

# Varieties of evidential shift

Natasha Korotkova  
n.korotkova@ucla.edu

University of California, Los Angeles

Sinn und Bedeutung 19 @ Universität Göttingen  
September 15, 2014

# Evidentiality

Marking types of acquaintance with situation denoted by the sentence;  
information source in terms of e.g. Aikhenvald (2004) and WALS

- (1) Cuzco Quechua evidential paradigm (Faller, 2002, 3, ex.2a)
- a. *Para-sha-n-mi.* [Direct]  
rain-PROG-3-**DIR**  
'It is raining, *I see.*'
  - b. *Para-sha-n-si.* [Hearsay]  
rain-PROG-3-**REP**  
'It is raining, *I hear.*'
  - c. *Para-sha-n-chá.* [Conjectural]  
rain-PROG-3-**CONJ**  
'It must be raining, *I gather.*'

## Perspective shift: evidentials

- Root declaratives: speaker
- Complements of attitude verbs: speaker → attitude subject

(2) St'át'incets (Matthewson et al., 2008, 45, ex.62b)

*tsut s-Lémya7 kw sqwemémn'ek ku7 s-Mary*  
 say NOM-L. DET pregnant REP NOM-M.

'Lémya7 said that [she was told that] Mary is pregnant'

- Matrix questions: speaker → addressee

(3) Cuzco Quechua (Faller, 2002, 230)

*Pi-ta-s Inés-qa watuku-sqa?*

who-ACC-REP Inés-TOP visit-PST2

'Who did Inés visit?'

Speaker expects addressee to base their answer on hearsay evidence

## Perspective shift: broader view

Configurational: something syntax & semantics need to handle

- Shifted indexicals: very restricted, only in some attitude reports (Schlenker, 1999, 2003; Anand and Nevins, 2004; Anand, 2006; Sudo, 2012; Shklovsky and Sudo, 2014, a.o)
- Logophors: no shift but also sensitivity to syntactically realized perspective (Charnavel, 2012; Pearson, 2013; Sundaresan, 2012)

Contextual: something we can leave to pragmatics

- Expressives, appositives: salient individual (Harris and Potts, 2009, 2011)
- Modals, predicates of taste (if anchored at all to an individual)

Today

Evidentials

# Roadmap

- 1 Introduction
- 2 Complements of attitude verbs
  - Perspective vs. scope
  - Typology
  - Conditions
  - Proposal
  - Further issues
- 3 Evidential shift in questions
  - Data
  - Previous accounts
  - Proposal
- 4 Conclusion

# Framing the discussion

- theories of evidentiality often reduce shifting to the relative scope of the evidential and attitude verb (Faller, 2002; Matthewson et al., 2008; Murray, 2010; Koev, 2011; Lee, 2013)
  - wide scope: non-shifted reading, speaker-oriented
  - narrow scope: shifted reading, attitude-subject-oriented
- we need to distinguish between the two notions at least on conceptual grounds (in addition to empirical considerations)

# Three types

- Languages with syntactically embeddable evidentials fall into three classes:
  - ① no evidential shift
  - ② optional evidential shift
  - ③ obligatory evidential shift
- Evidential shift cannot be contextual: the behavior is not uniform

NB: In some languages, e.g. Abkhaz and Cuzco Quechua, evidentials cannot be embedded under attitude verbs for syntactic reasons (Korotkova, 2013).

## Type I: no shift

Languages: Georgian, Bulgarian (dialect reported in Sauerland and Schenner 2007 and Koev 2011)

### (4) Georgian

*maria pikrobs rom mama mi-s c'odnia xuti ena*  
 M.NOM think.3SG.PRES that father her-DAT know.EV 5 language.NOM  
 'Maria thinks that her father knew five languages'.

(i), non-shifted: the speaker was told/infers it.

(ii), shifted: #Maria was told/infers it.

Continuation "But I know it's not true" is impossible.



## Type II: optional shift

Languages: German (Schenner, 2010), Turkish (at least dialect reported in Şener 2011), Bulgarian

(5) Bulgarian

*Marija kaza, che reka-ta e pridosh-l-a.*

maria said that river-DET be.3SG rise-**EV**-F  
 'Maria said that the river has risen'.

(i), non-shifted: the speaker was told/infers it.

(ii), shifted: Maria was told/infers it.

## Type III: obligatory shift

Languages: Japanese, Korean, Standard Tibetan (Garrett, 2001),  
St'át'imcets (Matthewson et al., 2008)

(6) Korean (Lee, 2013, 22, ex.27)

*Chelswu-nun pi-ka ecey o-∅-te-la-ko*

Chelswu-TOP rain-NOM yesterday fall-PRES-**DIR**-DECL-COMP

*malha-yess-e.*

say-PST-DECL

'Chelswu said that it was raining yesterday.'

(i), non-shifted: #the speaker has perceptual evidence.

(ii), shifted: Chelswu has perceptual evidence.

# Modals

- Frequent claim: evidentiality  $\subset$  epistemic modality (Palmer, 1986; Izvorski, 1997; Matthewson et al., 2008)
  - Objection: modals *shift* when embedded (Hacquard, 2006, 2010; Stephenson, 2005)
- (7) Ptolemy believes that Sun must be turning around Earth but in fact it's the opposite.

# Typology of indexicals

Three types of languages:

- ① No indexical shift: English, French, Russian ...
- ② Optional indexical shift: Amharic (Schlenker, 1999, 2003), Mishar Tatar (Podobryaev, 2014), Nez Perce (Deal, 2013), Turkish (Özyildiz, 2013)
- ③ Obligatory indexical shift: Matsigenka, Tamil (Sundaresan, 2012), Uyghur (Shklovsky and Sudo, 2014)

(8) Turkish (Özyildiz, 2013)

*Doktor [hasta-lan-di-m] de-di*

doctor sick-PASS-PST-1SG say-PST.3SG

(i), non-shifted: 'The doctor said that I got sick.'

(ii), shifted: 'The doctor said that the doctor got sick.'

# Distribution of embedded evidentials

	'say'	'think'	'know'
Bulgarian	✓	*	✓
Georgian	✓	✓	*
German	✓	*	✓
Japanese	✓	*	✓
Korean	✓	*	*
Mbyá	✓	*	*
Tibetan	✓	✓	*
Turkish	✓	✓	✓

Data sources: Bulgarian (Sauerland and Schenner, 2007), Georgian (Korotkova, 2012), Japanese (reportative *soo-da*, Sauerland and Schenner, 2007), German (*sollen*, Schenner, 2009), Mbyá (Thomas forth., Guillaume Thomas p.c.), Tibetan (Garrett, 2001) and Turkish (Şener, 2011) (cf. Sauerland and Schenner, 2007, 14, chart 42)

# Distribution of indexical shift

LANGUAGE	PREDICATE
Aghem	<i>say</i>
Amharic	<i>say</i>
Japanese	<i>say, think, consider</i> a.m.o.
Korean	person indexicals: <i>say</i> , adv. indexicals: <i>say, think</i>
Mishar Tatar	<i>say, think</i> a.m.o.
Navajo	<i>say</i>
Nez Perce	<i>say/tell, think</i>
Slave	<i>say, tell, want</i>
Tamil	<i>say</i>
Telugu	<i>say</i>
Turkish	<i>say, believe, want</i> , other speech-derived verbs
Uyghur	all attitude predicates
Zazaki	<i>say</i>

The chart adapted from Sundaresan (2012, 244) (adapted from Anand 2006), with addition of Japanese (Sudo, 2012), Korean (Park, 2014), Mishar Tatar (Podobryaev, 2014), Nez Perce (Deal, 2013), Turkish (Gültekin Şener and Şener, 2011; Özyildiz, 2013)

## Not just attitudes?

### (9) Turkish

*Arkadas-im-a* *gore*, *sinav-dan kal-mis-im* [Evidentials]

friend-1S.POSS-DAT according, exam-ABL stay-REP/PST-1S

'According to my friend, I failed the exam'

(i), non-shifted: I have reported evidence for that.'

\*(ii), shifted: My friend has reported evidence for that.

### (10) Japanese

*Mary-niyoruto*, *John-ga watashi-o suki*. [Indexicals]

Mary-according.to, John-NOM I-ACC like

(i), non-shifted: 'According to Mary, John likes me.'

(ii), shifted: \*'According to Mary, John likes Mary'.

- Potential exception: Bulgarian *spored* 'according to' can license evidential shift
- Potential solution: *spored* only refers to reports and can be an attitude construction in disguise

# Core idea

## Structural analogies between evidentials and indexicals

- Parallel #1: typology
- Parallel #2: distribution in embedded contexts
- Parallel #3: no shift without an attitude operator



The two should be analyzed along similar lines

A similar idea was first formulated by Sauerland and Schenner (2007)



# How to shift indexicals I

Standard Kaplanian semantics: indexicals are special elements sensitive to context, and there is only one matrix context

## Main ingredients

- ① Attitude verbs introduce a new context: a formal object different than sets of propositions
  - ② Shiftable indexicals are able to pick it up
- Schlenker (1999, 2003):
    - semantics of indexicals is not uniform across languages
    - cross-linguistic variation is in the pronouns: some are rigid and refer to matrix context only (English), some are more flexible and can refer to other contexts (similar treatment in von Stechow 2002)

## How to shift indexicals II

- Anand (2006); Anand and Nevins (2004) (refined by Sudo (2012); Shklovsky and Sudo (2014)):
  - semantics of indexicals is uniform across languages
  - some languages have context-overwriting operators, aka **monsters** in their lexicon that shift everything context-sensitive in their scope
  - cross-linguistic variation stems from whether or not monsters are present in the lexicon

### Why monsters

- in Zazaki (Anand, 2006; Anand and Nevins, 2004), Japanese (Sudo, 2012), Korean (Park, 2014) and Nez Perce (Deal, 2013) indexicals within some domain shift together or do not shift at all
- cannot be captured if they all shift independently

# How to shift evidentials

- Sauerland and Schenner (2007): a Schlenkerian approach to evidential shift
- Criticism:
  - overgeneration: unable to capture conditioned evidential shift in German: (semi)-factives favour the shifted reading, predicates of doubt and denial favour the non-shifted reading
  - not all constructions and attitude predicates license evidentials
  - no actual parallels in the distribution of indexicals and evidentials
- New proposal: as with indexicals, evidential shift is also done by monsters

# Speech verbs

Speech verbs are special in other respects:

- Embedded imperatives (Kaufmann 2014): under *say* in English, under 'say' and 'propose' in colloquial German, under predicates describing directive speech acts in Korean, Japanese, Slovenian
- Root clause phenomena (Hooper and Thompson, 1973; Heycock, 2005): more likely to be licensed under speech verbs, e.g. distribution of V2 in German
- Discourse adverbials: more likely to appear under speech verbs

# Bottom line

- many constructions are able to refer to non-matrix contexts
- they are licensed in similar environments but not any attitude predicate
- our theory needs to account for that in a coherent way, e.g. embedded speech acts (Sundaresan 2012, Krifka forth.)

# Roadmap

- 1 Introduction
- 2 Complements of attitude verbs
  - Perspective vs. scope
  - Typology
  - Conditions
  - Proposal
  - Further issues
- 3 Evidential shift in questions
  - Data
  - Previous accounts
  - Proposal
- 4 Conclusion

# Evidentials in questions I

- Evidentials vary a great deal within and across languages, hence different analyzes
- One instance of variation: evidential shift in declaratives
- Interpretations in questions almost do not vary: striking in view of the above observations
- Similarities between evidentials with otherwise not always uniform properties: Cheyenne (Murray, 2010), Cuzco Quechua (Faller, 2002), German (Faller, 2004), Korean (Lim, 2010), St'át'imcets (Matthewson et al., 2008), Tibetan (Garrett, 2001)

# Evidentials in questions II

## Observation

Evidentials shift in matrix questions: speaker → addressee

(11) Korean (Lim, 2010, 35-36, ex.44)

a. *John-i na-lul po-te-la* [Declarative]

John-NOM I-ACC see-DIR-DECL

'Given my perceptual evidence, John saw me.'

b. *John-i na-lul po-te-nya?* [Question]

John-NOM I-ACC see-DIR-Q

'Given your perceptual evidence, did John see me?'

## Desideratum for a theory

Differentiate indexicals and evidentials despite their commonalities in declaratives



# Murray (2010, 2012), based on Cheyenne

## The upshot

- 1 Questions introduce a new context
  - 2 Evidentials unlike pure indexicals can pick it up
- Prediction: indexicals in **indexical-shifting languages** should be able to shift in questions.
  - **Prediction not borne out:**

## Cross-linguistic generalization

Shifty indexicals don't shift in questions, matrix or embedded: Japanese (Sudo, 2012), Korean, Turkish

## Shifty indexicals in questions

Turkish personal and adverbial indexicals shift in attitude reports (Özyildiz, 2013) but not in questions

- (12) Context: A friend is talking about turnips, I ask:

*sev-er mi-yim?*

like-AOR POL.Q-COP.1SG

[Personal]

(i), non-shifted: 'Do I like them?'

(ii), shifted: \*'Do you like them?'

- (13) Context: Natasha is in Paris, Meaghan is Los Angeles. Natasha is talking about Jun but Meaghan does not know him and asks: 'Does he study here?'

*Jun bura-da mi oku-yor?*

Jun here-LOC POL.Q read-PRES.PROG

[Adverbial]

(i), non-shifted, speaker's 'here': 'Jun studies in LA.'

(ii), shifted, Natasha's 'here': #'Jun studies in Paris'.

Lim (2010, 2011); Lim and Lee (2012), based on Korean

The upshot: evidentials are monsters

Evidentials manipulate contexts: the author parameter shifts to addressee

- 1 Prediction # 1: If evidentials are monsters, monsters are licensed in questions. Then indexicals in **indexical-shifting languages** should be able to shift in questions.  
**Prediction not borne out.**
- 2 Prediction # 2: If evidentials are monsters, indexicals in **indexical-shifting languages** should be able to shift in their scope.  
**Prediction not borne out.**

# Shifty indexicals under evidentials

## Cross-linguistic generalization

Evidentials do not license indexical shift: Japanese, Korean, Turkish

(14) Turkish

Context: I spoke to my father ...

(ben) hastalan-*mis-im*

I get.sick-EVID-1SG

(i), non-shifted: 'I got sick, *I hear*'.

(ii), shifted: #'My father got sick, *I hear*'.

# Semantics?

## Observation

Evidential shift in questions is obligatory: speaker-anchored readings not available

- Current proposals: evidential shift is configurational, governed by semantics
  - Contrast: optional shift of expressive content, governed by pragmatics
  - But: what would it mean for an evidential to not shift in questions?
    - Rough paraphrase: *Given the specific type of evidence I, the speaker, have, tell me whether or not P.*
    - Standard pragmatics of questions: sincere inquiries for new information
- Speaker, if sincere, is not aware of evidence they have

## Interlude: evidentials are ‘de se’

### ‘de se’ constraint

Evidentials are obligatorily ‘de se’: having some type of evidence is a self-ascription; independently noticed by McCready (2011)

- evidentials are licensed in Gettier scenarios where agents are mistaken about their perception
- having evidence is always up to an individual: it cannot be challenged or denied

### (15) Georgian

- a. *los-anzeles-ji metro-s axal-i haz-i gauxavniat*  
 LA-in metro-GEN new-NOM line-NOM construct.3PL.S.EV  
 ‘They constructed a new metro line in Los Angeles, *I was told*’.
- b. #. That’s not true, you didn’t hear it.

# Pragmatics!

- 'de se' constraint: ban on speaker-anchored readings in questions
- no need to *additionally* restrain semantics
- evidential shift: garden variety of pragmatic shift in questions

(16) Other things that can be used this way

a. Expressives:

Did you get the **damn** job?

b. Discourse adverbials:

**Frankly**, when will you finish the paper?

c. Certain logophors

d. ...and counting.

- much in line with syntacticized pragmatic account of Speas and Tenny (2003)
- contra operator-based account of McCready (2007)

# Big picture

## Interrogative flip

Epiphenomenal and is due to pragmatics

Expected	availability and pervasiveness of evidential shift in questions
Unexpected but explained	obligatory evidential shift in questions
	<ul style="list-style-type: none"> <li>• With many other things, interrogative flip is optional</li> <li>• With evidentials, mandatory due to the independent 'de se' constraint</li> </ul>
Unexpected	lack of indexical shift in questions
Restating the problem	why monsters are not licensed in questions and under 'ask'?



# Roadmap

- 1 Introduction
- 2 Complements of attitude verbs
  - Perspective vs. scope
  - Typology
  - Conditions
  - Proposal
  - Further issues
- 3 Evidential shift in questions
  - Data
  - Previous accounts
  - Proposal
- 4 Conclusion

## Configurational

- Shifted indexicals
- Logophors

## Contextual

- Expressives, appositives
- Possibly: modals, PPT

## Third type

## Evidentials

- configurational in attitude reports
- contextual in questions

# Thank you!

This work has greatly benefited from comments and discussion with Yael Sharvit and Dominique Sportiche, Maria Aloni, Pranav Anand, Lisa Bylinina, Jesse Harris, Vincent Homer, Roumyana Pancheva, Hazel Pearson, Johan Rooryck, Philippe Schlenker, Benjamin Spector, Ed Stabler, Igor Yanovich, and audience at Institut Jean Nicod. I thank my language consultants, and especially Nana Dekanosidze for help with Georgian, Deniz Özyildiz for help with Turkish, Roumyana Pancheva and Vesela Simeonova with Bulgarian, Yasutada Sudo with Japanese, and Yun Kim and Suyeon Yun with Korean. All errors are mine.

# References I

- Aikhenvald, A. (2004). Evidentiality. Oxford: OUP.
- Anand, P. (2006). De de se. Ph. D. thesis, Massachusetts Institute of Technology.
- Anand, P. and A. Nevins (2004). Shifty operators in changing contexts. In R. B. Young (Ed.), Proceedings of SALT 14, pp. 20–37.
- Charnavel, I. (2012). *Son propre*, exemption and logophoricity. Ms, UCLA.
- Şener, N. (2011). Semantics and Pragmatics of Evidentials in Turkish. Ph. D. thesis, University of Connecticut, Storrs.
- Deal, A. R. (2013). Nez Perce embedded indexicals. In H. Greene (Ed.), Proceedings of SULA 7, Amherst. GLSA. To appear.
- Faller, M. (2002). Semantics and pragmatics of evidentials in Cuzco Quechua. Ph. D. thesis, Stanford.
- Faller, M. (2004). The deictic core of ‘non-experienced past’ in Cuzco Quechua. Journal of Semantics 21(1), 45–85.
- Garrett, E. J. (2001). Evidentiality and Assertion in Tibetan. Ph. D. thesis, UCLA.

## References II

- Gültekin Şener, N. and S. Şener (2011). Null subjects and indexicality in Turkish and Uyghur. In Proceedings of WAFL 7.
- Hacquard, V. (2006). Aspects of modality. Ph. D. thesis, MIT.
- Hacquard, V. (2010). On the event relativity of modal auxiliaries. Natural Language Semantics 18(1), 79–114.
- Harris, J. A. and C. Potts (2009). Perspective-shifting with appositives and expressives. Linguistics and Philosophy 32(6), 523–552.
- Harris, J. A. and C. Potts (2011). Predicting perspectival orientation for appositives. In Proceedings of CLS 45.
- Heycock, C. (2005). Embedded root phenomena. In M. Everaert and H. van Riemsdijk (Eds.), The Blackwell Companion to Syntax. Oxford: Blackwell.
- Hooper, J. and S. Thompson (1973). On the applicability of root transformations. Linguistic Inquiry 4(4), 465–497.
- Izvorski, R. (1997). The present perfect as an epistemic modal. In Proceedings of SALT XII, pp. 222–239.

## References III

- Kaufmann, M. (2014). Embedded imperatives across languages: too rare to expect, too frequent to ban. Handout for presentation at Colloquium Stony Brook, April 4, 2014.
- Koev, T. (2011). Evidentiality and temporal distance learning. In Proceedings of SALT XXI, pp. 115–134.
- Korotkova, N. (2012). Evidentiality in the Georgian tense and aspect system. Unpublished manuscript, UCLA.
- Korotkova, N. (2013). Embedding across evidentials across languages. A talk given at DIP Colloquium, ILLC, University of Amsterdam.
- Krifka, M. (Forthcoming). Embedding speech acts. In T. Roeper and M. Spears (Eds.), Recursion in language and cognition. [http://amor.cms.hu-berlin.de/~h2816i3x/Publications/Krifka\\_EmbeddingSpeechActs.pdf](http://amor.cms.hu-berlin.de/~h2816i3x/Publications/Krifka_EmbeddingSpeechActs.pdf).
- Lee, J. (2013). Temporal constraints on the meaning of evidentiality. Natural Language Semantics 21, 1–41.
- Lim, D. (2011). Evidentials in interrogatives: A case study of Korean. In I. e. a. Reich (Ed.), Proceedings of Sinn und Bedeutung 15, pp. 419–433.

## References IV

- Lim, D. and C. Lee (2012). Perspective shifts of Korean evidentials and the effect of contexts. In Proceedings of SALT 22, pp. 26–42.
- Lim, D. S. (2010). Evidentials as interrogatives: a case study from Korean. Ph. D. thesis, USC.
- Matthewson, L., H. Davis, and H. Rullman (2008). Evidentials as epistemic modals: Evidence from St'át'imcets. In J. van Craenenbroeck (Ed.), Linguistic Variation Yearbook, Volume 7. John Benjamins.
- McCready, E. (2007). Context shifting in questions and elsewhere. In E. Puig-Waldmuller (Ed.), Proceedings of Sinn und Bedeutung 11, pp. 433–447.
- McCready, E. (2011). What is evidence in natural language. <http://semanticsarchive.net/Archive/TAYYTI1N/evidMcc.pdf>.
- Murray, S. (2010). Evidentiality and the Structure of Speech Acts. Ph. D. thesis, Rutgers.
- Murray, S. (2012). The indexical component of evidentiality. At a workshop “Meaning as Use: Indexality and Expressives” during NASSLLI 2012 in Austin, <http://conf.ling.cornell.edu/sem/NASSLLI.pdf>.

## References V

- Özyildiz, D. (2013). When I is not me: A preliminary case study of shifted indexicals in Turkish. Unpublished manuscript, École Normale Supérieure.
- Palmer, F. (1986). Mood and modality. CUP.
- Park, Y. (2014). Indexicals and the long-distance reflexive *caki* in Korean. In Proceedings of SALT 24. Forthcoming.
- Pearson, H. (2013). The sense of self: topics in the semantics of textitde se expressions. Ph. D. thesis, Harvard.
- Podobryaev, A. (2014). Persons, Imposters, and Monsters. Ph. D. thesis, MIT.
- Sauerland, U. and M. Schenner (2007). Embedded evidentials in Bulgarian. In E. Puig-Waldmuller (Ed.), Proceedings of Sinn und Bedeutung 11, pp. 495–509.
- Schenner, M. (2009). Semantics of evidentials: German reportative modals. In C. C. Sylvia Blaho and B. L. Bruyn (Eds.), Proceedings of ConSOLE XVI, Leiden: Universiteit Leiden, pp. 179–198.
- Schenner, M. (2010). Evidentials in complex sentences: Foundational issues and data from German and Turkish. In T. Peterson and U. Sauerland (Eds.), Evidence from evidentials, pp. 183–220. Vancouver: University of British Columbia.



## References VI

- Schlenker, P. (1999). Propositional attitudes and indexicality : a cross-categorical approach. Ph. D. thesis, Massachusetts Institute of Technology.
- Schlenker, P. (2003). A plea for monsters. Linguistics and Philosophy 26(1), 29–120.
- Shklovsky, K. and Y. Sudo (2014). The syntax of monsters. Linguistic Inquiry 45(3), 381–402.
- Speas, M. and C. Tenny (2003). Configurational properties of point of view roles. In A. M. DiSciullo (Ed.), Asymmetry in Grammar, pp. 315–343. John Benjamins.
- Stephenson, T. (2005). Assessor sensitivity: Epistemic modals and predicates of personal taste. New Work on Modality, MITWPL 51.
- Sudo, Y. (2012). On the semantics of *phi*-features on pronouns. Ph. D. thesis, Massachusetts Institute of Technology.
- Sundaresan, S. (2012). Context and (Co)reference in the syntax and its interfaces. Ph. D. thesis, University of Stuttgart and University of Tromsø.

## References VII

- Thomas, G. (To appear). Embedded imperatives in Mbyá. In Proceedings of NELS 43. <http://web.mit.edu/gthomas/www/Embedded%20Imperatives%20in%20Mbya.pdf>.
- von Stechow, A. (2002). Feature deletion under semantic binding: tense, person, and mood under verbal quantifiers. In Proceedings of NELS 33.