Cable seminar 11/13/08   On Evidentials   Speas

I. **The syntax of evidentials**
   Some evidentials:
1. Makah
   a. wiki-caxa-**_w_**   'It's bad weather (directly exp.)'
   b. wiki-caxa-k-**_qad'i_**   'It's bad weather (I can see or hear it)'
   c. wiki-caxa-k-**_pid_**   'It looks like bad weather (inference from evidence)'
   d. wiki-caxa-k-**_wa.d_** 'I'm told/they say there's bad weather'

2. Quechua
   a. wañu-nqa-paq-**_mi_** 'It will die (I assert)'
   b. wañu-nqa-paq-**_chi_** 'It will die (perhaps/I infer)'
   c. wañu-nqa-paq-**_shi_** 'It will die (I was told/they say)'

3. Tibetan
   a. nga 'bras za-gi-**yod**   'I eat rice' (I just know from personal experience)
   b. kho 'bras   za-gi-**'dug**   'He's eating rice' (I see/saw him)
   c.   kho 'bras za-gi-**yod.red**   'He (must be) eating rice' (I infer)

Cinque (1999) claimed that evidentials are heads that occur in a crosslinguistically-fixed position, but
   - Aikhenvald (2005) discusses various cases where the morpheme order does not conform to C's predictions
   - Clearly Cinque's hierarchy of heads is at least partly predicted by semantic scope
   - There's no evidence from the position of other phrases similar to that used to argue for T, C, Topic and Focus as heads.

✳ In some languages evidentials form a clear morphosyntactic class, which can be obligatory.

II. **The semantics of evidentials**
   Questions:

   - What is the semantic/pragmatic status of the information conveyed by evidentials?
      - They are often translated as epistemic modals, but aren't the same
      - They seem to affect things like "speaker commitment" but it's not clear how they affect illocutionary force.
   - Why are there so few evidential categories? Is "evidence" a semantic primitive?
   - Why are evidentials often homophonous with tense/aspect?

   I think: Evidentials express a relation between the topic situation, a "reference situation" and the discourse situation.
   This relation affects the _quality threshold_ for the utterance.
   Changing the quality threshold has an effect similar to adding a modal

Potts, Davis and Speas: Evidentials alter the *quality threshold*
Maxim of Quality "Contribute only what you know to be true. Do not say false things. Do not say things for which you lack evidence."

Informally: p + modal =   p is true in some/all worlds compatible with modal base

p+evidential = given a certain set of situations, p is true in this world,

If you cannot felicitously assert p, you either assert what you do have evidence for (modal+p) or you change the threshold to one that allows assertion of things for which you have only a certain kind of evidence ((p),evidential).

4. It's clear that evidentials don't mean exactly the same thing as epistemic modals
   a. Evidentials do not directly express necessity or possibility. This is inferred from context.

   "It might be noted that, despite the hierarchy, all propositions with the Kashaya evidentials are presented by the speaker as being certain and true." (Oswalt 1986:43)

 5. Hearsay evidence can indicate necessity or possibility, depending on reliability of source:
Kéyah nihaa deet'ánígíí 'éí át'é jíní
land   1pl-to it.was.given-rel this is 4.say
'This is the land that was given to us, they say'

6. Inferential evidence can indicate necessity or possibility, depending on reliability of source:
   Scenario: Tibetan Sherlock Holmes-la has gathered all the clues, and now is absolutely certain who the murderer is. He announces:
       Miss Scarleet khorang gi rang murder jed (pa) red
       Miss Scarlett she herself murder do (perfective) INDIRECT
       'Miss Scarlett did the murder.'

7.   Garrett, Faller, Chung say that the inference evidential includes an epistemic modal as part of its meaning.   Chung: necessity   Faller: possibility   Garrett: uncommitted

       Both Faller and Garrett wind up analyzing each category of evidential as a categorically distinct amalgam of semantic and pragmatic features:
Quechua: (Faller)
-mi: speaker asserts p, believes p, has Best Possible Grounds for p
               adds Bpg(s,Bel(s,p)) to sincerity condition, increases strength to +1

 -chá: speaker asserts ,$\diamond$p, speaker's belief that p is based on reasoning
               changes ASSERT(p) to ASSERT($\diamond$p)
               adds Rea(s,Bel(s,$\diamond$p)) to sincerity condition, decreases strength to -1

-sí: speaker presents p, there is some other person who asserts p
                changes ASSERT(p) to PRESENT(p)
                changes sincerity condition to {∃$_{s2}$[ASSERT (s_2, p) ∧ s_2 ∉ {h,s)]}

7. A problem with treating evidentials as speech act operators: They can sometimes occur
   on questions:
Pi-ta-n   Inés-qa   watuku-rqa-n? (Faller2002)
who-ACC-EVIDENTIAL Inés-TOP visit-PST1-3   'Who did Inés visit?'
        i. speaker has best possible grounds for asking
        ii. speaker expects hearer to base his or her answer on best possible grounds

   ❋ Evidential conveys pragmatic info, but does not alter the type of speech act.

8.   Matthewson et al.
     Semantics of *k'a* (inferential)
$[[k'a(f)(B)(w)(\phi)]]$ is only defined if for all worlds w', w' ∈ B(w) iff **the inferential evidence**
in w holds in w', and f is a choice function of type <st,st> such that f(B(w)) ⊆ B(w).
If defined, $[[k'a(f)(B)(w)(\phi)]]$ = 1 iff for ∀w' ∈ f(B(w)): $[[\phi(w')]]$ = 1.

     Semantics of *-an'* (perceived-evidence)
$[[-an (f)(B)(w)(\phi)]]$ is only defined if for all worlds w', w' ∈ B(w) iff **the perceived evidence**
in w holds in w', and f is a choice function of type <st,st> such that f(B(w)) ⊆ B(w).
If defined, $[[-an (f)(B)(w)(\phi)]]$ = 1 iff for ∀w' ∈ f(B(w)): $[[\phi(w')]]$ = 1.

     Semantics of *ku7* (reportative)
$[[ku7(f)(B)(w)(\phi)]]$ is only defined if for all worlds w', w' ∈ B(w) iff the **reported evidence**
in w holds in w', and f is a choice function of type <st,st> such that f(B(w)) ⊆ B(w).

   • The meaning of the proposition is defined in only worlds where the (inferential/perceived/
     hearsay) evidence holds and the choice function picks out a subset of the modal base.
   • The choice function is determined by context.

   "The earth is 5000 years old-infer"
   B(w)= Worlds in which the inferential evidence holds
   {Adam and Eve were the first people, Dinosaurs and people were created on the same day, Moses
   lived 3000 years ago, There were 100 generations between Adam and Eve and Moses....}
   f(B(w))= Subset in which "the earth is 5000 years old" is true.

     "The earth is 5000 years old-hearsay"
   B(w) = {Rev. Ted says the earth is 5000 years old...}
   f(B(w)) = subset of the worlds above in which "the earth is 5000 years old" is true

φ is true in the subset determined by the choice function, i.e. you narrow down the
worlds first and then assert φ of all those worlds. Degree of certainty comes from the
degree to which f narrows down the set of relevant worlds.

9. Basic categories of evidentiality (Willett 1988:57):
    personal experience >> direct (eg. sensory) evidence>> indirect evidence >>
hearsay.

10. No language has a morpheme that restricts modal base to those containing
    evidence from speaker's lumbago, evidence from speaker's hard experience, things
    one's parents said, spiritually-discerned evidence, things that elders say, legal
    edicts, speaker's abilities, religious tenets, beliefs of one's political party,
    experiences in childhood......

In many languages, evidentials are homophonous with aspect/tense:
11. Macedonian "indefinite past" ('descended from Common **Slavic Perfect**')
    a. Tatko mu   **bil**(indef. past) mnogu **meraklija** za cveḱa.   (Friedman 1986)
        father to-him was   very   fond   for flowers
       'His father was very fond of flowers. [or so I gather]'

Chung(2005): Perfect = p + presupposition that p resulted in some relevant s
                Indirect= p + presupposition that p is the result of some relevant s

The most basic evidential contrast: direct (witness) vs. indirect (not witnessed)
de Haan (2004): direct evidentials describe eventuaities occurring inside the
"speaker's deictic sphere," while indirect evidentials describe ones outside that sphere.

12. MacKenzie (2007):
[[DIR]]= P_{st} s. P(s) & speaker(s*) $\leq$ s : $<<s,t>,<s,t>>$
[[INDIR]]= P_{st} s. P(s) & speaker(s*) $\leq$ s : $<<s,t>,<s,t>>$

(The speaker was or was not in the topic situation.)

Problem: Direct vs Personal Experience; Inference vs. Hearsay

13. Eastern Pomo:
    a.   biˑYá pʰaˑbé-kʰ-**ink'e**
             hand   burn-punctual-sensory
              'I burned my hand' (I feel the sensation of burning in my hand)

    b.   míˑ-p-al   pʰaˑbé-k-**a**
             3.sg.-male-patient burn-punctual-direct
             'He got burned' (I have direct evidence, eg., I saw it happen)

    Personal Experience evidence is "ontologically subjective" (Searle 2004) - it is
    knowledge that exists only from a first person point of view; it is unique to the
    speaker.

Direct (aka "visual") evidence is causally related to the knowledge (Searle) : Our experience of witnessing p causes us to know p.

An event of witnessing p includes p.

Indirect evidence is one state of affairs that leads to knowledge of another.

14. Tibetan
      a. kho 'bras za-gi-**'dug**   'He's eating rice' (I see/saw him)
      b. kho 'bras za-gi-**yod.red** 'He's eating rice' (I infer)

a: Speaker saw the eating
b: Speaker saw pot with rice residue and open cupboard where rice bowl usually is.

Hearsay evidence is not directly related to p at all.

("Mary said that the world is flat" is true in worlds where the world isn't flat)

Hearsay evidentials don't always mean that the speaker was personally told:

15.   [1] T'ah tłé'dá' danásikai ni' áídí'   Western Apache
          'We left from there while it was still dark.'
    [2] Hikahgo nohwee gozt'ííd
       'It got daylight while we were walking'
    [3] Go dził bikáyú hikahgo t'aazhí' nijēēdyú nádadílt'iid
      'And when we were walking on the mountain we looked back down to where
         we had slept.'
    [4] Áí n'í nanezna' łeshijēēdyú nohwiheskāā **lék'eh**! (hearsay)
    'We had slept in a graveyard!'   de Reuse (2003:84-85)

Evidence situation is completely removed from the sleeping-in-graveyard situation.

Kratzer (2007): Modal base = situation or set of situations accessible from the situation of which the proposition is true.

16. "Suppose the two of us observe a bear crossing the road one night in Glacier National Park. Since it is dark, we can't see the bear very well, and I say to you:

               (17) The bear might be a grizzly."   (2007:11)

Modal base: s' in which the bear smells like a grizzly and sounds like a grizzly and
              unlike s, it's not too dark to tell and the bear is a grizzly
(17) is true of   Some s', accessible from s

OR Modal base: s' in which Bob just told me that the bear is a grizzly

18.　　　　　　　　Evaluated Situation (ES)　The situation of which p is true
　　　　　　　　　Reference Situation (RS)　A situation accessible to ES and DS
　　　　　　　　　Discourse Situation (DS)　The situation in which the sentence is
　　　　　　　　　　　　　　　　　　　　being uttered

19. Indirect Evidential: RS is accessible from ES
  ⬤　Inference is based on accessible situation whether there's a modal or not
  ⬤　English: this accessibility relation is implicit; modal value is explicit
　　Tibetan: this accessibility relation is explicit; modal value is implicit.

　　　So far we have just reiterated the observation of Izvorski (1998) and others that indirect evidentials encode the presence of a modal base - the Reference Situation. Things get more interesting when we look at the other categories of evidence.

20.　　Indirect Evidential:　　　RS is accessible from ES
　　　Direct Evidential:　　　　RS includes ES
21. He's eating rice-Direct
　　RS': situation in which I'm seeing him eating rice
　　ES: situation in which he is eating rice

22. Hearsay evidential:　　RS is accessible from ES
　　　　　　　　　　　　RS is accessible from DS

23. Yogi is a grizzly-hearsay
　　ES: situation in which Yogi is a grizzly
　　RS: situation in which Mary said that Yogi is a grizzly.
　　DS: situation in which I am relating to you that Yogi is a grizzly

ES contains Yogi, who is a grizzly
RS may or may not have Yogi or any grizzlies in it. It contains a discourse about Yogi.
DS contains Yogi (in common ground) and my statement about Yogi.
.
Situation where I was told ⟷ Situation where ⟷ Situation where I'm asserting
 that Y is G　　　　　　　　Y is G　　　　　　　　that Y is G

24.　　Indirect Evidential:　　　RS is accessible from ES
　　　　　　　　　　　　　　RS includes DS

Basis for inference often includes "distributed knowledge of discourse participants" (von Fintel and Gilles 2005)
25.　"That animal was a bear-ind"
　　ES: situation in past in which the animal is a bear.
　　RS: my observations, accumulated wisdom and "distributed knowledge of discourse participants"
　　DS: discourse in which you have just told me that bunnies do not growl.

26.   Direct Evidential: RS includes ES
                                    RS is accessible from DS

⚬   Knowledge from witnessing cannot change based on subsequent information
      and still count as knowledge from witnessing

        He was eating rice-direct

ES: situation in which he was eating rice
RS: situation in which I saw him eating rice
DS: current discourse situation, from which RS is still accessible.

27.   What? Didn't you notice that it was a dessert and looked gel-like?

        Oh, He was eating tapioca-ind

28.   Personal experience   RS includes ES
                                  RS includes DS

⚬ New information IS included in personal experience assessment

29. ten years ago: I was sure I was in love with X

      now: "I was immaturely obsessed with X-pers.exp"

30. 20 years ago, discussing having broken my toe, I say "I was in agony"

      now, having experienced childbirth: "It hurt quite a bit-pers. exp."

ES: situation in which the toe felt the relevant way
RS: situation in which I felt my toe-pain and I know what I know now
DS: situation in which I know what I know now

References:

Aikhenvald, Alexandra (2004) *Evidentiality*. Oxford University Press. Oxford
Barnes, J. 1984. 'Evidentials in the Tuyca Verb.' *International Journal of American Linguistics*
        50: 255-271.
Chafe, Wallace and Johanna Nichols, eds.(1986) *Evidentiality: The Linguistic Encoding of
        Epistemology*, Norwood NJ, Ablex Publishing Corporation.
Chung, K. 2005. *Space in Tense: The Interaction of Tense, Aspect, Evidentiality and Speech Act
        in Korean.* Ph.D. dissertation, Simon Fraser University.
Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A Cross-Linguistic Perspective.*
        Oxford University Press. Oxford.

Davis, Christopher, Christopher Potts and Peggy Speas (2007) 'Evidential Marking, Interrogatives and the Maxim of Quality.' SALT 17, University of Connecticut, April 2007.

De Haan, Ferdinand. 1999. 'Evidentiality and epistemic modality: setting boundaries.' *Southwest Journal of Linguistics* 18, 83-101.

De Reuse, Willem, 2003. 'Evidentiality in Western Apache' in A.Aikhenvald and R.M.W. Dixon, eds., Studies in Evidentiality. Benjamins, Philadelphia/Amsterdam.

Faller, Martina. 2001. 'Remarks on Evidential Hierarchies' in Beaver, Kaufmann, Clark and Casillas, *Proceedings of the "Semfest".* CSLI Publications.

Faller, M. 2002 *Semantics and Pragmatics of Evidentials in Cuzco Quechua.* Doctoral Dissertation, Stanford University.

Fintel, K. von and B. Gilles (2005) '*Might* made right.' ms. MIT and University of Michigan.

Garrett, Edward. (2001) *Evidentiality and Assertion in Tibetan.* Doctoral Dissertation, UCLA.

Rooryck, J. 2001a. 'Evidentiality, Part I.' *GLOT International* 5:125-133.

Rooryck, J. 2001b. 'Evidentiality, Part II.' *GLOT International* 5:161-168.

Searle, John (2004) *Mind: A Brief Introduction*. Oxford University Press. Oxford.

Willett, Thomas. 1988. 'A cross-linguistic survey of the grammaticization of evidentiality.' Studies in Language 12:51. pp. 51-97.