BELLA COOLA CONJUNCTIVE PARTICLE USAGE

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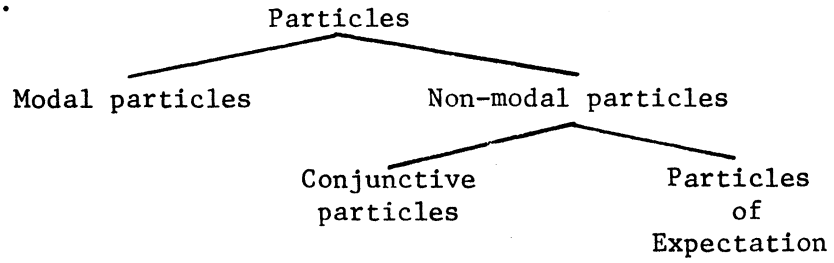
0.0 Introduction

This paper concerns the determination and description of the circumstances appropriate to the use of the conjunctive particles tu? and ?ic'ik in Bella Coola, an isolate of the Salishan language family which is spoken in the village of Bella Coola in central, coastal British Columbia.[1]

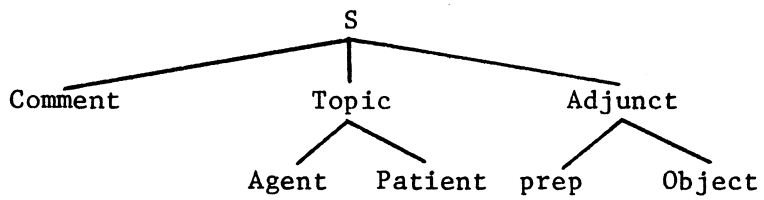
0.1 Particles in Bella Coola divide (as in Fig.1) into Modal and Non-modal particles. This division is based on whether the particle signals a diadic relationship between the speaker and the Narrated Event (E^n) or a triadic one involving the speaker, his audience and the Narrated Event.[2] For example, if a speaker is observing the Cooperative Principle (Grice,1975) a declarative sentence lacking a modal particle signals that the speaker knows that his assertion is true. If, for whatever reason, the speaker wishes to signal that his knowledge of the narrated event is such that he cannot guarantee its truth, he must employ one of the set of modal particles. From this set he may choose, according to the specific circumstances. the Dubitative ma, the Inferential Dubitative ck, the Quotative k^w, etc.

Non-modal particles divide into Conjunctive Particles (C.P.) and the Particles of Expectation. Both of these involve a triadic relationship among speaker, audience and narrated event. Their difference is in syntactic function; the conjunctive particles conjoin sentences, the particles of expectation do not. For a detailed treatment of one of the particles of expectation, see Saunders and Davis 'Bella Coola su'.

Figure 1.



0.2 Bella Coola is a VSO language. We have described the underlying representation of simple sentences as below (cf. Davis and Saunders, Bella Coola Syntax).



where Patient under Topic and Adjunct under S are optional constituents. The underlying representation of conjunct sentences is posited as S_o S_1 conj. S_2. A rule moves the conjunction to the right of the Comment of the second of the conjoined sentences. Thus on the surface we find:

$$\underset{S_1}{[....]} \quad \underset{S_1}{[} \; \underset{S_2}{[} \text{ Comment+ CP] [Topic] [Adjunct] } \underset{S_2}{]}$$

The conjunctive particles are restricted to sentence conjunction. Phrasal conjunction in Bella Coola employs a different form n̓, and is restricted to Agent, Patient and Object constituents as in:

1. talaws-aw snac n̓ snic
   'Snac and Snic are married.'
2. ʔat'-aɬ-ic ti-pot-nu-tx n̓ ti-pot-c-tx
   'I painted your boat and my boat.'
3. sp'-ɬ-is ti-ʔimlk-tx ti-papnk-tx ʔaɬ ti-stn-tx n̓ ti-mila-s-tx
   'The man hit the snake with a stick and his cane.

0.3 On Sentence Conjunction

Lakoff (1971) posits a condition on sentence conjunction to the effect that "Two sentences may be conjoined if one is related to the other, or if they share a common ... [theme][3]. For a common theme to be present, at least one set of paired constituents must be identical or reduce, via common presuppositions and deductions to a statement of identity. For example:

4. John is married and John is happy.

where the common theme is manifest in the explicit identity of the Subject in both sentences, i.e., John = John.

5. Bachelors eat Wheaties and unmarried men enjoy their breakfast.
where the common theme resides in the semantic identity of the terms 'bachelors' and 'unmarried men',i.e., bachelors = unmarried men.

6. Ford went skiing and the President fell several times.
where the common theme resides in the referential identity of the terms 'Ford' and the 'President'i.e., Ford = the President.

7. John wants to go skiing and Mt. Seymour has plenty of snow.
where the common theme must be deduced, perhaps as follows:

a) Snow is a requisite to skiing.
b) If there is snow on Mt. Seymour, it is a good time to go skiing there.
c) Therefore John should go skiing on Mt. Seymour.
d) to go skiing = to go skiing.

0.4 Sentence Conjunction in Bella Coola

The presence of a common theme is also a condition for sentence conjunction in Bella Coola.

8. * muq^{w}-u?ɬ-ø ti-yalq-u?ɬ-nu-tx; qup'-ɬ-is $\begin{matrix}tu?\\ ?ic'ik\end{matrix}$ snac nanus.
? 'Your ball is red $\begin{matrix}and\\ but\end{matrix}$ Snac punched Nanus.'

Sentence 8. lacks a common theme and is therefore ungrammatical.

9. muq^{w}-u?ɬ-ø ti-yalq-u?ɬ-nu-tx; ?aχ^{w}-ø $\begin{matrix}tu?\\ ?ic'ik\end{matrix}$ xɬ-yalqu?ɬ-c
'Your ball is red $\begin{matrix}*and\\ but\end{matrix}$ I do not have a ball.'

In sentence 9. a common theme can be deduced to be that of possession or non-possession of a ball. S_1 asserts that the hearer has a ball, which is red while S_2 asserts that the speaker does not have a ball. Because a common theme can be deduced, sentence 9. is a grammatical conjunct sentence in Bella Coola.

10. ya-ø snac; ya-ø tu? snic
'Snac is good and so is Snic.'

In sentence 10. the common theme is explicit in the identity of the paired Comments, ya 'to be good.'

Not all paired constituents of two conjoined sentences may match,i.e., the common theme condition stops short of complete identity of the conjoined sentences. Cf. sentence 11.

11. *ya-ø snac; ya-ø tu? snac
'Snac is good and Snac is good.'[4]

This means that, in addition to the presence of a common theme. there must also be present at least one set of paired constituents that do not match. That is, the necessary condition for sentence conjunction is that there must be at least one set of matching paired constituents in the conjoined sentences (the minimal common theme) and no more than n-1 pairs of matching constituents (the maximal common theme), where n equals the total number of paired constituents. This condition yields a continuum along which two conjoined sentences may vary in the number of matching or non-matching paired constituents within the limits of the minimal and maximal common themes. We call this continuum the Thematic Contrast Continuum, or in short the Contrast Continuum. In section 1.1 we consider the Thematic Contrast Continuum as a possible determinant for the circumstances appropriate for the use of the conjunctive particles.

1.0 The Bella Coola Conjunctive Particles tu? and ?ic'ik

Consider the sentences 12. and 13.:

12. muq^{w}-u?ɬ-ø ti-yalq-u?ɬ-nu-tx; muq^{w}-u?ɬ-ø tu? ti-nap-c-tx
'Your ball is red and so is mine.'

13. muq^{w}-u?ɬ-ø ti-yalq-u?ɬ-nu-tx' ;?aχ^{w}-ø ?ic'ik muq^{w}-u?ɬ-s ti-nap-c-tx
'Your ball is red, but mine is not.'

To the extent that the English glosses are correct, they reveal that in 13. there is an element of contrast, accompanied by the particle ?ic'ik in the Bella Coola sentence, which is lacking in 12. where the Bella Coola sentence contains the particle tu?. Accordingly, we call ?ic'ik the contrastive conjunctive particle and tu? the non-contrastive conjunctive particle. We mightsay in addition, that the appropriate circumstance for the use of ?ic'ik is when S_1 contrasts with S_2; and that the appropriate circumstance for the use of tu? is when S_1 does not contrast with S_2. We do not yet know exactly what it is that constitutes the basis for the relationships of contrast and non-contrast. We turn now to that task.

While the current state of the art includes some valuable insights into the semantics and pragmatics of conjunction, there remain a number of approaches, concerning in particular the relationships of contrast and non-

contrast, which have yet to be explored. In the remainder of this section we shall take up several of these, including some which, while representing possible hypotheses, do not appear to be especially plausible.

1.1 Hypothesis #1- The Thematic Contrast Continuum as a determinant of contrast and non-contrast.

Given the Thematic Contrast Continuum along which two conjoined sentences may have any number of matching paired constituents ranging from at least one to at most n-1 such pairs, we might hypothesize that there is a point on the continuum where a certain number of non-matching pairs constitutes a forced relationship of contrast between the two assertions. Alternatively, it might be the case that a certain ratio of non-matching pairs to the total number of paired constituents would constitute this point on the continuum at which the relationship of contrast is forced. This follows from the assumption that if two conjoined sentences contain two non-matching paired constituents, they should contain a greater element of contrast than two conjoined sentences which manifest only one set of non-matching paired constituents. We tested this hypothesis against all the possible combinations of matching and non-matching paired constituents as represented by the sentences below, expecting to find some point on the continuum where only one or the other of the two conjunctive particles would be appropriate.

Consider the following:

14. ya-ø snac; ya-ø $\begin{matrix}\cdot tu? \\ ?ic'ik\end{matrix}$ snic

'Snac is good and/but so is Snic.'

where n=2 and only one pair of constituents match,here the Comments. We note that both conjunctive particles are appropriate.

15. nuq^{w}n-aɬ-ɬ-is snac ti-nan-tx; nuq^{w}n-aɬ-ɬ-ic $\begin{matrix}tu? \\ ?ic'ik\end{matrix}$

'Snac tracked the grizzly and/but so did I.'

where n=3 and there are two matching paired constituents (Comments and Patients) and only one non-matching paired constituent (the Agents). Again both conjunctive particles are appropriate.

16. nuq^{w}n-aɬ-ɬ-is snac ti-nan-tx ?alatuks; nuq^{w}n-aɬ-ɬ-ic $\begin{matrix}tu? \\ ?ic'ik\end{matrix}$

'Snac tracked the grizzly on that trail and/but so did I.'

where n=4 and there are three matching paired constituents and only one non-matching one. Again, both particles can be appropriately used.

17. nuq^{w}n-a$\frac{1}{2}$-$\frac{1}{2}$-is snac ti-nan-tx; nuq^{w}n-a$\frac{1}{2}$-$\frac{1}{2}$-ic $\begin{matrix}tu?\\ ?ic'ik\end{matrix}$ ti-ƛ'la-tx

'Snac tracked the grizzly and/but I tracked the black bear.'

where n=3 and there is one matching paired constituent and two non-matching constituents. Both conjunctive particles are appropriate.

18. cp-a$\frac{1}{2}$-$\frac{1}{2}$-is snac ti-pot-tx ?a$\frac{1}{2}$ ti-suk'ta-t'ayx; cp-u?$\frac{1}{2}$-$\frac{1}{2}$-is $\begin{matrix}tu?\\ ?ic'ik\end{matrix}$

ti-q'χ^{w}umtimut-tx ?a$\frac{1}{2}$ t'ayx

'Snac wiped the boat with this rag and/but he wiped the car with it too.'

where n=4 and there are two matching and two non-matching paired constituents. Again both conjunctive particles can be used.

19. cp-a$\frac{1}{2}$-$\frac{1}{2}$-is snac ti-pot-tx ?a$\frac{1}{2}$ tunixa; ?at'-u?$\frac{1}{2}$-$\frac{1}{2}$-ic $\begin{matrix}tu?\\ ?ic'ik\end{matrix}$

ti-q'χ^{w}umtimut-tx (?a$\frac{1}{2}$ tunixa)

'Snac wiped the boat yesterday and/but I painted the car (yesterday).'

where n=4 and there is only one matching set of paired constituents and three non-matching. Again both conjunctive particles are appropriate.

Sentences 14-19 demonstrate that there is neither an absolute number of non-matching paired constituents which forces the relationship of contrast nor a ratio of non-matching paired constituents to the total number of paired constituents which forces contrast between two conjoined sentences. Thus, the Thematic Contrast Continuum as construed above cannot serve to determine the relationship of contrast which is relevant to the appropriate usage of the particles tu? and ?ic'ik.

1.2 Hypothesis #2- Syntactic determinants of contrast.

Let us now explore the hypothesis that it is articular combinations of matching or non-matching paired constituents which force the relationship of contrast. Accordingly, we might expect for example, that two conjoined sentences whose paired Agent and Patient constituents do not match should be more contrastive than two conjoined sentences whose only non-matching paired constituent is the Agent.

We tested this hypothesis against all possible combinations of matching

and non-matching paired Comment,Agent, Patient and Adjunct constituents. Below is a representative sample.

20. ya-ø snac; ya-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ snic

'Snac is good and/but so is Snic.'

where the Comment constituents match and the Agent constituents do not. Both particles are possible.

21. ya-ø snac; sx-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ nanus

'Snac is good and/but Nanus is bad.'

where neither Comments nor Agents match, but both conjunctive particles are possible.

22. nuq^{w}n-aɬ-ɬ-is snac ti-nan-tx; nuq^{w}n-aɬ-ɬ-ic $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ (ti-nan-tx)

'Snac tracked the grizzly and/but so did I.'

where the paired Comment and Patient consituents match, but the Agents do not. Both conjunctive particles are possible.

23. nuq^{w}n-aɬ-ɬ-is snac ti-nan-tx; nuq^{w}n-aɬ-ɬ-ic $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ ti-ƛ'la-tx

'Snac tracked the grizzly and/but I tracked the black bear.'

where only the Comments match. Both particles are possible.

24. nuq^{w}n-aɬ-ɬ-is snac ti-nan-tx ?alatuks; nuq^{w}n-aɬ-ɬ-ic $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$?alaac

'Snac tracked the grizzly on that trail and/but I tracked him on this one.'

where both Comment and Patient constituents match, but Agent and Adjunct do not. Both conjunctive particles are possible.

25. nuq^{w}n-aɬ-ɬ-is snac ti-nan-tx ?alatuks; nuq^{w}n-aɬ-ɬ-ic $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ ti-ƛ'la-tx ?alaac

'Snac tracked the grizzly on that trail and/but I tracked the black bear on this one.'

where the Comments match, but Agent, Patient, and Adjunct constituents do not. Again both conjunctive particles are possible.

Sentences 20-25 demonstrate that there appears to be no combination of matching or non-matching constituents which forces the relationship of contrast between conjoined sentences. If contrast had been forced, we should have expected the particle tu? to have been unacceptable in one of the test sentences. In all sentences tested, both conjunctive particles were possible.

1.3 Semantic factors as determinants for contrast.

Let us now examine whether or not the presence of an inherent contrast in two Comments forces the relationship of contrast between two conjoined sentences. Consider:

26. χs-ø snac; χik'-ø $\begin{matrix}*tu?\\ *?ic'ik\end{matrix}$

'Snac is fat and/but Snac is thin.'

27. χs-ø snac; ?aχ^{w}-ø $\begin{matrix}\%tu?\\ \%?ic'ik\end{matrix}$ χik'-s

'Snac is fat and/but he is not thin.'

28. ?aχ^{w}-ø χs-s snac; ?aχ^{w}-ø $\begin{matrix}tu?\\ ?ic'ik\end{matrix}$ χik'-s

'Snac is not fat and/but he is not thin.'

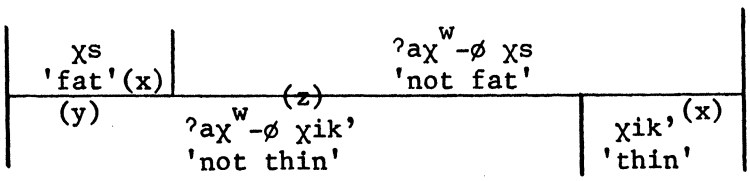
In sentence 26., both conjunctive particles are impossible. A single subject cannot be both fat and thin at the same time. This represents a specific instance of a more general logical belief that when two predicates are poles of some semantic continuum i.e., are what we shall call here scalar predicates (but cf. Horn 1973 for a different definition), a subject can occupy only a single point on the continuum. The predicates χs 'fat' and χik' 'thin' describe two points on the continuum.

In sentence 27., the Comments 'fat' and 'not thin' describe a single point on the semantic continuum and this sentence should be acceptable as it does not conflict with the logical belief stated above. However, 27. is not acceptable because it it tautologous,i.e., to be fat entails being not thin. Sentence 27 evoked this comment from CS concerning its appropriateness: "You could say it that way if you were making fun at what you say." (We use the symbol % to mark a grammatically correct sentence that has been matched to an inappropriate context or meaning.)

Sentence 28. is acceptable with both conjunctive particles. The predicates 'not fat' and 'not thin' describe a range of points in the middle of the continuum and tautology is involved.

We can illustrate the above as in Fig.2.

Fig.2.



where (x) are the predicates ascribed to Snac in 26.;(y) those in 27.; and (z) those in 28.

Sentence conjunction involving a single subject and a scalar predicate is possible only in the region specified by the negation of both polar terms. Note, however, that within this region, both conjunctive particles are possible, thus contrast is not forced.

Let us now examine the same scalar predicates, but with two subjects. Consider:

29. χs-ø snac; χik'-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ c'ayliwa
'Snac is fat and/but C'ayliwa is thin.'

30. χs-ø snac; ?aχ^{w}-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ χs-s c'ayliwa
'Snac is fat and/but C'ayliwa is not.'

31. χs-ø snac; ?aχ^{w}-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ χik'-s nanus
'Snac is fat and/but Nanus is not thin.'

32. ?aχ^{w}-ø χs-s c'ayliwa; χik'-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ tepis
'C'ayliwa is not fat and/but Davis is thin.'

33. ?aχ^{w}-ø χs-s c'ayliwa; ?aχ^{w}-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ χik'-s snac
'C'ayliwa is not fat and/but Snac is not thin.'

34. ?aχ^{w}-ø χs-s c'ayliwa; ?aχ^{w}-ø $\begin{matrix} tu? \\ ?ic'ik \end{matrix}$ χs-s tepis
'C'ayliwa is not fat and/but Davis is not fat.'

As could be expected when two subjects are involved, all combinations of predicates are possible conjunct sentences. In each sentence, however, both conjunctive particles are acceptable. This would seem to indicate that the inherent semantic contrast between fat and thin does not have any effect on contrast between conjoined sentences where different Agents are specified. This is not completely true; all other things being equal, Bella Coolas do have differential preferences for sentences that are distinct only in the choice of the conjunctive particle. In sentences 29-33, the form containing the conjunctive particle ?ic'ik is the preferred sentence. To use the corresponding sentence with tu?, one has to "know what you are talking about" which suggests that contrast is the normal relationship between these conjoined sentences and that when tu? occurs, it is marked by special circumstances. In sentence 34., the preference is reversed with the sentence containing tu? preferred over the one with ?ic'ik.

We take all of this to indicate that certain predicate pairs have an inherent element of contrast which in most circumstances forces the relationship of contrast between conjoined sentences containing them and hence the preferred use of ?ic'ik. The use of tu? in corresponding sentences indicates that in some way, the special circumstances required for its appropriate usage suspends the inherent contrast.

1.4 In this section, we found that sentence conjunction in Bella Coola is subject to the condition posited by Lakoff (1971) for sentence conjunction in English, namely the presence of a common theme such that at least one pair of constituents is reducible to a statement of identity, but that no more than n-1 such matching pairs can reduce to such an identity statement, where n equals the total number of paired constituents in the two conjoined sentences. From this we extracted a Thematic Contrast Continuum hypothesizing that a certain number of non-matching paired constituents or a certain ratio of non-matching to the total number of paired constituents might force the relationship of contrast between the conjoined sentences. Examination of this hypothesis showed that such was not the case.

We examined particular combinations of matching and non-matching constituents looking for a pattern which would force contrast. Upon examination, we found none.

In examining scalar predicates, we found additional constraints on sentence conjunction itself when these predicates were conjoined in reference to a single individual. For those sentences which were acceptable when scalar predicates applied to both one and two subjects, we found that the inherent semantic contrast between different predicates on the same semantic continuum did not force the relationship of contrast between the conjoined sentences as both conjunctive particles could occur. We did find, however, that when in an otherwise identical sentence, both conjunctive particles could occur, Bella Coola speakers evinced a preference for those sentences where the inherent semantic contrast was manifested by ?ic'ik over those sentences in which the particle tu? occurred. Further, we found that the use of tu? in conjunct sentences involving two predicates on the same semantic continuum required special circumstances which in effect suspended the inherent contrast of such predicates before they could be accepted.

2.0 Hypothesis #3 - Facts and beliefs

In this section, we propose a hypothesis concerning the relations of contrast and non-contrast which is based on the consistency or non-consistency of asserted facts and the beliefs a speaker may hold relative to the facts. We arrive at this hypothesis by considering those cases of sentence conjunction where the following circumstances obtain:

a - The common theme is explicit in identical Agent constituents.

b - The minimal difference is represented by two non-identical,non-scalar predicates.

c - There is nothing either syntactic or semantic in nature within the conjoined sentences which forces a relationship of contrast between them.

d - The conjunct sentence is considered to be discourse initial, thus lacking prior linguistic context.[5]

2.1 Facts

Consider the following conjunct sentences which meet the conditions:

35. talaws-ø snac; yaya?twi-ø tu?
'Snac is married and happy.'

36. talaws-ø snac; ?aχ^{w}-ø ?ic'ik yaya?twi-s
'Snac is married, but he is not happy.'

37. talaws-ø snac; yaya?twi-ø ?ic'ik
'Snac is married, but happy.'

38. talaws-ø snac; ?aχ^{w}-ø tu? yaya?twi-s
'Snac is married and not happy.'

We note that there are two sets of facts asserted in these sentences. In 35, and 37., it is asserted that Snac is both married and happy. Let us symbolize this as 'M ∧ H'. In 36. and 38., the fact asserted is that Snac is married and not happy. Let us use 'M ∧ ~H' to represent this fact. We next note that the factual situation alone cannot determine the correct conjunctive particle because for the fact M ∧ H we find tu? in 35. and ?ic'ik in 37. Likewise, for the fact M ∧ ~H, we find ?ic'ik in 36. and tu? in 38. Thus, for these sentences, the relationship of contrast is not forced by specific factual situations.

As discourse initial sentences, 35.-38. have no prior linguistic context. There is nothing either syntactic or semantic in nature about the conjunct sentences which forces the relationship of contrast. Add to these the observation that the different asserted facts do not force contrast nd it would appear that the sole remaining source of information which may be relevant to the choice of conjunctive particles is the mind of the speaker.[6] This information may be variously considered as presupposition, supposition, entailments, etc., but we prefer here a more neutral term- beliefs.

2.2 Beliefs

Let us suppose that, as there were two different facts asserted concerning marriage and happiness in sentences 35.-38., there are also two beliefs which may be held by a speaker concerning marriage and happiness. (We expand the number of possible facts which may be asserted concerning marriage and happiness as well as the number of possible beliefs later in this section.) A speaker might believe that the states of marriage and happiness are compatible. This rather general belief may occur in various strengths rangeing from

$\forall x$; if Mx, then $(M \wedge H)x$

For all x's; if x is married, then x is married and happy.

to

$\exists! x$; if Mx, then $(M \wedge H)x$

There is at least one x such that if x is married, then x is married and happy.[7]

For our immediate purposes, we shall assume the stronger form of this belief, but in place of the cumbersome formula above we shall use the simple expression ' $m \wedge h$.'

A speaker might hold a second belief in which the states of marriage and happiness are considered incompatible. We symbolize this simply as '$m \wedge \sim h$' 'married and not happy.'

It is in the interaction of asserted fact and the belief held by the speaker at the time of his speech act concerning the terms of his assertion that we believe to have found the basis of contrast and non-contrast relevant to the choice of conjunctive particles. Looking at 35. we might say that the use of tu?, the non-contrastive conjunctive particle, signals in this sentence that the asserted fact $M \wedge H$ matches, or is consistent with the speaker's

belief m ∧ h . We can then define the relationship of non-contrast as this matching of fact and belief. We use the expression $\bar{\blacktriangle}$(F,B) 'no difference between Fact and Belief' as the symbol for non-contrast.

Looking now at sentence 37. we might say that the use of ?ic'ik , the contrastive conjunctive particle, signals that the asserted fact M ∧ H does not match or is inconsistent with the speaker's belief concerning marriage and happiness, here m ∧ ~h . We define contrast then as this mismatching or inconsistency of fact and belief and symbolize it as ▲(F,B) 'difference in fact and belief.'

In sentences 36. and 38., the asserted fact is that Snac is married and not happy. In 36., the occurrence of ?ic'ik must signal (consistent with our interpretation of 37.) that this fact does not match the speaker's belief which in this case must be m ∧ h. (Note that the conjunctive particles are not bound to any particular belief. In 37., the belief which occasioned ?ic'ik was m ∧ ~h; here it is m ∧ h.) In sentence 38., the occurrence of tu? must signal that the asserted fact, M ∧ ~H matches the speaker's belief, i.e., m ∧ ~h.

We can summarize the above in the matrix of Fig.3.

Figure 3.

Belief \ Fact	M ∧ H	M ∧ ~H
m ∧ h	tu? (S35)	?ic'ik (S36)
m ∧ ~h	?ic'ik (S37)	tu? (S38)

This matrix can be expressed as two rules which constitute our hypothesis concerning the use of the conjunctive particles tu? and ?ic'ik.

R_1 If $\bar{\blacktriangle}$(F,B); then CP = tu?

'If, as a speaker, you want to conjoin two sentences whose conjunct assertion of fact matches your belief concerning the compatibility (or non-compatibility) of the terms of that assertion, use the conjunctive particle tu?'

R_2 If ▲(F,B); then CP = ?ic'ik

'If, as a speaker, you wish to conjoin two sentences whose conjunct assertion of fact does not match your belief concerning the terms of that assertion, use the conjunctive particle ?ic'ik.

2.23 At this point we consider the remaining possible facts and beliefs concerning the states of marriage and happiness. To those above, we add the factual situations: 'not married and happy,' ~M ∧ H and 'not married and not happy,' ~M ∧ ~H as well as the analogous beliefs ~m ∧ h and ~m ∧ ~h.

Consider sentences 39.-42.:

39. ʔaχ^{w}-ø talaws-s snac; yaya?twi-ø ʔic'ik
'Snac is not married but he is happy.'

40. ʔaχ^{w}-ø talaws-s snac; yaya?twi-ø tu?
'Snac is not married and he is happy.'

41. ʔaχ^{w}-ø talaws-s snac; ʔaχ^{w}-ø ʔic'ik yaya?twi-s
'Snac is not married, but he is not happy.'

42. ʔaχ^{w}-ø talaws-s snac; ʔaχ^{w}-ø tu? yaya?twi-s
'Snac is not married and he is not happy.'

In 39., the asserted fact is that Snac is not married and he is happy. Consistent with our hypothesis, the occurrence here of the conjunctive particle ʔic'ik must signal that this fact is inconsistent with the speaker's belief. We wish now to see if we can uniquely determine which belief it is which contrasts with the asserted fact. The total array of possible beliefs is m ∧ h, m ∧~h, ~m ∧ h, and ~m ∧ ~h. We know immediately that the belief cannot be ~m ∧ h because this belief matches the asserted fact and such a matching of fact and belief would yield, according to the hypothesis, the conjunctive particle tu? as in sentence 40. This leaves as the possible specific belief one of the following: m ∧ h, m ∧ ~h, and ~m ∧ ~h.At this point we introduce an important constraint on the matching of facts and beliefs.

We shall consider it as given that in sentence conjunction the speaker will match a belief whose initial term is identical to the initial term of the assertion. We consider this constraint as reflecting Grice's maxim of relevancy assuming operation of the Cooperative Principle. That is, if the assertion concerns a person who is married plus either happy or unhappy, the speaker matches this with a belief whose initial term concerns married people and does not match the assertion concerning a married individual with a belief concerning unmarried people. In similar fashion, if the assertion concerns an unmarried individual, the speaker will match it to a belief

concerning unmarried people and not with one concerning married people. We call this the relevancy constraint.[8] The effect of this constraint in sentence 39. is to eliminate from further consideration as possible beliefs held by the speaker of 39. the beliefs m ∧ h and m ∧ ~h. This leaves ~m ∧ ~h as the sole belief which contrasts with the asserted facts.

In sentence 40., the assertion is ~M ∧ H and according to the hypothesis and the operation of the relevancy constraint, the occurrence of tu? arises from the congruent belief ~m ∧ h.

In sentence 41., the assertion is ~M ∧ ~H. The occurrence of ?ic'ik arises from the contrasting underlying belief ~m ∧ h.

In sentence 42., the assertion is again ~M ∧ ~H and the occurrence of tu? arises from the matching belief ~m ∧ ~h.

We can summarize our discussion relative to sentences 35-42 in a matrix as in Fig.4.

Figure 4.

Fact	M ∧ H	~M ∧~H	M ∧ ~H	~M ∧ H
Belief				
m ∧ h	tu?	____	?ic'ik	_____
~m ∧ ~h	____	tu?	_____	?ic'ik
m ∧ ~h	?ic'ik	____	tu?	_____
~m ∧ h	_____	?ic'ik	_____	tu?

where the cells containing a line indicate the belief is irrelevant to the assertion,i.e., to match this belief with the assertion would be in violation of the relevancy constraint.

2.3 Testing the hypothesis

In sentences 35.-42., we saw that all possible conjunctions of the predicates married:not married and happy:not happy could containeither conjunctive particle. The matrix in Fig.4 shows the distribution of tu? and ?ic'ik relative to all the possible intersections of beliefs and facts. In any given situation, a single speaker can hold only one of the total number of different beliefs relevant to his assertion. Thus, if we can determine what belief a speaker holds in a given situation, we should be able to predict which of the conjunctive particles he will employ in different assertions.

For example, if a speaker believes that marriage and happiness are compatible, according to our hypothesis we should be able to predict that if his assertion is that Snac is married and happy, this assertion will contain the conjunctive particle tu? and not ?ic'ik . Given the same belief but the assertion that Snac is married and not happy, we predict that the conjunctive particle contained in the assertion will be ?ic'ik and not tu?.

In the following test conjunct sentences, we introduced into the first member (S_1) information which we hoped would force a speaker into a specific belief and then tested his responses to a number of different second members expecting to find a distribution of tu? and ?ic'ik as predicted by the hypothesis.

2.31 Test #1

43. S_1 ?aɬ-talaws-ø snac ?uɬ ci-?aχ^w-ø yaya?si ci-xnas-cx;_____
'Snac is married to an unattractive woman _____'

Our expectation here was that the native speaker of Bella Coola would have the belief that marriage to an unattractive woman would constitute sufficient grounds for unhappiness. Thus, we predict that if S_2 is the assertion that Snac is happy, the only appropriate conjunctive particle would be ?ic'ik, the contrastive conjunctive particle, and that tu? would be rejected. The results:

a) S_2 % yaya?twi-ø tu? '...and he is happy.'
b) S_2 yaya?twi-ø ?ic'ik '...but he is happy.'

confirmed our expectations as to which belief CS would have in this situation as well as our prediction of the appropriate conjunctive particle. We then presented the testee with two assertions as S_2 in which Snac is unhappy. Here we predict that the assertion containing tu? will be judged appropriate and the one containing ?ic'ik will be rejected. The results:

c) S_2 ?aχ^w-ø tu? yaya?twi-s '... and he is not happy.'
d) S_2 %?aχ^w-ø ?ic'ik yaya?twi-s '... but he is not happy.'

again confirm the hypothesis.

2.32 Test #2

44. S_1 ?aɬ-talaws-ø snac ?uɬ ci-yaya?si-cx;_____
'Snac is married to an attractive woman_____'

Here our expectation was that CS would hold the belief that marriage to an attractive woman would constitute happiness. Thus, if as in a-b), the assertion of S_2 is that Snac is happy, we should expect that the test sentence containing tu? will be accepted and the one containing ?ic'ik will be rejected. The results:

a) S_2 yaya?twi-ø tu? '...and he is happy.'

b) S_2 yaya?twi-ø ?ic'ik '...but he is happy.'

contradict our expectations. Both S_2 assertions were acceptable given S_1. We tested S_2 with the assertion that Snac was not happy. The results:

c) S_2 ?aχ^w-ø tu? yaya?twi-s

d) S_2 ?aχ^w-ø ?ic'ik yaya?twi-s

also contradict our expectations.

There are two explanations why all four S_2 assertions were accepted. Either S_1 does not force a specific beliefregarding the compatibility of marriage and happiness or our hypothesis is incorrect. In pursuing the first of these alternatives, we elicited from CS the statement that while marriage to an attractive woman could mean marital happiness; it could also mean 'trouble' in that "she might have lots of guys after her or she could be in love with herself..." We took this to mean that at least for CS, marriage to an attractive woman could be equated with either happiness or unhappiness (i.e., 'trouble') and that S_1 did not provide enough information to force CS into a specific belief. Thus, the results of Test #2 do not disprove the hypothesis, but rather add additional proof that the hypothesis is correct.

We returned to Test #1 wherein S_1 asserted that Snac was married to an unattractive woman to see if CS could hold, if only temporarily, the belief that such a marriage could be equated with marital happiness. While he admitted that some people might think that way, but that he did not. Hence, Test #1 stands as proof of the hypothesis.

We continued the testing procedure with a large number of test sentences. Whereever we were able to provide enough information in S_1 to force CS into a specific belief, the results confirmed the hypothesis. Where S_1 did not force a specific belief, all S_2 assertions were acceptablei.e., both those containing tu? and those containing ?ic'ik. We offer two more tests as representative of the larger body of test sentences.

2.33 Test #3

45. S_1 ka cp-aɬ-ɬ-is alu snac ti-pot-tx; _____
'Snac was supposed to wipe the boat _____'

Here we expect to find that if the assertion of S_2 is that Snac did wipe the boat, only tu? will be appropriate. The results:

a) S_2 cp-aɬ-ɬ-is tu? '... and he did.'
b) S_2 %cp-aɬ-ɬ-is ?ic'ik '...but he did.'

confirm the hypothesis.

If S_2 is the assertion that Snac did not wipe the boat, we predict that the assertion with tu? will be rejected and that the one containing ?ic'ik will be accepted. The results:

c) S_2 %?aχ^w-ø tu? cp-aɬ-ɬ-is '... and he didn't wipe it.'
d) S_2 ?aχ^w-ø ?ic'ik cp-aɬ-ɬ-is '... but he didn't wipe it.'

confirm the predictions based on the hypothesis.

2.34 Test #4

46. S_1 ?aχ^w-ø ka cp-aɬ-ɬ-is alu snac ti-pot-tx; _____
'Snac was not supposed to wipe the boat _____'

Here we predict that if the assertion of S_2 is that Snac wiped the boat, the appropriate conjunctive particle will be ?ic'ik. The results:

a) S_2 %cp-aɬ-ɬ-is tu? '... and he did wipe it.'
b) S_2 cp-aɬ-ɬ-is ?ic'ik '... but he did wipe it.'

confirm the hypothesis.

If the assertion of S_2 is that Snac did not wipe the boat, we predict that the appropriate conjunctive particle will be tu?. The results:

c) S_2 ?aχ^w-ø tu? cp-aɬ-ɬ-is '... and he didn't wipe it.'
d) S_2 %?aχ^w-ø ?ic'ik cp-aɬ-ɬ-is '... but he didn't wipe it.'

again confirm the hypothesis.

2.35 The results of our tests of Hypothesis #3 confirmed that the relationship of contrast between conjoined sentences and hence the appropriate use of the contrastive conjunctive particle ?ic'ik arises from a difference between an asserted fact and the speaker's belief about the conjunction of the

terms of his assertion. Likewise the relationship of non-contrast and the appropriate use of the non-contrastive conjunctive particle tu? arises from the situation when a speaker's beliefs are consistent with his assertion. The sentence groups 43.a-d,45.a-d, and 46.a-d are direct proof of the hypothesis. The sentences 44.a-d constitute indirect proof.

2.4 Suspension of inherent semantic contrast

In section 1.3, we noted in regard to sentences 29-33 that the conjunction of two predicates on the same semantic continuum,i.e. what we have called scalar predicates, evoked a preference on the part of Bella Coolas speakers for the sentence containing the conjunctive particle ?ic'ik over an otherwise identical sentence with tu?. We took this to indicate that such pairs of predicates contain a inherent element of contrast. We noted that the use of tu? in such sentences required special circumstances as evidenced by CS's statement that to use tu? here "you have to know what you are talking about." Consider again sentence 30.

30. χs-ø snac; ʔaχ^{w}-ø $\begin{matrix} \text{tu?} \\ \text{ʔic'ik} \end{matrix}$ χs-s c'ayliwa

'Snac is fat and/but C'ayliwa is not.'

When the common theme is taken by the speaker to be that concerning 'fatness', then the fatness of Snac is contrastive with the non-fatness of C'ayliwa and the appropriate conjunctive particle is ?ic'ik. When 30. is a discourse initial sentence, ?ic'ik does not necessarily arise from contrast construed as a difference between asserted fact and speaker belief, although it may. The contrast between S_1 and S_2 in 30. can arise either from the speaker's belief that both Snac and C'ayliwa are fat (based upon an earlier observation when C'ayliwa was indeed fat) which contrasts with a more recent observation that C'ay;iwa is not now fat as in the assertion,or when such a belief is lacking, the contrast between S_1 and S_2 may arise from the inherent contrastiveness of the predicates fat and not fat. Thus, while ?ic'ik is employed whenever S_1 and S_2 contrast, the relationship of contrast can arise from a difference in fact and belief (pragmatic contrast) or from the inherent contrast of scalar predicates (semantic contrast). Pragmatic contrast may exist between any pair of predicates, but semantic contrast exists only between predicates on the same semantic continuum.

Turning now to the suspension of semantic contrast as in sentence 30. where the conjunctive particle is tu?, we find that such a suspension is possible only when the speaker raises the generality of the common theme from that concerning fatness (where Snac's fatness and C'ayliwa's non-fatness are inherently contrastive) to another semantic level where fat and not fat are not contrastive, or , at least need not be contrastive. Such a common theme would be general physical characteristics of Snac and C'ayliwa, in which case listing Snac as fat and C'ayliwa as not fat using sentence 30. with the conjunctive particle tu? is acceptable. The main point concerning the suspension of semantic contrast,i.e., the use of tu? in assertions conjoining scalar predicates, is that it can only be possible if the common theme is something different from the semantic continuum explicit in the asserted predicates. When a speaker utters sentence 30. using tu?, his audience must deduce that he is not talking about fatness but about something else.

The raising of the common theme in the suspension of semantic contrast in effect descalarizes the predicates, for scalar predicates by definition must operate along the same semantic continuum. Thus the choice of conjunctive particle rests on pragmatic information such that when a speaker says that Snac is fat and C'ayliwa is not, using the conjunctive particle tu? as in sentence 30., he is signalling both that the common theme of the conjunction has been raised and that his assertion is consonant with his belief concerning the fatness of Snac and the non-fatness of C'ayliwa.[9]

2.5 Revision of the hypothesis

At this point we must make some minor revisions to the hypothesis. First, we must account for the use of ?ic'ik with scalar predicates. This revisions concerns contrast defined above simply as a mismatch between the fact asserted in the conjunct sentence and the speaker's belief concerning the terms of that assertion. In section 2.4 we characterized this circumstance as yielding pragmatic contrast and the label does seem apt as it does involve information not available from within the assertion. We saw, however, that when two different predicates from the same semantic continuum were conjoined, contrast could arise independently of pragmatic circumstances. Such contrast we found to be inherent in such predicates and we called this

semantic contrast because it involves information available from within the assertion itself. We now appear to have two types of contrast instead of one as in the original hypothesis. However, both types of contrast have the same exponentiation in conjunct sentences. Regardless of its origin, when the relationship of contrast exists between conjoined sentences, the only appropriate conjunctive particle is ?ic'ik.

The relationship of non-contrast remains unchanged in its definition. What must be introduced into the hypothesis, however, is a provision for raising the common theme to a higher level of generality than is explicit in assertions containing predicates on the same semantic continuum and the connection of this process of Common Theme Raising with the descalarization of the predicates bringing the circumstances for the relationship of non-contrast up to the pragmatic level.

3.0 External Conjunction

In this section, we treat two problems concerning the use of the conjunctive particles tu? and ?ic'ik for which our hypothesis provides no accounting, namely their use in what appear to be non-conjunct sentences and their cooccurrence in the same conjunct sentence as the string ?ic'ik tu?. Both problems relate to what we shall call external conjunction , a term we define in the following subsection.

3.1 The occurrence of ?ic'ik and tu? in non-conjunct sentences.

Consider the following:

47. a) yaya?twi-ø tu? snac
'And Snac is happy.'

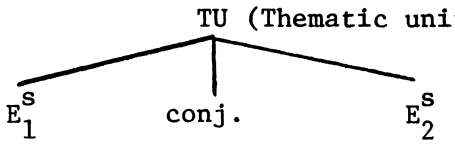
b) yaya?twi-ø ?ic'ik snac
'But Snac is happy.'

In 47.a-b) we have two superficially simple sentences containing conjunctive particles. Sentences 47.a-b) never occur as discourse initial. Typical of their place in a discourse is the following discourse fragment:

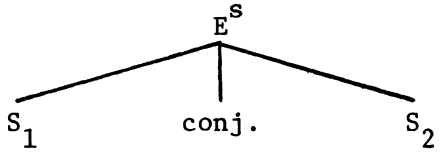
48. E_1^s talaws-ø snac
'Snac is married.'

E_2^s	a)	yaya?twi-ø tu?	'And he is happy.'
	b)	yaya?twi-ø ?ic'ik	'But he is happy.'

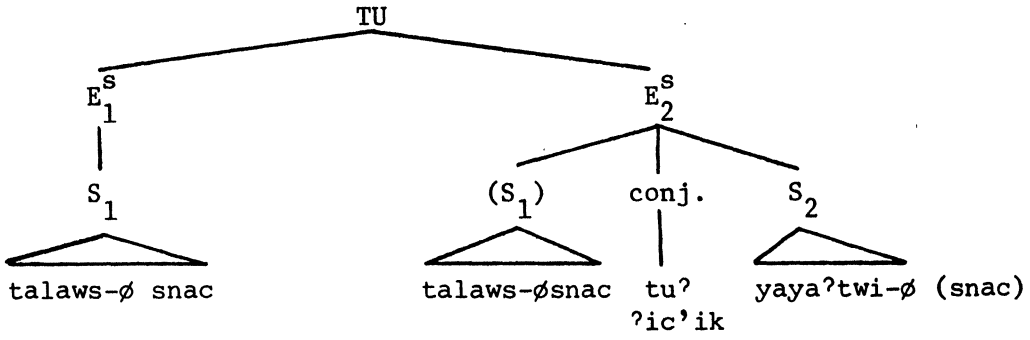
Within this discourse fragment, it is obvious that the second speaker is adding his information concerning a common theme - characteristics of Snac- by conjoining his assertion to that of the first speaker. It is this which we call external conjunction, i.e., the conjoining of two sentences from different speech events which share a common theme. This contrasts with sentence conjunction within a single speech event, which we shall now call internal conjunction. External conjunction can be schematically represented as



while internal conjunction (née sentence conjunction) is schematically



In external conjunction it appears that the second speaker takes the first speaker's assertion and conjoins it to his own; chooses an appropriate conjunctive particle, according to our hypothesis; and then, in the case of 48.a-b) deletes the first assertion. (We represent the deleted fragment by surrounding it with parentheses.) Thus,



Support for this interpretation derives from those cases where the second speaker does not delete the first speaker's assertion as in fragment 49.

49. E_1^s talaws-ø snac
'Snac is married.'

a) E_2^s talaws-ø snac; yaya?twi-ø tu?
'Snac is married and happy.'

b) E_2^s talaws-ø snac; yaya?twi-ø ?ic'ik
'Snac is married, but happy.'

Bella Coola speakers recognize 48a) as a reduction of 49a) and 48b) as a reduction of 49b). The converse obtains also,i.e., if asked to expand 48a), a Bella Coola will respond with 49a), likewise the expansion of 48b) is 49b). In normal conversation, 48.a-b) are preferred over 49.a-b) because they more closely follow the maxim of quantity- say no more than needs to be said.

From examples 48. amd 49., we see that external conjunction is really only a special case of internal conjunction, but one in which the speaker borrows a sentence from a previous speaker as the first member of his conjunct sentence. The use of the appropriate conjunctive particle follows as before from the rules derived from our hypothesis.

3.2 The combination ?ic'ik tu?

The hypothesis predicts that when a difference in fact and belief exists only the contrastive conjunctive particle ?ic'ik is appropriate. Conversely, when there is no difference between asserted fact and underlying belief, only the non-contrastive conjunctive particle tu? is appropriate. The relationships of contrast and non-contrast appear to be exclusively disjunct,i.e., the relationship between conjoined sentences is either that of contrast or non-contrast, but not both contrast and non-contrast. Hence, a sentence containing both ?ic'ik and tu? should not occur. One might say that the hypothesis implicitly predicts that such conjunct sentences are impossible. Consider, however, the following:

50. talaws-ø snac; yaya?twi-ø ?ic'ik tu?
'Snac is married, but he is happy too.'

where both particles occur as the string ?ic'ik tu?.

In accepting such sentences, a Bella Coola will usually pause; appear to be thinking about the matter and then say something to the effect that

" it is alright, if you know what you are talking about." In pursuing the difference between sentences such as 50. and 35. and 37. (reproduced below)

35. talaws-ø snac; yaya?twi-ø tu?
'Snac is married and happy.'

37. talaws-ø snac; yaya?twi-ø ?ic'ik
'Snac is married, but happy.'

we found that in 35. and 37., a hearer will interpret these as asserting that Snac is happy both in and out of his marriage, while in 50., the clear interpretation is that Snac is not happy in his marriage, but happy in everything else.

We asked if there was another way to say sentence 50. and received 51. as its equivalent.

51. ?aχ^{w}-ø yaya?twi-s snac ti-s-talaws-s; yaya?twi-ø ?ic'ik tu? ?ala cay
'Snac is not happy in his marriage, but he is otherwise happy.'

A sentence such as 50. (and 51. as well) does not usually occur discourse initial. In the case where a speaker would want to initiate a conversation about Snac by asserting the information contained in 50.and 51., the latter would be the preferred sentence. The typical situation is where 50. occurs within a discourse as in the discourse fragment 52.

52. a) E_1^s talaws-ø snac; ?aχ^{w}-ø ?ic'ik yaya?twi-s
'Snac is married but not happy.'

b) E_2^s talaws-ø snac; yaya?twi-ø ?ic'ik tu?
'Snac is married, but he is happy too.'

b') yaya?twi-ø ?ic'ik tu?
'But he is happy too.'

The problem with sentences such as 50. (=52b.) is first to explain the co-occurrence of both conjunctive particles and then to determine the origin of each of them. We know the following about 50. (52b).:

a)While 50. (52b) asserts as fact only that Snac is married and happy, the interpretation of this sentence is that his happiness excludes marital happiness (cf. the equivalent sentence 51.). Thus, underlying sentence 50. is a conjunction of not happy in marriage and happy in everything else. We

noted earlier that when a positive value of a predicate is conjoined with a negative value of the same predicate, semantic contrast arises. This then is the probable source of the conjunctive particle ?ic'ik in the combination.

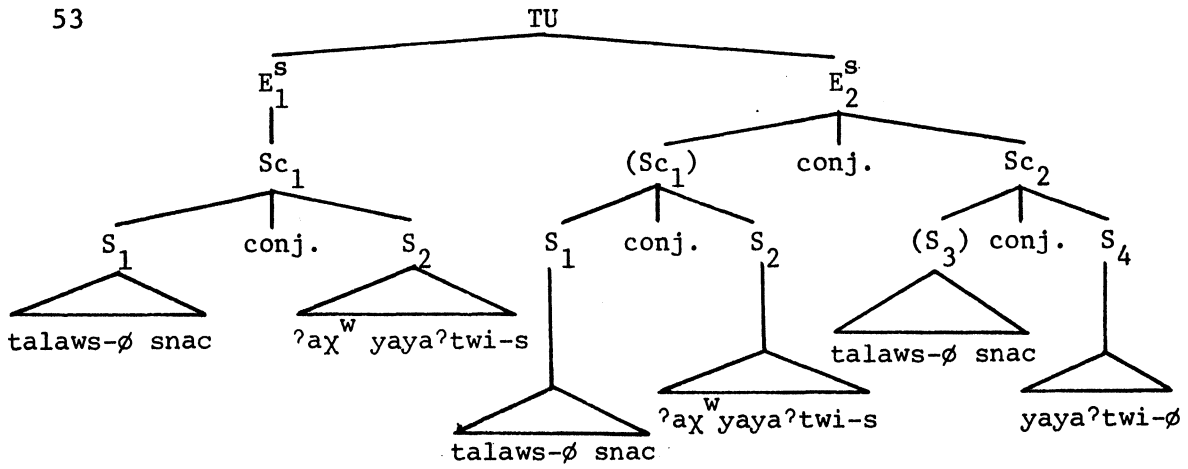
b) The fact that 52b-b') partially contradict the facts asserted by 52a.) has no effect on the choice of conjunctive particle in these sentences/ That is, ?ic'ik in 52.b-b') does not signal a contrast in facts. Contradiction in facts is signalled by a change in the positive or negative value of the predicate being contradicted,here from not happy in 52.a) to happy in 52.b-b').

c) The conjunctive particle of 52.a) and hence the first speaker's belief concerning Snac's marriage and the state of happiness are irrelevant to the choice of conjunctive particle in 52.b-b') for they are appropriate responses to 52.a').

52. a') talaws-ø snac; ?aχ^{w}-ø tu? yaya?twi-s
'Snac is married and he is not happy.'

If we consider that the usual response to 52.a) is 52b'), we have a situation akin to that discussed in section 3.1 wherein the second speaker adopts as the first member of his own conjunct sentence the assertion of the first speaker, chooses the appropriate conjunctive particle and then optionally deletes all redundant constituents, then we have a model which might be applicable to the case of the discourse fragment 52. Of course, in 52. we find conjunct sentences conjoined instead of simple sentences. We schematize this as in 53.

53



The schema 53. is identical to that on page 22., except that here the second speaker has adopted a conjunct sentence as the first member of his conjunct response and that his second member is also a conjunct sentence. It is this hierarchical structure of a conjunct sentence whose members are themselves conjunct sentences that occasions the appearance of two conjunctive particles. The relationship between Sc_1 and Sc_2 is that of contrast arising from the semantic contrast between ?aχ^w yaya?twi 'not happy' in the first and yaya?twi 'happy 'in the second member of the conjunct sentence. This explains the origin of the conjunctive particle ?ic'ik in the combination ?ic'ik tu?. The relationship between S_3 and S_4 is that of non-contrast and is the origin of tu?. The underlying representation 53. will variously generate:

54. a) talaws-ø snac; ?aχ^w-ø ?ic'ik yaya?twi-s; talaws-ø snac; yaya?twi-ø ?ic'ik tu?

b) talaws-ø snac; yaya?twi-ø ?ic'ik tu?

c) yaya?twi-ø ?ic'ik tu?

according to the options taken on deletions. Of the three, 54c) is preferred, but 54b) is acceptable. Sentence 54a) is only marginally acceptable because it contains too much redundancy.

We claim the underlying representation of all sentences containing the combination ?ic'ik tu? is structurally as illustrated in 53. and therefore that such sentences do have an accounting within the hypothesis.

4.0 Summary

We can summarize the hypothesis concerning the use of the conjunctive particles ?ic'ik and tu? in the following set of statements and definitions.

1. Conjunction is possible only when a Common Theme exists between the conjoined sentences.

Common Theme $=_{def.}$ When there is at least one pair of matching constituents and no more than n-1 pairs of matching constituents between the conjoined sentences (where n equals the total number of paired constituents.)

2. Conjunction is possible, given a Common Theme, between sentences within a single speech event (internal conjunction) and between sentences, each of which is contained in a different speech event (external conjunction.) However, in external conjunction, the second speaker adopts the assertion of the first speaker and conjoins to it his own assertion thereby creating his own internal conjunct sentence. This in effect reduces all cases of external conjunction to internal conjunction. External conjunction may involve either the conjoining of two simple sentences or two conjunct sentences. In the latter case, two conjunctions arise; one between the conjunct sentences and one between the sentences of the conjunct sentence which is not deleted. (Cf. 3.2 for details.)

3. There are two possible relationships between conjoined sentences- contrast and non-contrast. The relationship of contrast may arise from pragmatic or semantic grounds.

Pragmatic contrast $=_{def.}$ When there is a mismatch between the asserted fact and the speaker's belief concerning the terms of the conjunct assertion.

Semantic contrast $=_{def.}$ The inherent contrast between different predicates on the same semantic continuum (what we have called scalar predicates.)

Non-contrast $=_{def.}$ When there is no difference between the asserted fact and the speaker's beliefs concerning the terms of the conjunct assertion. The relationship of non-contrast exists only between predicates not on the same semantic continuum,i.e., between non-scalar or descalarized predicates or when the same sclar predicate is asserted of two different subjects.

4. Inherant semantic contrast can be suspended by raising the Common Theme of scalar predicates to a higher level of generality,which preocess in effect descalarizes them.

5. When the relationship between conjoined sentences is that of contrast, the appropriate conjunctive particle is <u>?ic'ik</u> , the contrastive conjunctive particle.

6. When the relationship between conjoined sentences is that of non-contrast, the appropriate particle is tu?, the non-contrastive conjunctive particle.

NOTES

1.- We would again like to thank Margaret Siwallace, Felicity Walkus, and especially Charles Snow for their help. We should also like to express our gratitude to the Canada Council (Grants S73-1973 and S72-0958) and the National Science Foundation (Grants SOC73-05713 A01 and BNS73-05713 A02) for their continued financial support.

2.- We shall employ here a distinction between Speech Event (E^s) and Narrated Event (E^n). A speech event is a single speaker's utterance concerning a narrated event. The narrated event is tha actual manifestation of the content of the speech event independent of its formulation and expression of it within the speech event. The narrated event is the thing reported; the speech event is the report.

3.- The term used by Lakoff is 'common topic'. Because we use the term Topic as a constituent of S, we have tried to avoid possible confusion by replacing Lakoff's original term with 'common theme.'

4.- English does have an intensive use of and which permits identical sentences to be conjoined (cf. John ran and ran.) In Bella Coola, this would be expressed by a special form of reduplication.

5.- We offer a brief definition of discourse as a cooperative talk exchange between at least two speaker-listeners which is characterized by a common purpose or at least a mutually accepted direction, which we collectively call the Theme of the discourse. A discourse minimally consists of two successive speech events. A discourse initial sentence is the first sentence in the speech event which broaches the theme of the discourse after whatever preliminary exchanges, such as introductions, salutations, pleasantries, etc. have taken place.

6.- There is one other possible source of information which could conceivably be relevant- the physical location of the discourse. Such information is, for example, relevant in determining the use of the deictic affixes (cf. Davis and Saunders 1975a. and b.) We have not systematically explored the relevance of physical location to the use of the conjunctive particles, but what little work we have done concerning it appears to indicate that it is not a factor.

7.- There are several comments pertinent to this discussion of beliefs. First we are not claiming that such a general belief as 'marriage and happiness are compatible' exists or is held in this form by Bella Coola speakers. We use this form only for expository purposes. Our impression concerning beliefs is that, in regards non-scalar predicates such as 'marriage' and 'happiness', they are created by the speaker for the nonce and in terms specific to the speaker's knowledge of the individual to whom they are attributed. That is, rather than a general belief concerning the compatibility of marriage and happiness, what is operative is a specific belief concerning a subject (or subjects) and the compatibility of the predicates relative to him (them). One might say that to the extent that any general belief exists concerning these predicates it is of the form $(m \bar{v} h)_x$ 'x is married and/or happy' from which, according to the individual represented by x at any given time, a range of specific beliefs -- $(m \wedge h)_x$, $(m \wedge \tilde{}h)_x$, $(\tilde{}m \wedge h)_x$, and $(\tilde{}m \wedge \tilde{}h)_x$-- is derivable according to the speaker's knowledge of the individual x. It is thus possible that a single speaker could hold one specific belief, say $(m \wedge h)_x$ where x = Snac, but hold a different belief, say $(m \wedge \tilde{}h)_x$ where x = Snic. Likewise a single speaker might hold different beliefs relative to the same individual at different times. For example, upon the occasion of Snac's recent marriage the speaker may hold $(m \wedge h)_{snac}$, but after having seen Snac and his wife fighting for twenty years hold the belief $(m \wedge \tilde{}h)_{snac}$.

This variability extends to different speakers such that concerning Snac and the states of marriage and happiness, one speaker having knowledge of Snac might believe $(m \wedge h)_{snac}$ while another speaker having different knowledge of Snac believes $(m \wedge \tilde{}h)_{snac}$.

8.- The relevancy constraint has a broader scope than that described here. For example, given operation of the Cooperative Principle, a sentence such as a) below, if a speaker wishes to continue the theme, he is forced to do so in terms of the original predicate asserted in a) and is precluded from doing so with its opposite on the same semantic continuum.

a) sx-ø snac ʔaɬ-tunixa 'Snac was bad yesterday.'

b) %ʔaχ^{w}-ø-a ya-s 'Wasn't he good?'

b') sx-ø-a 'Was he bad?'

When as in a) the speaker begins in terms of the 'bad' point of the 'good-bad' continuum, the second speaker must respond - if he does in fact answer - in terms of the same point on the continuum. Hence b) is inappropriate and b') is the correct form for a confirmatory question of the accuracy of the choice of predicate from the 'good-bad' continuum. We find such examples to constitute sufficient external motivation for positing the operation of the relevancy constraint in conjunction.

9.- While we have treated the suspension of inherent contrast as arising from a raising of the common theme from the semantic continuum along which two scalar predicates operate to a higher level of generality thus descalarizing the predicates, it is possible to see in this process the operation of the relevancy constraint as explaining why a Bella Coola speaker prefers the contrastive conjunctive particle ʔic'ik in such sentences at first sight and why he requires additional information to accept such sentences with tuʔ. As noted in footnote 8., when one speaker begins a theme at one point on a semantic continuum, his respondent must continue from that point. This constraint can be considered as being manifested as well in the speech event of a single speaker who uses a scalar predicate. Consider:

a) i χs-ø snac; χik'-ø ʔic'ik c'ayliwa
'Snac is fat, but C'ayliwa is thin.'

ii χs-ø snac; χik'-ø tuʔ c'ayliwa
'Snac is fat and C'ayliwa is thin.'

In ai) we could say that this sentence is preferred over aii) because the relevancy constraint would stipulate that by having begun to talk about fatness in regard to Snac, the common theme is the semantic continuum 'fat-thin'. At this level, the predicates 'fat' and 'thin' are inherently contrastive and hence the preferred use of ?ic'ik. The sentence aii) would appear to be in violation of the relevancy constraint. As per Grice, when a maxim (or here, a constraint) is violated, one must assume either that the Cooperative Principle is not in force or, if it is in force, that some implicature is involved. Accordingly, the use of tu? as in aii) is a violation of the relevancy constraint and must implicate that the speaker is not talking about the 'fat-thin' semantic continuum, but about something else,i.e., where the common theme is such that 'fat' and 'thin' are not contrastive. We noted that this implicated common theme could be something such as general physical characteristics.

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