Cross-linguistic Evidence for Evidential Projection and Locality condition on Discourse Items

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Introduction

There exists a cross-linguistic asymmetry in availability of certain discourse items among adjunct clauses

Those items

can appear within a *because*-clause

cannot appear within temporal clauses like 'when' and an *if*-clause

English: *obviously*

(1) a. Mary is upset **because obviously** John doesn't love her.
     b. * Mary got upset **when obviously** she failed the exam.

German: *ja*

(2)   a.   Maria ist ärgerlich, **weil**   John sie **ja** nicht liebt
                Maria is angry,   because John her JA not   love
                'Maria is angry, because John JA doesn't love her.'
        b. *Maria wurde ärgerlich, **als**   sie **ja** die Prüfung nicht bestanden hatte
                Maria was   angry,   when she JA the exam   not   passed   have
                'Maria is angry, when she JA didn't pass the exam.'

Japanese: *wa*

(3)   Kinou   Mary-**wa**   uchi-ni   kita **node**   kodomo-ga   yorokon-da.
        yesterday Mary-CTop house-dat came because, children-Nom happy-Past
        'Because Mary$_{CTop}$ came to our house yesterday, the children became happy.'

(4)   *Kinou   Mary-**wa**   uchi-ni   kita **toki**, kodomo-ga   yorokon-da.
        yesterday Mary-CTop house-dat came when, children-Nom happy-Past
        'When Mary$_{CTop}$ came to our house yesterday, the children became happy'

The same asymmetry is also found in Sawada and Larson (In press).

Goal

The goals of this paper are:

1. To show that the discourse items in discussion need to be associated to some attitude-holder.

2. To give an account for this contrast using two 'pragmatic' concepts:

   Implicature

   Evidentiality

3. To give evidence for syntax-pragmatics interfaces

   These concepts (Implicatures & Evidentiality) are previously treated as purely pragmatic.

   Some recent studies show that there are syntactic representations for Implicatures (Chierchia, 2001) and Evidentiality (Cinque, 1999; Speas, 2004; Tenny, 2002)

4. To show there is a syntactic and pragmatic connection between implicatures and evidentiality

Discourse Items and Attitude-Holders

English: *obviously*

Tredinnick (2004) points out that (5) is ambiguous between assertive reading (5-a) and expressive meaning (5-b),

(5)   Mary is upset because it is obvious that John doesn't love her. (ambiguous)
   a.   M. is upset because John's lack of love for her is obvious to people.
   b.   M. is upset because J. doesn't love her. (the speaker's comment "By the way, it's obvious that he doesn't love her.")   (Trednick 2004)

while (1-a) with the adverb *obviously* only has the expressive (the speaker's comment) meaning.

(1-a)   Mary is upset **because obviously** John doesn't love her.   (unambiguous; cf. (5))

German: *ja*

Kratzer (1999) roughly defines German discourse particle *ja* as follows.

(6) *Ja* α is appropriate in a context c if the proposition expressed by α in c is a fact of w_c which - <u>for all the speaker knows</u> - might already be known to the addressee. (Kratzer 1999)

German: *ja*

As the definition suggests, *ja* has to be associated with the speaker,

but it is also shown that it can be relativized to other attitude-bearer if it is embedded within an attitude predicate like *claim*.

(7) Jederder Zeugen   behauptete, er habe ja mit eigenen Augen gesehen, dass. . .
Each   witnesses claimed   he had JA with own   eyes   seen   that
'Each of the witnesses claimed he had JA seen with his own eyes that. . .'

Japanese Contrastive Topic
(Hara 2004, to appear)

Contrastive and Implicature

Japanese Contrastive Topics always induce implicatures (Hara, 2004)

(8)   Nannin-ka-wa kita
       "[Some people]$_{CTop}$ came,"

Implicature: It is possible that it is false that everyone came.
≈Possibly, not everyone came.

Worlds doxastically accessible to the speaker

Implicature: There exist some worlds in which the stronger alternative is false
←The alternative could be false
←Possibly, not everyone came.

w_1 –⟦Some people came⟧ $= 1 \ldots$ ⟦Everyone came⟧ $= 1$

w_2 –⟦Some people came⟧ $= 1 \ldots$ ⟦Everyone came⟧ $= 0$

w_3 –⟦Some people came⟧ $= 1 \ldots$ ⟦Everyone came⟧ $= 0$

w_4 –⟦Some people came⟧ $= 1 \ldots$ ⟦Everyone came⟧ $= 1$

w_5 –⟦Some people came⟧ $= 1 \ldots$ ⟦Everyone came⟧ $= 0$

$\vdots$

Speaker

Implicature and Attitude

Key Point The induced implicatures are always attributed to some attitude-holder.

(9)   CONTRASTIVE$(w)(x)(B)(T)$ (x is an attitude-holder, B is a background and T is a topical element)

    a.   asserts: $B(T)(w)$

    b.   presupposes: $\forall w' \in \min_w[w' \in \mathrm{Dox}_x(w)]$: $\exists T'[T' \in ALT_C(T)$ & $B(T')(w')$ entails $B(T)(w')$ & $B(T)(w')$ doesn't entail $B(T')(w')]$

    c.   implicates: $\exists w' \in \min_w[w' \in \mathrm{Dox}_x(w)]$:$\forall T'[T' \in ALT_C(T)$ & $B(T')(w')$ entails $B(T)(w')$ & $B(T)(w')$ doesn't entail $B(T')(w')][B(T')(w')=0]$

Implicature and Attitude

    If *wa* is embedded within an attitude predicate,

    another attitude-holder is introduced (the subject of the attitude predicate).

    As a result, the sentence becomes ambiguous.

(10)   nanninka-**wa**   kita-to   Mary-ga   shinjite-iru
       some-people-CTop come-Comp Mary-nom believe-Prog
       'Mary believes [some people]$_{CTop}$ came'

(10) is ambiguous depending on:

1. which attitude-holder (the speaker or Mary) is responsible for the implicatures

2. which propositions are contrasted; i.e. what propositions are in the alternative set.

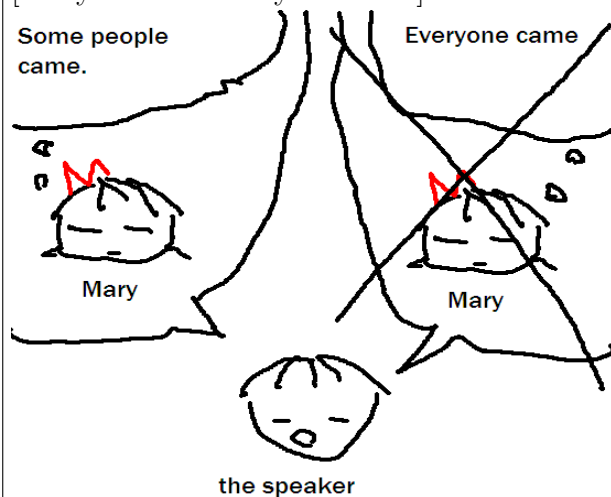# Locus of Implicatures: Local

Local: The speaker asserts
[Mary believes some people came and she doesn't believe everyone came]

— slide #16

Locus of Implicatures: Global

Global: The speaker asserts [Mary believes some people came] and the speaker doesn't assert [Mary believes everyone came].

— slide #17

when and attitude

(4) *Kinou Mary-**wa** uchi-ni kita **toki**, kodomo-ga yorokon-da.
     yesterday Mary-CTop house-dat came when, children-Nom happy-Past
     'When Mary$_{CTop}$ came to our house yesterday, the children became happy'

Interestingly, *wa* under *toki* 'when' becomes acceptable if *wa* is further embedded in an attitude predicate.

(11) John-ga Mary-**wa** kita-to **omot**-ta **toki**, kanojo-ga heya-ni haitte
      John-Nom Mary-**CTop** come-Comp **think**-Past **when** 3sg-Nom room-Dat in
      kita   .
      come-Past
      'When John thought that Mary$_{CTop}$ came, she came into the room.'

Summary of the facts

The interpretations of discourse items like *wa*-induced implicatures involve some attitude-holder.

If *wa* is embedded within an attitude predicate, the induced implicature could be attributed to the subject of the predicate or to the speaker.

wa within *when* is bad

But if *wa* is further embedded in an attitude predicate, *wa* within *when* becomes acceptable

Based on these facts,...

Movement

> **Speculation** There is a movement operation involved in the computation of *wa*-implicatures.

Proposal The use of *wa* introduces an implicature operator, which contains an attitude-holder variable.

Motivation for the movement The implicature operator needs to saturate its attitude-holder variable.
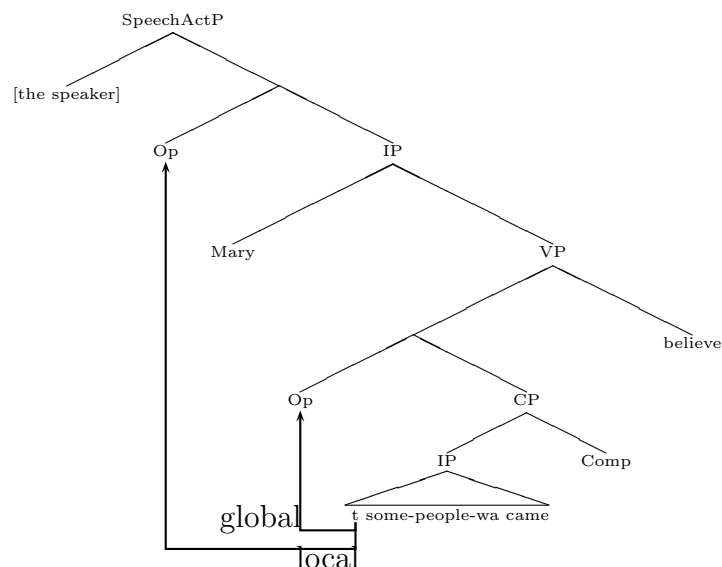The attitude-holder could be either the speaker or the subject of the attitude predicate.

Movement of Implicature Operator: Example

(10) nanninka-wa   kita-to   Mary-ga   shinjite-iru
      some-people-CTop come-Comp Mary-nom believe-Prog
      Mary believes [some people]$_{CTop}$ came

(12)

Adjunct Island Violation

Then, we could say that (4) is unacceptable since it causes an adjunct-island violation.

(4)   *Kinou   Mary-**wa**   uchi-ni   kita **toki**, kodomo-ga   yorokon-da.
      yesterday Mary-CTop house-dat came when, children-Nom happy-Past
      'When Mary$_{CTop}$ came to our house yesterday, the children became happy'

1. The operator cannot find a local attitude predicate

2. It tries to target the global implicature (the speaker's uncertainty)

3. then it has to cross an adjunct island

(13)   *[[speaker] [$_{XP}$ Op [$_{XP}$ ... [$_{\underline{AdjunctP}}$ [$_{IP}$ t Mary-wa kita] toki]]]]   (4)
                          *

Two questions

This speculation raises two questions.

1. where exactly does this operator move?

2. why does a *because*-clause not constitute as an island?

Evidentiality (Tenny 2002)

Evidential Projection

On the assumption that there exist Speech Act Phrases (Rizzi 1997, Rivero 1994) and Evidential Phrases (Cinque, 1999; Speas, 2004),

Tenny (2002) argues for the existence of an evidential argument in syntax.

The evidential argument refers to an individual who is "responsible for evaluating the truth of a proposition"

Example: Korean evidential particle

a sentence with an *e* ending indicates that the speaker of the sentence has direct evidence for the statement

while a sentence with a *tay* ending indicates that the truth value of the statement is based on the reported evidence

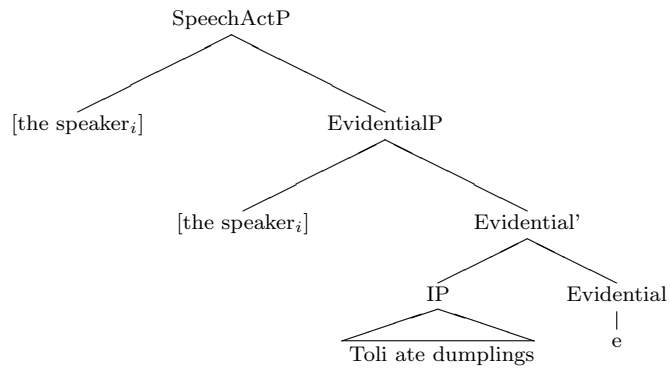(14)   a.   Toli-ka   mantwu-lul   mek-ess-**e**
                Toli-Nom dumpling-Acc eat-Past-Declarative
                'Toli ate dumplings.'
    b.   Toli-ka   mantwu-lul   mek-ess-**tay**
                Toli-Nom dumpling-Acc eat-Past-Declarative
                '(I heard that) Toli ate dumplings.'   (Papafragou *et al.*, 2004)

Example: Korean evidential particle

(14-a) Toli-ka   mantwu-lul   mek-ess-**e**
        Toli-Nom dumpling-Acc eat-Past-Declarative
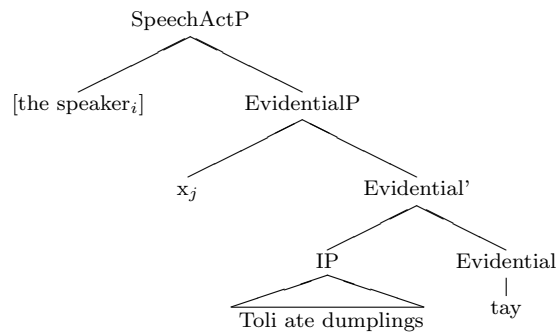   'Toli ate dumplings.'

(15)

```
                         SpeechActP
                        /          \
              [the speaker_i]     EvidentialP
                                 /           \
                        [the speaker_i]    Evidential'
                                          /          \
                                        IP          Evidential
                                      /    \             |
                              Toli ate dumplings         e
```

Example: Korean evidential particle

(14-b) Toli-ka   mantwu-lul   mek-ess-**tay**
        Toli-Nom dumpling-Acc eat-Past-Declarative
        '(I heard that) Toli ate dumplings.'

(16)

```
                      SpeechActP
                     /          \
          [the speaker_i]     EvidentialP
                             /           \
                           x_j        Evidential'
                                      /          \
                                    IP          Evidential
                                  /    \             |
                          Toli ate dumplings        tay
```

Key Points

The pragmatic concept of Evidentiality is mapped in syntax as Evidential Projection.

Evidential Projection contains an evidential argument, which refers to an individual who is responsible for the truth value of the proposition.

Back to Contrastives

Implicatures and Evidentiality

Implicatures induced by Contrastive Topic *wa* also gives evidence for the existence of evidential arguments and projections.

Wa contains a variable which corresponds to the attitude-holder of the induced implicature.

I equate this attitude-holder of *wa* to the evidential argument in Tenny's framework.

Implicatures and Evidentiality

When a speaker utters:

(8)   Nannin-ka-wa kita
      "[Some people]$_{CTop}$ came,"

the individual who knows the truth value of the asserted proposition 'some people came' (the evidential argument)

=the individual who is not sure about the truth value of the stronger alternative,
namely the individual who implicates 'probably not everyone came' (the attitude-holder of the implicature)

=<u>the speaker</u>

Implicatures and Evidentiality

Both an evidential argument and an attitude-holder are holders of a point of view towards a proposition.

The implicature operator needs to find an entity for its attitude-holder.

Therefore, the attitude-holder variable of *wa* should be saturated by the evidential argument.

This saturation is implemented in syntax: the implicature operator adjoins to the Evidential Projection.

Answer to the first question.

Asymmetry

(3)   Kinou   Mary-**wa**   uchi-ni   kita **node**   kodomo-ga   yorokon-da.
       yesterday Mary-CTop house-dat came because, children-Nom happy-Past
       'Because Mary$_{CTop}$ came to our house yesterday, the children became happy.'

(4)   *Kinou   Mary-**wa**   uchi-ni   kita **toki**, kodomo-ga   yorokon-da.
       yesterday Mary-CTop house-dat came when, children-Nom happy-Past
       'When Mary$_C$Top came to our house yesterday, the children became happy'

Asymmetry

Since both are adjunct clauses, we need to explain why the analysis for *when* does not apply to *because*.

Tenny (2002) proposes that Japanese *node* 'because' is a head of an Evidential projection.

She gives an annalysis for different interpretations of direct experience predicates and logophors within a because-clause and a when-clause, arguing that unlike *node* 'because', *toki* 'when' does not project Evidential Phrase.

Following Sawada and Larson (in press), I would like to modify Tenny's account.

> *because* takes Evidential Projection as its complement, while *when* does not.

because

In (3), the operator finds the local Evidential projection which is located under *node* 'because'

Therefore, it does not need to cross the island.

(17) $[_{\text{SpeechActP}}$ [speaker] $[_{\text{EvidP}}$ . . .
$[_{\underline{\text{AdjunctP}}}$ $[_{\text{EvidP}}$ Op $[_{\text{EvidP}}$ [evid-arg] $[_{\text{Evid'}}$ $[_{\text{IP}}$ t Mary-wa kita] node]]]]]]   (3)

when

In (4), *toki* 'when' does not introduce an Evidential projection.

The operator cannot find a local landing site within an adjunct.

Thus having *wa* within *toki* causes an island violation

(18)   *$[_{\text{SpeechActP}}$ [speaker] $[_{\text{EvidP}}$ Op $[_{\text{EvidP}}$ . . . $[_{\underline{\text{AdjunctP}}}$ $[_{\text{IP}}$ t Mary-wa kita] toki]]]]   (4)
                                          *

Answer to Question 2

Wa in a 'because'-clause does not cause an island violation since a 'because'-clause contains an Evidential Projection that can host the implicature operator.

Summary and Conclusion

By examining the distribution of *wa*, we can see the connection between implicature and evidentiality
both pragmatically and syntactically.

- Pragmatics: Both concepts involve a holder of a point of view towards a proposition
- Syntax: Implicature Operator adjoins to Evidential Projection

The analysis accounts for the asymmetry between *because* and *when*

This analysis crucially requires a framework of syntax-pragmatics interfaces,
"Some pragmatic features are represented in syntax."

Without the notion of interfaces, i.e. if pragmatics is indifferent to syntactic internal structures, it would be very difficult to give a unified account for the distribution of discourse items.

Preview

Preview: Syntax-Semantics of *when*

I need to establish two points regarding the syntax of adjuncts.

1. there is no Evidential Phrase under *when*.

2. there could be an Evidential Phrase under *because*.

Preview: Syntax-Semantics of *when*

an evidential argument is defined as a sentient being "who holds for the evidence for the truth of a proposition" (Tenny, 2002)

Evidential Projection takes a closed event sentence (type t).

One cannot hold for the evidence for the truth of an open predicate since the expression is not saturated to be a truth-condition.

According to Johnston (1994), *when* necessarily combines with an **open** event predicate $< ev, t >$ and yields a restriction of quantification.

Given Johnston's analysis of *when*, therefore, there is no Evidential Projection under *when*.

Preview: Syntax-Semantics of *because*

It is not clear whether *because* necessarily takes an Evidential Projection as its complement.

According to Johnston (1994), *because* takes a **closed** event proposition t and expresses a binary **relation**.

Johnston's (1994) analysis of *because* is certainly compatible with the speculation in which *because* takes an Evidential Phrase as its complement.

Since it is the speaker's or some attitude-bearer's reasoning that connects two conjuncts of *because*, it is plausible to introduce evidentiality (point of view) in the complement of *because*.

References

Chierchia, G. (2001), "Scalar Implicatures, Polarity Phenomena, and Syntax/Pragmatics Interface." University of Milan.

Cinque, G. (1999), *Adverbs and Functional Heads: A cross-linguistic perspective*. Oxford University Press.

Hara, Y. (2004), "Scope Inversion in Japanese: Contrastive Topic Require Implicatures." In *Japanese/Korean Linguistics 13*, CSLI Publication.

Johnston, M. (1994), *the Syntax and Semantics of Adverbial Adjuncts*. Ph.D. thesis, UCSC.

Papafragou, A., P. Li, and Ch. Han (2004), "Evidentiality and the Language/Cognitive interface."

Sawada, M., and R. Larson (In press), "Presupposition & root transforms in adjunct clauses." *Proceedings of NELS 34.* .

Speas, M. (2004), "Evidentiality, logophoricity and the syntactic representation of pragmatic features." *Lingua* 114: 255–276.

Tenny, C. (2002), "Evidentiality, experiencers, and the syntax of point of view in Japanese." Carnegie-Mellon University.

Tredinnick, V. (2004), "Modal Flavor and Quantificational Force in Free Relatives with -ever."