# Speech reports: Day 5 Hearsay evidentials & Class summary

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Hearsay evidentiality and (non-)commitment

# Overarching issues

- Speech reports
- Division of labor between semantics and pragmatics
- Cross-linguistic variation and semantic variation

Evidentiality (Chafe and Nichols 1986; Aikhenvald 2004) Linguistic category that signals the source of the semantically determined information for an utterance

## Empirical landscape

**English**: lexical means, e.g. seem, must or adverbials

(1) Threatened by climate change, Florida **reportedly** bans term 'climate change'. Washington Post

Many other languages: dedicated grammatical means to talk about information source (verbal morphology, clitics ...):

Direct	Indirect			
	INFERENCE	HEARSAY		
• visual	<ul> <li>reasoning</li> </ul>	<ul> <li>secondhand</li> </ul>		
<ul> <li>auditory</li> </ul>	• observable results	<ul> <li>thirdhand</li> </ul>		
other sensory		<ul><li>folklore</li></ul>		

(Willett (1988) based on a 32-language sample)

## Empirical landscape, cont'd

- (2) Cuzco Quechua (Quechuan; Peru)
  - a. para-sha-n=mi [Firsthand]
    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 [CONJECTURE] rain-PROG-3=CONJ 'It must be raining, *I gather*.'

(adapted from Faller 2002: 3)

# Empirical landscape cont'd

### Evidential perfects (term due to Izvorski 1997)

- (Present) perfect morphology: hearsay and inference
- Especially common in the Anatolia-Balkans-Caucasus region
- (3) Georgian (South Caucasian; Georgia, Azerbaijan)
  C1: My brother tells me that the dragon hid the treasure[Hearsay]
  C2:The dragon's cave is empty. [Inference]

```
urtfxul-s gand-i daumalia
dragon-DAT treasure-NOM hide.3SG.S.3SG.O.IND.PST
'The dragon hid the treasure, I hear/infer.'
```

## Empirical landscape cont'd

237 out of 414 languages in (de Haan 2013b,a): dedicated grammatical means to talk about information source



World Atlas of Language Structures (WALS) Online (https://wals.info/)

# Uniformity and heterogeneity

- Evidentials exhibit semantic uniformity across a range of environments and can be analyzed as self-ascriptions of a mental state (Korotkova 2016a,b, 2019b)
  - speaker-oriented in root declaratives
  - resist denials in dialogues
  - de se in attitudes
  - addressee-oriented readings in canonical questions
- Some existing variation is syntactic (Korotkova forth.)
- Today: a case of non-syntactic variation
  - ► A systematic difference in the speaker's commitment to *p*
  - Commitment is used in a theory-neutral way

#### Non-commitment I

- Evidentials differ in commitment to p
  - Non-hearsay (direct, inference): commitment to at least  $\Diamond p$  (see (Degen et al. 2019) on degrees of confidence)
  - Hearsay: often allow non-commitment
- Presence or absence of commitment is diagnosed by the possibility of explicit contradictions

#### Non-commitment II

### Non-hearsay evidentials

Obligatory commitment at least  $\Diamond p$ : Bulgarian, Cheyenne, Georgian, Korean, St'át'imcets, Quechua, Turkish ...

#### (4) Cuzco Quechua

a. FIRSTHAND

```
#Para-sha-n-mi, ichaqa mana crei-ni-chu.
rain-PROG-3-DIR but not believe-1-NEG
Intended: 'It is raining, I see, but I don't believe it.'
```

b. **CONJECTURE** 

```
#Llave-qa muchila-y-pi-chá ka-sha-n, ichaqa mana-n key-top backpack-1-Loc-conj be-prog-3 but not-dir aqhay-pi-chu. there-Loc-NEG Intended: 'The keys may be in my backpack, but they are not there.'
```

(adapted from Faller 2002: 163, ex. 126 and 178, ex. 138)

#### Non-commitment III

(5) Georgian
Inference: You misattributed Maria's allergic red eyes to crying.
#maria-s utiria magram asi ar aris
Maria-DAT cry.3SG.S.IND.PST but this NEG be.3SG.S.PRES
Intended: 'Maria was crying, I infer, but that is not so.'

#### Non-commitment IV

#### Hearsay evidentials

Commitment often optional: first noticed for Cuzco Quechua, later observed in e.g. Bulgarian, Cheyenne, Georgian, Dutch, Tagalog (see (AnderBois 2014) for an extensive overview)

#### (6) Cuzco Quechua

```
Pay-kuna=s ñoqa-man-qa qulqi-ta muntu-ntin-pi (s)he-PL=REP l-ILLA-TOP money-ACC lot-INCL-LOC saqiy-wa-n, mana-má riki riku-sqa-yki ni un sol-ta leave-10-3 not-SURP right see-PP-2 not one sol-ACC centavo-ta-pis saqi-sha-wa-n-chu cent-ACC-ADD leave-PROG-10-3-NEG 'They left me a lot of money, as it is said, but, as you have seen, they didn't leave me one sol, not one cent.'
```

(Faller 2002: 191, ex.152)

#### Non-commitment V

(7) Georgian

Hearsay: There is a report that California legalized marijuana.

kalifornia-s k'anonier-i gauxdia marihuan-is
California-DAT legal-NOM make.IND.PST marijuana-GEN
gamoq'eneba magram asi ar aris
usage.NOM but this NEG be.3SG.S.PRES
'California legalized marijuana, I hear, but that's not true.'

#### Non-commitment VI

### Hearsay evidentials

Commitment can be obligatory: Finnish (pace AnderBois 2014), Gitksan, Lillooet Salish, Turkish (pace Şener 2011)

(8) Turkish (Turkic; Turkey): hearsay/inference miş

Context: You hear from a friend that in snowed in LA, but you have reasons to be skeptical.

#LA'ye kar yağ-mış ama kar yağ-dıg-ın-a LA.DAT snow rain-IND but snow rain-NMLZ-3SG.POSS-DAT inan-mı-yor-um.

believe-NEG-PROG-1SG

Intended: 'It snowed in LA, I hear, but I don't believe that it snowed.'

**Comment:** to avoid being contradictory, use *guya* 'allegedly'.

#### Non-commitment VII

#### Emerging typology

	HEARSAY	NON-HEARSAY
OPTIONAL COMMITMENT	✓	(2)
OBLIGATORY COMMITMENT	✓	✓

#### Desiderata for a theory

- account for optional commitment with hearsay (Bulgarian, Cheyenne, Dutch, Quechua, Tagalog ...)
- allow obligatory commitment with hearsay (Finnish, Gitksan, Lillooet Salish, Turkish)
- explain the systematic gap: only obligatory commitment with non-hearsay

## Hearsay as a speech report

Opacity

(9) German

Hans: The dean is on vacation.

Regine soll im Urlaub sein. Regine REP.3SG in vacation be.INF 'Regine is said to be on vacation.'

- The source of report with hearsay evidentials needn't be sentient but requires linguistic communication:
- (10) Context: You read an encyclopedia.

Kaliforniya'da balina var-mış California.Loc whale cop-IND 'There are whales in California, I hear.' Turkish

#### Accounts

- Special speech act
- Pragmatic shift
- Relevance implicature

## Special speech acts I

- Speech acts with hearsay evidentials are special (Faller 2002; Portner 2006; Murray 2010, 2014, 2017)
- (Non-)commitment is an arbitrary fact of grammar

# Special speech acts II

- Murray's system (Murray 2010, 2014, 2017)
- Some evidentials assert p
  - ▶ introduction of a discourse referent for p
  - $\triangleright$  proposal to add p to the common ground
  - reduction of the common ground to p-worlds
- Some evidentials present p
  - introduction of a discourse referent for p
  - common ground not reduced to p-worlds, contradictions possible
- A straightforward account of other phenomena under the "hegde" umbrella (cf. Simons 2007, Benton and von Elswyk forth)
- (11) My wife won't let me race real cars so I come here. It's an addiction I suppose.

(Corpus of Contemporary American English)

## Special speech acts III

- account for optional commitment with hearsay
- allow obligatory commitment with hearsay
- 3 explain the systematic gap ©
- ightarrow nothing excludes a non-committal inference/direct evidential (cf. criticism in (AnderBois 2014))

# Special speech acts IV

- Additional problems: embedded clauses
- Speech act accounts predict that the pattern evaporates (like norms of assertion; Yalcin cf. 2007 on epistemics)

#### (12) Dutch

```
Lisa zegt [ dat John de wijn shjint te hebben Lisa say.3SG [ COMP John DEF wine seem.3SG INF AUX opgedronken, ] maar ze gelooft het niet. drink.PART ] but she believe.3SG that NEG 'Lisa said that John is said to have drunk all the wine, but she does not believe it.'
```

# Special speech acts V

(13) Turkish

Context: your friend Lisa woke up to white stuff on the ground and tells you about it.

```
#Lisa [ LA'ye kar yağ-mış ] de-di ama kar
Lisa [ LA.DAT snow rain-IND ] say-PST but snow
yağ-dıg-ın-a inan-mı-yor.
rain-NMLZ-3SG.POSS-DAT believe-NEG-PROG
Intended: 'Lisa says that it snowed in LA, given what she inferred,
but she doesn't believe that it snowed.'
```

## Pragmatic shift I

- Non-commitment: result of a pragmatic shift (AnderBois 2014)
- Cf. a pragmatic account of perspective in (Harris and Potts 2009)
  - speaker-oriented by default (Potts 2007)
  - can shift to a salient perspective (Harris and Potts 2009)
- Only hearsay evidentials introduce another perspective
  - Commitment shifts to that of the reporter (cf. Smirnova 2012)
  - No such thing with non-hearsay

# Pragmatic shift II

- Problem #1
  - ► Perspective requires sentience (Sundaresan and Pearson 2014; Kaiser 2017; Sundaresan 2018)
  - ► Hearsay does not

## Pragmatic shift III

- Problem #2: cross-linguistic variation
- Pragmatic shift should be universal
- AnderBois (2014)
  - Only languages of the Pacific Northwest have committal hearsay
  - Such languages lack pragmatic shift altogether
- Explanation doesn't work
  - Gitksan has non-literal language (Peterson 2010)
  - Obligatory commitment with hearsay is more widespread (Finnish, Turkish)

## Pragmatic shift IV

- account for optional commitment with hearsay
- •
- allow obligatory commitment with hearsay

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- ightarrow failure to predict the variation
- explain the systematic gap

/

## Proposal: the upshot

- Optionality of commitment in the evidential domain reflects a more general distinction that cross-cuts the grammar:
  - ► The divide between mental attitudes and speech reports

## Proposal about commitment I

#### Status of commitment to p

#### The communicative vs. doxastic divide

- Private mental states about p require commitment to  $p/\Box p/\Diamond p$  on part of the attitude holder
- (14) # I infer / think / conclude that it was raining, but I don't believe it was raining.
  - Reporting a previous discourse move does not (but may) require such commitment:
- (15) 

  ✓ I was told / I read / Jane says that it was raining but I don't helieve it.

## Proposal about commitment II

#### The pattern in the evidential domain is of the same nature

- Non-hearsay evidentials denote private mental states (perception, reasoning, inference) and thus require commitment to p
- Hearsay evidentials additionally make reference to discourse moves (they also have a mental state component; Korotkova 2016a,b, 2019b)
- NB this is not to say that speech reports with evidentials and with communicative predicates always behave the same (cf. Bary and Maier 2018)

#### Status of the commitment inference I

- Optional commitment with hearsay is a relevance implicature
- Obligatory commitment with non-hearsay is an entailment

#### Status of the commitment inference II

- Optional commitment with hearsay: a relevance implicature
- Evidentials
  - common analysis as lexical triggers of not-at-issue meaning (Murray 2017)
  - Instead: evidence is typically backgrounded for pragmatic reasons, but can become foregrounded (Korotkova 2019a)
- Non-commitment is when evidence may become relevant
- Epistemic commitments are known to be expressed via implicatures; cf. ignorance effects with modal indefinites (Kratzer and Shimoyama 2002; Alonso-Ovalle and Menéndez-Benito 2010)

# Obligatory commitment with non-hearsay

- Crucial property
  - commitment is not cancellable in root and attitude environments alike
- Proposal
  - expressions dealing with private mental states entail commitment
- Sanity check with English attitude verbs:
- (16) a. Jane concluded that Los Angeles is the capital of California. 

  → Jane believes that LA is the capital.
  - Jane did not conclude that Los Angeles is the capital of California.

# Obligatory commitment with hearsay

- Several languages require commitment with hearsay evidentials: Finnish, Gitksan, Lilloet Salish, Turkish
- Commitment required in root and attitude clauses
- Obligatory commitment is an entailment
- Source of variation between different hearsay evidentials: the lexicon
- Parallel: entailment about the truth of the complement can be present with speech predicates, albeit rare (English be right)
- Be right: entailment about the truth of the predicate is foregrounded and such predicates are veridical
- (17) a. Mary is right that Riga is in Latvia.
  - $\rightarrow$  Riga is in Latvia.
  - b. It is not the case that Mary is right that Riga is in Latvia.
     → Riga is in Latvia.

## Overall proposal

- The language describing discourse moves differs from the language describing mental attitudes
- Mental attitudes always require commitment
- Discourse moves may imply commitment
- Language- and construction-specific constraints may override the defaults

#### Bottom line

- account for optional commitment with hearsay
- allow obligatory commitment with hearsay
- explain the systematic gap

Wrap-up

# A recap I

PHENOMENON	TOOL
referential opacity and transparency	quantificational ambiguity (Russell 1905, Quine 1956)
obligatory <i>de se</i>	centered worlds (Lewis 1979, Chierchia 1989)
pure quotation	proper name (Quine 1940) description (Geach 1957)
direct discourse	disquotation (Pagin and Westerstahl 2010) multidimensional composition of quote (Potts 2007)

# A recap II

PHENOMENON	TOOL
mixed quotation	deferential reference (Recanati 2001)
4	unquotation (Maier 2014)
FID	bicontextualism (Banfield 1982, Doron 1991)
	generalized SOT (Sharvit 2008)
indexical shift	monstrous context shift (Schlenker 2003, Anand and Nevins 2004)
speech acts	public commitment (Condoravdi and Lauer 2017)
	conversational scoreboards (Farkas and Bruce 2010)

Thank you!

## References I

- Aikhenvald, A. Y. (2004). Evidentiality. Oxford: Oxford University Press.
- Alonso-Ovalle, L. and P. Menéndez-Benito (2010). Modal indefinites. *Natural language semantics* 18, 1–31.
- AnderBois, S. (2014). On the exceptional status of reportative evidentials. In T. Snider, S. D'Antonio, and M. Weigand (Eds.), Semantics and Linguistic Theory (SALT) 24, pp. 234–254. LSA and CLC Publications.
- Bary, C. and E. Maier (2018). The landscape of speech reporting. Ms.
- Benton, M. and P. von Elswyk (Forth.). Hedged assertion. In S. Goldberg (Ed.), The Oxford Handbook of Assertion. Oxford University Press.
- Chafe, W. and J. Nichols (Eds.) (1986). *Evidentiality: the linguistic coding of epistemology*. Norwood: Ablex Publishing Corporation.
- Degen, J., A. Trotzke, G. Scontras, E. Wittenberg, and N. D. Goodman (2019).
  Definitely, maybe: A new experimental paradigm for investigating the pragmatics of evidential devices across languages. *Journal of Pragmatics* 140, 33–48.

#### References II

- Enrich, V. (2001). Was nicht müssen und nicht können (nicht) bedeuten können: Zum Skopus der Negation bei den Modalverben des Deutschen. In R. Müller and M. Reis (Eds.), Modalität und Modalverben im Deutschen, pp. 149–176. Hamburg: Buske.
- Faller, M. (2002). Semantics and Pragmatics of Evidentials in Cuzco Quechua. PhD dissertation, Stanford.
- Faller, M. (2004). The deictic core of 'non-experienced past' in Cuzco Quechua. *Journal of Semantics* 21(1), 45–85.
- Faller, M. (2007). Evidentiality above and below speech acts. Ms., University of Manchester.
- Faller, M. (2011). A possible worlds semantics for Cuzco Quechua evidentials. In N. Li and D. Lutz (Eds.), Semantics and Linguistic Theory (SALT) 20, pp. 660–683. CLC Publications.
- Faller, M. (2012). Evidential scalar implicatures. *Linguistics and Philosophy 35*, 285–312.
- Garrett, E. J. (2001). *Evidentiality and Assertion in Tibetan*. PhD dissertation, University of California, Los Angeles.

### References III

- de Haan, F. (2013a). Coding of evidentiality. In M. S. Dryer and M. Haspelmath (Eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- de Haan, F. (2013b). Semantic distinctions of evidentiality. In M. S. Dryer and M. Haspelmath (Eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Harris, J. A. and C. Potts (2009). Perspective-shifting with appositives and expressives. *Linguistics and Philosophy 32*(6), 523–552.
- Izvorski, R. (1997). The present perfect as an epistemic modal. In A. Lawson (Ed.), Semantics and Linguistic Theory (SALT) 7, pp. 222–239. CLC Publications.
- Kaiser, E. (2017). Pronoun use in Finnish reported speech and free indirect discourse: Effects of logophoricity. In P. Patel-Grosz, P. G. Grosz, and S. Zobel (Eds.), Pronouns in Embedded Contexts at the Syntax-Semantics Interface, pp. 75–104. Springer.
- Kalsang, J. Garfield, M. Speas, and J. de Villiers (2013). Direct evidentials, case, tense and aspect in Tibetan: evidence for a general theory of the semantics of evidential. Natural Language and Linguistic Theory 31(2), 517–561.

### References IV

- Kierstead, G. (2015). Projectivity and the Tagalog Reportative Evidential. Master's thesis, Ohio State University.
- Korotkova, N. (2012). Evidentiality in the Georgian tense and aspect system. Ms., UCLA.
- Korotkova, N. (2016a). Disagreement with evidentials: A call for subjectivity. In J. Hunter, M. Simons, and M. Stone (Eds.), JerSem: The 20th Workshop on the Semantics and Pragmatics of Dialogue, pp. 65–75.
- Korotkova, N. (2016b). *Heterogeneity and Universality in the Evidential Domain*. PhD dissertation, University of California, Los Angeles.
- Korotkova, N. (2019a). Status of the evidential requirement. Ms., University of Konstanz.
- Korotkova, N. (2019b). The subjective heart of evidentiality. Ms., University of Konstanz.
- Korotkova, N. (Forth). The embedding puzzle: Constraints on evidentials in complement clauses. *Linguistic Inquiry*.
- Kratzer, A. and J. Shimoyama (2002). Indeterminate pronouns: The view from Japanese. In Y. Otsu (Ed.), *The Proceedings of the Third Tokyo Conference on Psycholinguistics*, Tokyo, pp. 1–25. Hituzi Syobo.

## References V

- Lim, D. (2010). Evidentials as interrogatives: A case study from Korean. PhD dissertation, USC.
- Lim, D. and C. Lee (2012). Perspective shift of Korean evidentials and the effect of contexts. In *Proceedings of SALT 22*, pp. 26–42.
- Littell, P., L. Matthewson, and T. Peterson (2010). On the semantics of conjectural questions. In T. Peterson and U. Sauerland (Eds.), *Evidence from evidentials*, Volume 28 of *University of British Columbia Working papers in Linguistics*, pp. 89–104.
- Matthewson, L., H. Davis, and H. Rullman (2007). Evidentials as epistemic modals: Evidence from St'át'imcets. In J. van Craenenbroeck (Ed.), *Linguistic Variation Yearbook*, Volume 7, pp. 201–254. Amsterdam: John Benjamins.
- Meriçli, B. (2015). Anchors away: Toward a semantics of evidentiality in Turkish interrogatives. Unpublished manuscript, UCSC.
- Murray, S. (2010). Evidentiality and the Structure of Speech Acts. PhD dissertation, Rutgers.
- Murray, S. (2014). Varieties of update. Semantics and Pragmatics 7(2), 1-53.
- Murray, S. (2016). Evidentiality and illocutionary mood in Cheyenne. *International Journal of American Linguistics* 82(4), 487–517.

### References VI

- Murray, S. E. (2017). *The Semantics of Evidentials*. Oxford: Oxford University Press.
- Peterson, T. (2010). *Epistemic Modality and Evidentiality in Gitksan at the Semantics-Pragmatics Interface*. Ph. D. thesis, University of British Columbia.
- Portner, P. (2006). Comment on Faller's paper. Handout of the commentary at the *Workshop on Philosophy and Linguistics*, University of Michigan.
- Potts, C. (2007). Conventional implicatures, a distinguished classs of meanings. In G. Ramchand and C. Reiss (Eds.), *The Oxford Handbook of Linguistic Interfaces*, pp. 475–501. Oxford: OUP.
- Schwager, M. (2010). On what has been said in Tagalog: Reportative *daw*. In T. Peterson and U. Sauerland (Eds.), *Evidence from Evidentials*, pp. 221–246.
- Şener, N. (2011). Semantics and Pragmatics of Evidentials in Turkish. Ph. D. thesis, UConn, Storrs.
- Simons, M. (2007). Observations on embedding verbs, evidentiality, and presupposition. *Lingua 117*(6), 1034–1056.
- Smirnova, A. (2012). Evidentiality in Bulgarian: Temporality, epistemic modality, and information source. *Journal of Semantics* 30, 479–532.

### References VII

- Sundaresan, S. (2018). Perspective is syntactic: Evidence from anaphora. *Glossa: A Journal of General Linguistics 3*(1).
- Sundaresan, S. and H. Pearson (2014). Formalizing linguistic perspective: insights from spatial anaphora. Ms., University of Leipziq and ZAS.
- Willett, T. (1988). A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language 12*(1), 51–97.
- Yalcin, S. (2007). Epistemic modals. Mind 116(464), 983-1026.

## Data sources I

- Bulgarian (South Slavic; Bulgaria): Izvorski (1997); Smirnova (2012); ?, own fieldwork
- Cheyenne (Algonquian; USA): Murray (2010, 2014, 2016)
- Cuzco Quechua (Quechuan; Peru): (Faller 2002, 2004, 2011, 2012)
- Georgian (South Caucasian; Georgia, Azerbaidjan): Korotkova (2012), own fieldwork
- German (Germanic; Germany): Enrich (2001); Faller (2007)
- Gitksan (Tsimshianic; Canada): Peterson (2010)
- Imbabura Quichua (Quechuan; Ecuador): own fieldwork
- Korean (isolate; Korea): Lim (2010); Lim and Lee (2012), own fieldwork
- St'át'imcets (Salish; Canada): Matthewson et al. (2007); Littell et al. (2010)

## Data sources II

- Tagalog (Austronesian; Philippines): Schwager (2010); Kierstead (2015)
- Tibetan (Tibeto-Birman; China, Nepal): Garrett (2001); Kalsang et al. (2013)
- Turkish (Turkic; Turkey, Germany): Şener (2011); Meriçli (2015), own fieldwork