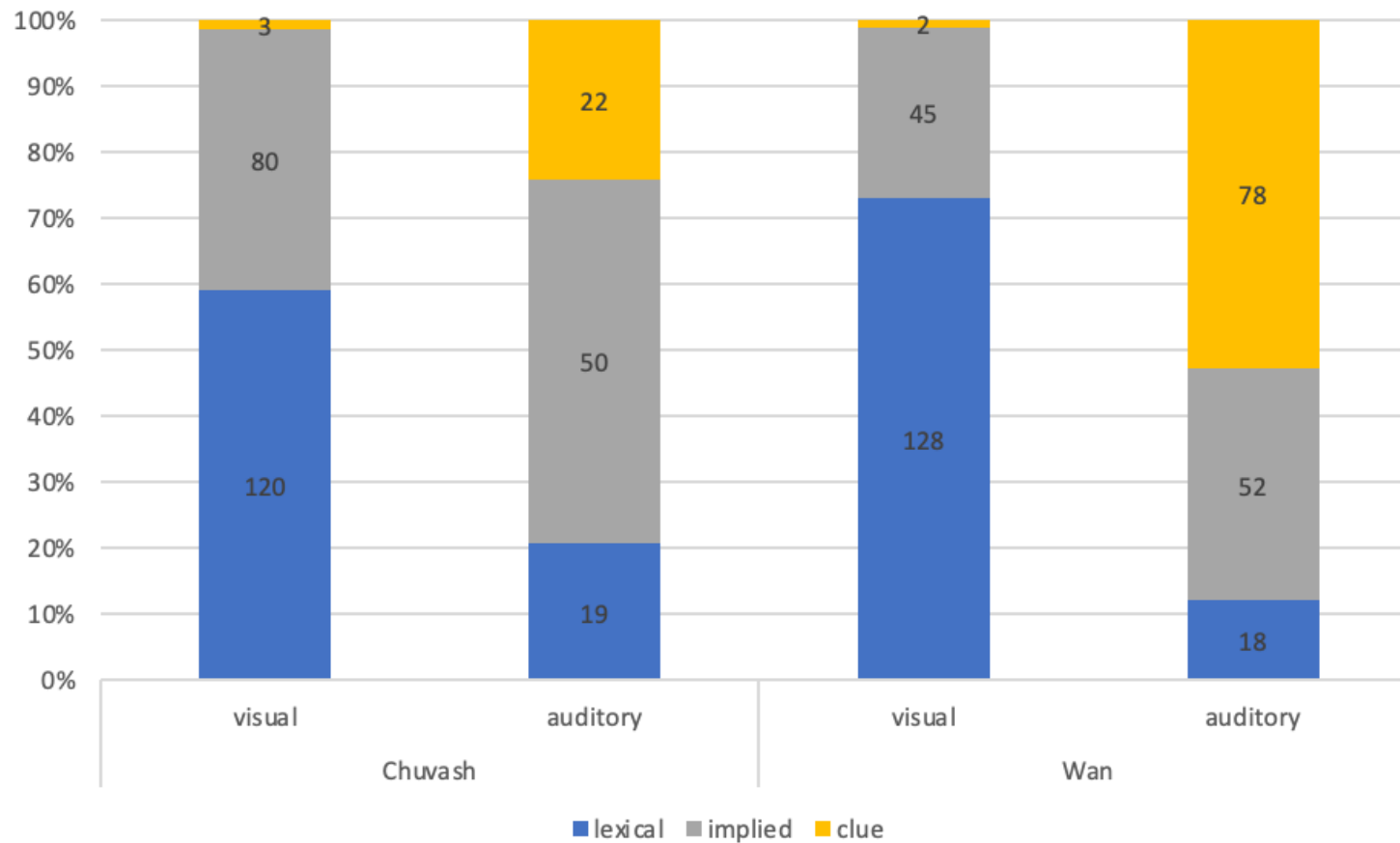
'looks like gold in color, shining bright, that's it.'

(Chuvash\_Ivan\_sadovnik\_start.297)



## Sensory perception in languages without grammatical evidentials

Figure 2. Sensory perception in Chuvash and Wan



## Sensory perception in languages without grammatical evidentials

In Chuvash & Wan:

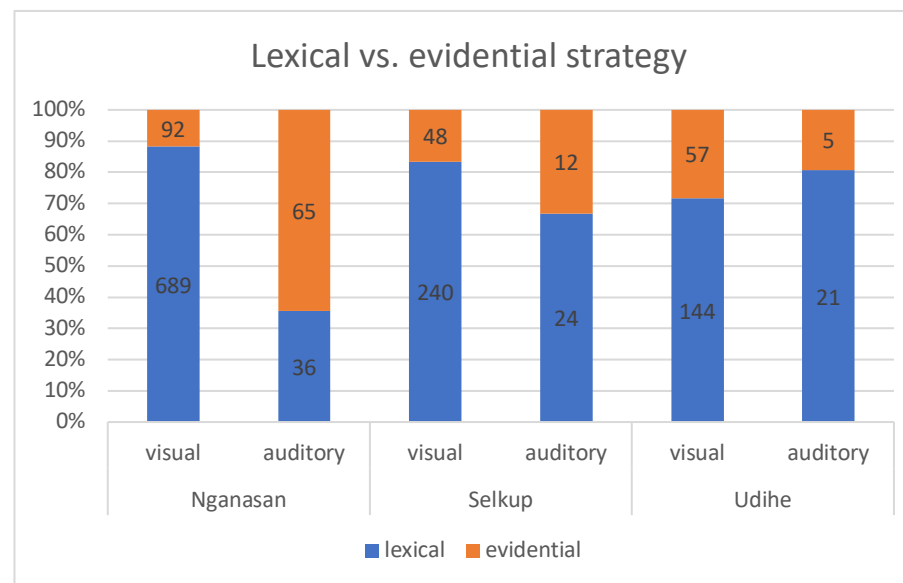
- Visual perception similarly prevails over auditory;
- Visual perception: lexical > implied > visual clue;
- Differences in encoding auditory perception:
  - Chuvash: implied > auditory clue > lexical;
  - Wan: auditory clue > implied > lexical.

## 4. Discussion

## Is Nganasan special?

***Is auditory perception more prominent in Nganasan at the lexical level than in languages without specialized auditive evidentials?***

- Contrary to our expectations, we detected a negative correlation between the use of sensory evidentials and the use of perception verbs:

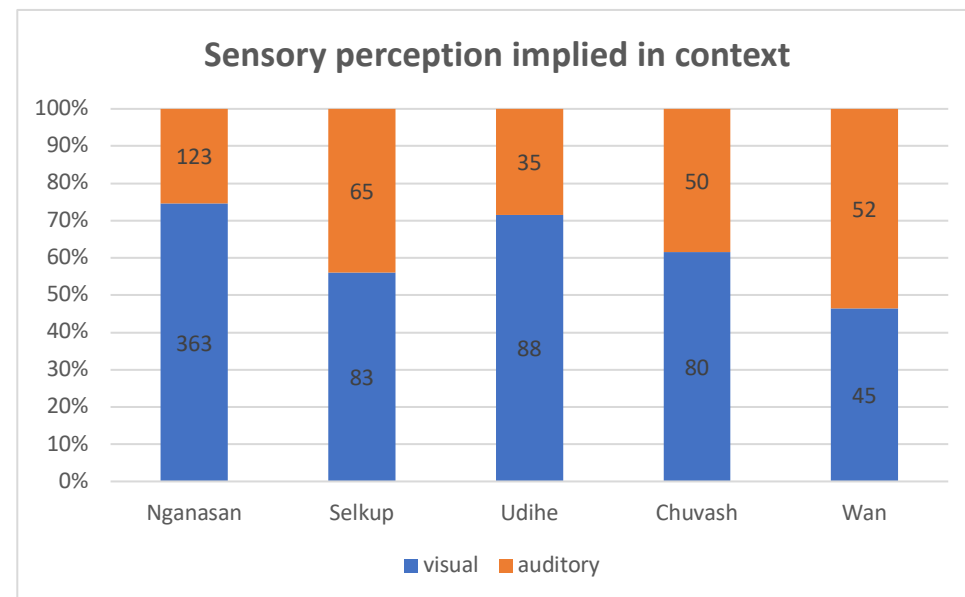
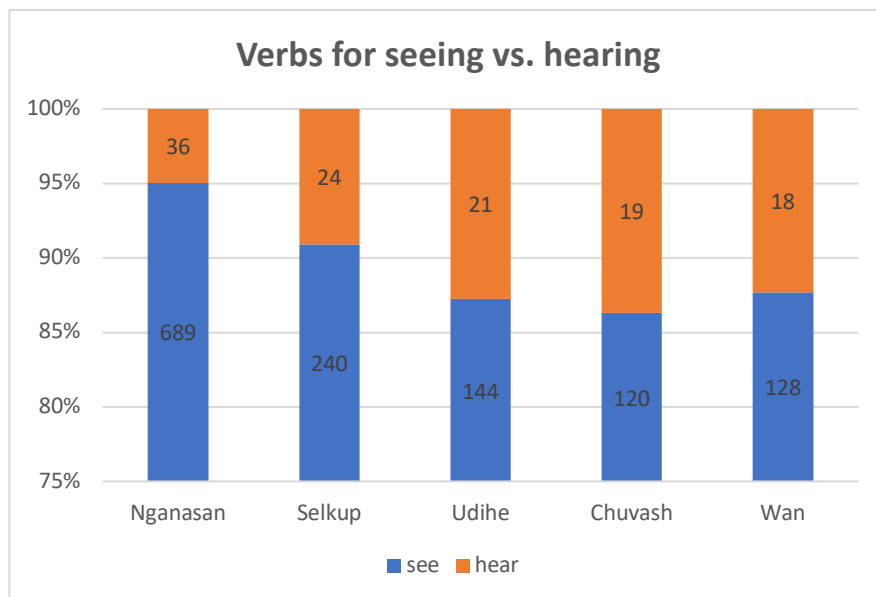


(the difference between Nganasan and Selkup/Udihe is statistically significant)

## Is Nganasan special?

***Is auditory perception overall more prominent in Nganasan traditional narratives as compared to languages without auditive evidentials?***

- Contrary to our expectations, it is less prominent, compared to visual perception, than in the other languages we examined:



(significant difference between Nganasan and all other languages) (significant difference between Nganasan and all languages except Udihe)

## Why are the distributions so different?

- Cultural factors;
- Rhetorical factors;
- Conventions of genre.

## Why are the distributions so different?

- Cultural factors:
  - a common setting in Nganasan & Selkup: listening from the inside of the house to what is going on outside;
  - In Nganasan but not Selkup: prominence of shamanistic rituals in traditional narratives (but also in personal life stories) involving singing and playing shaman drums;
  - in Wan: a person approaching an unknown village announces their arrival by a song (which is perceived and interpreted by the villagers).

## Why are the distributions so different?

- Cultural factors;
- Rhetorical factors:
  - a popular construction in Udihe:
    - ‘She got up [and saw] her sledge full of ash wood’
    - ‘She went there [and saw] that the little man had been walking there again’
  - emotion-laden visual descriptions by a Chuvash narrator:
    - ‘It is indescribably beautiful!’
  - visual and auditory perception expressed via the characters’ speech and thought in Nganasan & Selkup narratives:
    - ‘Oh, here is my younger sister walking outside.’
    - ‘The fire crackles and she is suprised: "Why is the fire crackling all the time?"’



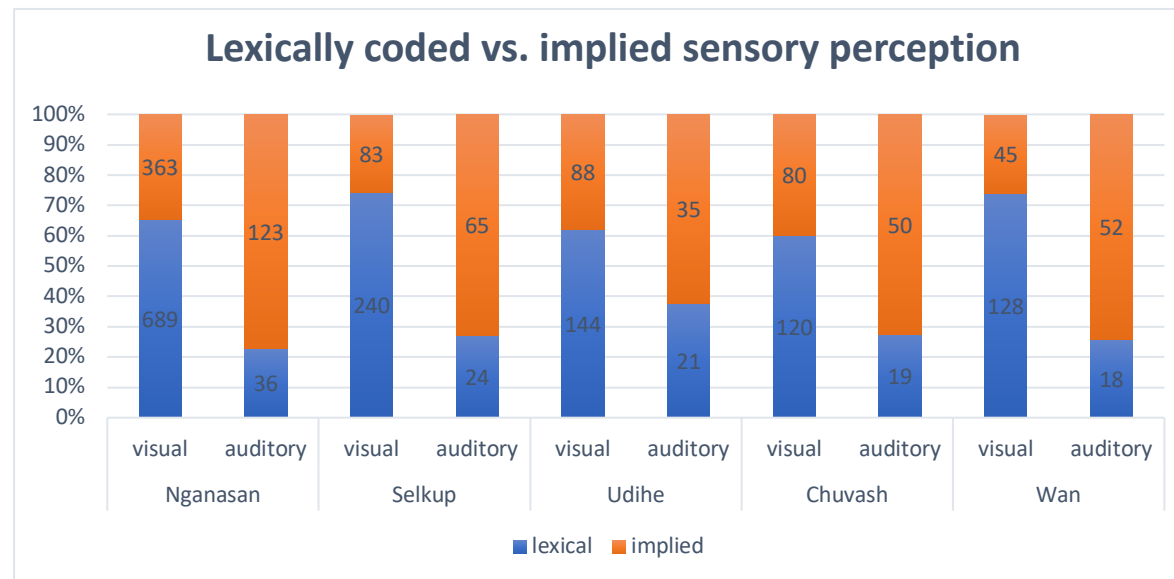
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- Cultural factors;
- Rhetorical factors;
- Conventions of genre:
  - traditional stories in Wan are structured around a song, which serves as the driving force behind the events in the story (hence the common mentions of the way it is perceived):
    - ‘What kind of proverb-song are you singing?’
    - ‘Eh, your dance is sweet.’
    - ‘And she did not hear the song.’

## Are there any universals across our samples?

In all the five languages of our sample:

- visual perception tends to be coded lexically,
- auditory perception tends to be inferred from context.



Could the relative prominence of vision as information source explain this tendency?

## 5. Conclusions

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Our initial hypothesis was only partially confirmed:

- the language with specialized auditive evidentials behaved differently from all others, but not in the way expected;
- instead of showing greater prominence of events of auditory perception in traditional narratives, it showed their significantly lower prominence (compared to visual perception)

This result can be explained in part by an overlap in the functions of the auditive evidential and the use of verbs for 'hear'.

What remains unexplained is the low frequency of events of auditory perception that are not coded overtly.

## Conclusions

We observe that **the frequency of reference to events of sensory perception depends on extralinguistic factors** (cultural, rhetorical, generic):

- there may be extralinguistic reasons why Nganasan behaves as an outlier;
- Is it a coincidence that our hypothesis of its “deviating” behavior was confirmed?

## Conclusions

The study revealed an unexpected general trend observed in all the languages in our sample: **visual perception tends to be coded by verbs while auditory perception tends to be left uncoded.**

- This trend is highly significant but we do not quite know how to explain it.
- Are visual experiences more “tell-worthy” across cultures?

We need to extend our sample, considering cultural differences in the social role of auditory experience (Evans & Wilkins 2000).

***Thank you!***

***Ευχαριστώ!***

## References

- Aikhenvald, Alexandra Y. (2004), *Evidentiality*. Oxford: Oxford University Press.
- Bernárdez, Enrique (2017), Evidentiality – A Cultural Interpretation, in F. Sharifian (ed), *Advances in Cultural Linguistics*, Singapore: Springer, 433–461.
- Brykina, Maria, Valentin Gusev, Sándor Szeverényi & Beáta Wagner-Nagy (2018), *Nganasan Spoken Language Corpus (NSLC)*. Version 0.2. <http://hdl.handle.net/11022/0000-0007-C6F2-8>
- Brykina, Maria, Svetlana Orlova & Beáta Wagner-Nagy (2020), INEL Selkup Corpus, Version 1.0, in B. Wagner-Nagy, A. Arkhipov, A. Feger, D. Jettka, and T. Lehmberg (eds), *The INEL corpora of indigenous Northern Eurasian languages*. <http://hdl.handle.net/11022/0000-0007-E1D5-A>.
- Evans, Nicholas & David Wilkins (2000), In the mind's ear: The semantic extensions of perception verbs in Australian languages. *Language*, 546-592.
- Gusev, Valentin Ju. (2007), Èvidencial'nost' v nganasanskom jazyke [Evidentiality in Nganasan]. In: V. S. Xrakovskij (ed), *Èvidencial'nost' v jazykax Evropy i Azii. Sbornik statej pamjati N.A. Kozincevoj*, Saint-Petersburg: Nauka, 415 – 444
- Michael, Lev (2015), The cultural bases of linguistic form: The development of Nanti quotative evidentials, in R. De Busser, and R. J. LaPolla (eds), *Language Structure and Environment*, Amsterdam: John Benjamins, 99–133.
- Nikitina, Tatiana (2022), A narrative corpus of Chuvash. In Nikitina, Tatiana, Ekaterina Aplonova, Izabela Jordanoska, Ekaterina Biteeva, Abbie Hantgan-Sonko, Guillaume Guitang, Olga Kuznetsova, Elena Perekhval'skaya & Lacina Silué (eds.) *The SpeechReporting Corpus: Discourse Reporting in Storytelling*. CNRS-LLACAN & LACITO, <http://discoursereporting.huma-num.fr/index.html>
- Nikolaeva, Irina & Maria Tolskaya (2001), *A Grammar of Udihe*. Berlin: Mouton de Gruyter.



## References

- Perekhval'skaya, Elena (2021), A narrative corpus of Udihe. In Nikitina, Tatiana, Ekaterina Aplonova, Izabela Jordanoska, Ekaterina Biteeva, Abbie Hantgan-Sonko, Guillaume Guitang, Olga Kuznetsova, Elena Perekhval'skaya & Lacina Silué (eds.) *The SpeechReporting Corpus: Discourse Reporting in Storytelling*. CNRS-LLACAN & LACITO, <http://discoursereporting.huma-num.fr/index.html>
- Slobin, Dan I. (1987), Thinking for Speaking, *Annual Meeting of the Berkeley Linguistics Society* 13, 435–445.
- Urmančieva, Anna Ju. (2014), Èvidencial'nye pokazateli sel'kupskogo jazyka: sootnošenie semantiki i pragmatiki v opisanii glagol'nyx grammem [Evidential Markers of Selkup: Correlation between Semantics and Pragmatics in the Description of Verbal Grams], *Voprosy jazykoznanija* 4, 66–86.