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CONJUNCTION IN KORAFE
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Conjunction in Korafe

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0. Introduction

Halliday and Hasan (1976:227) define conjunction as "a specification of the way in which what is to follow is systematically connected to what has gone before." Basically then, in order to have conjunction, there must be two conjuncts or propositions in some relationship to each other: either in an equality relationship or in an inequality relationship. Two words of Greek derivation are used widely to define these two relationships: parataxis (arranged next to) and hypotaxis (arranged under). In English, paratactic structures are often termed coordinate, and hypotactic structures subordinate. But for the purposes of this paper, I will follow Reesink's example (1978) and use parataxis and hypotaxis respectively to refer to the equality and inequality relationships in order to reserve the term coordination for a sub-type of both.

Grimes (1975:207ff) distinguishes between paratactic and hypotactic predicates as categories of rhetorical predicates, "propositions whose arguments are not related to their predicates via semantic roles." Paratactic predicates "dominate all their predicates in coordinate fashion" and are manifested by the semantic concepts of alternation and response. Hypotactic predicates "have

as one of their arguments the center, a term with respect to which the proposition as a whole is subordinated to some other proposition by being added to it as an extra argument." These include the semantic notions of supplementary or supporting predicates, equivalent, specific predicates, explanation, evidence, analogy and manner. He posits a third category, neutral, which he says covers the semantic concepts: collection, covariance, and adversative. In some contexts, the neutral predicates manifest a paratactic relationship, and in others a hypotactic one.

The problem giving rise to the need for this neutral category can best be explained by reference to Anderson's matrix discussion of syntactic main and subordinate and semantic main and subordinate clauses as cited by Reesink from Kroll.

Table 1: Anderson's Clause Matrix

	syntactic main	syntactic subordinate
semantic main	a	b
semantic subordinate	c	d

Anderson's examples for these relationships are:

(a.) Ingemar is skiing.

(b.) It is true that he is very learned.

- (c.) Robin doesn't study linguistics, because he has always been interested in language (but because he wants to impress his girlfriend).
- (d.) The tourist went to the place where Jesus is supposed to have been born.

Where both clauses are syntactically main and semantically main, there is true parataxis. Where one clause is both syntactic and semantic subordinate and the other clause is syntactic and semantic main, hypotaxis is clearly the relationship between the conjuncts. However, where one clause in a conjunction is syntactic subordinate and semantic main or semantic subordinate and syntactic main, the type of relationship is not clear, and one is tempted to discuss the relationship as being on a continuum between parataxis and hypotaxis.

For the purposes of this paper, I will use syntactic criteria only to distinguish between parataxis and hypotaxis. Thus, conjunction of two syntactic main clauses is paratactic, and conjunction involving a syntactic subordinate clause is hypotactic.

In addition to the parataxis/hypotaxis distinction, there are two other parameters which need to be discussed for a clear delineation of Korafe conjunction: internal/

external conjunction and presupposition/assertion.

The external/internal distinction presented in Halliday and Hasan (1976:321) is as follows: external conjunctions "are located in the phenomena that constitute the content of what is being said," and internal conjunctions are found "in the interaction itself, the social process that constitutes the speech event." As I apply the distinction to Korafe, external conjunction is a relationship between the units of the text, whether between arguments of a proposition or between propositions (clauses) or between combinations of propositions (sentences). Internal conjunction is the relationship in the mind of the speaker (hence 'internal') between the actual speech acts. This distinction is illustrated in examples (1) and (2).

External:

(1.) Mike Schmidt hit the ball and ran the bases
for a home run.

Internal:

(2.) Tommy plays the piano and does a good job.

Halliday and Hasan's example 5.17a (245) illustrates both

within a single stretch of speech.

(

- (3) I was very nearly opening the window, and putting you out into snow. And you'd have deserved it.

The internal/external distinction has proven most helpful in analyzing Korafe¹ conjunctions, so I will be discussing it as it pertains to the various sections of the paper.

The final parameter to be discussed is that of presupposition and assertion. I shall be using presupposition in a pragmatic rather than logical sense throughout this paper. Kempson (1975) points out that linguists use presupposition in two senses which I shall call the textual sense and the world knowledge one. The textual presupposition is context specific. Any proposition in the text may become a presupposition for what follows, regardless of its truth value (whether the speaker believes it or not). The world knowledge sense specifies, in Kempson's (1975:190) terminology, that "the speaker believes the hearer knows (and the speaker knows) a certain body of propositions (i.e. a Pragmatic Universe of Discourse)" to which the speaker can freely refer, because he believes the

hearer shares this set of presuppositions about the real world which he has. An assertion is any set of conditions that falls outside this set of shared presuppositions about the real world, at that point in the discourse. Either the speaker believes that the hearer does not share these presuppositions, or else the speaker is querying something outside of his set of real world presuppositions. However, once an assertion is stated, it may become a presupposition for the next assertion in the text, in accordance with the textual sense of presupposition. Stalnaker (1972) further distinguishes between semantic presupposition and pragmatic presupposition. Thus, both conjuncts in a paratactic conjunction are assertions, but become presuppositions for all subsequent propositions, whereas all subordinated propositions in a hypotactic conjunction are necessarily presuppositions for the syntactic main conjunct. Kempson (1975:101) points out the difference between the definitions tendered by Strawson and Russell. Russell stated that "assertion is a (very special kind of) commitment to the truth of a proposition." Kempson maintains that Strawson's definition of assertion is "to give information of some kind to an audience." This distinction needs to be maintained for Korafe, for, as will be shown, Korafe finite verbs differ in this regard as to the type of assertion being made.

1.0 Korafe Conjunction

Korafe handles conjunction in two different ways: through verbal juxtaposition and through connective words or phrases (which I will term conjunctions), which consist of demonstratives alone, stripped down medial verb forms, and combinations of the same with clitics and nominals.

1.1 Conjunction through Verbal Juxtaposition:

Conjunction is manifested in the Korafe verbal system through the following types of verbal juxtaposition:

(a.) juxtaposition of clauses in a string in which every predicate except the ultimate one is a medial verb², and the final predicate is manifested by a semi-final or final form of the verb. The resultant construction can be termed a clause cluster.

(b.) juxtaposition of the clause clusters mentioned under (a.) with each other where the final clause cluster must terminate with a final form of the verb and the other clause clusters may terminate with either semi-final or final verb forms. Both semi-final and final verbs are finite ones.

Syntactically, these clause clusters appear to be examples of parataxis or coordination of the type which Grimes (1975:219) terms collection. Semantically, juxtaposed constructions of the types (a.) and (b.)

Each clause terminating in a medial verb can be considered an assertion, which becomes a presupposition for the succeeding clause. But the clauses cluster together to form one event chain with a composite sentential assertion. Event chains may be subdivided to allow for different topics by (i.) the addition of the verb 'finish' where different referents are topicalized, or (ii.) the usage of the contrastive focus markers avo and avori, which are often used when the same referent is sentence subject, but a different topic is in focus in one section of the sentence.

- (4) ...siono eni ir-ari, siono
 shuttle one remain-seq.ir.3s.DR³ shuttle
eni gemb-eoro, dadab-eari
 one weave.SP-seq.proc.1p.DR finish-seq.proc.3s.DR
g-ido eni amo gemb-uraera.
 see.SP-seq.SR one that.t. weave.SP-proc.1p.ind

' ...one shuttle remains (aside), and we weave (using) another shuttle until it is finished, and then we weave that (first) one.'

- (5) ...nu tumba ghae f-ua nati
 he night with come.LP-seq.ir.SR house
atu-da ghuf-use, avo-ri, nunda
 rear-at fly.LP-sim.SR that.ct.-e. his
beka mo "Jufi, jufi," s-eraira.
 mouth t. jufi jufi say-proc.3s.ind
 '...he (the small fruit bat) comes at night,
 and while he is flying around at the back of
 the house, all right, he says, "Jufi, jufi,"
 as his bird call.'

- (6) Aimi sav-era
 that.con.t. went.out-seq.dur.p.3p.SR
buy-u g-ido kavenu
 approach.SP-seq.IA see.SP-seq.SR comfort
s-edo avo jingabu amo voto
 say-seq.SR that.ct. snake that.t. net
ghae b-u vit-ido founa
 with get.SP-seq.IA ascend.SP-seq.SR reef

da fug-etero fas-etiri
 on throw.SP-seq.r.3p.DR lay.down-seq.r.3s.DR
d-edo kaiya-i ifu da gaf-useri.
 hit.SP-seq.SR knife-con. body on cut-DP.3p.ind.
 'They went out to him, saw (the snake), and
 expressed their sympathy, and then that snake
 they grabbed along with the net and pulled him
 up on to the reef where they threw him down,
 beat him and cut him with a knife.'

Just as the sentence is unfinished at the termination of a medial verb clause, so clause clusters that terminate with a semi-final verb may not terminate a sentence. By their very nature, these two sets of forms have a textual presuppositional value within the sentence. The affixation on a medial verb presupposes to some extent the subject-topic of the next predication as well as the temporal relationship of the two conjuncts to each other. Most medial verb forms terminate in -o, which seems to have the semantic component of given, or presupposed in relationship to something else which follows.

All semi-final⁴ verbal forms, some medial same referent forms, and the future, present, and procedural (gnomic)

indicative forms together with the third person singular forms of all of the indicative conjugations, except the indefinite past, terminate with the morpheme -a. The semi-final verb forms are used to delimit an assertion that has a dependency status in the sentence, or else to interrupt the flow of the discourse to impart some background information. Thus, they are used to terminate relative clauses, embedded in another clause. They break off the temporal or logical flow of the text to indicate collateral information like an explanation, a question, or a flashback. They occur before most demonstrative pronouns in mid-sentence position, especially when the pause in intonation follows the demonstrative. The -a occurs with same referent medial verbs that manifest a durative aspect: the time span of the verb continues up until the next action occurs, and it cannot be defined (or terminated) without the subsequent predication.

- (7) Nu r-av-ara sifo
 he dur-sleep-seq.np.3s.SR day
at-etiri er-etira.
 dawn.SP-seq.r.3s.DR arise.SP-tp.3s.ind.
 'He slept until day dawned, and then he arose.'

Final verb forms terminate either in aa (as described above) or with -i in almost all verbs that terminate content questions or with the past indicative forms of the verb. The final indicative verb forms may occur sentence medially just like the semi-final forms do, but the intonational break usually is evidenced between the final verb form and the subsequent demonstrative. These indicative verb forms, terminating in -a or -i, also predicate statements and factual yes-no questions in sentence final position. Ivan Lowe (personal communication) states that an assertion is something that the speaker tells the addressee (information) and/or something that the addressee may check for its true-false value. Our language teacher, Warrington Isari, believes that the -i assertion is definitely true and a bit stronger and more definite than the -a assertion. I believe that "the morpheme -i indicates that the truth value of the underlying cognitive proposition is well-defined and is true for all except the contrafactual construction, in which case it is false."⁵ The morpheme -a suggests that "the truth value of the underlying cognitive construction is not well-defined (left open) and can be either true or false."⁵ It is used under these conditions irrespective of whether the verb is positioned medially or finally in the sentence. So, for the following sentence:

- (8) Nu rejo eti?
 he what do.tp.3s.q.
 'What did he do?'

the speaker is asserting that 'he did do something', and that the truth value of that assertion is true. Whereas, in:

- (9) Avose, nu y-arira.
 perhaps he go.LP-f.3s.ind.
 'Perhaps he will go.'

the speaker is merely giving more information, information for which no truth value can be assigned.

There is a further distinction that can be drawn between the -a verbal forms and the -i verbal forms. The -a verbal forms are used to manifest actions that are in some sense incomplete. In the case of the future tense, it is not started. This imperfective quality explains why the semi-final verbs all manifest the -a suffix: they indicate that there is something unfinished about the sentence they occur in. The -i verbal forms often mark predications, whose actions are completed or established.

- (10) Nanda saramana anakora eteni.
 my work already do.tp.1s.ind.
 'I already did my work.'

1.2 Conjunctions

In Korafe, conjunctions are either demonstratives⁶, medial sequential same referent verbs without personal or temporal desinences, or a combination of the two, sometimes with additional nominals and/or clitics. The nominals used are: giti 'front, forward projection', ambo 'back, tail', kotu 'footprint', tuka 'point', susu 'source', and beka 'truth'. The following relationals and clitics also are used in combinations to form conjunctions: ta 'frustrative marker', da 'locative', dae 'purpose', and 'go' 'comparison!'. In the following list, the type of conjunction formation is indicated by numerical subscripts: a₁ to demonstratives, a₂ to medial verbs, a₃ to combinations of demonstratives and medial verbs, a₄ to combinations of demonstratives and clitics, and a₅ to nominal conjunctions or combinations of nominal conjunctions with relationals.

Paratactic conjunctions:

- | | |
|----------------------------------|----------------|
| <u>gitida/giti</u> ₅ | 'before/first' |
| <u>ainda gitida</u> ₅ | 'before that' |
| <u>amboda</u> ₅ | 'afterwards' |
| <u>ainda amboda</u> ₅ | 'after that' |

<u>a</u> ₁	'and' (external AND, speaker assumes that addressee can make his own logical connection between the two conjuncts.)
<u>ata</u> ₄	'and frustratingly enough'
<u>edo</u> ₂	'and' (internal AND, speaker is spelling out to addressee that the conjoined elements do have a connection for him, also means AND THEN.)
<u>kotu/kotugo</u> ₅	'in addition to, besides, furthermore, likewise, moreover, nevertheless' (internal AND)
<u>o</u>	'or' (indicate external disjunction of both the inclusive and exclusive types, also used to indicate 'on the other hand'. This morpheme actually is a loan word from English, 'or'.)
<u>ai</u> ₁	'or' (biased disjunctive of both the inclusive and exclusive types. It is used as a tag on yes-no questions to indicate 'yes'.)
<u>gido</u> ₂	'seeing'

Hypotactic conjunctions

<u>ghae</u>	'and/with' (dual comitative relator)
<u>de</u>	'and/with' (plural comitative relator)

<u>amo</u> ₁	'when, if, since, regarding that' {topic and implicational marker. See Farr, Lowe, and Whitehead 1981 manuscript for further discussion of its use as a topic.)
<u>amota</u> ₄	'if that is frustratingly the case...'
<u>ava</u> ₁	'but/leaving that proposition and heading another direction' (See Farr, Lowe, and Whitehead 1981 manuscript for further discussion of it as a contrastive topic marker.)
<u>avata</u> ₄	'but, yet, however, nevertheless, despite that'
<u>avose</u> ₃	'perhaps/saying that, but I don't know for sure...'
<u>a gido</u> ₃	'therefore, so, then, hence (literally means 'seeing that')
<u>avo gido</u> ₃	'therefore, so' (literally means 'seeing that significantly contrastive event')
<u>ava sedo</u> ₃	'therefore, consequently, because of that' (It may occur in sentence initial position. It literally means 'saying that'.)

aindae₄ sedo₃ 'therefore, because of that
controlling factor' (It may occur
in sentence tail position. It
literally means 'speaking on account
of that'. The sedo component makes
it an internal conjunction.)

aindae₄ 'therefore, because of that con-
trolling factor' (It may occur in
sentence tail position. It is an
external conjunction literally
meaning 'on account of that'.)

ai resira (amo) 'that says that' (This conjunction
is used to express internal reason.
Actually this construction begins
and ends with a demonstrative
and has a fully inflected final
verb form 'it says' in present
tense between the two.)

ainda tuka (mo)₅ 'the point of that (is)'

ainda susu (mo)₅ 'the source of that (is)'

ainda beka (mo)₅ 'the reality of that (is)'

dae (aindae) 'in order to, for the purpose of'

dae sedo₂ (aindae)₁ 'speaking in order to, speaking for
the purpose of'

aminga₄/amingo₄ 'like that'
avavaga₄/avaga₄/
avavago₄/avago₄ 'like that'
kau daba ava₅ 'just like that'
kau daba aminga ava₅ 'exactly like that'

1.3 Criteria for delimiting paratactic and hypotactic structures language specifically for Korafe

I have already pointed out, following the presentation of Anderson's main/subordinate clause classification that there is a continuum between paratactic conjunction and hypotactic conjunction, when one conjunct is syntactically main, yet semantically subordinate or vice versa. Therefore, as Halliday and Hasan (1976:238) say, "There is no single, uniquely correct inventory of the types of conjunction relation; different classifications are possible, each of which would highlight different aspects of the facts."

According to the classification I am presenting here, verbal juxtaposition (1.1) strategies exemplify parataxis, and most conjunctions (1.2) hypotaxis. However, there are a few conjunctions which demonstrate a paratactic relationship. These are the demonstratives without topicalizing clitics a 'that' meaning 'and', and ai 'that with control' meaning 'or', the verbal form edo 'doing' (AND THEN), ata 'and (with a frustrative element)', kotugo/

kotu 'and moreover', and o 'or (an English loan word)'.

Regarding hypotaxis, Reesink (1978 ms:24) states for Usan: "Following Anderson's criterion, this means that one of the conjuncts involves an embedded sentence," and this applies to Korafe also. In Korafe, embedding is accomplished by the use of a semi-final or final verb form terminating a clause or clause cluster that is embedded in the sentence by a demonstrative. This embedded or restrictive relative clause may replace the head noun and be possessed, as in the following example.

- (10) ...nunda aki.mane vos-edo
 her older.sisters descend.SP-seq.SR
 nenda edo gh-etera
 their do.seq.SR do.successively-tp.3p.SF
 ava etero...
 that.ct. do.seq.r.3p.DR
 'her older sisters came down and did what
 they always did...'

The following example illustrates the use of the relative clause in a marked topicalization situation similar to the English cleft sentence.

- (11) Mandi sife f-umutara amo,
 boy yesterday come.LP-yp.3s.SF that.t.
nu-mo-ri.
 he-t.-e.
 'The boy that came yesterday, it is he.'

The next example illustrates the use of the relative clause in a marked topicalization situation similar to the English pseudo-cleft sentence.

- (12) Na reju-á ingari uju erena
 I what.spec.-that to.bake want do.pr.1s.ind.
amo, farava-ri.
 that.t. bread-e.
 'What I want to bake is bread.'

Examples (13) and (14) illustrate the contrast between parataxis and hypotaxis respectively, differing only in the presence of the embedding amo in (15).

Paratactic adversative:

- (13) Sasingu ava usera, io
 children that.ct. do.dp.3p.SF not

amb-ae-ri.

die.SP-not.do-e.

'The children did that, (but) they did not die.'

Hypotactic embedding:

(14) Sasingu ava usera amo,
 children that.ct. do.dp.3p.SF that.t.
 io amb-ae-ri.
 not die.SP-not.do-e.

'The children who did that didn't die.'

Keeping these criteria in mind, I am discussing paratactic onjunction first under the areas of temporal (THEN) ^{CO}onjunction, coordination (AND), alternation (OR), narrowing focus conjunction (AND-BUT), and the juxtaposition of verbal forms that encodes the semantic ideas of equivalence, adversative, and cause and effect. Hypotactic conjunction in Korafe includes hypotactic coordination, implication: condition and hypotactic equivalence (IF, WHEN, SINCE), adversative-contraexpectation (BUT), cause-reason (SO), purpose-prevention (IN ORDER (NOT) TO), comparison and pretense. Within the hypotactic section is a brief discussion of the hypotactic nature of quotations and the use of sedo/sise, but the main discussion

of quotation and reported speech, including their placement in the paratactic-hypotactic dichotomy, is at the conclusion of the paper.

2.0 Paratactic Rhetorical Predicates

Conjunction operates at three levels in Korafe: phrase level, inter-clausal or sentence level, and above the sentence level. Halliday and Hasan (1976:222) discuss the sentence level paratactic and hypotactic relationships in reference to clause complexes, but they see the relationships at this level as being basically structural or logical, rather than conjunctive. They (1976:238) narrow the scope of conjunctive relationships to relationships that are involved in making a text cohesive. However, in Korafe, at least for coordination and alternation, I prefer to discuss conjunction on all three levels.

In section 1.0, I introduced the external-internal distinction that Halliday and Hasan posit. The external conjunctions appear to conjoin clauses that would be assigned to the 'a-cell' of Anderson's (Table 1), where both clauses are syntactic and semantic main clauses. The internal use of the paratactic conjunctions occurs with clauses that most probably would be listed under the 'c-cell', because both clauses are still syntactically

main ones, but the second clause presupposes the first clause, which appears to be semantically subordinate. Therefore, the first clause belongs to the 'c-cell', and the second clause belongs to the 'a-cell', in that it is syntactic and semantic main.

In Korafe, unmarked conjunction is demonstrated by juxtaposition of clauses, terminating either in medial verbs (See (a) in section 1.1) or in semi-final or final verbs (See (b.) in section 1.1). If the juxtaposition of clause clusters is of the latter type, the conjunction is probably expressing an equivalence, adversative, or cause-effect relationship in addition to or instead of the logico-temporal relationship that normally is encoded in verbal juxtaposition. However, which type of relationship it is is not specified, and the addressee must decide for himself whether it is an equivalence or an adversative, etc. Where actual demonstrative or other types of conjunctions are used, the nature of the connective relationship is clearly defined. So, there are three levels of paratactic conjunction: ⁽¹⁾ unmarked verbal juxtaposition, ⁽²⁾ conjuncts joined by external conjunctions (so that either conjunct may occur in initial position), and ⁽³⁾ conjuncts joined by internal

conjunctions, where, at least in the speaker's mind, the first conjunct must always precede the second conjunct for the utterance to make good sense. The first level is the least specific in terms of the type of conjunctive relationship. The third is the most specific in terms of the inter-relatedness of the two events, expressed by the conjuncts, to each other.

2.1 Temporal (THEN) Relationships

Halliday and Hasan (1976:243,261ff) describe THEN relationships as one of the four cohesive connectors. Grimes (1975:214,221-2) describes temporal relationships as being hypotactic when they encode temporal setting within the discourse, where the collection in time oriented by elements such as after, while, etc. For him, paratactic temporal relationships are indicated by a verbal string (collection of verbs) manifesting temporal sequence and/or simultaneity.

Korafe normally manifests temporal sequence and overlap-simultaneous relationships by stringing together clauses that terminate in medial verbs which occur with sequential or simultaneous-overlap desinences. The medial verbs also have desinences to express repetition, duration up until the subsequent event, actions which are

viewed as one integral event with the next action, and actions which are punctiliar. If the subject-topic of the subsequent clause differs from the one under consideration, the medial verb is also marked with a subject-topic desinence. Between clause clusters or sentences, the unmarked relationship manifested by tail-head linkage (beginning a sentence with a medial form of the verb that concluded the preceding sentence) is temporal sequence.

- (15) Na evetu fifit-useni. Fit-ido
 I woman put.LP-dp.1s.ind. put.SP-seq.SR
ainda amboda, na dubo mema useni.
 of.that afterwards I neck pain do.dp.1s.ind.
 'I married a wife. After I married, I was
 troubled.'

- (16) Gemb-udo gagh-arera. Gagh-edo
 weave,SP-seq.SR fold-f.1p.ind fold-seq.SR
diti gay-arera. Ga-edo...
 eyes spear.SP-f.1p.ind. spear.SP-seq.SR
 'Having sewn (the pandanus leaves together),
 they fold (the mats) in half. After folding,
 they sew a quilting stitch (near to the two
 side edges). After sewing...'

The chaining together of medial verb clauses is the external (in the Halliday and Hasan sense) unmarked way of encoding temporal succession and overlap. The medial sequential forms of 'do': edo and etiri, and the medial simultaneous forms of 'do': use and iri are used to indicate emphatic temporal succession and overlap (i.e. the speaker is emphasizing his view of the temporal relationship in using these forms). See section 2.2. for a more complete discussion of edo as the AND THEN conjunction.

I prefer to view these concatenations of medial verbs as collections of verbs in a paratactic relationship. But there is some justification syntactically as well as semantically for claiming a hypotactic rhetorical predicate for temporal settings in discourse. Temporal settings are usually introduced as one clause in a string of clauses, each of which terminates with a medial verb. However, even though the subject of the temporal setting clause differs from the subject of the preceding clause, the preceding clause may and often does terminate with a medial verb, marked with same referent, rather than different referent, desinence. This same referent marking indicates that the subject-topic of the preceding clause has a scope that extends over the temporal setting clause.

- (17) ...gagaraka baj-i tambuno
 girl.exc. grow.up-seq.IA.SR moon
etoto ava dadab-etiri, noi
 two that.ct. finish-seq.r.3s.DR her.mother
numamo g-era...
 her.father see.SP-tpq3p.SF
 '...that little girl continued to grow until
 two months had elapsed, (then) her parents
 examined (her)...'

Since temporal succession is the expected relationship dominating medial verb strings, when the speaker draws from his knowledge of real world events and refers cataphorically to an event (mentioning it in an event chain that refers to events which temporally preceded it), he uses a complicated structure, involving the devices of negation and simultaneous-overlap medial verb forms.

- (18) Nu io Jebo y-ae ir-iri,
 he not Jebo go.LP-not.do remain-sim.r.3s.DR
ne f-usevu.
 you.2p come.LP-dp.2p.ind.
 'He still hadn't gone to Jebo when you came.'

Use of time words alone and in combination with demonstratives marked with the possessive clitic is the internal marked way of indicating temporal sequence. As mentioned before, Korafe speakers usually encode temporal succession between sentences by unmarked tail-head linkage. The usage of the temporal expressions: amboda 'afterwards' and ainda amboda 'after that' indicates marked temporal sequence. These two temporal expressions are conjunctions in the sense that they indicate a relationship between two conjuncts, but their basic function is to mark discourse clock time⁷. There may be some grounds for calling them hypotactic conjunctions as Grimes does, but I prefer to view them as paratactic conjunctions joining two clauses in an equality relationship. Syntactically, there seem to be several reasons for maintaining them as syntactic main clauses. The usual intonation break falls before ainda amboda, breaking it away from the clause it should be embedding. Ainda amboda often occurs sentence initial with a topicalizer mo following it, indicating that it is actually sentence theme, in accordance with Dik's (1978:19) usage of the word. If ainda amboda were truly an embedding conjunction expressing a hypotactic relationship, it would follow semi-final forms of the verb (which are often used as the

verb in embedded constructions) at least occasionally. But, it predominantly follows medial forms or occurs at sentence breaks as the initial element in the second sentence (which automatically presupposes that it follows the final verb that terminates the first sentence). Therefore, I consider amboda and ainda amboda to be paratactic conjunctions. Since temporal succession is the usual temporal ordering in Korafe, temporal expressions like giti 'first', gitida 'at first', and anakora 'already, long ago' occur near the beginning of a discourse. Cataphoric temporal reference (re-ordering two clauses so that the time index in the first clause follows that of the second clause) does occur infrequently in Korafe discourses. It is manifested externally by verbal juxtaposition of a negated overlap medial form with another verbal form (as mentioned above). It is sometimes manifested by the overlap verbal medial form in a clause followed by the internal conjunction ainda gitida 'before that' and a subsequent clause.

- (19) Ne isoro tuturo ari dae
 they war start to.do in.order.to
 use ainda giti-da mo kau
 do.sim.SR that.pos first-at t. like

nu ba banungari avavaga use
 spec to.pray that.ct.like do.sim.SR
nombua.mane da javono gat-edo
 their.ancestors pos clan.name split-seq.SR
s-edo gh-useri...
 say-seq.SR continue-dp.3p.ind.
 'Before they would prepare for battle, while
 they were acting like they were praying, they
 would call on the ancestors, using their clan
 names and say...'

Simultaneity and overlap is handled across clause and
 sentence boundaries by the expression, ainda jokada
 'within that'.

- (20) ...ne ga-etero airi
 they spear.SP-seq.r.3p.DR go.SP-seq.r.3s.DR
ga-etero oj-iri
 spear.SP-seq.r.3p.DR come.SP-seq.r.3s.DR
jor-e fugari g-iri
 break.off-seq.IA to.throw.away see.SP-seq.r.3s.DR
ainda joka-da buv-eri.
 that.pos inside-of arrive.SP-tp.3p.ind.
 'They (the dancing group) were moving this

7 way and that and breaking off and joining up
 again, (and) inside of that (activity) (the
 boys) arrived.'

For a fuller discussion of time words in Korafe, see
 Farr and Whitehead (1981 ms:7).

2.2 Coordination (AND)

Coordination is of two types: logical (putting things together which belong together in the real world of speaker and addressee) and temporal (described at some length in section 2.1). Unmarked coordination (or collection as Grimes calls it) in Korafe is logical coordination, which is expressed by juxtaposition: juxtaposition of noun phrases, adjectives (presumably, because none occur in texts), and medial verb clauses (See section 2.1). Example (21) illustrates noun phrase coordination or listing.

- (21) ...ne embo boka, fuka,
 they laplap loincloth pigs
 guri, okia ava b-u
 traditional.jewelry pots that.ct. get.SP-seq.IA
 vog-edo. mut-eoro...
 descend.SP-seq.SR give.SP-seq.proc.3p.DR

'they would take down tapa cloth, pigs,
traditional shell jewelry, (and) pots
(and) give (them)...'

The external conjunction AND in Korafe is the same as the medial demonstrative root a 'that'. Because the conjuncts on either side of this conjunction can be freely permuted, it is operating as a paratactic conjunction. It coordinates noun phrases, adjectives, locative phrases, medial verb clauses, and final verb clauses within the boundaries of the sentence⁸ and across sentence boundaries.

- (22) ...kiki Korafe geka a English geka
 stories Korafe talk and English talk
 aimi teg-edo...
 that.con.t. read.SP-seq.SR

- (23) Nunda tamo ingago a foyago-ri.
 his body black and white-e.
 'Its body is black and white.'

- (24) ...ika toka-da a enda toka-da
 tree hole-in and ground hole-in

ir-ia-gh-eraira.

remain-dur.ir.-continue-proc.3s.ind.

'...it lives in holes in trees and holes in
the ground.'

The external conjunction a is used to conjoin Korafe verbal constructions to break the normal temporal sequence expectancy, neutralizing the temporal relationship between the two conjuncts.

- (25) goroba aimi af-e gagadedo
spear that.con.t. throw-seq.SR spear.SP-seq.SR
a ghamana aimi b-udo
and rock that.con.t. get.SP-seq.SR
i-e bas-ari
gash.SP-seq.SR bore-seq.ir.3s.DR
'(he) would spear (the man) by throwing
spears, and he would take rocks, gash, (and)
cut (him) up'

- (26) nene s-e gogogho aoro
they.con. say-seq.IA well do.seq.ir.3p.DR
ning-ase, a gengi gavi
hear.SP-h.2s. and limepot limestick

ijug-aorog-aseI

show-seq.ir.3p.DR see.SP-h.2s

'let them thoroughly explain (that) for you
to hear, and let them show you the ceremonial
limepot and limestick for you to see for yourself.'

In the verbal examples above, the verbal forms that are coordinated are equal in syntax (medial verbs paired together, etc.) and in status. I believe the Korafe a coordinates elements of equal status, therefore the medial verb must have equal status with the final verb, in contrast to what McCarthy (1965) and Wurm (1977:171) posit. In example (27), a medial different referent verb form is coordinated with a final verb form.

(27) ...na K2.50 fit-enoa

I K2.50 put.down.SP-seq.r.1s.DR and

grass gaf-umuta.

grass cut-yp.3s.ind.

'I put down the two kina and 50 toea, and
he cut the grass.' (My part of the bargain
was to pay the money for petrol, his to cut
the grass.)

The conjunction atá 'and frustratingly enough' adds the frustrative marker ta on to the a 'and' discussed above. It illustrates an internal 'and', in that the connective frustration is totally in the mind of the speaker. In example (28), it seems to be functioning as an interjection as well as a conjunction.

- (28) Etero g-ido, geraku
do.seq.r.3p.DR see.SP-seq.SR frogs
s-eteri, "Atá!
say-tp.3p.ind. that.frus.
Doy-ovo namonde
leave.off.SP-seq.ir.2p.DR we.inc.
ir-ise, gegenembo taima-da
remain-sim.SR men bush-to
y-aovo g-ido namane
go.LP-seq.ir.2p.DR see.SP-seq.SR we.exc.
eming-edo gheaeteri."
do.this.way-seq.SR continue-subj.1p.ind.
'Seeing that they (the men) had done (that -
beaten them up), the frogs said, "Foiled
again! If you would have left us remaining
(in this way), if you men would have continued
going off to the bush (and leaving your wives

behind for us to enjoy), we would have continued acting in this way."

- (29) Roera digari kau eni taf-useni.
 things many kind another find.LP-dp.1s.ind.
Atá nu genembo javo Harija,
 that.frus. spec. man name Harija
ava noaro.mane isambu 15 a nunda
 that.ct his.wives all 15 and his
sasingu isambu 25, nunda fuka.mane
 children all 25 his pigs
isambu 5,000 amingo-ri.
 all 5,000 like.that-e.
 'I found many things different (from my cultural world view). And one of them frustratingly enough was that there was a man named Harija who had 15 wives in all, 25 children in all, and something like 5,000 pigs in all.'

The basic internal AND, which Halliday and Hasan refer to as the additive AND THEN, is manifested by the medial forms of 'do': edo, etiri, use, and iri. For the purposes of this discussion, I will focus on the medial sequential same referent form edo. It usually conjoins

propositions and maintains in most contexts the relationship of temporal sequence between them.

- (30) Etiri, dungut-useri. Edo
do.seq.r.3s.DR burn.LP-dp.1p.ind and.then
ghaf-useri.
dig.LP-dp.1p.ind.
'It did (dried the slashed vegetation), (and
then) we burned it. And then, we dug up and
prepared (the ground).'

Sometimes edo expresses a logical conjunctive relationship between the two conjuncts.

- (31) ...evetu dae rosemo
 woman on.account.of grieving.mother
s-eraera. Genembo dae mo
say-proc.1p.ind. man on.account.of t.
tamboro s-eraera. Edo
grieving.father say-proc.1p.ind. and
evetu genembo ghae ne jigho jo
woman man with spec. comb not
gay-ae ir-ia-gh-eraera.
spear-not.do remain-dur.ir-continue-proc.3p.ind.

'...we call the grieving mother rosemo.
 The grieving father we call tamboro.
And the couple remain (in mourning) without
 combing their hair.'

In example (31), there is no temporal relationship between the conjuncts, only the logical relationship between the two as the speaker views it.

The medial verb forms of 'do': edo, etiri, use, and iri often replace the verbal copy in tail-head linkage between sentences as the head of the second sentence. The use of this more generic verbal form indicates that the speaker is signalling a larger chunk of discourse such as a paragraph or a focus space is beginning at this point. The edo forms make the tail-head linkage much more prominent than the normal tail-head linkage with verbal copy would have.

Occasionally edo is used with noun phrases.

- (32) tax 8 kina edo court fine 8 kina
 tax 8 kina and court fine 8 kina
ainghae dabade 16 kina b-u
 that.con.with together 16 kina get.SP-seq.IA
 '(he) will get (his) 8 kina tax money together
 with (his) 8 kina fine (making) 16 kina...'

In this context, the offender did not pay his taxes, so the speaker begins with the 8 kina he didn't pay and logically adds to it the fine that he will receive for not paying his taxes. Because the first amount precedes the other in logical order, the speaker used edo rather than a for 'and'.

There is one more set of internal AND's in Korafe; kotu 'footprint' and kotugo 'like footprint'. These can best be translated 'furthermore, in addition, besides, incidentally, by the way, in the same way, moreover, and (occasionally) alternatively, or on the other hand.'

- (33) Sivoro mo, nu enda joka-da
 earthworm t. spec. ground inside-of
ir-a-gh-eraira. Kotu,
 remain-dur.ir.-continue-proc.3s.ind. footprint
nu jo gamb-ae eraira.
 it not bite.SP-not.do do.proc.3s.ind.
 'The earthworm lives in the ground. By the way,
 it doesn't bite (people).'

- (34) Nunda tamo kokoi-ri. Nunda mendo mo
 its body red-e. its nose t.
kotugo kokoi-ri.
 footprint.like red-e.

'Its body is red. In addition, its nose is red.'

- (35) Nu giti afa.mane mind-ido gh-useri.
 it first fathers eat.SP-seq.SR continue-dp.3p.ind.
Ava-ta kotugo afa.mane ne
 that.ct.-frus. footprint.like fathers spec.
dara useri.
 great.mistake do.dp.3p.ind.
 'At first, (our) forefathers ate it (lizard).
 But on the other hand, they erred greatly.'

2.3 Alternation (OR)

Grimes (1975:210) claims that alternation is one of the 'two purely paratactic predicates.' Korafe speakers do not differentiate between inclusive and exclusive disjunction, but at this point in time, they do seem to differentiate between external and internal (relationship in the mind of the speaker) disjunction. The disjunctive that is most often used in an external way is o, which our Korafe instructor, Warrington Isari, claims is a loan word from English: 'or'. Example (36) illustrates the use of o between terms and (37) between propositions.

- (36) Nunda bayau mo ika o asi vuji-ri.
 its food t. tree or vine fruit-e.
 'Its food is fruit from trees or vines.'

- (37) ...aya afa ghae dabade tat-edo
 mother father with together join-seq.SR
ir-ero duro eraira.
 remain-sim.r.3p.DR glory do.proc.3s.ind.
o aya nu-suka ir-aetira,
 or mother spec.-alone remain-subj.3s.ind.
gari jo eveva ir-ae arira.
 to.see not good remain-not.do do.f.3s.ind.
 'When mother and dad are alive and living
 together, there's a glory in the situation.
Or if mother should remain by herself, (that)
 doesn't present a good appearance.'

Halliday and Hasan (1976:242) include the adversative contrastive relationship of 'however, on the other hand, at the same time' under BUT for English. If the disjuncts have different surface structure subject-topics, this particular adversative contrastive relationship is encoded in o in Korafe, as examples (37) and (38) illustrate.

- (38) ...bebego, etodaba aimi,
 firstborn.ones three that.con.t.
 isoro edo ghəuseri, o
 war do.seq.SR continue-dp.3p.ind. or
 ambo beka mo reighi-da ir-ise...
 last true t. place-in remain-sim.SR
 'Those three firstborn (sons) were off fighting,
 on the other hand, the youngest was staying
 at home...'

The original Korafe disjunctive form was ai, the demonstrative 'that' with the control clitic. This form is either homophonous or a polyseme with the ai that means 'yes, true'. At this present point in time, it seems to be widely used as an internal disjunctive, that logically orders the disjuncts and indicates that they may not be reversed, because the speaker sees them occurring in that order. The ai disjunctive also displays the inclusive-exclusive distinction.

- (39) Inclusive: dara ai dubo mema eni
 trouble or neck pain any
 tefo-ri.
 nothing-e.

'There's no mishap or sadness here.'

At first, it would seem that the terms in example (39) could be re-ordered, but in the Korafe world view which the speaker is expressing, by his use of ai, that 'sadness' arises out of 'trouble', which is most often associated with death. So here, the speaker is euphemistically proclaiming, "No one has died here, so we're not in mourning." Therefore, the dara must precede the dubo mema.

- (40) Exclusive: doy-arira, ai mindafu
 leave.off.SP-f.3s.ind. or great
sumb-arira?
 run.SP-f.3s.ind.

'Will (the cyclone) cease, or will it keep on blowing?"

That ai means 'yes' is significant. In example (40), the speaker is actually presenting a biased alternative; his hope is that the cyclone will cease blowing, so he presents that as his first alternative. Example (41), which also is a quotation, illustrates this semantic idea of a biased alternative again.

- (41) Oroko mind-aresa ai, nang-aresi?
 today eat.SP-f.2s.ind. yes...or do.what-f.2s.q.
 'Will you eat (it) now, or what will you do?'

To further confirm the use of ai as a biased disjunctive, which is of course an internal usage, I mention briefly here the use of ai as the 'yes' tag on a yes-no question. In Korafe, most yes-no questions are only tagged with ai instead of the ai-tefo combination. As in English, the use of the ai alone signals that the speaker expects 'yes' for an answer.

2.4 Nu, the AND-BUT narrowing focus conjunction

Halliday and Hasan (1976:250) state that " 'but' contains the element 'and' as one of its meaning components." Marge Reis (1978:541ff), in discussing the German aber, says that it has an AND-BUT sense, in that aber adds in some way to the information provided by the first conjunct. The Korafe specifying pronoun nu seems to perform this role as a paratactic conjunction. In the following examples, it narrows the scope of the initial conjunct to give a clearer delineation of the item under discussion.

- (42) Na reju geka ava s-aoni-ta?
 I what.spec. talk that.ct. say-h.1s.q-frus.
Nu, Kenneth vos-e f-usira.
 spec. Kenneth descend.SP-seq.1A come.LP-dp.3s.ind.

'Whatever shall I talk about? Oh, yes,
Kenneth came.'

- (43) Roera jo teria ir-ae-ri. Nu
thing not great remain-not.do-e. spec.
botoro ainda geka sari dae erena.
bottle of.that talk to.say pur. do.pr.1s.ind.
'It's not a great matter. But I'm going to
talk about the bottle.'

- (44) Na jo namonde business erera,
I not we.inc. business do.pr.1p.ind.
against use jo s-ae erena-ta.
against do.sim.SR not say-not.do do.pr.1s.ind.-frus.
Nu, Gode tumond-use Gode dae
spec. God believe-sim.SR God pu.
fut-use namonde da business dae
give.LP-sim.SR we.inc. pos. business pur.
fut-use gh-arera.
give.LP-sim.SR continue-f.1p.ind.
'I am not saying that I am against us doing
business. But (I am saying that) while we
are trusting God, we will be giving to Him
and to our businesses.'

As can be seen in the above examples, the nu is an AND-BUT conjunction, because it does not change either the topic or the direction of the discourse flow (as ava/avata 'but' do. See section 3.3.), but it gives the speaker's perspective on the topic.

2.5 Semantic relationships encoded in juxtaposition of semi-final and final verb forms

Korafe semi-final and final verb forms often terminate clause clusters that are immediately juxtaposed, hence by definition, paratactic. The relationships which these juxtapositions encode are coordination of both temporal and logical types, adversative, equivalence, and cause-effect.

Coordination is the rhetorical predicate encoded in example (45).

- (45) Jughu d-eraira, vare
 under.the.house sweep.SP-proc.3s.ind. garden
 vive eraira, bayau it-iraira.
 weed do.proc.3s.ind. food cook.SP-proc.3s.ind.
 'She sweeps underneath the house, weeds the
 garden, (and) cooks the food.'

Halliday and Hasan (1976:250) mention two components of adversative: contrastive and contrary to expectation. Usually, this conjunctive relationship is syntactically a hypotactic one in Korafe, manifested by the conjunctions ava and avata. However, the semantics of adversative AND-BUT can be encoded in the paratactic juxtaposition of semi-final and final verb clause clusters. However, one of the clause clusters must be in the negative mode.

- (46) Sasingu ava usera, jo
 children that.ct. do.dp.3p.SR not
 amb-ae-ri.
 die.SP-not.do-e.
 'The children did that, but (and) they
 didn't die.'

- (47) Na gos-usena, jo tumond-ae-ri.
 I see.LP-dp.1s.SF not believe-not.do-e.
 'I saw (it), but (and) I couldn't believe (it).'

Longacre (1972:57) discusses the semantic relationship of equivalence under the heading of paraphrase, which he subsumes as identity-equivalence, generic-specific, statement-specification, negated antonym, summary, contrac-

tion, and amplification. Grimes defines equivalence as a hypotactic relationship. However, in Korafe, equivalence is encoded structurally as both a paratactic and hypotactic relationship. Paratactically, juxtaposed semi-final and final clause clusters demonstrate equivalence conjunction in some instances.

- (48) Nu jo ghumb-ae eraira. Nu
 he not fly.SP-not.do do.proc.3s.ind. he
enda-da deingh-eraira.
 ground-on walk-proc.3s.ind.
 'He (the cassowary) doesn't fly. He walks
 about on the ground.'
- (49) Dara eming-useri. Arada amo
 error do.this.way-dp.3p.ind. lizard that.t.
b-udo kae bor-iseri.
 get.SP-seq.SR poison roast-dp.3p.ind.
 'They erred greatly in this way. They took
 the lizard and made black magic poison for
 sorcery.'

- (50) ...vasai da kirumu ari dae
 trading.partners pos. feast to.do pur.

edo gh-usera, giti fuka
do.seq.SR continue-dp.3p.SF first pigs
digarigo und-udo gh-useri.
many nurture.SP-seq.SR continue-dp.3p.ind
'(When) they were about to make a trading
partner feast, first they would raise many
pigs.'

Juxtaposition of final verbs may also encode a causal relationship, either of a necessary or sufficient nature. Example (51) encodes both equivalence and cause-effect.

- (51) A eva-da y-aresa, nu aminda
and ocean-to go.LP-f.2s.ind. he there
ghumb-udo irurari
fly.SP-seq.SR go.LP-seq.dur.ir.3s.DR
g-aresa.
see.SP-f.2s.ind.
'And (if/when) you go to the ocean, you will
see him flying along there.'

A special example of this juxtaposition is the sequence of two clause clusters, the first of which terminates with a final verb in the imperative mode, and the second with a

final verb in the hortative mode, often denotes a causal relationship. Although the relationship between the two conjuncts is semantically hypotactic, this relationship is viewed structurally as a paratactic one, because of the verbal juxtaposition.

- (52) Y-asi b-ase!
 go.LP-2s.imp. get.SP-h.2s.
 'Go, get (it).'

- (53) S-e ning-ore!
 say-2s.imp. hear.SP-h.3p.
 'Tell (them) so that they hear!'

- (54) Ne Bubu isambu, enda ghojaba edo
 you.2p. Bubu all land knife do.seq.SR
i-evu, fas-edo iji av-are!
 chop.SP-2p.imp. lie.down-seq.SR sun dry-h.3s.
 'All you Bubu clan members, chop down the
 bush on your land, so that the sun can dry it.'

- (55) D-e-g-e amb-are!
 hit.SP-IA-continue-2s.imp. die.SP-h.3s.
 'Kill him!' (Hit him, so he dies!)

2.6 Paratactic cause-effect in medial verb strings

The concatenation of any two medial verbs may embody a cause-effect relationship, but the juxtaposition of different referent medial verb forms more often signifies this relationship, which can be described as external, related to the nature of the interaction itself. Thus, the combinations 'hit-die', 'put-go down', 'say-come into being' are all very strong cause-effect relationships that need no demonstrative conjunctions to highlight the relationship. Syntactically, these occur as two consecutive clauses in a concatenation of clauses terminating in medial verbs (unless they occur in sentence final position), that are in a paratactic relationship to each other. Semantically, the second conjunct is caused by the first, and the relationship, which is usually one of sufficient cause, is hypotactic.

(56) Nu genembo d-etiri

he man hit.SP-seq.r.3s.DR

ambu-dudur-usira.

die.SP.IA-fall.down.LP-dp.3s.ind.

'He hit the man, (and) he died.' (He caused the man to die.)

The medial same referent verb form gido 'seeing' is often used in a non-contextual, internal way as a weak causal conjunction encoding the necessary causal relationship. When gido follows a different referent medial verb form and has no overt subject-topic role in its predication, it appears to be used in this conjunctive sense.

- (57) Soini jeka
 flies small.bits.of.rubbish
kisigh-eraira. Ari gido
 deposit-proc.3s.ind. do.seq.ir.3s.DR seeing
jingabu amo siror-eraira.
 snakes that.t. be.born-proc.3s.ind.
 'Flies deposit small bits of rubbish. They
 do (that) so those maggots come into being.'

Semantically, this is a hypotactic predication, but syntactically, the medial verbs are still arranged in a paratactic collection.

The negation of the juxtaposed medial verb causal relationships suggests an interesting difference between those concatenations which encode necessary cause and those which encode sufficient cause. Ordinarily, the

negation limiting adverb jo 'not' delimits the backward scope of the negation in the sentence, and the predicate negation marker ae 'not doing' attached to the verb delimits the forward scope of the negation. Normally, all the verbal actions within this delimitation are negated, as is the case in the following example, which illustrates necessary cause.

- (58) Na jo s-ari ning-ae-ri.
 I not say-seq.r.3s.DR hear.SP-not.do-e.
 'He didn't tell me, (so) I didn't hear.'

However, in some sequences which evidence sufficient cause, both verbs are not necessarily negated.

- (59) Na jo jigh-ono amb-ae-ri.
 I not hold.SP-seq.r.1s.DR die.SP-not.do-e.
 'I didn't poison him (so) he died.' (Korafe speakers understand from this sentence that someone is dead and that the speaker is denying a causal relationship, on his part, to that death.)

The negated antonym of the imperative-hortative cause-effect conjunction is a medial verb-final verb

concatenation in the negative hortative mode.

- (60) Erama noi numamo
 do.dur.ir.SR (don't) his.mother his.father
mandi amo doy-eovo,
 boy that.t. let.v.SP-seq.neg.h.2p.DR
town-da y-eure!
 town-to go.LP-neg.h.3s.
 'Don't you, the mother and father of that
 boy (who was expelled from school) let him
 go to town (to become a 'rascal').'

3.0 Hypotactic Rhetorical Predicates

Grimes (1975:212) sees the hypotactic relationship as having a central argument with other arguments subordinate to that central argument. "The hypotactic proposition is added as an extra argument to some other proposition so that the hypotactic proposition as a whole is subordinate to the rest of the dominating proposition."

Reesink (1981 ms.:1) states that "subordinating clauses share the pragmatic function of presupposition with each other and with topical NP constituents. A topic is what the speaker wants to talk about. Once the topic has been identified, it may be referred to as if it were within the speaker and hearer's perceptual field. Languages often choose a far deictic for such anaphoric reference. Whatever deictic is used to refer to a given nominal constituent, this deictic is then also used to mark relative clauses and other subordinate clauses: conditionals, temporals, reasons, and sometimes purposive clauses."

In Korafe (Farr, Lowe, and Whitehead), the medial (near the addressee) deictic a is used to mark topics, embed relative clauses, and also embed subordinate clause clusters. All of these structures may in themselves be assertions, but an assertion often becomes

a presupposition for a subsequent proposition in the text. In discussing the hypotactic relationship between embedded constructions and main constructions in a sentence, I am basically focussing on the presuppositional character of the embedded proposition with respect to the main one. Because they have a pragmatic function as presuppositions for the rest of the sentence, these embedded propositions are usually the first conjunct in the sentence, in accordance with the communicative dynamism principle, developed by the Prague school, which states that speakers move from the known to the unknown. In the Korafe causal conjunction expressions, these subordinate clause clusters may move into 'tail' position in the sentence; the 'tail' is characterized as following a final or existential verb form with sentence final intonation and being composed of either a phrase or a subordinate embedded clause. The speaker still regards the 'tail' information as a presupposition for his speech act (internal presupposition as discussed in section 0.), but the addressee receives this presupposition after the assertion, so that it loses some of its presuppositional force and may take on the force of an assertion.

Most hypotactic propositions in Korafe are expressed by a clause cluster that terminates in a final or semi-

final verb followed by an appropriate form of the medial deictic. However, the comitative relationship, which is usually a hypotactic coordination between noun phrases is marked by the usage of one of two relationals. The purpose relationship is also designated in its minimal form by a relational. Comparison and pretense are also conveyed by a relational.

The hypotactic relationships in Korafe which are presented in this paper include hypotactic coordination, condition and equivalence implications, adversative, cause and reason, purpose and prevention, pretense, and comparison.

3.1 Hypotactic Coordination

The comitative relationship between two noun phrases is a hypotactic relationship. In Korafe, it is expressed by a central noun phrase followed by a noun phrase subordinated to the central one by the dual comitative ghae or the plural comitative de. The normal usage is to indicate accompaniment; one central person or item is accompanied by one or more persons or items. In example (61), Goliath has a definite subordinate status, which is reflected in the fact that the person marking on the verb only co-references with first person singular Na 'I'.

(61) Na oroko Goliath ghae isoro arena.

I today Goliath with war do.f.1s.ind.

'Now, I will fight with Goliath.'

The above example is taken from a sermon about David and Goliath.

The comitatives also express an AND relationship, and even though the initial noun phrase receives the most prominence, all may be referenced in the personal deference on the verb.

(62) Afa Conrad noaro Eura Joyce ghae

father Conrad his.wife Eura Joyce with

amboda iseri.

afterwards go.LP.dp.3p.ind.

'Uncle Conrad and his wife Eura Joyce went afterwards.'

(63) Sasingu noi de aera.

children their.mother with go.SP.tp.3p.ind.

'The children and their mother went!'

The comitative relationship sometimes expresses the generic-specific equivalence. The Rhoda ghae in (64) exhibits obligatory pronominal deletion of na 'I', since it is strongly presupposed in namane 'we, exclusive'.

(64) Namane Rhoda ghae eveva ava erera.

we.exc. Rhoda with good that.ct. do.pr.3p.ind.

'We, (I mean) Rhoda and I, are doing fine.'

The dual comitative ghae has an extended usage as an encoder of internal attitude, condition, or manner; the plural comitative de additionally encodes external condition.

- (65) dumo ghae vos-edo...
 sulking with descend.SP-seq.SR
 'he went down sulking...'
- (66) Nu bibita ghae sumb-ira.
 he speed with run.SP-tp.3s.ind.
 'He ran quickly.'
- (67) Fegha nu mandi gugua de...
 Fegha spec. boy possessions with
 'Fegha (was) a wealthy young man...'

Finally, the ghae comitative is used with temporal expressions to designate any time within the day which the speaker is marking as his coding time.

- (68) oroko sifo ghae
 today day with
 'this morning'
- (69) sife ungobu ungobu ghae
 yesterday afternoon with
 'yesterday afternoon'

The plural comitative de exhibits a much more restricted temporal usage. It is used with two time expressions to reflect time adjacent to the speaker's coding time of 'today'. Thus, 'last night' is translated tumbade, and 'tomorrow' is sifode in Korafe.

3.2 Implication (IF, WHEN, SINCE, GIVEN THAT)

Longacre (1976:119) discusses implication as a logical relationship that subsumes pure conditions, conditions with a universal quantifier on term, contingency, and proportions.

In "Conditionals are Topics," Haiman (1978:564) claims, "Conditionals, like topics, are givens which constitute the frame of reference with respect to which the main clause is either true (if a proposition) or felicitous (if not)." In Korafe, topics (cf. Dik's (1978:19) theme) occur initially in the sentence or in the clause cluster for which they are presuppositions. They are often marked by the topicalizing clitic mo or the demonstrative topicalizing form amo⁹, a combination of the medial demonstrative root a and the topic marker mo.

- (70) ...rika kafu amo, nu vasa a
 bird owl that.t. he place †that
 d-odo...
 leave.SP-seq.SR
 'Regarding that bird, the owl, he leaves
 that place...'

Hypothetical conditionals, contrafactual conditionals, equivalence implications, and temporal contingencies also occur in sentence initial positions and are optionally¹⁰ marked by amo (occasionally by emo 'this').

- (71) Rika kafu s-eraera amo, nu
 bird owl say-proc.1p.ind. that.t. he
 taima-da ir-a-gh-eraira.
 bush-in remain-seq.dur.ir.SR-continue-proc.3s.ind.
 'When we're discussing the bird, the owl,
 (we can say) it lives in the bush.'
- (72) ...tamo kae semb-arira amo,
 body poison cross.SP-f.3s.ind. that.t.
 tumba urur-arira rika kafu nu
 night dur.sim-do.f.3s.ind. bird owl spec.
 taima-da-ghe f-ua...
 bush-from come.LP-seq.dur.ir.SR

'...when sickness spreads to (people's) bodies,
(then) during the night, the owl comes from
the bush...'

In his article, Haiman states that topics are givens, presuppositions, and left-dislocated constituents. Although conditions, like topics and left-dislocated constituents, are marked by the demonstrative topic marker amo, I feel uneasy about calling them givens or presuppositions in the same sense that topics are givens and presuppositions. Topics correspond to what I have termed the textual knowledge sense of presupposition, already defined and established by the context. Conditions are related to the speech situation, but they do not correspond directly to the real world knowledge sense of presupposition, because the speaker does not necessarily assume that the hearer contains this information in his real world knowledge. Rather, the speaker's stance is: "Let us assume for the sake of argument that 'x' is true. If 'x' is true, then 'y'." Conditions are presuppositions or topics, given for the sake of argument. Equivalences and temporal contingencies match topics more directly in being givens, presuppositions, left-dislocated constituents, and syntactically marked by the demonstrative topic marker amo in Korafe.

3.2.1 Conditional Implications (IF)

Haiman claims that relevance, not cause, is implied in conditionals. Lowe (1981 ms:35ff) claims that conditionals and causals can be very closely related. He lists seven categories of conditionals, some of which are related to causals: law-like conditionals, loose law-like conditionals, facilitative or enabling conditionals, conditional relevance, conditional promises and threats, conditional commands, and miscellaneous conditionals. Korafe conditionals manifest these relationships.

Conditional structures are more tightly knit than equivalence structures in Korafe. Hypothetical conditions must occur with future tense forms of the verb at the conclusion of the protasis. Contrafactual conditions specify subjunctive forms of the verb at the conclusion of the protasis. Both future and subjunctive forms are irrealis.

3.2.1.1 Hypothetical Conditions

The following are examples of hypothetical conditions. Example (72) illustrates a law-like conditional, encoding sufficient cause. Conditionals encoding cause manifest future verb forms at the conclusion of both the protasis and apodosis.

- (72) Nu fat-aresa amo,
 it press.SP-f.2s.ind. that.t.
gamb-arira.
 bite.SP-f.3s.ind.
 'If you step on it, it will bite (you).'

The following example illustrates a facilitative or enabling condition, that manifests necessary cause.

- (73) Na Tufi y-arena amo, rice bag
 I Tufi go.LP-f.1s.ind. that.t. rice bag
eni omb-arena.
 a buy.SP-f.1s.ind.
 'If I go to Tufi, I will buy a rice bag.'

Conditional relevance and conditional commands evidence final forms other than the future tense forms in the apodosis. Example (74) illustrates conditional relevance, and example (75) conditional command.

- (74) Ni usu uju aresa amo,
 you coconut want do.f.2s.ind. that.t.
maketa-da ir-ira-re.
 market-at remain-pr.3s.ind.-im.
 'If you want coconuts, they're right here at the market.'

- (75) Ni Tufi yari uju aresa amo,
 you Tufi to.go want do.f.2s.ind. that.t.
nanda ghaka b-udo y-asil
 my canoe get.SP-seq.SR go.LP-2s.imp.
 'If you want to go to Tufi, take my canoe.'

3.2.1.2 Contrafactual Conditions

Subjunctive verbs normally occur as the last verb at the end of both the protasis and apodosis propositions. These forms are composed of the verb stem, the irrealis marker a followed by the today's past/perfective aspect of the verb: y-a-eteni 'I should/would go'. The semi-final verb form distinction occurs with this set of conjugated verb forms. Our language teacher, Warrington Isari, allowed the final form of the verb to occur in the protasis without the demonstrative topicalizer amo, but he insisted that the use of the semi-final verbal form in the protasis required an obligatory amo.

- (76) Namonde fura eni dotut-usera ominda
 we.inc. week one leave.LP-dp.1p.SF there.distal
f-ur-a-etera amo, emboro
 come.LP-dur-subj.1p.SF that.t. path

seriri aetira.

slippery do.subj.3s.ind

'If we would have come last week, the path
would have been slippery.'

- (77) Y-aetera amo, nou
go.LP-subj.lp.SF that.t. whip.snake
f-ua gamb-aetira.
come.LP-seq.dur.ir.SR bite.SP-subj.3s.ind.
'If we should go, the whip snake would come
(and) bite (us).'

3.2.2 Equivalence Implications (WHEN)

Grimes uses the term equivalence, and Longacre the term paraphrase to discuss the implication relationships of identity-equivalence, negated antonym, summary, contraction, and amplification. Section 2.4 illustrates the juxtaposed sentences that designate this relationship. In this section, the juxtaposed sentences are conjoined by the demonstrative topic marker amo, but they are still encoding the same relationships.

- (78) Edo nunda munju fumb-uraira amo,
and its eggs lay.SP-proc.3s.ind. that.t.

babai ava fumb-uraira.

large that.ct. lay.SP-proc.3s.ind.

'And when it lays eggs, it lays large ones.'

(79) ...ava roera dabako jo ae-ri

that.ct. thing one not not.do-e.

amo okia jo uvu ghae bayau it-ae-ri.

that.t. pot not water with food cook-not.do-e.

'...but they thing' that they didn't do (was)

they didn't cook the food with any water in

the pot.'

(80) Nunda bayau mind-iraira amo,

its food eat.SP-proc.3s.ind. that.t.

jo g-ae eraera.

not see.SP-not.do do.proc.1p.ind.

'When it eats its food, we're not observing (it).'

Although evaluation is not exactly an equivalence relationship, it takes the same format as the equivalence constructions.

(81) Ne y-a jung-edo ne-suka

they go.LP-seq,ir.SR hide.SP-seq.SR they-alone

fet-edo nemonde beka s-edo
 stand.SP-seq.SR they.inc. mouth say-seq.SR
gh-useri. Amo ari eveva beká
 continue-dp.3p.ind that.t. deed good true
ava edo gh-useri.
 that.ct. do.seq.SR continue-dp.3p.ind
 'They would go off and privately and carry
 on their courtship. That was a very good thing
 they did.'

3.2.3 Temporal Contingency

Temporal contingency is usually encoded in the medial verb chaining system. However, more marked examples of temporal contingency include the conjunction amo between two clause cluster conjuncts.

- (82) ...mandi fumb-uraera amo,
 boy bear.SP-proc.3p.ind. that.t.
 fat-i git-ioro
 press.SP-seq.IA crush.by.hugging-seq.proc.3p.DR
 amb-uraira.
 die.SP-proc.3s.ind.
 '...when they produce a baby boy, they crush
 him to death.'

The following example encodes evidence as well as temporal contingency. Evidence does not seem to have the strong connotations in Korafe that it does in English; it seems to be more tied in with necessary than sufficient cause.

- (83) Namane nu sife gos-umutari,
we.exc. him yesterday see.LP-yp.1p.ind.
amo, nu jo amb-ae-ri.
that.t. he not die.SP-not.do-e.
'Given that we saw him yesterday, he has
not died.'

3.3 Adversative (BUT)

Longacre sees contrast as the basic component of the adversative relationship. Halliday and Hasan (1976:250) state that "the basic meaning of the ADVERSATIVE relation is 'contrary to expectation'." Lowe (1981 ms:17) includes both contraexpectation and contrast as basic manifestations of this relationship, and he adds a third category, limitation, which the others also mention. Lowe states, "The adversative relation in English expresses change of direction in argument, sometimes unexpected."

The terms, change of direction and contrast, seem to characterize the Korafe conjunctions ava and avata which are equivalent to 'but', 'on the other hand', 'nevertheless', 'though', 'however', 'yet', and 'only'. For Korafe, contraexpectation seems to be a subset of contrast. Haiman (1978:584) mentions two types of topics: resumptive themes (which are marked in Korafe by amo) and contrastive themes (which are marked in Korafe by ava). (See Farr, Lowe, and Whitehead manuscript) Reesink describes the BUT relationship as paratactic, and it is true that semantically many of the adversative conjuncts tend to be of equal status. However for Korafe, the syntactic use of ava embeds the

the first proposition in the BUT predication. An embedded proposition is involved in a hypotactic relationship.

Limitation in Korafe is often handled in a phrase. Whatever item is being described as the 'only one, the exception' will be modified by ava nembo 'only that contrastive one' or vanembo 'in contrast only'.

- (84) ...reighi aminda evevetu ava nembo
 place there women that.ct. only
 ir-era.
 remain-pr.3p.ind.
 '...only women live in that place.'

- (85) ...oka jo mind-ae, nu bayau
 fish not eat.SP-not.do she food
 vanembo mind-ido gh-usira.
 only eat.SP-seq.SR continue-dp.3s.ind.
 '...she didn't eat fish; she ate only
 vegetables.'

Lowe (1981 ms:29) indicates that the English conjunction BUT has among its semantic components the ideas of contrast and contraexpectation. He differentiates between the two usages in English in the following way:

"if the second clause is new information to the addressee, it's contraexpectation. If the second clause is old information to the addressee, it's contrast." The Korafe conjunction ava 'but' manifests the contrastive morpheme va 'change of direction' in its composition. It indicates contrast, and in some instances contraexpectation, between the two conjuncts on an external plane. In addition to having the contrastive component va, the conjunction avata 'but' occurs with another morpheme ta, which functions basically on an internal plane. The ta indicates that the speaker feels frustration about the situation. The usage of ta is often broadened to include the semantic component of contraexpectation as well. Thus, the conjunction avata signifies frustrative contrast in some contexts and contraexpectation in others, along the lines that Lowe has established. In the following examples, contrast is the basic semantic relationship involved. Example (86) manifests the semantic component of exception as well.

- (86) ...io nanda totofo eni nanda letter
 not my folks any my letter
 gemb-udo dengoro ind-ae
 write.SP-seq.SR ears instruct.SP-seq.SR
 eraera, ava nine usesi...
 do.proc.3p.ind. but you.con. do.dp.2s.ind.

'...not any of my folks have written a letter giving me advice, but you did...'

- (87) ...na bako bunari-ri. Avata afa
 I hole not.know-e. but father
 ijuga-etiri ghaf-useni.
 teach.do.seq.r.3s.DR dig.LP-dp.1s.ind.
 'I didn't know how to make a pit (for
 snaring pigs). But dad showed me, and I
 dug it.'

The following examples encode contraexpectation.

- (88) Nangae fugut-usera, ava oka ttamo
 we.two throw.LP-dp.3p.SF but fish body
 jo der-ae-ri.
 not touch.SP-not.do-e.
 'In spite of the fact that we threw out (our
 lines), the fish didn't bite.'

- (89) Boke da gari kau mo, nu
 cassowary pos to.see kind t. spec.
 rika da kaugo-ri. Avata boke mo
 bird pos kind-e. but cassowary t.

io ghumb-ae eraera.

not fly.SP-not.do do.proc.3p.ind.

'The cassowary looks like a bird. However,
cassowaries do not fly.'

The Korafe avata occasionally manifests the AND BUT relationship, discussed by Halliday and Hasan (1976:250).

(90) Virutu mo ika ghousa-ri, avata fakara
stave t. stick long-e. but hard
ambari-ri.

dying-e.

'The fighting stave is a long piece of wood,
but (and) as a matter of fact, it is extremely
hard.'

Although ava is used as the conjunction BUT, its primary function is as contrastive topic marker (See Farr, Lowe, and Whitehead manuscript.) The avata occurs primarily as the conjunction BUT.

3.4 A note on speech events and sedo/sise in particular

Speech events are encoded in a mental process construction that has a mental process proposition before and/or after a quotation proposition. When the initial mental process verb precedes an amo or when the concluding mental process verb follows an ava, the relationship is definitely hypotactic. There is also some grounds for calling the relationship between a quotation proposition followed by a mental process proposition a hypotactic one.

- (91) Jingabu g-ido "Aji!" s-edo
 snake see.SP-seq.SR Yikes! say-seq.SR
 '(He) saw the snake (and) said, "Yikes!"

In example (91), the quotation is definitely the object of sedo 'saying'. And when the mental process verb follows the quotation, one can say that the quotation is the object of the mental process verb. However, there are problems with viewing all mental process constructions as hypotactic ones. I will deal more fully with these problems in sections 4.0, 4.1, and 4.2.

The sequential medial same referent form of 'to say' sedo is used quite frequently with demonstrative forms (ava sedo and aindae sedo) to express internal causation relationships. Occasionally if simultaneity or

overlap temporal relationships exist between the cause-effect conjuncts, the simultaneous medial same referent form of 'to say' sise replaces sedo in the causal conjunctions.

- (92) s-aoro nune s-ari
say-seq.ir.1p.DR he.con. say-seq.ir.3s.DR
ning-arera, aindae.sise
hear.SP-f.1p.ind. therefore(on.account.of.that.
 speaking.sim.SR)
nu oj-igh-ira.
he come.SP-completive-tp.3s.ind.
'in order that we might tell him to speak to
us that we might hear (his message), he came.'

I will not refer to sise again in the subsequent discussion of cause, reason, and purpose, but there is the viable option that sise can substitute for sedo wherever it is used in conjunction formation.

A word of explanation about necessary or enabling cause and sufficient or strongly motivating cause (To be read in relationship to section 3.5 and in particular sections 3.5.2.1 and 3.5.2.3.)

Necessary or enabling cause is a term for a cause-effect relationship where the cause given in the causal conjunct is one of many events which is a possible or enabling motivator for the resultant action or effect. The causal conjunct says, "Since this has happened, this effect may occur."

Sufficient or strongly motivating cause is a term for a cause-effect relationship where the event presented in the causal conjunct is the single event, which, by itself, must and does precipitate the resultant action or effect in the subsequent effect conjunct. The sufficient cause conjunct says, "This has happened, so now this must happen (or has happened) as a direct and automatic result or effect of the cause given."

The conjunctions on the left side of Table 2 (a gido, avo gido, ava sedo, aindae sedo, and aindae) conjoin cause-effect relationships described by Lowe (1981 ms.:31-2,34ff). The conjunctions on the right side of Table 2 (ai resira amo, ainda tuka mo, ainda susu mo, and ainda beka mo) conjoin grounds and evidence relationships which Lowe (1981 ms.:33) also discusses.

3.5 Cause, Reason, Purpose

It is very difficult to separate the concepts of purpose, cause, and reason. Webster's dictionary defines purpose as "intention, resolution, and determination." Donald Davidson (1968:79ff) lists two components involved in reason: "(a) having some sort of pro attitude toward actions of a certain kind, and (b) believing (or knowing, perceiving, noticing, remembering) that his action is of that kind." He proceeds to specify (a) as including such items as wantings, desires, urges, etc. One half of his definition of reason, namely (a) includes the element of purpose. He further states that "the primary reason for an action is its cause." "Causal statements entail laws, and causal explanations involve laws," he claims. The dictionary definitions for reason indicate that reason is: "1. a statement ordered in explanation or justification, 2. a rational ground or motive, 3. a sufficient ground of explanation or logical defence, and 4. a thing that makes some fact intelligible." The dictionary equates reason and cause in its definition of cause as: "1. something that brings about an effect or result, and 2. a reason for an action or condition." These definitions blend the three concepts together.

Lowe (1981 ms:31ff) discusses several types of causal relationships. He (personal communication) defines strong cause as a "law-like effect that one set of affairs compels another or makes it likely." Strong cause, or sufficient cause, is that cause which is strong enough to motivate by itself the resultant action. (S0) causals encode necessary cause, a cause which enables a resultant action to occur. Another causal relationship which he mentions is evidence-grounds. The dictionary defines evidence as "outward signs, indications." I have found the dictionary definition of reason as an explanation or justification helpful in my analysis of Korafe reasons, explanation being defined as "something that gives the reason for or the cause of something that shows the logical development of."

Whitehead (personal communication) suggests: "cause, being law-like, does not involve a decision on the part of the actor. Reason, on the other hand, begins with the agent's thought process (reasoning ability), but the decision reached can become so binding as to be law-like, therefore, a reason can become a cause. Purpose is then, the result of the reasoning thought process without the move to cause."

Whitehead's suggestion arises out of his study of the literature and the Korafe causal system with me and appears to be approaching an approximate definition of the Korafe causal framework. That this area is important to Korafe speakers is signalled by the fact that there are five conjunctions expressing the cause-effect relationship, four conjunctions expressing the concept of reason, and four conjunctions expressing the purpose relationship. However, there is significant overlap between the usages of the various conjunctions in their respective categories. The following discussion breaks the presentation of these concepts into three areas: 1. a presentation of purpose, cause, and reason at phrase level, 2. the encoding of cause and reason at clause level and higher levels, and 3. the encoding of purposes and prevention at clause and higher levels.

3.5.1 Purpose, cause, and reason in Korafe phrases

The morpheme dae, used usually to indicate purpose, can be broken down into the components da 'locative, goal' and e 'this', or compositely 'this goal'. The morpheme dae is used to signify the syntactic indirect object, manifesting recipient or benefactive role. When both the recipient and benefactive roles occur together, there are some very important

restraints on the relational usages. 'He gave the axe to Michael for me' can be expressed in several ways.

(93) a. Karivako nandae sedo Michael dae mutira.
axe me.for saying Michael to he.gave

b. Karivako nandae sedo mutira, Michael
axe me.for saying he.gave Michael
kena.

to/toward

*c. Karivako nandae sedo mutira, Michael
axe me.for saying he.gave Michael
dae.

to

d. Karivako Michael dae mutira, nandae
axe Michael to he.gave me.for
sedo mutira.

saying he.gave

e. Karivako nandae sedo Michael dae
axe me.for saying Michael to
mutiri bira.

he.gave.DR he.received

f. Karivako nandae sedo Michael kena
axe me.for saying Michael to/toward
mutiri aira.

he.gave.DR it.went

*g. Karivako nandae sedo Michael kena
 axe me.for saying Michael to/toward
mutiri bira.
 he.gave.DR he.received

The benefactive (or ultimate goal) has the mental process sedo occurring with it ('with me in mind') whenever an intermediary goal is present. The dae relationship must always be nuclear to the clause, hence the ungrammaticality of sentence c. The dae relationship evidences a stronger reciprocity relationship than kena, therefore sentence e. manifests 'Michael' with a dae marking the recipient relationship, which is co-referential with the verb bira 'he received (it)'. This also explains why sentence g. is not allowed. The kena marking on 'Michael' does not strongly indicate a recipient relationship, so it may not be co-referential with bira. These dae relationships are all goal-oriented, relating to the semantic notion of purposes. There are, however, clearer examples of phrase level purpose.

(94) ...nunda reima mo daka dae rur-useri.
 its ribs t. limestick for take-dp.1p.ind.
 'We took his ribs for (to make) limesticks.'

Besides encoding purpose, dae may also function at the phrase level in the semantic domain of cause-reason.

- (95) ...nu-mo uvi dae oju
 he-t. fireflies on.account.of fear
 eraira.
 do.proc.3s.ind.

'He is afraid of fireflies.' (The cause or grounds for the fear expressed is the fireflies.)

3.5.2 Cause and reason at levels above the phrase

The following table summarizes the conjunctions used to express cause and reason in Korafe and their specific domains. The right group appears to be the reverse of the left group, hence the use of B and C to indicate the two conjuncts. The basic thought underlying the concepts expressed in this table is that a reason(A) is the mental motivation behind a law-like cause (B), which then produces an effect (C).

Table 2: Korafe Cause and Reason Conjunctions

	CAUSE-EFFECT	EFFECT-REASON	
B specifically encodes:	$B \rightarrow C$ B causes C.	$C \leftarrow A_B$ The reason A for the effect C is cause B.	A_B encodes:
necessary cause	<u>a gido</u> 'seeing that' <small>avo gido 'seeing that contrastive pattern'</small>	<u>ai resira (amo)</u> 'that says that'	internal reason
explanatory cause - explanation, justification for action	<u>ava sedo</u> 'saying that'		
C - speaker or internally oriented		<u>ainda tuka (mo)</u> 'the point of that' Specific-generic	external reason
internal sufficient cause	<u>aindae sedo</u> 'speaking on account of that'	<u>ainda susu (mo)</u> 'the source of that' generic-specific	
external sufficient cause	<u>aindae</u> 'on account of that'	<u>ainda beka (mo)</u> 'the reality of that' generic-specific	

In Table 2, B and C represent propositional conjuncts that the listed conjunctions connect. A, however, represents the reason conjunctions: ai resira amo, ainda tuka mo, ainda susu mo, and ainda beká mo. All these reason conjunctions manifest in their surface structure the element of volitional control (the morpheme i), an element also present in Donaldson's definition of primary reason. The content of the reason-cause proposition (^AB) of ai resira amo is co-referential with that of the cause conjunct (B) of a gido and ava sedo. In similar fashion, the content of the reason-cause conjuncts (^AB) of ainda tuka mo, ainda susu mo, and ainda beká mo is co-referential in different contexts with that of the causal conjuncts (B) of ava sedo, aindae sedo, and aindae. The conjunctions ainda tuka mo, ainda susu mo, and ainda beká mo appear to be used almost interchangeably. Moreover, the borderlines between a gido, ava sedo, aindae sedo, and aindae in that order are not clearly defined. Rather, the conjunctions appear to be on a continuum, so in some contexts, Korafe speakers may use a gido and ava sedo, ava sedo and aindae sedo, or aindae sedo and aindae interchangeably.

The conjunctions at the top of Table Two on the left side seem to indicate a much weaker causal relationship, at least in the mind of the speaker, than the ones

further down the table. Hence, a gido, a combination of a less emphatic demonstrative form with a perception verb, is weaker than ava sedo, which is a combination of a contrastive demonstrative form with a performative verb. All the other conjunctions in the table share a component (ai). The reality of the Korafe term (ai) is somewhat broader (than its initial definition as the semantic actor-instrument), having the semantics of control behind it. And in these causals and reasons, one definitely sees an element of control operating between the events described in the two conjuncts.

3.5.2.1 Necessary or Enabling Cause (S0)

The Korafe phrase a gido 'seeing that', spoken as one phonological word and written by some Korafes as agido, denotes necessary cause as the relationship the B conjunct has to the C conjunct (the effect). There are some rules which govern the use of a gido. The verb forms in conjunct B may be asymmetrical with those found in conjunct C; that is: conjunct B may exhibit verbs in the negative mode and conjunct C verbs in the imperative mode. Both conjuncts terminate with a final, semi-final, or existential verb form. The presupposition that a gido embeds may not be moved to the tail position in the sentence.

The connection is an external one, verifiable by the addressee. The conjunction a gido encodes expectancy and keeps the thought flow established in propositionBB moving in the same direction. Either or both of the conjuncts may be off the main event-line of the discourse. When that happens, they are introducing a hypothetical situation.

- (96) Jo redae s-ae-ri. Damana
 not what.for say-not.do-e. stars
vit-ira, agido ava
 ascend.SP-tp.3s.ind. so that.ct.
s-aovo ningari s-eteno
 say-seq.ir.2p.DR to.hear say-seq.r.1s.DR
buv-eyu!
 arrive.SP-tp.2p.ind.
 'I haven't spoken about anything in
 particular. The stars have gone up (the
 season has come for holding feasts), so
 I've called you together to discuss (holding
 a feast).'

- (97) ...na-mo doriri kena siror-useni.
 I-t. mountain towards be.born-dp.1s.ind.

A.gido na kau nanangedo oka mokogo
 so I kind how fish for.the.most.part
bambari amo na bunari-ri.
 to.catch that.t. I not.to.know-e.
 'I was born uphill (away from the ocean).
 Therefore, I don't know all the ins and outs
 of catching fish.'

In English, excuses usually involve strong or sufficient causes. However, in Korafe as seen in example (97), excuses are viewed as enabling.

There is another necessary causal phrase that is stronger than a gido and used in marked situations: avo gido 'seeing that significantly contrastive (event)!'. It is used two ways in one explanatory discourse (with some hortatory elements): as a pivotal point to introduce the main topics of the discourse and at the end of the discourse to mention the last things the audience should keep in mind. Below are the translations of these sentence, rather than the interlinears, as these sentences are quite lengthy.

Pivotal point marking topic switch in two succeeding sentences:

(98) Our whole life style has changed. Consequently

(avo gido), moreover, we must use all our wits to help each other.

- (99) But without money, this area won't stand (on its feet economically). Therefore (avo gido), we who have gathered together here are speaking about new things.

Ultimate points in the discourse:

- (100) I have spoken in order that Korafes should hear about how Popondetta is beginning (economic development). So (avo gido), (now) we will all speak our piece, not just one of us.

- (101) With this discussion, I've done the spadework. So (avo gido) (now) we will all speak about what we will do to acquire money.

3.5.2.2 Explanatory Cause

Just as there was an element of contrast in the pivotal avo gido, so the Korafe expression that encodes explanatory cause manifests as its conjunction the phrase ava sedo, composed of the contrastive topic marker ava and the speech performative verb sedo 'saying'. This is the most heavily used cause conjunction in Korafe. Conjunct B

encodes the explanation or justification, which the speaker deems an appropriate cause for the event in conjunct C. Although at this point, I'm viewing conjunct B as operating in the realm of cause, it is the causal conjunct in the set of four that moves the closest to coalescing with reason. The combination of conjunct B with the conjunction ava sedo has the same structure as the mental process constructions, discussed in section 4.1. It definitely is operating in the internal plane, indicating that the speaker has some sort of belief, which he expresses in conjunct B; he also has a pro-attitude toward that concept. These are the two conceptual pre-requisites that Davidson claims a primary reason has, and certainly ava sedo is operating in the area of mental motivation. However, ava sedo seems to be functioning as the conjunction linking a causal explanation, "one that involves laws," to its effect. It functions differently from the reason conjunctions (on the right side of Table 2) in that they actually encode the reason in themselves, not in the conjunct that precedes them, and the ava sedo makes conjunct B into an explanation or justification.

There are several rules which apply to the use of ava sedo. Both conjuncts must terminate with a final, semi-final, or existential verb form, but these verbs do not need to correspond to each other in tense or mode.

The conjunct dominated by ava sedo often occurs in the tail position in a sentence; i.e. the explanation for an event is often an afterthought.

- (102) ...nangae saramana tuturo edo
 we.two work begin do.seq.SR
arera, nangae da irari,
 do.f.1p.ind. we.two pos. to.remain
ava.sedo.
 because.of.that
 '...we two will begin to work, because of
 our (desire to have a good) lifestyle.'

In example (103), the entire explanation conjunct is hypothetical and off the main line of the discourse.

- (103) ...oka-i omb-udo irari
 fish-con. catch.SP-seq.SR to.remain
ava kot-isira. Ainda beka'
 that.ct. think-dp.3s.ind. of that reality
mo: sifo jo at-e simbug-ae,
 t. day not dawn.SP-seq.IA prepare-not.do
ava.sedo.
 because.of.that
 'He thought that a fish had gotten hung up

(in the net). The reason he thought that was because the day hadn't dawned yet (and he couldn't see well).'

As mentioned before, there must be some element of contrast in the ava sedo conjunction relationship, because ava is a contrastive marker. It can be a syntactical contrast: positive versus negated verb forms as example (103) evidences. It may be a logical contrast as in the story where 'the girl thought the spirit girl was a real person, therefore (ava sedo) she took off and went fishing with her as she would with a real person'. Conjunct C often encodes persuasion, directed toward the textual addressee or the speech event addressee.

Persuasion directed to the textual addressee:

(104) nanda vasa uju eraena, aminda
 my place want do.proc.3p.ind. there
buv-eri, ava.sedo nangae
 arrive.SP-tp.1p.ind. therefore we.two
anga oroko.ava fug-arera.
 anchor right.now throw.SP-f.1p.ind.
 'we have arrived at my favorite spot,
 therefore, we will heave the anchors
 right now (anchors aweigh!).'

Persuasion directed to the speech event addressee:

- (105) ...isambu mendeni jo ae eraera.
 all some not not.do do.proc.3p.ind.
Ava.sedo, namonde isambu God da Bible
 therefore, we.inc. all God pos. Bible
teg-aeteri.
 read.SP-subj.1p.ind.
 '...everybody is not doing (showing love).
 Therefore, we should all read God's Bible.'

3.5.2.3 Sufficient or Strongly Motivating Cause

Sufficient cause in Korafe operates on both an external (contextual) and internal (speech event) plane. The external conjunction is made up of the controlling (agent-instrument) demonstrative ai plus the purpose marker dae, discussed in section 3.1: aindae. Here, intention is overtly marked as part of the cause, as well as control. The internal conjunction is a combination of aindae and the speech performative verb sedo 'saying'.

Some of the governing rules apply to the usage of both of these conjunctions; others only apply to one of them. Conjunct C must follow conjunct B in temporal or logical succession, even if conjunct B

occurs as the sentence tail. In contrast to all the other causal conjunctive constructions, conjunct B may terminate with a medial verb form as well as a semi-final or final one. This supports the idea that aindae and aindae sedo are marking strong causal conjuncts. The stronger the causal relationship is viewed to be in the Korafe world understanding, the more likely it is to be expressed by a concatenation of medial verbs. Thus, the Korafe expression for 'murder' is composed of 'hit. different referent medial verb-die.final verb form' or 'perform sorcery.different referent medial verb-die.final verb form'. In example (108), the passage of body waste is seen as an unquestionable outcome of the process of eating, therefore, a medial verb form was used before aindae.

- (108) ...na reju ava b-u
 I what that.ct. get.SP-seq.IA
r-ise aindae foka
 eat.LP-sim.SR on.account.of.that excrement
uju ari s-aono...
 want to.do say-seq.ir.1s.DR
 '...whatever have I eaten that I should
 say that I want to defecate?'

In sentence initial position, conjunct B encodes sufficient cause; in tail positions, it also encodes the semantic component of explanation that is of sufficient proportion to motivate the act. Example (109), which is a translation of a Korafe sufficient cause construction illustrates that.

- (109) 'If you go and see him (the New Ireland Fruit Pigeon), you will be startled and you will quiver all over. The reason for that: (you will be thinking) how you should kill and eat this bird, on account of this reason (aindae) (you will quiver all over).'

The main difference between aindae and aindae sedo is the external-internal distinction. Both conjuncts in the aindae predication are easily assumed to be related by sufficient cause in the real world context of the speaker and addressee, so that the addressee can predict the content of conjunct C.

- (110) Nano.namendi amb-earo
 brothers die.SP-seq.proc.3p.DR

aindae dubo vevera ari
on.account.of.that neck hot do.seq.ir.3s.DR
aindae kae bor-earo
on.account.of.that poison roast-seq.proc.3p.DR
siror-eraira.
be.born-proc.3s.ind.
'Brothers die, therefore, they (kinsfolk)
become upset, therefore they prepare sorcery
potions.'

In example (110), I have no trouble perceiving the causal connection between the first two conjuncts: it is natural for one to be upset and grieving at the death of his brother. However, one must appreciate the Korafe real world view to understand the sufficient causal connection that the second aindae is conjoining. Korafes believe that a brother has a moral obligation to pay back his brother's death by performing retributory sorcery on a member of the clan that caused the brother's death.

The sufficient cause manifested by aindae sedo may not be perceived as strongly and clearly by the addressee as sufficient cause, therefore, the speaker indicates his causal view of the relationship between the two conjuncts by using the speech performative verb form sedo. There tends to be considerable overlap in usage between the two

conjunctions involving the speech performative sedo:
aindae sedo and ava sedo. Aindae sedo links a sufficient
 cause to its effective or resultant action. Ava sedo
 links an explanation or justification to the effective
 or resultant action.

- (111) Na tamo mino rur-use aindae.sedo
 I body response get-sim.SR on.account.of.that
ghaito a tatau
 mat and string.bag.for.a.baby
b-u esimbug-erena.
 get.SP-seq.IA prepare-pr.1s.ind.
 'I am feeling something happening in my
 body, therefore, I'm preparing a sleeping
 mat and a string bag for the baby.'

- (112) Saki nunda mandi siror-etira,
 Saki his boy be.born-tp.3s.ind.
aindae.sedo oka bayau b-u
 therefore fish food get.SP-seq.IA
simbug-edo kirumu edo...
 prepare-seq.SR feast do.seq.SR
 'Saki's son was born, therefore, he prepared
 food and made a feast (for his wife's male
 relatives)...'

3.5.2.4 Internal Reason

The felicitous or supporting reason motivating a necessary or explanatory cause is expressed in Korafe by the conjunction ai resira (amo or mo) 'that says that'. The internal reason construction is composed of three parts: the first conjunct being an effect (C), the conjunction which encodes the reason (A) for that effect (C): ai resira amo, and the conjunct (B) which arises from that reason and is the cause for the action in the first conjunct. In example (113), the second conjunct (conjunct ^A_B) encodes the semantic component of evidence as well as that of an enabling reason.

- (113) Nu-mo ungobu ghae fas-e
 he-t. afternoon with lie.down-seq.IA
av-iraira. Ai re-s-ira
 sleep-proc.3s.ind. that.con. dur.-say-pr.3s.ind.
amo: nu-mo uvi dae
 that.t. he-t. fireflies on.account.of
oju eraira.
 fear do.proc.3s.ind.
 'He lies down and sleeps in the late afternoon.
 That implies that he fears fireflies (that
 come out at night).

Because of its length, I will just give the translation of example (114).

- (114) 'I have closed down boat and air traffic.
The reason for that is (ai resira amo) that
 people are going to Tufi and mocking the
 Korafe people in the suffering that they're
 experiencing. Therefore (ava sedo), I
 have closed down all boat and air traffic.'

The internal aspect of this reason conjunction is manifested morphologically by the speech performative verb form resira 'it says', used as the central component in this reason conjunction. It is obvious from these examples that the reason for the effects of 'the cassowary bird sleeping in the late afternoon and at night' and 'the district commissioner's closing down boat and air traffic' is totally in the mind of the speaker, and the hearer cannot possibly deduce it from this information given in conjunct C in sentence initial position.

3.5.2.5 External Reason

There are three conjunctions which are used to motivate the causes that ava sedo, aindae sedo, and aindae presuppose in different contexts. They are

ainda tuka (mo) 'the point of that', ainda susu (mo) 'the source of that', and ainda beka' (mo) 'the reality (truth) of that'. That these conjunctions are external (joining propositions which the addressee can logically connect without reference to the speaker's internal point of view) is evident in their morphology; they occur without any form of the speech performative verb 'saying'. They set up reasons, which motivate causes which lead to effects, which are predictable in and consistent with the Korafe view of the real world. These three conjunctions are used seemingly interchangeably to signify the third and fourth dictionary definitions of reason: "3. a sufficient ground of explanation or logical defence, and 4. a thing that makes some fact intelligible." Like the internal reason construction, they are tri-partite: the first conjunct (C) encodes an effect, the conjunction encodes the reason (A) for that effect (C) and motivates the cause in the second conjunct which is so strongly tied to the reason that I have labelled it conjunct (^AB), as per Lowe's suggestion. The following examples illustrate how the reason conjunctions are used in combination with the causal conjunctions in sentences.

- (115) Jingabu da javo s-arera, na
 snake pos. name say-f.3p.ind. I
sorara arena, ainda . tuka.mo:
 cry do.f.1s.ind. the.point.of.that
afa jingabu nunda kae usira,
 father snake his poison do.dp.3s.ind.
ava.sedo na barago ava erira.
therefore I also that.ct. do.pr.3s.ind.
 'If they will mention the word, snake, I
 will cry; the reason for that is that snakes
 were my father's poison, therefore I do the
 same thing.'

- (116) Nunda ata g-aresa amo, gegha
 its legs see.SP-f.2s.ind. that.t. laugh
g-aresa. Ainda . beka.mo: nu
 say-f.2s.ind. the.reality.of.that spec.
ata memeyako g-aresa, aindae.sedo
 legs short see.SP-f.2s.ind. because.of.that
 'If you see its legs, you will laugh. The
reason for that: you will see it (has)
 short legs, because of that (you will laugh).'

- (117) Amo gegenembo uju beka eraera.
 that.t. men want truly do.proc.3p.ind.
Ainda.susu: gegenembo isambu rika
 the.source.of.that men all bird
emo ne b-udo digh-ido
 this they get.SP-seq.SR tie.SP-seq.SR
varu divari dae sedo
 song to.dance.and.sing pur. saying
aindae uju eraera.
therefore want do.proc.3p.ind.
 'Men desire that (bird) very much. The
explanation for that: all men take this
 bird, tie together (its feathers) in order
 to dance, therefore, they want it.'

As a statistical note, ava sedo is the only causal conjunction that occurs overtly in constructions with the reason conjunction ainda tuka mo. Although ava sedo does occur with ainda beka mo, aindae and aindae sedo are used more frequently with this reason conjunction.

3.6 Purpose and Prevention

The simplest expression of purpose or intention in Korafe is found in the purpose phrase, composed of an infinitive verbal form and the purpose clitic dae discussed in section 3.1.

- (118) uvu gut-ari dae
 water bathe-to.do pur.
 'in order to bathe, with the intention of
 bathing'

Anticipation is designated by the purpose phrase plus some form of the verb 'do'.

- (119) Na yari-dae erena.
 I to.go-pur. do.pr.1s.ind.
 'I'm about to go. (I'm getting ready to go.)'

Desire is also expressed in the same construction.

- (120) Ghato, na uvu mindari dae erena.
 cousin I water to.eat pur. do.pr.1s.ind.
 'Cousin, I want a drink of water.'

There are two parameters that occur in connection with purpose, the parameter of the presuppositional status of the purpose and that of focus on the mental intention of the speaker. When the speaker is emphasizing the presuppositional nature of his purpose, thus giving more force to it, he adds aindae 'for that reason, purpose' to the purpose phrase. If he is focussing on his intention, he adds the performative verb sedo 'saying' to the purpose phrase. Table 3 illustrates these parameters.

Table 3: Parameters of Purpose

	simple purpose	mental intention of speaker in focus
no marked presup- positional status	<u>dae</u>	<u>dae sedo</u>
marked presup- positional status	<u>dae aindae</u>	<u>dae sedo aindae</u>

The presuppositional forces is probably introduced in example (121), because this sentence is discourse initial.

- (121) Na boare dari dae aindae
 I tattoo to.hit pur. on.account.of.that

usena...

do.dp.1s.SF

'When I was about to be tatooed...'

- (122) taima da ambe i-edo dari
 bush pos. sago chop.SP-seq.SR to.hit
dae sedo aera.
 pur. saying go.SPtp.1p.ind.

'We went, intending to chop down and beat
 sago in the bush.'

- (123) ...varu divari dae sedo
 song to.sing.and.dance pur. saying
aindae uju eraera.
 on.account.of.that want do.proc.3p.ind.
 '...they want (it) for the intended purpose
 of making a singsing!'

All of the above examples illustrate a purpose that the speaker himself intends to execute. When the speaker intends for someone else to perform the action (someone other than the referent manifested by the subject of the clause following the purpose expression), he substitutes a sequential irrealis (or future) different referent medial

form or a hortative form for the infinitive in the purpose expression, which then more closely resembles a purpose clause.

- (124) ...oka naufasa ava b-udo
 fish enormous that.ct. get.SP-seq.SR
 f-ur-ari gay-one
 come.LP-dur.-seq.ir.3s.DR spear.SP-h.1s
 dae erira.
 pur. do.pr.3s.ind.
 'It's doing (the wind's blowing) in order
 that it may bring me a large fish that I
 will spear.'

- (125) ...ava ning-aso dae
 that.ct. hear.SP-seq.ir.2s.DR pur.
 re-g-ena.
 dur.-say-pr.1s.ind.
 '...I am speaking in order that you might
 hear that.'

In Korafe, prevention constructions closely resemble purpose constructions. In fact, prevention could also be entitled negative purpose for Korafe data. The verb

(126)..ne jo uju ae-ri nenda enda
they not want not.do-e. their land
gitofu imi b-eoro dae
enemy con.t. get.SP-seq.neg.h.3p.DR pur.
sedo aindae fakina edo
saying on.account.of.that power do.seq.SR
gh-useri.
continue-dp.3p.ind.
'...they didn't want their enemies to take
their land, so they strengthened themselves.'

(127) Erama noi numamo
do.seq.dur.ir.SR his.mother his.father
mandi amo doy-eovo, nu
boy that.t. let.SP-seq.neg.h.2p.DR he
town da y-eure dae re-s-ena.
town to go.LP-neg.h.3s. pur. dur.-say.pr.1s.ind.
'I am telling you parents not to let that
(expelled) boy go to town.'

3.7 Comparison and Pretense

Halliday and Hasan (1976) discuss two different types of comparison: (a) comparative reference, which is subsumed as identity, similarity, and difference, and (b) nominal substitution, which evidences similarity. They (p. 95) indicate, "In reference there is a total referential identity between the reference item and that which it presupposes; nothing is to be added to the definition. In substitution there is always some re-definition. Substitution is used precisely where the reference is not identical, or there is at least some new specification to be added." They (p. 115) further specify that some area of contrast is implied in substitution: "Like the nominal substitute 'one', the verbal substitute 'do' is typically associated with contrast."

In Korafe, the distinction between referential and substitutional similarity is reflected in the two sets of comparative expressions that are used. One set evidences the normal topic amo, which keeps the flow of discourse moving in the same direction. The other set uses the contrastive topic marker ava. Both amo and ava are suffixed with the comparison relational go, used as a focus comparative marker, or the comparison relational ga, used with thematic

(128) Nunda kau mo soini amingo-ri.
its kind t. flies like.that-e.
'Its appearance is like that of the flies.'

(129) ...iji dabako o etoto aminga na n̄=etot i., t.
day one or two like.that
dadab-eari...
finish-seq.proc.3s.DR

(130) Osevi, nu gari da
Keeled.Anglehead.Lizard it to.see pos.
kau arada avago-ri,
kind Spotted.Monitor.Lizard like.that-e.
avata osevi nu kiki tefo-ri.
but spec. traditional.use nothing-e.
'The Keeled Anglehead Lizard looks about like
the Spotted Monitor Lizard, but it doesn't

have any traditional use.'

- (131) Aya afa datu.eraera
 mother father make.marriage.and.bride.price
 arrangements.proc.3p.ind.
avaga kotugo eminda
 like.that on.the.other.hand here
datu jo ae useri.
 not not.do do.dp.3s.ind.

'Mother and father normally make the marriage arrangements and fix the bride price, but we didn't make marriage and bride price arrangements like that here.'

As the above examples demonstrate, the noun kau 'kind, likeness' is often used in comparison conjunction. It combines with daba 'same one' and the contrastive topic marker ava, as well as the demonstrative comparative form aminga in some contexts. The resultant expressions are kau daba ava 'that same kind', kau daba avo 'that same kind (with focus or comment elements in sentence or clause)', and kau daba aminga ava 'like that very one'.

- (132) Abua.mane ne isoro kau nu David
ancestors spec. war kind spec. David
edo gh-usira, kau daba
do.seq.SR continue-dp.3s.ind. kind one
ava edo gh-useri.
that.ct. do.seq.SR continue-dp.3p.ind.
'(Our) ancestors conducted warfare just
like David did.'

- (133) Kefata nu kau daba
long.fighting.club spec. kind one
avo-ri.
that.contrastive.focus-e.
'The long fighting club is just like
that (very hard).'

- (134) Kau daba aminga ava Gas
kind one like.that that.ct. Gas
nengae Tevari ghae vasai
they.two Tevari with trading.partner
da kirumu eraera.
pos. feast do.proc.3p.ind.
(The preceding paragraph describes at great

length how the Bubu clan conducts its trading partner feast with the Bujeje clan.) 'In that very same way, the Gaso clan together with the Tevari clan conduct their trading partner feast.'

Clausal pretense is manifested in Korafe by a phrase, composed of an infinitive form of the verb, a possessive relator and the word kaugo 'like'.

- (135) Ni redae bunari da kaugo
 you why not.to.know pos. like
eresi?
 do.pr.2s.q.
 'Why are you acting like you don't know?'

- (136) John sasingu dari da kaugo
 John children to.hit pos. like
etira.
 do.tp.3s.ind.
 'John acted as if he were going to hit the children.'

When intention is involved in the pretense, the simultaneous irrealis (future) form of the medial verb is combined with the form arigo, which literally means 'like doing'.

- (137) Ni redae bun-ise ari-go
 you why not.know-sim.SR to.do-like
eresi?
 do.pr.2s.q.
 'Why are you pretending you don't know?'

- (138) ...afa Susugayari jimbi r-irurari
 father Susugayari tail eat.LP-sim.ir.3s.DR
aya Daisi Kotari gifua mindari dae
 mother Daisi Kotari head to.eat pur.
ururari ari-go ere-gar-ena.
 do.sim.ir.3s.DR to.do-like dar-spear.LP-pr.1s.ind.
 'I'm spearing (fish) daydreaming (to myself)
 (or pretending) that my dad, Susugayari,
 might eat the tail, and my mother, Daisi
 Kotari, will eat the head.'

When a speaker recounts an event in the past that at that event time he misperceived, he uses the infinitive

of a mental process verb like sari 'to say' or kotari 'to think' and the contrastive topic clitic va, which in this context indicates contraexpectation.

- (139) Nu fuka gayari va s-eteni.
 he pig to.spear ct. say-tp.1s.ind.
 'I said (thought) that he speared the pig,
 (but he didn't).'
- (140) Na nu avari va kot-iseni.
 I he to.sleep ct. think-dp.1s.ind.
 'I thought that he was sleeping, (but
 he wasn't).'
- (141) ...nunda kotari mo: nunda evetu va
 his to.think t. his woman ct.
s-etira.
 say-tp.3s.ind.
 '...his thinking was: he said that she was
 his wife, (but she wasn't).'

4.0 Quotations and Reported Speech

In Korafe, direct quotations, repartee, indirect quotations and reported speech are for the most part manifested by mental process constructions.

4.1 Mental Process Constructions

Lowe (1981 ms.:65) states, "Direct speech gives a verbatim (i.e. word for word) report of what a speaker actually said." The Korafe mental process sentence manifests the semantic concept of direct speech. It is described in "Korafe Grammar Essentials" (Farr and Farr 1974 ms.) as being a three-part structure: (a) a mental process proposition which concludes with some form of a cognitive verb, (b) a direct quotation that may encode an actual speech act or a thought which the speaker has, and (c) a second mental process proposition with a cognitive verb like 'say', 'question', 'report', 'think', 'teach', 'want', 'be unaware of', etc. Either the first or the second mental process proposition may be deleted. The following example illustrates two mental process sentences conjoined paratactically into one sentence that illustrates the repartee calculus (Longacre.1972:78-9), commonly termed dialogue.

- (142) S-etiri, 1.) na bun-edo
 say-seq.r.3s.DR I not.know-seq.SR
s-isena, "Afa, tuka redae
 say-dp.1s.SF father point why
aming-eresi?" s-isena,
 do.that-pr.2s.q. say-dp.1s.SF
 2.) afa s-isira, "Jingabu nanda
 father say-dp.3s.ind. snake my
kae-ri," s-isira.
 poison-e. say-dp.3s.ind.
 'After he spoke, 1.) I ignorantly said,
 "Father, why are you acting that way?" I
 said, and 2.) father said, "Snakes are my
 poison," he said.
- (143) "Nanda ata gafug-edo fug-evu!"
 my foot cut.off-seq.SR throw.SP-2p.imp.
s-iseni.
 say-dp.1s.ind.
 '"Cut off my foot and throw it away!" I said.'

These examples occur within a single sentence boundary, but the mental process construction also functions across sentences. Actually, the first clause in example (142) is a verbal copy of the final mental process proposition in a preceding quotation. Both of the above examples

occur without demonstrative embedding conjunctions and appear to be paratactic in accordance with the structural definition of parataxis for Korafe presented in section 1.3, as each proposition manifests either a final or semi-final verb and the three propositions are immediately juxtaposed.

However, the Korafe mental process sentence can be modified in one of two ways, either of which subordinates one section to the other. The initial mental process proposition can be followed by a normal topic marker amo in a structure that resembles equivalence (see section 3.2.2, example (81)). Grimes (1975:69-70) discusses quotations as a subset of collateral information, background information, or evaluations. When amo occurs with the initial mental process proposition, it is often encoding evaluation.

- (144) Na ere-kot-ena amo, saramana
 I re.-think-pr.1s.ind. that.t. work
arera, amo eveva-go-ri.
 do.f.1p.ind. that.t. good-like-e.
 'I think it's good to do work.'

- (145) ...na s-iseni amo, "Gego-a
 I say-dp.1s.ind that.t. nothing-that
erira; nange.ari na oka
 do.pr.3s.ind. what.do.seq.ir.3s.DR I fish

beka eni-ko gay-ae y-aone
true one-exc. spear.SP-not.do go.LP-h.1s
dae erira!" s-edo...
pur. do.pr.3s.ind. say-seq.SR
'I said, "That (sleepiness I'm feeling) is
really nothing; what must I do in order that
I don't go (home) without spearing one single
fish!" saying...'

Besides the evaluation of the first clause, example (145) also encodes a rhetorical question, which Grimes subsumes under collateral information.

The speaker may also convert the paratactic mental process construction to a hypotactic one by embedding the central proposition of the speech act with a contrastive topic marker ava, which follows it. When this configuration occurs, the direct quote section is often encoding background or collateral information. In the following sentence (146), it is indicating background information to bring the reader of the story up to date on the status of the fish.

(146) ...kot-edo, "Emo vog-aira
think-seq.SR this.t. descend.SP-top.3s.ind.

amb-ira," ava s-ise
 die.SP-tp.3s.ind. that.ct. say-sim.SR
anumb-ir-iseni.
 sit-remain-dp.1s.ind.
 '...thinking to myself, "This (fish) has
 sunk down and died," I was seated (there)
 saying that.

Korafe speakers sometimes replace the ava in these sentences with aminge 'doing that way'. The ava denotes that the quote is subordinate to the speech act, but the aminge says something about the nature of the speech act. Just as aminga and amingo imply a more precise referential correlation than avavaga and avavago do, so aminge implies that the speaker is more nearly approximating the actual words which were used in the corresponding speech events in the real world.

- (147) Sifia gimasa g-ido s-etira,
 Sifia young.man see.SP-seq.SR say-tp.3s.ind.
 "Agá, o gagara avejo-ri?" aming-e
 Wow! that girl who-e. do.that.way- seq.1A
s-etiri...
 say-seq.r.3s.DR

'Sifia, the young man, saw (her) and said,
 "Wow! who is that girl?" he spoke thus...'

The cataphoric form of aminge may be used in the mental process construction before the direct quote. The following example (148), which comes from a legend, demonstrates the precise nature of the aminge/eminge set of verbs. The direct quote is a rigid pattern that is repeated in the legend, so one would expect it to be quoted more precisely as it is well established in the oral tradition.

- (148) Kori mo eming-e s-etira,
 shout t. do.this.way-seq.IA say-tp.3s.ind.
 "Susugayari, nearo Daisi Kotari evia
 Susugayari your.wife Daisi Kotari this.ct.
d-odo erese-re!"
 leave.SP-seq.SR go.pr.2s.ind.-im.
 'She shouted this way, "Susugayari, you're
 leaving behind this your wife here, Daisi
 Kotari, at this very moment!"

Korafe speakers prefer to use the aminge/eminge forms when translating Jesus' direct quotes in the New Testament. When they are indirectly quoting someone, they use the ava form.

4.2 Reported Speech

Lowe (1981 ms:65) states that "indirect speech is to some degree or other, an interpretation." The subject in the mental process proposition is co-referential with the first person references within the direct quote. The object in the mental process proposition is co-referential with second person references within the direct quote, but co-referentiality is manifested by identical elements in indirect speech.

(149) (a.) He said to me, "I'll see you tomorrow."

(b.) He said to me that he would see me today.

In example (149 a.), 'he' is co-referential with 'I', and 'me' is co-referential with 'you'. In (149 b.), 'he' co-references 'he', and 'me' with 'me'.

Korafe encodes indirect speech in three ways. The first two demonstrate hypotactic conjunction. All of them have the the common property of making the indirect speech the object in the sentence and placing the subject of the speech event before the reported speech and the mental process verb after the reported speech.

Reported speech = ± subject +reported speech + mental
process proposition

The usual construction encoding reported speech that does not involve some kind of intention and purpose is to use the mental process construction with ava and to identify the referents with identity co-referencing devices.

- (150) Nu usira, ava s-etira.
 he do.dp.3s.ind. that.ct. say-tp.3s.ind.
 'He said that he did (it).'

- (151) ...nuvu rea etira ava
 her.husband what do.3s.ind. that.ct.
 s-etiri ning-ira.
 say-seq.r.3s.DR hear.SP-tp.3s.ind.
 '...he told her what her husband had done,
 and she heard.'

When the speech act involves intention or purpose that an action be performed, the construction used is a purpose one with a mental process proposition following it.

- (152) Na, gagara fitari dae s-etero,
 I girl to.put pur. say-seq.r.3p.DR
 d-odo re-f-ena.
 leave.SP-seq.SR da-come.LP-pr.1s.ind.
 'They said that their clan member would marry

the girl, and I left and came home.'

However, there is one example where indirect speech manifests a personal referencing system which resembles the person switches that occur in direct speech. In example (153), the speaker is saying that someone else said that he wasn't there. In this example, the subject of the quote is co-referential with speaker in the real world speech event, rather than the speaker-subject of the textual speech event: (A, who presents the discourse, says) that B (context speaker) said that A was not there.

- (153) Lucas, na aminda tefo, s-etiri...
 Lucas I there nothing say-seq.r.3s.DR
 'Lucas said that I wasn't there...'

The subject, Lucas, is separated from his action, setiri 'he spoke'. In the typical mental process construction, 'Lucas said' would occur as one unit before or after the quotation, so this construction is definitely reported speech. Because the reported speech separates the subject and verb in much the same way that an object would in this SOV language, one is tempted to call it an

object, but it doesn't have the contrastive topic marker to embed it and make it a hypotactic construction like the other reported, non-intentional speech pattern does. The whole construction needs further explanation; it is unambiguously an indirect quote, but it does not manifest hypotactic conjunctions in the same way that other types of reported speech do.

5.0 Conclusion

The Indian philosopher, Tagore, is reported to have said, "The intellectual that is sharp, but not broad gets stuck at every point and doesn't get any further." This paper has been an attempt to give an overview of Korafe conjunctions, penetrating deep enough into the system to be coherent, but not getting stuck on the individual conjunctions. Further study might reveal that it's very worthwhile to get stuck on the adversative, the cause-reason, or the comparison set of conjunctions. But for now, that's all for Korafe conjunctions.

Footnotes

¹Korafe is a Non-Austronesian language of the Trans-New Guinea phylum. It belongs to the Binandere family. It is spoken by the 3,000 or so Korafe people living on the headlands of Cape Nelson around the Tufi sub-provincial headquarters and also by those Korafe people living and working in the towns and population centers of Papua New Guinea.

Korafe is an SOV language with a strong tendency to topicalize the subject (or object). The phonemes of the language are: /a/, /ạ/, /b/, /d/, /e/, /ẹ/, /f/, /g/, /g̣/ written as 'gh', /ị/, /i/, /j/, /k/, /m/, /n/, /o/, /ọ/, /r/, /s/, /t/, /u/, /ụ/, /v/, and /y/.

The data for this paper were gathered on field trips by the author and her husband to Korafe villages between 1972 and 1981. This paper was written under the auspices of the Summer Institute of Linguistics at a field workshop held in 1981 at Ukarumpa in the Eastern Highlands Province of Papua New Guinea.

A concordance of 61,053 morphemes taken from oral and written Korafe texts was used in the analysis done for this paper. The concordance was prepared at the Ukarumpa Computer Laboratory.

Footnotes (continued)

I am deeply indebted to my adviser, Carl R. Whitehead, who analyzed the data with me, helped me reach these conclusions, and patiently re-wrote sections of the paper with me. I am also grateful to Ivan Lowe, whose insights and lecture examples stimulated much of the research that led to these conclusions, and to Ger Reesink, whose papers and lectures on conjunctions, coordination, and subordination prompted this research in the first place.

I am also indebted to my husband, James, and my son, Jamie, without whose loving support and forbearance this paper would not have been possible.

I am indebted to the many Korafe speakers who have helped us with our language analysis, especially Warrington and Rhoda Isari, who assisted with this paper.

²Medial verbs which evidence a quasi or approximate tense marking system usually demonstrate a realis-irrealis distinction. The medial verbs that are non-finite do not indicate the realis-irrealis distinction in their morphology. Affixation in the medial verb system includes the following temporal aspects: succession, overlap, repetition, punctiliar aspect and/or durative aspect. The tense

Footnotes (continued)

marking system on the medial verbs is a cataphoric one in that each verb in the clause cluster points to and depends on the ultimate semi-final or final verb in its series to give it a temporal value in the real world. Besides the temporal desinences affixed to the medial verbs, referential desinences also occur as medial verb affixes. These affixes monitor the reference system in the clause cluster by cataphorically indicating whether or not the topic-subject on one clause will be co-referential with the topic-subject in the subsequent clause.

³List of Abbreviations:

con.	control
ct.	contrastive topic
dur.	durative aspect
dp.	distant past tense
DR	different referent desinence on medial verb
e.	existential verb
exc.	exclusive
f.	future tense
frus.	frustrative marker
h.	hortative mode
IA	integral action desinence on medial verb
im.	immediacy of action marker on verbs
imp.	imperative mode

Footnotes (continued)

inc.	inclusive
ind.	indicative mode
ir.	irrealis aspect desinence on medial verb
LP	long process stem of verb
neg.	negative mode
np.	near past tense
p.	general past tense used with medial verb
pos.	possessive
pr.	present tense
proc.	procedural or gnomic tense/aspect
pur.	purpose
q.	question mode (used with content questions)
r.	realis aspect desinence on medial verb
seq.	sequential desinence on medial verb
SF	semi-final form of verb
sim.	simultaneous desinence on medial verb
SP	short process stem of verb
spec.	specifying pronoun indicating contrast in set
SR	same referent desinence on medial verb
subj.	subjunctive tense/aspect
t.	topic marker
tp.	today's past tense/perfect aspect
yp.	yesterday's past tense

Footnotes (continued)

- 1s. first person singular person marking
- 2s. second person singular person marking
- 3s. third person singular person marking
- 1p. first person plural person marking
- 2p. second person plural person marking
- 3p. third person plural person marking

⁴As far as I know, Korafe is the only language in the Binandere family that maintains this semi-final/final distinction. The others studied by my colleagues all manifest only the 'a' desinence in the indicative mode. The switch to 'i' is used in the Binandere language family to signal the question mode, the form the verb takes when a content question word (r-word or n-word for Korafe) is used in the sentence. Korafe is unusual in that past tense indicative forms occur with this 'i' desinence.

⁵This terminology was suggested by Ivan Lowe.

⁶Korafe demonstrative roots are e 'this, near speaker', a 'that, near addressee' and o 'that, distal'. To these root forms can be added clitics that indicate topic (mo), contrastive topic (va), control (i), and controlling topic (imi). Other clitics may follow these basic ones. See Farr and Whitehead manuscript and Farr, Lowe, and Whitehead manuscript.

Footnotes (continued)

	Proximal	Medial	Distal
topic	<u>emo</u>	<u>amo</u>	<u>omo</u>
contrast	<u>evia</u>	<u>ava</u>	<u>ovia</u>
control	<u>ei</u>	<u>ai</u>	<u>oi</u>
controlling topic	<u>eimi</u>	<u>aimi</u>	<u>oimi</u>

⁷The wording 'discourse clock time' was suggested by Ivan Lowe.

⁸There are four criteria that help to determine the boundaries of a Korafe sentence:

- 1.) a marked fall in intonation.
- 2.) devoicing of the last syllables.
- 3.) a breath pause.
- 4.) a final verb form.

Three of these criteria must be present at the conclusion of a sentence.

⁹Haiman (1978:584) uses the term resumptive topic to mean a topic "established by previous contexts." Thus, the Korafe amo, that often has anaphoric reference, could be considered a resumptive topic. However, it also can be used to introduce the topic at the discourse onset. Therefore, it is best to consider it as a normal topic marker, moving the discourse along in the same direction.

¹⁰Many Korafe speakers delete the amo between the protasis and the apodosis, so that the structures take the syntactic shape of those discussed in section 2.4.

Footnotes (continued)

However, our present language instructor, Warrington Isari, feels that the inclusion of amo between the protasis and apodosis reflects more correct or proper Korafe. The situation parallels the English grammar school children's use in the classroom as opposed to that they use on the playing field.

¹¹Ivan Lowe suggested the symbolization (^AB) to describe the relationship between reason and cause.

¹²Douglas Parrington (personal communication) states that Ewage, a language related to Korafe, has two related topic markers awa and awawa. One of the distinctions between them is the singular-plural one, i.e. the reduplicated form signals plurality. This may have been the original distinction between the Korafe forms avaga and avavaga. However, that distinction has blurred in current usage. In fact, some speakers, like Warrington Isari, do not have avago and avaga (the "singular" forms) in their vocabulary.

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A word of explanation about necessary or enabling cause and sufficient or strongly motivating cause (To be read in relationship to section 3.5 and in particular sections 3.5.2.1 and 3.5.2.3.)

Necessary or enabling cause is a term for a cause-effect relationship where the cause given in the causal conjunct is one of many events which is a possible or enabling motivator for the resultant action or effect. The causal conjunct says, "Since this has happened, this effect may occur."

Sufficient or strongly motivating cause is a term for a cause-effect relationship where the event presented in the causal conjunct is the single event, which, by itself, must and does precipitate the resultant action or effect in the subsequent effect conjunct. The sufficient cause conjunct says, "This has happened, so now this must happen (or has happened) as a direct and automatic result or effect of the cause given."

The conjunctions on the left side of Table 2 (a gido, avo gido, ava sedo, aindae sedo, and aindae) conjoin cause-effect relationships described by Lowe (1981 ms.:31-2,34ff). The conjunctions on the right side of Table 2 (ai resira amo, ainda tuka mo, ainda susu mo, and ainda beka mo) conjoin grounds and evidence relationships which Lowe (1981 ms.:33) also discusses.