

Clause, Sentence, and Discourse Patterns
in selected languages of Nepal

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Part I, General Approach

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Clause, Sentence, and Discourse Patterns

We all wish to express our appreciation to the Institute of International Studies, U. S. Office of Education, for making it possible for Dr. and Mrs. Pike and other members of the research team to attend the workshop and for helping us in many ways in the preparation of this report.

Table of Contents

Acknowledgments	v
Toward the systematization of display grammar, Austin Hale.	1
Clause patterns in Kham, David E. Watters	39
Tentative systemic organization of Nepali sentences, Maria Hari	203
Maithili sentences, Alice Davis	259
Notation for simultaneous representation of grammatical and sememic components in connected discourse, Burkhard Schöttelndreyer and Kenneth L. Pike	321
Paired-sentence reversals in the discovery of underlying and surface structures in Sherpa discourse, Kenneth L. Pike and Burkhard Schöttelndreyer	361
Contra-expectancy particles in Tharu Bhojpuri, Richard D. Hugoniot.	377
Chaining and spotlighting: two types of paragraph boundaries in Sunwar, Marlene Schulze and Dora Bieri .	389
An approach to discourse in Sunwar, Dora Bieri and Marlene Schulze.	401

Maithili Sentences

Alice I. Davis

CONTENTS

I.	INTRODUCTION	260
A.	Scope and Purpose.	260
B.	Language Research.	260
C.	How to Find a Sentence	261
II.	SENTENCE SYSTEM.	264
A.	Definitions.	264
B.	Contrast of Sentence Types	265
	1. The Semantics Tree.	268
	2. The Grammar Tree.	269
	3. Correspondence between the Trees.	269
III.	DETAILED DESCRIPTIONS OF THE SENTENCE TYPES.	270
A.	Coupling Relationships	270
	1. Correlative Sentence.	271
	2. Alternative Sentence.	274
	3. Coupled Sentence.	276
	4. Contrast Sentence	278
B.	Restatement Relationships.	280
	1. Reiteration Sentence.	281
	2. Paraphrase Sentence	282
	3. Negated Antonym Sentence.	283
	4. Generic-Specific Sentence	284
	5. Question-Response Sentence.	286
C.	Cause-Effect Relationships	287
	1. Antithetical Sentence	289
	2. Concessional Sentence	291
	3. Reason Sentence	293
	4. Result Sentence	299
	5. Purpose Sentence.	301
	6. Negative Purpose Sentence	302
	7. Contrafactual Sentence.	304

8. Condition Sentence.	305
9. Warning Sentence.	307
D. Chronological Relationships.	308
1. Temporal Sentence	308
2. Immediate Sequence Sentence	313
REFERENCES.	314
FOOTNOTES	316
APPENDICES.	318
A. Maithili Phonemes and Their Orthographic Form. . .	318
B. Abbreviations.	319

I. INTRODUCTION

A. Scope and Purpose

The purpose of this paper is three-fold. First, it aims to provide some materials on the Maithili language as spoken by the Brahmin caste in the area around the town of Janakpur in south-eastern Nepal. This brief description of the internal structure and meaning of Maithili sentences may, secondly, be helpful for grammatical comparison across various languages in Nepal and India, especially among the Indo-Aryan language groups. In the third place, this analysis, since it has been done when language research is still in preliminary stages, may provide some useful hints to other technicians on methods for beginning sentence analysis of other languages.

Maithili sentence structure is a field of study rarely mentioned in previous literature dealing with this language and when mentioned, then only in briefest form.¹ Generally, descriptive works on Maithili concentrate on the varieties of sound and the complexities of the verb system. In addition, the major works on Maithili were done before the field of linguistics was giving much attention to structures above the clause level.

This analysis is Maithili-specific and does not purport to be exhaustive or capable of universal application. It is highly tentative, and further revisions and expansions are expected in the future when more textual material is available. The present work was done totally without reference to distribution on higher levels and largely without attention to variation at lower levels. Thus, many vital points of contrast and comparison between sentence types are regrettably missing. At a later date we hope to remedy this situation.

B. Language Research

During this investigation, Messrs. Shibnandan Mandal,

Jay Narayan Jha, and Keshav Thakur have served as able language assistants. I am indebted to all three of them for their help in gathering data and to Mr. Mandal for his patient and careful help in checking the data on which this paper is based. Without the capable English translations and explanations by Messrs. Mandal and Thakur, it would have been impossible to produce this paper at such an early stage of Maithili investigation.²

Data for this paper has been gathered under the auspices of the Institute of Nepal and Asiatic Studies, pursuant to an agreement of cooperation between Tribhuvan University and the Summer Institute of Linguistics in Nepal. The author also wishes to express appreciation to Andhra University, Visakhapatnam, India, for the seminars conducted on their campus. Partial support for the research was made available through a grant from the U.S. Office of Education, Washington, D. C., under contract number OEC-0-097721-2778(014).

I am greatly indebted to Dr. Kenneth L. Pike for his inspiration and direction in beginning analysis; to Dr. Ronald L. Trail for valuable suggestions, encouragement, and guidance in the analyzing and writing process; and to Dr. Austin Hale for his willingness to read and criticize the paper. In addition, I am grateful for the stimulating discussions from time to time with Mr. R. Christmas and Miss F. Woods.

C. How to Find a Sentence

Locating the boundary of a sentence has always been problematical. Dr. Kenneth L. Pike has suggested that perhaps dialogue can aid in the effort.³ The suggestion was applied to some Maithili work, and also Mr. Burkhard Schöttelndreyer used the technique on Sherpa, a Tibeto-Burman language spoken in northeastern Nepal. Since helpful insights were gained by these investigations, the heuristic method is presented here with the expectation that it may prove beneficial to others in beginning sentence analysis.

We begin with the assumption that a minimal utterance in dialogue is a sentence (independent clause) and a minimum response is a word. We assume that for analytic purposes we can successfully identify and temporarily exclude hesitation and interruption phenomena from consideration. With this exclusion we can say that a change of speakers in dialogue will involve at least one sentence boundary and possibly two. Suppose we have a text which has been transcribed as a single sentence but which we suspect may actually consist of two sentences. If such a text can be re-written as a dialogue such that a change of speakers may occur in the middle of the text without radically changing the meaning of the text then the sequence is no longer suspect. It consists of two sentences. Notice, however, the three conditions upon this analytic approach: there must be no hesitation, no interruption, and no change of meaning involved.

How is change of meaning checked? By substituting other words in place of the linking word or phrase. For example, recasting into dialogue the utterance:

I'm going home but I'm coming back.
 results in: Speaker A: I'm going home.
 Speaker B: But you're coming back?

In dialogue the but can be replaced by surely or I hope and the meaning remains the same, but when they are substituted in the original sequence, the meaning will be changed. Thus, we must assume that in this test the meaning is altered when the utterance is split in dialogue; so the original utterance must be one rather than two sentences.

Another instance of suspect sequence is:

It's late therefore I must go.
 In dialogue it would become: Speaker A: It's late.
 Speaker B: Therefore you must go.

Speaker B could replace therefore with that's why, and, or I think without changing the meaning. These same substitutions could be made as well in the original monologue sequence with no meaning change. In this case, a speaker change in the midst of the suspect sequence is perfectly acceptable; so this sequence must be analyzed as two sentences.

In the early analysis of Maithili, the reason-result and result-reason sequences were giving the most trouble when it came to defining boundaries. The following two examples will illustrate how Dr. Pike's suggestion proved helpful. The suspect links in the following examples are underlined. (See Appendix A for charts of Maithili phonemes and their orthographic representation.)

- 1) kharheyā bahut tej chalabālā rahai ahi ke lel o khub tej
 rabbit very fast goer was this for he very fast
 daka chala lāgal
 running to go began

'The rabbit was very swift therefore he started out running very fast.'

The spontaneous informant response to the query of whether this (Example 1) was one or two sentences was to say it was one. However, on setting up the situation so that there could be a change of speaker in the middle, he readily agreed that the first part could appear anywhere with no problem. The second part would have to be in some sort of context; that is, it could not be dialogue initial, but it was perfectly all right response, or even paragraph, initial. With very slight adjustment, this sequence could be changed into just one sentence, but in its present form it has to be two sentences.

- 2) atek pahine o pahych gelāik kyāek je ki asthir
 so much first he reach went why that Quest mkr slow

aur chalabālā byakti res jitait achh
and goer man race win is

'He reached there so much earlier because the slow and steady runner wins the race.'

Because most of the utterances checked before we got to this one were of the two-sentence variety of Example 1, the language assistant had gotten accustomed to calling suspect sequences two sentences; so that is what he initially said Example 2 was. But when I tried to split it in the middle, he objected. The second part was all right standing alone (as long as it was not dialogue initial) but the first part must be accompanied by the second. The order could be reversed and put in the ahi ke lel form of Example 1 with no difficulty, but in its present form it must be one sentence.

Thus, in Maithili this technique led to a final analysis of ahi ke lel occurrences as reasonable introducers for simple sentences which are preceded by another sentence stating a reason, and the kyæk je ki structure as a link between the two bases of one Result Sentence.

In the Sherpa analysis, Mr. Schöttelndreyer had done no previous work on the sentence level, so this was a good test of whether this heuristic device could give a beginning point to analysis. The informant was instructed to take a narrative discourse and convert it into a dialogue, making a change of speaker at every possible opportunity. This, however, in the informant's view was not possible unless the dialogue allowed to Speaker B was restricted to the questions "Why?" or "How?" or the like. Since this would be viewed as interruption, it did not fit the requirements of the technique, and therefore was of no help.

Upon turning to a topicative text, the change to a dialogue became simple for the informant, and in redoing this type according to the original instruction, Mr. Schöttelndreyer obtained evidence for calling sinang 'although,' 'cilaasisi 'because,' and -si 'if' conjunctions linking propositions in one sentence, and evidence for analyzing 'ti tapkiq 'that therefore' as indication of a new sentence beginning. In the 14 clauses of Sherpa text on which this experiment was carried out, these decisions allowed the beginning analyst to say with a fair degree of certainty that five sets of those clauses would be sentences.

In summary, Dr. Pike's suggested technique of using discourse as an aid in defining sentence boundaries has proved helpful in both Maithili and Sherpa. On the basis of these limited experiments, we feel that the device should be useful for most languages in the beginning stages of sentence analysis. Procedural texts are perhaps the easiest variety to recast in dialogue form, but it should (with an imaginative language assistant) be possible with narrative discourses as well.

II. SENTENCE SYSTEM

A. Definitions

For the purpose of this paper, a sentence is defined grammatically as the level of clause combination and semantically as structured relationships between paired propositions. Independent clauses may themselves be simple sentences, although in this study we deal only with complex sentences. A sentence consists of a variety of optional peripheral items⁴ which accompany the sentence nucleus or center. It is the structure of the sentence nucleus which is under focus here and from which the individual types acquire their distinctiveness and their names.

In this description, the following general definitions have been adopted for the grammatical components of the various sentence structures:

Adjunct is an emphatic item occurring in specific sentence types which serves to emphasize the relationship between the propositions involved.

Base is an independent clausal structure.

Dependent Base is a clausal structure which cannot stand alone due to a dependent feature found elsewhere than in the verb.

Introducer is an introductory item optionally occurring in a specific sentence type and which serves to signal the type of relationship between propositions involved in the sentence.⁵

Link is a conjunctive word or phrase which connects two bases. Two types of links occur: those allowing permutation of the bases (which will be indicated by pLink) and those prohibiting permutation.

Margin is an axis-relator or participial clausal construction⁶ which cannot occur alone, which attaches itself to a base, and which is an integral part of the sentence, i.e., not in the periphery. It is always capable of permutation.

Subordinate Base is a clausal structure which cannot stand alone due to the presence of a subordinating feature in the verb.

On the semantic level, sentences are composed of propositions and connectors.

It seems plausible to assume that in any type of a discourse the speaker(s) must segment the text in order to communicate effectively. To develop a discourse many things must be said, but to say them all at the same time would be impossible, and to say them all with equal focus would boggle the listeners' minds. Therefore there must be some way for a language to impose an artificial sequence on events, to divide discourse into segments, and to focus on only certain of those segments at a time without

losing the items which are out of focus. Items which are candidates for focus are probably signaled from the monologue level, determined by the overall purpose of the discourse. Although the present work is not intended to prove this theory and although sufficient Maithili textual material is not in hand to make application of the theory, we assume that these main focusing and subordinate focusing devices could be found at the sentence level. Perhaps certain of the sentence types are reserved for highlighting, and others may be primarily for the sidelighting process. Perhaps certain components of a sentence (like margins) subordinate focus, and other parts (like bases) give main focus. Perhaps items of minimal focus are consigned to the periphery of the sentence. All of these we do not know now, but the suggestions seem sound and worthy of further investigation.

B. Contrast of Sentence Types

The relationships between paired propositions in Maithili are divided and contrasted according to semantic distinctions as shown in Figure 1 and grammatical differences as indicated in Figure 2. In order to establish contrast between sentence types, following the tagmemic form-meaning composite standard, we require that each sentence type appear on a separate branch of both the Semantics Tree and the Grammar Tree. If two types emanate from the same terminal branch on either one of the trees, they are considered as sub-types. Thus, although the Reason Sentence types appear in three different places on the Grammar Tree, they are classed as sub-types because they all emerge from the same branch on the Semantics Tree. Each node of each tree represents one feature on which the internal contrast of sentence types is based. For example, Reiteration and Paraphrase are contrastive types because semantically there is one node separating them and grammatically there are three nodes.

In general, the nodes split in a binary manner allowing the right-hand branches to present the positive aspect while the left-hand branches are distinct by the absence or non-obligatory status of that same aspect. Below the Semantics Tree is a general representation of the structure of the sentence types, and below the Grammar Tree is a general classification of the semantic relations between the types. The underlined nodes on each tree indicate the major divisions by which the types are classified at the bottom of the other tree. This has been included for gaining a general view of how semantic types are represented at the grammatical level and vice versa.

To facilitate the cross-referencing process between semantics and grammar, each terminal branch of each tree is numbered. The number appearing after each sentence name on each tree records the number of the branch on the other tree where the same sentence is located. For a full description and examples of each contrastive type, consult Section III where the order of the descriptions follows the left-to-right order on the Semantics Tree.

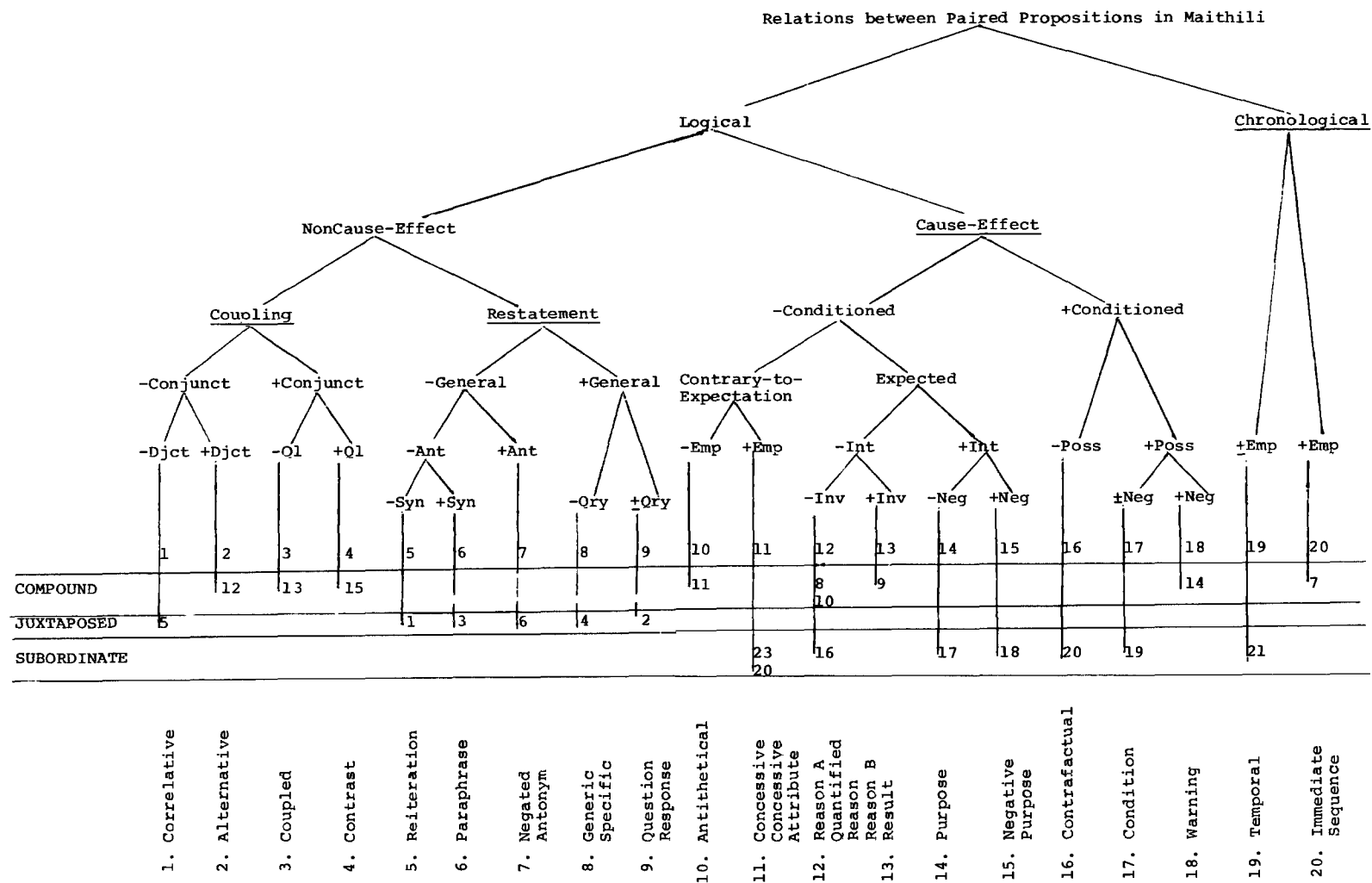


Figure 1. Semantics Tree. (Abbreviations used are as follows: Djct=Disjunct; Ql=Qualified; Ant=Antonym; Syn= ynonym; Qry=Query; Emp=Emphatic; Exp=Expected; Int=Intent; Poss=Possible.)

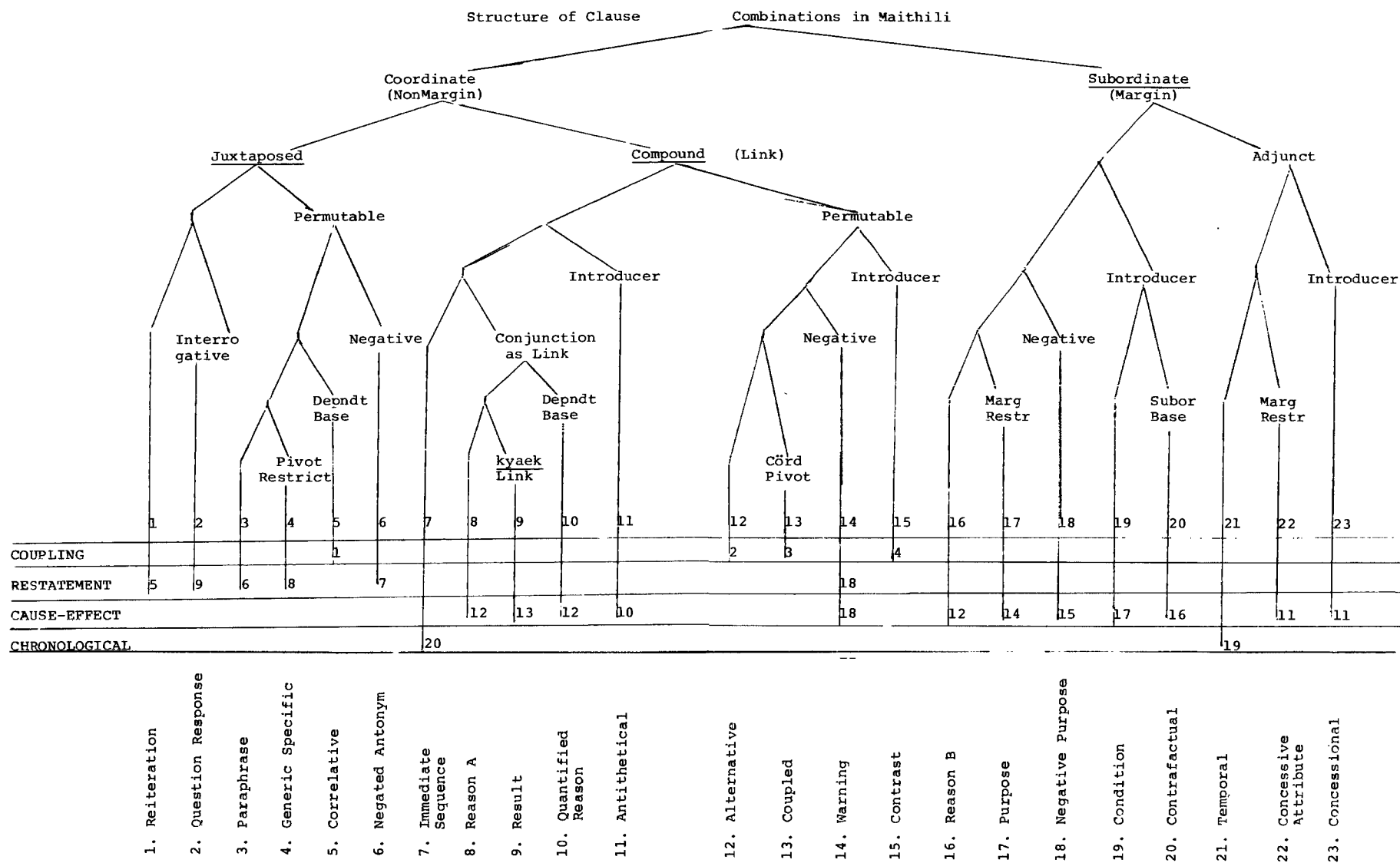


Figure 2. Grammar Tree.

1. The Semantics Tree

As indicated on the tree in Figure 1, the four major divisions among semantic relationships of Maithili sentences are Coupling, Restatement, Cause-Effect, and Chronological. That there is a node which is labeled chronological does not mean no other nodes dominate chronological sequences--it merely indicates that sentence types under this node have a primary focus on the chronology while types elsewhere have their main focus on some other feature of the relationship. Sentences overtly stating concepts such as 'before,' 'after,' 'during,' or 'as soon as' are classified under the Chronological branch of the Semantics Tree.

All other relationships between propositions fall under the broad category of Logical, which is further divided into Cause-Effect relations and NonCause-Effect ones. Stimulus-Response is an alternate name for Cause-Effect, both of which terms show that one proposition in the sentence is a direct or indirect outcome of the other one. These types may be of the Conditioned, Expected, or Contrary-to-Expectation variety. Conditioned relations involve such utterances as "If you laugh, the world laughs with you." Contrary-to-Expectation types include relations like "Although water was scarce, some took baths," or "He deserved better treatment, but that's how he fared." Under the Expected node would fall relations like "He went home because he was tired," or "He climbed the hill to take a picture," or "He walked all day so he is sleeping now."

Sentence types which are not Cause-Effect and not Chronological are separated into Restatement and Coupling relationships. The major characteristics shared by the Coupling type of sentences is the absence of the features which established the other major nodes on the Semantics Tree. Therefore it is difficult to give a characterization of the Coupling types in one example. Diverse relations such as the following fall into this classification: "The quicker I arrive, the quicker our work will be done"; "Do or die!"; "He is shopping and he is working"; "I am tall but she is short."

There is greater cohesiveness among Restatement Sentence types. As the name implies, the second proposition in each type says basically the same thing as the first proposition did. This, in general, makes it possible to delete half of the sentence and still leave the text in a coherent state. Examples include "She was angry; she was utterly furious with him"; "Let the little children come--don't hinder them"; and "He is a good man: he is kind, honest, and faithful to God."

This broad classification covers all the semantic relationships found to date among Maithili paired propositions. We assume that further investigation may reveal other relationships, but these, too, should fit under the four main divisions just discussed. For discussion of the lower nodes on the tree, see the detailed description of these four major headings in Section III.

2. The Grammar Tree

The structure of Maithili sentences is displayed in Figure 2. Initial division is made on the basis of whether the clauses involved are dependent on, or independent of, one another. Balanced and non-balanced is another way of viewing the structure, but for the present we will refer to the two divisions as Subordinate and Coordinate. Subordinate constructions in Maithili are similar to the English forms, "Having won the race, he is headed for the Olympics," and "As he walked along, he practiced his speech," and "If you work hard you will do well."

Coordinate sentence types are like stone walls in Nepal--some are held together by mud or mortar but others are just stones placed side by side and held together because of the shape of the stones. The mortar for compound sentences is called "link" and may come in as many mixtures as is illustrated by the underlined items in these examples: "Speak softly and carry a big stick"; "It's raining so they won't come"; "Shape up or ship out"; and "The milk comes as soon as the sun is up."

"Juxtaposed" is the name given to sentences which hang together without the help of mortar links. Certain restrictions occur within each clause which make it fit well with the other clause, but the side-by-side position is all the external cohesion needed to produce the sentence. An example of juxtaposed construction in English is: "He is an important man--he's chairman of the bank."

These three major divisions embrace all the constructions found to date and should be sufficient to handle any new sentence structures that might be revealed in further data collection.

3. Correspondence between the Trees

Briefly now, we shall look at the correspondence between the Semantics and the Grammar Trees. Figure 3 presents the major semantic distinctions in the columns and the grammatical divisions in the rows.

The most obvious observation from the matrix is that Restatement relations occur only in a juxtaposed form, making them the most restricted of all the semantic types. Coupling relations show a decided preference for the compound structure, but Cause-Effect and Chronological relations are equally happy in compound or subordinate constructions. All of the Cause-Effect and Chronological sentences, i.e. those relations dealing with events in sequence (whether it is the sequence or the cause of it which is in focus), must have the relationship overtly expressed either in the link (compound) or the relator (subordinate). The compound structure seems to be the most versatile of the grammatical forms, representing all but Restatement relations, while juxtaposed handles only varieties from the left half of the Semantics Tree and subordinate maps only branches on the right half.

COUPLING	RESTATEMENT	CAUSE-EFFECT	CHRONOLOGICAL	
Coupled Contrasted Alternative		Antithetical Reason A Quantified Reason Result Warning	Immediate Sequence	COMPOUND
Correlative	Reiteration Paraphrased Generic- Specific Negated Antonym Question- Response			JUXTAPOSED
		Concessive Concessive Attribute Reason B Purpose Negative Purpose Contrafact- ual Conditional	Temporal	SUBORDINATE

Figure 3. Relation between the Semantics and Grammar Trees.

III. DETAILED DESCRIPTIONS OF THE SENTENCE TYPES

The remainder of the paper will deal with the specific sentence types found in Maithili. Preceding each of the major divisions among the sentence types, a reproduction of the relevant branches from the Semantics Tree of Figure 1 will be given, accompanied by brief comments on the distinctive features involved. Then come the detailed descriptions of each sentence type. These descriptions will be presented first of all in a four-box formula⁷ and then in prose, looking at the grammatical and semantic characteristics and the restrictions. Maithili examples appear throughout the text with a word-by-word translation, a notation of the grammatical function of each part of the sentence, and a free English translation.

A. Coupling Relationships

Relations between propositions which are nonChronological, nonCause-Effect, and nonRestatement are referred to as Coupling Sentences. They are divided according to the following distinctive features in Figure 4:

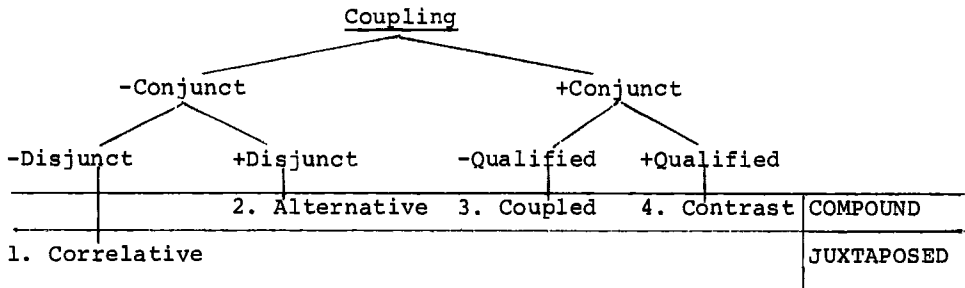


Figure 4. Reproduction of the Coupling node from the Semantics Tree. (Numbered labels in the tree refer to sections below.)

Formal logic uses the term "conjunct" to refer to a joining or a combination, and this is the first distinctive feature which divides Coupling Sentence types. On the +Conjunct side, the Contrast Sentence requires the link 'but' which joins the second proposition in a qualifying manner to the first one. The 'and' link of the Coupled Sentence merely combines the propositions without adding any other indication of further relationship.

Turning again to formal logic, we use the "presenting alternatives" definition of the term disjunct, and this separates the two members under the -Conjunct node. The link 'or' of the Alternative Sentence requires a choice to be made among alternatives. Unlike the other Coupling Sentence types, the Correlative Sentence is a juxtaposed structure. The pronouns 'wherever,' 'however,' etc. in the first proposition produce a corresponding 'there,' 'so,' etc. in the second, making this the only Coupling Sentence with dependent bases.

1. Correlative Sentence

dBASE 1	In Cl c	dBASE 2	In Cl c
+ Antecedent Prop	specifying correlative	+ Main Prop	specified correlative

Grammatically a Correlative Sentence requires two dependent bases. The verbs of the clauses filling each base are independent verbs, so it is not this feature which makes the bases dependent. Rather, it is the occurrence of a pronoun in Base 1 which, together with the whole clause, forms the antecedent for the pronoun in Base 2 and prohibits either base from standing alone. (Pronouns diagnostic of the Correlative Sentence are underlined in the following examples.)

- 3) jahinā hunkar dhan aelainh tahinā dhan chali gelainh
 as his wealth came so wealth move went
 dB1 dB2
 As his wealth came, so it went.

Time, location, amount, manner, and person or object are the items susceptible to pronominalization in this way, and the pronouns indicating the shared constituent usually stand in initial position in the clauses. Figure 5 is a chart of the paired pronouns employed in this type of structure.

Correlative Constituent	Pronoun in Antecedent Proposition	Pronoun in Main Proposition	Meaning
Time	jakhan	takhan	when...then
	jahiyä	tahiyä	
Location	jemhar	omhar	where...there
	jata	ota	
Amount	jateik	ateik*	as much...that much
	jae	tae	
Manner	jahinä	tahinä	as...so
	jenä	tenä	
Person or Object	je	o	who, which...that one
		se**	

Figure 5. Pronouns used for shared constituents.

*In conversation the se pronoun from the last row may be substituted in the amount row, but if the bases are permuted it must revert to the normal ateik.

**A spoken form only.

In addition to the pronouns given here, a phrase with the pronouns jai and tai may also be used to indicate the shared item, as in Example 4. In such cases the entire phrase is treated as a single pronoun, i.e. if permutation occurs, the whole phrase is permuted as a unit.

- 4) hamsab jai din kaThmanDu sa paTnä aelau tai din sa ek
 we which day Kathmandu from Patna came that day from one
 dB1 dB2

din pahine jeni DäkDar ke ghar gel rahaith
 day before Jenny doctor of house went stayed

Whichever day we came from Kathmandu to Patna, one day
 before that Jenny went to the doctor.

Frequently and especially in conversation, one of the correlative pronouns may be omitted, usually from the first base. Then structurally that base would appear to be no longer dependent; however, the pronoun is understood to be there so the base is still inherently dependent.

Semantically the Correlative Sentence consists of two dependent propositions with a shared pronominal constituent. One proposition is used as a specifying antecedent and the shared pronominal in the other proposition then refers to this specifying antecedent. The content of the antecedent pronoun is specified by the rest of its clause. This specification is quite often indefinite, referring to some other antecedent in the discourse or speech situation. The content of the pronoun of the main proposition is then supplied by reference to that of the antecedent pronoun. In this sense they may be viewed as correlative pronouns, and it is from this feature that the sentence takes its name.

- 5) jakhan duTa karin lagäba partai takhan chäir ädmi ke jarurat
 when two karin stick operate then four man of necessary
 dB1 dB2

partai
 operate

When two karins (irrigation devices) are used then four men are needed to operate them.

The pronouns in the antecedent proposition very often can be translated as '____ever,' which seems to indicate that when this type of a sentence is used, either the actual item is unknown or it is unnecessary to specify it in other than relative terms.

- 6) jemhar jae ke bichär ai omhar chalu
 where go of thought is there let's go!
 dB1 dB2

Wherever you wish to go, let's go there.

The relationship involved may be either directly proportional or inversely proportional, as Example 7 is.

- 7) jateik ham bisas adhyan karab tateik kam jänait chhi
 as much I much study do so much less know am
 dB1 dB2

The more I study the less I know. (However much I study, that much less I know.)

Any of the tenses may occur in either base, although it is most common to find the same tense in each base.

- 8) jakarä päś me dhansampati chhai se tahnä kəraiya
 whose to in wealth is he thus does
 dB1 dB2

Whoever has the money (he) does it like this.

Indicative is the preferred mood, but imperative does occur in Base 2 (Example 6). Negation is possible, and it would generally occur only in Base 2.

As mentioned above, the pronouns normally occur at the beginning of their respective bases. To date not one exception to this has been found in Base 2, but in Base 1 infrequently the pronoun may be shifted to another spot in the clause. The pronoun of Base 2 may often be omitted and the deletion signaled by intonation in speaking or a comma in writing. If both of the pronouns are left out (thus subtracting the dependent elements), two sentences evolve with an implicit coupled relationship between them.

Deletion of shared items occurs, but there seems to be no pattern as to when it can and cannot occur. Notice, in this regard, the 'you' morpheme in Example 9 where it is deleted in Base 2, and then Example 10 (a permutation of 9) where it is retained.

- 9) jenä ahä ke nik lägai onä khä sakait chhi
 as you to good sticks so eat can are
 dB1 dB2

However you like, you can eat it.

- 10) ahä ekarä khä sakait chhi jenä ahä ke nik lägait achh
 you it eat can are as you of good sticks is
 dB2 dB1

You can eat it however you like.

Permutation of the bases is possible, both in elicited examples and in normal text. Non-initial occurrence of the pronoun in the first base is often a characteristic of such a permuted construction, as is the addition of the particle *ki* following the pronoun. Such use of *ki* does not alter the meaning in any discernible way.

Consideration was given to the possibility of calling the pronouns a link joining two independent bases. However, since these pronouns fill a normal clause- or phrase-level position and since they travel with their clauses in a permutation operation, we have decided to analyze them as constituent members of dependent bases.

2. Alternative Sentence

Alternation is an operation which can occur at several levels in a grammar. It is necessary, therefore, to determine at which level the alternation is working before calling every occurrence of 'or' a pivot in an Alternative Sentence. For purposes of this analysis, sentence-level alternation must involve the verb. A choice between subjects, objectives, manner, etc. is relegated to the phrase level. A choice of positive or negative or a choice in tense or aspect in the verb phrase qualifies for consideration

on the sentence level, as do alternatives of action.

±	INT cj	+	BASE 1 InCl	+	pLINK cj	+	BASE 2 InCl
	Alt		Choice		Alt		Choice
	Sig		Prop 1		Conn		Prop 2

$$\pm \left(\begin{array}{c|c} \text{pLINK} & \text{cj} \\ \hline \text{Alt} & \\ \text{Conn} & \end{array} + \begin{array}{c|c} \text{BASE 3} & \text{InCl} \\ \hline \text{Choice} & \\ \text{Prop 3} & \end{array} \right)$$

Grammatically the Alternative Sentence is a double (or triple) based construction joined by a permuting link. Each base is independent and filled with an independent clause.

- 11) chāhe o bimār bhelāh chāhe ghar gelāh
 either he sick became or house went
 INT B1 pL B2

Either he got sick or went home.

Two bases is the most commonly occurring structure, but three bases are also possible.

- 12) umes yā dhān kait rahal achh yā ganit-ak adhyān ka rahal
 Umes either rice cut stay is or math-of study do stay
 B1 INT pL B2

achh chāhe apanā bhae sa gapp ka rahal achh
 is or own brother from talk do stay is
 pL B3

Umes is either cutting rice or studying math or talking to his brother.

The conjunctions capable of manifesting link are ki, yā, athabā, arthat, and chāhe. The morphemes yā and chāhe may also be repeated at the beginning of the sentence in the optional introducer position, as in Example 11. Note in Example 12 that the introducer has taken a position immediately preceding the items under alternation, rather than its normal sentence-initial location.

Semantically the Alternative Sentence offers a choice or alternative. In Example 11 one may affirm either that he got sick (choice 1) or that he went home (choice 2) but not both. What the sentence type affirms is that one of the choices but not both is asserted. It does not state which of the choices is asserted. This exclusiveness of choice is signaled by the connector translated 'or' and supported by the optional emphaziser rendered 'either.' Interestingly enough, the intuitively similar

'neither...nor' construction does not qualify for consideration under this alternative relation because in such a construction the assertion is that both are negated. Such a structure is treated under the Coupled Sentence because it signals an exclusion rather than an exclusive choice.

All tenses may occur in Alternative Sentence bases. Generally the same tense is used in both bases unless time is the item under alternation. Interrogative and imperative, as well as indicative, moods are common.

- 13) yāta nik jakä parhu yä adhyan chhori diya
 either good like read! or study leave give!
 INT B1 pL B2

Either read sincerely or give up your study!

Often the tense or aspect of the verb is the item registering the alternation. Frequently negation of the verb in Base 1 constitutes the alternative of Base 2.

- 14) kāj khatm bhel ki nai bhel
work finished became or not became
B1 pL B2

Is the work finished or not?

Note that negation in the second proposition may entail deletion of all other items in the clause. However, the verb will not be deleted in an indicative sentence but rather repeated along with the negative in order to distinguish it from a question. If the alternative is negation of Base 1, then only two bases are allowed.

Deletion of shared items also occurs commonly when other things are under alternation. Such deletion generally affects Base 2 rather than Base 1. Permutation of the bases is easily accomplished with no semantic change. Even when an introducer is present, the process of permutation does not affect it at all--the two bases merely switch places. However, when Base 2 is negation, permutation is not possible.

3. Coupled Sentence

Coordination, like alternation, is an operation which can appear on several levels of a grammar. In order for a use of 'and' to qualify for sentence-level consideration in this analysis, we require that it must couple together verbs in propositions.

BASE 1	InCl	+ $\left(\frac{\text{BASE } n}{\text{Prop } n} \right)^2$	pLINK	cj	FINAL BASE	InCl
Prop 1			Cop1 Conn		Final Prop	

Grammatically a Coupled Sentence consists of two bases joined by a balancing link. Each base is filled by an independent clause and the permuting link is manifested by aur or ā and infrequently by tathā or ebam.

- 15) jeni kaphi pibaiya aur ham chāh pibai chhi
 Jenny coffee drinks and I tea drink am
 B1 pL FB

Jenny drinks coffee and I drink tea.

Example 16 illustrates the occurrence of three bases. As many as four bases have been found in the corpus. The extra base or bases appear following Base 1 and are joined to the rest of the sentence merely by juxtaposition rather than by an additional link.

- 16) maTkuri me dahi poraiya dahi do rakhaiya aur chhoT chhoT
 matkuri in curd make curd give keep and small small
 B1 B2 pL FB

pariwār ke ādmi ahi me mächh māns koraiya
 family of people this in fish meat do

In a matkuri (type of clay pot) curd is made and kept and a very small family uses it for meat and fish.

Semantically the Coupled Sentence is a loose coordination of two propositions. Presumably any two independent clauses can be joined by coordination, but the operation automatically implies that there is some sort of relation between the events or states. The connector does not signal what the relationship is--it merely indicates that one exists.

The same construction is frequently used to denote sequence. Two tests can be applied to determine whether such a structure is being used as sequence or as simple coupling. If 'and' can be replaced by 'and then,' sequence is the probable meaning of the construction. If the bases can be permuted without violating the sense of the context, the 'and' is probably showing simple coupling.

Generally the tenses are the same in both bases, although they do not have to be. Indicative mood is favored, but interrogative and imperative are also used. A wide variety of clause types occur in each base, and Example 17 shows an embedded Conditional Sentence in the final base.

- 17) des ke rakchā karab aur mokā parat ta larāi me jaeb
 nation of guard will do and time must if war in will go
 B1 pL FB

I will protect the country's security and go to war if necessary.

Negation is possible in either base or in both. When it occurs in both bases, the translation could be 'neither...nor' as

well as 'not...and not.' Deletion of shared items is possible but seemingly not mandatory. Notice the repetition of 'in the hills' in Example 18.

- 18) pahār me karin lagāba ke asthān nai chhaik aur bisēs ka
 hill in karin stick of place not is and more of
 B1 pL FB

pahārsab me oteik khetiyo nai hoi chhai
 hills in so much cultivation not is is

In the hills there is no place to stand a karin (an irrigation device) and in the hills farming is not done on such a large scale.

The bases can be permuted with no difficulty since this structure does not involve any relationship other than simple coupling, and this function is achieved regardless of which proposition appears initially.

4. Contrast Sentence

INT	cj	BASE 1	InCl	pLINK	cj	BASE 2	InCl
+ Conc - Sig		+ Prop	State- ment	+ Cont Conn	non- emph	+ Prop 2	contrast or qualifi- cation

Grammatically the Contrast Sentence consists of two independent bases joined by a permuting link. Independent clauses manifest each base, and a conjunction fills the link. Some of the literary conjunctions employed are parantu, magar, paranch, and muda but the colloquial form is the Hindi loan lekin. Optionally the introducer onāta may appear initially in the sentence, as in Example 20.

- 19) chhoT Ta ai lekin chhichhalāh seho ai
 short emph is but slippery also is
 B1 pL B2

It is short but also slippery.

- 20) onāta akhan ham chāh nai pibai chhi mudā bād me pib
 although now I tea not drink am but after will drink
 INT B1 pL B2

Though I'm not drinking tea now, I will later.

Since the Contrast Sentence is in basic structure the same as the Antithetical Sentence--with optional introducer onāta and two independent clauses joined by the same choice of conjunctions--we originally classed them as one type. However, the permutation process, the differing transformational possibilities, as well as semantic distinctions demanded a separation into two distinct types.

Semantically the Contrast Sentence contains two independent propositions, the second of which either qualifies the statement of the first (Examples 19-21) or offers a contrast to the first proposition (Examples 22 and 23). This makes it distinct from the Antithetical Sentence, which is basically a cause-effect relationship of the contrary-to-expectation variety. In the relationship of contrast, the second proposition contains two points of difference from Proposition 1, while in the qualification relationship, Proposition 2 merely gives one item of further information--often a negative aspect--regarding Proposition 1.

- 21) ham ebi äi bājār jaeb lekin nischit nai kon samae
I Evie today bazaar will go but certain not which time
B1 pL B2

me jaeb
in will go

Evie and I will go to market today but it's not certain at what time we'll go.

- 22) pahineta hamrā plen me bahut Dor läge lekin pächhä sa
before to me plane in much fear stick but behind from
B1 pL B2

kichh nai
any not

Before I was very fearful of planes but afterwards not at all.

The concessive signal onāta 'although' may be prefixed to any Contrast Sentence. In such a case, if Proposition 2 is a qualification presenting a negative aspect which could also be interpreted as contrary-to-expectation, the link would then probably become the concessive link taiyo 'still' and the transformation to a Concessional Sentence would be complete. But if Proposition 2 is contrast or is a qualification with no contrary-to-expectation overtones, the contrast connector must remain as it is.

All tenses can be used in each base of the Contrast Sentence. Normally the tense of Base 1 will match that of Base 2, but Example 20 indicates that this need not always be so. Indicative mood occurs most frequently, but imperative and interrogative are possible in Base 2. A wide variety of clause types fill each base, as well as embedded sentences. In the example below a Correlative Sentence fills Base 1.

- 23) jahiyā ham dhanik chhalāu tahiya ekar pariwär nai mudā āb
when I rich was then his family not but now
B1 pL B2

chintā me bhae gelāu
anxiety in became went

When I was rich then his family was not, but now I have become anxious.

Negation can occur in either or both bases if Proposition 2 is not an antonym of Proposition 1. (That is, using this construction it is impossible to say, "It is not new but it is not old." This would have to be expressed by means of a Coupled Sentence using 'and' instead of 'but.')

Permutation is easily accomplished by putting Base 2 in the place of Base 1 and Base 1 in that of Base 2, leaving the link and the introducer, if there is one, as it is. Since deletion of shared items from Base 2 is common (note Example 22), the permutation operation will also require that the deleted items be reinstated in Base 2 when it is permuted and then deleted from Base 1 when it takes the place of Base 2.

B. Restatement Relationships

All five of the Restatement Sentence types in Maithili are of the juxtaposed construction. They are logical rather than chronological in focus, but are not of the Cause-Effect variety of relations. The basis on which the five types are further separated is shown in Figure 6.

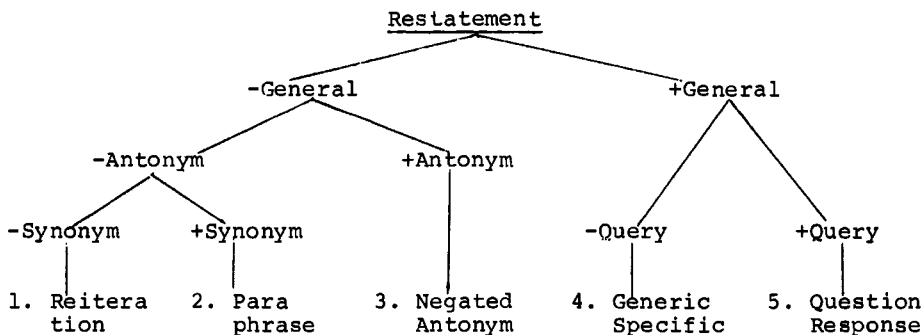


Figure 6. Reproduction of the Restatement node of the Semantics Tree. (Numbered labels in the tree refer to sections below.)

The term "restatement" indicates that the two propositions involved in the sentence are saying the same thing, as the English, "He is gone, he's not here." Thus it should be possible to eliminate one of the propositions and still leave the meaning intact. Perhaps this feature hints at the function of these sentence types in monologue--they are for use in focusing rather than in adding new information.

The sentence types dominated by the node +General in Figure 6 involve a restatement in which the statement is generalized and its restatement is specific. These are further divided into two types according to whether the general proposition is a generic statement or a generic query (rhetorical question). "How do I know? Because his wife told me," is a Question-Response Sentence

type, and "The Terai is a bad place to be in summer--the temperature reaches 125 degrees" is a Generic-Specific type.

Under the -General node of the tree, the three sentence types are further separated on the basis of antonym, synonym, and virtual repetition. The Negated Antonym Sentence requires words which are opposites so that the restatement can negate the positive. In "He is gone, he's not here," "here" is the opposite of "gone" and the restatement duplicates the "he is gone" by negating its opposite: "he is not here." The Paraphrase Sentence calls on a synonym to do the restating, as "He looks happy, he beams all over." The Reiteration Sentence is basically a repetition form, with generally little new information being given. This sentence type is the simplest type of restatement.

1. Reiteration Sentence

BASE 1	InC1	BASE 2	InC1
+		+	
Stat		Reit	repetition
Prop		Prop	of subj & pred of statement

Grammatically the Reiteration Sentence is a double-based construction with no link and with no possibility of a third base. Independent clauses manifest each base.

- 24) loksab ängan ghar me chintä phikr nai rahaiya kono
people courtyard house in anxiety care not stays any
B1 B2

chintä nai rahaiya
anxiety not stays

There is no anxiety or care among the people at home, there are no worries.

Semantically the Reiteration Sentence consists of a statement proposition followed by a reiteration proposition. Normally the purpose of the second proposition is merely to emphasize what has already been said rather than to give new information; thus simple repetition is also classed as a Reiteration Sentence. At least the subject and the predicate of the statement will be repeated in the reiteration and frequently more than that is repeated. Often the restatement will have an additional emphatic word not found in the statement, such as the superlative in Example 25.

- 25) ahi me brämhanak bhoj prasidh achh bisesta tähi me
this in Brahmin's feast famous is most this in
B1 B2

brāmhanak bhoj prasidh achh
Brahmin's feast famous is

The feast of the Brahmins is famous, the Brahmin feasts are the most famous of all.

Due to the nature of this sentence type, the verb tense, mood, and aspect will be the same in both bases. Since emphasis is the purpose of Base 2, this construction normally resists permutation. (It is difficult to emphasize something before it has been stated.) Embedding is not uncommon. In Example 26 a Correlative Sentence is embedded in Base 1.

- 26) karin sambhabta ohi samae me hamsab upyog karait chhi jakhan
karin possibly this time in we use do are when
B1

hamsab barsä sa niräs bho jait chhi takhan ham
we rain with disappoint become go are then we
B2

karin ke upyog karait chhi
karin of use do are

We probably use the karin (an irrigation device) in the time when we are disappointed with the rains, then we make use of the karin.

2. Paraphrase Sentence

BASE 1	InCl	pLINK	cj	BASE 2	InCl	BASE 3	InCl
+		±		+		±	
Stat		Copl		Synonym		Synonym	
Prop		Conn		Prop		Prop	

Grammatically the Paraphrase Sentence is a double-based construction joined by an optional permuting link. Also optionally present is a third base. Each base is manifested by independent clauses.

- 27) hamsab barsä sa niräs bho jait chhi sochai chhi
we rain with disappoint become go are think are
B1 B2

je barsä nischit nai haet
that rain certain not will be

We are disappointed with the rain, thinking that the rains certainly will not come.

When the option of a link is chosen, this sentence type appears to be like the Coupled Sentence at the grammatical level.

Semantically the Paraphrase Sentence consists of a statement

proposition followed by a restatement in the form of a synonym proposition. The optional connector means simply 'and,' in no way changing the meaning when it occurs in a sentence. If a second synonym proposition is chosen, it will be paraphrasing the original statement, but since things equal to the same thing are also equal to one another, it could be described as a paraphrase of the first synonym proposition.

- 28) pahār me karin lagāba ke asthāne nai chhai aur khās ka
 hill in karin stand of place not is and particularly
 B1 pL B2

lagebo kartaik ta kata lagataik kon Tham lagataik
 stand do if where stand which place stand
 B3

In the hills there is no place to stand a karin (irrigation device) and especially if going to stand one, where will it stand--in which place will it stand?

Embedding is a normal phenomenon in this sentence type, as is interrogative mood.

- 29) ahā konā hinkā sange jā rahal chhi ahā ke kenā hinkāsab ke
 you how her with go stay are you of how them of
 B1 B2

bheT bhāi gel
 meet become went

How (is it that) you are travelling with her--how did you happen to meet her?

Imperative has not been found in the text materials prepared to date. The tenses in each base must be the same in order to maintain the paraphrase. Permutation occurs easily in sentences without embedding, but the construction seems unable to handle the complexity of permuting embedded structures.

3. Negated Antonym Sentence

BASE 1	InCl	pLINK	cj	BASE 2	InCl
+		+		+	
Stat	pos/	Copl		Antonym	neg/
Prop	neg	Conn		Prop	pos

The Negated Antonym Sentence is grammatically a double-based construction with an optional permuting link. Textual material gathered to date shows no occurrence of three bases. The exponents of the bases are independent clauses and the coordinating conjunction fills the link position. When the link option is chosen, the form of this sentence resembles that of the Coupled Sentence, but the option is most often not chosen.

- 30) kono tarhak takliph nai hoiya sab goTe ānand sa rahai
 any kind of difficulty not be all one happy with stay
 B1 B2

chhi
 are

There is not any kind of trouble--everyone lives happily.

Semantically the Negated Antonym Sentence requires a statement proposition followed by an antonym proposition which gives the opposite sense of the original statement. The important feature of this sentence type is that one of the propositions must be positive and the other negative so as to counterbalance the effect of the antonym. Only thus may the two propositions be classed in a restatement relationship.

- 31) hinkā bhārat āba lel āgyā nai delkхинh kāThmanDu-e
 to her India come for permission not gave Kathmandu-emph
 B1 B2

rahi gelaith
 stay went

He did not give her permission to come to India; she stayed in Kathmandu.

In the original four-box description the statement was positive and the antonym always negative. However, this would make it difficult to decide which proposition to place first because the examples from text had the negative occurring an equal number of times initially and finally. Since any antonym could also be viewed as an original statement and the statement interpreted as its antonym, we have chosen to disassociate negative from antonym and simply to stipulate that one proposition must be positive and the other one negative. When the optional connector 'and' appears, it in no way alters the meaning of the sentence.

Generally the tense and mood of the verb is the same in both bases.

- 32) bachchā ke āba diya okarā ne roku
 child to come give! them not stop!
 B1 B2

Let the children come--do not hinder them.

Embedding does not occur in the textual examples at hand except in a quotation clause. Permutation is a normal operation in this sentence type.

4. Generic-Specific Sentence

Similar to all the other Restatement Sentence types, the Generic-Specific is grammatically a double-based construction.

Unlike other such types, however, this one may optionally have several additional bases. As many as six bases have been found in text. The addition of more than two bases also requires the addition of a link preceding the final base, unless the sentence is permuted so that the first base is final.

+ BASE 1 InCl		+ BASE 2 InCl		+ (BASE n InCl) ⁿ	
Stat	generic	Spec	for one	Spec	for same
Prop		Prop	item of	Prop	item of
			Stat		Stat

+ pLINK cj		+ FINAL BASE InCl	
Conn		Spec	for same
		Prop	item of
			Stat

- 33) o barhiyā ädmi ai o imändär dayälu aur isvar biswäsi ai
 he good man is he honest kind and god believer is
 B1 B2 B3 L B4

He is a good man; he is honest, kind, and believes in God.

Since each of the non-initial bases cites one characteristic or action illustrating or supporting the general statement of Base 1, it is common for all but the last base to exhibit greatly reduced clause structure, as in Example 33 where all but the adjective has been deleted from Base 3 and all but the subject and adjective from Base 2.

Independent clauses manifest each base and the link position is filled by the coordinating conjunction or a conjunctive phrase used in a summary fashion.

- 34) räit me hamräsab ke bahut tarhak takliph ael suta ke lel
 night in us to many kind trouble came sleep for
 B1 B2

ochhaen nai bheTal baisa ke lel siT nai bheTal ant me ham
 seat not met sit for seat not met end in I
 B3 L B4

peTi par sutlāu
 trunk on slept

At night we had many kinds of difficulties: there was no place to sleep, no place available to sit, (and) in the end I slept on the trunk.

Semantically the Generic-Specific Sentence consists of two or more propositions, the first of which makes a general statement and the rest of which all take the same particular member of that statement and give more specific details of it.

- 35) ahiTham näriyal bahut sast chhai ekTä näriyal ke däm
 here coconut very cheap is one coconut of price
 B1 B2

pachäs paisa mätr
 50 pice only

Coconut is very cheap here--only 50 pice for one.

The connector is a signal that what follows will be the final specific detail given. It is possible to delete everything but the statement proposition without, as a rule, altering the general meaning of the text; so the specifics are used as a focus device for the original statement.

The type of clause manifesting Base 1 may be the same as those in succeeding bases or completely different. As mentioned above, reduced clause structure is common in the specific propositions, but if full clauses are given, then the tenses of all bases must be the same. No imperative or interrogative moods have been found to date and we suspect that they will not occur. Permutation is possible, as shown in Example 36, in which case all of the specific propositions are moved as a unit to sentence initial position, leaving the generic statement proposition at the end as a sort of summarizing comment.

- 36) gäm me iskul banoläu pakkäk ghar banoläu sahkäri
 village in school I built proper house I built co-op
 B2 B3 B4

sansthä banboläu sarak banboläu ityäd käj sab keläu
 institute I built road I built etc. work all I did
 B5 B1

In the village I have built a school, a proper house, an institution, a road, and the rest--all this work I have done.

5. Question-Response Sentence

BASE 1	InCl introg	BASE 2	InCl indic
+ Quest	generalized	+ Resp	answer
Prop	query	Prop	

Grammatically the Question-Response Sentence contains two bases which are filled by independent clauses and related only by juxtaposition. The first clause must be in the interrogative mood and the second in indicative.

- 37) kyaek nai achh tahi ke ham bahut kichh käran bujhai chhi
 why not is this of I many some reason seem am
 B1 B2

Why not? I understand several reasons for this.

As the name of this sentence type indicates, it is semantically a question proposition accompanied by the response proposition. The response itself is all that is actually necessary to maintain the flow of the text, but the rhetorical query is included to highlight the information given as the answer. Therefore it is necessary to have the first proposition make a generalized query about an item in the answer. In Example 38 below, the unhighlighted statement may have been, "Then after that the thief took the key and began to empty the trunk." For good storytelling, the speaker generalized the verb of the statement, changed it to a question, and came out with this suspense-heightening sentence:

- 38) takhan takarā bād o chor ki kelak kunji laka hunak
 then that after that thief what did key with his
 B1 B2

peTi me ke sab samān nikāla lāgal
 trunk in of all goods take out began

Then, after that, what did that thief do? With the key he started to take everything out of her trunk.

Unlike other Restatement Sentences, the Question-Response Sentence cannot drop off one proposition and leave the text comfortably understandable. But just a slight readjustment endows it with the characteristic deletability of other Restatement types. For example, the sentence given below merely needs to replace the 'it' with 'your life' and the text will be completely comprehensible with only the second proposition.

- 39) ahā ke jiban ki achh ek Tā pāin-ak bulbulā jakā achh
 you of life what is 1 thing water-of bubble like is
 B1 B2

What is your life? It is a bubble of water.

In the few examples of this sentence type available from text, the verb of the question must be the same tense as that of the response. The query does not contain embedded constructions, but the answer could feasibly embed an entire discourse. Since an answer does not normally precede its question, this sentence type can not be permuted.

C. Cause-Effect Relationships

Propositions which are related in a cause-effect way are actually saying "first A, then B." However, they are not classified as chronological relations because the inherent sense is "because of A, B" and this puts the emphasis on the logical rather than the temporal.

The Cause-Effect division of the Semantics Tree is the largest section and is sub-divided according to the features shown in Figure 7.

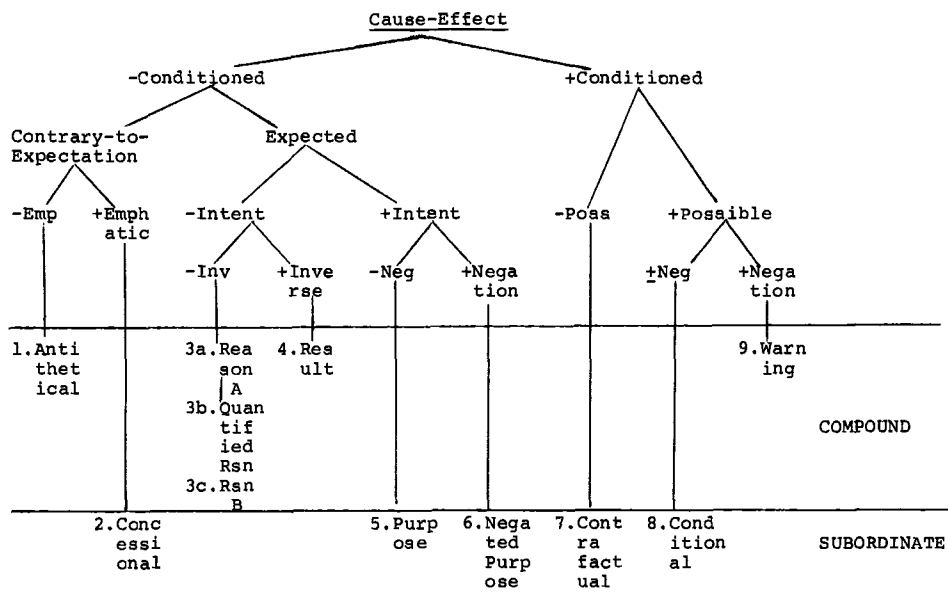


Figure 7. Reproduction of the Cause-Effect node of the Semantics Tree. (Numbered labels in the tree refer to sections below.)

"If you sit by the fire, your feet will get warm" is a typical example of a conditioned relation between propositions. If the condition were impossible of being fulfilled, the sentence would be, "If you had sat by the fire, your feet would have been warm," and this would be a Contrafactual type of sentence. In Maithili the Warning Sentence requires a negation in the link, literally meaning 'if no,' and it is rendered into English as "Sit by the fire; otherwise your feet will be cold."

On the -Conditioned side of the tree, relations are divided again by whether or not the logical sequence is the expected one. Contrary-to-Expectation Sentence types are Antithetical and Concessive, which in English are, "He sat by the fire but his feet were cold" and "In spite of the fact that he sat by the fire, his feet were still cold." In Maithili the Concessive Sentences are a more emphatic type than the Antithetical. A specialized Concessive sub-type requires an attributive clause in the first proposition: "Although he is active, his feet are cold."

The next division at the Expected node separates sentence

types which involve intention or purpose from those which do not. In English, too, distinction is made between "He sat by the fire in order to keep his feet warm" and "He sat by the fire; so his feet were warm." The Negative Purpose Sentence contains a negative which English would translate as 'lest.' The regular Purpose Sentence cannot be used if the purpose of an action is to prevent something--only the Negative Purpose Sentence can handle such a relationship.

Cause-effect relations under the -Intent node are finally separated on the basis of the order in which the propositions are presented. The Result Sentence uses inverse order: "His feet are warm because he sat by the fire" (effect-cause). All three varieties of Reason Sentence place the cause first rather than last. The difference between Reason A and Reason B sentences is structural form only. The Quantified Reason Sentence contains a measuring word in the first proposition, such as, "He sat so close to the fire that..."

1. Antithetical Sentence

+	INT	cj	+	BASE 1	InCl		+	LINK	cj	+	AD	adv
-			+				+			+		
	Conc			Thesis	stimulus			Cont	non-		Emph	
	Sig			Prop				Conn	emph			

											BASE 2	InCl
											+	
											Anti-	c-t-e
											thesis	response
											Prop	

Grammatically the Antithetical Sentence has the same basic structure as the Contrast Sentence, with two bases filled by independent clauses and joined by a linking conjunction, with an optional introducer. The same parantu, paranch, magar, mudā, and lekin conjunctions are used as links and the same onāta as introducer. Optionally present may be an adverb in adjunct position, following the link.

- 40) bahut muskil buijh paral lekin kahunāka hamsab howrah
 very difficult seem must but anyway we Howrah
 B1 L AD B2

pahuch gelau
reach went

It was very difficult but we arrived in Howrah anyway.

Semantically the Antithetical Sentence is a cause-effect relationship with the antithesis being the unexpected result of the thesis.

- 41) o barhiyā ādmi rahai lekin okarā sāth kharāb byewahār bhel
 he good man was but him with bad treatment became
 B1 L B2

He was a good man but he got bad treatment.

That the outcome is unexpected may be emphasized by the addition of the adverbs kohunaka or kono tārhaē 'anyway' or taiyo 'still' following the contrast pivot, as in Example 40. However, for a stronger emphasis the sentence must be transformed into a Concessional type.

Past seems to be the favored tense in this construction, which is not surprising since the unexpected result would have occurred. However, present and future tenses are not impossible, as Example 42 demonstrates.

- 42) onāta ham iskul me parha jāi chhi lekin parikchā nai
 although I school in read go am but examination not
 INT B1 L B2

deb
 will give

Although I study in school, I will not take the exam.

Generally the mood of each base is indicative but interrogative and imperative are also possible in Base 2. Negation occurs in either or both bases. Example 43 has an embedded Alternative Sentence filling Base 1. Deletion of shared tagmemes is common in Base 2.

- 43) ahā khāu chāhe nai khāu lekin kāj kara parat
 you eat or not eat but work do must
 B1 L B2

Eat or don't eat, but you must work.

The Antithetical Sentence seems to resist permutation. In initial attempts at exchanging Bases 1 and 2 we could carry out the operation in only a few instances and even those seemed to be awkward. Then a transform to the Concessional or to the emphasized Temporal Sentence type using par (see Figure 9) was offered as the only means of permuting the base, and even the sequential transform felt unnatural to the language assistant. Several weeks later we returned to the same chart of Antithetical Sentences and read each example in a simple permuted form (Base 2-Link-Base 1). In every case the sentence was accepted as normal but in trying to permute it back to its original form (as it was actually written on the chart), once again there seemed to be strong resistance. From this exercise we ascertain that an Antithetical Sentence is not normally permutable, an important point of difference between it and the Concessional and Contrast sentence types. No doubt this phenomenon is tied in with paragraph and/or discourse level pressures which have not yet been studied. We surmise that permuting a sentence also alters the focus of the sentence; thus permutation is an operation not normally carried

out on minimally or maximally emphatic constructions. Since an Antithetical Sentence is the less emphatic counterpart of a Concessional Sentence, this may be the cause of its resistance to permutation and the explanation of why a Concessional Sentence easily permutes. Further study of this point may be taken up at a later date.

2. Concessional Sentence

On the Grammar Tree there are two branches for Concessional Sentence, but on the Semantics Tree there is only one. Therefore, the two grammatical types are classed as sub-types under one semantic type. The first structure presented here handles a broader variety of situations and it will be called the Regular Concessional Sentence. The more restricted of the two sub-types is labeled Concessional Attributive Sentence.

2a. Regular Concessional Sentence

INT	cj	MAR	AR Cl3 <u>taiyo</u>	AD	adv	BASE	InCl
+		+		+		+	
Conc		Init	stimulus	Emph		Reality	c-t-e
Sig		Prop				Prop	response

The Concessional Sentence is grammatically a dependent construction consisting of a margin and an independent base. The margin is dependent due to the obligatory presence of the relator taiyo, even though the axis is filled by an independent clause.

- 44) math-o dukh haet taiyo ham dabāi nai leb
 head-emph hurt will be still I medicine not will take
 MAR B

Even though my head will hurt, still I will not take medicine.

As a sentence introducer, onāta or yadyapi optionally occur. The relator taiyo may be reinforced by the adjunct kohunāka.

- 45) pāin kam chhal taiyo kahunāka kichh lokain ahi
 water little was nevertheless anyway some people this
 MAR AD B

me asnān kelainh
 in bath did

Water was scarce, yet some people took baths in it anyway.

Semantically, in over-all meaning the Regular Concessional Sentence is quite similar to the Antithetical Sentence. In fact, in the initial analysis the two were considered impossible to separate. However, the differing permutation processes and the nature of the concessive relator as opposed to the contrast link led to this analysis as two distinct sentence types. The meaning of this construction is broadly a cause-effect (stimulus-response) relationship in which the initial proposition introduces

a fact which leads the listener to expect a certain effect. The relator warns that the normal expectation is not realized, and the reality proposition proceeds to state the actual outcome.

- 46) hamsab bahut garib chhi taiyo nayä chij ke utpädan karai chhi
 we very poor are still new thing of produce do are
 MAR B

We are very poor, nevertheless we are producing new things.

The relator taiyo 'nevertheless' (very similar in its meaning but different in function from the emphatic adverb taiyo 'still' used in the adjunct position in the Antithetical Sentence) has a more emphatic meaning of contrary-to-expectation than do various links glossed as 'but' in Antithetical Sentences.

As expected in all cause-effect sentences, past tense is favored although present and future may be used.

- 47) yadyapi ham hunkä kitäb deliainh taiyo o hamrä sa gapp
 although I him to book gave yet he me with talk
 INT MAR B

nai kara chähai chhaith
 not do want is

Although I gave him a book, he still does not want to talk to me.

Indicative mood occurs regularly in both margin and base, and if the interrogative or imperative are used they occur only in the base. Permutation is easily carried out on this sentence type, distinguishing it from the Antithetical Sentence. If there is an introducer present in the sentence being permuted, it may retain its sentence initial position or it may move with the margin to a sentence medial location.

2b. Concessional Attributive Sentence

MAR	dCl 2	AD	particle	BASE	InCl
+ Init	attributive	+ Emph		+ Reality	c-t-e
Prop	stimulus			Prop	response

Although in basic semantic content it is the same as the Regular Concessional Sentence, the Attributive Concessional Sentence is structurally quite distinct. It is one of the few sentences with neither a link nor a relator.

- 48) bimär rahait-o o ghar geläh
 sick stay-emph he house went
 MAR AD B

Although he was sick, he went home.

Since the verb form in the margin is not independent as are verb forms of bases, the first clause could not be a base. We attempted an analysis of axis-relator clause filling the margin; but this proved unsatisfactory because once the dependent clause was put in axis position there was nothing left to function as a relator except the emphatic particle. This did not seem feasible since the real function of the particle is that of emphasizing rather than of relating. Therefore, this analysis of margin filled by dependent clause 2 and an obligatory emphatic particle has been chosen as the more truly descriptive solution.

This sub-type requires in the margin an attributive clause, usually quite short, with only the imperfect participle as the verb. This has the emphatic particle -o or -e attached to it.

- 49) pustak rahait-o syaed syām adhyān nai karat
 book stay-emph perhaps Syam study not will do
 MAR AD B

Although he has a book, perhaps Syam will not study.

Only three participles are allowed in this construction: rahait, hoit (rare), or achhait. The latter is possible only if possession of an alienable item is involved, and it is usually accompanied by the postposition me 'in' following the emphatic adjunct.⁸

- 50) pāi achhait-o me ham bhukhle rahalāu
 money be-emph in I hungry stayed
 MAR AD B

Though I had money, I was hungry.

Semantically this sub-type is inherently a cause-effect relationship with the initial proposition describing a state and the reality proposition indicating a contrary-to-expectation response arising from that state. The emphatic marker is the item carrying the 'nevertheless' or 'although' meaning in this construction.

3. Reason Sentence

The Reason Sentence can take either of two forms: a double-based construction joined by a link or a margin-base construction. In addition, there is a specialized variety of the double-based type whose structure is basically the same but whose meaning is slightly altered. This is the Quantified Reason Sentence. As yet, analysis of higher levels has not been done so it is not possible to define the environment in which each sub-type occurs, but we expect to find mutually exclusive distribution.

3a. Reason Sentence A (double-based)

BASE 1	InCl	LINK	cj cpt rel cj	BASE 2	InCl
+ Resn	logical	+ BiDi	recalls resn	+ Rslt	
Prop	source	Conn	promises rslt	Prop	

Reason Sentence A grammatically requires two independent bases which are filled by independent clauses. The link is manifested by a variety of forms ranging from the literary conjunction phalswarup to the composite relative conjunction jai sa ki. Although both bases are grammatically independent, dependency of the two bases is seen in the semantic relation.

- 51) o thäik geläh chhaläh jai sa ki o nai äib sakläh
 he tired went was so he not come was able
 B1 L B2

He was tired so he could not come.

Semantically the Reason Sentence A contains a reason and a result proposition in a cause-effect relationship. As in the Result Sentence, the connector has a bidirectional function. The most common connector is jai sa ki which is literally 'that from this,' meaning "from that reason proposition, this result proposition comes." This bidirectional nature of the connector is recorded in Box 5 of the formula. Though not carrying such explicit marks of this double action, the filler phalswarup 'consequently' has the same meaning implicitly.

- 52) ahäsab maithili sikha me bahut parisram keläu phalswarup
 you Maithili learn in very labor did consequently
 B1 L

ahäsab barhiyā sa maithili sikh leläu
 you good with Maithili learn took
 B2

You have worked hard in learning Maithili so you have learned it well.

Examples of Reason Sentences exhibit present, past, and future tenses in the bases. Due to the cause-effect nature of this sentence type, one would normally expect that if the tenses are not the same in the two bases, the tense of Base 1 should be prior to that of Base 2. This is, in fact, the usual situation. However, one interesting exception to this norm can be seen in Example 53 where Base 1 uses present tense and Base 2 the perfect.

- 53) takhan pher dosar kät dai chhi jai sa ki siddh bho gel
 then again another side give am so finish become went
 B1 L B2

Then I do the other side again so it is finished.

This example comes from a procedural text in which the narrator gives all directions regarding what is to be done in the first person present tense, and then generally explains what occurs as a result of these actions in a third person perfect tense. A further exposition of this phenomenon should be possible when analysis is done on higher levels.

Indicative is the only mood found to date. Negative occurs in both bases with no observable restrictions. Items shared by the bases appear not to be deletable.

- 54) o bimär bhel jai sa ki o ghar geläh
 he sick became so he house went
 B1 L B2

He got sick so he went home.

Permutation of the bases is not possible. Generally simple independent clauses fill both bases, but we anticipate that more complex embeddings are also allowed. The relationship "A so B so C" cannot be expressed naturally with this sentence type--it is most natural to use the Reason B Sentence type (see 3c. below). However, if the focus is taken off the "so C" part of the relation so that it is not stressed as the logical consequence of B as well as of A, it is possible to embed a Coupled Sentence in the result proposition, as in Example 55. Structurally it would appear as:

(A) (so) (B) (and/so) (C)
 BASE 1 LINK 1 BASE 2 BASE 3 LINK 2 BASE 4

- 55) mae bachchä ke kuaelak jai sa ki o suit rahai aur o
 mother child to fed so he sleep was and she
 B1 L B2

käj ko sakae
 work do able

Mother fed the baby so he slept and (so) she could work.

When multiple reasons are given, the reason proposition is filled with a Coupled Sentence:

(A) (and) (B)
 BASE 3 LINK 2 BASE 4 (so) (C)
 BASE 1 LINK 1 BASE 2

This construction handles "A and B so C" relationships.

3b. Quantified Reason Sentence (Reason A sub-type)

A further note is necessary on a specialized variety of Reason Sentence A. The formula looks much the same as the formula for the double-based Reason Sentence:

+ dBASE 1	In Clq	+ LINK	cpt rel cj rel cj	+ BASE 2	InCl
Resn Prop	quant logical source	Conn	recalls resn promises rslt	Rslt Prop	

Grammatically and semantically this specialized type of Reason Sentence contains the same slots, fillers, and characteristics as the structure described in Reason A, with these two restrictions: first, the independent clause filling Base 1 must contain an adverb of quantification such as ehan 'such' or ateik 'so much'; and secondly, the link appears to use only jai sa ki or simply the relative se or ki 'that.'

- 56) ehan käj karu jai sa ki apan jiban nirbäh kai saki
 such work do! that own life support do able
 dB1 L B2

Work in such a way that you can support yourself.

- 57) ahä ehan namhar käj keläu jai sa ki hamsab ahä ke dhanyabäd
 you such big work did that we you to thanks
 dB1 L B2

dait chhi
 give are

You have done such great work that we give you thanks.

There is not a great deal of difference in meaning between this construction and the one described above, but the quantification in the reason proposition adds a shade of meaning which would be rendered into English as 'so hard that' or 'so slowly that.'

Interestingly enough, the substitution of a quantifying adverb for a regular adverb in a cause-effect situation is capable of producing a sentence restructuring. Example 58 is an elicited sentence based on Example 59 which is a two-sentence sequence from a text.

- 58) kechhuwä ateik rase rase chalait rahai ki o okrä par
 tortoise so slow slow move was that he him on
 dB1 L B2

häis delkai
 laugh gave

The tortoise was going so slowly that he laughed at him.

- 59) kechhuwä bahut rase rase chalait rahai. ahi ke lel okrä par
 tortoise very slow slow move was this for him on

häis delkai.
 laugh gave

The tortoise was going very slowly. Therefore he laughed at him.

By the heuristic method described in Section I.C, this original reason-result sequence was described as two separate sentences. In this two-sentence stretch, by substituting ateik 'so much' for bahut 'very,' the language assistant said it now collapsed into one sentence and the ahi ke lel must be altered to ki 'that.' Thus, the original two-sentence sequence was restructured into one Reason Sentence of the quantified variety, merely by the substitution of a quantifying adverb.

3c. Reason Sentence B (margin-base)

MAR	AR Cl 2 <u>lel</u> , <u>kāran so</u> AR Cl 3 <u>tāe</u>	BASE	In Cl
+		+	
Resn	logical	Rslt	
Prop	source	Prop	

The margin-base sub-type of the Reason Sentence grammatically contains a dependent margin and an independent base. The margin is filled by axis-relator clauses 2 or 3. The conjunction tāe must be used when clause 3 is chosen, and the postposition lel or the composite kāran sa are employed with clause 2.

- 60) ghar gandā rahai tāe o okrä bahāir delak
house dirty was so she it broom gave
MAR B

The room was dirty so she swept it.

- 61) āi sārhe tin baje me uThabāk kāran sa bahut nind
today half 3 o'clock in rise reason from very sleep
MAR B

ābaiya
comes

Because I got up at 3:30 this morning, I'm very sleepy.

The lel construction carries overtones of a Purpose Sentence and the structure can be ambiguous if the base is capable of interpretation as an intention.

Semantically the Reason B Sentence is quite similar to Reason A. The relator does not exhibit a bidirectional nature as do the connectors in the Result and Reason A sentences, though. This feature, coupled with the dependency of the verb in the reason proposition, led to the analysis as margin-base rather than as an independent double-based construction. The cause is found in the reason proposition and the effect is given in the result proposition.

- 62) sain din hoba ke lel chuTTi ai
Saturday be for holiday is
MAR B

Because it is Saturday, there is a holiday.

Present, past, and future tenses are used in the base. Negative has not been found but that is no doubt due to the limitations of the data. Only indicative and imperative moods are utilized in the current examples. A variety of dependent clause types and even some dependent sentence types can be observed in the margin, and several independent clause types and some embedded sentences occur in the base. Deletion of shared items is possible in this type, as seen in Example 63 where the subject is given in the margin but not repeated in the base. Perhaps this deletion is possible only if the item has the same grammatical role in each part of the sentence.

- 63) kăilhkhan ham hoTal me khæe ke kăran sa bimăr bho gelău
 yesterday I hotel in eat of reason from sick became went
 MAR B

I got sick because I ate in a hotel yesterday.

In this sentence type, permutation of the margin and base is possible. If axis-relator clause 3 with tæ fills the margin position, the process of permuting the sentence may introduce some ambiguity. The conjunction tæ occurring sentence finally, when deeply pondered, could also be interpreted as 'because,' thus creating a Result Sentence with the link in a strange position. However, this is a rare occurrence which can easily be cleared up from the context. Normally the hearer understands tæ as 'so' in final position.

If it is necessary to give two reasons, this sentence type may accomplish it in the same way that the Result Sentence does. That is, an "A and B so C" meaning creates a Coupled Sentence embedded in the margin, while an "A so B so C" relation requires a Reason Sentence in the margin. The nature of these embeddings can be represented as follows:

$$\text{MARGIN} \left(\begin{array}{ccccc} (A) & & (\text{and}) & & (B) \\ \text{BASE 1} & \text{LINK} & \text{BASE 2} & (\text{so}) & \end{array} \right) \text{BASE} (C)$$

and

$$\text{MARGIN 1} \left(\begin{array}{ccccc} (A \text{ so}) & & (B) & & \\ \text{MARGIN 2} & & \text{BASE 2} & (\text{so}) & \end{array} \right) \text{BASE 1} (C)$$

Also possible is the embedding of a Result Sentence in the result proposition for an "A so B because of C" relation, as shown here and exemplified in Example 64.

$$\text{MARGIN} (A \text{ so}) \text{BASE 1} \left(\begin{array}{ccccc} (B) & & (\text{because of}) & & (C) \\ \text{BASE 2} & \text{LINK} & \text{BASE 3} & & \end{array} \right)$$

- 64) okar bābu mair gel chhai t̥ə o iskul chhori delak
 his father die went was so he school leave gave
 MAR B

kāran okarā krisi k̥j karbā-k chhalai
 reason to him field work do-of was

His father died so he quit school because he was doing field work.

4. Result Sentence

BASE 1	InCl	LINK	cpt cj	BASE 2	InCl
+ Rslt		+ BiDi	queries rslt	+ Resn	logical
Prop		Conn	promises resn	Prop	source

Grammatically the Result Sentence consists of two independent bases and a link. Normally the bases are filled by independent clauses, but sentence and paragraph may also embed in either base.⁹

- 65) o nai aib saklāh kyaek t̥ə hunkar ghar me ek T̥ā
 he not come was able because his house in 1 thing
 B1 L B2

aniwārj k̥j chhalainh
 urgent work was

He could not come because he had an urgent job at home.

The link is filled by the conjunction kyaek or a composite conjunction of which kyaek is a part, or by the noun kāran used in a conjunctive manner.

Semantically the propositions of a Result Sentence are in an inverse cause-effect relationship in which the first proposition describes an act or a state of affairs, and the second gives the logical source or cause which produced the action or state of affairs.

- 66) jai din ham gām par sa aelau tai din hamar bābu
 that day I village on from came that day my father
 B1

gām par nai rahaith kyaek hamrā gām me ektā
 village on not stayed because my village in 1 thing
 L B2

masomāt ke ek jorā barad chhori bhō gel rahai
 Muslim of 1 team ox theft became went was

The day on which I came from the village my father was not there because there had been a theft of a Muslim's team of oxen in the village.

The bidirectional connector which links the two propositions has as its basic component kyaek 'why' or kāran 'reason.' This conjunctive use allows the connector to serve as a query to the result which has just been stated and also as the promise of an explanation to come. This query-plus-promise indication in the connector is one of the reasons for analyzing it as a link between bases rather than as a relator for a margin to a base. As such, the bidirectional function of the connector does not make one proposition dependent on the other but rather makes both dependent on each other semantically.

The tense of Base 1 is generally past or present, and Base 2 almost always employs the same tense as that of Base 1. The one exception found to this in textual material is given in Example 67.

- 67) hamrā dosar sa likhāba paral kyaek ki ham Devanāgri
for me another from writer must was because I Devanagri
B1 L B2

nai likh sakait chhi
not write able am

I had someone else write it for me because I cannot write Devanagri.

Indicative and imperative are the only moods found to date. Negation occurs in either base or simultaneously in both. In the event that two reasons are given for the one result, Base 2 is filled by a Coupled Sentence which gives a dual logical source (A because B and C).

(A) (because) (B) (and) (C)
BASE 1 LINK 1 BASE 2 (BASE 3 LINK 2 BASE 4)

However, if one of the reasons is a logical source of both the other propositions, then Base 2 is filled by a Result Sentence.

(A) (because) (B) (because) (C)
BASE 1 LINK 1 BASE 2 (BASE 3 LINK 2 BASE 4)

This gives an "A because B because C" relationship, shown in Example 68.

- 68) o iskul chhori delak kyaek ta okarā krisi kāj karbā-k
he school leave gave because to him field work do-of
B1 L B2

chhalai kāran okar bābu mair gel
was reason his father die went

He quit school because he had to do field work because his father died.

Although it is often found, deletion of shared items does not always occur, as can be seen in Example 69 where the 'he' is given twice.

- 69) o ghar geläh kyaek ta o bimär bho gel chhaläh
 he house went because he sick became went was
 B1 L B2

He went home because he was sick.

Permutation of the bases results in a new sentence type, the Reason Sentence. Alternatively, we could say that permutation is not possible within this construction. This non-permutability of propositions may be significant in the study of stress and focus which will be undertaken at a later date.

A variety of clause types occurs in both the bases, and embedding of more complex structures is not uncommon in either base.

5. Purpose Sentence

MAR	AR Cl 2	BASE	In Cl
+ Purp	intention	+ Active	
Prop		Result	
		Prop	

Grammatically the Purpose Sentence appears to be the same as Reason Sentence B in that the axis of the margin is filled by a clause with a dependent verb form with ke and the base calls for an independent clause. The only difference is that there is a greater restriction on the fillers of the relator position in this margin. For indicating purpose, only ke lel, ke bäste, ke hetu, or udes sa can be used. (Note that ke can be realized as -k suffix on the verb form.)

- 70) kän me rui dhara ke lel seho delak
 ear in cotton keep for also gave
 MAR B

For keeping in the ears, they also gave cotton.

- 71) bäd me nik nokri paebäk hetu o Täip sikh rahal achh
 after in good job obtain for he typing learn stay is
 MAR B

In order to get a good job later, he is learning to type.

The distinctive nature of this sentence type becomes apparent from a sememic point of view. Purpose is either explicit or implicit in the first proposition. To test implicit cases where it might be called reason instead of purpose, paraphrase the margin as "in order to" or "for the purpose of" or "he wanted to...so." Reason margins answer the question, "Why--for what reason?" while

purpose margins answer the question, "Why--for what purpose?" Purpose is a volitional thing--something that does not just happen. There is always an aim or intention, conscious or unconscious, in the mind of the actor when he does the action found in the active result proposition.

- 72) saläi kinbäk bäste ham dokhän me geläu
 matches buy for I store I went
 MAR B

In order to buy matches, I went to the store.

Action in the second proposition is another contrast with a Reason A Sentence. Compare these two sentences:

Because he was famous John became rich.
 In order to be famous John became rich.

In the first sentence, John need do nothing--his becoming rich will be automatic due to his fame. But the second sentence leaves us with the impression that John was active in acquiring wealth to achieve fame. Intention requires action, not event or state: so margin as purpose demands base as active result.

Past, present, and future tenses occur in the base. Indicative and imperative are the only moods found in the data, but we see no reason why interrogative could not also occur. Negation in the base is accomplished in the same way as in other sentence types, with addition of nai 'not' to the verb phrase, but to negate the margin, the Negative Purpose Sentence must be used.

Dual purpose is registered by repetition of the margin with the coordinating conjunction 'and.' This form indicates a dual purpose for the same action. To show a second purpose growing out of the first one, the most natural way is to embed a Reason Sentence in the margin, as in Example 73.

- 73) okarä apnä bahin ke rupaiyā debāk chhalai tæ o okarä sa
 to him own sister to rupees give was so he her with
 MAR

bheT karbäk lel dilli gel
 meet do for Delhi went
 B

He was giving his sister money, so he went to Delhi to meet her.

6. Negative Purpose Sentence

BASE	In Cl	MAR	AR Cl 3
+ Active Result Prop		+ Purpose Prop	negative intention

The grammatical structure of the Negative Purpose Sentence corresponds closely to that of the Purpose Sentence. Independent clauses manifest the base and axis-relator clauses fill the margin.

- 74) adhyan bahut kelaith kahī o pheil nai karaith t̥ae
 study much did lest he fail not do so
 B MAR

He studied hard so that he would not fail.

Important differences occur, however, and these involve the margin. First of all, note that the margin normally follows rather than precedes the base. Secondly, the verb form in this type is independent (see the exception for the imperative described below). A third distinction is in the relator required--a discontinuous morpheme whose first member kahī is optional and whose second member t̥ae is obligatory. The t̥ae morpheme occurs in the Reason A Sentence, but kahī is found only in this sentence type.

Although the Negative Purpose Sentence resembles the Purpose Sentence semantically, it contrasts with the latter by the negative intention (Box 5 of the formula) of the purpose proposition. This sentence type embodies a cause-effect relation in which the action of the first proposition is carried out to prevent the occurrence of the second proposition. Whether or not the kahī 'lest' part of the relator is present, the purpose verb must be accompanied by a negative morpheme. (Note that Example 75 is permuted.)

- 75) kahī glen suit nai rahai tae Don khelait achh
 lest Glen sleep not stay so Dawn play is
 MAR B

Lest Glen sleep, Dawn plays with him.

Interestingly enough, this sentence type can be transformed into a Warning Sentence. However, the kahī seems to carry an element of uncertainty and fear of the outcome which is not conveyed by the link in the Warning type.

When the base is manifested by an imperative clause, then the verb in the margin becomes dependent and the relator becomes + kahī and + t̥ae.¹⁰ In this form it could be translated 'so as not to.'

- 76) dauru nai kahī khais nai pari
 run not lest fall not
 B MAR

Don't run so as not to fall.

Future is the favored tense in both parts of this construction, but present and past are frequently found. As mentioned above, negation must occur in the margin, and it may be in the base as well. In order to get an imperative in both the margin and base, it is necessary to involve a third person and an

indirect quotation in the process.

- 77) hunkä baichka chala lel kahabain kahı khais nai paraith tæ
 him carefully move for tell! lest fall not so
 B MAR

Tell him to walk carefully or he will fall.

Generally, indicative mood is used. Permutation is possible with no difficulty, as in Example 75. However, if an imperative base is permuted, the *tæ* is no longer optional--it then becomes obligatory in the construction.

7. Contrafactual Sentence

INT	cj	MAR	AR Cl 4	sBASE	dCl cntf
+ Cond Sig		+ Unful- filled Group Prop	stimulus which did not occur	+ Unful- filled Outcome Prop	assumed response which did not occur

The Contrafactual Sentence is a close relative of the Condition Sentence, both in structure and in meaning. Grammatically it contains a margin whose exponent is an axis-relator clause 4 and a subordinate base manifested by a dependent clause.

- 78) o ael rahait ta sab chij Thik bho gel raihtaik
 he came had if all thing good became went would have
 MAR sB

If he had arrived, all would have been well.

Both of the verb forms in the clauses must be marked by the contrafactual modality, which feature makes the clauses dependent. This dependency is not a normal one, however, because the verbs still carry person and tense in them, which normal dependent verbs do not. Aside from this dependent characteristic, the structure is like the conditional type and employs the same conjunctions for filling the introducer and relator positions, i.e., *ta* is relator and *jou*, *jadi*, and *agar* as introducer.

- 79) yadi o natkhat rahait ta ham okarä mäirtiaik
 if he naughty had been if I him would have beat
 INT MAR sB

If he had been naughty I would have beaten him.

When queried, native speakers say *yadi*, *agar*, or *jou* may indiscriminately be chosen to act as introducer, but there seems to be a slight tendency to favor *jou* in normal conditions and *yadi* in contrafactual ones--a hypothesis which can be checked further when more textual material is available.

Semantically the Contrafactual Sentence sets a condition

which did not actually occur, and then states what the outcome would have been if the condition had been fulfilled. The implication is that the opposite of the unfulfilled condition occurred and so an outcome opposite to the one stated also occurred. In fact, a Contrafactual Sentence is easily transformed to a Reason Sentence by inserting negative indicative verbs in both margin and base and by changing the relator ta to the link jai sa ki. For instance, the meaning of Example 80 is virtually, "I could not read so I did not learn."

- 80) ham pairh saiktaṭ ta ham sikh lene rahaitaṭ
 I read can if I learn take would have
 MAR SB

If I could have studied I would have learned.

Only two tenses are possible in the Contrafactual Sentence--past (which native speakers say carries a feeling of future) and perfect. Interrogative mood occurs in the nucleus but imperative is not possible.

- 81) yadi khene rahaitaṭ ta ki bho gel rahait
 if eaten had been if what become went would have
 INT MAR SB

If it had been eaten, what would have happened?

Negation is found in either or both clauses. The permutation operation is easily accomplished in the same manner as for normal condition types, with the introducer obligatorily occurring between base and margin and with the relator appearing at the end of the permuted construction.

8. Condition Sentence

INT	cj	MAR	AR Cl 3 <u>ta</u>	BASE	InCl
+ - Cond Sig		+ Ground (Prota- sis) Prop	stimulus which may occur	+ Outcome (Apodosis) Prop	assumed response

Grammatically the Condition Sentence is a dependent margin-base structure. Independent clauses fill the base, and axis-relator clause 3 manifests the margin.

- 82) khānā kharāb haet ta ahā bimār bho jaeḃ
 food bad will be if you sick become will go
 MAR B

If the food should be bad then you will get sick.

The relator must be ta, and its presence is what renders the margin dependent since the axis is filled by an independent clause. Phonetically the conjunction ta belongs with the base, but grammatically it adheres to the margin. Preceding the margin,

an introductory conjunction jou, yadi, or agar optionally occurs.

- 83) agar ahä asthir sa bajai chhi ta ham buijh sakai chhi
 if you slow from speak are if I understand can am
 INT MAR B

If you talk slowly I can understand.

Semantically the Condition Sentence is a stimulus-response relationship in which the stimulus is a possible occurrence and the response is the expected outcome. The first proposition gives the ground of the condition and the second declares what the outcome will be when the ground is fulfilled. The introductory conditional signals are all translated 'if', but it is actually the relator which carries the onus of setting up the ground.

- 84) ahä akhan-e pi leb ta ägä ke lel kichh nai bächat
 you now-emph drink take if later for some not will remain
 MAR B

If you drink it now there will be none left for later.

Native speakers normally translate the ta as 'then' when by itself, but since the sentence still contains an 'if' whether or not the conditional emphasis is present, the relator appears to be the real 'if' vehicle instead of the introducer. Generally this construction indicates an uncertainty as to whether the ground has, is, or will occur and with this understanding the 'if' introducer is sometimes translated as 'when.'

All tenses occur in both margin and base but the tenses need not be the same in both. However, the tense of the base generally must not be earlier in time than that of the margin. Frequently if both contain past tense, the construction will be rendered as a correlative time sentence with 'when' or 'whenever' and 'then.' Indicative mood is most common but imperative and interrogative are possible in the base.

- 85) yadi prophe sar sähab ghar me hethinh ta i chitThi hunkä
 if professor sir room in will be if this letter to him
 INT MAR B

do diyä
 give give

If the Professor is in his room, give him this letter.

Negation occurs in either or both constituents. Permutation occurs frequently and easily. Whether or not the introducer was present in the original sentence, it must occur in the permutation, creating a Base-Introducer-Margin pattern.

9. Warning Sentence

BASE 1	InCl	LINK	cpt cj	BASE 2	In Cl
+ Command Prop	imper- ative	+ Warn Conn	nega- tion	+ Threatened Outcome Prop	future

Although it is related to the Conditional Sentence, the Warning Sentence is structurally distinct. It contains two independent bases joined by a link. Independent clauses manifest both bases, and the exponent of the link is what we shall call a composite conjunction. Actually it is a conditional sentence reduced into the morphemes nai ta and functioning as a link.

- 86) oi kukur lag nai jău nai ta kăiT let
that dog near not go! not if cut will take
B1 L B2

Don't go near that dog or it will bite.

Semantically the Warning Sentence contains a command proposition requiring an imperative verb. The connector, using the negative marker 'not' and the conditional marker 'if,' is virtually a condensed version of the command "if you do not do this, then such and such will happen." And the final proposition is the threatened outcome which states what presumably will happen if the command is not obeyed. This is in essence a cause-effect relationship used in a warning manner.

- 87) jaldi jău nai ta Tren chhuTi jaet
quickly go! not if train leave will go
B1 L B2

Hurry or the train will leave!

Infrequently the sentence construction is used for what might be termed a negative circumstance sentence. In this case the initial proposition is a statement rather than a command and the connector would be translated 'otherwise.' This also is a cause-effect relationship but denoting a type of purpose rather than a warning.

- 88) ham Thik Thik kahab nai ta o sab hasat
I good good will say not if he all will laugh
B1 L B2

I will say it correctly; otherwise they will laugh.

A warning obviously must be for future time; therefore, the tense of the verb in Base 2 is always future. The command is frequently a negative one and the outcome may also be negative. Both imperative and interrogative moods as well as the commonly used indicative are employed in the second base. Permutation is not possible with this sentence type.

- 89) nik jaka karu nai ta chhori diya
 good like do! not if leave give!
 B1 L B2

Work well or else give it up!

D. Chronological Relationships

Propositions whose main focus rests on the temporal relations of the events involved are Chronological. This final division of the Semantics Tree has only two sentence types under it, but it handles a great number of utterances, especially in narrative discourses. The separation of these two chronological types is based on the fact that the Immediate Sequence Sentence is an obligatorily emphatic structure but the Temporal Sentence is only optionally emphatic, and the two types have distinct structures. The Immediate Sequence deals only with sequences such as: "Immediately after school was out, the family left for the beach." All other varieties of events in sequence or simultaneous events fall under the Temporal Sentence domain.

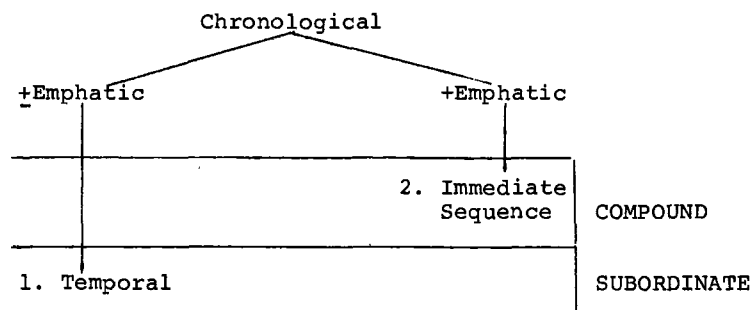


Figure 8. Reproduction of the Chronological node of the Semantics Tree. (Numbered labels in the tree refer to sections below.)

1. Temporal Sentence

MAR	dCl 1 or 2 AR Cl 1 or 2	AD	particle	BASE	In Cl
+ Accompanying Event Prop		+ Emph		+ Main Event Prop	

The typical way of registering chronological relations is by means of the Temporal Sentence. Due to the great variety of possible fillers for Box 2 and functions in Box 4, Figure 9 has been included to further explain the diversity of sub-types encompassed by this formula.

Ex No	Form of Verb in Axis	Relator Used	Emphasis Adjunct	Relation of A (main verb to B (dependent verb)
92 99	verbal noun	<u>ke</u> <u>bād</u> (<u>me</u>) 'after'	<u>-e</u> on verb seldom used, then mostly in future tense	A after B
94 101 103	verbal noun ending in <u>-la</u>	<u>par</u> 'on'	<u>-e</u> on verb	A after B
91 95 104	verbal noun	<u>ke</u> <u>pahine</u> <u>sa</u> <u>pahine</u> 'before'	<u>-hi</u> on relator but only when the two events could co-occur	A before B
96	verbal noun	<u>sa</u> 'from'	<u>-e</u> on verb	A begins only after B starts (hints at stimulus- response relation)
93 100 103	verbal noun	<u>me</u> , <u>kāl</u> , <u>samae</u> <u>ber</u> <u>kal</u> } <u>me</u> 'in (time of)'	<u>-hi</u> on verb	A during B
90 102	conjunctive participle <u>-ka</u> '-ing'	none	none	A right after B margin and base must have the same subject
97 98	imperfect participle <u>-ait</u> 'as soon as'	none	<u>-e</u> on verb <u>-e</u> <u>sāth</u>	A right after B usually emphatic

Figure 9. Varieties of Temporal Sentences.

Grammatically the Temporal Sentence is a margin-base construction with an optional adjunct slot. An independent clause fills the base position and a variety of axis-relator clauses or dependent clauses may fill the margin. The adjunct is a particle which occurs according to the restrictions shown in Figure 9.

- 90) chor ke pakeri-ka khub mair mairlak
 thief to catch-ing very beat beat
 MAR B

Catching the thief, they beat him harshly.

Semantically the Temporal Sentence deals with one event and its relation to another event. The main event may occur before, after, or during the accompanying event, but it is called the main event because it contains the one independent verb in the construction. In the following examples, 91 gives the before relation, 92 the after, and 93 the during.

- 91) hamsab jae sa pahine bahut chij samapt kara chahait chhi
 we go from before many thing finish do want are
 MAR B

Before we leave, we want to finish many things.

- 92) o dokan me aelak bad chitThi det
 he store in come after letter will give
 MAR B

After he comes to the store he will give the letter.

- 93) dhanak ropni samae me sarkar rupiya karj det
 rice of planting time in gov't money loan will give
 MAR B

During the rice planting, the government will lend money.

The function of the adjunct tagmeme is to emphasize the sequential relation. Other emphatics are allowed in the clauses, but this emphasis slot is intended to handle only that which focuses on the chronological relation. Example 94 emphasizes that A started only when B had occurred.

- 94) hamsab nepal ael-e par maithili sikha lagalau
 we Nepal come-emph on Maithili learn began
 MAR AD B

Only after coming to Nepal we started learning Maithili.

This sentence type can be used in a contrary-to-expectation manner if the adjunct position is filled by -o instead of the -e emphasis. For example, in Example 94 the meaning would change to: "On coming to Nepal, we started learning Maithili (instead of Nepali)."

In Example 95, stress is laid on the fact that A did happen

before B.

- 95) räjä ke märba sa pahine-hi hamsab chali gel rahi
king of die from before-emph we move went were
MAR AD B

Before the king died we had already gone.

Another means of emphasizing the sequence "A after B" is shown in Example 96, in which the emphatic adjunct -e is attached to the "B" verb and sa 'from' is used as relator. This structure carries an inherent feel of a cause-effect relation.

- 96) kaThmanDu me rahal-e sa bimär bho geläu
Kathmandu in stay-emph from sick became went
MAR AD B

Ever since being in Kathmandu I have been sick.

For specific characteristics or restrictions relating to one particular type of margin exponent, see the accompanying chart of Figure 9. Permutation of the Temporal Sentence is easily done by moving the base to sentence initial position. In general, any tense is allowable in the base clause, as well as indicative, imperative, and interrogative moods. Imperative mood is shown in Example 97 and interrogative in Example 98. (In these examples, the imperfect participle -ait has undergone morpho-phonemic changes in the axis verb form.)

- 97) patr ebt-e hamrä lag laeb
letter come-emph to me beside bring!
MAR AD B

As soon as a letter comes, bring it to me.

- 98) ahä nik hoit-e säth ki hamrä chiThäm aeb
you good be-emph with Quest mkr my place will come
MAR AD B

Will you come to my place as soon as you are better?

Since most of the relators are postpositions, the verbal nouns of the axis clauses must be in the oblique case. If the subject of the margin is not the same as that in the base, the margin subject must also be indicated in the oblique case. At times this may lead to some ambiguity, as the subject in the oblique case could also be interpreted as the possessor of a noun in the dependent clause, but context should decide the matter. In Example 99, different subjects are used in the "A after B" relation:

- 99) okarä bäjär pohychbäk bäd ham mäch kinab
his market reach after I fish will buy
MAR B

After he reaches the market I will buy fish.

312 Clause, Sentence, and Discourse Patterns

Example 95 above exhibits differing subjects in the "A before B" relation, and Example 100 shows the same phenomenon in the "A during B" relation:

- 100) glen ke sutak samae me Don khelaith chhal
 Glen of sleep time in Dawn play was
 MAR B

While Glen slept Dawn played.

When the subject is the same for both events, the direct case is used and it may appear in either the margin or the base. Example 92 places the shared subject in the margin while in Example 101 the subject is in the base.

- 101) i gapp sunlä par mae ke baDD hāsi lagalai
 this talk hear on mother to much laugh stuck
 MAR B

Hearing this, Mother burst into laughter.

It is possible for a Temporal Sentence to have multiple margins, but only in the case of -ka will the same relator be used in more than one margin.

- 102) khā-ka kaprā pahir-ka awai chhi
 eat-ing cloth put on-ing come am
 MAR MAR B

Eating and changing clothes, I'll come (I am coming).

Example 103 indicates how differing margins occur in the same sentence:

- 103) janakpur dekhak kāl mandir dekhlā par o sab prabhābit bhelāh
 Janakpur look time temple look on they impressed became
 MAR MAR B

Upon seeing the temple during their visit to Janakpur, they were impressed.

It is also possible to get the effect of a double margin by embedding a Coupled Sentence in the margin, as Example 104 has done:

- 104) khet ropā ā patāba sa pahine hamsab okarā jotai chhi
 field plant and flood from before we it plow are
 MAR B

Before planting and before flooding, we plow the field.

Maithili sentence structure affords several different methods for indicating chronological events. In addition to the specific type here described as Temporal Sentence, several other sentence types may also be employed. Naturally, the chronology of the events involved is not the primary emphasis of these other types, but if the speaker, for style or some other reason, wishes to draw

on this secondary function, it is possible to do so.

Figure 10 presents the five sentence types capable of carrying a secondary meaning of temporal relations. Most frequently the Coupled and Correlative types are called upon to encode sequence, but use of Contrast, Condition, and Reason Sentence types is also possible. Contrast would indicate simultaneous events while Reason and Condition are usually reserved for events in sequence (with Condition introducing an element of uncertainty, as explained earlier). Both Coupled and Correlative Sentences can convey a broader scope of relationships in that they encode both sequence and simultaneous relations. Correlative may also show "A before B" and "A immediately following B" sequences. For further treatment on the use of non-temporal sentence types to indicate sequence, refer to Figure 10.

Sentence Type	Relationship* Encoded	Notes and Restrictions
Conditional	A after B	-no introducer is used -uncertainty of the event is always involved -Base 2 must be future if Base 1 is present
Coupled	A after B A during B	-the tense of Base 1 must not be subsequent to that of Base 2
Contrast	A during B	-the tenses of the bases match
Correlative	A after B A during B A before B A immediately after B	-must use the time pronouns -the "A before B" relation requires <u>pahine</u> with the pronoun in Base 2 -the "A immediately after B" relation must use <u>-e</u> emphasis on the pronouns
Reason A	A after B	

Figure 10. NonChronological Sentence types which may carry temporal notions.

* A = Base 2 or the base
B = Base 1 or margin

2. Immediate Sequence Sentence¹¹

BASE 1	In Cl	LINK	particle	BASE 2	In Cl
+ Event Prop 1		+ Emph Conn		+ Event Prop 2	immedi ately follow ing Event 1

314 Clause, Sentence, and Discourse Patterns

Any one of the relationships encoded by a regular sequence Temporal Sentence may be altered to fit also into the emphatic Immediate Sequence Sentence. Grammatically the sentence is double-based and joined by a link. Independent clauses fill each base and the particle ki manifests link.

- 105) phulal ki utäir deläu
swell down gave
B1 L B2

As soon as it swelled, I took it off.

Semantically the Immediate Sequence Sentence deals with events which happen one immediately after another. Although native speakers say the ki has no meaning by itself in this construction, it signals a translation of 'as soon as.'

- 106) nani aelih ki bachchä janma lelak
Grandma came baby birth took
B1 L B2

As soon as Grandma came, the baby was born.

This is strictly a spoken, never a written, sentence type. The same immediacy of sequential meaning can be conveyed by using the -ait sãth margin-base construction of the Temporal Sentence or by the emphasized temporal Correlative Sentence structure.

The only tense restriction apparent on this sentence type is that Base 1 must contain the same tense as Base 2 unless Base 1 is present, in which case Base 2 may be future. A question or a command is possible in Base 2, with Base 1 always remaining indicative (see Example 107). Permutation is impossible in this emphatic sentence.

- 107) bhãnas haet ki satah ke bahäir debai
cook will be floor to broom give!
B1 L B2

As soon as you finish cooking, sweep the floor!

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FOOTNOTES

¹Grierson mentions the relative and correlative pronouns (diagnostic of the Correlative Sentence) on page 99 and lists conjunctions on page 302. Jha treats the conjunction on page 567, but the section entitled "Sentences" on page 576 deals only with reduplication for intensity in short sentences. In Part II of Chapter 12 on Syntax, Kellogg presents the most lengthy discussion on sentences, but it is, of course, primarily with Hindi rather than Maithili in mind.

²Initial data collection was carried out by Miss Jennifer Williams and this writer in the Maithili-speaking village of Ghorghas, near the town of Janakpurdham, Dhanusha District, Nepal, during a period of 14 weeks spread between May, 1971 and April, 1972.

Maithili is the language of approximately 21 million people located in the southeastern Terai region of Nepal and the northern section of Bihar state in India. It is the Brahmin dialect under focus in this study, with an attempt to consider the spoken as well as the literary variety. An Indo-Aryan language, Maithili is normally classed as a dialect of the Bihari language.

³The suggestion was made in a conversation in the Maithili village during Pike's visit in April, 1972.

⁴The following items are candidates for inclusion in the sentence periphery: aur 'and,' lekin 'but,' tathäpi 'still,' ahi ke lel 'for this,' tähi kārane 'for this reason,' tähi laka 'by means of this,' takar bād 'after that,' pahine ta 'before

then,' and the echo question ki nai 'or not' whose actual function is an affirmation seeker meaning, "That's right, isn't it?" These peripheral items may occur on any sentence type.

⁵An attempt to handle this introducer in a manner similar to the way Longacre handled cross-referencing particles (1968:113) proved unhelpful at the current stage of analysis.

⁶In initial analysis, only constructions with dependent verbs were called margin constructions due to the writer's original definition of margin. After great hesitation, however, we conceded to redefining the margin to include independent verbs, too, because the conjunction following the independent verb performed, especially in permutation, much more like a relator of an axis-relator clause than it did as a link in a base-link-base construction. Allowing independent verbs in a margin tagmeme seems to be the happier solution.

⁷The four-box formula is that part of Pike's nine-box tagmeme which is relevant for the writing of generalized grammatical/sememic formulas. The four boxes are reproduced here, but see A. Hale's paper in this same volume for a full description.

	FUNCTION	SYSTEMIC CLASS	ITEM
Grammatical	1. Focus	2. Category	
Sememic	4. Role	5. Concept	
Phonological			

⁸Alternately, it could be analyzed as an axis-relator clause 1 filling the margin, with the emphasis occurring between the axis and the relator (me), but this seems to make the description a bit awkward.

⁹In this present analysis, result and reason are treated as sentential notions, but if a whole monologue can also be a "because"-type structure, it seems not quite legitimate to treat it at sentence level as well. Example 66 is a case in point. The rest of the narrative beyond, "The day on which I came from the village my father was not there because..." involves a whole monologue of a theft, the need to search for the thief, the father being requested to assist, and the absence of the father. At the point of "because" the speech act appears to alter from narrative to explanatory. The problem then arises: at which level are because-type structures properly treated? Other relationships which pose the same question may be alternation, co-ordination, and perhaps contrast. These are herein treated as sentence-level relations, but paragraphs and monologues could feasibly carry the same notions. Can such notions legitimately be handled at more than one level? If not, on what basis does the analyst assign them to one level or another? These queries go beyond the scope of the present work but will no doubt furnish interesting and

helpful insights when pursued.

¹⁰It is this feature of an obligatory kahi and an optional tae which indicated the analysis of a discontinuous morpheme rather than an introducer and a relator. In permutations it is common for an introducer to become obligatory, but nowhere does the description allow for an optional relator. By calling the kahi...tae a discontinuous morpheme in relator position, we can say that a relator is always obligatory, but when the exponent of the base is an imperative clause, the first member of the relator becomes the obligatory part and the second member the optional part.

¹¹Further investigation will very likely reveal this sentence type to be a truncated variety of the temporal Correlative Sentence, but for the present study it is being treated as a type in its own right.

APPENDICES

A. Maithili Phonemes and Their Orthographic Representation

1. Consonants

<u>Phonemes</u>										
stops vl	p	p ^h	t	t ^h	ṭ	ṭ ^h	tʂ	tʂ ^h	k	k ^h
vd	b	b ^h	d	d ^h	ḍ	ḍ ^h	dz	dz ^h	g	g ^h
fricatives			s							h
nasals	m	m ^h	n	n ^h						ŋ
liquids			l	l ^h			r	r ^h		
glides	w						y			

<u>Orthographic Conventions</u>										
stops vl	p	ph	t	th	T	Th	ch	chh	k	kh
vd	b	bh	d	dh	D	Dh	j	jh	g	gh
fricatives			s							h
nasals	m	mh	n	nh						ng
liquids			l	lh			r	rh		
glides	w						y			

2. Vowels

<u>Phonemes</u>					<u>Orthographic Conventions</u>				
i		u			i		u		
e	ə	o	ə ⁱ	ə ^u	e	a	o	ai	au
æ	a	ɔ			ae	ä	ɔ		

3. Other Conventions

Phonemic nasalization is indicated as ɲ and length is presented as a double letter. Palatalization is written as Cy and labialization as Cw.

B. Abbreviations

AD	adjunct	Quest	question
adv	adverb	Reit	reiteration
Alt	alternative	rel	relative
AR	axis-relator	Resn	reason
B	base	Resp	response
BiDi	bi-directional	Rslt	result
c	correlative	s	subordinate
cj	conjunction	Sig	signal
Cl	clause	Spec	specific
cntf	contrafactual	Stat	statement
Conc	concessive		
Cond	condition		
Conn	connector		
Cont	contrast		
Copl	coupling		
cpt	composite		
c-t-e	contrary-to-expectation		
d	dependent		
emph	emphasis		
F	final		
In	independent		
indic	indicative		
Init	initial		
INT	introducer		
introg	interrogative		
L	link		
MAR	margin		
mkr	marker		
n	unknown quantity		
neg	negative		
p	permuting		
pos	positive		
Prop	proposition		
Purp	purpose		
q	quantifier		
quant	quantified		