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thesis entitled

A TAGMEMIC ANALYSIS OF CONVERSATIONAL EXCHANGES

IN A SWAHILI FOLKTALE

presented by

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has been accepted towards fulfillment
of the requirements for

a Master's degree in Linguistics

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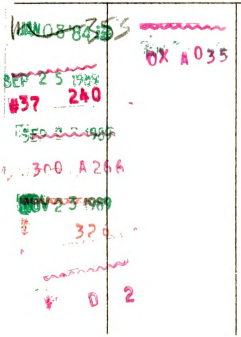
Date July 23, 1981

O-7639



A TAGMEMIC ANALYSIS OF CONVERSATIONAL EXCHANGES IN A SWAHILI FOLKTALE

By

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Linguistics,
Oriental, and African Languages

1981

ABSTRACT

A TAGMEMIC ANALYSIS OF CONVERSATIONAL EXCHANGES
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This study attempts to apply the revised tagmemic theory of Pike and Pike (1977) to the analysis of narrated conversational exchanges in a Swahili folktale. This revised theory does not allow the out-of-phase relations between deep and surface structures that Longacre (1968) demonstrates at the exchange level, because structure (surface relations) and function (deep relations) are considered to be features of every tagmeme. This study demonstrates that out-of-phaseness need not be called upon as an explanatory device if the associations between structures and functions are analyzed in sufficient detail. Such detail is obtained by allowing any constituent of a turn to be labeled for the exact function it carries in the exchange. The resulting detailed analysis reveals that exchanges are linked to each other by shared constituents, and that linkage can account for out-of-phaseness. An emic analysis of the exchanges demonstrated that, for Swahili, functional relations within certain complex exchanges may be made explicit if exchanges are viewed as capable of having exchanges embedded within them. Embedding aids the explanation of the relationship among the emic exchange classes, which, in Swahili, may be seen to form a hyperclass.

ACKNOWLEDGMENTS

I would like to express my sincere gratitude to the members of my committee, Dr. Carol M. Scotton, Dr. Barbara Abbott, and Dr. Ruth M. Brend, for their helpful criticism and patience during the course of this study. A special thanks is due to Dr. Brend for her openness to my new and sometimes strange ideas about tagmemics. Special thanks also go to my friend Mr. Darryl A. Salisbury, who spent many a long night typing the diagrams and text of this thesis. My deepest thanks are extended to my wife Carrie, without whose love and support the project would have been impossible.

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1. INTRODUCTION

1.1. Scope of this Study

This study offers a tagmemic analysis of conversational exchanges found in the narrative text of a Swahili folktale, *Kisa cha Punda wa Dobi* (The Story of the Washerman's Donkey). Tagmemics, because of its orientation to the hierarchical structure of language, is well suited for the analysis of discourse and provides an analytical method which allows consistent analysis of both higher- and lower-level grammatical structures. Tagmemic research on conversational exchanges has already been undertaken by Longacre (1968, 1976) and by Klammer (1971). Longacre's work calls for the separate analysis of functional (deep) and structural (surface) relations, and represents a departure from Pike's tagmemic scheme. Klammer (1971) attempted to reconcile Longacre's findings with Pike's work by viewing Longacre's deep structure relations within the Pikean lexemic hierarchy. During the 1970's, however, Pike merged part of his lexemic hierarchy into the grammatical hierarchy, and established the new referential hierarchy into which are encoded relations between cultural or real-world entities. Klammer's work, although still relevant to exchange analysis, has become dated as a consequence. This merger poses a further problem. Previous analyses by Longacre (1968, 1976) have shown that the deep (lexemic) and surface (grammatical) structures do not always coincide, and may be "out-of-phase" with each other at the higher linguistic levels. Merging the grammatical and lexemic hierarchies as proposed by Pike implies that out-of-phaseness can no longer be tolerated. This study attempts to solve this problem by allowing Longacre's deep structure labels for function to name grammatical roles in Pikean tagmemes at the exchange

level. The resulting analysis shows the structure of exchanges in greater detail than those of Longacre, and allows a clear view of both linkage between exchanges, and embedding of exchanges within other exchanges. This improved analysis directly associates the structures of an utterance with their functions, and thereby eliminates the need to explain the relationships between structures and functions in terms of out-of-phaseness.

The remainder of this chapter will outline some recent trends in discourse analysis, and introduce the Swahili folktale. Chapter Two will introduce tagmemic theory, and discuss methods of emic and etic analysis. The third chapter will discuss some problems which arose in the original etic analysis. Certain changes to the analytic approach will be proposed here. Chapters Four and Five will discuss the findings of the analyses (etic and emic) of the folktale. The findings of this study will be summarized in Chapter Six.

1.2. Discourse Analysis as a Field of Study

1.2.1. Discourse Analysis and Related Disciplines

For purposes of this study, Pike and Pike's view of discourse analysis as the study of linguistic organization at or above the sentence level will be adopted (Pike and Pike, 1977). The range of such study is obviously quite broad, and may include such topics a paragraph structure, relations between paragraphs, dialog structure, plot marking, and extra-sentential influences on sentence structure. This breadth contributes to the usefulness of discourse analysis for application to syntactic, textual, and semantic problems.

Before continuing to outline the range of these applications, it

would be useful to contrast discourse analysis with the traditional disciplines of rhetoric, stylistics, and criticism. In many cases discourse analysis may share the same object of study as these older disciplines, namely, the structural analysis of texts, or the evaluation of these structures for their effects. Characteristically, however, modern discourse studies are closely bound to a linguistic theory of one type or another, and serve the purpose of shedding light on lower-level phenomena such as stylistic transformations, or describing text in terms of a particular theory, as this study attempts to do. As a result, both the means and ends of current discourse analysis are quite different from work in the traditional areas.

1.2.2. Approaches to Discourse Analysis

It seems that some treatment of discourse has been attempted by proponents of almost every major linguistic theory in the United States of America and Europe. One of the earliest treatments of discourse in relation to syntax was by Mathesius (1939), and his work, along with that of other members of the Prague School such as Danes and Firbas has contributed to the development of the Functional Sentence Perspective (FSP). With FSP, as described by Palkova and Palek (1978), is concerned with the potential communicative function of a sentence in a particular textual or situational environment. It has been brought to bear on generative syntax in this country through Kuno's (1972) development of functional syntax. Kuno (1978) uses discourse-based FSP principles to act as constraints on Gapping operations.

Much of the current work relating discourse to generative grammar is moving in the direction of showing how discourse factors influence

structures at the sentence level. There is much recent work exploring the influence of discourse factors on pronominalization, of which a study by Bolinger (1979) on the extra-sentential influences on choice between full NP and pro-form is a representative example. Other syntacticians are now looking to discourse features and constraints for motivation of certain syntactic operations. The work by Erteshik-Shir (1979) on dative-movement is representative of this approach. A number of linguists, notably van Dijk (1972), have been much more ambitious, and have proposed that a generative grammar could be designed to account for textual as well as syntactic structure. Rieser (1978) explains that under such an expanded model a text symbol could be rewritten into symbols for sentence sequences, which could, in turn, be rewritten in sentence symbols. He reports that generative text grammars have been modeled in terms of interpretive semantic theory (Isenberg, 1971), and generative semantic theory (Petofi, 1973).

The treatment of discourse plays an integral role in Systemic-Functional (SF) linguistic theory. In a recent review of the SF approach to text linguistics, Hasan (1978, p. 228) states that the concepts of texture and structure are fundamental to the analysis of texts. Texture involves cohesive devices such as conjunction, ellipsis, and substitution which cause a series of lexical-grammatical structures to be percieved as related to each other. Structure, on the other hand, concerns those principles of textual organization which allow the hearer to understand whether or not a text is complete. Hasan asserts that the structure of discourse type (genre) is determined by its contextual configuration, the features of the environmental situation affecting the discourse. These features bear some resemblance to tagmemic role in the

higher levels of the tagmemic grammatical hierarchy, and in the referential hierarchy also.

Sociolinguists and psycholinguists have also attempted treatments of discourse. Studies concerning the structure of conversation are naturally in the domain of sociolinguists, but they represent a form of discourse analysis as well. Schegloff's (1979) article about the influence of repair on the syntax used in a conversation is representative of such studies. In this article, Schegloff suggests that repair, the mid-sentence changes of syntactic course that result in pauses, "uh's," and restarts, affects the form of sentences and hence alters the cues presented to listeners used for marking and turn-taking opportunities. Psycholinguistic studies are often concerned with discourse as well. Chafe (1979), for example, has put forth a "flow model" to explain the relation of thought to language. The model suggests that foci, or units of stored information, are clustered to form thoughts. As a person "thinks" he moves from focus to focus and may eventually move to a different cluster of foci. Such a jump represents a sharp change in coherence of the items being thought about, and, if such thoughts are being expressed in speech, this jump may correspond to a boundary of a discourse unit. In this manner, cognitive structure may contribute to the structure of discourse.

1.3. A Swahili Folktale: *Kisa cha Punda wa Dobi*

1.3.1. Cultural Background

Swahili is known today as a lingua franca throughout East Africa. It orignated as the dialect of Zanzibar town on the island of Zanzibar just off the coast of Tanzania (Whiteley, 1969). A number of languages

closely related to Swahili stretch along the Indian Ocean coastline from southern Somalia to northern Mozambique. This dialect area has long been distinct from cultural groups in the continental interior due to trading contacts with Arabs, and the settlement and assimilation of Arabs in coastal ports. The Afro-Arab culture based on trade contacts with the outside world has become known as the Swahili culture. The term "Swahili culture" is difficult to apply, however, since there is a considerable amount of cultural diversity and social stratification within the area (Ismail and Lienhardt, 1968). Swahili culture is quite old, dating at least to the 11th or 12th century. The oldest mosque in Zanzibar dates to 1107 A.D. (Knappert, 1971).

The East African coastal area was culturally distinct from the interior in many ways. Coastal residents had greater material wealth due to imported goods such as Chinese china. Economic life centered around towns was also an innovation not found in the interior. Linguistically, the Bantu dialects along the coast lost their tone and acquired many loans from Arabic. The introduction and widespread adoption of Islam also distinguished this area from the interior.

1.3.2. Swahili Literature

The Islamic religion had a great influence on the development of Swahili literature. Historically, much Swahili poetry functioned to express Islamic values, and was patterned after Arabic models (Knappert, 1968). There are many literary genres in Swahili, the most famous of which is *utenzi*, a peotic form used for both religious expression and epic narratives (Knappert, 1968). The earliest known Swahili verse the *Hamziya*, is in this form, and dates from the 17th century. Other

genres include songs, riddles, proverbs, and animal fables (Knappert, 1971). The story subjected to analysis in this thesis, *Kisa cha Punda wa Dobi* (The Story of the Washerman's Donkey), belongs to the latter class. Swahili literature continues to thrive in modern times, as evidenced by the work of the late Shaaban Robert and others.

Knappert (1968, p. 7) argues strongly that the form and content of most traditional Swahili poetry come from Arabic, Persian, or Indian sources. Other scholars are able to clearly demonstrate African influences in more recent Swahili literature, as seen in Lienhardt's study of Ismail's *Swifa ya Nguvumali*, a modern epic poem about medicine men (Ismail and Lienhardt, 1968). In light of this debate, it is interesting to note that *Kisa cha Punda wa Dobi* bears a very close resemblance to some tales found in the Sanskrit *Panchatantra*. The Sanskrit stories in question are The Story of the Ape and the Crocodile and The Ass without Heart or Ears, found in Book IV of the *Panchatantra* (cf. Edgerton, 1924). The Swahili tale studied here contains two stories, one embedded in the other. The Swahili matrix story is nearly identical to the Sanskrit The Story of the Ape and Crocodile, while the embedded story in the Swahili tale is very close to The Ass without Heart or Ears in Sanskrit. Interestingly, the *Panchatantra* also has the story of the ass embedded in the story about the ape and crocodile, so the overall structure between the tales in the two languages is similar. The Swahili tale substitutes a shark for the crocodile in the matrix story, and a rabbit, the traditional African trickster, for the jackal in the embedded story.

1.3.3. Source of this Tale

The tale *Kisa cha Punda wa Dobi* was collected by the Reverend Edward Steere, Bishop of Central Africa, in Zanzibar town sometime during the 1860's. Steere was among the first Europeans to study Swahili, and his collection, Swahili Tales (1870), was probably the first Swahili literature translated into English. Steere produced descriptions of a number of African languages, and did some translation of the Gospels (Heanley, 1909).

1.3.4. Summary of the Story

Briefly told, *Kisa cha Punda wa Dobi* (The Story of the Washerman's Donkey) goes like this: A monkey, *kima*, and a shark, *papa*, become friends because the monkey drops fruit to the shark from a fig tree whose branches spread over a harbor. One day the shark offers to repay the monkey's kindness by entertaining him. After promising not to get the monkey wet, the shark takes him on his back and procedes homeward. Halfway there, the shark tells the monkey the truth: his sultan is sick and needs a monkey's heart to cure his illness. The monkey, realizing that he is almost a goner, tries to deceive the shark; he says that monkeys always leave their hearts in the trees when they come down to the ground, and he didn't bring his heart with him. The shark believes this and returns to the tree. The monkey escapes into the tree and will not come down when the shark calls. When the shark asks why he won't come down, the monkey asks, "Do you take me for a washerman's donkey," and the shark, of course, replies, "What's that?" The monkey then tells the story of the washerman's donkey: A washerman, *dobi*, had a donkey, *punda*, which ran away and got fat. The hare, *sungura*, sees the donkey

and makes a plan for the lion to kill it so the two of them may have a feast. The lion agrees to this plan, and the hare tells the donkey (a female) that the lion wants to marry her. She agrees, and they go to the lion's house. The lion tries to kill the donkey, but because he is weak from a recent illness, she escapes. After some days, they try again. The hare convinces the worried donkey that the lion was not trying to kill her, it was only the way he converses. She agrees to return, and is immediately killed. The lion tells the hare to roast the meat, and save him the heart and ears. The hare roasts the meat and feasts, and hides the leftovers. When the lion comes for the heart and ears, the hare tells him that this was a washerman's donkey and consequently had no heart and ears; after all, if it had a heart and ears, would it have returned a second time? The monkey tells the shark that he will not become a washerman's donkey; their friendship is ended.

1.3.5. Further Comments on the Choice of this Story

This story was chosen as the subject of analysis for a number of reasons. The most important of these was that it exhibited a rather complex structure that involved the embedding of one story within another. Tagmemic theory makes claims about being able to express such recursiveness, and it was felt that a story having this structure would provide a good test of the theory. Another reason for choosing this story was that it was provided with a good translation. Finally, it was felt that the story would represent a form of Swahili that was free from modern stylistic influences from the western world, since it was collected before the European cultural influence in the area was very strong.

2. TAGMEMICS

2.1. The Tagmemic Approach to Discourse Analysis

Because of their interest in translation, tagmemicists have long paid attention to the structure of discourse. The result of this attention is a theory in which the treatment of discourse is well integrated. To explain the nature of this treatment requires some background of the tagmemic view of language; what follows, therefore, is a brief summary of tagmemic concepts as they relate to the treatment of discourse. Whenever possible, comments on the developmental history of these concepts will be provided.

Kenneth L. Pike is known as the founder and prime mover of tagmemic theory. Pike has stated that tagmemics originated in the period between 1947 and 1949 when he started a search for a unit of grammar that would be analogous to the phoneme (Pike, 1976). The outcome of this search was the creation of the tagmeme, as well as a new theory of language, tagmemics.

The tagmeme was analogous to the phoneme in many respects. Like the phoneme, it exhibited variability, being realizable in a number of ways. The subject of a sentence, for example, might be realized by a pronoun, noun, noun phrase, or clause. Also, like the phoneme, a tagmeme had distributional constraints. The subject of a sentence can only occur in certain positions in a sentential construction, for example. These two characteristics allowed the tagmeme to be expressed as a slot-plus-filler unit where the slot reflected the position of the unit in its including structure, and the filler reflected the different realizations of the unit. Finally, the tagmeme and phoneme were similar with respect to their abstract nature. Just as a given phone, say [b], is not the same

as the phoneme it realizes, /b/, a phrase such as *in Kalamazoo* in the sentence *I have a girl in Kalamazoo* is not the same thing as the adverbial tagmeme which may be used as part of an abstract description of that sentential construction. The phrase is a realization of that tagmeme.

As a constituent of a larger construction, the prepositional phrase in the example above illustrates another point which Pike had to treat, namely that constructions could include other constructions in their structure. This presented little problem, because any construction, no matter what structure it is included within, can be described in terms of constituent tagmemes. This solution, as a result, gave Pike a means of describing hierarchical structure in the sentence.

However, some changes away from the prevailing view of hierarchical grammatical structure were made as tagmemics developed. Pike (1976, p. 96) states that he made an important breakthrough when he rejected the idea that a grammatical unit must have at least two immediate constituents, and concurrently adopted the view that a grammatical unit must fill a "functional position" in a construction (Pike, 1974). This meant that the tagmeme, along with having a place (slot) and shape (filler), had a function in the construction which included it. This function was constant for the slot and its fillers, and expressed in part the relation between the tagmeme in question and other tagmemes in the construction. Thus, to call a noun phrase a "subject" of some clause type is to say that the noun phrase bears some special relation to the other constituents of that clause. It should be noted that the tagmeme carries the function but the construction that fills it does not. Thus noun phrases and prepositional phrases do not have functions in their own right, but

only as realizations of tagmemes. The function of the prepositional phrase in *I have a girl in Kalamazoo* is different from that in *The girl in Kalamazoo is my wife*. Pike relates that this change was significant because it caused him to focus on the functional relation between a tagmeme and its including construction rather than on its immediate constituents. This ability to look upward for a functional relation to an including construction was later to have great importance for the treatment of discourse.

Another useful consequence of allowing grammatical function to be a feature of the tagmeme was that this feature could be very useful in distinguishing between constructions in cases where their structural differences were minimal or non-existent. For example, in the sentences *John hit the ball* and *John was hit by the ball*, the subjects have different functions. The subject of the first performs the action, while that of the second receives the action. These differences in function, together with some significant structural differences, contribute to the contrast between the two constructions.

It might appear that the analogy between the phoneme and the tagmeme had broken down at this point, since no mention has been made of phonological constructions, phonological function, or contrast between tagmemes. Consistency between the phoneme and the tagmeme was maintained as an outgrowth of Pike's early realization that a phonological hierarchy based on the phoneme - syllable - stress group - etc., could be formed (Pike, 1976). This concept was radically different from the then current notion of linguistic hierarchy which had phonemes constituting morphemes, morphemes constituting phrases, etc. A re-evaluation of grammatical and lexical structures satisfied Pike that three

semi-autonomous, simultaneously realized hierarchies, the phonological, grammatical, and lexical, could be posited. This view was set forth in the first volume of Pike's Language in Relation to a Unified Theory of Human Behavior (1954). Eventually, from the influence of works such as Crawford's (1963) in phonology and Wise's (1968) in lexemics, it became apparent that tagmeme-like units could be posited in the phonological and lexemic hierarchies. The phoneme became the minimal unit in the phonological hierarchy, but phonological tagmemes analogous to grammatical tagmemes were allowed. In this way a closer correspondence between the two hierarchies was established.

The general scheme of language presented in Volume I of Language in Relation to a Unified Theory of Human Behavior is still accepted by tagmemicists. In this scheme, discourse structure is seen as structure above the level of the sentence in the grammatical hierarchy. Discourse structure is therefore a type of grammatical structure, as recently argued by Longacre (1979). Discourse constructions may be hierarchically organized, having sentences within paragraphs, and paragraphs within monologs, for example. These constructions may be described and contrasted in terms of their tagmemic constituents with their features of slot, class (filler), and role (function). (Tagmemes may also have a feature of cohesion which expresses co-occurance restrictions.) Discourse analysis parallels the grammatical analysis of constructions at lower levels. This concept of discourse is allowed by the view of function in hierarchy mentioned earlier. For every construction it is possible to ask what larger structure includes it, and what function the lower-level unit plays within the higher-level one. If this question is asked repeatedly, sooner or later linguistic acts are seen as

parts of non-linguistic behaviors. Functional units of behavior were seen by Pike as parallel to linguistic units, and called behavioremes in Language... (1954).

Discourse has therefore been an integral part of tagmemics since the theory began. In the first volume, first edition, of Language... (1954), Pike discussed discourse genre as "utterance types" such as the sermon, the after-dinner speech, a cantata, a joke, and so forth. One of the earliest descriptive treatments of discourse was Loriot's study of Shipibo paragraphs (1958) which treated the different ways sentences could be linked together to form paragraphs of various functional types. Longacre (1976, p. 8) states that this paper was very influential among tagmemicists during the early sixties, particularly with respect to Powlison's study of Yagua paragraphs and Gudshinsky's consultation work for the SIL in Brazil. During the middle sixties, Waterhouse (1963) and Pike (1966) contributed further to the study of paragraph structure by producing reports on the dependencies between sentences in a text. Discourse genre, as opposed to paragraphs, were first treated comprehensively by Longacre (1968) and his colleagues at a workshop he conducted in the Phillipines. This workshop produced many significant findings, among the most important being a classification and analysis of features for four different discourse genre: narrative, procedural, horatatory, and dramatic. The first tagmemic treatment of conversational exchanges is represented by the work on dialogue in narrative and dramatic discourse done at this workshop. Pike and Pike (1977) and Longacre (1976) represent the most recent major theoretical treatments of discourse from the tagmemic standpoint. Pike and Pike provide a useful etic (descriptive) list of roles (functions) for tagmemes at different hierarchical

levels of discourse, and both they and Longacre pay increasing attention to the relation between discourse and reference.

2.2. Discourse, Reference, and Function

Probably the least developed aspect of tagmemic theory, and the aspect that has been subject to the greatest theoretical modification, is the treatment of the referential hierarchy. This hierarchy was originally called the lexical hierarchy by Pike (1954). It functioned in part to express the taxomonic relations between real world object, *Fido is a dog; a dog is a canine; a canine is a mammal; etc.*, and the relations between paraphrased expressions, *Fido; my dog; my four legged frisbee catcher*, all in reference to the dog that I own. Wise (1968) expanded this concept beyond lexical items by showing that features such as the chronological ordering of events are constant for a story despite its grammatical form. She also proposed that participant roles similar to Fillmore's (1968) cases could be encoded in this hierarchy. She renamed the hierarchy the lexemic hierarchy, a revision which was accepted by Pike during the late sixties and early seventies.

Klammer's work on conversational exchanges (1971) was done with Wise's model of the lexemic hierarchy. The significance of Klammer's work lies in his adaptation of Longacre's findings to the Pike-Wise lexemic hierarchy. Longacre at this time (1968) had developed an analysis of conversational exchanges in which "surface structures" (grammatical structures) were treated separately but parallel to "deep structures" (relations between constructs analogous to case roles such as actor, undergoer, etc., at the lower levels). Longacre showed that deep and surface structures were usually congruent, but sometimes diverged at the

higher levels of discourse, becoming out-of-phase, as he termed it. Klammer was able to account for Longacre's case roles and deep structures in the Pike-Wise lexemic hierarchy, and demonstrate out-of-phase lexemic-grammatical structures as well.

Longacre maintains his deep-surface model to this day, but Pike and Pike (1977) have extensively revised the lexemic hierarchy and renamed it the referential hierarchy. This revision was apparently made so that identities, events, purposes, and other forms of cultural knowledge could be analyzed as they pertain to language. For example, what Pike and Pike call the referential structure of a story is quite distinct from its grammatical structure because if the story is told from a different point of view or with its elements in different order, the participants, items, and events referred to in the story still maintain their relationships. It is possible to tell a story backwards, but the chronological relationships of its events will still remain the same. Thus, the referential hierarchy may be viewed as expressing the relations between things (in the cultural world) referred to in a discourse.

Part of Pike's revision of the lexemic hierarchy involved moving the account of deep case or participant role over to the grammatical hierarchy. This transfer was due in part to Becker's (1967) development of Pike's notion about the close relation between participant role and grammatical structure, and it had the effect of establishing participant role as a feature of the grammatical tagmeme. In the revised tagmemics, grammatical tagmemes at all levels have a feature analogous to participant role. Pike calls this feature role, but I prefer to call it function because it is more descriptive and general, particularly for the higher levels.

A number of points should be made about function. The first is that it is in some sense a semantic feature of a grammatical unit (just as case is), so the constituents of a grammatical construction are seen as having semantic function within that construction. Second, the function of which Pike writes in his early works (cf. 1954) is not quite the same as what I label function here. The original function represented the relation of a constituent to its including construction. To use Pike's example (1976), the relation between *a* and *the* and the noun phrase in which they are included is constant in *a boy* and *the boy*. In both cases *a* and *the* are determiners, and function to specify the noun. In practice, slot names such as subject, object, etc., come to label this type of relationship. In the past decade, the use of these labels has lessened because it is difficult to find them for each level and they are very easy to confuse with role labels. In this study they are eliminated entirely. A third point is that function (role) is analyzable into component features. Much recent tagmemic work has concentrated on finding such features (see section 2.3.3.).

The shift of participant role or function from the lexemic to the grammatical hierarchy raises a number of questions. First, since the revision has dated Klammer's work, we may ask the general question of whether or not the new scheme can account for the phenomena treated by Longacre and Klammer. Secondly, we note that structure and function are now united in the grammar and ask how we can specifically account for the phenomenon of out-of-phaseness. This is the major problem treated in the present study, and it will be shown that the revised scheme can account for the previously noted discourse phenomena.

2.3. Further Comments on the Nature of the Discourse Level

2.3.1. Hierarchical Organization at the Discourse Level

In the tagmemic framework, the upper grammatical levels are usually considered to be those constructions above the level of the clause, so what is studied here is the "supra-syntax" of the story. Tagmemic theory makes explicit claims concerning the existence of grammatical structure above the sentence (cf. Longacre, 1979). Pike and Pike (1977) demonstrate that this supra-sentential level is hierarchically organized in a manner analogous to the lower grammatical levels. Although the exact number of levels above the sentence is language specific, the Pikes state that the basic hierarchical ordering of these levels is as follows: sentence, paragraph, monolog, exchange, and conversation. A tagmemic analysis of these levels would illustrate their constituent structure, showing, for example, how sentences act as constituents of paragraphs, how paragraphs act as constituents of monologs, and so forth. Both Longacre and the Pikes realize that the hierarchical progression is not as simple as stated above. Both have allowed level skipping and recursion to occur within the hierarchy. Normally, we would expect a tagmeme to be realized by a construction on the next lower hierarchical level. When level-skipping occurs, the tagmeme is realized by a construction which is on a still lower level. For example, a turn in conversation does not necessarily require a monolog consisting of many paragraphs; a single clause, or even a single word will do. Level-skipping such as this is very common. On the other hand, a turn at conversation might present the opportunity to present a narrative of some sort in which a conversation is recounted. Telling a joke may represent such a situation. In this case, a conversation would be embedded in a monolog, and

recursion would occur. This phenomenon, like level-skipping, is very common at the supra-sentential, or discourse level.

Both level-skipping and recursion are easily expressed tagmemically. For example, each turn in a conversational construction is a constituent of that construction and hence may be abstracted as a tagmeme. This tagmeme may have fillers from monologs down to individual morphemes. If a single morpheme is realized as the filler, level-skipping has occurred. If a monolog is realized, and one of its constituent tagmemes is realized as a conversation, then recursion has occurred. There is nothing inherent in the tagmeme which prevents it from being realized (filled) by a construction that is of the same or higher level than the construction of which the tagmeme is a constituent. The restrictions on the realizations of a tagmeme are due to the definition or specification of the construction in which the tagmeme plays a role. A construction of a given type *X*, which contrasts with some other constructions *Y* and *Z*, may contain constituent tagmemes having different realizations (fillers) or functions (roles) from those of *Y* or *Z*.

2.3.2. Nuclearity and Marginality

Pike and Pike (1977) apply two descriptive terms to the position feature (slot) of the tagmeme: nuclear and marginal. The Pikes state that a tagmeme is nuclear if it plays an essential semantic role within the including construction, and if it tends to recur in all instances of that construction. A construction in slightly varied forms might be used to realize a number of different tagmemes; the unvarying constituents of that construction would be nuclear to it. Thus, nuclear tagmemes tend to be obligatory and functionally important to their including

construction. Marginal tagmemes tend to lack these qualities. A constituent tagmeme of a construction must be either nuclear or marginal with respect to that construction, and a construction may have more than one nuclear and/or marginal tagmeme.

Two examples may serve to illustrate this point. First, at the lower grammatical level, the constituents of the English noun phrase may be considered. In a noun phrase, a noun is always found, determiners are frequently found, and adjectives, prepositional phrases, and relative clauses are not uncommon. No matter where the noun phrase is found, be it a subject, object, prepositional object, etc., it always has a noun and often has a determiner. These constituents are considered nuclear to the noun phrase, while the others are marginal to it. From the functional standpoint the noun plays a critical role since it is the "namer" in the construction; it is saddled with the primary task of the construction. As a second example, the discourse level of a story may be considered. It will be noticed that certain constructions in the story present information crucial to its development, while other constructions provide background information, or make comments about the action or participants. In most cases, the particular genre of the story and its essential semantic content would remain unchanged if these comments were excluded. In fact, different tellings of the story might include different comments, or the deletion of some comment made in an earlier version, or entirely new comments at points in the story where they were not included before. Such comments are marginal to the structure of the story, while the less changeable ones are nuclear to it.

Nuclearity and marginality are important characteristics of tagmemes because they indicate the status of the tagmeme in relation to the

entire including construction. Determining nuclearity is part of the process of determining emic (contrastive) construction types, since many examples of the construction must be used, and contrast between constructions may be based on the nuclear versus marginal status of tagmemes.

2.3.3. Further Comments on Tagmemic Function

Tagmemic function, or role, as it is called by Pike and Pike (1977), is very important in tagmemic analysis. As mentioned in section 2.1., tagmemic function is important for determining contrastive construction types. Section 2.4. will show that the identification of functional units in a text is a very important part of determining that text's constituent structure. Section 2.2. mentions that role expresses the generalized semantic function of the tagmeme in its including construction. The identification of tagmemic function is therefore a crucial aspect of both the theory and practice of tagmemics.

Although tagmemics provides a method for discovering the emic construction classes of a language, it does not provide a unique method for the determination of tagmemic function. Tagmemicists are very much aware of this situation, and have been exploring the problem in recent years. Most of this work has been done at the clause and sentence levels, however. Hale (1973) worked on role features for clauses of Indian and Nepalese languages, while Longacre (1976) has developed an etic set of case frames based primarily on English data. Sterner, Subharno, and Pike (1976) worked on a feature system for role relations in complex (multi-clausal) sentence constructions, and two-sentence clusters. Their role feature system serves as the model for assigning roles to sentence level constructions in the Swahili text under study here.

Pike and Pike suggest a list of possible tagmemic functions for constructions at the higher levels of discourse. They do not maintain that the list is comprehensive or exhaustive; tagmemic function might be of any sort and take any label, and its description is left to the skill and insight of the analyst. Among functions listed for sentence level constructions they suggest question, command, wish, and statement. At the paragraph level, they suggest topic, problem, illustration, hypothesis, and many others. At the monolog level, they suggest instruction, greeting, coordination, story telling, and many others. Many more functions are suggested for the exchange and conversation levels.

The discussion above does not imply that each grammatical level has its own exclusive set of functions. It is often the case that the same function is found on more than one level of a hierarchy, especially if the function is for a marginal unit. In the sentence 1.2. of the folktale, for example, the function "item" occurs at all levels from sentence cluster down to word (see Figure 2, page 30).

The tagmemic literature, with the exception of Fries (1970), has not paid attention to the effects of level-skipping and recursion on the roles assigned to constructions. Chapter Four will treat this problem in detail, and demonstrate that a construction may have dual roles if it functions as a constituent shared between two linked exchanges.

2.4. Methods of Analysis

From the preceding discussions, it may be seen that a tagmemic discourse analysis of a text should accomplish two things. First, it should shed some light on the constituent structure of the text itself (etic analysis), and second, it should make a statement about the types

of constructions which are used in the text (emic analysis). The first of these goals is readily achieved by examining the constructions which make up the text, and determining their function. The second goal is somewhat more difficult to achieve because it involves determining the emic classes of constructions. A simple text would not be adequate to achieve this goal for all structures in a discourse. However, if a type of structure occurs frequently enough in a text, a limited but not necessarily exhaustive set of contrastive classes may be discovered. This study will present detailed emic and etic analyses of the narrated exchanges in the folktale, but cannot make any broad claims about the emicity of its exchange classes in relation to the rest of the language.

It should be noted here that the processes of etic and emic analysis often appear to be arbitrary and ad hoc exercises in labeling units and functions. The object of tagmemic analysis, however, is not to label everything in sight, but to discover the least complex system of units which account for the data. There is no mechanical process for doing this, and the analyst must rely on what Longacre (1964) called the "guess-and-check" method. In this process the analyst creates labels freely, but constantly checks and refines them. The result of this refining process is a system of units and labels (particularly for functions of tagmemes) which account for the data in the most efficient way. There is, of course, no guarantee that the analysis will be correct or valid, but experience has shown that results for one language are often relevant for other languages. A case in point is the set of functions Longacre developed for turns in an exchange. This set was originally developed on the basis of data from some Phillipine languages, but has been applied with little modification to languages of Central America

and, in this study, to Swahili. This cross language relevance lends some degree of validity to tagmemic theory and analysis.

2.4.1. Etic Description

Ideally, an etic analysis of a text's constituent structure would be handled in much the same way as it is for clause-level constituents; constituency would be judged by the substitutability of one unit for another. While this is relatively easy to do at the clause level, it is rather cumbersome for texts, since it is difficult to ask an informant to substitute one paragraph for another. With an old written text such as the one used in this study, this approach is almost impossible, since the text is a static record of a discourse. A different approach must be taken for the analysis of old written texts.

This alternative approach hinges on the basic assumption of tagmemics that tagmemes have functions (deep or semantic roles). If the function associated with a construction can be discerned, then the function of the tagmeme which the construction realizes is known, since constructions have functions only with respect to the tagmemes which they realize. If the construction in its context can be identified as to its type, then the three basic features of the tagmeme are known: its slot (grammatical role), its function (semantic role), and at least one of its fillers. For example, it might be possible to recognize a certain section of a narrative text as acting to introduce or set the stage for the story that follows. The function of the tagmeme which this section realizes is now clear: introduction. The type of construction which fills this tagmeme might be a paragraph, and it might be located at the very beginning of the story. Thus, the tagmeme which represents this

constituent of the story has the features of introduction, filled by a paragraph in story-initial position.

At the early stages of analysis very few functional units may be recognizable. When one such unit is discovered, however, it is possible to ask at least three questions: (1) In what construction is the identified construction included? (2) What other constructions are constituents of this larger construction? (3) What constructions act as constituents of the identified construction? It may not be possible to answer all these questions, but as often as not, they lead to the identification of a few more tagmemes. As more tagmemes are identified, the questions repeat themselves, and gradually, by proceding upwards, downwards, and sideways in this manner, the constituent structure of the text is fleshed out. The final result of the analysis is a description in which the constituents are identified by their function, type, and position. The analysis may be represented by a tree diagram in which the nodes are labeled as construction types, and the branches are labeled for the function of the node to which they lead.

2.4.2. Emic Analysis

Once an etic description has been obtained, an emic analysis may be undertaken to determine the constrastive construction types. An emic analysis begins by sorting the constructions under study into groups on the basis of their structural make-up and the functions of their constituents. Constructions with the same order of constituents and having the same function associated with each constituent are placed in the same group. Any two groups contrast when their constituent structure and internal functions vary from each other. Often, it is found that

one group appears to be some sort of expansion of another group; the two groups may have a common core of constituents with the same order and functions. If the functions of the core constituents are not altered by the presence of the new constituents, the new constituents are considered optional, and the two groups are classed as one. When this sorting is completed, tagmemic formulas for each construction class can be made. Each tagmeme in a formula will be an abstract representation of one of the constructions' constituents into which features of location, function, possible fillers, and cohesion (co-occurrence restrictions) are coded.

Occasionally, systematic relationships of structure or function may be noted between contrasting classes of constructions. For example, within Swahili clause roots we see a regular pattern of verbal derivation: *kusoma* (to read), *kusomea* (to read to), *kusomewa* (to be read to). When fully inflected, each of the verb stems will form the nucleus of a clause root that contrasts with others, even though the contrasting forms are obviously related in a regular fashion. These related constructions can be seen to form a paradigm or expansion set of clause roots. Such a paradigmatic set of related yet contrasting constructions is called a hyperclass in tagmemics. It will be shown in Chapter Five that the contrasting exchange classes in the folktale form a hyperclass.

2.5. An Example of an Etic Textual Analysis

An example of an etic tagmemic discourse analysis by means of function and construction identification will now be presented. This example should amplify the points already made, provide a clearer idea of the type of information a tagmemic analysis presents, and illustrate the

various options for labeling structures and functions that arise during an analysis.

2.5.1. The Analytic Process

The first paragraph of the story will be the subject of this simple analysis. This paragraph and its translation are presented in Figure 1 (page 28). We cannot tell if it is actually a paragraph; that decision involves the contrastive analysis of construction types. It is seen that this is a paragraph-like structural unit of some kind because it is composed of sentences, and is distinct from other structures containing dialogues that follow it. Also, the sentences that comprise it all have a common purpose, to provide background information for the story. The unit appears to be an introductory paragraph for the folktale. We could say that its function is simply to provide an introduction to the folktale, but a closer look at its constituent sentence-groups allows a refinement of that functional label. These constituents express the relations between the main participants, the location of the story, and the relevant habitual actions of the participants. A more apt label for the function of this paragraph might therefore be *setting* rather than introduction. With these considerations in mind, we tentatively posit a paragraph having the function *setting* for this position in the folktale. The story has many constituents; one of them has now been isolated. It is in story-initial position, has the function (seemingly) of stating the setting, and takes the form (seemingly) of a paragraph.

We may now ask what constituents comprise this paragraph. The orthographic form of the text provides four "sentences," but detailed examination reveals that each orthographic sentence contains more than

1.1a. Aliondokea **kima**
he-went monkey
"A monkey went off"

b. **akafanya urafiki na papa.**
he-did friendship with shark
"and made friends with a shark."

1.2a. **Pana mti mkubwa,**
there was tree big
"There was a big tree,"

b. **jina lake mkuyu,**
name its fig-tree
"called a fig-tree,"

c. **umeota katika kilindi;**
it-grew at deep water
"it had grown near deep water;"

d. **matawi yake nusu yako mjini,**
branches its half over town
"its branches were half over the town,"

e. **na nusu yako baharini.**
and half over sea
"and half over the sea."

1.3a. **Yule kima kila siku kwenda akila kuyu,**
that monkey each day went eating figs
"Every day that monkey went eating figs,"

b. **na yule rafiki yake papa huwapo chini ya mti.**
and that friend his shark be-there beneath of tree
"and his friend the shark would be beneath the tree."

1.4a. **Humwambia,**
he-say-to-him
"He would say to him,"

b. **Utupie nami rafiki yangu vyakula;**
throw-to me friend my food
"Throw me some food, my friend;"

c. **humtupia siku nyingi na miezi mingi.**
throw-to-him days many and months many
"he was throwing to him for many days and many months."

FIGURE 1: Paragraph 1 of PWD Divided into Clauses and Translated

one sentence-like or clause-like unit. Because of this, each orthographic sentence here can be called a sentence cluster. The characteristic that sets each of these clusters apart is their function in the paragraph. The first sentence cluster describes participant relations; the second, the initial location of the story; the third, habitual actions of the participants; and the fourth, habitual subsequent action of the participants. Each sentence cluster in this paragraph has the role mentioned above: participant relation, location, action, subsequent action. The setting paragraph isolated earlier is now seen to have four major constituents in the form of sentence clusters, each of which has its own function.

The sentence clusters may now be examined. As seen in Figure 1 (page 28), the first sentence cluster, which functions to express participant relations, is composed of two clauses. The first clause (1.1a.) is a formulaic story opener (cf. Johnson, 1939), so it may be said to have the function *aperture* (Longacre, 1976, p. 213). The second structure (1.1b.) is an expanded clause which will be termed a sentence stem. This sentence stem functions to state the relationships between the primary participants of the story, so the function label given to this structure will be *situation* (see Figure 2, page 30).

Skipping ahead to the third sentence cluster, we find that a more complex analysis is required here. Structure 1.3a. will be called a sentence stem because it has both a main and subordinate clause. Normally each clause is considered to have its own discourse function, so the participial adverb *akila* (eating), could be taken as the purpose of *kwenda* (go). The structure of this sentence is diagrammed in Figure 3 (page 31). It is not clear, however, that *akila* functions to express

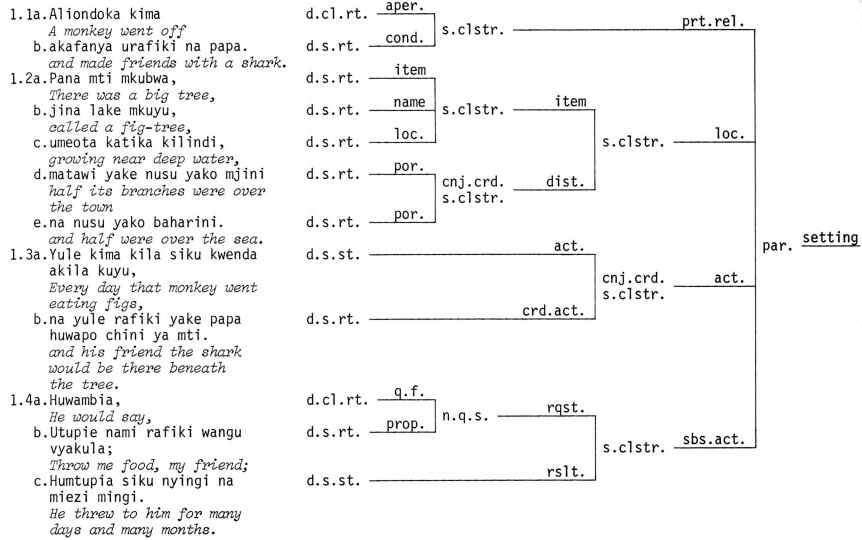


FIGURE 2: Discourse Structure for Paragraph 1 of the Folktale

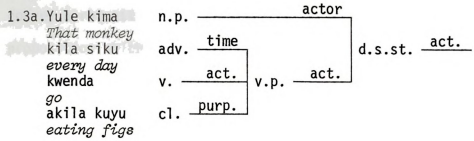


FIGURE 3: Alternative Analysis of Sentence 1.3a.

the purpose of going. *Kwenda akila* could be an idiom or a compound verb, and in that case the structure would be much simpler, the sentence stem having the function *action*. For the sake of simplicity in presentation, compound verb will be assumed here. At this point, some indeterminancy in the analysis results in an arbitrary choice being made. However, this is not the fault of the theory or method; simply more information about compound verbs in Swahili is needed to make the choice.

Sentence stem 1.3b. also expresses an action, but it is coordinated with the action of 1.3a. The function of 1.3b. will therefore be called *coordinate action*, and, since 1.3a. and 1.3b. are conjoined, the sentence cluster they comprise will be called a *conjoined coordinate sentence cluster*. The analysis is presented in Figure 2 (page 30).

Sentence 1.4. includes a quotation and a statement of the speech act's result. The quotation has two constituents, the first a clause root *humwambia* (he usually tells him), which functions to introduce the quote. This is given the functional label *quote frame*. The quote itself proposes action by the monkey, and is expressed by a sentence having a verb in the subjunctive form. This structure will be called a *subjunctive sentence stem*. The quote frame and quoted sentence form a larger sentential form which will be called a *narrative quote sentence*. In sentence cluster 1.4., the narrative quote sentence functions to

convey a request. 1.4b., a *declarative sentence stem*, functions as the proposition which realizes that request. See Figure 2 (page 30) for a diagram of this analysis.

Sentence cluster 1.2. presents more complexities, because it is tempting to interpret clauses 1.2b. and 1.2c. as non-restrictive and restrictive relative clauses, respectively. Steere's translation reads, "There was a great tree, of the sort called *mkuyu*, which grew near the deep water..." Swahili marks relative clauses in either of two ways, marking the verb with an affix, or using the relative pronoun *amba-*. In clauses 1.2b.-c., verbs carry no relative affixes, and no *amba-* forms are present. The only possibility is that the *amba-* forms have been deleted, but it is unknown here if that can be done. Given this uncertainty, a simpler course will be followed. The clauses 1.2a.-c. will be considered of equal status, the first functioning to state the existence of some *item*, the second *naming* that item, and the third specifying its *location*. Clauses 1.2d.-e. together describe the *spatial distribution* of the tree's branches, and each of these clauses states a *portion* of that distribution. Sentences 1.2d.-e. therefore form another conjoined coordinate sentence cluster. A final problem occurs when we try to decide the structural status of these four constructions within the including cluster. It is possible to consider them equals, resulting in the structure diagrammed in Figure 4 (page 33). However, the semi-colon following 1.2c. may suggest an intonational clue that 1.2a.-c. is a cluster in its own right. Functionally, this cluster would specify the *item* as opposed to the coordinate cluster which specifies the *distribution* of the item. This analysis is diagrammed in Figure 2 (page 30).

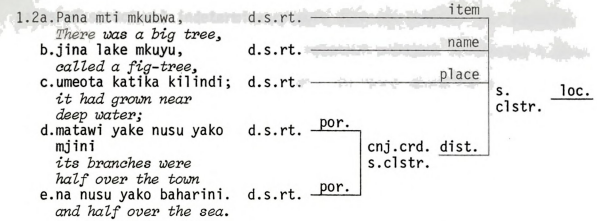


FIGURE 4: Alternative Analysis of Sentence Cluster 1.2.

2.5.2. Discussion of the Analysis

The analysis presented above is partial and incomplete. A comprehensive analysis would have determined emic (contrastive) construction types and accounted for how each construction found in the text was representative of some emic construction type. The analysis presented here is a necessary first step in that direction, and it does provide us with a fairly reliable skeleton of the grammatical structures found in that particular paragraph.

A major implication of this type of analysis is that each identified construction is the realization of some tagmeme. Thus the identification of a sentence cluster functioning to express location (1.2. on Figure 2, page 30) implies an emic paragraph type, one of whose tagmemic constituents allows location as a role, and is fillable with a sentence cluster. Each branch of the diagram implies a tagmeme which is capable of being realized by the construction type and role for which the branch is labeled.

A number of indeterminancies were noticed with respect to function labels, structural configurations, and construction labels. In the

cases of structural indeterminancy more data was needed. For example, the problem of possible deletion of relative pronouns in clauses 1.2b-c. simply needs more data for resolution. In cases where the construction type is unknown or the name of a function is not at hand, it should be remembered that the labels themselves are not important; what is important is that a structure or a function has been isolated, and can be judged the same as or different from other constructions or functions. The final assignment of labels is left to the final stage of the contrastive analysis.

3. ANALYTICAL PROBLEMS

3.1. Structural Labels

One of the problems encountered in the analysis of hierarchically structured data is that the constructions found at the different levels all require names. In this study the names assigned to sentential constructions between the clause and paragraph levels are not critical, yet a consistent and descriptive classification of these structures is needed. The following etic (descriptive) scheme will be applied to the Swahili sentences of this folktale:

1. The Swahili sentences will be classified as declarative, interrogative, or subjunctive. Interrogative sentences are marked by an interrogative suffix on the verb or a question word within the sentence. The subjunctive is marked by the suffix *-e-* on the verb. The subjunctive in Swahili is often used as a polite imperative, and as an expression of intention.
2. Four levels of sentential complexity will be posited between the clause and paragraph levels (cf. Pike and Pike, 1977). The simplest structure will be the clause root (cl.rt.) which is the verb plus various tense, agreement, and derivational affixes. For example:

Example 3.1-1.

a. akamwambia *and he told him* (declarative clause root)

b. twende *let's go* (subjunctive clause root)

The next level of complexity is the sentence root (s.rt.) which is a clause root plus subject, object, or modifying phrase. This is the basic "unexpanded" sentence which shows no embedding. In Swahili the

sentence root and clause are at the same level; because this analysis looks downward, structures at this level will be called sentence roots, although they could just as well be called clauses. Examples of sentence roots:

Example 3.1-2.

a. Ntakuleta nyama kesho. *I will bring you meat tomorrow.* (declarative sentence root)

b. Sasa twende zetu. *Let's get on our way now.* (subjunctive sentence root)

The next level above the sentence root is the sentence stem, in which two or more sentential or clausal roots are linked with some sort of grammatical device. This device may be conjunction or some dependency relation.

Example 3.1-3.

a. Ntakuleta nyama kesho tuje kule. *I will bring you meat tomorrow so we may eat.* (declarative sentence stem)

When the constituents of a sentence stem are linked by a conjunction the structure may be called a conjoined sentence stem. There is a special linked sentential construction using the *-ka-* tense which usually expresses sequential action. Constructions of this sort will be called linked sentence stems. For example:

Example 3.1-4.

a. Sungura akaondoka, akaenda mwituni, akamwona punda. *The hare left, went into the forest, and saw the donkey.* (linked sentence stem)

Finally, a sentence cluster is any group of sentential constructions which are not grammatically linked, but which have coordinated functions. For example:

Example 3.1-5.

a. Fadhili zako nyingi, nataka kwenda kwetu nikakulipe fadhili. *Your kindness is great, I want you to come to our place so that I may repay it.* (sentence cluster)

Note that orthographic punctuation cues are unreliable for determining sentence clusters. Often sentence clusters are included within orthographic sentences.

The terms dialog, conversation, exchange, and turn require brief discussion. Dialog is used here as a general term for conversation between two people. Conversation, however, is a technical term for the structure formed by one or more linked exchanges. Exchanges are the basic structural units of conversations, and consist of at least an initiating turn and a resolving turn. Turns (occasionally referred to here as utterances) are simply the speeches made by the participants.

3.2. Quoting Structures

In the original analysis of the folktale it became quite evident that the use of narrative quote sentence (n.q.s.) as quoting structures created a highly regular and predictable layer immediately below the exchange level. Paragraph two of the folktale, diagrammed in Figure 5 (page 38), is a typical illustration of this situation. This diagram shows that each turn of the exchange is filled by an n.q.s. consisting of a quote frame (q.f.) which identifies a speaker and signals the onset of a quote, and the quote (qt.) itself. Of fifty-nine narrated conversational turns in the folktale, only two did not exhibit the q.f.-qt. pattern. One turn, 9.4., reversed this sequence, while another turn, 4.4., eliminated the quote frame (see Appendix 3, page 85).

Despite the regularity of this pattern, it poses two problems. The

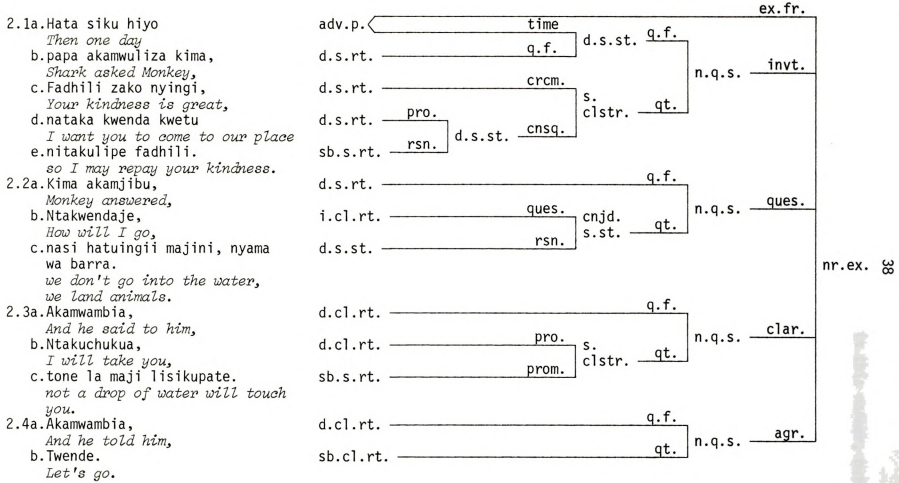


FIGURE 5: Paragraph 2 of the folktale, original analysis.

first is that not only sentences are quoted in this manner, but greater and lesser structures as well. Note in Figure 5 (page 38) that the quote in turn 2.3. is a sentence cluster, not a dependent or conjoined sentence stem. Note also that the same quote frame, *akamsambia* (and he said to him), is used to frame an adverb in sentence 8.5. and an entire monolog in sentence 7.1. This evidence would require either the establishment of classes such as narrative quote sentence clusters and narrative quote monologs, or the creation of a structure within narrated exchanges which marks the quote and labels the speaker.

Consideration of the second problem will shed further light on this choice. The second problem is that the n.q.s. analysis of Figure 5 (page 38) is totally predictable and hence inelegant. All turns in a narrated exchange are filled by an n.q.s. This regularity suggests the same alternatives as before; either the quote structures should be differentiated so a variety of structures fill the turns, or a special quoting structure used within the exchange should be created.

Because the creation of a variety of quoting structures would add considerably to the number of contrastive classes, it is desirable to opt for a quoting structure which is part of the exchange structure. This alternative gains additional support from the existence of other structures which must be included within the exchange, such as the adverbial phrase 2.1a. in Figure 5 (page 38). This phrase acts as a time frame for the entire exchange and is a 'sister' of the exchange's constituent turns. It is proposed that quote frames be considered immediate constituents of narrative exchanges, and therefore sister constituents of the quoted structures directly under the exchange node. This solution simplifies the hierarchical structure of exchanges,

eliminates the need for many additional construction classes, and helps to directly associate the function of a conversational turn with the structure that fills it. A revised analysis of paragraph two is presented in Figure 6 (page 41).

3.3. Problems with Function Labels

Two important but related problems surface during the analysis of function in discourse. One has to do with the choice of terms used for labels (what should function *X* be called?), while the other concerns the appropriateness of the label for the particular level of structure being considered. Both problems are evident in Figure 5 (page 38). Notice that the description of sentence cluster 2.1c.-e. requires labels of function at three levels. During analysis this creates a problem of choice because it is initially assumed that the function of each construction at each of the levels is different. The analyst normally asks "What does this construction do within the including construction?" but the answer is sometimes misleading. In Figure 6 (page 41), for example, it was decided that the function of sentence cluster 2.1c.-e. was 'invitation' (invt.), but careful examination will reveal that this could serve to describe the compound sentence 2.1d.-e., or even the sentence root 2.1d.

This vagueness in application of function labels relates to a problem of appropriateness of these terms to the level at which they apply. Are 'invitation' (2.1c.-e.) and 'clarification' (2.1b.-c.) appropriate functional labels for the exchange level structures? Also, can these terms be seen as members of an integrated set of functional labels for the exchange level? If such an integration is attempted these functions

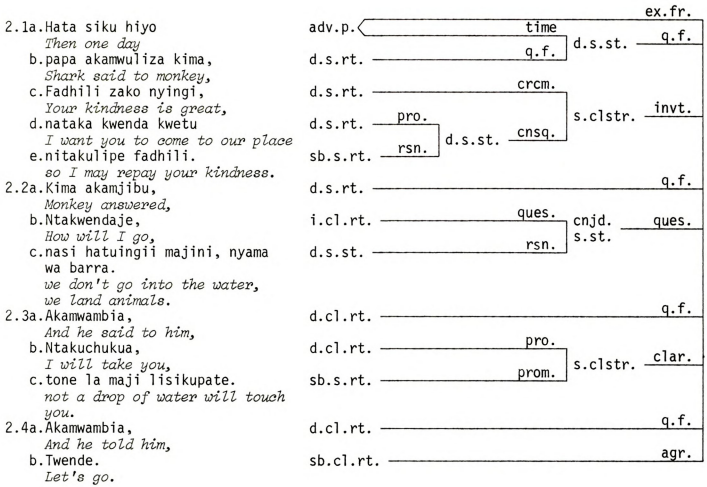


FIGURE 6: Paragraph 2 of the folktale, revised to include q.f.'s in exchange structure.

would seem rather inconsistent with the quote frame function discussed earlier. This problem of consistency and appropriateness of function labels at a given level can only be solved by detailed analysis of function at specific levels of the grammatical hierarchy. Such work has been done by Hale (1974) at the clause level; Sterner, Suharno, and Pike (1976) for sentence clusters; and by Longacre (1976) for conversational exchanges. Longacre's treatment of exchange level structure and function is based on a large amount of work done on Philippine and Mesoamerican languages, and has general applicability to other languages. A modified set of his exchange level function labels will be used in this analysis. The following sections will describe and critique Longacre's treatment of exchanges and explain why certain modifications were made to the scheme.

3.4. Longacre's Analysis of Exchanges

3.4.1. Longacre's Deep and Surface Structures

Longacre (1968, 1976) made a significant departure from Pikean tagmemics when he adapted the terms deep and surface structure to describe the relations of slots to each other and functions to each other within a hierarchy. This proposal has caused considerable discussion among tagmemicists, but it is fair to state that Longacre's surface structures correspond to Pike's slots, while his deep structures correspond at least in part to Pike's roles (functions)(Brend, personal communication, 1979). The significant difference between these approaches is that Longacre allows the separate analysis of functional relations and structural relations, whereas the latest version of Pikean tagmemics has structure and function inextricably bound together. For Longacre, structural and functional relationships are generally congruent, but may

be 'out-of'phase' at certain points.

This paper attempts to justify the Pikean model, but Longacre's well developed set of function labels for exchanges will be borrowed with certain modifications. Justification for these changes will be made in the critique of Longacre's analysis of exchanges given in section 3.5.

3.4.2. Terminology for Exchange Structure and Function

Longacre (1976) provides a set of labels for both structure and function in conversational exchanges. His structural labels include initiating utterance (IU), resolving utterance (RU), continuing utterance (CU), and terminating utterance (TU). An initiating utterance opens an exchange, while a resolving utterance closes or at least resolves the issue brought up within the exchange. A continuing utterance is a structure which extends an exchange by failing to resolve the previous utterance and forcing the other participant to make a resolving utterance. A terminating utterance closes an exchange after it has been resolved. TU's are often optional. The exchange analyzed in Figure 6 (page 41) illustrates these four slots. The first turn (2.1c.-e.) is an initiating utterance in which an invitation is presented. The second turn is a continuing utterance because it fails to resolve the IU and causes the other participant, in this case the initiator of the exchange, to resolve a new issue. The third turn in this exchange is the resolving utterance since the issue raised in the previous turn is settled here. The final turn is the terminating utterance since it closes the exchange by signaling agreement on the resolved issue.

Longacre's terms for function (deep structure) form a small but

very useful set which is organized according to which turn (IU, CU, or RU) the function applies. Initiating utterances may take three basic functions: proposal, question, and remark. Proposals (pro.) are utterances which ask or suggest some action on the part of one of the exchange's participants. Under this term are included utterances which act to advise, suggest, invite, plan, threaten, request, or command. Questions (ques.) ask for information, but are not considered to be proposals. Utterances which have an interrogative form, but which function to request some action function as proposals, not questions. Remarks (rem.) function as statements or declarations which the hearer may comment upon. Remarks do not request action or information.

Resolving utterances have their own set of functions each of which corresponds to a function listed for initiating utterances. Resolving functions include answer, response, and evaluation. Answers resolve questions, responses resolve proposals, and evaluations resolve remarks. These functions may be used in terminating utterances as well, although TU's may also express acquiescence (acq.) or rejection (rej.). In Figure 6 (page 41) the IU (2.1.) functions as a proposal, the RU (2.3.) functions as an answer to a question put forth in the previous turn, and the TU functions as acquiescence.

Continuing responses act to let a participant in a position to resolve an exchange prolong it by countering the preceding utterance in some manner. The three functional labels for utterances which do this are the counter-question (c.ques.), counter-proposal (c.pro.), and counter-remark (c.rem.). The definitions of these functions are the same as they were for the IU's except that their use is directed towards the purpose of 'countering.' The function of a CU need not counter the

same type of function in the preceding utterance. In Figure 6 (page 41), for example, the second turn (2.2.) is a CU functioning as a counter-question, although the preceding turn is an IU functioning as a proposal. Figure 7 (page 46) shows the structure of paragraph two relabeled with Longacre's terms for exchange slot and function. Slot names, where used, are indicated in parentheses below the branch line.

3.4.3. Exchange Types

Longacre's labels for the different turns in an exchange and their possible functions enable him to present an insightful discussion of exchange types. What he calls a simple exchange is the most basic type of dialog, and IU-RU turn sequence. Sentences 8.4. and 8.5. of the folk-tale provide an example of a simple exchange in which the rabbit schemes with the lion to get some meat:

Example 3.4.3-1.

8.4. rabbit: I'll bring you an animal tomorrow so that we may both eat. (IU, pro.)

8.5. lion: Good. (RU, resp.)

In some cases a simple exchange may allow an optional terminating utterance. Consider this translation of an exchange between the rabbit and the lion:

Example 3.4.3-2.

12.1. rabbit: Well lion, did you get her? (IU, ques.)

12.2. lion: No I didn't. She hit me with her hoofs and ran away, and now I have many bruises because of my lack of strength. (RU, ans.)

12.3. rabbit: Sorry to hear that. (TU, eval.)

The TU is optional because the exchange seems resolved with or without it. The general pattern of simple exchanges may be formulated as:

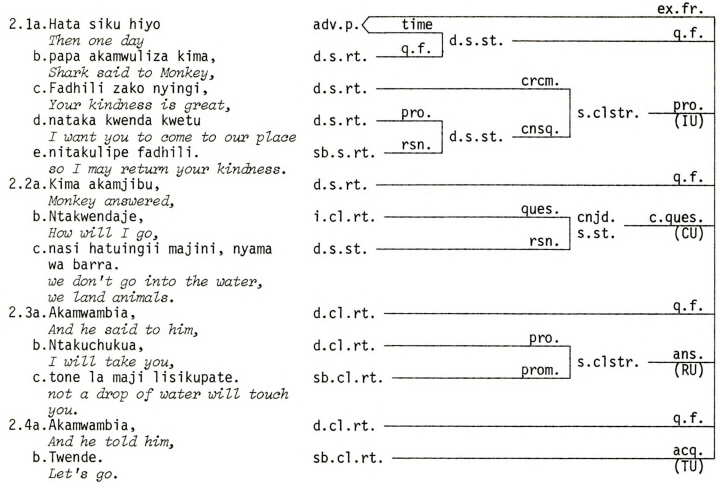


FIGURE 7: Paragraph 2 relabeled for Longacre's slots and functions.

simple exchange = +IU +RU $\pm$TU

An exchange that contains one or more continuing utterances is a complex exchange. The rabbit's proposal to the donkey can serve as an example of this type of exchange:

Example 3.4.3-3

9.2. rabbit: I have been asked to come here to propose to you. (IU, pro.)

9.3. donkey: By whom? (CU, c.ques.)

9.4. rabbit: By the lion. (RU, ans.)

9.5. donkey: Well, let's go. (TU, acq.)

As in the case of simple exchanges, the terminal utterance may or may not be used. The general formula for a complex exchange will be:

complex exchange = +IU $+CU^{n}$ +RU $\pm$TU

Longacre also notes that exchanges may be linked together to form compound dialogs. In this paper, such compound dialogs are considered conversations. In compound dialog exchanges are linked together when one exchange is resolved and a new one about the same or related topic is initiated. In its simplest form a compound dialog is a series of exchanges concerning the same topic. Here is a hypothetical example from English:

Example 3.4.3-4.

EX_1 A: Where's my book? (IU, ques.)

B: You left it on the table. (RU, ans.)

EX_2 A: If I had cleaned up last night I would have seen it. (IU, rem.)

B: Well, it was Jane's turn to clean. (RU, eval.)

There are more complex ways in which exchanges may be linked, but Longacre does not mention them. These complex linkages involve the

sharing of constituents between exchanges. Linkage accomplished by sharing constituents is very common in the folktale, and will be discussed at length in sections 4.3. and 5.4.

3.4.4. Out-of-Phaseness

Longacre coined the term "out-of-phase" to describe situations in which the relations between functions in a dialog do not coicide with the relations between grammatical structures. This situation arises when a grammatical structure has more than one function relative to its including constructions. The following English example, patterned after one presented by Longacre, demonstrates this:

Example 3.4.4-1.

1. A: Would you please move that box over there? (IU, pro.)
2. B: Sure boss, could Fred help me? (CU, res./pro.)
3. A: Don't strain yourselves; use the forklift. (CU, pro./pro.)
4. B: Thanks. (RU, resp.)

The second and third turns in this exchange have dual functions. In the second turn, the speaker both responds to the original proposal "sure boss..." and makes a counter-proposal "...could Fred help me?" In the next turn Speaker A counters this by saying, "Don't strain yourselves..." and then makes a new proposal "...use the foklift."

The following chart adapted from Longacre (1976) illustrates why he describes such structures as being out of phase:

Example 3.4.4-2.

	Surface		Deep
1.	A: IU	-	pro.
2.	B: CU	-	resp. / c.pro.
3.	A: CU	-	c.pro. / pro.
4.	B: RU	-	resp.

These three naturally formed pairs of deep structure relations are indicated by the square brackets, and they are incongruent with the four surface structures. This is one of the reasons why Longacre separates deep structure (relations between functions) and surface structure (relations between grammatical units).

Example 3.4.3-2. may be reanalyzed to show an out-of-phaseness similar to that of example 3.4.4-1. In this case, the RU (12.2) is analyzed as carrying two functions, answer and remark:

Example 3.4.4-3.

12.1. rabbit: Well lion, did you get her? (IU, ques.)

12.2. lion: No I didn't; she hit me with her hoofs and ran away, and now I have many bruises because of my lack of strength. (RU, ans./rem.)

12.3. rabbit: Sorry to hear that. (TU, eval.)

Multiple function such as this is common in the folktale. Out-of-phaseness, together with the linkage shown in the previous section contributes to the complexity of exchange structure in the folktale. Longacre points out that out-of-phaseness makes dialog seem "effective" and suggests that discourse of literary quality may demand such structure rather than tolerate it. Perhaps this greater effectiveness is due to a greater load of functional information carried on each structural unit.

3.5. Critique of Longacre's Treatment of Exchange Structure

Longacre's treatment of dialog structures and functions is both simple and elegant. His function labels are few in number, yet appropriate and comprehensive for the exchange level. His analysis of dialog is straightforward and gives us insight into dialog structure and function. Despite the importance of his contribution, Longacre's treatment of dialog is subject to at least two criticisms from a Pikean viewpoint. First is that his analysis fails to accurately associate the function of a particular utterance in a dialog with the structure within that utterance which serves that function. Second, the purported existence of out-of-phase (incongruent) relations between deep and surface structures seems to represent an anomaly, since such structures appear to be "in-phase" at all the lower levels.

3.5.1. Loss of Detail

The first problem of Longacre's analysis of exchanges is that functions are not clearly associated with particular structures in cases where a complex filler of a turn is analyzed as having more than one function. This situation can be called loss of detail, and it is clearly illustrated by example 3.4.4-1. Turns two and three of this example each have two functions. This suggests that the fillers of these turns each have two functions. Taken as whole entities, these two structures do have two functions apiece. However, we notice that each filler is a complex unit. Turn two is a sentence consisting of a phrase of agreement followed by an interrogative clause, while turn three is a sentence cluster consisting of two imperative clauses. It is clear that each of these constituents is associated with one of the exchange

functions. "Sure boss..." functions as a response to the proposal in turn one, while "...could Fred help me?" is a counter-proposal. "Don't strain yourselves..." is the counter-proposal in turn three, while "...use the forklift," is the new proposal.

When complex fillers of conversational turns are examined, we find that many of the sub-constituents can be labeled for a function different from that of the entire utterance. Often, an answering utterance may be prefaced by a rhetorical question, or a responding utterance may include a remark. Noting the functions of the constituents of a complex filler of an exchange may yield important information about the construction's internal structure and linkage to other exchanges. Longacre's analysis, however, does not permit a sufficient amount of detail to make this evident. Given the potential usefulness of this functional detail for the study of such things as linkage between exchanges, it is surprising that Longacre allows the loss of so much of it. This loss of detail may account for why he mentions only the simplest type of linkage between exchanges.

3.5.2. A Problem with Out-of-Phaseness

A second criticism of Longacre's treatment of exchanges concerns his demonstration that deep and surface structures may be "out-of-phase" or incongruent with each other. Out-of-phaseness is interesting in its own right, but it is also important for Longacre's theory insofar as it helps demonstrate the necessity for the separate treatments of deep and surface structures. It was an apparent "out-of-phaseness" between phonological and grammatical structures that stimulated Pike to explore the notion of having separate hierarchies in his theoretical treatment

of language.

Out-of-phaseness is therefore known and accepted within tagmemics. However, Longacre's out-of-phaseness appears only at the higher levels of discourse, the exchange level and above. The question is why doesn't it appear at lower levels also? It seems inconsistent to find this phenomena occurring only above a certain level. The view taken in this study is that a more detailed analysis of the associations between structures and functions will eliminate the need for out-of-phaseness. The following section proposes a minor revision of Longacre's scheme which allows for a more detailed analysis.

3.5.3. Modifications to Longacre's Scheme

Two problems with Longacre's analysis of exchanges have been raised. The first is that details of function within the exchange may be lost, while the second is that out-of-phaseness occurs only at the highest levels. A minor modification of Longacre's scheme will now be proposed to help alleviate these problems for the initial etic description of exchanges in this folktale. This proposal is to apply Longacre's functional labels to any relevant structure or sub-structure within an exchange. This will allow a complex filler and its constituents to be labeled for exchange function. Figure 8 (page 53) presents paragraph two of the folktale reanalyzed in this manner. It should be stressed that this modification is made to improve the etic description of the exchanges; the emic analysis will reduce the detail to those elements responsible for contrast. The enhanced etic analysis will, however, permit an emic analysis which preserves any necessary detail and captures functional relationships without divorcing them from structure.

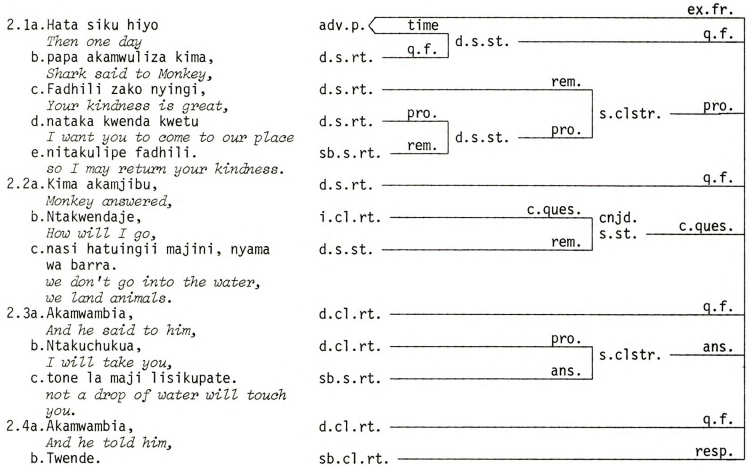


FIGURE 8: Etic analysis of paragraph 2 using modifications to Longacre's scheme.

A second minor modification will be to eliminate the use of slot names (IU, RU, CU, and TU) in this analysis. The reason for this is that identification of slot names has no effect on the emic or etic analysis. Slots are easily identified by their position and nuclearity feature. On a chart they can be easily numbered. Slot names often have functional overtones, and confusion over slot and functional labels may result. In Figure 8 (page 53) slots are identified only by their spatial distribution in the graphic display; slot labels are not used.

4. ETIC ANALYSIS OF EXCHANGES IN KISA CHA PUNDA WA DOBI

4.1. Etic Diagrams for Story and Exchanges

An etic description of the folktale's upper-level discourse structure is presented in Chart 1 of Appendix III. This chart diagrams the folktale down to the level of conversation and paragraph, and clearly shows the embedding of one story within the other. Names for the constructions and many of the functions have been adapted from Pike and Pike (1977), while the remainder of the functions have been borrowed from Longacre's discussion of plot structure (1976). The numbers at the terminal nodes correspond to numbered paragraphs of the story's text.

Examination of the etic charts of the folktale's exchanges prompts several general remarks. First, two-thirds of the exchanges in this story are linked to other exchanges. Two exchanges are said to be linked when they relate to similar topics and are juxtaposed. Linked exchanges from what Longacre calls a compound dialog, and a compound dialog forms at least a part of a conversation. Unlinked exchanges are, for the most part, embedded within paragraphs. Node 3 of the story (Appendix III) illustrates a typical linked exchange cluster, while Node 2 typifies the unlinked exchange.

Another observation is that fifteen of the twenty-two exchanges in the story make use of continuing utterances, and may therefore be considered complex under Longacre's scheme. Node 2 is a typical complex exchange. Complex exchanges are often linked together to form compound dialogs. Node 6 provides an example of this.

Within exchanges are structures similar to quote frames which describe time, place, or action at some point in the exchange, usually the onset. When such structures do occur at the beginning of the exchange

the action expressed **functions** to set up or frame the exchange; hence such structures are called exchange frames. Although these structures function directly in the narrated exchange, they are often grammatically linked or subordinated to other structures in the exchange. In this case the filler of the exchange frame will have dual functions, one function as the exchange frame, and the other specific to the structure in which the frame is included. Node 2 illustrates an exchange frame with dual functions. Other examples of exchange frames are found in Nodes 3, 6, 12, 14, 15, and 17.

4.2. Exchange Linkage

Longacre's discussion of dialog types mentions compound dialogs which are formed by a series of linked exchanges (1976). The nature of linkage is not discussed by Longacre, but his examples show us exchanges which are placed side by side with no device other than position acting to link them. Linkage of this sort, which I shall call conjunctive linkage because the linkage is realized by placement, is seen in Node 4 of the folktale.

The structural and functional detail made possible by the analytic changes proposed in the previous chapter allow us to observe other types of linkage between exchanges. These additional means of linkage occur when a quoted utterance (or part of one) functions in two exchanges rather than only one. For example, it is possible for an utterance to simultaneously resolve one exchange and initiate another, as the fragment of Node 6 diagrammed in Figure 9 (page 57) shows. Notice that sentence 6.11. resolves the previous exchange by answering the shark's question (6.10.), but also stimulates the shark to pursue the topic by

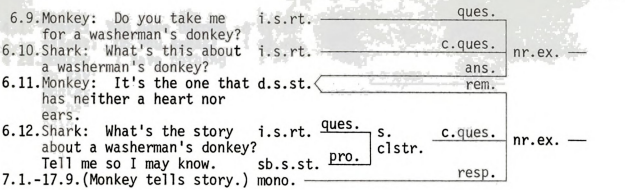


FIGURE 9: Shared Linkage

asking another question (6.12.). Sentence 6.11. therefore has a dual function in the discourse, and links two exchanges together. A situation like this, in which the construction is shared in its entirety between two exchanges, will be called linkage via a shared constituent, or shared linkage.

Another type of linkage found in this etic analysis is similar but not identical to shared linkage. An example found in Node 4 is presented in translation Figure 10A (page 58). In this case only part of a construction (sentence cluster 4.2.) is shared between exchanges, so this type of linkage will be termed linkage via a partially shared constituent, or partially shared linkage. There are three instances of partially shared linkage in the folktale, and the constituent which is partially shared is always a sentence cluster (sentence clusters 4.2., 4.7., and 17.4.). Sentence clusters and other sentential types may participate in shared linkage also. The three types of linkage are presented schematically in Figure 11 (page 59).

The effect of linkage is to make the linked exchanges appear to overlap each other. Overlap of this sort is tolerated and expected by tagmemicists, since it does not effect the emic analysis. This overlap

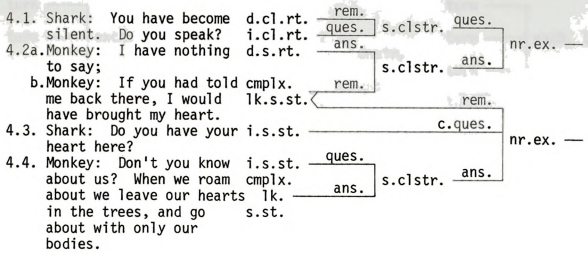


FIGURE 10A: Partially Shared Linkage

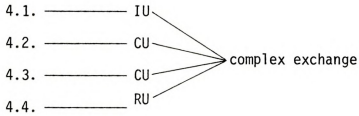


FIGURE 10B: Exchange 4.1.-4. Surface Structure (Longacre's Model)

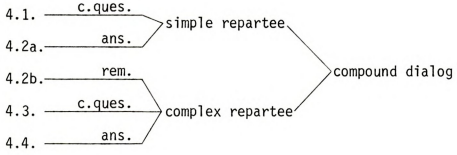


FIGURE 10C: Exchange 4.1.-4. Deep Structure (Longacre's Analysis)

is accounted for as a manifestation of the wave-like properties of language (Pike, 1967, 1977).

Much of what Longacre would call out-of-phaseness can be accounted for here by overlap due to the types of linkage mentioned. For

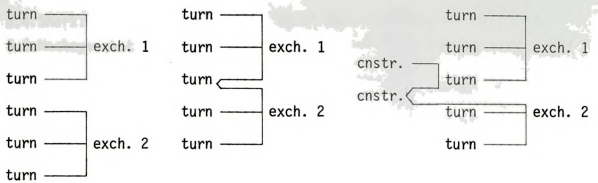


FIGURE 11: Types of Linkage

example, exchange 4.1.-4. (Figure 10A, page 58) would have to exhibit out-of-phaseness in Longacre's model. This out-of-phaseness can be seen in Figures 10B and 10C (page 58), which present the surface and deep structures of this exchange as Longacre would analyze them. The deep and surface structures are not identical in this example, and are therefore out-of-phase. (Note also that the deep structure analysis of Figure 10C, page 58, fails to treat sentence 4.2. as a whole entity.)

In contrast to this analysis, the analysis which produced Figure 10A (page 58) used the revised scheme in which function may be associated with structure at any level. (Recall that Pike's revised tagmemics requires structure and function to be bound together.) We see that sentence 4.2. can stand alone as an answer to the initiating question, but that part of it, complex linked sentence stem 4.2b., can be viewed as acting to stimulate the next utterance, and hence functions as an initiating remark for a new exchange. Thus, using the revised analytical method we obtain two exchanges which are linked together by a shared constituent, and which have their structures and functions totally in phase. Increased analytic detail allows us to view the exchange linkage

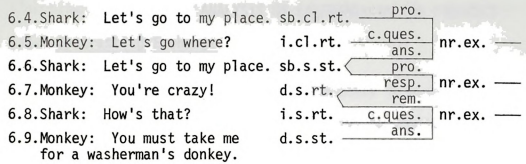


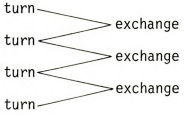
FIGURE 12: Structural Out-of-Phaseness

clearly, without the need to call on out-of-phaseness.

4.3. Structural Out-of-Phaseness

The apparent structural overlap caused by shared linkage gives rise to an interesting juxtaposition of hierarchical structures which can be called structural out-of-phaseness. This type of out-of-phaseness is quite different from Longacre's out-of-phase deep and surface structures because it does not result from discrepancies between functions and associated structures. Instead, structural out-of-phaseness results when all the constituents of one exchange are constituents of other exchanges as well. This can happen when the constituents of a simple (two turn) exchange are shared with the preceding and following exchanges, as happens with exchange 6.6-7., shown in Figure 12 above. The sharing of fillers between exchanges causes what can be described as out-of-phaseness between the exchanges and their fillers. This situation is illustrated schematically in the following example:

Example 4.3-1.



5.1. Contrasting Exchange Types

An emic analysis is essentially a process in which constructions of a given level are grouped together according to similarities in their functional and structural configuration. Groups of constructions which differ with respect to two or more structural or functional features are said to contrast with each other, and every contrasting group is called an emic class. Table 1 (page 63) presents the results of such an analysis for the exchanges in the folktale. The groupings shown in Table 1 are based on the function of particular exchange slots. Exchanges with the same number of turns and the same function for each turn were placed in the same class.

This table shows that the twenty-one exchanges found in the folktale may be grouped into eleven contrasting classes. Of the eleven contrastive classes, six were represented by only one example. This is expected with a small corpus. The other classes had multiple examples, the maximum number being five for the normal proposal exchange.

The functional relations between constituents of constructions within a particular emic class are unique for that class (Pike and Pike, 1977). Examination of the classes proposed in Table 1 bears this out. In the three simplest classes, the normal remark (1), normal proposal (5), and normal question (11), there are three unique pairs of function, remark-evaluation, proposal-response, and question-answer. In each case the last utterance serves to resolve the first.

Classes seven and eight represent complex exchanges in which the last-resolving-first functional pattern also holds. In these cases the response to an initial proposal is given only after some clarifying

discussion. Example 5.1-1. illustrates this pattern clearly for Node 2 (paragraph 2). The monkey's final utterance, "Let's go," functions as a response to the shark's original proposal. The intermediary turns serve to clarify the proposal.

Example 5.1-1.

2.1.Shark: Your kindness is great. I want you to go to my place so that I may repay your kindness.

2.2.Monkey: How will I go? We animals of the land don't go into the sea.

2.3.Shark: I will take you. Not a drop of water will touch you.

2.4.Monkey: Let's go.

Exchanges in which the first utterance is resolved will be called resolved exchanges. Actually, all exchanges (except class four which is a special case) have resolving utterances of some sort, but it is not always the initiating utterances which are resolved. Classes 1, 5, 7, 8, and 11 contain resolved exchanges.

Exchange classes 2, 3, 6, 9, and 10 represent unresolved exchanges because their initial utterances are not resolved. The resolving utterances in these exchanges relate to the second or third turns. Example 5.1-2. illustrates this point for exchange 4.2.-4. The initiating remark made by the monkey about bringing his heart is never evaluated by the shark. This evaluation might have said something like, "Yes indeed, I'm sorry I forgot to tell you." Instead, the shark presents a counter-question, "Do you have your heart here?" which is resolved in the final turn by the monkey's answer.

No.	Description	Configuration				Examples
1	sim.rslvd.rem.	rem.	eval.			3.4.-5.
2	exp.unrslvd.rem.	rem.	ques.	ans.	(eval.)	4.2.-4., 6.7.-9., 6.9.-11., 17.4.-9.
3	exp.unrslvd.rem.	rem.	pro.	resp.		6.11.-M.
4	special case	rem.	ques.	eval.		3.5.-7.
5	sim.rslvd.pro.	pro.	resp.	(eval.)		6.6.-7., 4.7.-9., 13.2.-3., 15.3.-4.
6	exp.unrslvd.pro.	pro.	pro.	resp.		3.2.-4., 4.5.-7.
7	exp.rslvd.pro.	pro.	ques.	ans.	resp.	2.1.-4., 9.3.-7.
8	exp.rslvd.pro.	pro.	rem.	eval.	resp.	14.3.-6.
9	exp.unrslvd.pro.	pro.	ques.	ans.		6.3.-6.
10	exp.unrslvd.pro.	pro.	ques.	ques.	ans.	17.1.-4.
11	sim.rslvd.ques.	ques.	ans.	(eval.)		4.1.-2., 12.1.-3.

TABLE 1: Emic Exchange Classes

	simple	expanded
resolved	1, 5, 10	7, 8
unresolved		2, 3, 6, 9, 10

TABLE 2: Classification of Emic Exchange Classes

Example 5.1-2.

4.2.Monkey: Because you didn't tell me back there I didn't get to take my heart.

4.3.Shark: Do you have your heart here?

4.4.Monkey: Don't you know about us? When we roam about we leave our hearts in the trees, and roam with only our bodies.

Even though exchange 4.2.-4. has been labeled unresolved, sentence 4.4. is an answer which resolves the question put forth in sentence 4.3. Sentences 4.3.-4. appear to represent a resolved question exchange that is embedded within exchange 4.2.-4. Example 5.1-1. displays a similar situation because sentences 2.2.-3. are seen to form a resolved question exchange inside of the resolved proposal. The data therefore indicate

that exchanges may be embedded within exchanges in this instance of Swahili narrative. Embedding of exchanges within exchanges was briefly discussed by Longacre in connection with clarification dialogs (1976). Exchanges that exhibit embedding will be called expanded exchanges. Those which are not expanded will be termed simple exchanges.

Table 2 (page 63) presents a matrix showing the assignment of these newly coined exchange features to the emic classes derived from the data. No exchange is assigned to the simple unresolved quadrant because such an exchange would not be an exchange at all; it would be a single utterance. Emic class four was not included in the matrix because its resolving turn (3.7.) is not spoken but thought by the monkey, and functions as a link between two conversational sequences.

The prospect that exchanges in this folktale allow other exchanges to be embedded in them considerably alters our view of functional relations within expanded exchanges. Counter-functions as proposed by Longacre are no longer necessary in this analysis because the entire embedded exchange functions to counter the initiating utterance. In resolved exchanges, the relation between the initiating utterance and its resolving utterance will be much more explicit, since they will be clearly paired at the same structural level in the diagram. The general pattern of exchanges becomes initiation, optional expansion, and resolution, in which the initiation and resolution have their normally paired functions, and the embedding functions to counter the initiating utterance.

The diagram of Node 2 in Appendix 4 presents an emic reanalysis of paragraph two as an example of this altered view of functional relationships. Because sentences 2.2.-3. are interpreted as forming an embedded exchange, the diagram appears more complex than its etic counterpart

(Node 2, Appendix 3). Node 3 is classified as an expanded resolved proposal exchange (class seven) while its embedded exchange is classified as a simple question exchange (class eleven). The function of the embedded exchange is countering, but within this exchange the normal question-answer function sequence is observed. The matrix proposal exchange maintains the normal proposal-response function sequence.

5.2. <u>Emic Exchange Classes as Forming a Hyperclass</u>

The embedding of exchanges within other exchanges suggests that the contrastive exchange classes may be interrelated in some systematic way. It seems that any of the three basic exchange types (rem., pro., and ques.) are expandable by exchanges of any type, and if an exchange is expanded, it may be resolved or unresolved. The folktale's proposal exchanges illustrate this principle, although incompletely. We observe that a proposal expanded by a question may be resolved or unresolved (classes seven and nine respectively). If we posit that the second slot in an exchange is fillable by an optional exchange, we can propose the following tagmemic formula:

Exchange =	+	init.	etc. s.rt.	±	exp.	exch.	±	reso.	etc. s.rt.
		rem. pro. ques.	1.		cntr.			eval. resp. ans.	>1.

This formula is generalized, because three are actually necessary, one for each proposal, remark, and question exchange. A cohesion rule is necessary to insure that a resolving utterance is present if the expansion option is not taken.

Table 3 (page 66) lists the possible expansions of the three basic exchange types down to one level of embedding. Of twenty-one possible

	sim.rslvd.	exp.unrslvd.	exp.rslvd.
rem_1	$eval_1$(1)	rem_2-$eval_2$ pro-resp(3) ques-ans(2)	rem_2-$eval_2$-$eval_1$ pro-resp-$eval_1$ ques-ans-$eval_1$
pro_1	$resp_1$(5)	rem-eval pro_2-$resp_2$(6) ques-ans(9)	rem-eval-$resp_1$(8) pro_2-$resp_2$-$resp_1$ ques-ans-$resp_1$(7)
$ques_1$	ans_1(11)	rem-eval pro-resp $ques_2$-ans_2(10)	rem-eval-ans_1 pro-resp-ans_1 $ques_2$-ans_2-ans_1

TABLE 3: Possible Expansion Sets of Exchange Hyperclasses (parenthetical numbers indicate emic class in data)

expansions, ten are represented in the folktale. Absence of certain expansions from the data may be due to the limited corpus or some restriction in the language, but the cause cannot be determined from the present data. However, the data suggest the conclusion that the contrasting exchange classes represent members of the expansion set of three basic exchange types. Such an expansion set would be similar to a grammatical paradigm, and is called a hyperclass in tagmemics. The evidence is strong enough to suggest the organization of exchanges into a hyperclass, but not plentiful enough to set limits on expansion with confidence.

For example, the hyperclass of possible proposal exchanges is represented by the middle row of Table 3 above (to one level of embedding). The simplest proposal exchange is pro_1-$resp_1$. A more structurally complex group of proposal exchanges is the unresolved expanded group. Here a proposal is followed by an embedded exchange which may be of any type,

remark, proposal, or question. The possible patterns are: pro_1-rem-eval, pro_1-pro_2-$resp_2$, and pro_1-ques-ans. The latter two patterns are found in the folktale, but the first is not. The most structurally complex proposal exchanges are the resolved expanded type. These have a proposal, embedded exchange, and a response. The possible expansions are: pro_1-rem-eval-$resp_1$, pro_1-pro_2-$resp_2$-$resp_1$, and pro_1-ques-ans-$resp_1$. The first and last of these patterns are represented in the data.

As a final note, class ten, represented by sentences 17.1.-4. of the folktale, show two levels of embedding. The initial proposal is countered by a question, thereby introducing an embedded exchange. This embedded exchange is countered by another question exchange, which represents the second level of embedding. This lowest-level exchange is resolved by an answer, leaving the upper two unresolved. (See Node 17, Appendix IV.)

5.3. Emic Exchanges in the Structure of the Folktale

Appendix IV presents each exchange of the folktale diagrammed accordint to its emic structure. Because the emic analysis presented in the previous two sections altered the view of functional relationships within exchanges, the emic diagrams significantly differ in appearance from the etic diagrams presented in Appendix III. The emic diagrams appear more complex with more structural levels because of frequent embedding.

The analysis presented in Appendix IV permits the total of function labels for exchange roles to be reduced in number from nine to seven, because counter-remarks, etc., are no longer needed. This is not to say, however, that counter-functions are of no use in etic analysis or that they will never be found in an emic analysis of exchanges in other

texts or other languages. The analysis of this data simply allows these terms to be set aside.

5.4. Exchange Structure and Linkage Type

Given that many exchanges in the folktale are unresolved, and that many of the exchanges were linked together in a variety of ways to form complex conversational structures, the question of what relation exchange structure bears to linkage type naturally arises. For example, we might suspect that linkage is what causes exchanges to be unresolved, and thereby hypothesize that unresolved exchanges will always be linked to other exchanges.

Table 4 (page 69) throws some light on this question. The evidence which it presents leads us to reject the hypothesis that unresolved exchanges are always linked, since there are two instances of independent unresolved exchanges. Data in the table indicate that all structural exchange types may occur independently (unlinked). However, it is clear that not all exchange types are linked to other exchanges, for there are no instances of resolved expanded exchanges being linked to other exchanges.

It is difficult to explain this observation, other than to suggest that resolved complex exchanges are large paragraph-like structures that are complete in themselves. As such, they are perfectly suited to stand independently. However, there is no good reason why they could not be linked. All of the construction classes which fill the resolving slots of these exchanges are capable of being shared, and conjoined linkage places no demands on internal structure.

An interesting pattern between type of linkage and type of structure

	indp.	cnjd.lk.	p.s.lk.	sh.lk.
rslvd.sim.	5	0	1	2
rslvd.exp.	3	0	0	0
unrslvd.exp.	2	1	2	4

TABLE 4: Exchange Structure vs. Linkage Type

	s.rt.	s.st.	s.clstr.
shared	3	3	0
partially shared	0	0	3

TABLE 5: Type of Linkage vs. Structure Linked

shared is revealed in Table 5 above. It is observed that shared linkage always involves sentence stems or sentence roots, but never clusters, while partially shared linkage always involves sentence clusters, but never stems or roots. The data is too limited to suggest anything but a trend in this direction, and it is difficult to explain why this pattern should occur. The pattern of partial sharing is perhaps the easier to explain, because we may expect the more tightly bound constituents of sentence stems and roots to be available for sharing on an all-or-nothing basis. The constituents of a sentence cluster are likely to be able to stand independently, so the cluster might be "broken" more easily. It is more difficult to explain why sentence clusters are not shared in their entirety. Perhaps their large size has something to do with it, but it would not be surprising to find a sentence cluster being shared in some other text.

5.5. Normal vs. Non-normal Class/Function Relationships

In language, we normally expect units which perform a given function to take a particular form. In English, for example, sentences which express questions are expected to contain interrogative clauses, while commands take imperative clauses. When a function is performed by the type of structure we expect to do that job, a normal class-function relationship is said to exist. Occasionally, a function is performed by a structure which does not normally do that job. For example, the interrogative clause "Could you close the window?" performs the function of the imperative "Close the window, please." In such cases a non-normal class-function relation exists.

The correlation between function and class is important to tagmemicists, and Pike and others have given the topic a good deal of attention (Pike and Pike, 1977). Very little work of this sort has been done at the higher levels of the grammatical hierarchy, although some off-norm variation between class and function is expected. Table 6 (page 71) was constructed to provide a brief view of normal versus non-normal relations at the exchange level of this folktale.

Table 6 (page 71) is a matrix which shows the frequency with which each of the six exchange functions is associated with the three basic sentence classes used in the etic analysis. Because these sentence classes are not emically refined any inferences drawn from the table must be viewed as tentative. Most assignments of normal class-function relations were modeled after what might be expected for English. All of the exchange functions had the declarative assigned as their normal form except for question, which was assigned the interrogative. In

	dec.	sb.	int.
rem.	17	4	1
eval.	5	-	-
pro.	14	6	1
resp.	5	4	-
ques.	-	-	17
ans.	7	1	1

TABLE 6: Normal vs. Non-normal Class/Function Relations

addition, the subjunctive was allowed for proposal because the subjunctive is often used for making requests, suggestions, and imperatives in Swahili.

Table 6 above shows that the normal class-functions relations within exchanges turn out to be largely as they were expected. Only fourteen percent of the utterances were off-norm. The largest proportion of off-norm utterances involved responses in the subjunctive. Examination of response turns in the folktale reveals that many proposal exchanges were resolved by a subjunctive clause root. Node 2 is typical of this because the shark's invitation is finally resolved by a *twende* (let's go), a clause root with a subjunctive suffix. Perhaps the subjunctive should also be considered a normal form for response turns in Swahili exchanges.

6. SUMMARY AND CONCLUSIONS

6.1. Summary

This thesis has performed two tasks, the first being to account for the structure of conversational exchanges in a Swahili folktale using Pike and Pike's revised tagmemic theory (1977), and the second to show that complex exchange structure can be analyzed without recourse to the notion of out-of-phaseness between structure and function.

The first two chapters provided background for this study: overviews of discourse analysis, tagmemic theory, and Swahili literature and culture. Chapter Three discussed some problems that occurred in the initial analysis of the folktale. These problems involved the terminology used to describe tagmemic function and the use of narrative quote sentences to act as turn fillers. Arguments were presented in favor of abandoning the narrative quote sentences and placing quote frames directly within exchange structure. Longacre's (1976) treatment of exchange structures and functions was described and criticized on the grounds that structural detail had been lost in his analysis, and that his treatment of out-of-phase deep and surface structure at the discourse level was inconsistent with the general congruity of these structures at lower levels. It was proposed that Longacre's deep structure roles be used as functions (roles) within Pikean tagmemes describing exchanges. Chapter Four discussed the etic description of exchanges in the folktale. Following the proposals for the revision of Longacre's scheme produced a description which allowed several types of linkage between exchanges to be discovered, and which allowed structural out-of-phaseness to be observed. The emic analysis discussed in Chapter Five showed that the folktale's exchanges could be contrasted to form emic classes, and that

exchanges appeared to be embedded in other exchanges.[1] The systematic nature of this embedding led to the formation of a hyperclass of possible exchanges. It was shown that some classes of exchanges do not resolve the initiating utterance, and that exchanges which contain an embedding and a resolved initial exchange are not prone to linkage with other exchanges.

6.2. Findings Concerning Swahili

Although this study has focused on theoretical issues, a number of findings about Swahili should be accented here. The most basic of these findings is that the narrated exchange exists as a unit of discourse in Swahili. Other authors (Longacre, 1968; Waltz, 1977; Kerr, 1977; and Koontz, 1977) have considered narrated exchanges to be types of paragraphs, but no effort to show this for Swahili has been made here. Some narrated exchanges observed here serve as constituents of paragraphs (e.g. Nodes 9 and 13), while others, perhaps, may be considered to fill paragraph slots (e.g. Node 2). Structurally, Swahili narrated exchanges may have exchanges embedded within them, so that 'complex' exchanges are possible (cf. section 5.1.). Also, it was found that constituents of turns may be shared between exchanges, so that Swahili exchanges may be linked together. Analyzing the exchanges of the folktale in terms of embedding and linkage has clarified the relationships between the contrastive exchange types, so that a hyperclass of Swahili exchanges could be posited (cf. section 5.2.). Finally, because many of the exchanges in the folktale could be seen as having an embedding, the total number of functions for turns within exchanges could be reduced in number (cf. section 5.3.). Swahili, therefore, can be considered to

possess a simpler set of exchange functions that those posited for Philippine and Central American languages by Longacre and his colleagues (1968, 1977).

6.3. Conclusions

The major theoretical finding of this study was that it was not necessary to call on the phenomenon of out-of-phaseness to explain the relations between grammatical structures and functions at the exchange level. It was demonstrated that functions and structures could be seen as congruent if the turns of exchanges were analyzed in sufficient detail to show functions associated with substructures of individual turns and linkage by means of shared constituents. This demonstration of linkage between exchanges is a finding which extends previous work of exchange structure, for analysis of linkage via sharing has been nonexistent until now. Much of what has been accounted for by out-of-phaseness in Longacre's work is analyzed here as dual function in situations of shared linkage between exchanges.

The analysis of exchanges embedded within exchanges represents another important finding of this study. Previous work such as Longacre's (1976) has suggested that such embedding may occur, but no previous work has shown that a regular expansion set, or hyperclass, of complex exchanges may be formed. The existence of an exchange hyperclass is important because it parallels the existence of hyperclasses at the clause and sentence levels.

The emic analysis in Chapter Five uses a system of function labels which is even simpler than the already elegant system proposed by Longacre. In the analysis presented here, counter-functions were

eliminated by including utterances carrying such features into embedded exchanges, the function of which was countering. The combined use of embedding and counter-exchanges (rather than counter-turns) enabled the analysis to more accurately show the functional relations of an exchange's turns to each other.

6.4. Significance of the Study

Two sets of problems within tagmemic theory have been approached in this study. The primary set had to do with Pike and Pike's revision of tagmemics in 1977. An analysis of exchange structure had never been done within the revised theory. Also, an analysis using the revised theory could not permit out-of-phase relations between structures and functions. Another set of problems concerned Longacre's treatment of conversational exchanges. One problem here was that his analysis was not detailed enough in that the constituents of a turn were not always directly associated with their function in the exchange. A second problem was that his use of out-of-phaseness at the discourse level was inconsistent with the overall "in phaseness" of the lower levels.

This study has demonstrated that complex exchange-level structures can be analyzed without recourse to out-of-phaseness. This in effect, confirms the ability of the Pikes' revised tagmemics to account for exchange-level structure. Beyond confirming the Pikes' theory, this demonstration also has serious consequences for Longacre's treatment of exchanges and his general approach to tagmemics, for, by showing that structure and function may be analyzed as congruent at all levels, it removes part of his justification for treating deep and surface structures separately. Given the questions raised about the accuracy and

consistency of Longacre's analysis, and findings of an emic exchange hyperclass with a simplified set of exchange roles, this study implies that the newer, revised Pikean theory is preferable to Longacre's earlier system.

NOTES

[1] The participants of the folktale were of more or less the same social status. It is possible that the analysis presented here would be slightly different were the participants on different levels of the social scale.

APPENDICES

APPENDIX I

Text of the Folktale

Below is a copy of Kisa cha Punda wa Dobi as Reverend Steere transcribed and translated it. Some of his spellings of Swahili words do not follow modern usage. The paragraph divisions of Steere's text have been altered in accordance with the analysis presented in Appendices II and III. Each new paragraph is one of the numbered terminal nodes on Chart 1 (page 86).

Kisa cha Punda wa Dobi

The Story of the Washerman's Donkey

Node 1: Aliondokea kima akafanya urafiki na papa. Pana mti mkubwa, jina lake mkuyu, umeota katika kilindi, matawi yake nussu yako mjini, na nussu yako baharini. Yule kima kulla siku kwenda akila kuyu, na yule rafiki yake papa huwapo chini ya mti. Humwambia, utupie nami rafiki yangu vykula; humtupia siku nyingi na miezi mingi.

There once was a monkey which made friends with a shark. There was a great tree, of the sort called mkuyu, which grew near the deep water; half its branches were over the town and half over the sea. The monkey used to go every day and eat the kuyu fruit, and his friend the shark was there under the tree. He used to say, "Throw me some food, my friend;" and he used to throw to him, many days and many months.

Node 2: Hatta siku hiyo papa akamwambia kima, fathili zako nyingi, nataka twende kwetu nikakulipe fathili. Kima akamjibu, ntakwendaje, nasi hatuingii majini, nyama wa barra. Akamwambia, ntakuchukua, tone la maji lisikupate. Akamwambia, twende.

Till one day the shark said to the monkey, "You have done me many kindnesses, I should like for us to go to my home, that I may repay you for your kindness." The monkey answered him, "How shall I go? We don't go into the water, we beasts of the land." And he said, "I will carry you; not a drop of water shall get to you." And he said, "Let us go."

Node 3: **Wakaenda** zao hatta nussu ya njia. Papa akamwambia, rafiki **yangu weye,** ntakwambia kweli. Akamwambia, niambie. **Akamwambia,** huko kwetu tunakokwenda, Sultani wetu hawezi sana, **na dawa tumeambiwa ni moyo wa** kima. Kima akamjibu, hukufanya **vema usiniambie kulekule. Papa akamwuliza, ginsi** gani?

Akafikiri kima akaona, nimekwisha kufa; sasa ntanena uwongo, labuda utanifaa.

They went half the way. And the shark said, "You are my friend, and I will tell you the truth." He said, "Tell me." He said, "There, at home, where we are going, our Sultan is very ill, and we have been told that the medicine for him is a monkey's heart." The monkey replied to him, "You did not do well not to tell me there on the spot." The shark said, "How so?"

The monkey considered, and felt, "My life is gone already; now I will tell him a lie, perhaps that may save me."

Node 4: Papa akamwuliza, umenyamaza huneni? Akamwambia, sina la kunena, kwani usiniambie kulekule, nikapata kuchukua moyo wangu. Papa akamwuliza, hapa, kunao moyo wako?

Huna khabari yetu? Sisi tukitembea mioyo yetu huacha mitini tukatembea viwiliwili tu, wallakini hutanisadiki, utaniambia nimeogopa, sasa twende zetu hatta huko kwenu, ukanichinje kama utauona moyo wangu.

Papa akasadiki, akamwambia kima, turudi sasa, ukatwae moyo wako. Kima akamwambia, sikubali, ela twende kwenu. Akamwambia, turudi kwanza ukatwae moyo wako, tupate kuenenda.

Kima akawaza--ni heri kumfuata hatta mtini, akili nnayo mwenyewe nikiisha fika.

The shark asked him, "You have become silent; don't you speak?" He said, "I have nothing to say, because of your not telling me there on the spot, and I might have brought my heart." The shark asked, "Have you your heart here?"

"Don't you know about us? When we go out we leave our hearts in the trees, and we go about with only our bodies; but you won't believe me, you will tell me I am afraid; let us go on now to your home there, and kill me if you find my heart."

The shark believed it, and said to the monkey, "Let us go back now and you get your heart." The monkey said, "I don't agree to that, but let us go to your place." And he said, "Let us go back first and take your heart, that we may go on."

The monkey considered--I had better consent to him as far as to the tree, I know what to do when I have got there.

Node 5: Wakaenda wakarudi hatta mtini, akapanda juu yule kima akamwambia, ningoje hapa, papa, naenda twaa moyo wangu, tupate kwenda zetu.

Akapanda mtini akakaa kitako kimya.

They went and returned to the tree, and the monkey climbed up, and said, "Wait for me here, shark, I am going to get my heart, that we may be off."

He climbed into the tree and sat down quite still.

Node 6: Papa akamwita. Akanyamaza. Akamwita tena. Akamwambia, twende zetu. Kima akamjibu, una wazimo? Papa akamwuliza, ginsi gani? Kima akamwambia, umenifanya punda wa dobi? Papa akamwuliza kima, ginsi gani punda we dobi? Akamwambia, Ndiye hana moyo, wala hana mashikio. Papa akamwuliza, ginsi gani kisa cha punda wa dobi? Nambie, rafiki yangu, nipate kujua maana.

The shark called him. He held his tongue. He called him again and said, "Let us be going." The monkey answered him, "Let us go where?" He said, "Let us go to our home." He said, "Are you mad?" The shark said, "How so?" The monkey said to him, "Do you take me for a washerman's donkey?" The shark said to the monkey, "What about a washerman's donkey?" He said, "That's what has neither heart nor ears." The shark said, "What is the story of the washerman's donkey? Tell me, my friend, that I may know what it means."

Node 7: Akamwambia, Dobi alikuwa na punda wake, akimpenda sana mwenyewe. Akakimbia punda akaingia mwituni siku nyingi, hatta akamsahao mwenyewe dobi. Akanenepa sana kule mwituni.

And he said, "A washerman had a donkey, and its owner was very fond of it. And the donkey ran away and went into the forest many days, till its owner the washerman forgot it. And it got very fat there in the forest."

Node 8: Akapita sungura, akamwona yule punda, mate yaka mtoka, akanena, nyama imenona hii. Akaenda akamwambia simba. Na simba atoka ugonjwani, amekonda sana. Sungura akamwambia, ntakuleta nyama kesho, tuje tule. Akamwambia, vema.

"And the hare went by and saw the donkey, and foam coming from its mouth, and he said, 'This beast is fat.' And he went and told the lion. Now the lion was recovering from an illness; he was very weakly. The hare said to him, "I will bring you some meat tomorrow, that we may come and eat." The lion said, "Very good."

Node 9: Sungura akaondoka, akaenda mwituni, akamwona punda, na yule mke. Akamwambia, nimetumwa kuja kukuposa. Na nani? akamwuliza. Akamwambia, na simba. Akakubali, akafurahi sana punda. Akamwambia, Twende zetu, bass.

The hare arose and went into the forest, and found the donkey; now that donkey was a she. And he said to her, "I am sent to come and ask you in marriage." "By whom?" she asked. And he said, "By the lion." And the donkey consented and was very glad. And she said, "Let us go, that will do."

Node 10: Wakaenda zao, hatta wakafika kwa simba. Akawakaribisha simba. Wakakaa kitako. Sungura akamkonyeza simba, akamwambia, nyama yako hiyo imekwisha kuja, nami naondoka. Akamwambia punda, nnakwenda chooni mimi, zumgumzeni hapo na mumeo.

And they went, till they arrived at the lion's. And the lion invited them in, and they sat down. The hare gave the lion a sign with his eyebrow, telling him,'This is your meat, it has come with me already; I am going out.' And he said to the donkey, "I am going on private business, converse here with your husband."

Node 11: Simba akamrukia, wakapigana, akapigwa sana simba kwa mateke, naye akampiga makucha mengi. Akaangusha simba akakimbia punda, akenda zake mwituni.

The lion sprang upon her, and they fought: the lion was kicked very hard, and he struck hard with his claws. And the donkey threw the lion down and ran away, and went off into the forest.

Node 12: Akaja sungura, akamwambia, Je! simba, umempata? Akamwambia, sikumpata, amenipiga kwa mateke amekwenda zake, na mimi nimemtia madonda mengi, sababu sina nguvu. Sungura akamwambia simba, tulia we.

The hare came and said, "Hullo! lion, have you got it?" He said, "I have not got it; she kicked me and went off, though I have made her many sore places, because I am not strong." The hare said to the lion, "Don't put yourself out of the way."

Node 13: Wakakaa siku nyingi, hatta punda akapona madonda yale, na simba akapata nguvu sana. Akaenda sungura kwa simba, akamwambia, waonaje sasa, nikuletee nyama yako? Akamwambia, kaniletea ntaikata vipande viwili.

They stayed many days, till the donkey was well of her wounds, and the lion had got very strong. And the hare went to the lion and said, "What do you think now, shall I bring you your meat?" He said, "Bring it me, I will tear it into two pieces."

Node 14: **Akaenda** sungura mwituni. Punda akamkaribisha sungura, **akamwuli**za khabari. Akamwambia, na mchumba wako anakwita. **Punda** akamwambia, siku ile umenipeleka, amenipiga sana kwa **makucha, naogopa sasa.** Akamwambia, hapana neno yalio ndio **mazumgumzo ya simba.** Twende zetu, bass.

The hare went into the forest; the donkey welcomed the hare and asked the news. He said, "You are invited by your lover." The donkey said, "That day you took me, he scratched me very much, and now I am afraid." And he said, "This is nothing, it is only the lion's way of conversing." She said, "Let us go, then."

Node 15: Wakaenda hatta wakafika. Simba alipomwona tu, akamrukia vipande viwili.

Hatta sungura alipokuja, akamwambia, chukua nyama hiyo ukaoke, wallakini sitaki kitu mimi, ela moyo na mashikio ya punda. Sungura akamwambia, marahaba.

They went till they arrived. The lion, when he had only caught sight of her, sprang upon her and tore her in two pieces.

When the hare came, he said to him, "Take this meat and roast it; but myself I want nothing except the donkey's heart and ears." The hare said, "Thanks."

Node 16: Akaenda akaoka nyama mahala mbali, simba hamwoni. Akatwaa moyo ule na mashikio akala yeye sungura, hatta akashiba. Na nyama ngine akaziweka.

And he went and roasted the meat in a place apart, where the lion did not see him. And the hare took the heart and ears, and went on eating himself, till he had had enough. And the rest of the meat he put away.

Node 17: Akaja simba, akamwambia, niletee moyo na mashikio. Akamwambia, yako wapi? Simba akamwuliza, kwa nini? Akamwambia, huyu punda wa dobi, huna khabari? Akamwambia, ginsi gani kutoa kuwa na moyo na mashikio? Akamwambia, wewe simba mtu mzima hayakuelei? Kama ana moyo huyu na mashikio, angalikuja tena hapa? Kwani marra ya kwanza amekuja akaona atakuuawa, akakimbia, marra ya pili amekuja tena, bassi kama ana moyo angalikuja? Simba akamwambia, kweli maneno yako.

And the lion came and said, "Bring me the heart and ears." He said, "Where are they?" The lion asked him, "What does this mean?" He said, "This was a washerman's donkey, did not you know?" And he said, "What about there being no heart and ears?" He said, "You lion, a grown-up person, and is it not clear to you? If this animal had had heart and ears, would it have come here a second time? For the first time it came, it saw it would be killed, and ran away; and yet it came again the second time.

Now, if it had any heart, would it have come?" The lion said, "There is truth in what you say."

Node 18: **Bassi kima akamwambia** papa, nawe wataka unifanye mimi punda wa **dobi, shika njia wende** zako kwenu, mimi hunipati tena, na **urafiki wetu umekwisha.** Kua heri.

So the monkey said to the shark, "And you want to make a washerman's donkey of me. Take your way and be off home, you are not going to get me again, and our friendship is ended. Good-bye."

APPENDIX II

Abbreviations

act.	action
adj.	adjective
adv.p.	adverbial phrase
agr.	agreement
ans.	answer
ant.act.	antecedent action
c.pro.	counter-proposal
c.ques.	counter-question
cl.	clause
clar.	clarification
cmmt.	comment
cmplx.lk.s.st.	complex linked sentence stem
cmplx.s.st.	complex sentence stem
cncl.	conclusion
cnjd.s.st.	conjoined sentence stem
cnsq.	consequence
cntr.	counter
cnv.fr.	conversation frame
compl.	complement
conv.	conversation
crcm.	circumstance
crd.act.	coordinate action
crd.s.clstr.	coordinate sentence cluster
CU	continuing utterance
d.cl.rt.	declarative clause root
d.s.rt.	declarative sentence root
d.s.st.	declarative sentence stem
denou.	denouement
dev.	development
dev.act.	development action
dis.	discussion
eval.	evaluation
ex.fr.	exchange frame
fr.	frame
i.act.	initiating action
i.cl.rt.	interrogative clause root
i.s.rt.	interrogative sentence root
i.s.st.	interrogative sentence stem
imp.s.st.	imperative sentence stem
indp.	independent
init.	initiation
invt.	invitation
IU	initiating utterance
lk.s.st.	linked sentence stem
mono.	monolog
n.q.s.	narrative quote sentence
nr.ex.	narrative exchange
par.	paragraph

par.cmplx.	paragraph complex
prem.	premise
pro.	proposal
prob.	problem
prom.	promise
p.s.lk.	partially shared linkage
q.f.	quote frame
qt.	quote
ques.	question
rem.	remark
reso.	resolution
resp.	response
rslvd.	resolved
rsn.	reason
RU	resolving utterance
s.	sentence
s.clstr.	sentence cluster
sb.cl.rt.	subjunctive clause root
sb.s.rt.	subjunctive sentence root
sb.s.st.	subjunctive sentence stem
sbs.act.	subsequent action
sh.lk.	shared linkage
st.	state
sub-denou.	sub-denouement
TU	terminating utterance
unrslvd.	unresolved

APPENDIX III

Etic Analysis

The following diagrams represent the etic analysis of all nodes in the folktale which contain conversational exchanges. Narrative paragraphs were not included. The etic analysis is discussed in Chapter Four.

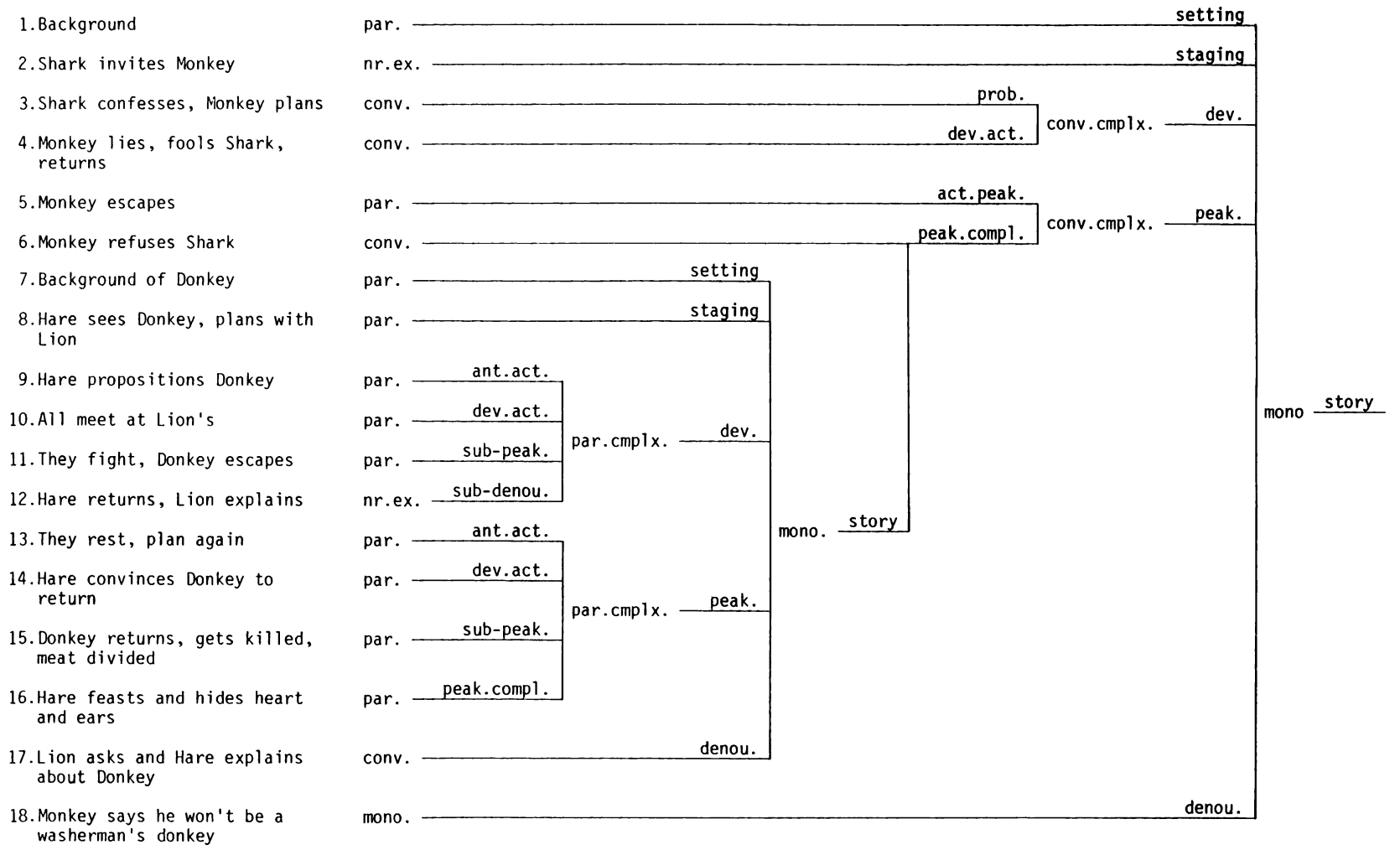
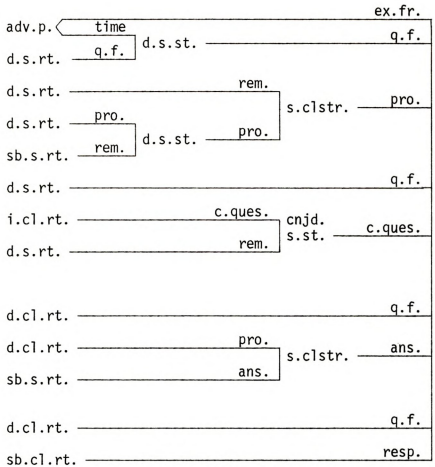


CHART 1: Story Structure of Kisa cha Punda wa Dobi

2.1a.Hata siku hiyo
Then one day
b.papa akamwuliza kima,
Shark said to Monkey,
c.Fadhili zako nyingi,
Your kindness is great,
d.nataka kwenda kwetu
I want you to come to our place
e.nikakulipe fadhili.
so I may return your kindness.
2.2a.Kima akamjibu,
Monkey answered,
b.Ntakwendaje,
How will I go,
c.nasi hatuingii majini, nyama wa barra.
we don't go into the water, we land animals.
2.3a.Akamwambia,
And he said to him,
b.Ntakuchukua,
I will take you,
c.tone la maji lisikupate.
not a drop of water will touch you.
2.4a.Akamwambia,
And he told him,
b.Twende.
Let's go.



NODE 2: Etic Analysis

3.1 Wakaenda zao, hata nusu ya njia.
They went halfway.

3.2a. Papa akamwambia,
Shark said to him,

b. Rafiki yangu weye,
You are my friend,

c. ntakwambia kweli.
I will tell you the truth.

3.3a. Akamwambia,
And he told him,

b. Niambie.
Tell me.

3.4a. Akamwambia,
And he said to him,

b. Huko kwetu tunakokwenda, Sultani wetu hawezi sana, na dawa tumeambiwa ni moyo wa kima.
At our place where we're going, our king is very sick, and the medicine prescribed is a monkey's heart.

3.5a. Kima akamjibu,
Monkey answered him,

b. Hukufanya vema usiniambie kule kule.
You didn't do well not telling me.

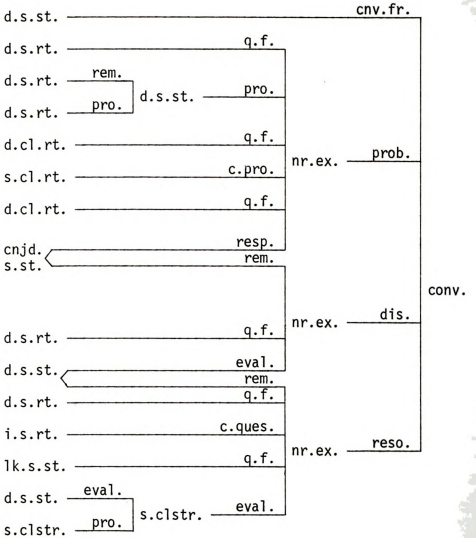
3.6a. Papa akamwuliza,
And Shark asked him,

b. Jinsi gani?
How so?

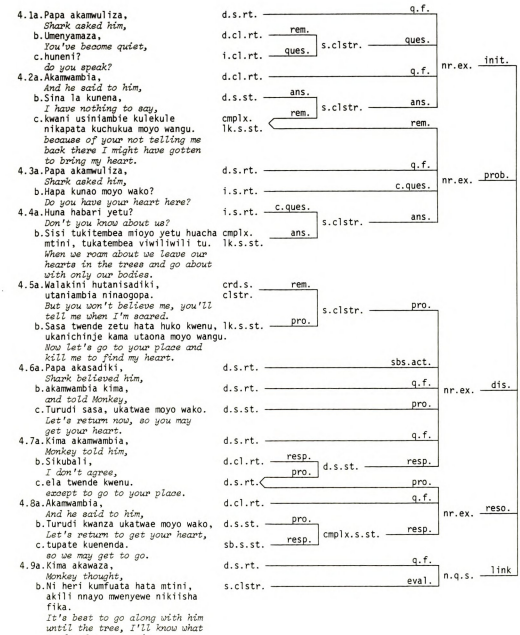
3.7a. Akafikiri kima akaona,
Monkey thought and realized,

b. Nimekwisha kufa,
I'm already dead,

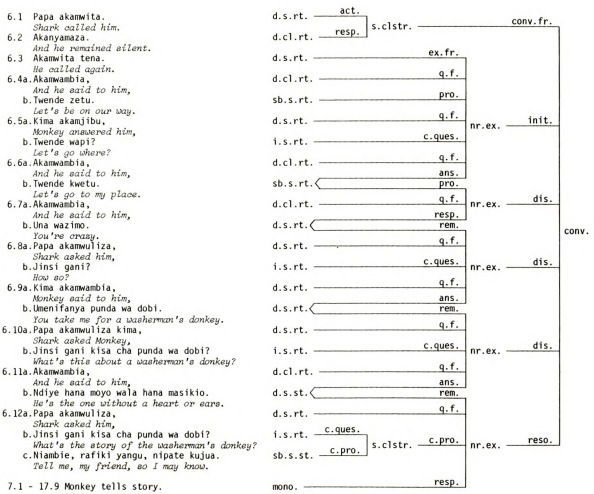
c. Sasa ntanena uwongo, labda itanifaa.
Now I'll tell a lie, perhaps it will help me.



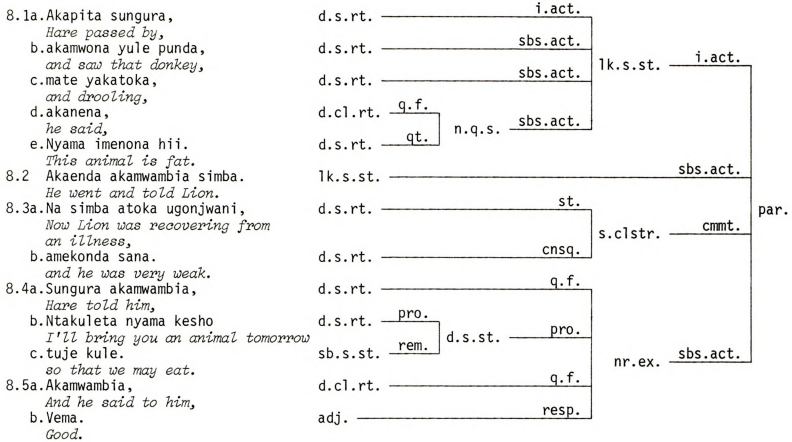
NODE 3: Etic Analysis



NODE 4: Etic Analysis

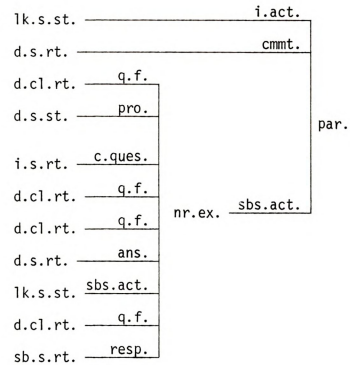


NODE 6: Etic Analysis



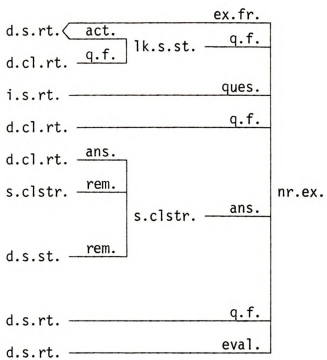
NODE 8: Etic Analysis

9.1 Sungura akaondoka akaenda mwituni.
Hare left and went to the forest.
9.2 Na yule punda mke.
Now that donkey was a female.
9.3a. Akamwambia,
And he said to her,
b. Nimetumwa kuja kukuposa.
I am being used to come to propose to you.
9.4a. Na nani?
By whom?
b. akamwuliza.
she asked him.
9.5a. Akamwambia,
He told her,
b. Na simba.
By Lion.
9.6 Akakubali akafurahi sana punda.
Donkey agreed and was very happy.
9.7a. Akamwambia,
She said to him,
b. Twende zetu, bas.
Let's be on our way.



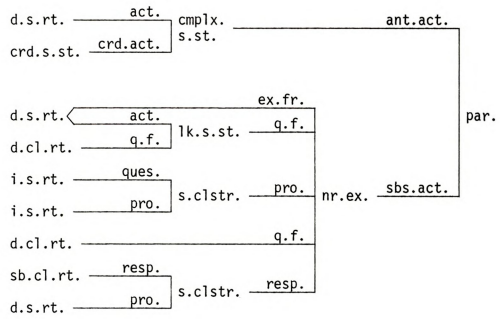
NODE 9: Etic Analysis

12.1a. Akaja sungura
Hare came
b. akamwambia,
and said to him,
c. Je simba, umempata?
Well Lion, did you get her?
12.2a. Akamwambia,
And he told him,
b. Sikumpata,
I didn't get her,
c. amenipiga kwa mateke, amekwenda zake,
she hit me with her hoofs, and ran off,
d. na mimi nimetia madonda mengi sababu sina nguvu.
and I have gotten many scratches because of my lack of strength.
12.3a. Sungura akamwabia simba,
Hare told Lion,
b. Tulia we.
Sorry.



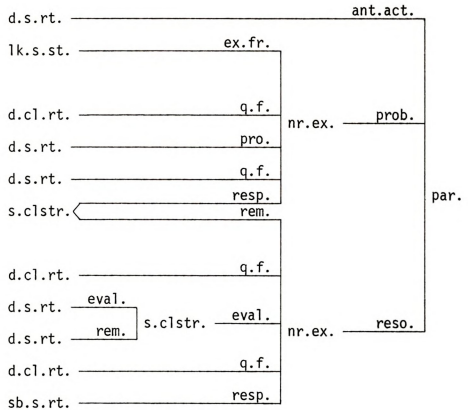
NODE 12: Etic Analysis

13.1a.Wakakaa siku nyingi,
They rested many days,
b.hata punda akapona madonda yake,
na simba akapata nguvu sana.
until Donkey's wounds healed,
and Lion became very strong.
13.2a.Akaenda sungura kwa simba
Hare went to Lion
b.akamwambia,
and said to him,
c.Waonaje sasa?
What do you think now?
d.Nikuletee nyama yako?
Should I bring you your animal?
13.3a.Akamwambia,
And he told him,
b.Kaniletea,
Bring it to me,
c.ntaikata vipande viwili.
I'll cut it into two pieces.



NODE 13: Etic Analysis

14.1 Akaenda sungura mwituni.
Hare went into the forest.
14.2 Punda akamkaribisha sungura, akamwuliza habari.
Donkey welcomed Hare and asked him the news.
14.3a. Akamwambia,
And he told her,
b. Na mchumba wako anakwita.
Your lover calls you.
14.4a. Punda akamwambia,
Donkey told him,
b. Siku ile umenipeleka amenipiga sana na machuka; naogopa sasa.
That day when you sent me he hit me with his claws; now I fear.
14.5a. Akamwambia,
And he told her,
b. Hapana neno,
It's nothing,
c. Yalio ndio mazumgumzo ya simba.
That's just the way lions converse.
14.6a. Akamwambia,
And she said to him,
b. Twende zetu, bas.
Let's go.



NODE 14: Etic Analysis

15.1 Wakaenda hata wakafika.
They went until they arrived.

15.2 Simba alipomwona tu, akamrukia akamkata vipande viwili.
As soon as Lion saw her, he leapt upon her and tore her into two pieces.

15.3a. Hata sungura alipokuja,
Then Hare came,

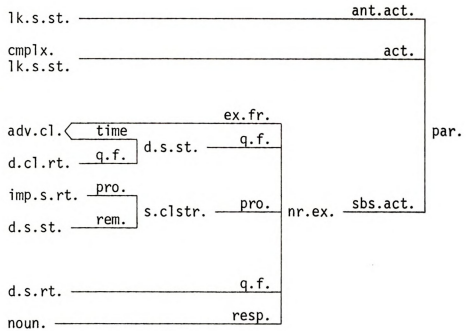
b. akamwambia,
and he said to him,

c. Chukua nyama hiyo ukaoke;
Take this meat and cook it;

d. Walakini sitaki kitu mimi, ela moyo na masikio ya punda.
But I don't want a thing, except for the donkey's heart and ears.

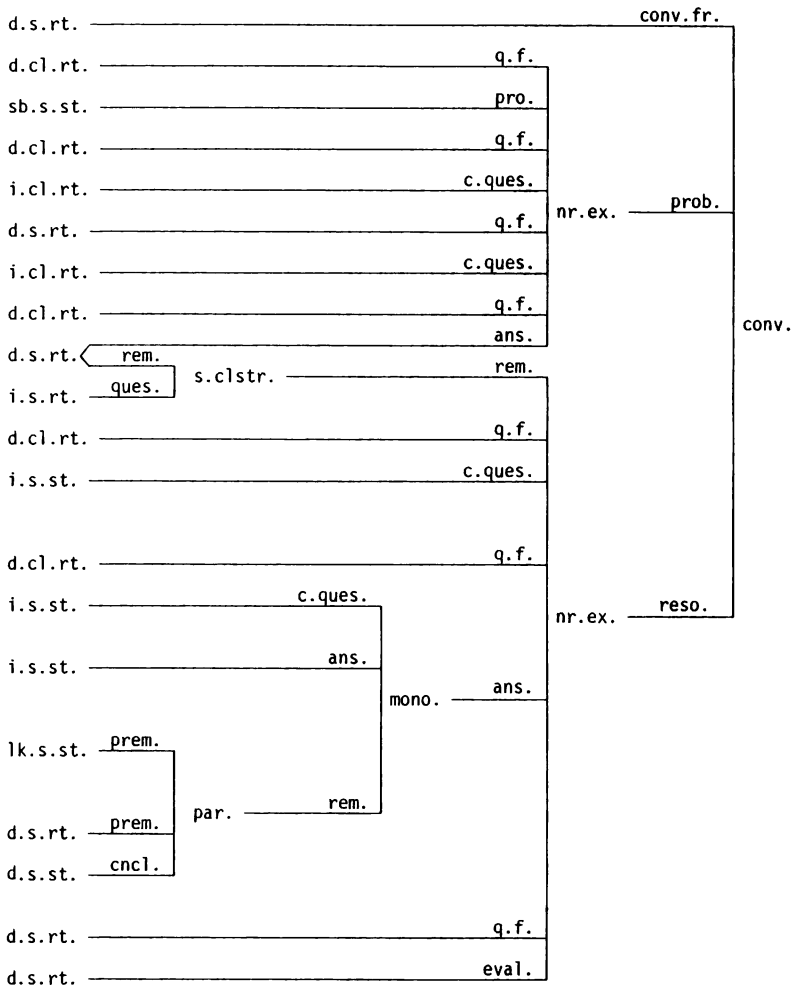
15.4a. Sungura akamwambia,
Hare told him,

b. Marahaba.
Thanks.



NODE 15: Etic Analysis

17.1a. Akaja simba,
Lion came,
b. Akamwambia,
And said to him,
c. Niletee moyo wa masikio.
Bring me the heart and ears.
17.2a. Akamwambia,
And he told him,
b. Yako wapi?
Where are they?
17.3a. Simba akamwuliza,
Lion asked him,
b. Kwa nini?
Why?
17.4a. Akamwambia,
And he told him,
b. Huyu ni punda wa dobi,
This is a washerman's donkey,
c. Huna habari?
Didn't you know?
17.5a. Akamwambia,
And he said to him,
b. Jinsi gani kutoa kuwa na moyo na masikio?
How is it that it lacks a heart and ears?
17.6a. Akamwambia,
And he told him,
b. Wewe simba mtu mzima hayakuelei?
You, a mature lion, and you don't understand?
17.7 Kama ana moyo na masikio angalikuja tena hapa?
If it had a heart and ears would it have returned here again?
17.8a. Kwani mara ya kwanza amekuja, akaona atakuuawa, akakimbia,
For the first time it came it saw it would be killed and escaped,
b. Mara ya pili amekuja tena,
It came again a second time,
c. basi, kama ana moyo angalikuja?
well, if it had had a heart, would it have come?
17.9a. Simba akamwambia,
Lion told him,
b. Kweli, maneno yako.
Your words are true.



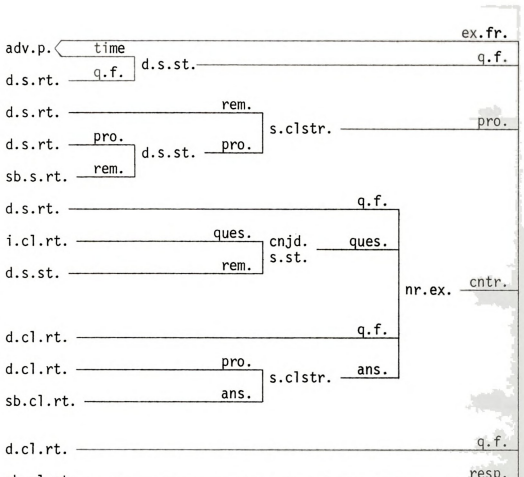
NODE 17: Etic Analysis

APPENDIX IV

Emic Analysis

The following diagrams represent the emic analysis of all nodes diagrammed in Appendix III. The emic analysis is discussed in Chapter Five.

2.1a.Hata siku hiyo
Then one day
b.papa akamwuliza kima,
Shark said to Monkey,
c.Fadhili zako nyingi,
Your kindness is great,
d.nataka kwenda kwetu
I want you to come to our place
e.nikakulipe fadhili.
so I may return your kindness.
2.2a.Kima akamjibu,
Monkey answered,
b.Ntakwendaje,
How will I go,
c.nasi hatuingii majini, nyama wa barra.
we don't go into the water, we land animals.
2.3a.Akamwambia,
And he said to him,
b.Ntakuchukua,
I will take you,
c.tone la maji lisikupate.
not a drop of water will touch you.
2.4a.Akamwambia,
And he told him,
b.Twende.
Let's go.



NODE 2: Emic Analysis

3.1 Wakaenda zao, hata nusu ya njia.
They went halfway.

3.2a. Papa akamwambia,
Shark said to him,

b. Rafiki yangu weye,
You are my friend,

c. ntakwambia kweli.
I will tell you the truth.

3.3a. Akamwambia,
And he told him,

b. Niambie.
Tell me.

3.4a. Akamwambia,
And he said to him,

b. Huko kwetu tunakokwenda, Sultani wetu hawezi sana, na dawa tumeambiwa ni moyo wa kima.
At our place where we're going, our king is very sick, and the medicine prescribed is a monkey's heart.

3.5a. Kima akamjibu,
Monkey answered him,

b. Hukufanya vema usiniambie kule kule.
You didn't do well not telling me.

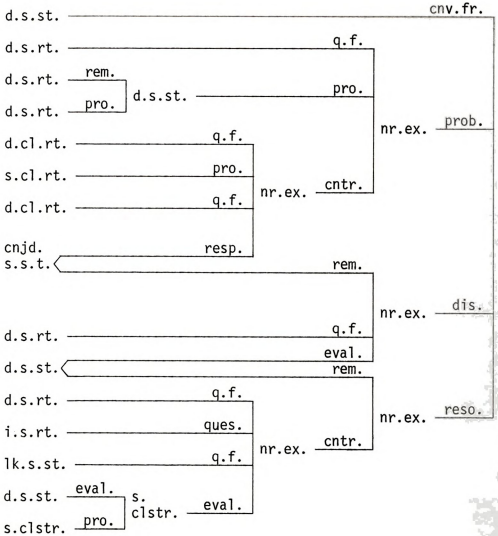
3.6a. Papa akamwuliza,
And Shark asked him,

b. Jinsi gani?
How so?

3.7a. Akafikiri kima akaona,
Monkey thought and realized,

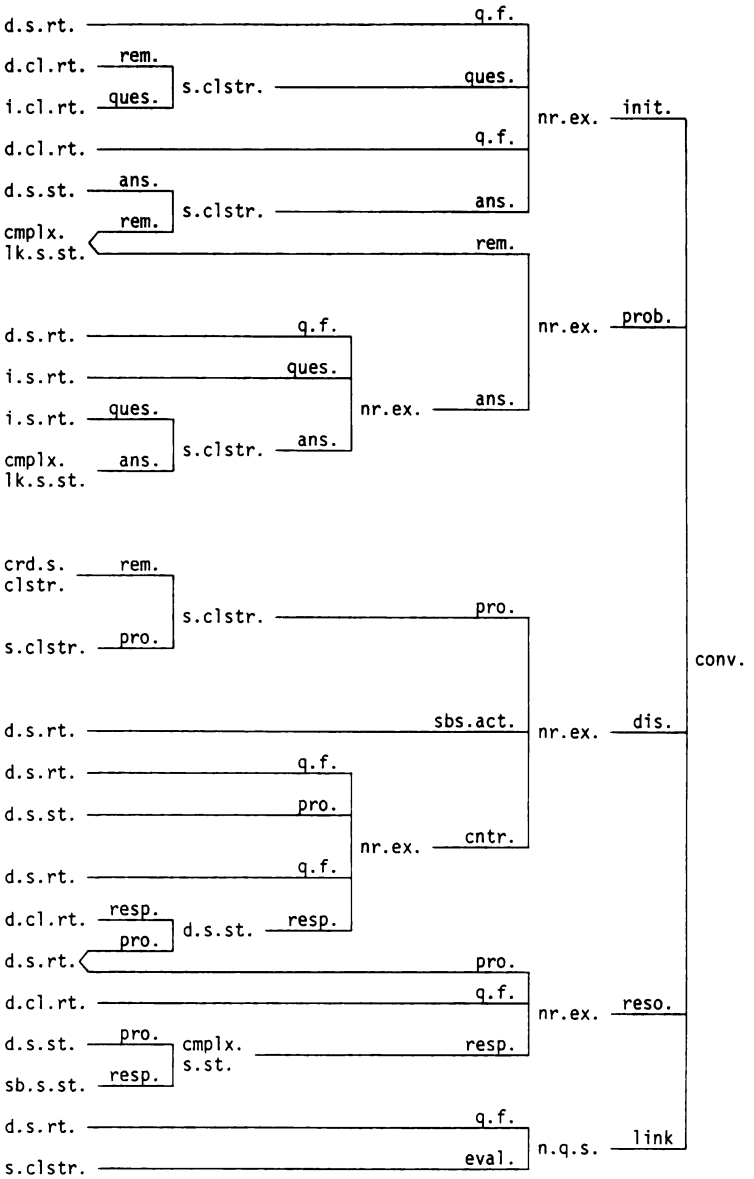
b. Nimekwisha kufa,
I'm already dead,

c. Sasa ntanena uwongo, labda itanifaa.
Now I'll tell a lie, perhaps it will help me.



NODE 3: Emic Analysis

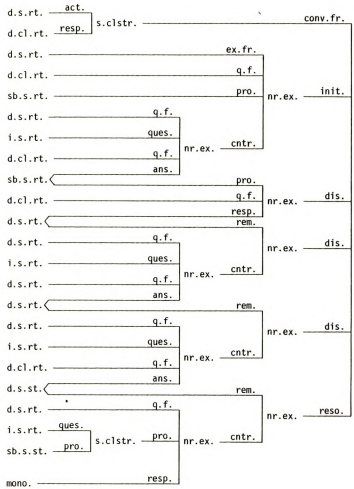
4.1a.Papa akamwuliza,
Shark asked him,
b.Umenyamaza,
You've become quiet,
c.huneni?
do you speak?
4.2a.Akamwambia,
And he said to him,
b.Sina la kunena,
I have nothing to say,
c.kwani usiniambie kulekule nikapata kuchukua moyo wangu.
because of your not telling me back there I might have gotten to bring my heart.
4.3a.Papa akamwuliza,
Shark asked him,
b.Hapa kunao moyo wako?
Do you have your heart here?
4.4a.Huna habari yetu?
Don't you know about us?
b.Sisi tukitembea mioyo yetu huacha mtini, tukatembea viwiliwili tu.
When we roam about we leave our hearts in the trees and go about with only our bodies.
4.5a.Walakini hutanisadiki, utaniambia ninaogopa.
But you won't believe me, you'll tell me I'm scared.
b.Sasa twende zetu hata huko kwenu, ukanichinje kama utaona moyo wangu.
Now let's go to your place and kill me to find my heart.
4.6a.Papa akasadiki,
Shark believed him,
b.akamwambia kima,
and told Monkey,
c.Turudi sasa, ukatwae moyo wako.
Let's return now, so you may get your heart.
4.7a.Kima akamwambia,
Monkey told him,
b.Sikubali,
I don't agree,
c.ela twende kwenu.
except to go to your place.
4.8a.Akamwambia,
And he said to him,
b.Turudi kwanza ukatwae moyo wako,
Let's return to get your heart,
c.tupate kuenenda.
so we may get to go.
4.9a.Kima akawaza,
Monkey thought,
b.Ni heri kumfuata hata mtini, akili nnayo mwenyewe nikiisha fika.
It's best to go along with him until the tree, I'll know what to do after we arrive.



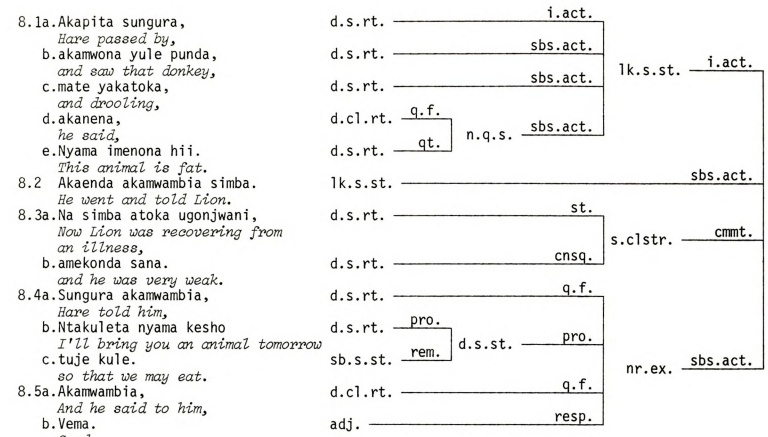
NODE 4: Emic Analysis

6.1 Papa akanwita.
Shark called him.
6.2 Akanyamaza.
And he remained silent.
6.3 Akanwita tena.
He called again.
6.4a.Akanwambia,
And he said to him,
b.Twende zetu.
Let's be on our way.
6.5a.Kima akamjibu,
Monkey answered him,
b.Twende wapi?
Let's go where?
6.6a.Akanwambia,
And he said to him,
b.Twende kwetu.
Let's go to my place.
6.7a.Akanwambia,
And he said to him,
b.Una wazimo.
You're crazy.
6.8a.Papa akamwuliza,
Shark asked him,
b.Jinsi gani?
How so?
6.9a.Kima akamwambia,
Monkey said to him,
b.Umenifanya punda wa dobi.
You take me for a washerman's donkey.
6.10a.Papa akamwuliza kima,
Shark asked Monkey,
b.Jinsi gani kisa cha punda wa dobi?
What's this about a washerman's donkey?
6.11a.Akamwambia,
And he said to him,
b.Ndiye hana moyo wala hana masikio.
He's the one without a heart or ears.
6.12a.Papa akamwuliza,
Shark asked him,
b.Jinsi gani kisa cha punda wa dobi?
What's the story of the washerman's donkey?
c.Niambie, rafiki yangu, nipate kujua.
Tell me, my friend, so I may know.

7.1 - 17.9 Monkey tells story.

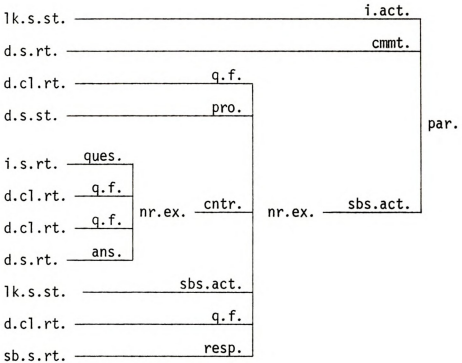


NODE 6: Emic Analysis



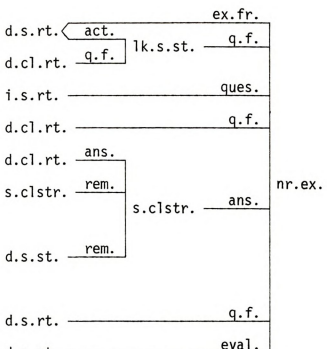
NODE 8: Emic Analysis

9.1 Sungura akaondoka akaenda mwituni.
Hare left and went to the forest.
9.2 Na yule punda mke.
Now that donkey was a female.
9.3a. Akamwambia,
And he said to her,
b. Nimetumwa kuja kukuposa.
I am being used to come to propose to you.
9.4a. Na nani?
By whom?
b. akamwuliza.
she asked him.
9.5a. Akamwambia,
He told her,
b. Na simba.
By Lion.
9.6 Akakubali akafurahi sana punda.
Donkey agreed and was very happy.
9.7a. Akamwambia,
She said to him,
b. Twende zetu, bas.
Let's be on our way.



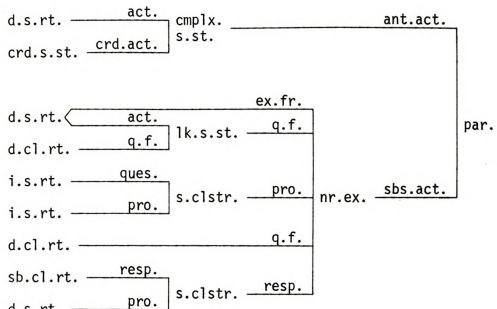
NODE 9: Emic Analysis

12.1a. Akaja sungura
Hare came
b. akamwambia,
and said to him,
c. Je simba, umempata?
Well Lion, did you get her?
12.2a. Akamwambia,
And he told him,
b. Sikumpata,
I didn't get her,
c. amenipiga kwa mateke, amekwenda zake,
she hit me with her hoofs, and ran off,
d. na mimi nimetia madonda mengi sababu sina nguvu.
and I have gotten many scratches because of my lack of strength.
12.3a. Sungura akamwambia simba,
Hare told Lion,
b. Tulia we.
Sorry.



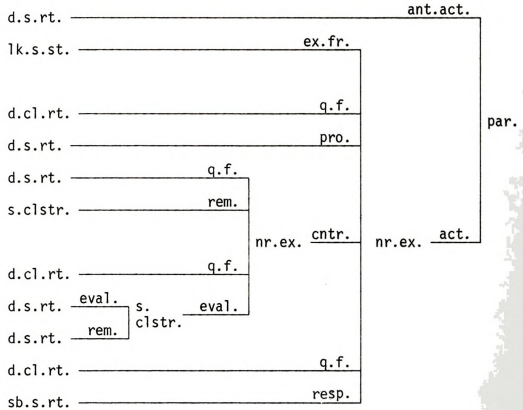
NODE 12: Emic Analysis

13.1a.Wakakaa siku nyingi,
They rested many days,
b.hata punda akapona madonda yake,
na simba akapata nguvu sana.
until Donkey's wounds healed,
and Lion became very strong.
13.2a.Akaenda sungura kwa simba
Hare went to Lion
b.akamwambia,
and said to him,
c.Waonaje sasa?
What do you think now?
d.Nikuletee nyama yako?
Should I bring you your animal?
13.3a.Akamwambia,
And he told him,
b.Kaniletea,
Bring it to me,
c.ntaikata vipande viwili.
I'll cut it into two pieces.



NODE 13: Emic Analysis

14.1 Akaenda sungura mwituni.
Hare went into the forest.
14.2 Punda akamkaribisha sungura, akamwuliza habari.
Donkey welcomed Hare and asked him the news.
14.3a. Akamwambia,
And he told her,
b. Na mchumba wako anakwita.
Your lover calls you.
14.4a. Punda akamwambia,
Donkey told him,
b. Siku ile umenipeleka amenipiga sana na machuka; naogopa sasa.
That day when you sent me he hit me with his claws; now I fear.
14.5a. Akamwambia,
And he told her,
b. Hapana neno,
It's nothing,
c. Yalio ndio mazumgumzo ya simba.
That's just the way lions converse.
14.6a. Akamwambia,
And she said to him,
b. Twende zetu, bas.
Let's be on our way.



NODE 14: Emic Analysis

15.1 Wakaenda hata wakafika.
They went until they arrived.

15.2 Simba alipomwona tu, akamrukia akamkata vipande viwili.
As soon as Lion saw her, he leapt upon her and tore her into two pieces.

15.3a. Hata sungura alipokuja,
Then Hare came,

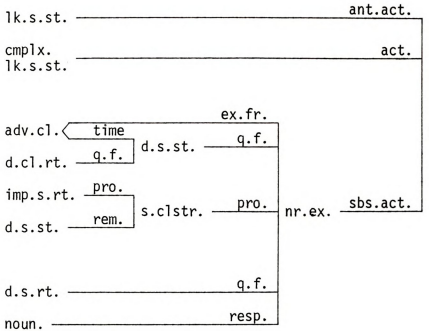
b. akamwambia,
and said to him,

c. Chukua nyama hiyo ukaoke;
Take this meat and cook it;

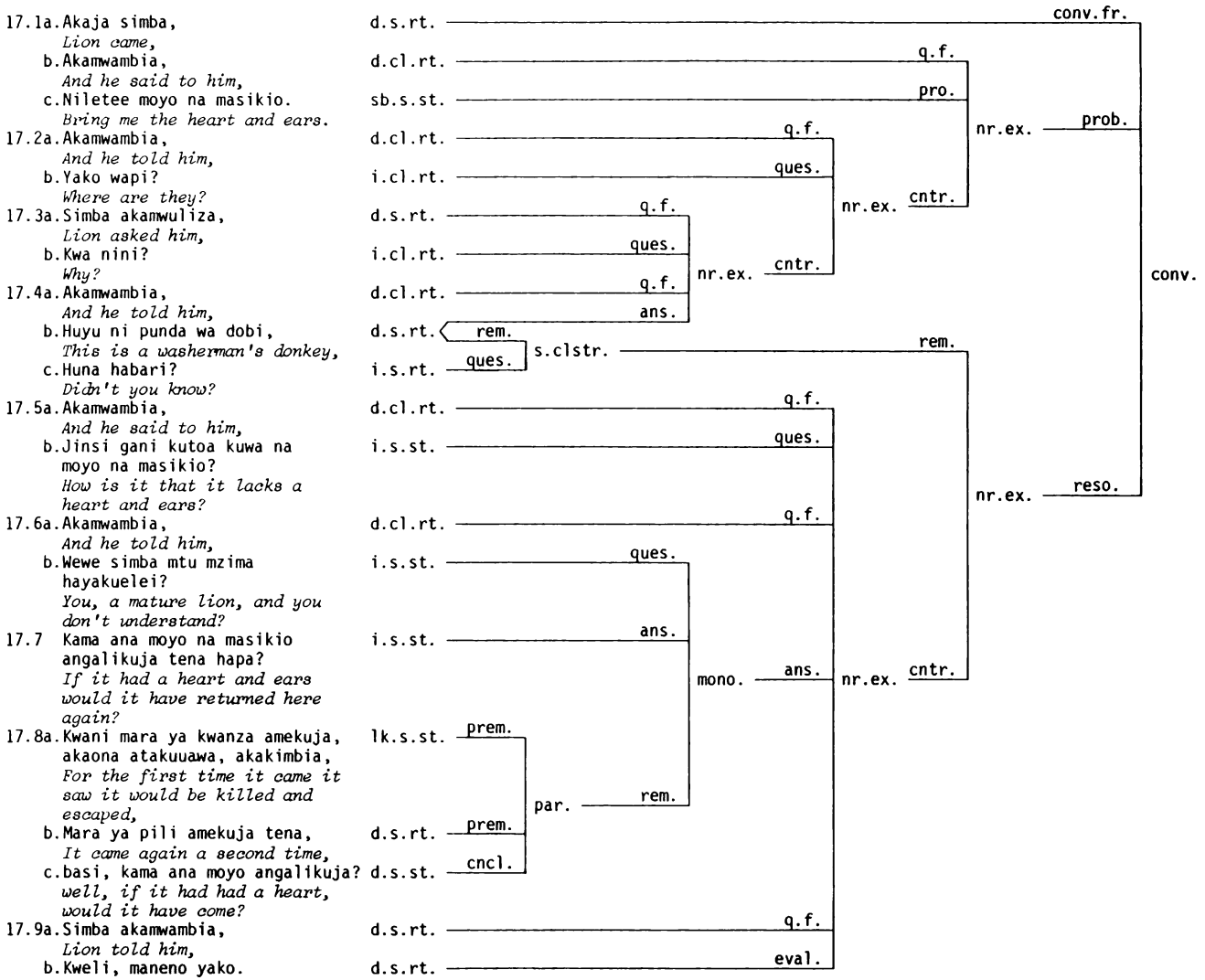
d. Walakini sitaki kitu mimi, ela moyo na masikio ya punda.
But I don't want a thing, except for the donkey's heart and ears.

15.4a. Sungura akamwambia,
Hare told him,

b. Marahaba.
Thanks.



NODE 15: Emic Analysis



NODE 17: Emic Analysis

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