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EDITED BY:

MICHAEL W. LA GALY

ROBERT A. FOX

ANTHONY BRUCK

GB 500.069/101

Universität Tübingen
FB. NEUPHILOLOGIE
BIBLIOTHEK

CHICAGO LINGUISTIC SOCIETY
GOODSPEED HALL
1050 EAST 59TH STREET
CHICAGO, ILLINOIS 60637

1076175

FURTHER AND'S AND BUT'S ABOUT CONJUNCTION

Marga Reis
Universität München

1. The further and's and but's I want to add about conjunction all relate to the projection problem for coordinate structures. In dealing with this problem, Karttunen proposes (1973, 176ff.) that conjunctions like if-then, and, or be considered as filters, filters being "predicates which, under certain conditions, cancel some of the presuppositions of the complement" (p.174). In particular, he proposes the following filtering condition for and:

- (1) "Let S stand for any sentence of the form "A and B".
a. If $A \gg C$, then $S \gg C$.
b. If $B \gg C$, then $S \gg C$, unless $A \Vdash C$ "¹.

This filtering condition mirrors the way in which ordinary discourse usually proceeds: Old information precedes new information, old information is a matter of presupposition; hence, what is presupposed at the beginning of an utterance will remain presupposed throughout, hence (1a)². On the other hand, what has been asserted within an utterance will stand as an assertion throughout, no matter whether, later on in the utterance, it is repeated as a presupposition or not; hence (1b). Being thus in accord with what is normal, it stands to reason that (1) will yield the right results in the majority of cases. It correctly predicts, for example, that the sentences (2a), (3a) will not presuppose their corresponding c-sentences, and it is certainly not wrong in claiming that the b-sentences do presuppose (2c) and (3c) respectively, since the major intuition about (2b), (3b) is that they are pragmatically unacceptable to begin with.

- (2)a. Hans ist verheiratet und seine Frau ist noch berufstätig.
b. Hansens Frau ist noch berufstätig und Hans ist verheiratet.
c. Hans hat eine Frau.
(3)a. In dieser Stadt und nur in dieser möchte ich leben.
b. Nur in dieser Stadt und in dieser Stadt möchte ich leben.
c. In dieser Stadt möchte ich leben.

What is normally correct need not, however, always be. To this, it will turn out, Karttunen's filtering condition (1) is no exception. By presenting counterexamples against (1a) as well as (1b), I should like to argue specifically two points:

- (4)a. There is no filtering asymmetry between the conjuncts of a coordinate structure.

b. It is sometimes not sufficient and sometimes not necessary that C, in order to be filtered out, stands to the relevant conjunct in the relation of semantic entailment.

2. Let me first take up (1a), the condition crucial to (4a). In examining its validity, four cases must be distinguished:

- (5)a. $A \gg C$, $\neg(A \rightarrow C)$; $\neg(B \Vdash C)$, hence $\neg(B \gg C)$.
b. $A \gg C$, $\neg(A \rightarrow C)$; $B \gg C$, hence $B \Vdash C$.
c. $A \gg C$, $A \rightarrow C$.
d. $A \gg C$, $\neg(A \rightarrow C)$; $B \rightarrow C$.

Regarding (5ab), (1a) is no doubt correct, cf. the sentences in (6), and I shall not bother with them any further. Note that in both cases A could be interpreted as the second, B as the first conjunct without any change in the filtering results: With respect to (5ab) both conjuncts exhibit symmetric behaviour, and this is correctly allowed for by (1).

- (6)a. Pauls Kollegen sind jünger und sein Chef ist älter als er.
C: Paul hat Kollegen. $S \gg C$
b. Es ist schade, daß Hans geht, aber nicht überraschend.
C: Hans geht. $S \gg C$

In (5c)-cases, on the other hand, S does not seem to presuppose C, cf. (7):

- (7) Der Mann, der gewonnen hat, hat (nun mal) gewonnen, und du solltest es endlich glauben, daß er gewonnen hat.

Thus, sentences like (7) constitute counterexamples to (1a). Regarding (4a), however, they are of marginal importance: Since C is filtered out within the conjunct by which it is also presupposed, the question of symmetry does not really arise.

The interesting case is (5d), regarding which the asymmetry in Karttunen's filtering condition arises: If (5d) obtains, the conjunction as a whole is claimed to presuppose C (by virtue of (1a)); if A and B were, however, interchanged, C would be filtered out (by virtue of (1b)). Note, however, that only (1b), but not (1a) is well supported in this respect: Since there are no clearly acceptable (5d)-type sentences confirming (1a) on record, the main point in its favor is that, up to now, no pertinent counterexamples have been adduced either. This state of affairs reflects the fact already alluded to: (5d)-type sentences normally do not occur. Thus, with respect to (5d), (1a) seems not stronger than the claim made by (8); in fact, given the so far available (non)evidence, (8) is the only legitimate reading of (1a) regarding (5d).

(8) Pragmatically acceptable (5d)-type sentences never occur.

(8), however, is false, and so is (1a). Consider the following examples:

- (9) Hans weiß, daß Gretchen Sorgen hat / und sie hat Sorgen.
 / und Sorgen hat sie auch.
 / und Sorgen hat sie weiß Gott.
 / und daß sie welche hat, ist leider wahr.
- (10) Du hast es vielleicht nicht bemerkt, daß Erna Max betrogen hat / aber sie hat ihn betrogen.
 / aber getan hat sie es (trotzdem).
 / aber es ist (dennoch) wahr.
- (11) Es ärgert Fritz, daß er verloren hat / aber er hat verloren.
 / aber es ist nun einmal passiert.
- (12) Hans ist traurig und zugleich wütend darüber, daß ich so eifersüchtig bin / aber ich bin eifersüchtig.
 / aber ich bin es nun mal.
 / aber ich bin halt so.
- (13) Meiers Kinder sind zwar dumm und reizlos, aber er hat wenigstens welche.
- (14) Fritz hat zwar jetzt damit aufgehört seine Frau zu schlagen, aber früher hat er das getan, fragt sie nur selbst.
- (15) Ich habe den König von Frankreich zwar noch nicht gesehen, aber es gibt ihn.

Many of the sentences in (9)-(15) contain the connective aber instead of und. While the use of aber is frequently responsible for the acceptability of the sentences involved⁴, this does not vitiate the argument I am about to make: First, in these sentences aber no doubt behaves syntactically like a coordinating conjunction; semantically "A aber B" and "A und B" constructions can be said to have the same assertional structure "A ∧ B", the difference in meaning being attributable to the additional presuppositions of aber. Second, aber has the same filtering properties as und in all clear cases, cf. (16)-(17).

- (16) Ich habe im Lotto gewonnen, aber behalte das für dich!
 C: Ich habe im Lotto gewonnen.
 A ⊢ C, B ⊃ C: ¬(S ⊃ C), cf. (1b).
- (17)a. Hansens Bruder weiß, daß Jo sitzenbleibt, aber er selbst weiß es noch nicht.
 C₁: Hans hat einen Bruder. C₂: Jo bleibt sitzen.
 A₁ ⊃ C₁, ¬(B ⊢ C₁): S ⊃ C₁, cf. (1a).
 A ⊃ C₂, B ⊃ C₂: S ⊃ C₂, cf. (1a).
- b. Hans machte die Tür nicht zu, aber sie war offen.
 C: Die Tür war offen.
 A ⊃ C, B ⊢ C: S pragmatically unacceptable.

Hence, all of the sentences in (9)-(15) can be taken to be true coordinate constructions, falling into the domain of filtering condition (1).

Leaving aside the superficial formal differences introduced by reduction, deletion, pronominalization, permutation rules, all of the sentences in (9)-(15) exhibit the same relationship between first and second conjunct: The second asserts or logically entails what the first presupposes. Take, for example, one of the versions of (10): Here the first conjunct (18) presupposes (20); the second conjunct (19), however, logically entails (20), since not only "(19) → (20)" is true, but also "¬(20) → ¬(19)".

- (18) Du hast es nicht gemerkt, daß Erna Max betrogen hat.
 (19) Es ist (dennoch) wahr, daß Erna Max betrogen hat.
 (20) Erna hat Max betrogen.

Thus, (9)-(15) are all instances of the (5d)-pattern; yet, they are fully acceptable. An explanation is not hard to find: The normal (5d)-type sentences such as (2b), (3b), (17b) are bad because they are pointless: Simply stating in the second conjunct what has been presupposed in the first, does not add any new information whatever. But the parallel assertions in (9)-(15) are far from pointless: In (9), (10), (14), (15), for example, by emphatically asserting C (the presupposition of A), the truth of C is defended against doubts possibly invited by stating (conceding) A; these sentences thus have the illocutionary force of (re)assurances. In sentences like (11), (12), since the assertion of C is directed against the wish for "¬C" entailed by the first conjunct, it takes on the additional meaning of "nothing can be done about C", "C can't be helped"; this allows sentences like (11), (12) to function as excuses, advice to put up with certain facts, etc. The illocutionary force of repetitious assertions varies, obviously, with the meaning of the matrix verb in A, content of C, subject of matrix and presupposition. All of them, however, have in common that they add in some way to the information provided by the first conjunct, the additional meaning usually being indicated by devices like emphatic stress, affirmative adverbs and predicates in the case of reassurances, concessive adverbs in cases like (13), modal particles like nun einmal, halt in the case of the "can't help" meaning. Since unacceptable repetitious assertions exhibit none of these features, we might take the possibility of informative (and correspondingly emphatic) assertion as characteristic of acceptable (5d)-type conjunctions.

Do the compound sentences (9)-(15) share the presuppositions of their respective conjuncts, as (1a) predicts? The answer clearly depends on what is considered the crucial

difference between S presupposing C and S asserting C. If our intuitions are guided by (21) or, putting it more operationally, by (21'),

- (21) S does not presuppose C, if it (also) asserts C.
 (21') S does not presuppose C, if C is sensitive towards the usual tests: negation, questioning, modal contexts, natural response (involving questioning, means expressing internal negation, etc.).

then the compound sentences (9)-(15) do not presuppose the first conjunct presuppositions in question: In accordance with (21), C is in every case asserted, and this emphatically. In accordance with (21'), C qualifies as an assertion under the natural response test, cf. the possible responses (22) to anybody uttering a sentence like (9)-(15): All of them may, in principle (and often more naturally), be understood to refer to the second conjunct; none of them need, in principle, involve external negation, and usually doesn't.

- (22)a. Das trifft nicht zu. d. Glaub ich nicht.
 b. Nein, das ist nicht wahr. e. Wirklich?
 c. Kann ich nicht finden. f. Ach, findest du?

But even if our intuitions were based on a more pragmatic concept like (23),

- (23) S presupposes C, if and only if the truth of C is taken for granted already before uttering C (for example, by C having been introduced prior to S and been accepted by the speaker of S).

sentences like (9)-(15) still could be said not to share the presuppositions C of their first conjuncts, since, by uttering S, C may be asserted for the first time. Thus, (10) may be said in objecting to (24), (12) may be part of the answer to (25); neither situation presumes prior acceptance of C by either speaker or hearer⁶.

- (24) Erna war Max immer treu. - Na, na: _____
 (25) Wie geht es Hans? - Ach, nicht gut: _____

Since there is no third option (apart from circularly basing our intuitions on (1a)), we may conclude that in acceptable (5d)-type sentences the presuppositions of the first conjuncts are filtered out. Hence, (1a) is false; it must be revised so as to be symmetric to (1b). From this it follows that (4a) is correct.

The schema of such a revised filtering condition for

coordinate structures is given in (26). It should be clear that (4a) is not meant to say that every (5d)-type sentence is pragmatically acceptable, - just that, if they are acceptable and compatible with the meaning requirements of the respective conjunctions, then (26) holds.

- (26) Let S stand for any coordinate structure of the form " X_1 und/aber X_2 ... und/aber X_n " (for aber $n=2$).
 $X_1 \triangleright P$, then $S \triangleright P$, unless X_j rel P.⁷

3. Let me next turn to (4b). Given (26), the problem may be phrased as follows: Under what interpretation of rel will (26) be correct?

3.1. Note first that under a symmetric formulation, rel cannot simply be specified as "semantically entails". If it were, the presuppositions of sentences like (6b), (27) would, incorrectly, be filtered out, since what is presupposed is also semantically entailed.

- (27) Pauls Kinder sind süß und Paul liebt sie sehr.
 P: Paul hat Kinder.
 $X_1 \triangleright P$, $X_2 \triangleright P$; $S \triangleright P$.

In order to exclude filtering in such cases, the unless clause in (26) must at least specify that, in addition to " X_j rel P" being true, also " $\neg(X_j \text{ rel P)$ " holds. Hence (referring to the semantic relation defined by these two conditions as "implication"), X_j will at least have to imply P ($X_j \triangleright P$), in order to be credited with filtering power.

"Implication", however, may not be the correct substitute for rel either. In all filtering cases cited so far, P usually was logically entailed, even logically equivalent, to X_j . While logical equivalence, clearly, would be too strong a requirement, cf. (28),

- (28) Hans und Peter blieben sitzen, aber die Eltern wunderten sich nur im Falle Peters, daß er sitzenblieb.
 P: Peter blieb sitzen. $X_1 \rightarrow P$, $\neg(P \rightarrow X_1)$, $X_2 \triangleright P$; $\neg(S \triangleright P)$.

matters are less clearcut regarding logical entailment vs. implication, cf. (29)-(32), where P is only implied, not logically entailed by the respective conjunct (s. Karttunen 1971):

- (29) Hans konnte nicht anwesend sein, aber seine Abwesenheit störte niemand.
 P: Hans war nicht anwesend; $X_1 \triangleright P$, $X_2 \triangleright P$.
 (30) Hans war so nett mitzukommen, und alle waren dankbar, daß er mitkam.
 P: Hans kam mit; $X_1 \triangleright P$, $X_2 \triangleright P$.

(31) Hans vergaß, Blumen mitzubringen, und Erna war sehr erstaunt, daß er keine mitbrachte.

P: Hans brachte keine Blumen mit; $X_1 \triangleright P$, $X_2 \gg P$.

(32)a. Hans wurde gezwungen auszusagen, und daß er aussagte, war für seine Genossen von größtem Nachteil.

b. Hans wurde gezwungen auszusagen, und deshalb ist seine Aussage null und nichtig.

P: Hans sagte aus; $X_1 \triangleright P$, $X_2 \gg P$.

Intuitions about these sentences are mixed: In (29)f. P seems to get filtered out by X_1 , similarly in (32a), whereas in (32b) P definitely is a presupposition of the sentence as a whole; regarding 31, intuitions are unclear. The reason is not hard to find: Although the first conjuncts of (29)-(32) all have the same logical form, they differ as to the assertional prominence of their implications P. Two factors seem relevant in this respect: First, the semantic load of the matrix predicates - the 'lighter' it is, the smaller the semantic difference between the full sentence X_1 and the implication P gets. Hence, asserting sentences containing predicates as empty (or predictable as to content, given P) as nicht können (cf. English fail, happen, turn out), will practically amount to asserting the respective implications themselves. Accordingly, in sentences (29)f. P is filtered out, whereas with semantically complex items like sich herablassen, zwingen, vergessen, sich die Zeit nehmen, this is neither necessarily nor usually the case. Second, it is important whether the matrix verbs are used assertionally or adassertionally, the difference being that in the former case, the semantic content of the verbs figures centrally in the assertion, with P remaining in the background, whereas in the latter case P is asserted, the matrix verb acting only as some sort of qualifier (s. also Liberman 1973). It stands to reason that the normal use of semantically empty predicates will be adassertional, likewise that of unemphatic emotive predicates like so nett/klug/dumm sein; but with semantically complex items assertional:adassertional ambiguities do indeed show up, cf., with respect to X_1 , (32b), where zwingen is central and P in the background (even presupposed, given the almost unavoidable stress on zwingen in this context), vs. (32a), where the point of the assertion is P, the syntactic matrix verb providing only second-rate information.

What we should like to say, then, is that (26) should be specified as (26'), no matter whether the asserted proposition P comprises the meanings of all or of the topmost elements of the surface sentence or not.

(26') If $X_1 \gg P$, then $S \gg P$, unless X_j actually asserts P (in a given utterance of S).

Converting this formulation, however inappropriately⁹, into a statement concerning the logical relation between X_1 and P, it seems, however, that "logically entails" rather than "implies" is the correct interpretation of rel: In all clearly adassertional cases (which are also the cases where P gets filtered out) not only " $X_1 \Vdash P$ " but also " $\neg P \Vdash \neg X_1$ " is true, cf. (29)f., that is X_1 logically entails P, whereas in clearly 'assertional' cases like (32b), where " $\neg P \Vdash \neg X_1$ " does not hold (but possibly " $X_1 \gg P$ "), no filtering takes place either. This also generalizes to the intermediate cases, where our intuitions that P is filtered out get stronger/weaker depending on whether the relation between X_1 and P approaches logical entailment/presupposition respectively. Hence, if filtering conditions are to be stated in terms of semantic relations, rel in (26) should be replaced by "logically entails", cf. (26"), and thus the first part of (4b) is proven correct.

(26") If $X_1 \gg P$, then $S \gg P$, unless $X_j \rightarrow P$.

3.2. I take (26") to be the standard filtering condition for basically coordinate sentences, no matter whether conjoined by und, aber, doch, mere juxtaposition, or transformed into parenthetical, appositive, or niching constructions. There are, however, exceptions, showing the second half of (4b) to be correct. I shall discuss two types of exceptions. The first is illustrated by sentences such as (33)f.:

(33)a. Es hat den Anschein, /Vieles spricht dafür, daß Paul entkam, und seine Frau dürfte sich gefreut haben, daß er entkam.

P: Paul entkam; $X_1 ? P$, $X_2 \gg P$.

b. Vieles spricht dafür, daß Paul entkam, noch mehr aber dagegen.

(34)a. Hans konnte Erna behilflich sein, und Erna war ihm für seine Hilfe dankbar.

P: Hans war Erna behilflich; $X_1 ? P$, $X_2 \gg P$.

b. Hans konnte Erna behilflich sein, doch dann wagte er es nicht, ihr seine Hilfe anzubieten.

In neither case is " $X_1 \rightarrow P$ " or " $X_1 \Vdash P$ " true, as shown by the respective b-sentences, where X_1 acceptably appears in contexts implying " $\neg P$ ". It can only be said that, in the absence of evidence to the contrary, X_1 invites the inference that P (s. Karttunen 1971, 20f.); but, nevertheless, P is filtered out. This can be taken to mean that the filtering condition (26") is sometimes too strong. What it should be taken to indicate, however, is, probably, that the assumption underlying it as well as (1) - that only logical relations between X_1 and P are crucial in filtering - is too strong: Note that (33)f. could have been accommodated by (26') without any trouble.

Second, consider examples (35)-(38):

- (35) Hans glaubt, [daß er verloren hat]₁ und ärgert sich darüber.
P: Hans₁ hat verloren; X₂ » P.
- (36) Hans bildet sich ein, [er hätte im Lotto gewonnen]₁ und freut sich schrecklich darüber.
P: Hans hat im Lotto gewonnen; X₂ » P.
- (37) Hans hat das Gefühl, daß er betrogen wurde, und tut nun alles um nicht wieder betrogen zu werden.
P: Hans wurde betrogen; X₂ » P.
- (38) Erna glaubt, daß Fritz früher seine Frau schlug, hofft aber, daß er zwischenzeitlich damit aufgehört hat.
P: Fritz hat früher seine Frau geschlagen; X₂ » P.

Again, it is never the case that S presupposes P, although P is presupposed by X₂ and neither logically nor semantically entailed by X₁, nor asserted for that matter. Thus, (35)-(38), too, are counterexamples to (26"), but this time also to (26').

This points to a striking difference to the other filtering cases previously discussed: In all of them, the speaker remains committed to the truth of P; only the mode of the commitment changes: Instead of (only) presupposing P, he (also) asserts it. In sentences like (35)-(38), however, P constitutes only part of what is predicated of the subject of S and his beliefs; there is no commitment by the speaker of S to the truth of P as such. In fact, the speaker may always acceptably add to X₁ disclaimers like zu Unrecht, irrtümlicherweise, indicating his belief that P is false.

Sentences like (35)-(38) thus are comparable to sentences containing "plugs" or "world-creating predicates", plugs being defined as "predicates which block off all the presuppositions of the complement sentence" (Karttunen 1973, 174), world-creating predicates as predicates which block only those presuppositions in their sphere (complements) that have been explicitly introduced as holding in their sphere (s. Morgan 1969, 170ff.). In either sentence type the speaker is likewise relieved of his commitment to P, with P figuring as part of the assertion about the subject of S. Nevertheless, in accounting for (35)-(38), neither concept is of great explanatory value as it stands: If all propositional attitude expressions were considered as plugs¹⁰, this would only dispose of (38), where hoffen would block P within X₂ itself; the analogous sentences (35)-(37), that do not contain any plugging predicates in X₂ at all, would still be unaccounted for. Moreover, classifying verbs of belief etc. as plugs is quite ad hoc, since they, unlike bona fide plugs such as sagen, are supposed to block only some, but not all presuppositions of the respective complements, cf. X₂ in (38), which still presupposes (40ab), with (39) which does not:

- (39) Erna sagt, Fritz habe in der Zwischenzeit aufgehört, seine Frau zu schlagen.
- (40)a. Es gibt Fritz. b. Fritz ist verheiratet.

Neither would it be sufficient to treat (35)-(38) as instances of world-creating sentences, a bona fide example of which is provided by (41):

- (41) Hans träumte, daß er im Lotto gewonnen hatte, und daß er/seine Frau darüber ganz unglücklich war.
P: Hans hat im Lotto gewonnen. P₂: Hans ist verheiratet.
X₁¹ → P₁, X₂ » P₁, P₂; ¬(S » P₁), ² S » P₂.

For although the propositional attitude expressions in X₁ of (35)-(38) have the same selective filtering effects as träumen in (41), there are crucial differences: In (35)-(38), X₂ (the presupposition of which is blocked) is not embedded under the putative world-creating matrix predicate of X₁, not "in its sphere", whereas in (41) it must be; on the other hand, in (35)-(38) the subjects of the conjoined propositions must be co-referential, if P is to be filtered out, cf. (42), whereas in (41) they need not be. Moreover, only unnegated belief predicates may function as matrix predicates in sentences like (35)-(38); other world-creating expressions, for example, träumen, hoffen, wünschen, zweifeln, nicht glauben, may not, cf. (43), although they are all acceptable in sentences like (41).

- (42) Hans glaubt (auch), daß er verloren hat, und sein Trainer bedauert es, daß er verloren hat.
- (43) Hans träumte immer davon, im Lotto zu gewinnen und des halb freut er sich so, daß er im Lotto gewonnen hat.

Sentences like (35)-(38) thus remain a tough nut for any projection theory to crack¹¹. Perhaps, the best way out would be to handle them outside of the projection problem altogether - for example, by acknowledging in our general presupposition theory that the particular propositions P₁...P_n invariably associated as use conditions with particular linguistic expressions L₁...L_n which are said to be presupposed by a speaker using L_i, can be taken to be so presupposed only in the absence of evidence to the contrary, the only possible contrary being that P_i belongs to the assertional part of the meaning of L_i. This may sound ad hoc, but in view of the many cases where the distinction between assertional and presuppositional meaning of L_i is blurred (cf. gestehen, leugnen, abstreiten), gives rise to polysemy (cf. vergessen, erinnern, many verbs of saying), may shift, varying with context (cf. stehlen, ausreißen, fangen), it should not be too surprising, if more systematic, constructional means for forcing such a

shift should exist. If such a solution were adopted, however, then sentences patterning like (35)-(38) should, strictly speaking, not be treated under the same heading as the other filtering cases, since the failure of S to presuppose P would belong, in origin and effect, to an entirely different category.

FOOTNOTES

- ¹p. 179. "A » C" means "A presupposes C"; "A ⊢ C" means "A semantically entails C", where semantic entailment differs from logical entailment ("A → B") in that for the former only modus ponens but not modus tollens necessarily holds.
- ²This presupposes that there is no such phenomenon as presupposition cancelling by special cancelling phrases, a position that has been successfully advocated in Karttunen 1971a.
- ³For reasons of native speaker competence I shall use German examples throughout; but as far as I can see, the same case could be made based on data from English or from any other language for that matter.
- ⁴Some conditions under which und/aber (and/but) sentences such as (9)-(15) are acceptable have been discussed in Reis 1973.
- ⁵Due to their particular make-up and illocutionary force, constructions like (9)-(15) can never be embedded nor negated or questioned as a whole; hence, none of the other more usual tests can apply.
- ⁶Cf. also sentences like Tut mir leid, aber ich muß Sie verhaften., Du hast es vielleicht nicht bemerkt, aber Erna hat Max betrogen., Komisch, aber ich habe schon wieder Hunger., which very likely derive from the same deep structures as sentences (9)-(15), but are primarily used for introducing new information in the aber conjunct, the first conjunct being reduced to some sort of adassertional qualifier.
- ⁷In view of examples like (7), it is unnecessary to require that X_i and X_j be distinct, although, of course, they normally will be.^j
- ⁸Suggestive evidence for this is provided by the following facts: Some of the empty English implicative verbs, for example happen, fail, can only be translated by adverbs in German; the adassertional so+Adj+S constructions may all be paraphrased with -weise adverbs or und -coordinations, showing S to be asserted, cf. with (30): Netterweise kam Hans mit., Hans war so nett und kam mit.

⁹With "actually asserts" an essentially pragmatic term is used, thus showing from yet another angle that due to the possible discrepancy between syntactic and assertional structure (although in large part predictable from the items involved) there is a pragmatic dimension to the projection problem apart from the "assumed context" problem discussed in Karttunen 1973, 1973a. Cf. also Liberman 1973.

¹⁰As suggested by Karttunen (1973, 188ff.) in order to account for sentences such as (38).

¹¹Note that the problem posed by these sentences is independent of the 'projection' approach to the problem of what the presuppositions of compound sentences are. Thus it will not disappear just by giving up this approach altogether (as has been done, for example, in Karttunen 1973a). The same is true, by the way, for the other problems discussed in the present paper.

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