Constraints on Presupposition Accommodation

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0. Introduction

The purpose of this paper is to inquire what constraints are imposed on Lewis's (1979) rule of presupposition accommodation, which, Ahn & Kim (1992) propose, plays a crucial role in interpreting the extrinsic topic construction in Korean. In section 1, we will describe the semantic problems of the construction Ahn & Kim tried to provide a solution to. In the next section, we then reproduce their proposal and try to show how it works. In the third section, we argue that an important morphological constraint should be imposed on presupposition accommodation's salvaging the extrinsic topic, and propose that the archimorpheme -*n*, which is instantiated by the topic marker, the relative clausal marker, and the conditional marker, makes a semantic ground on which presupposition accommodation can work. In the fourth section, lastly, we propose some additional pragmatic constraints to be imposed on the rule of presupposition accommodation. More specifically, we propose that the associations between an object and a set of predicates form a scale of proximity and produce an associated potential presupposition set, and that presupposition accommodation is sensitive to it. Besides this, we propose that there is a sort of pragmatic elsewhere condition at work.

1. The Extrinsic Topic

Bak (1981) sets aside a class of topic expressions naming them extrinsic. An extrinsic topic does not have any explicit grammatical (hence any thematic) relation to the predicate expression heading the comment expression (cf. Foley and Van Valin's (1985) free external topics). The following examples illustrate such a topic-comment relation.

(1) khephi-nun   <u>cam-i   an   wa</u>.
    coffee-TOP   sleep-NOM not come
    '#As for coffee, one can hardly fall into sleep.'
(2) polipap-un   <u>pangkwi-ka cal   naonta</u>.
    boiled+barley-TOP wind-NOM   well comes+out
    '#As for boiled barley, one breaks wind frequently.'

(3) cihachel-un <u>ccacung-i   nanta</u>.
    subway-TOP irritation-NOM arises
    '#As for subways, one gets irritated.'
(4) enehak-un   <u>chwicik-i   cal   an toynta</u>. (Kang 1986)
    linguistics-TOP job+hunting-NOM well not goes
    '#As for linguistics, the job hunting does not go well.'

Notice that there is no explicit thematic or semantic relation between the topic
expression and the verbal or nominal expressions in the comment. Example (1)
means something like (1'a-c).

(1') a. If people drink coffee, they can hardly fall into sleep.
     b. Coffee causes people not to fall into sleep easily.
     c. Drinking coffee causes people's not falling into sleep easily.

The semantic problem posed by the extrinsic topic constructions is how to arrive
at the interpretation of (1) illustrated in (1') based on its surface form.

2. Presupposition Accommodation
     Ahn & Kim (1992) propose (i) that what Lewis (1979) calls presupposition
accommodation, as in (5), bridges the gap between the extrinsic topic and its
comment, and (ii) that a presupposition is accommodated under conditions such as
those in (6)-(8).

(5) The Rule of Accommodation for Presupposition
     If at time t something is said that requires presupposition P to
     be acceptable, and if P is not presupposed just before t, then --
     ceteris paribus and within certain limits -- presupposition P
     comes into existence at t. (Lewis 1979: 172)
(6) Condition on Non-Referent Accommodation
     If a proposition is to be accommodated, it must contain a variable
     coreferential with an existing argument in the sentence in question.
(7) Condition Against Vacuous Quantification (Kratzer 1990)
     For every quantifier Q, there must be a variable x such that Q binds an
     occurrence of x in both its restrictor and its nuclear scope.
(8) a. A presupposition is accommodated only when it relates the extrinsic
        topic and the comment through a causal chain.
     b. A set of events forms a causal chain iff it is strictly and totally
        ordered with respect to the causing relation.
        (Ahn & Kim (1992))

The rule of presupposition accommodation in (5) states that if an utterance
needs a certain presupposition in order to make sense, the hearer makes up the
presupposition within certain limits and understands the utterance along with
it. Presupposition accommodation can be observed in sentences like (9a), which
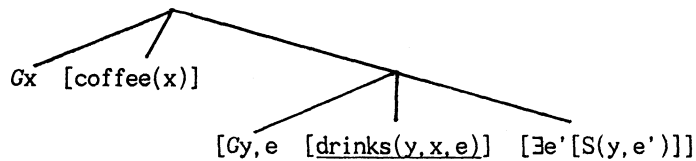
comes from Schubert & Pelletier (1989):

(9) a. Cats land on their feet.
     b. If they drop to the ground, cats land on their feet.

Sentence (9a) is hard to understand unless something like the antecedent clause in (9b) is supplemented. This process of supplementation is an instance of presupposition accommodation.
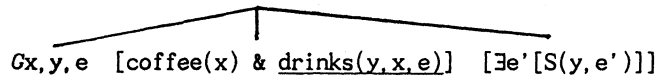
According to Ahn & Kim, the logical form of sentence (1) as it is will look like (10a), which is not well-formed; rule (5) makes the hearer of sentence (1) create a presupposition like (10b), resulting a logical form like (11a)[1]:

(10) a. Gx,y [coffee(x)] [S(y)], which is not a wff, and where S stands for *can hardly fall into sleep.*
      b. if one drinks it

(11) a.

Gx [coffee(x)]

[Gy,e [drinks(y,x,e)] [∃e'[S(y,e')]]]

      b.

Gx,y,e [coffee(x) & drinks(y,x,e)] [∃e'[S(y,e')]]

Notice that in the logical form in (11a), the topic 'as for coffee' is represented in terms of the generic operator G which binds the variable in the restrictive clause *coffee(x)*, whereas the comment is represented as the nuclear scope. The presupposition to be accommodated is introduced into the nuclear scope of the higher three-part structure, along with a new generic operator, but as the restrictive clause of the lower three-part structure. The resulting logical form in (11a) will be equivalent to what will be the logical form of (11c).

(11) c. khephi-nun   kukes-ul masi-myen cam-i   an   wa.
         coffee-TOP   it-ACC   drinks-if sleep-NOM not come
         'As for coffee, one can hardly fall into sleep if he drinks it.'
      d. khephi-lul masi-myen   cam-i   an   wa.
         coffee-ACC drinks-if   sleep-NOM   not come
         'One can hardly fall into sleep if he drinks coffee.'

Notice, in (11a), that the common semantic property of the topic and the conditional clause is represented in terms of their constituting the restrictive clauses. (11c) is almost equivalent to (11d), except that in the former 'coffee' is established as topic.[2] (11a) and (11b) should then be almost equivalent. In fact, they are so unless the generic operators in (11a) come to have different

quantificational force, because in both cases the admissible cases will be restricted to a set of triples consisting of a portion of coffee, a person, and an event of drinking involving the other two participants.

Ahn & Kim's proposal applies to examples (2)-(4), and rule (5) accommodates necessary presuppositions into the logical forms of the examples.

Presupposition accommodation does not always succeed in supplying necessary presuppositions, however. Consider examples (12a,b).

(12) a. $^{?*}$polumtal-un   cam-i   an onta   (Due to cond (6))
          full+moon-TOP   sleep-NOM not comes
          '#As for the full moon, one can hardly sleep.'
     b. polumtal-i   ttu-myen   cam-i   an onta
          full+moon-NOM rises-if   sleep-NOM not comes
          'If the full moon rises, one can hardly sleep.'

Notice that the extrinsic topic construction in (12a) is not acceptable while its counterpart conditional construction in (12b) is perfect. If presupposition accommodation could supply (13a), the logical form of (12a), with a presupposition like *ttumen* ('if it rises'), the resulting logical form of (12a), viz. (13b), would resemble that of (12b), viz. (14).[3]

(13) a. Gx [full-moon(x)] [S(y,e')] --- not a wff
     b. Gx [full-moon(x)] [Gy,e [$\underline{rises(x,e)}$] [$\exists e'[S(y,e')]$]]]
(14) Gx,e [full-moon(x) & $\underline{rises(x,e)}$] [$\exists e'[S(y,e')]$]]

In view of this similarity, the unacceptability of (12a) strongly implies that rule (5) cannot supply the part of *rises(x,e)* for (12a). Condition (6) prevents it from being accommodated because it does not contain any variable an occurrence of which appears in the neclear scope of (13a), viz. *S(y,e')*. However, consider example (15) with reference especially to that in (16b).

(15) $^{?(?)}$polumtal-un   kasum-i   sellaynta
          full+moon-TOP   heart-NOM   gets+restless
          '#As for the full moon, one's heart gets restless.'
(16) a. polumtal-i   ttu-myen   salamtul-i ku kes-ul   ponta
          full+moon-NOM rises-if   people-NOM the thing-ACC see
          'If the full moon rises, we see it.'
     b. polumtal-ul   po-myen   kasum-i   sellaynta
          full+moon-ACC see-if   heart-NOM   gets+restless
          'If they see the full moon, their hearts get restless.'
     c. kasum-i   sellay-myen   cam-i   an onta
          heart-NOM   gets+restless-if   sleep-NOM not comes
          'If their hearts get restless, they can hardly sleep.'

(15) is not perfect, but it is not so unacceptable as (12a), either. This suggests that the presupposition necessary for interpreting (15) can be

accommodated into the logical form of (15). Let us inquire what makes this difference between (12a) and (15) by examining the logical form of (15) in (17a) and its post-accommodation form in (17b).

(17) a. Gx [full-moon(x)] [∃e' [gets-restless(y,e')]] --- not a wff
    b. Gx [full-moon(x)] [Gy,e [sees(y,x,e)] [∃e'[gets-restless(y,e')]]]

Here the accommodated part *sees(y,x,e)* contains the variable *y*, an occurrence of which also appreaⁿs in the nuclear scope of (17a). One may ask what determines which material to be accommodated? We will return to this question later.

    Some eventive sentences, when they have generic subjects, require conditional antecedents in order to make sense; they include the underlined parts of examples (1)-(4) with generic subjects in Korean, and example (9a) in English. Without such parts, they do not make much sense because the predicates in them denote transient properties and are predicated of generic objects. Furthermore, as Lee (1983) notes, a causal relation generally holds in Korean conditional constructions. It is important to notice that only such sentences may constitute the comment part licensing the extrinsic topic. If no causal relation is found, due to condition (8), rule (5) cannot apply to rescue an extrinsic topic. Consider examples in (18).

(18) a. ?*Hankwuke-nun mwul-i   malkta   (Violation of condtion (8))
        Korean-TOP   water-NOM is+clean
        '#As for Korean, water is clean.'
    b. Hankwuke-ka ssui-nun   nala-nun   mwul-i   malkta.
       Korean-NOM is+spoken-REL country-TOP   water-NOM is+clean
       'In countries where Korean is spoken, water is clean.'

There is no causal relation found between Korean's being spoken in a certain country and water's being clean in that country.

    There is a potentially important cooccurrence constraint here: only when their generic subjects become implicit, those sentences can function as comments to extrinsic topics. This point is illustrated by the following contrast in acceptability.

(19) a. khephi-nun   (*wuli-nun/?*wuli-ka) cam-i   an   wa.
        coffee-TOP   we-TOP/   we-NOM   sleep-NOM not comes
    b. wuli-nun/ka cam-i   an   wa.
      we-TOP/NOM sleep-NOM not comes

This paradigm apparently shows that the extrinsic topic requires a generic comment, just as in middle constructions.

3. A Morphological Constraint

    The topic marker *nun* and the relative clause marker *-n* play a crucial role in licensing the extrinsic topic: The common semantic property between them and

the conditional marker -*myen* must be the crucial factor (cf. Haiman 1978, Lee 1983, Shin 1987). The semantic property between topics and conditionals is shown by the fact that (20a) and (20b) have exactly the same logical form in (21).

(20) a. salam-<u>un</u> mal-ul   hanta
        man-TOP   language-ACC does
        'Man speaks a language.'
     b. salam-i-<u>myen</u> mal-ul   hanta
        man-is-if   language-ACC does
        'If he is a man, he speaks a language.'
(21) *G*x [man(x)] [speaks-a-language(x)]

This means that the topic marker and the conditional marker make a similar semantic contribution in forming the logical form.
     As Lee (1989) observes, it is generally the case that the topic marker *nun* is replaced by the nominative marker *ka* when the sentence is embedded.

(22) a. Chelswu-*nun* chencay-i-ta
        Ch.-TOP   genius-is-DEC
        'Chelswu is a genius.'
     b. Na-nun Chelswu-*ka*/-?**nun* chencay-la-ko mitnunta
        I-TOP Ch.-NOM/-TOP   genius-be-COMP believes
        'I believe that Chelswu is a genius.'

When the *nun* in (22b) is understood as a neutral topic marker, not as a contrast topic marker, (22b) is not quite acceptable. In the light of this fact, it is interesting to observe that the nominative marker *ka* cannot replace the topic marker attached to an extrinsic topic. Compare example (23) with (24)-(25).

(23) ??ne-nun <u>khephi-ka cam-i   an onta</u>-nun sasil-ul a-ni?
         you-TOP coffee-Nom sleep-NOM not comes-REL fact-ACC know-INT
         'Do you know the fact that as for coffee one can hardly fall into sleep?'
(24)   ne-nun <u>khephi-nun cam-i   an onta</u>-nun sasil-ul a-ni?
         you-TOP coffee-TOP sleep-NOM not comes-REL fact-ACC know-INT
         'Do you know the fact that as for coffee one can hardly fall into sleep?'
(25)   ne-nun <u>KHEPHI-ka   cam-i   an onta</u>-nun sasil-ul a-ni?
         you-TOP COFFEE-NOM sleep-NOM not comes-REL fact-ACC know-INT
         'Do you know the fact that as for coffee one can hardly fall into sleep?'

The extrinsic topic *khephi* does not sound natural with the nominative marker as in (23) whereas it can appear with the neutral topic marker as in (24), or with the nominative marker as in (25) only when it is heavily stressed. The contrast between (23) and (24) clearly shows that the existence of the topic marker itself is crucial in licensing the extrinsic topic. One might suppose that the

acceptability of (25) undermines this thesis. However, it must be noted that the interpretation of a focused constituent involves a presupposition that will look like (26):

(26) x-nun   cam-i   an   onta
     x-TOP sleep-NOM not comes

Given this, we may say that the topic marker plays a crucial role in the presupposition in the case of (25).

Presupposition accommodation may provide a significant means of constructing the logical form of the so-called pseudo-relative clausal construction. Consider examples in (27).

(27) a. sayngsen-i tha-nun   naymsay
        fish-NOM   burns-REL smell
        '#the smell that fish burns'
     b. sayngsen-i tha-myen na-nun   naymsay
        fish-NOM   burns-if comes+out-REL smell
        'the smell that comes out if fish burns'

(27a) has an interpretation similar to (27b); however, the interpretation is not obtained compositionally, as can bee seen in (27').

(27') a. THEx [smell(x) & [fish(y) & burns(y,e)]] --- not a wff
      b. THEx [smell(x) & [Γy,e [fish(y) & burns(y,e)] [$\exists$e'[comes-out(x,e')]]]]]]

The fragment of logical form in (27'a), which is a translation of (27a), is ill-formed and hence cannot be interpretable unless something like the underlined part in (27'b) is augmented. We propose that the same process as applies to the extrinsic topic construction is in operation here. The part of *comes out if* is accommodated by rule (5) while the interpretation of (27a) is being undergone. This is possible because our world is constructed so that the following causal relation may usually hold: some smell comes out if some fish burns.

The same may be said about the pair of (28a) and (28b).

(28) a. swulchwyha-n kelumkeli
        drunk-REL   gait
        '#the gait that people are drunk'
     b. salam-i   swulchwiha-myen nao-nun   kelumkeli
        people-NOM are+drunk-if   comes+out-REL gait
        'the gait that people makes if they are drunk'

The last case to be considered in this connection is found in conditional constructions. Bak (1992) discusses the following examples (=his (13), with a

slight notational modification) and, generally following Lee (1983), suggests that only a certain kind of pragmatic (or relevant) correlation holds between the antecedent and the consequent.

(29) mok-i   malusi-myen,   tongsan neme-ey   saym-i issupnita.
     throat-NOM are+thirsty-if hill   the+other-side-on spring-NOM exists
     'If you are thirsty, there is a spring over the hill.'

The interpretation of (29) will look like (30).

(30) If you are thirsty and <u>looking for a place to get water</u>, there is a spring over the hill.

In (30) the underlined part is to be supplemented by the rule of presupposition accommodation in (5). What we are proposing here, in other words, is that the relevant correlation is given a more concrete form by presupposition accommodation.

It is worthy noting that the relative clause marker and topic marker *nun* and the conditional marker *myen*, as proposed in Shin (1987), are instances of the archiphoneme -*n*. We interpret Shin's proposal that the archimorpheme indicates choice from contrasting alternatives, as meaning that it indicates imposition of semantic restriction. We propose that when the instances of the artimorpheme are attached to logical premises, they provide some room where the missing semantico-pragmatic relations can be restored. This must be related to the shared semantic property of the three morphemes. This is indirectly demonstrated by the following fact. The Korean language has another relative clause marker -*ul*, which indicates futurity. Interestingly, this marker can never head the quasi-relative clauses.

(31) a. *sayngsen-i tha-l   naymsay
        fish-NOM   burn-REL smell
        '#the smell that fish will burn'

     b. *swulchwyha-l kelumkeli
         drunk-REL   gait
         '#the gait that people will be drunk'

That the morphological marking is crucial in such a licensing business is further supported by the fact that if the topic marker, say, *as for* is employed, an extrinsic topic is licensed even in English and presupposition accommodation may be applied. [4]

(32) a. As for food, let's drive into town to MacDonald's.
        (Foley & Van Valin 1985: 300)
     b. As for unemployment, Australia is encountering major problems.

(Peter C. Collins, p.c.)

(33) If we want to eat food, let's drive into town to MacDonald's.

(32a), for instance, means what (33) will mean. Furthermore, when the conditional marker *if* is employed, such a missing information can be restored. Consider the following example.

(34) If anybody comes and asks about Gary, we've heard nothing about him.

The antecedent clause of (34) is not smoothly connected with the consequent. Here something like *we should tell him that* should be added for (34) to be properly interpreted. This will mean what (35) means.

(35) If anybody comes and asks about Gary, we should tell him that we've heard nothing about him.

This accommodation is presumably done by rule (5).

There still remains some unsatisfactory aspects in the treatment of the quasi-relative clauses. Even though the relative marker *-nun* is attached to the constituent which provides a certain semantic restriction, first, the restriction is not so presupposed as a topic or a conditional is. Second, the relative marker *-ul* also provides a certain restriction. It hasn't been explicated, however, why presupposition accommodation cannot apply in such cases as in (31). Considering these problems, we commit ourselves only to the proposal that presupposition accommodation be invoked to get quasi-relative constructions interpreted properly, and leave the details of the explanation open to better suggestions in the future.

4. Additional Pragmatic Constraints

Besides conditions (6)-(8) and the morphological constraint discussed in the previous section, there seems to be a pragmatico-cognitive constraint that should be imposed on the rule of presupposition accommodation. This constraint may be roughly formulated as in (36).

(36) The potential presupposition that is most easily associated with an entity *a* with respect to a proposition *b* is most easily accommodated.

The potential presuppositions which can be associated with an entity *a* with respect to an aspect expressed by a proposition *b* are defined as associated potential presupposition set below.[5]

(37) Associated Potential Presupposition Set
    a. In a model M, for all entity *a*, there is a potential presupposition set associated with *a*.
    b. $\Sigma: X \longrightarrow \Psi$, where X={⟨a,b⟩|'a' is an object and 'b' is a proposition},

and Ψ is the set of partially ordered, associated potential presupposition sets.
c. The associated potential presupposition which is closer to the given proposition 'b' in the conscious causal chain precedes the one which is not so.
d. A set of events which are in a causal chain forms a conscious causal chain iff their causing relations are known to the language user (Cf. (8b)).

Condition (36) is related to the possibility of presupposition accommodation in the following examples.

(38) a. ywuli   cong-ul   ttayli-myen   malkun   soli-ka   nanta.
     crystal bell-ACC hits-if   resonant   sound-NOM comes+out
     'If one hits the crystal bell, resonant sound comes out (of it).'
  b. ywuli   cong-un   malkun   soli-ka   nanta.
     crystal bell-TOP resonant   sound-NOM comes+out
     'As for crystal bells, resonant sound comes out of them.'

Rule (5) accommodates the presupposition of *if one hits it* into the logical form of (38b). One may ask why a presupposition like *if one breaks it* is not accommodated here? An appropriate answer to this question will be that the presupposition of *if one hits it* is more easily associated than the other with the object denoted by *the crystal bell* with respect to the proposition *this sound comes out*. The relevant associated potential presupposition set will look like (39):

(39) Σ(⟨the crystal bell, resonant sound comes out⟩) = ⟨if one hits it, if one breaks it, if one scrubs it, ...⟩

In connection with such an associated potential presupposition set, consider the following examples.

(40) a. sayngsen-i tha-myen masissnun   naymsay-ka nanta
     fish-NOM   burns-if flavorous smell-NOM   comes+out
     'If fish burns, flavorous smell comes out (of it).'
  b. sayngsen-un   masissnun   naymsay-ka nanta
     fish-TOP   flavorous   smell-NOM comes+out
     'As for fish, flavorous smell comes out of it.'

It seems that the associated potential presupposition set of fish with respect to the presupposition *this smell comes out* will look like (41):

(41) Σ(⟨fish, flavorous smell comes out⟩) = ⟨if it burns, if one cooks it, ...⟩

In a neutral context, nevertheless, sentence (40b) cannot be understood as what (40a) means. Rather, it shows a strong tendency to mean that fish itself smells in this way. That is, no presupposition seems to be accommodated here. What makes the difference between its possibility in (38b) and its impossibility in (40b)? As a part of our world knowledge, we know that a bell does not make any sound unless some force is given to it to do so, whereas fish generally has some smell even when no manipulation is given to it. This shows that actual presuppositions, which constitute the world knowledge, always outrun potential presuppositions in the competition to be accommodated. This phenomenon is observed when both presupposition inheritance and accommodation can apply: always the presupposition inheritance outruns the other because the first incorporates an actual presupposition whereas the latter a potential presupposition. This may be captured through a pragmatic elsewhere condition such as in (42).

(42) Pragmatic Elsewhere Condition on Presupposition Incorporation
First, apply rules incorporating actual presuppositions; then apply rules incorporating a potential presupposition.

Here let us go back to examples (12a) and (15), repeated below as (43) and (44).

(43)   *polumtal-un   cam-i   an onta
         full+moon-TOP   sleep-NOM not comes
        '#As for the full moon, one can hardly sleep.'
(44) ?(?)polumtal-un   kasum-i   sellaynta
         full+moon-TOP   heart-NOM   gets+restless
        '#As for the full moon, one's heart gets restless.'

The associated potential presupposition sets to which the topics and the comment propositions are mapped will look like (45a) and (45b).

(45) a. Σ(⟨the full moon, one can hardly sleep⟩) = ⟨if it rises, if it is
         bright, if one sees it, ...⟩
     b. Σ(⟨the full moon, one gets restless⟩) = ⟨if one sees it, if it rises, .
         if it is bright, ...⟩

The first associated potential presupposition related to (43), *if it rises*, does not share a variable with the comment proposition *one can hardly sleep*, whereas the one related to (44), *if one sees it*, does. In other words, the contrast under scrutiny is based on this different associated potential presuppositions.
   One might ask why the associated potential presupposition sets are ordered as in those in (45). We may be able to figure out more accurate ordered sets if we inquire into this problem using a questionaire method and collecting relevant data. It seems to lie beyond the scope of this paper.

5. Final Remarks

We have tried to show that besides the contraints Ahn & Kim (1992) propose, presupposition accommodation is subject to a morphological constraint and to two additional pragmatic constraints as in (36) and (42). Remaining tasks include illucidating associated potential presupposition sets and undertaking a cross-linguistical, comparative research on extrinsic topic construction. In particular, it will be interesting to see what the semantico-pragmatic constraint on the English topic-markers *as for, speaking of, in terms of* and others, and their counterparts in other languages.

NOTES

*   A preliminary version of this paper was presented at the Asian Conference on Language, Information, and Computation, August 1 - August 2, 1992, Korea Univ., Seoul. We are grateful to the audience, especially to Prof.'s Emmon Bach, David Gil, Kiyong Lee, and Ik-Hwan Lee, for their invaluable comments, suggestions, and interest at the conference. All remaining errors are, of course, our own.

1. G is the inherently vague operator, which is proposed in Farcas & Sugioka (1983) as a translation of *generally*, and which functions as the default operator for a sentence which does not have an explicit quantifier.

2.   When this paper was presented adopting (11a), Ik-Hwan Lee suggested logical forms which are in line with (11b). We've decided to stick to logical forms like (11a), since it can represent the topic as well. Cf. Ahn & Kim (1992) for a discussion on this matter.

3.   We presume that the logical form in (14) will be changed into (i) by the role of presupposition accommodation in (5), which accommodates *sees(y,x,e")* along with appropriate operators.

(i) Gx, e [full-moon(x) & $\underline{rises(x,e)}$] [$Gy, e"$ [sees(y,x,e")]] [$\exists e'[S(y,e')]$]]]

4.   The Korean language allows the bare (or marker-less) topic to be licensed. Consider example (i).

(i) khephi, cam   an wa.
    coffee, sleep not comes
    '#As for coffee, one cannot fall into sleep.'

We, however, observe that in this case a rising tone tends to be inserted after the extrinsic topic expression. We propose that this tone marks the extrinsic topic phonetically. With respect to David Gil's (p.c.) comment that languages like Chinese and Thai do not have any morphological topic marker but have extrinsic topic constructions, we suspect that they are marked phonetically in a similar way when they are extrinsic. If this is not the case, our proposal in

this section will lose its generality considerably.

How far can the topics and their comments be unrelated in English? This is another interesting question to pursue. We won't be able to do that here.

5. Emmon Bach pointed out at the conference a case where two or more presuppositions share the immediately preceding and the immediately succeeding element. In this case, vagueness will arise and might be resolved by the context.

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