

TRANSPARENCY AND SPREADING OF TENSE, ASPECT, AND MOOD IN
KUCHE NARRATIVE DISCOURSE

by

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This volume is dedicated to my loving husband, Dr. Chuck Wilson, who wouldn't let me quit.

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Praise to God Almighty, Who has seen me through to the end of this enormous endeavor! I stand in awe at the gift of speech He has given us; it is an amazing and fascinating endowment. He has truly made us wonderfully.

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ABSTRACT

TRANSPARENCY AND SPREADING OF TENSE, ASPECT, AND MOOD IN KUCHE NARRATIVE DISCOURSE

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Though clauses of Kuche can be grammatically marked—usually by verb prefixes or auxiliary verbs—for tense and/or aspect and/or mood (TAM), in discourse, very few clauses are actually marked for these categories. Instead, TAM is often marked only once in a stretch of text and is assumed to apply to every subsequent clause up to a delimiting construction. This paper describes how certain grammatical indicators of TAM are used in Kuche narrative discourse.

Four chapters of an oral history and one folk tale are tabulated for the frequency of various TAM markings and interpretations. Number grids and bar graphs indicate how the grammatical markings correlate with the interpretations. The tabulation reveals that most clauses in the narratives are totally unmarked for TAM, but these unmarked clauses are not interpreted uniformly. In narratives that begin with several clauses marked Perfective (by the verbal prefix *nì-*), most clauses are interpreted as past perfective. In

narratives that begin with Perfective marked clauses (*nì-*) and Habitual marked clauses (verb prefix *tá-*), most clauses are interpreted as past habitual. Clauses of conversation and story dialog are tabulated in a similar fashion and compared, on the one hand, with past perfective narratives and, on the other hand, with past habitual narratives. Three distinct patterns of use are observed.

A formal model for interpreting the TAM of Kuche clauses in narrative is developed based on the five tabulated narratives plus five other texts previously recorded and analyzed for other papers. In simple terms, clauses of a narrative are like transparent layers of TAM meaning, allowing the interpretation of early (marked) clauses to show through. Some of the layers add further meaning, some add zero meaning, but most do not obscure the TAM indicated earlier in the text.

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LIST OF ABBREVIATIONS

1	1 st person prefix/suffix/pronoun	PFV	Perfective aspect prefix
2	2 nd person prefix/suffix/pronoun	PL	plural
3	3 rd person prefix/suffix/pronoun	PLACE	name of a place
ASP	Aspect	Poss	Possessive pronoun
ATR	advanced tongue root	PREP	preposition
CL[1, 2..]	Noun Class Prefix	PROG	present participle prefix
DEF	definite suffix	Q	Question particle
HAB	Habitual aspect prefix	RED	Reduplicative suffix
HPL	human plural	S	singular
HS	human singular	TAM	tense/aspect/mood
IMP	Imperative	vs.	versus
Ind	Independent pronoun	X	Untranslated morpheme
INF	Infinitive prefix	hyphen -	Morpheme boundary
LOC	locative suffix	period .	No morpheme boundary
NAME	Personal name	asterisk *	Phonetic insertion
NEG	Negative		

CHAPTER 1

INTRODUCTION

In Kuche, a Plateau language of Northern Nigeria, tense, aspect, and mood (TAM) interpretations are assigned to relatively unmarked verbs by a process somewhat analogous to phonological feature-spreading (see Goldsmith 1990 and Kenstowicz 1994). The various TAM forms have domains over which the semantic reference may spread, and domains may be embedded within larger domains. In this dissertation, a model is constructed that borrows from the concept of tone-spreading in that it develops the notions of directional spreading and domains of spreading. It also borrows from the concept of vowel harmony, where consonants do not block feature assimilation, but neither do they participate, because their features are incompatible with harmony. Certain TAM features spread to every story clause to the right—when the domain is the narrative discourse—skipping the clauses of dialog and interactive conversation. Other TAM features spread to the right just up to the last clause of the sentence.

The model for TAM in Kuche narrative is also built on a familiar discourse process: clause-chaining (see especially Longacre 1990). Clause-chaining is a process of joining one fully-inflected verb with one or more verbs which are structurally reduced (Longacre 1996:286). Actually, clause-chaining also incorporates at least one of the concepts of phonological feature-spreading: directionality. Chains can start from the right

and chain to the left—Longacre (1990:287) calls these medial-final chains—or they can start from the left and chain to the right—these are initial-consecutive chains. A Kuche narrative is like a very long left-headed clause chain (i.e. an initial-consecutive chain) in this respect: only a few initial verbs are fully inflected for the tense and aspect¹ that influence the entire discourse.

This research begins with the concept of feature-spreading because it is a familiar linguistic concept that can be discussed in terminology that has become standardized in phonology. While spreading is a metaphor that suits the Kuche data well, another apt metaphor is transparency. The spreading metaphor suggests that the physical features of one linguistic element—tone on a syllable for example, or roundness on a vowel—attach to nearby elements—maybe a preceding syllable, or a subsequent vowel. On the other hand, transparency suggests that the physical features stay put but are visible through intervening elements. This research discusses TAM in Kuche narrative both in terms of spreading—because it is a familiar linguistic process—and in terms of transparency—because it represents the data more faithfully. In Kuche, explicit physical features (morpho-syntactic marking) remain in place, but all the clauses of the story—even when they do not bear any explicit morphology—are interpreted as if they bore the same morpho-syntactic marking as the first clause.

Clauses that are most obviously transparent are those containing the so-called “Unmarked” verb form. The Unmarked form is inflected for subject agreement only, but it is not grammatically marked for any tense, aspect, or mood. In the context of everyday

¹ Typically, a narrative is set completely in the indicative mood, which tends to be grammatically unmarked, so only tense and aspect can be marked differently from one narrative text to another.

conversation, it may be interpreted as a simple present tense. However, it is never the form cited in elicitation as a present tense form. Furthermore, in narrative, an Unmarked verb is seldom interpreted as a present tense form, simple or otherwise; instead, it receives its TAM interpretation from the context. In terms of spreading, the Unmarked form might be compared to tofu, which, having no flavor of its own, absorbs the flavors surrounding it. For example, in the sentence below, both verbs are interpreted as past habitual, but only the first (*à-ā-tā-fārā*) is marked Habitual (the prefix *tā-*). The verb of the second clause (*ā-mōŋ*) is an Unmarked form: there is a subject agreement prefix (*ā-*) but no other marking.

- 1.1 *à-ā-tā-fārā* *ī-mílí* *àná* *ā-mōŋ* *kù-kpá-ì*. . .
 then-3HS-HAB-take CL10-dust and.then 3HS-put CL15-skin-DEF
 . . .and he would scoop up dirt and would put it on his body. . .
 from “The Coming of the White Man” lines 45-46

To use another metaphor, the entire process of TAM-spreading could be compared to a load of laundry that has some white clothes in it, some red clothes, and some items of various shades of yellow and blue. If the red dye runs during the wash, the effects will be quite obvious on the white clothes, still evident on the yellow things, but only subtle on the blue ones. In Kuche, certain forms are like the red items, whose dye is much more likely to run; the Unmarked form is like white clothing, taking up any of the dyes easily; and still other forms are like the yellow and the blue items, reflecting the other dyes in the context to a limited extent. The example above (1.1) also illustrates this point: the first verb (*à-ā-tā-fārā*) is marked Habitual, not Past Habitual. The reference to past time comes from an overtly marked verb much earlier in the narrative. An overtly marked verb is

indeed interpreted according to its own TAM marking, but it also absorbs TAM marking from its context.

The model presented here integrates several models of TAM in discourse: Longacre's (1990) notions of narrative & consecutive tenses, Kiparsky's (1968) conjunction reduction, Fleischman's (1990) contrastive device for foregrounding text, Bybee's (1994) zero category, and the more familiar concept of the historical present. Especially important to the understanding of Kuche's Unmarked form is Bybee's explanation of the evolution of meaning for zero-marked forms. She says (1994:235), "When a grammaticizing overt morpheme becomes obligatory, it may happen that other meanings within the same functional domain, which previously had no grammatical expression, come to be expressed by a meaningful zero." This study indicates that Kuche is at a point in its history where the overt marking of a verb for TAM is not obligatory. What this means is that there is no specific meaning attached to the zero-marking of a verb, so that its interpretation is open—not open to just anything, but open to interpretation based on discourse principles.

It is expected that the integrated model, which is successful in accounting for TAM reference in Kuche, will also be useful in describing discourse issues in other languages.

1.1 Language Taxonomy

Kuche is spoken by about 50,000 people (Crozier and Blench 1992) who reside mainly in about seventeen villages west of Jos, the capital of Plateau State, in Northern Nigeria. The people call themselves Bache and they call their territory Kiche; however,

the Hausa people call them Rukuba (“people of the rocks”), and that is the name by which their language is widely known. A recent edition of the *Ethnologue* (Grimes 1992) lists the language simply as “Che,” omitting the noun class prefix. This paper adopts the term “Kuche” exclusively, since this is the name that native speakers call their language.

Ruhlen (1987) places Kuche—which he lists as Rukuba—into the bigger picture, placing it in the Eastern branch of the South-Central Niger Congo group (figure 1.1).

Table 1.1
Ruhlen’s Language Taxonomy

NIGER-KORDOFANIAN

- I. KORDOFANIAN (32 languages)
- II. NIGER-CONGO
 - A. Mande (30 languages)
 - B. Niger-Congo Proper
 - 1. West Atlantic (46 languages)
 - 2. Central Niger-Congo
 - a) North Central Niger-Congo (216 languages)
 - b) South Central Niger-Congo
 - (1) Ifo-Defaka (7 languages)
 - (2) Western (49 languages)
 - (3) Eastern
 - (a) Central Niger (11 languages)
 - (b) Yoruba-Northern Akoko (6 languages)
 - (c) Edo (22 languages)
 - (d) Lower Niger (7 languages)
 - (e) Jukunoid (12 languages)
 - (f) Delta Cross (12 languages)
 - (g) Lower Cross (8 languages)
 - (h) Upper Cross (23 languages)
 - (i) Benue-Zambesi
 - i) Cara (45 languages)
 - ii) Nyima
 - A. Plateau
 - 1. Ayu
 - 2. Yashi

Table 1.1: Ruhlen's Language Taxonomy
(Continued)

3. Mabo-Barkul
4. Iregwe
5. Berom-Migili
 - a) Migili
 - b) Aten
 - c) Birom: Birom, Fachara
6. Kaje-Kadara
 - a) Katab (=Tyap)
 - b) Yeskwa: Yeskwa, Lungu, Koro
 - c) Kaje: Kamanton, Kagoma, Jaba, Nandu, Izarek, Kaje (=Jju)
 - d) Kadara: Kadara, Kuturmi, Ikulu, Idong, Doka, Iku
7. Ninzam-Rukuba
 - a) Rukuba (**Kuche**)
 - b) Kwanka: Kwanka, Shall
 - c) Ninzam: Ninzam, Mada, Gwantu, Nindem, Kaningkon (=Kaningkwom), Kanufi
8. Eggon: Eggon, Nungu, Ake, Jidda
9. Fyam: Fyam, Horom
10. Tarok: Tarok, Bashar, Pai
11. Turkwam: Turkwam, Arum
- B. Wel
 1. Bendi-Bokyi (9 languages)
 2. Bantoid
 - a) Non-Bantu (16 languages)
 - b) Broad Bantu
 - (1) Bane (118 languages)
 - (2) Narrow Bantu (380 languages)

Previous researchers who have investigated Kuche have used Greenberg's (1963) classification of the Plateau languages. A small section of Greenberg's outline is reproduced as Figure 1.2, beginning with Greenberg's #5, Benue-Congo (which appears to be roughly equivalent to the Eastern division of South Central Niger-Congo in Ruhlen's system).

Table 1.2
Greenberg's Language Taxonomy

5. Benue-Congo
 - A. Plateau
 1. (Plateau 1)
 - a) Kambari, Dukawa, Dakakari, Basa, Kamuku, Reshe
 - b) Piti, Janji, Kurama, Chawai, Anaguta, Buji, Amap, Gure, Kahugu, Ribina, Butawa, Kudawa
 2. Afusare, Iregwe, Katab, Kagoro, Kaje, Kachicheri, Morwa, Jaba, Kamantan, Kadara, Koro, Afo
 3. Birom, Ganawuri (Aten)
 4. Rukuba (**Kuche**), Ninzam, Ayu, Mada, Kaningkwom
 5. Eggon, Nungu, Yeskwa
 6. Kaleri, Pyem, Pai
 7. Yergam, Basherawa
 - B. Jukunoid
 - C. Cross-River
 - D. Bantoid (including all of Bantu)

Though the systems are not identical, there is reasonably good agreement as to which languages are most closely related to Kuche. Greenberg lists four languages as sister to Kuche; while Ruhlen lists no languages as sister, he does have three of those from Greenberg's list (Ninzam, Mada, Kaningkwom) in the branch next to Kuche. Gerhardt (1982) recognizes the genetic similarity of Kuche and Nindem, Kaningkon, Ninzam, Mada (West) and Mada (North)—these are the languages he uses to reconstruct Proto-Plateau 4. For the most closely related languages, there is little except for Gerhardt's reconstruction; the only other published data is Blench and Kato (2001), an English/Mada dictionary with a basic grammatical description.

1.2 Social, Historical, and Political Background

The Bache live on a high plateau in northern Nigeria, just a few miles west of Jos, a city of about 800,000 people (Missen 2000). Kiche (the area where the Bache people live) is divided into five sections: Ujja, Kinedik, Kishi, Kikala, and Ubumu (Muller 1976:747). Each section has a head village for rituals and a political head village—sometimes one and the same, but not always. Besides the head village, there are several other villages in each section, each with a chief of its own. Though the chief of the head village has unique responsibilities and authority, the villages are to some extent autonomous. Between the city and Kiche is the Rukuba army barracks. The soldiers who are housed there come from all areas of the country; both English and Hausa (a West African *lingua franca*) are used in the barracks and in the nearby city.

Jean-Claude Muller has researched and published extensively on Rukuba (Bache) culture, political systems, and social structure (see Muller 1972, 1973a, 1973b, 1975a, 1975b, 1976a, 1976b 1977, 1978a, 1978b, 1980a, 1980b, 1982a, 1982b, 1984, 1986, 1989, and 1994). The Bache still maintain certain important aspects of their tradition as described by Muller: most importantly, they maintain their identity and their language.

Muller characterizes the traditional Rukuba political system as “a polycephalous confederation of ideally exogamous chiefdoms, chiefdoms that, nevertheless, had best be called villages due to their small size” (1976a:739). Historically, this kind of political organization meant “trouble in finding a single traditional ruler to convey the orders emanating from the British administration” (739). The British conquered the Bache people in 1905 (1975a:8), but continued to deal with a collection of village chiefs until 1950,

when a Bache man—Adukucili Acadun, later called Alhaji Abdul Rahman—was appointed as the Administrative Chief (10). Though the new, non-traditional chief's office has not integrated well with the traditional system, both systems continue to exist, side by side. The same man continued in office after independence, ruling, as Muller says, "singlehandedly" (1975a:10). He died in 1968 (Muller, personal communication) and was succeeded by His Royal Highness Utu Agoh Mallam Aku Kudu. However, there is no well-established tradition of succession, and nobody is sure how the next Administrative Chief will be selected. Village chiefs, on the other hand, continue to take an active role in rural life, living and ruling in the villages, dying and being succeeded according to tradition.

It seems village life has changed little in the last century: most of the villagers are Bache people who support themselves by farming. There are occasional intrusions by modern society, but they have not reached a "critical mass" that might actually disrupt the course of Bache society. For instance, pastors, government workers, and schoolteachers may be from other areas of Nigeria, as are the soldiers who stay at the army barracks. Fulani people graze their cattle in the area and participate in the local markets. Children learn to speak, read, and write Hausa in elementary school, and Hausa is the language of church and government. Both Hausa and Kuche are spoken in the markets; English is seldom used. Kuche is always spoken at home.

In Jos the situation is quite different. As many of the young people move to the city for education and for jobs, traditional village life is less characteristic of the present, city-dwelling generation; they may not speak Kuche even at home. Unless both husband

and wife are Bache, Hausa is learned as the “mother tongue” of the children. English is taught at school, but Hausa is used for most purposes. Even in Jos, though, there is a distinct Bache community.

Life in the city may be slowly replacing traditional rural society, but it has not eliminated the Bache identity. A sense of community and ethnic cohesion persists largely because of an initiative taken by one early missionary, C.F. Hummell. Some time during the 1940s or 50s, Mr. Hummell established an organization called “Bache binJos” (The Bache in Jos), so that the young people who moved to the city could meet together for Bible study and fellowship. This association is still active, with the entire constituency meeting once a month and the Executive Committee meeting once or twice in between. They select a “chief” of the metropolitan Bache, as well as a secretary, treasurer, chaplain, and so on. At these meetings, Kuche is spoken almost exclusively, even by those who seldom speak it at school or on the job. These people are typically well-educated and they are involved in business, government, church, and teaching. They have access to modern technology and the training to use it. The large pool of fluent speakers in the village, along with the large pool of resources among the Bache binJos, bodes well for the sustained development of the language.

1.3 Kuche Data

1.3.1 Early Language Research

In July of 2001, The Kuche Language Society was formed for the development of the language, of an orthography, and of vernacular literature. It is hoped that the Bache people themselves will take the initiative to produce written literature and ensure the

continued vitality of the language. Before this author's research began in 1991, there was little literature *in* Kuche and scant published research *about* the language.

Scripture portions were published between 1924 and 1943, including the gospels of Mark and John and the epistle to the Romans (listed in the References section as Hummell 1943). In 1931 a book of hymns was translated and published—and reprinted more than once until 1978 (listed as Asen Iba Kuru 1978). These are written in an old orthography developed by (non-linguist) missionaries. More recently, the Christmas Story was translated by Gideon Asukutuk—using a tentative orthography developed by this author—and was mimeographed and distributed (Asukutuk 1992). Also at that time, one native folk tale, told by Ruth Adiwu, was transcribed for a very limited distribution; that folk tale is appended to this work as “Uyho” (see Appendix 10). The Kuche Language Society is currently (2002) working on translating church liturgy, but it is not known if any of their work has been published yet.

The earliest published work about the language is a chapter about the noun class system of six Plateau languages by Luc Bouquiaux (1967). Williamson and Shimizu (1968) include Rukuba (Kuche) in their Benue-Congo Comparative Wordlist. Carl Hoffmann (1976), at the University of Ibadan, Nigeria, has a paper on the noun class system of Kuche. He extends the analysis of the noun classes to include the intricate concord system. Included with Hoffmann's paper are excerpts from unsigned essays written by four of his undergraduate students during the previous academic year. Five pages of these student papers deal with tone, and there is a cursory glance at the tense/lax vowel distinction; the remaining pages discuss the noun class system. Ludwig Gerhardt

(1982) uses Hoffmann's data to reconstruct "Proto-Plateau-4". Elisha Kuchili, a native speaker of Kuche, wrote a Master's level thesis (1990) entitled "The Noun Phrase in Rukuba and English." His purpose in writing this paper is "to make a detailed analysis and comparison of Rukuba and English language and identify the extent of the first language (mother tongue), interfering in the effective learning of English as a second language" (p. 7). Grimes and Grimes (personal communication) have supplied, on a floppy disk, a short word list that has enabled them to compare Kuche with related languages in order to determine its genetic affiliation.

There are also two more extensive word lists: one by this author (Wilson 1996b:appendix) and one by Roger Blench (2001). Wilson 1996b also provides a phonological analysis of the language and a brief sketch of the syntax and morphology. Wilson 1996a is an investigation of acoustic properties of vowels and glides in Kuche. Three other papers (Wilson 1997, 1998, 2000) examine the noun morphology, discourse structure of a hortatory text, and aspect/mood in narrative text. Wilson 2002 is an analysis of the plurals of certain kinship terms that are actually syntactic constructions including a preposition and a singular noun. It is hoped that a more complete grammar of the language will be available in the near future.

1.3.2 Current Data

The bulk of the data for this study comes from the author's field notes collected in June and July 2001, and notes collected earlier, between 1991 and 1994. Ten monologues—along with bits of dialogue—were recorded, transcribed, and translated with the help of a native speaker informant. Four of the monologues are actually a single

monologue divided into four chapters (see texts 5-8 in Appendix A). One monologue is incomplete in the Appendix (text #9), although it is completely translated and transcribed by hand. When it became obvious that it was another “habitual” narrative (an account of what usually happened over a period of time, rather than of what specifically happened at a specific time), the tedious work of entering it into a spreadsheet was left off. Another text (#10) is not narrative at all, but was translated and transcribed for an earlier study. Five of the narratives (#4-#8), plus the beginning of another narrative (#9), were coded and analyzed at the same time, using a system developed by this author; only those five complete narratives (#4-#8) were used to construct the model presented here. However, the model is found to consistently account for the distribution of verb forms in the other texts as well.

1.4 Research Questions

The primary question is: How is it that certain verb forms not overtly marked for a specific TAM category are interpreted as if they were? In order to research the questions, they need to be framed in terms that are measurable, as below. The questions ask about the *distribution* of certain verb forms—that is, their frequency within certain identifiable segments of discourse—and the *interpretation* of those forms—that is, the meaning that a native speaker assigns to them. Together, the distribution of a form and its semantic interpretation constitute its *use*.

Does a theoretical model analogous to phonological feature-spreading explain the distribution of certain overtly-marked verb forms and the interpretation of relatively unmarked forms that follow in discourse?

- A. Can the model be constructed so that it accurately represents the use of TAM forms in embedded domains? Particularly, how are verbs interpreted when they fall within the domains of the widely used forms listed below, and how are these four domains defined?
- i) The Perfective prefix *nì-*.
 - ii) The Habitual prefix *tá-*.
 - iii) The Conditional construction: a serial construction in which the first verb is *tù*.
 - iv) The Imperative form: a verb with no subject agreement prefix.
- B. Is the use of the Unmarked form in Kuche narrative explained by integrating Longacre's (1990) notion of consecutive tenses with various models of the simple present tense in narrative?

Not surprisingly, the most striking difference in the patterns of verb form usage is the difference between monologue and conversation. In this study the term *conversation* is applied both to actual conversation between the story-teller and the listener and also to constructed conversation: the story dialog.

There is also a distinct difference between the habitual narratives and the unique narratives. There are more subtle differences between story foreground and story background, and these differences are also analyzed.

1.5 Definition of terms

Several common linguistic terms are given a more specialized meaning in this volume. It helps to define these terms at the beginning.

Kuche has a verb form that is referred to here as *the Unmarked verb*. This is a form that is not grammatically marked for any tense, aspect, or mood, but it may be marked for other grammatical categories. It always occurs with a subject agreement prefix, and it may also occur with direct object or locative suffixes. It is unmarked in two

senses: it is not morphologically or syntactically marked for TAM, and it is non-specific in its reference to time, aspect, and modality.

The questions posed by this research make frequent reference to verb *interpretations*. For the purpose of this study, interpretation generally means the time category, aspect category, or modality category that a listener associates with a clause in its context. Discussion of interpretation is limited here to sixteen semantic categories:

- I. No TAM: Speaker utterances like, “yes,” “where?” or “no” are counted as clauses, but have no actual time reference, or aspect, or modality.
- II. Time Categories
 - A. Past
 - B. Future of Past
 - C. Present
 - D. Future
 - E. Timeless
- III. Aspect Categories
 - A. Unique, bounded event in sequence
 - B. Out of sequence bounded event
 - C. Non-unique
 - D. Durative
 - E. State
- IV. Modality Categories
 - A. Real
 - B. Likely situation
 - C. Factual “if”
 - D. Imperative
 - E. Unlikely (including Negative)

:
A concept that is also frequently used in this study is the concept of *grammatical*

form, or *overtly-marked form*. The forms that are intended here are generally the verb forms listed in tables 3.6 through 3.9 of chapter 3.

Spreading is a familiar linguistic concept, and it is used here with very little modification to its meaning. As in autosegmental phonology, it refers to a process by which a feature associated with one linguistic element—like the nasality of /n/--associates with other linguistic elements in the context. In this study, the features that spread are semantic categories, and the elements that they associate with are clauses.

Transparency is not a term used often in linguistics, but it is a term used frequently in the following chapters. It is an alternative way of thinking about the process that is also called spreading. Verb forms are *transparent* if they are non-specific in reference to time, aspect, and modality; in addition, information about the clause's time reference, aspect, and modality are retrieved from some other, more specific verb form in the context. In other words, the listener looks through the non-specific, transparent verb to see the TAM marked on another verb.

During the data collection phase of this research, the author visited various Bache villages and asked villagers to relate stories from their people's history. The intent was to collect *narratives* that would be true stories. Many of the texts thus recorded are not narratives in the typical sense: that is, they do not "refer to *specific* experiences that occurred in some *past* world" (Fleischman 1991:77). Several of the histories recorded for this study refer, not to *specific* experiences that occurred in the real past, but to *typical* experiences that occurred in the real past. They are still quite narrative-like. They are more like narrative discourse than like procedural discourse or hortatory, because temporal sequence is still an integral feature. It was deemed necessary for the purposes of this study, though, to divide the category *narrative* into two subcategories: *unique narrative*

and *habitual narrative*. The texts that are *unique narratives* relate specific events that occurred once in history—or once in fictional history in the case of the folk tales. The texts that are *habitual narratives* relate events that happened over and over again—events that are typical of a certain hero or of a certain epoch of history.

Of the ten texts that appear in Appendix A, five of them were selected for a process of *tabulation*. Tabulation, in this study, consists of (1) dividing the texts into seven different categories of clauses—the categories found to be appropriate for this study, (2) counting the various interpretations associated with each clause, and (3) counting how many times each Kuche verb form is associated with each of the interpretations.

Tabulation is basically a process of counting, but the term is used here only to refer to this specific three-step process.

1.6 Organization

Chapter 2 reviews the literature discussing TAM theory, various uses of indeterminate verbs, and TAM in discourse. Chapter 3 outlines the basic grammar of Kuche verbs. Chapter 4 explains the methods used to analyze the texts. Chapter 5 is a summary of the findings, reported as quantitative studies, as visual representations called line graphs, and as prose descriptions. Chapter 6 proposes metaphorical and graphic models that illustrate the structure of Kuche narrative as it relates to TAM. Chapter 7 presents a formal notational system that is used to chart the five Kuche texts that are tabulated. It is a system based on the concept of transparent, embedded domains. Chapter 8 evaluates the answers to the research questions posed above and proposes questions that merit further study.

CHAPTER 2

THEORY: TENSE/ASPECT/MOOD AND DISCOURSE

Cross-linguistically, tense, aspect, and mood form a grammatical system (the TAM system), one which “is probably the most complex and frustrating to the linguist” (Givón 1984:269). TAM researchers take two different approaches: some compare the semantic categories associated with TAM forms in various languages, and others compare patterns of discourse usage in various languages. While the goal of this research is to analyze patterns of discourse usage in Kuche narrative, it is necessary first to identify the semantic categories that are typically associated with TAM forms.

2.1 TAM theory

Tense, aspect, and mood mark three closely related *semantic* categories, and every human language makes some provision for distinguishing the relevant semantic differences (see Bhat 1999). Tense and aspect relate to ways of thinking about time, while mood relates to ways of thinking about reality (see Chung and Timberlake 1985:202).

Givón goes so far as to say that all three grammatical sub-systems relate to time.

The division within the TAM notional space into **tense**, **aspect** and **modality** is far from spurious. In one way or another, these three represent three different points of departure in our experience of **time**. Tense involves primarily—though not exclusively—our experience/concept of time as *points in a sequence*, and thus the notions of **precedence** and **subsequence**. Aspects of various kinds involve our notion of the **boundedness** of time-spans, i.e. various configurations of *beginning*, *ending* and *middle* points. But in the semantic space of aspect, nearly always some element of tense is also

involved, in terms of establishing a **point-of-reference** along the sequential time. Finally, modality. . . encompasses among other things our notions of **reality**, in the sense of “having factual existence at *some* real time” (‘true’), “having existence at *no* real time” (‘false’), or “having *potential* existence in some *yet-to-be* time” (‘possible’).

(Givón 1984:272, italics and bolding original)

Every language in the world can refer to a situation’s “location in time” (see Comrie 1985:9, definition of “tense”), or to its “internal temporal constituency” (Comrie 1976:3, definition of “aspect”), or to its “actuality” in the real world (“mood/modality” according to Chung and Timberlake 1985:241). However, the grammatical TAM system of any particular language only does part of that work (see Bhat 1999:15). References to “location in time” may be made lexically rather than grammatically. For instance, in languages with no grammatical tense system (like Indonesian), the time orientation of an utterance is either implicit in the context or can be made explicit through an adverbial expression, like “tomorrow” or “last week” or “now”(see, for instance, Wolff 1977:18). The same holds true for aspect and mood; while one language may incorporate a certain aspectual (or modal) distinction into verbal inflection, another language may make that distinction with a prepositional phrase or an adverb.

Problems arise, though, in distinguishing grammatical marking from lexical devices that perform similar functions, because, as Dahl says (1985:22), the boundary between lexical expressions and grammatical expressions tends to be a bit hazy. However, he goes on to say that, “the TMA [=TAM] system and in general systems of grammatical categories are ‘focused’ and ‘imprecise’, having a centre or ‘core’ and a periphery” (23). Linguists may disagree about some of the “periphery,” but they evidently agree closely

enough that the literature on TAM theory is focused on constructions generally described as *grammatical* rather than lexical.

This study follows Comrie's lead in "using an initial capital [letter] for the names of language-particular categories, whether referring to the category as such or to forms that belong to that category, while not using initial capitals for language-independent semantic distinctions" (1976:10). Dahl adds one more level of description. Besides the semantic distinctions (which he encloses in single quotes, e.g. 'past') and the language specific categories (capitalized, e.g. Past), Dahl recognizes "category types" (1985:34). Category types are not semantic categories, but grammatical categories that are comparable cross-linguistically; they may not encode precisely the same distinctions from one language to another, but they cover the same core semantic territory. For these category types, Dahl uses all upper case letters (e.g. PAST); Suzanne Fleischman is the only other author who consistently follows the convention of using all caps. References to Dahl's work and to Fleischman's work incorporate this convention.

In discussing tense, aspect, and mood, we will, as Givón says (1984:272), "maintain the pretense that each forms a separate, self-contained functional domain." In actuality, the three categories are interconnected, and the interpretation of grammatical constructions marking any one of them is influenced by the presence (or absence) of marking for the other two. (See also Dahl 1985:23-31 for more discussion of the problem of separating tense, aspect, and mood.)

2.1.1 Tense

2.1.1.1 Common Tense Categories

Comrie's definition of tense as the "grammaticalized expression of location in time" (1985:9) is sufficient for the purposes of this study. Other scholars have adopted his definition (see Bybee 1994b:46, Higdon 1996:47, Cullen 1999:18), or something very similar to it (see Dahl 1985:23ff and Bhat 1999:13). "Grammaticalized" expressions may be either morphological (i.e. inflection) or syntactic (e.g. auxiliary) constructions (see Comrie 1985:11). Typically, tense locates a situation in time by using some reference point, often the *now* of the speech situation. Comrie goes on to say that "A system which relates entities to a reference point is termed a deictic system, and we can therefore say that tense is deictic" (14).

The generally accepted division of time into grammatical tenses involves the categories *present*, *past*, and *future*—basically coinciding, respectively, with (1) time of speech, (2) time preceding the moment of speech, and (3) time subsequent to the moment of speech. "While the general theory allows us a three-way distinction within absolute tense, many languages in fact have a basic two-way split, with either an opposition between past and non-past or between future and non-future" (Comrie 1985:49).

As discussed in Comrie 1985, the tense systems of some human languages may also distinguish absolute tenses from relative tense (36-82) and degrees of remoteness in future and/or past tenses (83-101).

Absolute tenses are the tenses that use as their reference point the *now*, which Givón calls the "unmarked time axis" (1984:273). The relative tenses include the perfect

tenses, as in English (pluperfect), “He **had left** before they arrived.” In a relative tense, the point of reference for locating the situation in time is not the moment of speech, but some other point indicated in the context (see Bhat 1999:29). Though the perfect tenses tend to convey more than just a shift in the point of reference, that shift is generally a part of the semantic package (see Givón 1984:278-286).

While the tense category *perfect* is a widespread feature of human language (see Givón 1984:283), a less common opposition is near/remote—which can be a feature of either a past or future tense (273). Near and remote tenses are more common in sub-Saharan Africa (see Comrie 1985:83).

2.1.1.2 Present Tense

Bolinger (1947) suggests that the basic meaning of English Simple Present tense is better viewed, not as cotermporal with the speakers “now”, but as unmarked for time, temporally neutral. He says,

We might call the simple present tense the BASE TENSE, to which all other tenses are oriented but which is itself oriented to nothing, expressing merely the FACT OF PROCESS. The simple present . . . is ‘timeless’ not in the sense of ‘eternal’ but of ‘non-committed about time.’ Whenever, then, the speaker wishes to avoid the confinement of time implicit in other tenses, he uses the simple present.”

Bolinger (1947:436)

This semantic “non-commitment about time” is not a universal feature of Present tense, but it does occur in more than just English. In Tamil, for instance, the Present tense is the tense of choice for narrative background (*not* foreground), according to Herring (1985:41), exactly because it is “the maximally unspecified tense referentially”; she calls it “the Indeterminate Present.” The same semantic broadness, the same lack of specificity is

also apparent in some Indo-European languages. Fleischman (1990:54) explains that the contrast between a Past tense and a Present tense in Romance narrative is often not a contrast between “marking of past time” and “marking of non-past time.” Rather the contrast is between “marking of (past) time” and “non-marking of past time.” Semantic indeterminateness is a strong criterion for identifying unmarked categories in a language (Battistella 1990:45).

Another common feature of Present tense among Indo-European languages is zero-morphology—a verb form that may or may not be marked for subject agreement, but which has no overt TAM marking¹ (see, for instance, Bybee 1994b:339 and Dahl 1985:166-172). The relationship between form and meaning here may be iconic to a degree; Bybee (1994a) has found that there is a strong tendency cross-linguistically to leave only the Present tense or the Perfective aspect unmarked grammatically. Battistella names zero-morphology as another frequent correlate of unmarked categories, though not nearly as important a criterion as indeterminateness (1990:34).

Semantically, Present tense is a very broad category indeed; Bybee (1994b:126) goes so far as to say that, “Unlike Comrie (1985b:36-41) we find it difficult to view the so-called present tense as a “tense,” that is, as having to do primarily with deictic temporal reference. What present covers are various types of imperfective situations with the moment of speech as the reference point.” Broadly speaking, Present tense tends to include these “aspectual types” (1994b:140-141):

¹ Bybee (1994) also cites several languages whose non-marked verbal category is Perfective aspect, but none of them are Indo-European.

1. Progressive activities ongoing at the moment of speech.
2. Habitually occurring situations that include the moment of speech.
3. States that exist at the moment of speech.
4. Generic or gnomic—timeless, but they do hold at the moment of speech.

It is possible to identify languages in which all these aspectual types are marked by one “Present tense” form; other languages differentiate various subsets of these aspectual types (141). English, for instance, has overt marking for form #1 in the system outlined above, that is, the Present Progressive. The other three functions are not distinguished formally (in English), but are identically marked (or, rather *unmarked*) as Simple Present Tense: a form characterized by subject agreement marking only.

2.1.2 Aspect

2.1.2.1 Lexical Aspect

While the TAM system of a language gives a verb an added specificity of meaning, a verb has meaning of its own. Furthermore, verbs can be divided into broad categories based on their lexical meanings. TAM marking can be thought of as refinement to a verb’s meaning, fitting it more perfectly into its context. Tense, mood, and aspect—but especially grammatical aspect—interact with various broad categories of lexical verbs to express the speaker’s intentions as accurately as possible.

Various scholars divide the verbal lexicon in different ways. Bybee 1994b refers to verbs as either *stative* or *dynamic*, which seem to be equivalent to Givón’s division of lexical verbs into *states* and *events*. *States* are “existing conditions not involving change

across time” (1984:87); they may be either temporary or permanent. *Events* are “changes across time, either from an initial to a final state, if the event is bounded, or changes in the process of occurring, if the event is not construed as bounded” (87). He says that *actions* are “events for which a responsible agent is identified” (87). So that the category event includes the subcategories (a) completed event, (b) process, and (c) action. In another place (51), he subcategorizes events by their degree of time stability: instantaneous verbs (i.e. ‘hit,’ ‘shoot,’ ‘kick’) denote rapid change, while slower change is expressed by process/activity verbs (like ‘sing,’ ‘work,’ ‘eat’).

Levinsohn (1997:Lecture 4) also makes a distinction between events and non-events. Though his remarks refer to *clauses* in a discourse (rather than specifically to verbs), the distinction is similar to the one that Givón makes above. He goes on to cite Foley and Van Valin (1984), who, he says:

...go further; they discern a natural correlation between *four* basic verb classes and background versus foreground information. They use syntactic and semantic criteria proposed by Dowty (1979:60) to distinguish the following classes of verbs:

- achievement (e.g., recognize, find, die)
 - accomplishment (e.g., make something, paint a picture)
 - activity (e.g., run, drive a car)
 - state (e.g., know, have).
- (Levinsohn 1997:Lecture 4)

Binnick (1991) mentions states and non-states, and then divides non-states into activities and performances. Fleischmann (1990) divides the verbal lexicon differently. She defines both states and activities as atelic and defines accomplishments and achievements as telic.

For purposes of this study, two categories of lexical verbs are distinguished: **stative** verbs and **dynamic** verbs, using, for the most part, the categories of Bybee et al, as cited above. Some of the other categories mentioned here—achievement, event, process, etc.—are indeed valid categories, but have proved of little significance for this particular analysis.

2.1.2.2 Grammatical Aspect

Grammatical aspect is a linguistic resource used to modify and refine a verb's lexical aspect. In his discussion of grammatically-marked aspect, Comrie (1976:3) says, "Aspects are different ways of viewing the internal temporal constituency of a situation." In this definition, he uses the word "situation" as a cover-term to refer to states or events or processes, though some other scholars do not follow his lead. Comrie's definition of aspect is the basis for most discussion of verbal aspect in the current literature (see Givón 1984, Dahl, 1985, Bybee 1994b, Hopper 1982, ed.), though some scholars rephrase it, refine it, or build upon it. Bhat (1999:43) says that aspect "indicates the *temporal structure* of an event, i.e. the way in which the event occurs in time." While tense is a deictic category, aspect is not (see Comrie 1976:5). That is, tense functions to locate a situation by relating it to a reference point (typically the moment of speech), while aspect is concerned more with the "situation-internal time."

Chung and Timberlake (1985:213) say, "Aspect characterizes the relationship of a predicate to the time interval over which it occurs." They use different terminology than Comrie, but the mental images are compatible. The word "event" is their cover-term (comparable, evidently, to Comrie's use of "situation"). They define event "in terms of

three components: a predicate; an interval of time over which the predicate occurs, which we call the event frame; and a situation or set of conditions under which the predicate occurs, which we call the event world” (203). Their definition of aspect is built around the concept of “event”:

In order to qualify as an event, the predicate must minimally occur over the event frame, but there is more than one way to satisfy this requirement. Notably, the predicate can occur wholly within the event frame, or it can occur over a larger interval of time that includes the frame. In addition, it appears that frames can be nested, in that individual subframes can be added together to form larger, inclusive macroframes. Aspect characterizes the different relationships of a predicate to the event frame.
(214)

The most common aspectual distinction that is made in human language is the distinction between *perfective* (not to be confused with the *perfect* tense) and imperfective. Furthermore, according to Comrie (1976:25), the category imperfective is, in many languages, broken down into subcategories or even sub-sub-categories; perfective, on the other hand, is a category that is more likely to remain undivided. He draws this “classification of aspectual oppositions.”

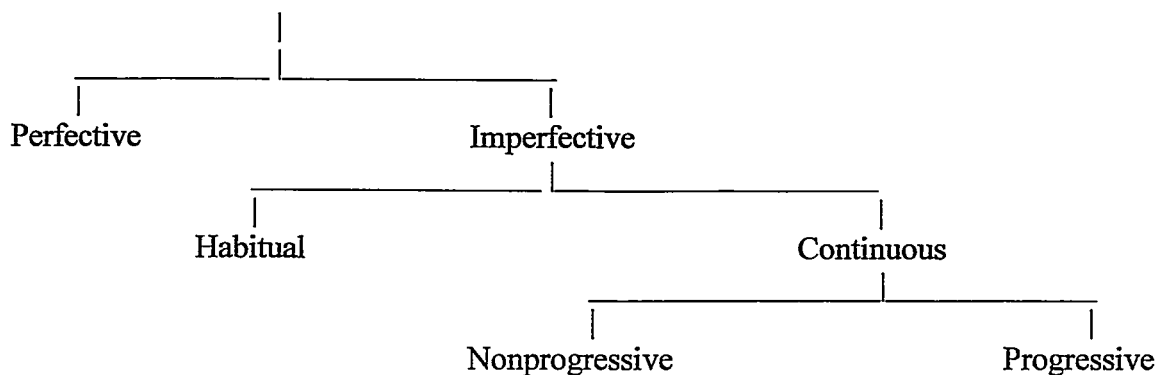


Figure 2.1: Comrie’s Classification of Aspectual Oppositions
Reproduced from Comrie 1976:25

Comrie says that “the perfective looks at the situation from outside, without necessarily distinguishing any of the internal structure of the situation” (1976:4). He contrasts it with imperfectivity, which makes “explicit reference to the internal temporal structure of a situation, viewing a situation from within.” Givón describes the essential feature of the perfective as its terminal boundary at the temporal point of reference, and the essential feature of imperfective as its lack of a terminal boundary at that point (1984:276).

The terminal boundary feature is most likely the reason that there is “a strong tendency for PFV [perfective] categories to be restricted to past time reference” (Dahl 1985:79). Dahl interprets this as a secondary feature of perfective. He continues,

In other words, for all languages it holds that ‘past time reference’ characterizes prototypical uses of PFV—single, completed events will in the ‘typical cases’ be located in the past. Languages will differ, however, in the extent to which they allow uses of PFV with non-past time reference. Also, within one and the same language, the ‘past time reference’ restriction may hold with unequal force in different contexts.
(79)

Bybee (1994b) finds that empirical evidence does not substantiate Comrie’s 1976 model (see figure 2.1) in its entirety. Specifically, the node labeled ‘continuous’ is cast into doubt:

We have also attempted to follow Comrie’s analysis of continuous as divisible into progressive (for dynamic verbs) and nonprogressive (for statives). . . In our data, however, while progressives stand out very clearly, no equally clear category of ‘continuous’ emerges. . . Our conclusion, then, regarding Comrie’s classification and definition of aspectual oppositions is that a gram-type for each node of figure [3.1] does not exist. We have strong evidence for progressive, habitual, past imperfective, imperfective, and present as cross-linguistic gram-types in our material, but a clear distinction between a progressive which is restricted to dynamic verbs and a continuous which is not does not emerge from our data.
(1994:139)

Chung and Timberlake (1985) characterize the perfective/imperfective divide with an analogy different from Comrie's. The perfective/imperfective distinction is based on the "notable" two-way distinction cited on page 27 above: "the predicate can occur wholly within the event frame, or it can occur over a larger interval of time that includes the frame" (214). They continue,

A given language will choose to define one of these two possibilities in relatively narrow terms, in the sense that it will impose additional semantic restrictions; the opposite possibility will be defined in broad terms, and will be expressed with the same morphology used for other aspectual values. (239)

The main difference between this description and Comrie's is that Chung and Timberlake's description allows for either perfective *or* imperfective to be more finely subdivided, just not in the same language. That is, the less notable distinctions—the "nested frames," the "subframes," and the "macroframes" (from Chung & Timberlake 1985:214)—may or may not be differentiated morphologically, and they may be grouped with imperfective morphology in one language and with perfective morphology in another language. This concept of aspectual distinctions is compatible with much of Dahl's results (1985).

Dahl names several other aspectual categories that are often marked morphologically (1985:90-102): progressive, conclusive, and habitual—with some languages additionally marking habitual/generic or habitual/past. Besides these, Chung and Timberlake discuss iterative and durative (1985:220-222). Longacre (personal

communication) mentions distributed, an aspect that Bybee (1994b:162) lists as a specialized sense of iterative.

2.1.3 Mood

Bybee (1994b:176) asserts that the categories traditionally labeled mood and modality “are not so easily defined as tense and aspect.” As Fleischman says,

The terms *mood* (or, in the European tradition, *mode*), *modal*, and *modality* have been used in widely differing senses by various authors at various times. Failure to distinguish clearly between **MOOD**, a purely formal category, and modality, a semantic category, has resulted in a good deal of confusion in the literature, particularly in regard to the subjunctive.
(Fleischman 1982:12-13, italics and bolding original)

Palmer (1979:4) makes much the same distinction: he says, “‘mood’ is a grammatical term, while ‘modality’ is a semantic term relating to the meanings that are usually associated with mood. The relation between mood and modality is thus like that between tense and time.” Much of the literature on “mood/modality” is murky because this distinction is blurred, or because the terms are differentiated in some other way. Fleischman’s and Palmer’s use of the terms makes good sense, so this is the usage that has been adopted here.

The two major divisions of modality are realis and irrealis (see Givón 1984:284). Realis refers to that which a speaker encodes as fact, while irrealis refers to that which a speaker encodes as “hypothetical, possible, uncertain states or events” (285). The term “indicative mood” is the label typically given to the linguistic category that encodes realis. Chung & Timberlake say, “Whereas there is basically one way for an event to be actual [realis], there are numerous ways that an event can be less than completely actual [irrealis].

For this reason our discussion of mood is concerned principally with different types of non-actuality" (1985:241). It is not only Chung and Timberlake who focus on non-actuality (irrealis). The indicative mood is generally unmarked—it is assumed to be in force except in unusual, highly marked clauses—so most literature on mood focuses on those marking irrealis, moods such as subjunctive, conditional, hypothetical, imperative, and so on (241).

Non-actual modality has traditionally been subdivided into two semantic categories: epistemic and deontic.

Modal logic has to do with the notion of possibility and necessity, and its categories epistemic and deontic concern themselves with these notions in two different domains. Epistemic modality has to do with the possibility or necessity of *the truth of propositions*, and is thus involved with knowledge and belief (Lyons 1977:793). Deontic modality, on the other hand, is concerned with the necessity or possibility of acts performed by morally responsible agents (Lyons 1977:823), and is thus associated with the *social functions of permission and obligation*.
(Bybee and Fleischmann 1995:4, italics original)

In their introductory essay cited above, Bybee and Fleischmann suggest new nomenclature and new groupings of concepts in the domain of irrealis. The term epistemic is retained and continues to refer to the same linguistic categories as before. However, the term deontic is considered "at once too broad and too narrow" (1995:5). It is replaced by the terms agent-oriented modality and speaker-oriented modality, explained thus:

Agent-oriented modality encompasses all modal meanings that predicate conditions on an agent with regard to the completion of an action referred to by the main predicate, e.g. obligation, desire, ability, permission and root possibility. **Epistemic modality** retains its traditional definition: epistemics are clausal-scope indicators of a speaker's commitment to the truth of a proposition. Markers of directives, such as imperatives, optatives

or permissives, which represent speech acts through which a speaker attempts to move an addressee to action, are called **speaker-oriented**. (1995:6, bolding original)

2.2 Unmarked Verbs

In some respects, the Kuche verb form that is not marked for TAM resembles a Present tense form. Kuche verbs unmarked for TAM are used to express two of the four “aspectual types” that present tenses frequently refer to: the gnomic present and states that exist at the moment of speech.² Furthermore, its use in narrative suggests that it might function there as a “historical present.” However, the term “Unmarked verb” (or “Unmarked form”) is more appropriate than “Present tense” for two reasons: (1) The distribution of various Kuche verb forms in discourse suggest that overt TAM markings represent aspectual categories and, to some extent, mood more than they represent tense; and (2) Native speakers never offer this form as an idiomatic translation of English Simple Present tense forms. There is definitely similarity between the Kuche Unmarked verb and a Present tense; but that similarity arises because the Present tense is often an unmarked verbal category, as it is in English.

Though the term “unmarked” is variously defined in the literature, this Kuche verb form has several correlates of an unmarked category, as described by linguists since Jakobson and Trubetzkoy. First, it is morphologically simpler than other verb forms (see Jakobson 1971:585-86 [1963] and 1984:154 [1939]). Second, it is used more frequently than any other verb form (see Greenberg 1966: 65ff)—indeed it is nearly as frequent as all other verb forms combined. Third, it is used in more contexts than any of the other forms

² See the discussion on page 17 above that refers to Bybee (1994:140-141).

(see Battistella 1990:37). And, last, it is indeterminate; that is, its meaning is more general, more broadly defined (see Jakobson 1984:1-2). The relationship between marked and unmarked features of language involves a semantic polarity that is inherently non-equivalent. As Battistella puts it, “[T]he terms *marked* and *unmarked* refer to the evaluation of the poles; the simpler, more general pole is the unmarked term of the opposition while the more complex and focused pole is the marked term” (1990:1).

It is the zero morphology of the Kuche form that first suggested it might indicate an unmarked category. However, there are several other criteria for distinguishing “marked” from “unmarked” categories. For instance, Battistella says:

As Moravcsik and Wirth (1986:3) observe, a “classical” version of markedness can be defined that relies on three types of criteria: the distribution of elements, the amount of structure they have, and their elaboration in terms of subtypes. . . .As I examine these criteria in more detail, I will define a version of markedness in which markedness values in a particular language can be determined by a coalescence of properties—optimality, breadth of distribution, syncretization, indeterminateness, simplicity, and prototypicality.
(1990:26)

In Battistella’s system, it is the *unmarked* element that is more optimal, has the wider breadth of distribution, tends more to syncretization, is more indeterminate, simpler, and more prototypical.. *Optimality* refers to a feature’s frequency across language. *Breadth of distribution* refers to a feature’s frequency within a language, particularly its use in contexts of neutralization. *Syncretization* refers to a feature’s tendency to be further subdivided: for instance, in English the singular (unmarked number) pronoun is divided into masculine and feminine gender but the plural (marked number) pronoun is not. *Indeterminateness* refers to a relative lack of semantic specificity. *Simplicity* refers to a

relative lack of elaboration in form. *Prototypicality* is a psychological criterion and refers to a category's conceptual basicness. (See Battistella 1990:26-27.) Battistella insists that "the semantic criterion of indeterminateness expressed in Jakobson's definition should be given priority" (45). Though this study does not determine the status of the optimality, syncretization, or prototypicality of Kuche's Unmarked verb form, it is observed to have a wide breadth of distribution, morphological simplicity and, the essential element, indeterminateness. Battistella goes on to say that:

Properties of **form** and syntactic distribution **sometimes show a correlation with semantic markedness**, but it is a correlation attenuated by other factors. I argue below that form and syntactic distribution may, with appropriate caution exercised, be secondary heuristics for determining marked and unmarked status but are not alone sufficient to serve as defining principles.

(1990:34, bolding added)

In Kuche, the data show that form correlates with semantics on the issue of the marking of a verb. A verb form with no TAM marking does not denote a specific tense, aspect, or mood; rather, it is a very general form that can refer to any tense, any aspect, or any mood, depending on context. It differs in one respect, though, from typical examples of semantically unmarked categories: it does not alternate with a specific interpretation.

As Battistella says:

The unmarked element thus has two interpretations: it has a general interpretation in which the nonsignalization of the marked feature indicates the irrelevance of the poles of the opposition; and it has a specific interpretation in which the nonsignalization of the marked feature indicates the signalization of the opposite. The double use of the unmarked term both to signal the logical opposite of the unmarked feature and to deny the assertion of the marked feature reflects a natural economy: two poles of a particular feature may define three values.

(1990:2)

He gives examples of English Simple Present tense forms; these forms can be used to refer to events actually occurring at the moment of speech, but they may also refer to habitual and gnomic situations, to events in the (near) future, and to events in the past (1990:3-4). He comments that, “[I]ts actual time reference depends on context or on other semantic properties of the verbs in question” (1990:3). In such instances, the Simple Present tense indicates “the irrelevance of the poles of the opposition”—that is, the irrelevance of the difference between Past (the marked tense in English) and Present (the unmarked tense in English). In other examples, the Present tense may be used as a “signalization of the opposite” of the marked tense; for example, in “Jenny is my best friend, but Teddy was my best friend,” the opposition between the Present tense form “is” and the Past tense form “was” is highlighted.

In Kuche, the Unmarked verb never “signals the opposite” of a marked tense. It never has a “specific” interpretation; its actual time reference—and its actual aspect interpretation as well—depend *always* on the context. It is indeed distinct from a typical unmarked category in that it is totally indeterminate. Yet it is still useful to compare it to more typical unmarked categories, like the Present tense in various languages. The literature reveals that the Present tense—especially in Indo-European languages, but in others as well—is often the indeterminate category, or the morphologically unmarked category, or both.

Two other wide-ranging studies of verbal categories (TAM) focus on only one or two properties that Batistella identifies as features of unmarked categories. Bybee (1994a) writes about verbs that are zero-marked grammatically, and Dahl (1985) writes both about

verbs that are grammatically unmarked and verbs that are indeterminate. A third volume (Bybee, Perkins, and Pagliuca 1994b) addresses a separate issue: which verbal categories tend to be grammatically unmarked among the languages of the world.

Bybee (1994a) describes “a possible inferential mechanism by which meaning may develop in grammatical morphemes (= grams) with no overt expression.” She also examines “the nature of the meaning of zero grams, arguing that such forms have positive semantic content, which arises from the communicative context” (235). If this is true, then it logically follows that the “positive semantic content” of such forms is subsequent to their use in discourse. To put it another way, if meaning “arises from the communicative context,” then there is no meaning in the form before it is used in discourse: it is indeterminate. Over a period of time, as the zero form is used more and more frequently in contexts where a certain specific interpretation is the only possible interpretation, the zero form becomes associated with that specific meaning (238-239).

Dahl (1985) makes a distinction between verbs that are indeterminate and verbs that are not grammatically marked, highlighting the fact that formally unmarked elements are not always conceptually unmarked elements. Verbs that are not grammatically marked he labels “U” (Unmarked), but there are other language-specific categories that he calls “Default” (1985:183). He says, “Basically, the idea is that there are a number of positively defined categories (that we later called grams) and “default” is what is left when you have given them their due” (Dahl 2003 e-mail 2-11-2003); Dahl’s “default” verbal categories, then, correspond closely to what is called “indeterminate” in this study. He reiterates the distinction, though, between grammatically unmarked verbs and default categories; as an

example he cites the Swedish Present tense as a verbal category “which is consistently equipped with an ending (there is no subject-verb agreement), [and] may be felt to have more of their own identity and should perhaps also be treated as positively defined, as Joan Bybee has argued” (Dahl 2003).

There is no dichotomy here. As Battistella says, “The unmarked element thus has two interpretations” (1990:2): a general (i.e. indeterminate) interpretation and a specific interpretation. Even default categories may be positively defined in certain contexts. And, even though an indeterminate verbal category is not always indicated by zero-marking in every language, it just so happens that in Kuche, it is.

In their landmark study of tense, aspect, and modality, Bybee, Perkins, and Pagliuca (1994b) compare verb forms from 94 languages drawn from diverse language families. Of particular relevance to this study is their treatment of verbs that are not grammatically marked for TAM. The zero-morphology verb forms tend to coincide with either Perfective aspect (in eight languages, see pages 333-335) or Present tense (in six languages, see page 339). In only one language (Slave) is a zero marked form used for some other category (“Imperfective Mode,” page 337). If we assume that zero-morphology correlates well with indeterminacy, then it seems that indeterminacy shares its form with Perfective *aspect* or Present *tense* more than with any other verbal categories. Why this should be so is not within the scope of this study; it does suggest, however, that generalizations made about the use of Present tense³ in discourse might well be applicable

³ I assume there should also be correlations between indeterminacy and Perfective aspect forms, but, if so, the literature could not be located.

to the Kuche Unmarked verb, as long as the generalizations are based on the indeterminacy of the present tense.

2.3 TAM in Discourse

2.3.1 Discourse Analysis

Real human language is not shaped into paradigm, definition, and analysis, but into discourse. In the past, traditional linguistics overlooked discourse as a field of study; however, discourse analysis has been growing in importance since the mid-1970s (Myhill 1992:1). Myhill says that discourse analysis “involves looking beyond the immediate sentence (the traditional domain of syntactic analysis) in order to discover properties of language which are not accessible to sentence-level investigation” (1992:1). He suggests that the understanding of tense and aspect is enhanced by an investigation of discourse:

The study of tense and aspect marking has been traditionally considered to be part of semantics rather than discourse analysis, and the typical data for the study of tense and aspect marking have been introspective. . . Such work has resulted in many useful observations and findings regarding certain types of verbal marking. More recently, however, a number of researchers, beginning with Hopper 1979, have argued that a more complete picture of tense and aspect marking can be obtained through the use of other types of data in addition to introspection. Text-based studies such as Hopper 1979, Schiffrin 1981, and Myhill 1988a, 1989a have shown that the use of certain tense/aspect categories is strongly affected by discourse context. (Myhill 1992:54)

Discourse can mean several people conversing, one person addressing a group, or correspondents writing to one another (see Levinsohn 1997:Lecture 1). Because of the personal nature of conversation and private correspondence, the kind of discourse most often studied is public discourse: a monologue, with one person addressing a group, either orally or in writing. The most frequently studied monologue is narrative, probably because

linguists have little difficulty finding a volunteer willing to tell a story and to allow his story to be taped, transcribed, and dissected. Most of the literature on TAM in discourse concerns its use in narratives.

2.3.2 Narrative Discourse

A narrative is a discourse in which the clauses are ordered according to the sequence in real time of the events reported. Longacre (1996) distinguishes narrative from three other types of monologue discourse by establishing two major parameters: [+Agent Orientation] and [+Contingent Succession]. Contingent succession means that the main clauses of the discourse follow one another in the same basic order that the actual events occurred in real time, and that each successive event is contingent upon those that precede it. Agent orientation means that the discourse concerns itself with individuals who do things. These parameters differentiate four major discourse types: narrative, procedural, behavioral, and expository, as diagrammed in table 2.1 below.

Table 2.1
Longacre's Parameters of Discourse
(adapted from Longacre 1996:10)

| | | AGENT ORIENTATION | |
|------------|---|-------------------------------------|------------|
| | | + | - |
| CONTINGENT | + | NARRATIVE | PROCEDURAL |
| SUCCESSION | - | BEHAVIORAL
(including hortatory) | EXPOSITORY |

There are two other parameters that distinguish subtypes of these major text types. Discourse can be [+Projection] and [+Tension]. Projection means future,

anticipated events; as applied to narrative, this parameter divides stories/histories from prophecies. Tension “has to do with whether a discourse reflects a struggle or polarization of some sort” (Longacre 1996:10). [+Tension] narratives are climactic (probably the only kind of narratives that North Americans consider *stories*) while [-Tension] narratives are episodic.

Labov (1972) defines narrative as “one method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events which (it is inferred) actually occurred” (1972:359-60). Furthermore, Labov says, “The skeleton of a narrative then consists of a series of temporally ordered causes which we may call narrative clauses” (361). Not all the clauses in a narrative discourse are narrative clauses—that is, not every clause relates the next event in the story. A story is one kind of narrative that is especially incomplete without some kind of explanation/description/dialogue to “flesh them out.” Those clauses that do relate the events of the story in temporal sequence are often referred to as the *storyline* or *foreground*⁴. Though temporal sequence is the one necessary ingredient for building a narrative, it is seldom the only ingredient: storyline clauses are interspersed with various kinds of *background* material. Linguists have analyzed narratives from around the world, and can make powerful generalizations about their basic structure.

Fleischman says that “‘narration’ constitutes a marked category of linguistic performance whose grammar differs in certain respects from the grammar of ordinary

⁴ Storyline is the term usually used by Longacre (1996) and refers especially to narrative. Hopper and Thompson (1980) use the term foreground, which applies to narrative as well, but can be used to refer to other types of discourse.

interactive language” (1991:76). In particular, she says that “in languages with a basic PAST/NONPAST opposition, in the *unmarked context* of ordinary (i.e. nonnarrative) language, the PRESENT is the *unmarked tense*, with respect to which the PAST is marked”

(77). She maintains that, in Western culture, the norms of a well-formed story are:

- (a) that narratives refer to *specific* experiences that occurred in some *past* world (real or imagined), and are accordingly normally reported in tenses of the PAST;
 - (b) that while narratives contain both sequentially ordered events and non-sequential collateral material (descriptions, narrator commentary), it is the *events* that constitute the backbone of a narration;
 - (c) that the unmarked order of presentation in narrative is one in which the order of narrative units (clauses) in a text parallels the order in which events are assumed to have occurred in the world modeled by that text. This default ordering principle is referred to as ‘iconic sequence’; and
 - (d) that all narrations are informed by a particular mode of reporting information, which establishes the narrator’s perspective on, relationship to, or involvement with the agents and events of the story.
- (1991:79)

As various researchers observe, the norm for narrative across languages is for the verbs of a narrative storyline to be marked for past tense, specifically for perfective past if that linguistic category is available (Fleischman 1990, Labov 1972, Myhill 1992).

However, individual speakers may break out of the norm and encode storyline events with other tense-aspect marking, often the present tense, or even the past imperfect. Fleischman argues that such non-normative language in narrative has its roots in the oral performance of stories. She says:

Current research into oral vs. written strategies in narrative suggests that in literate traditions “the meaning is in the text,” while in oral situations “the meaning is in the context” and in the implications of communicative acts (Goody and Watt 1968; Olson 1977; Bauman 1986); listeners attend more to what is *meant* and readers to what is *written* (the actual words in the text).

We are only now coming to recognize the linguistic implications of oral text performance and to articulate significant linguistic differences between narratives composed by literate writers for a literate readership and narratives composed for performance by professional storytellers in cultures still predominantly oral.
(1990:9)

2.3.3 Components of a Narrative

If we think of a narrative as a length of rope stretched across a horizontal plane, then there are two different ways the rope can be dissected: it can be cut vertically, into shorter lengths, or it can be teased apart horizontally, into strands that encompass the entire length, but compose only a part of its thickness. Hopper and Thompson's analysis (1980) identifies the horizontal structure of narrative, separating it into two strands: foreground and background. Labov's analysis of narrative (1972) cuts it up into shorter pieces, listed in table 2.2, below. Though Labov does not argue for rigid sequencing, the various "clause types" (especially #1 abstract, #2 orientation, and #6 coda), tend to follow one another in the order listed.

Table 2.2
Labov's Clause Types in Narration
(Labov 1972:363)

1. Abstract
2. Orientation
3. Complicating action
4. Evaluation
5. Result or resolution
6. Coda

Myhill (1992) notes that each clause type is associated with specific aspectual functions, and also that the English historic present is likely to be used only in the

complicating action. The clauses categorized as complicating action are the ones in temporal sequence, the ones that Labove defines as “narrative clauses.” They are also the clauses that give the story line (1992:69).

Longacre (1996) dissects discourse both ways; he identifies *bands of salience* that are woven throughout the entire story (see table 2.3, below), and he gives structure to the notion of *plot*, whose constituents follow one another in a loosely prescribed sequence (see figure 2.2). Hopper and Thompson’s (1980) division of text into foreground and background is analogous to Longacre’s bands of salience, but it separates only band 1 from all the rest. For many genres of text (e.g. expository, hortatory, etc.), no distinctions beyond foreground and background are consistently identified—though perhaps future research will reveal such finer distinctions. An example of Longacre’s concept of “bands of salience”—this one based on English narrative—is outlined in table 2.3 below.

As table 2.3 reveals, tense, aspect, and mood are not the only criteria for distinguishing the various bands of salience in English narrative. Other criteria include the grammatical encoding of the verbal arguments, the category of the lexical verb (state or event), the adverbs, and the cohesive devices. These linguistic features tend to figure large in the narratives of other languages as well, but always TAM is a core feature—especially tense and aspect (see Burquest 1992:416, Higdon 1996:108, Cullen 1999:127). Mood in narrative is generally restricted to indicative, except for a few contexts; note, for instance, that in table 2.3, Longacre mentions irrealis only once, in band 5. The likely reason for this limitation is that “. . . many of the functions of modality are inextricably embedded in contexts of social *interaction* and consequently, cannot be described adequately apart from

Table 2.3: Longacre's Bands of Saliency in English Narrative
(Longacre 1996:24)

| | |
|--|--|
| Band 1
Storyline | Past (S/Agent) Action, (S/Agent/Patient) Motion
Past (S/Experiencer) Cognitive events (punctiliar adverbs)
Past (S/Patient) Contingencies |
| Band 2
Background | Past Progressive (S/Agent) background activities
Past (S/Experiencer) Cognitive states (durative adverbs) |
| Band 3
Flashback | Pluperfects (events, activities, which are out of sequence)
Pluperfects (Cognitive events/states that are out of sequence) |
| Band 4
Setting (expository) | Stative verbs/adjectival predicates/verbs with inanimate subjects (descriptive)
"Be" verbs/verbless clauses (equative)
"Be"/"Have" (existential, relational) |
| Band 5
Irrealis (other possible worlds) | Negatives
Modals/futures |
| Band 6
Evaluation (author intrusion) | Past tense (cf. setting)
Gnomic present |
| Band 7 Cohesive band (verbs in preposed/Adverbial clauses) | Script determined
Repetitive
Back Reference |

their contextual moorings in *interactive discourse*" (Bybee and Fleischmann 1995:3, italics added). Since narrative is monologue rather than interactive discourse, we can probably expect to find little in narrative that sheds light on modal distinctions.

Longacre's other method of analyzing narrative also depends, to some extent, on differences in TAM marking. A "peak and profile" analysis of a narrative (Longacre 1996) aligns shifts in language structures with shifts in "notional structure" (i.e. the story's *plot*). There are typically a wide variety of linguistic devices that mark a narrative's plot, but TAM can be an important one. For a diagram of how notional structure maps onto surface structure, see figure 2.2 (below).

| Surface structure | Title | Aperture | Stage | (Prepeak episodes) | Peak episode | Peak' episode | Postpeak episode | Closure | Finis |
|--------------------------|-----------------------|---------------------------|---|--|--|---------------|-------------------------------------|---|---------------------------|
| Surface structure (plot) | | Formulaic Phrase/sentence | Expository paragraph/discourse
Narrative paragraph/discourse | Paragraph/discourse (usually narrative or dialogue) articulated by means of:
1. Time horizons in succession
2. Back reference to preceding
3. Conjunctions
4. Juxtaposition, i.e. clear structural transition to another paragraph or embedded discourse | Paragraph/discourse Marked by:
1. Rhetorical underlining participants
2. Concentration of
3. Heightened vividness
> Shift of tense
> Shift to more specific person
4. Narr-pseudo-dialogue-dialogue-drama
5. Change of pace
> Variation in length of units
> Less conjunction & transition
> Change of vantage point orientation | See peak | See prepeak episodes | Of varied structure: especially expository paragraph, but can be expository discourse, narrative discourse, hortatory discourse (=moral?) | Formulaic phrase/sentence |
| | Surface features only | | 1. Exposition 'lay it out' | 2. Inciting moment 'get something going'
3. Developing conflict: 'keep the heat on' | 4. Climax
5. Denouement 'knot it up proper' 'loosen it' | | 6. Final suspense 'keep untangling' | 7. Conclusion 'wrap it up' | Surface feature only |
| | Surface features only | | | | A. Climax may encode as peak and denouement as peak'
OR:
B. Climax may encode as prepeak episode and denouement as peak
OR:
C. Climax may encode as peak and denouement as postpeak episode | | | | |

Figure 2.2: Narrative Discourse with Surface Peaks (Adapted from Longacre 1996:36)

2.3.4 Verb Usage Unique to Narrative

As Fleischman suggests, the grammar of narrative is likely to be different than the grammar of interactive language (1991:76). She observes that, cross-linguistically, the PRESENT TENSE is the tense of choice for ordinary language (i.e. conversation). Even if it is relatively marked morphologically, it is still the unmarked choice (1991:77). On the other hand, in narrative, the unmarked form is typically the PAST; she says, "The prototypical tense of narration as a mode of reporting information is the PAST, specifically the PFV [perfective] PAST, or PRET (for languages with a PFV/IPFV contrast), whose status as the unmarked tense of narration derives from its link to the notion of an event" (1990:24). In narrative, then, the present tense is a marked choice, it often serves to highlight some portion of the text in some way. However, she rejects the term "historical present" as a characterization of all uses of PRESENT TENSE forms in narrative discourse. The "historical present" is only one way that the Present tense is used in narrative. "Historical present" is a discourse function of present tense that is relevant to many Western languages, but is not an accurate description of every discourse function of PRESENT TENSE.

The rest of this section summarizes descriptions from various languages of verb usage in narrative discourse—as distinct from verb usage in other contexts. For the most part, I have investigated constructions that are parallel in some respect to the Unmarked verb in Kuche narrative; that is, they are forms that are relatively unmarked morphologically or they are semantically non-specific. In some languages, the unmarked or

indeterminate form is identical to the Present tense form, but even in those cases, the historical present is only one such discourse function.

2.3.4.1 The Historical Present

Scholars in literature and linguistics are familiar with the term “the historical present,” and have applied the term traditionally to every use of the present tense in narrating past events (Herring 1985:22). The historical present is typically characterized as a “past more vivid” (see Jespersen 1931, Palmer 1965, Leech 1971). Myhill (1992:70) prefers a more quantitative approach, avoiding the term “vivid” as being too subjective. He refers to a study by Deborah Schiffrin (1981), saying:

Schiffrin’s study was based upon analysis of 73 narratives which were divided up according to the categories in Labov 1972. The Historic Present was never used in evaluations, abstracts, or codas. In orientation clauses, it was used in only 9 out of 268 clauses or 3% of the time, while in complicating action clauses, it was used in 381 out of 1,288 clauses or 30% of the time. So, generally speaking, the Historic Present is not used at the beginning or end of a narrative but rather in the middle, after the scene has been set with Past tense forms. Furthermore, even in the middle of the narrative, it is generally only used for complicating action clauses. (1992:70).

Labov’s “complicating action” clauses are among the clauses that narrate the sequential action of a story—they are equivalent to Longacre’s “inciting moments” or “prepeak episodes” (see figure 2.2 above). Myhill’s analysis of English oral narrative supports the view that the historical Present marks more salient clauses; so the historical Present is a valid category for English. A survey of the use of PRESENT TENSE in other languages reveals a variety of patterns in discourse, though, and not all of them can be identified as historical present.

2.3.4.2 Tense in Early Romance Oral Narratives

The basis for Fleischman's analysis of tense in early Romance narrative is the distinction between foreground and background. She cites Hopper and Thompson:

In any communicative situation, narrative or non-narrative, some parts of what is stated are more relevant or central than others. That part of a discourse that does not immediately contribute to a speaker's goal, but which merely assists, amplifies, or comments on it, is referred to as BACK-GROUND. By contrast, that material which supplies the main points of the discourse is known as FOREGROUND. . . . The foregrounded portions together comprise the back-bone or skeleton of the text, forming its basic structure; the backgrounded clauses put flesh on the skeleton, but are extraneous to its structural coherence.
(Hopper and Thompson 1980:280f.)

However, Fleischman proposes a "continuum approach to information saliency" rather than a binary foreground-background distinction (1990:169). Though she does not suggest any specific saliency structure for any specific language (like Longacre's bands of saliency), she lists various ways that morpho-syntactic devices can be used to mark degrees of saliency. One device is verb inflection. The epic poems that she examines in detail use both PAST IMPERFECTIVE and PRESENT TENSE forms to highlight portions of the narrative.

Yet there is nothing in HP [Historic Present] usage to justify a positive reference to present time. The IPFV aspect of the PR, plus the fact that in the absence of explicit time reference present time is assumed, licenses the meaning "PRESENT cotemporal with now"; but it is the basic neutrality of the PR with respect to time that allows this tense to be used in past contexts.
(Fleischman 1990:75)

She applies the term "diegetic present" to PRESENT TENSE forms that are used to narrate events. She seems to use it as a cover term that includes the historical present as well as other identifiable discourse functions of the PRESENT TENSE in narrative.

Among investigators who have examined the diegetic PR in various linguistic traditions, some reject the past-more-vivid interpretation on grounds that the most vivid or dramatic events of a story are often reported not in the PR but in a P[ast] tense and, conversely, that the PR is at times used for events that cannot be construed as salient.

(Fleischman 1990:75-76)

Fleischman concludes that in Romance Epic poetry, the PRESENT TENSE is used to highlight certain portions of the text. It could highlight those portions that would correspond to band one of Longacre's scheme, or to Labov's complicating action clauses, but it could also be used in other portions of narrative to highlight other elements. PRESENT TENSE verbs stand in contrast to a narrative's (contextually) unmarked past perfective verbs, but from one language to the next, there is great variation in exactly what part of a narrative can be highlighted by the present tense. As Longacre (1996) proposes, a particular language marks off the continuum of saliency into discrete units, like inches on a ruler; each unit is somehow marked off grammatically from the units next to it. Languages are alike in requiring past tense (preferably perfective) verbs throughout narrative, but are different in where they allow present tense verbs to intrude.

Fleischman cites numerous examples from Medieval epic narratives in which PRESENT TENSE forms are used in clauses that are definitely not complicating action. In addition, while the historical present tends to be used over long passages of text, in the epic narratives, verb forms may alternate even within a sentence. She proposes that the question of how a present tense form in narrative is interpreted semantically is not nearly as important as "why the PR tense has been mobilized across so many languages to carry out a number of pragmatic functions in the normally past-tense discourse of narrative" (1990:78).

Just how many different pragmatic functions the present tense may carry out still remains to be seen, but she makes it clear that the Historical Present (as described by Myhill) is only one of them.

2.3.4.3 Early Indo-European Tenses

Kiparsky (1968) investigates verb forms in ancient Indo-European languages that are “zero-marked” for tense; these forms occur in a construction known as conjunction reduction.⁵ In modern languages (like English) conjunction reduction occurs only in syntactically marked verb phrases, never in morphologically marked ones. That is, pairs like 2.1a and 2.1b are both grammatical and are nearly identical in meaning:

2.1a. I had seen my mother and had heard my father

2.1b. I had seen my mother and heard my father.

But 2.2a and 2.2b are not both grammatical.

2.2a. I skipped the pizza and heaped the salad on my plate.

2.2b. * I skipped the pizza and heap the salad on my plate.

Examples like 2.2b are ungrammatical, not just in English, but in most modern Indo-European languages, because conjunction reduction in those languages operates only on verb forms that are syntactically marked (Kiparsky 1968:35). However, in some ancient Indo-European languages, conjunction reduction operates also at the level of morphologically marked verbs. Depending on the language, it can work two different ways: (1) the “reduced” verb—the one that follows the conjunction—is an overtly marked verb form that is non-specific with respect to tense and aspect; or (2) the reduced verb is a formally

⁵ Though it is the verb that is actually reduced, not the conjunction, this is Kiparsky’s term; perhaps it highlights the fact that such a reduction only takes place when verbs are joined by a conjunction.

unmarked verb identical to the Present tense (1968:36); that is, the Present tense forms do “double-duty”, marking present time and marking indeterminate time.

In ancient Vedic (and Homeric Greek), the verb form that is used in conjunction reduction is an overtly marked form called the *injunctive*; there are apparently other uses of the injunctive form, but “a large proportion of the Vedic injunctives are conjoined to non-injunctive forms” (Kiparsky 1968:37). Kiparsky describes the form thus:

The unaugmented forms with secondary endings which this term refers to were characterized by Thurneysen in a classic study (1883) as forms which in effect neutralize the verbal categories of tense and mood, expressing only person, number, and voice. Subsequent semantic studies of the injunctive in the Gathas by Kurylowicz (1927) and in the Rig Veda by Renou (1928), Gonda (1956), and now by Hofmann (reported in Meid, 1963) have fully supported this analysis of Thurneysen.
(Kiparsky 1968:36)

Though Kiparsky does not specifically mention aspect, I assume that this is because tense and aspect were not always differentiated in linguistic literature before Comrie’s groundbreaking volume (1976) entitled *Aspect*. So then, we can interpret this quotation to mean that the Injunctive form neutralizes the categories of tense, aspect, and mood.

Kiparsky (1968:36) likens these injunctive forms to various African language forms that also participate in conjunction reduction. He says:

E.g. Maasai (Tucker and Mpaayei, 1955) has a special ‘N-tense’, which serves precisely to neutralize the category of tense and the category of mood. Thus in conjunction, all verbs but the first are put into this ‘N-tense’, with the first verb indicating the underlying tense of the entire string of coordinated sentences, e.g. *ki-etuo* (past) *aŋ ni-k-irrag* (N-tense) ‘we came home and slept’. . . Exactly such a system is also found in the unrelated (Bantu) language Tswana (Cole, 1955, 445); Cole, however, calls the zero tense a ‘subjunctive’, perhaps because it is used, beside in conjunction, also in complements. Other Bantu languages with ‘narrative tenses’ that

neutralize tense and mood in conjoined structures are Herero, Duala (the form is here called an 'aorist'), and Swahili (Meinhof, 1948, 188-9). (Kiparsky 1968:36)

Kiparsky argues that the Injunctive form was lost in later Indo-European languages, so that in Greek, early Latin, Old Irish, and Old Icelandic, the form used in conjunction reduction is identical to the Present tense. He says that the Present tense forms that occur in conjunction reduction are derived by a syntactic rule from Past tense verbs, thus:

Schematically, then, the sequence ...Past...and...Past... is reduced to ...Past...and...zero..., and since it is the present which is the zero tense, the reduced structure ...Past...and...zero... is realized morphologically as ...Past...and...Present... Repeated futures and subjunctives reduce in just the same way.

(Kiparsky 1968:38)

He cites examples from various ancient Indo-European languages where tense and mood are indicated only on the first of two (or three) conjoined verbs. He quotes a rule for Old Irish from Thurneysen (1961:558), "Where the protasis of a general conditional sentence contains two parallel conditions, only the first has the verb in the subjunctive," and then gives two Old Irish examples:

2.3⁶ *cía beid Críst indib-si et is béo ind anim tri sodin, is marb in corp*
 'though Christ be in you and the soul is alive thereby, the body

immurgu trisna senpect[h]u

nevertheless is dead through the old sins' Wb. 4ⁿ6 (Thurneysen, 1961, 562).

2.4 *má beid ní di rúnaib do-théi ar menmuin ind fir. . .et ad-reig (ind.)*

'if aught of the mysteries should come before the mind of the man...and he rises' Wb. 13n12. (Thurneysen 1961:558).

⁶ Kiparsky does not give morpheme-by-morpheme glosses.

Fleischman refers to Kiparsky's analysis and comes to the following conclusions about it. In the citation below, the portion in the middle is highlighted:

[H]e sees the diegetic PR (in early Indo-European languages) as a kind of neutral tense into which the narrator moves, having established through the form of a previous verb that what is being talked about is the past. In such contexts, Kiparsky argues, **it is superfluous to repeat a morpheme expressive of past time—hence comes an intermingled sequence of verbs, some explicitly P[ast], some not. The latter are called PR[esent] by grammarians;** but we must not infer from their appearance in a narrative that the story at that point bears some positive resemblance to present time, i.e., that it is more vivid or dramatic than portions of the story recounted in the past, or that it arouses the narrator's empathy (Kiparsky 1968:30-33). (Fleischman 1990:76, bolding added)

The paragraph above is a good summary of Kiparsky's analysis: it is as if the zero-marked forms are only **accidentally** identical to the Present Tense forms. As discussed above (section 2.2), it is not exactly an accident, not 100% arbitrary—rather, there is an iconic relationship between zero-morphology, indeterminate time reference, and the PRESENT TENSE. On the other hand, the lack of correlation between all three concepts does not preclude the use of an indeterminate verb form in narrative. For instance, in Tamil, the Narrative Present is both semantically indeterminate and specifically the Present tense form, but it is not zero-marked. Also, as Kiparsky demonstrates, the Injunctive form is semantically indeterminate, but it is neither a Present Tense form nor zero-marked. The crucial element in conjunction reduction is not the zero morphology nor the Present tense form; the crucial element is that the non-initial verb in the conjoined clauses is indeterminate—it is semantically general.

2.3.4.4 Clause-Chaining

The term “clause-chaining” refers to a process of joining one fully-inflected verb with one or more verbs which are structurally reduced (see Longacre 1996:286 and Givón 1989, section 19.3.3.2). Typically, the clause chain represents a sentence (Longacre 1996:285), but Givón remarks that “chain” refers loosely to the thematic paragraph.

Clause-chaining is a strategy used by speakers of wide variety of languages; Givón (section 19.3.3.2) offers this English example:

- 2.5
- a. Coming out,
 - b. stopping to check the mailbox,
 - c. taking a look at the driveway,
 - d. and pausing to adjust his hat,
 - e. he turned and marched off.

In example 2.5, only the final verb in the chain is fully finite; the others are present participles, unmarked for subject agreement or TAM. A chain such as this, where the final clause is the fully inflected one is called a medial-final chain. “Medial-final chaining is commonly found with OV languages, while initial-consecutive chaining is more characteristic of VO languages” (Longacre 1996:287).

2.3.4.5 Consecutive Tenses

Longacre 1990 discusses two phenomena that occur in a variety of African languages and seem to be unique to Africa: *Consecutive* tense and *Narrative* tense. Though the terms are not interchangeable, they both refer to morphological marking that is part of a language’s TAM (tense/aspect/mood) paradigm while marking a distinction that is relevant only at the discourse level. As Longacre says:

A narrative tense, whether relatively marked or unmarked, is a special form which carries the primary event line of a story and is neither dependent on a special initial form in some span nor is rank-shifted in sequence with non-storyline initials. By contrast, a consecutive tense, which also carries the primary storyline, is either dependent on a special initial form in some span and/or is rank-shifted in sequence with non-storyline initials.
(1990:109)

Verb paradigms offer no formal basis for distinguishing a Consecutive or Narrative tense from other verb forms of a language. What is unique about these forms is that their semantic package does not include any reference to aspect or location in time or mood. Languages from other parts of the world typically make their verb forms do “double duty.” That is, they use the same forms to distinguish bands of salience (or to make other discourse distinctions) that they use to refer to a location in time. Even in narrative, verb forms may retain some reference to time, but Fleischman explains how it is that tense and aspect forms carry such a heavy pragmatic load:

In narrative discourse, time reference is normally established at the outset of the text, and since it tends to be a property of large stretches of discourse, or even of entire texts, it need not in principle be reiterated in each successive clause. However, the grammars of many languages require that tense information be encoded (redundantly) on every finite verb. . . [T]he *laissez-faire* economies of natural languages tend to make more efficient use of available resources than their controlled counterparts in socio-political institutions. One result is that in the narrative grammars of many languages **tense is in large measure freed from its primary referential function of locating events in time, and the available morphology is pressed into service for other, notably pragmatic, purposes.**
(1991:26, bolding added)

Consecutive and Narrative tenses seem to be unique to Africa in that they are not “pressed into service” for pragmatic purposes—instead, their *only* purpose is pragmatic; their function is to mark certain portions of a discourse. This is consistent with

Fleischman's observation that "'narration' constitutes a marked category of linguistic performance whose grammar differs in certain respects from the grammar of ordinary interactive language" (1991:76). In "ordinary interactive language," a Narrative tense would have little purpose, because the turn-taking of conversations disrupts the flow of the narrative sequence that it would mark. Neither is a Consecutive tense useful in interactive language; it is interpreted according to the tense/aspect of the first verb in a series of verbs. That is, in connected discourse, tense and aspect need only be marked at the beginning of a series of verbs; the speaker then dispenses with full tense/aspect marking—using only the "Consecutive" marker—until there is an interruption of the clause series. Narrative and Consecutive tenses tend to occur only in the relatively uninterrupted speech of monologue.

When it comes to constructing initial-consecutive clause chains, a unique Consecutive form would have to be the verb of choice for the non-initial verb, provided the language in question has such a form. The availability of such a form undoubtedly facilitates the building of clause chains, but languages without a unique form also build clause chains.

2.4 Implications for This Research

Typical analyses of narrative discourse discuss how TAM forms are distributed between the various bands of salience (as in table 2.3) or how they are distributed along the plot of the story (as in figure 2.2). Because the Unmarked verb is used in almost every context, there is very little difference between the verb forms used at the climax of a story and the verb forms used in the rest of the story; there is a slight difference between the frequency of the Unmarked verb in the mainline and its frequency in story background.

However, the most revealing insights come from dividing up the narratives along different lines altogether.

TAM forms in Kuche narrative are best explained through a process somewhat akin to identifying clause chains within the text, rather than by identifying bands of salience or segments of the plot. Much of Kuche discourse consists of combinations of grammatically marked verbs followed by Unmarked verbs—nearly identical to the construction that Longacre calls an “initial-consecutive chain” (as in the citation above, page 49). However, the extent of each “chain” is obscured by the fact that the chains are embedded within other chains; that is, an individual clause may be within more than one “chain” at a time. The image evoked by the term *chain* is an image of adjacent clauses all linked end to end to the head of the chain—in this case the fully inflected verb. In Kuche, the “chains” can be interrupted by listener or storyteller asides or by story dialog and then resumed again, without reverting to the initial fully-inflected verb form. A chain that is thus broken seems to fall short of the concept of chaining. For this reason, this research has coined new terminology, referring to “domains” of TAM influence rather than clause chains and “domains embedded within domains” rather than “chains embedded within chains.”

The Unmarked verb in Kuche is reminiscent of the historical present, the Present tense in Romance epic poetry, and Consecutive tenses. The structures that are built with the Unmarked verb can be compared both to conjunction reduction and to clause chains. But it has proved impractical to adapt a clause chain model or conjunction reduction model to Kuche discourse: the impracticality results both from the embedding and from the fact

that unmarking is a relative phenomenon. A verb may be formally marked for a semantic feature C (say, Conditional mood) but formally unmarked for semantic features A or B (maybe Past or Habitual). The C-marked verb is not unmarked, either morphologically or semantically, but it is relatively unmarked compared to a verb marked both C *and* A, or compared to a verb marked both C *and* B. The model presented here takes into account both relative unmarking and domains of TAM influence.

CHAPTER 3

TAM MARKING IN KUCHE

3.1 Introduction

This study is the first ever to offer a description and analysis of the Kuche verb system. There is at this time no comprehensive written grammar of the language, nor even a dictionary. Earlier researchers have published bits of Kuche data, but that data highlights the noun class system and makes virtually no reference to verbs nor even to sentences. The data for this research comes directly from the field notes of this author.

Earlier research (before 1995) focuses on Kuche morphology, especially noun morphology. Hoffmann 1976 treats some aspects of phonology, and a paper by Elisha Kuchili (1990) deals with the structure of the noun phrase. Wilson 1996a investigates the acoustic properties of vowels, and Wilson 1996b is a thorough phonological analysis and an introduction to the morphology and syntax of the language.

Neither is there much information available on the verb systems of languages closely related to Kuche, which are Kwanka, Shall, Ninzam, Mada, Gwantu, Nindem, Kaningkon, and Kanufi (Ruhlen 1987). Of these eight, only a description of Mada is available (Blench and Kato 2001). The Bantu languages are more distantly related, and analyses for many of them are widely available, as is a reconstruction of Proto-Bantu. The most extensive such comparative study is Guthrie's, published in four volumes (1967, 1970a, 1970b, 1971). Between the eight closely related languages listed above and the

more distantly related Bantu languages are some languages of intermediate relationship to Kuche, of which some description of the verb system is available; for instance, Carol McKinney (1978) discusses plural verb roots in Kaje and Daniel Nettle (1998) summarizes the basics of verb morphology of Fyem.

Section 3.2 gives essential background of Kuche phonology and grammar, while section 3.3 presents the basics of the TAM system. Subsection 3.3.1 is an inventory of the basic morphemes and an explanation of how they combine with the lexical verbs. Subsection 3.3.2 discusses briefly how TAM markings may interact with each other when a verb is multiply-marked. Subsection 3.3.3 presents some theoretical criteria for three decisions made in this description.

3.2 Grammatical Basics

3.2.1 Phonology

Consonant phonemes of the language are displayed in table 3.1.

Table 3.1 Consonant Phonemes

| | | | | | | | |
|---------------|---|----------------|---|-----------------|---------------------|---|---|
| v'less stops | p | | t | | \overline{kp} | k | |
| v stops | b | | d | | \overline{gb} | g | |
| fricatives | | f | s | (ʃ) | | | h |
| v fricatives | | v | z | | | | |
| v flap | | b ^v | | | | | |
| affricate | | | | tʃ ¹ | | | |
| v affricate | | | | ɟʒ | | | |
| glides | | | y | | | | |
| v'less glides | | | ɣ | (ɥ) | w | | |
| nasals | m | | n | ɲ | $\overline{\eta m}$ | ŋ | |
| lateral | | | l | | | | |
| rhotic | | | r | | | | |

¹ Some of the text is transcribed in a slightly different system, in which the phoneme /tʃ/ is represented by the letter 'c' and the phoneme /ɟʒ/ is represented by the letter 'j'.

The nasal consonants are phonemic at the beginning of a syllable, and /m/ and /n/ are phonemic at the end of a word; but the contrasts are neutralized word-internally before a consonant. Also, though speakers of Kuche generally indicate the difference between [s] and [ʃ] in writing, they are not phonologically distinct. [s] and [ʃ] are in complementary distribution, with [ʃ] occurring only before front vowels. Similarly, [ɥ] is a voiceless palato-labio-velar approximant and is the palatalized allophone of /w/. The [w] of Kuche is not IPA [w], but it is the only segment in the language close to IPA [w]; the Kuche consonant is less voiced and more strident at the velum.

The glides /w/ (including its [ɥ] allophone) and /ɣ/ are what I have termed “tense” semi-vowels. They participate in the vowel harmony system, which is described below. The “lax” correlate of /ɣ/ is /y/, equivalent to IPA /j/, but /w/ evidently has no lax correlate.

The details of Kuche’s vowel harmony process have not been adequately described. The harmony feature is possibly advanced tongue root [\pm ATR], but until a definitive phonetic analysis is completed, they are simply labeled tense (rather than [+ATR]) and lax (rather than [-ATR]). Part of the problem is that the semi-vowels also participate in the harmony process, possibly by blocking or interfering with the spreading of the harmony feature. The vowels of the harmony groups are displayed below in table 3.2. The characters chosen to represent the tense vowels are not very distinct visually from the characters that represent the lax vowels, except for the tense /e/. This reflects the auditory situation closely: the tense /e/ is perceptually quite distinct from lax /a/, while tense /i/ and tense /u/ are easily confused with lax /ɪ/ and lax /ʊ/. The tense and lax vowels

are contrastive in lexical items, but alternate in affixes depending on the tenseness of the stem vowel. The mid-vowels [ɛ] and [ɔ]—which have no tense alternate—do not occur in any affixes.

Table 3.2 Tense and Lax Vowels

| | Tense | | | Lax | |
|---|-------|---|--|-----|---|
| i | | u | | ɪ | ʊ |
| | | | | ɛ | ɔ |
| | ɐ | | | a | |

The harmony system is evident in the contrast between subject agreement prefixes for *dī* ‘tell’ and *hīk* ‘find’ below.

Table 3.3 Verb Paradigms for Tense-Vowel Verbs versus Lax-Vowel Verbs

| Gloss | Verb with Tense Vowel | Verb with Lax Vowel | Gloss |
|---------------|-----------------------|---------------------|---------------|
| I tell | īndī | īṅhīk | I find |
| you (s) tell | ūdī | ūhīk | you (s) find |
| he/she tells | ēdī | āhīk | he/she finds |
| we tell | kūdī | kūhīk | we find |
| you (pl) tell | ūdīj | ūhīkí | you (pl) find |
| they tell | bēdī | bāhīk | they find |

Researchers analyzing Kuche (Bouquiaux 1967, Hoffmann 1976, Gerhardt 1982, Wilson 1996b, Blench 2001) consistently report that there are three phonemic tone levels in the language, high (á), mid (ā), and low (à). Following the conventions of autosegmental phonology, falling/rising tones are interpreted as combinations of tones on a syllable. There is also a phenomenon which Hoffmann (1976) labels “low plus” (L+).

This author has observed tone alternations that suggest assimilation and perhaps other tone processes, but none of these processes has been described or analyzed.

Although syllables of Kuche are overwhelmingly CV, exceptions to this syllable template occur, especially word-initially and word-finally. Syllables without onsets may be found word-initially, and closed syllables may be found word-finally—though the consonants that end a word are restricted.

3.2.2 Sentence Structure

3.2.2.1 Basic SVO Order

The basic word order of Kuche is Subject-Verb-Object, as in example 3.1. Questions have the same word order, with the question being signaled by rising intonation (example 3.2), by a question word, by a sentence-final question particle, or (usually) by some combination of these devices, as in example 3.3. Dependent clauses are introduced by relative pronouns and/or by the complementizer *nā* ‘that’, as in example 3.4; still, the subject, verb, and object come in the same order.

An S-V-O independent clause

- 3.1 .. à-à-bírídžé ā-nó āā-tō kù-tjīlīŋ-ì. . .
 then-CL1-hero CL1-some 3HS-see CL15-road-DEF. . .
 . . .one hero would see the route. . .
 from “Ude Aruku” line 17

An S-V-O question indicated by intonation only (not indicated in transcription)

- 3.2 wú à-dòs kàgò ā-nī-sā-tí ì-ŋkūŋ^y-ì bā-nà bà-kūn-ì?
 3HSInd CL1-NAME NAME 3HS-PFV-NEG-do CL9-war-DEF PL-with CL2-Irigwe-DEF
 Didn’t Ados Kago fight the war with the Irigwe people?
 from “Ados Kago” line 71

An S-V-Adverb question with initial question word & final question particle

- 3.3 *bā-tá bē-tē-dī yèyèl-à?*
 CL2-who 3HPL-HAB-tell secretly-Q
 Who (pl) organized [attacks] secretly?
 from "Raids" line 7

Dependent (relative) clause, with relative pronoun, complementizer and V-O order

- 3.4 *... à-ŋū ū-mōlōk à-tākàdā ā-yīī nā bá-tá-wúlō à-dīkšānērì, ù-tò.*
 then-2SInd 2S-look CL7-book CL7-which that 3HPL-HAB-call CL7-dictionary, you see.
 ...then you look for the book which is called a dictionary, and you find it.
 from "Language Meeting" lines 25-26

3.2.2.2 Deviation from the Basic SVO Order

The only clauses that deviate from the typical S-V-O order are a handful of copular clauses in which the complement is fronted. Example 3.5 is one such sentence.

- 3.5 *ī-yī à-yūùyò à-mù-ì ā-fēè.*
 CL10-these CL7-folk.tale CL7-1S-DEF CL7-be
 This is my folk tale
 from "The Frog & The Fly" line 12

Among other things this construction is characterized by an alternative form of the verb 'be'. The common conjugation of the verb 'be' is shown in table 3.4.

Table 3.4 The verb 'be' *fī*

| | | | | |
|-----------|----------------------|--|----------------------|--------|
| I am | īn-fī | | We are | kū-fī |
| You are | ū-fī | | You (pl) are | ū-fīí |
| He/she is | ā-fī | | They (human) are | bā-fī |
| It is | (x ²)-fī | | They (non-human) are | (x)-fī |

² I usually use "x" in the English gloss to represent an untranslated morpheme. However, in this example, it represents the fact that the actual prefix varies according to the noun class of the subject.

The paradigm of the alternative form of *fī* 'be' includes at least *fēē* (as in example 3.5) and *sā* (as in 3.7 below). Note that the prefixes alternate depending on the noun class of the subject, but the verb stem evidently alternates depending on the noun class of the complement. This particular example of complement-fronting (3.5) can also be identified by the fact that there are two noun phrases before the verb and none after; the subject prefix indicates agreement with the second noun phrase *à-yūùYḏ à-mù-ì* 'my folk tale'. More commonly, a fronted-complement construction has no overt subject; in such clauses, the complement is directly before the verb and the subject agreement prefix suggests that the subject is a "dummy it" (see example 3.6).

A fronted-complement clause with a "dummy" subject seldom constitutes a sentence by itself; it is more like a cleft construction. Both the form and the function are similar to a certain English construction: in order to emphasize a topic, a semantically empty clause is built around the noun that would ordinarily be the subject. The erstwhile subject becomes the complement of the verb 'be' and the clause with actual semantic content becomes a formally dependent clause. A Kuche cleft construction incorporates the alternative form of the verb 'be', as in example 3.6.

3.6 *ī-bāṅ-ì* *ī-fēē* *nū* *kú-nù-tēt...*
 CL10-issue-DEF CL9-be that 1PL-PFV-say
 That's what we said. . .
 from "Language Meeting" line 59

An inspection of further data reveals that the alternation in the stem vowel indicates agreement with the copula complement; the alternation is perhaps the reflex of a

historically earlier suffix. In example 3.7, the complement is a class 1 noun and the final vowel is /a/.

- 3.7 ū-vī ū-wā ī-sá ā-tí ū-ηtúη.
 CL1-child.of CL1-woman X-be 3SH-do CL3-excrement
 it was the woman's child who wet the bed. . .
 from "Folk Tale" line 8

In example 3.7, the free English translation is not forced into the word order of the Kuche example, but otherwise follows the form very closely: the subject of *ī-sá* is an unstated "dummy it", similar to the English translation. Example 3.6 could also be translated with a dummy subject, to read, "It was this issue that we said. . ." In example 3.6, the dependent status of the informative clause 'that we said. . .' is evidenced by the complementizer *nū* that introduces it; the complementizer is usually deleted when the copula complement is human.

The fronted-complement construction deserves special attention in a study of Kuche discourse, because it is frequently a marker of discourse boundaries. As a matter of fact, example 3.5 signals the end of "The Frog and the Fly", and 3.6 begins the wrap-up of the speech titled "Language Meeting". It should be noted that immediately after the main speaker utters example 3.6 (corresponding to line 59 of the translated text of "Language Meeting" in Appendix A) the listeners feel free to respond (see line 63 ff.). The main speaker adds a little more after the listeners' responses, but she begins that sentence (line 73) by repeating "*ī-bāη-ì īfêē*," translated here 'that's it.'

3.2.3 Nouns

Nouns of Kuche are sorted into thirteen noun classes,³ indicated by prefixes; noun prefixes and typical examples are listed in table 3.5.

Table 3.5 Kuche Noun Classes

| Class | Prefix | Typical Semantic Content | Example | English Gloss |
|-------|--------|--|---------|----------------|
| 1 | ū/à/ā | human | ūnīt | person |
| 2 | bā | plural of 1 | bānīt | people |
| 3 | ū | long and thin | ūkōt | throat/voice |
| 4 | ì(N) | plural of 3 & a few class 12 nouns | ìṅkōt | throats/voices |
| 5 | kī | compact shape | kīḡbāāt | hillock |
| 6 | bà(N) | liquids, ⁴ & plural of a few class 12 nouns | bāntfū | places |
| 7 | à | artifacts, misc. | àkpàtāk | shoe |
| 8 | ā | plural of 5, 7, 15 | ākpàtāk | shoes |
| 9 | ì | animals, misc. + verbal infinitive | ìwól | goat |
| 10 | ī | plural of 9 | īwól | goats |
| 12 | kā | misc. + time expressions | kātfū | place |
| 13 | kù | plural of a few class 3 nouns | kùṅgī | arrows |
| 15 | kū | bowl-shaped + abstractions | kūntfāk | spoon |

Kuche prefixes are much like Bantu noun prefixes in form and semantic content (compare, for instance, Guthrie 1967). Within a noun phrase, nouns precede their modifier(s) and all the other words in the noun phrase (e.g. adjectives, specifiers, quantifiers, etc.) agree with the noun, usually by taking the same prefix. Again like Bantu,

³ In Wilson 1997, I present 16 noun classes, but have rethought the analysis since then. Now, instead of dividing class 6 semantically into liquids (class 6a) and plurals (class 6), I have combined them because the forms (noun prefix and all concord markers) are identical. A new analysis of kinship terminology (Wilson 2002) also eliminates class 2a and combines 1a and 1.

⁴ An example of a class 6 noun that represents a liquid is *bànyī* 'urine'.

the concord system requires the verb of each clause to agree with the subject for person, for number, and (in the 3rd person) for noun class.

3.3 Verbs

3.3.1 An Inventory of the Morphemes

3.3.1.1 How Many Words in a Verb

Though a few copular sentences in Kuche have no verb, for the most part, verb phrases occur in every Kuche sentence. The verb may consist of a bare lexical verb (rare), a verb with one prefix (with or without a tone melody inflection), a verb with more than one inflectional prefix, a verb with a derivational suffix, an auxiliary verb construction, a serial verb construction, or some combination of these.

For the sake of convenience, this study uses the terms “prefix” and “suffix” for many verbal morphemes. Several common verbal expressions are clearly serial or auxiliary constructions, but most clauses have only one subject agreement morpheme and only one lexical verb. For instance, in example 3.8, all three morphemes preceding the verb stem are phonologically bound to it.

3.8 ĩn-sā-ŋá-kēni kākā.

1S-NEG-even-run* quickly

I can't run fast.

*The word final /i/ is inserted to break up consecutive consonants.

The phonological evidence suggests that most verbs in Kuche are individual words rather than phrases. For instance, vowel harmony operates at the level of the word, and in 3.9, all vowels of the verb harmonize with the tense vowel of the lexical verb *dĩ* ‘tell’.

- 3.9 ... ànā mīnìŋʸì **bē-nī-té-dī** · bē-dī ˘ yēlyēl. . .
 and.then like.that 3HPL-PFV-HAB-tell 3HPL-tell secretly
 . . .but they would still invite their friends secretly. . .
 from “Raids” line 2

In example 3.9, the subject-agreement marker *bē-*, the Perfective marker *nī-*, and the Habitual marker *té-* are all prefixes. Another phonological process that operates at the level of the word is consonant deletion. Final consonants are often deleted word finally, and for certain lexical items the final consonant is always deleted unless followed by a suffix. In example 3.10, the citation form of the lexical verb is *tā-rá*; the object pronoun *-ì* is a suffix, as is evidenced by the pronunciation of the word-final /ŋ/.

- 3.10ā-tā **āà-tāráŋ-ì** . . .
 3HS-intend 3HS-touch-it
 . . .she tried to touch it. . .
 from “Uyho” line 33

Phonological evidence such as that in 3.10 indicate that the Distributive aspect, unstressed direct and indirect objects, and some locative expressions, are phonologically bound to the right edge of the verb—that is, they are suffixes.

However, syntactic evidence for the bound/free status of all these morphemes is not as conclusive. Though the order of the constituents is generally predictable, it is not 100% fixed. In example 3.11, for instance, it is highly unusual to see the 1st person independent pronoun between verb prefixes rather than preceding them.

- 3.11 ̀m-sá-mī-zī-lūŋ-ì.
 1S-NEG-1SInd-again-cook-X
 I'm not going to cook any more!
 from “Uyho” line 27

For a more complete discussion of word boundaries in Kuche, see Wilson 1996b (115-119).

3.3.1.2 Exceptional TAM marking

The TAM of most clauses is indicated by verb prefixes, though there are several auxiliary constructions and various common serial verb constructions as well. Three TAM-marking devices fall completely outside these formal categories: the *distributed action* form, the *imperative*, and a future-oriented mood that occurs only in clauses with 1st person subjects. There is no reference to anything like the latter in the literature on tense, aspect, and mood; the construction might be translated, "I have determined that I will. . ." it is labeled here **Decisive mood**.

Distributed action is marked by a suffix, which is more derivational than inflectional.⁵ The form is a reduplicative suffix (C)V(k): the first C is /s/ if the verb ends with /k/ (which is deleted) or a vowel, but zero if the verb ends with a consonant other than /k/; V is the last vowel of the verb; the final consonant is /k/ if the verb stem ends with a consonant other than /k/, and zero if the verb ends with a vowel or with /k/. An example of a verb whose suffix is /-sV/ is *nī-sī* 'give one by one' (from *nīk* 'give')—it occurs in "Folk Tale" lines 51, 52, 55, 56, 136, and 132. An example of a verb whose suffix is /-ØVk/ is *ḡāt-àk* 'break several, one by one' from *ḡát* 'break (one)'—this form occurs in data from elicitation, not in any of the texts represented in the appendix.

⁵ The Distributed action suffix occurs with only a limited number of verbs, rather than having the wide distribution that the inflectional prefixes have. It also modifies the meaning of a verb significantly, suggesting that the derived form is lexically distinct from the simple form.

In example 3.12, the derived form *tā-sā* (or the second time, with slightly different tone, *tā-sá*), means ‘collect’; it is derived from the verb *tā* ‘receive’.

- 3.12 *dī ū-nī à-yì nā á-tá-tā-sā ì-ŋkērēhīŋ-ì*
 tell CL1-person CL1-which that 3HS-HAB-receive-RED CL9-money-DEF
bā-káā bā-tā-sá
 3HPL-go.round 3HPL-receive-RED.
 Tell the person who usually collects the money [the treasurer] to go round and collect it.
 from “Language Meeting” line 82

The Distributive suffix has more in common with derivational morphology than with inflectional morphology: it is as likely to derive a new lexical verb from a simple one as it is to affect grammatical aspect; for instance *dī* is ‘tell’ and *dī-sí* is ‘teach’. The sense of a Distributive verb is generally to indicate one activity repeated on a single occasion, usually upon several different objects (one by one); for instance, in the example above (3.12) ‘collect’ is indeed receiving several different objects (coins or bills) one by one. For some verbs, it may indicate intensity of action instead; for instance, the reduplicated form *wū-sù* means ‘burn up’ rather than ‘to burn again and again’. Occasionally both the simple form and the derived form seem like two grammatical aspects of one lexical verb: as illustrated for *nī-sí* ‘give one by one’ from *nīk* ‘give’ and *ŋāt-àk* ‘break several, one by one’ from *ŋát* ‘break (one)’. For some verbs, the reduplicated form occurs in the data, but the simple form never does: for instance, there is *wū-sù* ‘burn up’ but there are no examples of an underived form ‘burn’, and there is *yí-sī* ‘ask’, but there is no example of an underived form and no hint of what it would mean.

The second exceptionally marked verb form is the Imperative mood: a command. A command is a bare lexical verb, with no subject-agreement prefix, as in example 3.13. However, the Imperative may occasionally be preceded by a second person *independent* pronoun, as in example 3.14.

3.13 ʃē ù-bī-wāsāŋ-á-mī.
 IMP.go 2S-should-wash-for-1S
 Go, wash it for me.
 from “Folk Tale” line 3

3.14 . . . , à-ŋó wàsà-má.
 then-2SInd IMP.wash-with
 . . . , then wash with it.
 from “Folk Tale” lines 10-11

Last, the Decisive mood is indicated by a 1st person independent pronoun subject, which usually co-occurs with a dynamic verb marked for 1st person subject agreement, as in example 3.15. The 1st person independent pronoun with stative verbs does not function the same way—for the very logical reason that states are not generally brought on by an act of the will.

3.15 ɪn-ti ɪŋ-hīk bè-ʃit-ì à-mī ɪŋ-wàsà-mā.
 1S-if 1S-find CL6-black-DEF then-1SInd 1S-wash-with
 “If I find the black [water], I **will** wash with it.”
 from “Folk Tale” line 81

This statement by the second girl of the “Folk Tale” is uttered in defiance of the command she has just received from the red gorilla. She uses the 1st person independent pronoun to emphasize her own intentions over the social pressure of the command;

however, my informant always translates this particular use of the 1st person pronoun into English as ‘will’. A similar interpretation is found in example 3.11 above, where Apanchuk, Uyho’s wife recites to herself all the demands put upon her by her husband and responds “I **won’t** do it any more!” In my data there are no examples of the 1st person *plural* pronoun occurring in a similar construction.

A most interesting thing about this construction is that it is analogous, both in form and semantic content, to an emphatic command. Semantically, the presence of the independent pronoun gives more weight to the will of the speaker, whether he/she is imposing it upon another person—by using a 2nd person pronoun—or emphasizing his/her own determination—by using a 1st person pronoun. Phonetic processes somewhat obscure the similarity of form; that is, because the 2nd person subject agreement prefix is the vowel /u/ alone, it is impossible to tell if it occurs in examples like 3.14 or not. On the other hand, the 1st person singular agreement prefix always contains a nasal consonant, so its presence is more obvious. For the most part, I have transcribed only the independent pronoun when the subject is 2nd person, but both independent pronoun and subject prefix when the subject is 1st person.

3.3.1.3 Common TAM Marking

Aspect is the most prominent category distinction evident in the Kuche system; indeed, many forms that bear the label “tense” in the tables below might actually denote aspect as much as they do tense. Names for many of the TAM categories are adapted from Dahl 1985. All the verb forms involved in the TAM system of Kuche are displayed in

tables 3.6 through 3.9. Table 3.6 lists one-word verb forms, table 3.7 lists auxiliary constructions, and table 3.8 lists serial verb constructions; the Decisive mood has a table all to itself, table 3.9. The “Default Meaning” listed in the second column of the tables is the meaning that a form might have in the least marked discourse context. Some of the prefixes in table 3.6 do not fit into any of the semantic categories discussed in section 2.1, even though they are formally part of Kuche’s TAM system. Specifically, *ɣá-* ‘even’, *ʃā-* ‘also’, *bā-* ‘also’, *yá-* ‘again’, and *zī-* ‘furthermore’ are not prototypical examples of tense, nor aspect, nor mood.

Table 3.6 One-word Verb forms⁶

| | Form | Default Meaning ⁷ | Note |
|----|--------------------|------------------------------|---|
| 1 | ìkēn | to run | The Infinitive prefix ì- is the class 9 noun prefix. |
| 2 | kēn | run | Imperative : bare verb stem |
| 2a | òkēní | run | The same form can be used for the Plural Imperative as for inflected forms. |
| 3 | ākēn | he/she runs | An Unmarked form, occasionally interpreted as Simple Present tense in conversation, but interpreted variously in discourse |
| 4 | āákēn ⁸ | he/she ran | Not well-attested. Simple Past Tense |
| 5 | āákēn | he/she can run | Very consistent. Ability |

⁶ Not all forms are present in the data for the verb *kēn* ‘run’, though this was the most productive verb in elicitation sessions. Several forms occur in texts for other verbs, analogous forms are constructed for *kēn* ‘run’ for tables 3.6-3.9.

⁷ Meanings listed in this column may or may not be the most common meaning of the form. The **default** meanings listed here are the most likely translations of the forms when cited in isolation.

⁸ Clearly, forms 4 and 5 are identical, but informants do not identify them as the same form. It is easy to elicit this form in its meaning ‘I can, you can, etc.’ but almost impossible to elicit it as a past tense form. During discussion of “tense” phenomena, several informants mentioned this form for past tense, and said that exaggerating the tone rise more and more suggests distancing the event to a more and more remote past. A rising tone prefix occurs only twice in the texts analyzed here.

Table 3.6: One-Word Verb Forms
(Continued)

| | | | |
|-----|-----------|---------------------------|---|
| 5a | āásàṅákēn | he/she can't run | "Can't run" generally, rather than "can't run this time". Contrast with form 22 in table 2.4. Negative Emphatic Ability |
| 6 | āākēn | he/she will run | Consistent. Future |
| 7 | āākēn | he/she ran | Or "has/had run" (Past or Present) Perfect |
| 8 | ānìkēn | he/she ran | Not a past tense, rather a Perfective aspect. |
| 9 | ātákēn | he/she usually runs | Habitual aspect |
| 10a | āsàṅákēn | he/she doesn't (even) run | Typically, a verb with the Negative prefix also has the Emphatic prefix. |
| 10 | āsàkēn | he/she doesn't run | Usually, the Negative <i>sa-</i> is not prefixed to a verb without the emphatic <i>ḡa-</i> |
| 11 | āṅákēn | he/she even runs | Usually, the Emphatic <i>ḡa-</i> is not prefixed to a verb without the negative <i>sa-</i> . |
| 12 | ābìkēn | he/she should run | Seldom occurs in an independent clause. Often the second verb in a series of commands. Subjunctive |
| 13 | ātḡákēn | he/she runs also | When adding another verb. Addition 1 |
| 14 | ābākēn | he/she also runs | When adding another subject. Addition 2 |
| 15 | āyákēn | he/she runs again | Repetition |
| 16 | āzìkēn | furthermore he/she runs | Addition 3 |
| 17 | āḡìrìkēn | he/she has already run | A variant is <i>āḡìṅṡìkēn</i> . Anterior |
| 17a | āḡìṅṡìkēn | he/she has already run | A variant is <i>āḡìrìkēn</i> . Anterior |
| 18 | kìkēn | running | The Present Participle should be analyzed as the preposition 'in' <i>kà/kà/kò</i> + the infinitive prefix <i>ḡ-</i> + verb root. |
| 19 | īn-nī-sí | I give one by one | Distributive |

Most forms in these tables are built on the verb *kēn* 'run'; form #19 is based on the verb *nīk* 'give'; the 'k' at the end of the citation form *nīk* is never pronounced except before a pause (which almost never happens with this lexical verb).

The tones of the verb prefixes interact with the tones of the lexical verbs, likely an example of tone sandhi. Note the low-tone on the Negative prefix in 3.16—where the tone of the lexical verb is mid—and the mid-tone on the Negative prefix in 3.17—where the tone of the lexical verb is high.

3.16 ā-tá-dīsí-bá à-bā-sà-ṅā-tà
 3HS-HAB-teach-3HPL then-3HPL-NEG-even-accept
 He would preach to them, but they wouldn't accept.
 from "Binchi" line 14

3.17 ín-sā-nyé nù kù-lūī
 1S-NEG-come with CL15-anger
 I have not come with anger
 from "The Coming of the White Man" line 49

The Perfective prefix *nì-* has an alternate pronunciation *na-*, as in example 3.18.

The alternative pronunciation is used only rarely and seems to be phonetically conditioned.

3.18 tò, ū-nī ā-nìṅ^yī nā bāà-tīūṅ^yī á-nā-yí à-zāgūn.
 well, CL1-person CL1-that that 3HPL-make.responsible 3HS-PFV-mean CL1-NAME
 Well, the man that was installed was called Azagun
 from "The Coming of the White Man" line 3

Verbs that include the perfective aspect marker are typically interpreted as past in narratives, unless context indicates otherwise. As Dahl mentions, there is "a strong tendency for PFV [perfective] categories to be restricted to past time reference." He continues, saying, "Languages will differ, however, in the extent to which they allow uses of PFV with non-past time reference" (Dahl 1985:79). Kuche does allow for Perfective to be used with future time reference, but in most contexts a Perfective prefix is sufficient marking for a verb to be interpreted as past.

The rising tone prefix, which informants proffer both as a past tense marker and as a marker of ability, occurs only twice among the verb forms tabulated for this study, and in neither case can it be characterized as a strictly past tense form or as ability (examples 3.19 and 3.20).

3.19 . . .gbē kī-tú-ì kīi-túsú
 . . . until CL5-head-DEF CL5-break.off
 . . . until his head broke off
 from "The Frog & the Fly" line 10

3.20 bē-yì bā-tà báā-bló kààt, à-ū-nī ū-nó àā-pyē
 3HPL-know 3HPL-if 3HPL-go far, then-CL1-person CL1-other 3HS-come

ā-nì-ŋā-bā. . .

3HS-PFV-tease-3HPL

[When] they knew they had gone far, one man would come and tease them. . .

from "Raids" lines 31-32

In other texts and in elicitation, it is frequently used as a marker of ability, but its use as a past tense form in text is non-existent.

The present participle, form 18, usually occurs following the verb *fī* 'be' in a progressive construction, as in example 3.21.

3.21 īn-ī kī-tēt ī-bá ā-bíríǒǒé
 1S-be PROG-tell CL10-issue⁹ CL8-hero
 I am speaking about heroes. . .
 from "Ados Kago" line 4

⁹ *ibá* means 'issue' in a very broad sense, but is used for any thing that is comprised of words: a story, a matter under discussion, a reason. An appropriate free translation might be "I'm telling the story of . . ."

Occasionally, though, a present participle is used by itself as a noun. For instance, in 3.22 both *ī-bá* ‘issue’ and *kì-nyē* ‘coming’ are nouns: they are in a genitive relationship, where *ī-bá* is the head noun and *kì-nyē* is the genitive noun.

3.22 *īn-fī* *kì-tēt* *ī-bá* *kì-nyē* *nī* *ī-bá* *kù-rù*
 1S-be PROG-tell CL10-issue PROG-come that CL10-issue CL13-God

í-nyé *bū* *ū-yò*.

CL10-come PREP CL3-PLACE

I am speaking about the **coming** that the gospel came to Uyho.
 from “Binchi” line 3

Auxiliary verb constructions consist of a fully inflected verb followed by a non-finite form, which is the lexical verb. The verb *fī* ‘be’ and *tʃi* ‘move’ (Progressive Aspect, forms 20 and 21) are also used as lexical verbs, but *dòlì*, *tògòk* and *tú* are not found in the data except as auxiliary verbs.

Table 3.7: Auxiliary Verb Constructions

| | Form | Default Meaning | Note |
|-----|---------------------|---------------------------------------|---|
| 20. | <i>àfī kīkēn</i> | he/she is running | The verb “be” plus the present participle. Progressive |
| 20a | <i>àfī ìkēn</i> | he/she is running | The verb “be” plus the infinitive. Progressive |
| 21. | <i>àtʃi kīkēn</i> | he/she is running | The verb “move” plus the present Participle. Progressive 2 |
| 22. | <i>átègèk kīkēn</i> | he/she fails to run
(or can’t run) | Form #5a (Table 3.6) indicates a generalized inability, while this form indicates “tried, but can’t this time” or “can’t right now.” Failure |
| 23. | <i>tú ìkēnī</i> | stop running | Prohibitive 2 |
| 24. | <i>àdòlì ìkēn</i> | he/she starts to run | Inceptive |

Serial verb constructions consist of two or more inflected verbs. The difference between serial verbs and an auxiliary construction is that all the verbs in a serial construction are finite; the verb that follows an auxiliary is non-finite, either the infinitive or the present participle. Kuche has no finite verbs that are unmarked for subject agreement.

Two important considerations in identifying a serial construction in Kuche are:

(1) there is no intervening conjunction, and (2) arguments cannot be assigned to either verb individually, but are shared by the two (or more) verbs.

Table 3.8: Serial Verb Constructions

| | Form | Default Meaning | Note |
|----|-------------|----------------------------------|---|
| 25 | ātʃī ākēn | he/she will run tomorrow | Tomorrow Future |
| 26 | ātà ākēn | if he/she runs | The vowel of the verb <i>tà</i> typically assimilates to the following vowel; the most frequent form is <i>tò</i> . Conditional |
| 27 | ātā ākēn | he/she tries (or intends) to run | Makes no claim about the success of the attempt. Intentional |
| 28 | tʃīn ūkēn | leave off running | Negative Imperative |
| 29 | tānò ùkēn | don't run | Implies the running has not yet started. Prohibitive 1 |
| 30 | tānò kūkēn | let's not run | Negative Hortatory |
| 31 | ìmbī kūkēn | let's run | Informants translate this literally as 'come, we run.' However, <i>ìmbī</i> is invariant and unique to these two constructions. <i>nyē</i> is the common word for 'come', and it can be inflected for any TAM or person. Hortatory |
| 32 | ìmbī ùnīkēn | come and run | Not known if the perfective aspect marker <i>nī-</i> is optional in this construction. Imperative 2 |
| 33 | ākēn ākēn | he/she runs & runs | Intensifies the action. Similar to the English usage, this complete reduplication may indicate prolonged or quickly repeated action or intense action. Intense |

There are a host of other common serial verb constructions; listed above are those in which the first verb seldom occurs in the data except as part of a serial verb construction. That is, *ɪmbī*, *tānù*, *ɪfīn* and the rest do not generally occur in isolation.¹⁰

Some of the serial verbs are not perceptually distinct from verb prefixes except on paper. The feature that distinguishes a serial verb from a TAM prefix is the repetition of the subject agreement prefix. That repeated subject prefix is often lost phonetically when it is a vowel, but the 1st and 3rd person plural prefixes are consonant initial. For instance, ‘if he runs’ is pronounced *ātākēn* (but morphologically it is analyzed as *ātà ākēn*) and ‘he usually runs’ is pronounced *ātákēn*; however, the contrast between example 3.23 and 3.24 is striking. Though the morpheme for ‘if’ differs from the morpheme for Habitual Aspect only by tone, there is a big difference in their position relative to the lexical verb.

3.23 . . .kì ɪ-baŋ-ɪ nāā **bā-tá-kēn** káká
 PREP CL9-issue-DEF that 3HPL-HAB-run fast
 . . .because they usually run fast

3.24 **bā-tà** **bā-kēn**, à-mī ɪn-tègèk kī-vū-bē.
 3HPL-if 3HPL-run, then-1SInd 1S-fail PROG-catch-3HPL
 If they run, I will not be able to catch them.

Some of the other common serial verb constructions express meanings that could be considered aspectual, but they have more extensive use as main verbs than those in table 3.8. As they are borderline cases between lexical expressions of aspect and grammatical expressions, they are mentioned here only in passing.

¹⁰ Except that *tā* means ‘say’; I have assumed that the similarity between this verb and several TAM prefixes and auxiliaries is either accidental or only of historical significance.

The Decisive mood does not fit into any of the other tables because it does not consist of a single word (as in table 3.6) nor does it consist of two verbs (as in tables 3.7 and 3.8). It is given a table of its own.

Table 3.9 A Unique Form

| | Form | Default Meaning | Note |
|----|----------|-----------------|----------------|
| 34 | mī ṭṅkēn | I will run | Decisive mood. |

3.3.2 Interaction of TAM Markings

A verb is not limited to just one TAM marking. In table 3.3, form 5a *āásàṅákēn* is marked for Ability (tones), for Negative (*sa-*), and for Emphasis (*ḡa-*). It is very common for negative verbs to be marked more than once, but other multiple-markings occur. For instance, in sentence 3.25 below, the verb *fī* ‘be’ is marked both perfective and habitual.

3.25 ū-mbà ū-nìṅṅī ṭ-dór ì-nī-tā-fī-yá lák?
 CL3-time CL3-that CL10-horse CL10-PFV-HAB-be-LOC numerous
 So there were many horses at that time?
 from “White Man” line 42

It might seem that Habitual and Perfective aspects would be mutually exclusive, since they are very nearly semantic opposites. We should note in this regard that the use of English *used to* is very similar: it is both habitual and completed, albeit, in English, it is past tense morphology that indicates the completed nature of the habit. Native speakers of English know that *I used to smoke* implies ‘I don’t smoke anymore’. So also, this Kuche speaker was expressing surprise that ‘there **used to be** a lot of horses around here’—because she knows that horses have become quite scarce.

The potential for interaction is not as great as it might seem, because many of the TAM markers *are* mutually exclusive, either because their meanings are opposite or because their meanings are nearly identical. Some forms may not truly be different morphemes at all, but merely allomorphs of one form, as forms #17 and #17a (*āgìṛìkēn* and *āgìrìkēn*) are.

3.3.3 The Semantics of Three Forms

3.3.3.1 Perfective Aspect or Past Tense

On the basis of the narratives tabulated in this study, it is tempting to identify *nì-* as a marker of past tense. However, it can be used with future time reference as well, as it is in the excerpt from a language meeting, the text of which is recorded in Appendix A (see text #10, pages 249-250). This text was analyzed for an earlier study (Wilson 1998). Because the beginning of the discourse is not on the audio tape, the linguistic cue for the future time reference is missing. However, since the person whose speech is recorded is the same person who translated the text, and since she is fluent in English as well as Kuche, the translation can be considered reliable. Verbs with the prefix *nì-* are translated with both past tense and future tense English verbs.

The future time references come in line 40, line 50, and line 53, reproduced here as examples 3.26, 3.27, and 3.28.

3.26 ànā bā-nī-lík bā-māsà kù-nàsàràn^y-ì
and.then 3HPL-PFV-get.up 3HPL-learn CL15-English
And then they **will** learn English.
from "Language Meeting" line 40

- 3.27 tò, kŭ-tù kŭ-tʃó. . . , à-kŭ-pyè kŭ-ní-wólõ bā-títʃāz. . .
 well-1PL-if 1PL-write. . . , then-1PL-come 1PL-PFV-call CL2-teacher. . .
 Well, if we write. . . , then we **will** call all the school-teachers. . .
 from "Language Meeting" line 50
- 3.28 àà-bā-ī bā-nī-hīlè bā-yī ì-blõ ì-dīsīŋ^y-ī nā bà-dīsīŋ^y-ī
 then-3HPL-DEF 3HPL-PFV-return 3HPL-know INF-go INF-teach that 3HPL-teach-x
 Then they **will** go back and decide how to teach (it).
 from "Language Meeting" line 53

When pressed for a morpheme-by-morpheme analysis of the sentences above, my informant identified *nì-* as the element in the sentence that should be translated 'will'.

However, *nì-* is used in this same discourse and in many other contexts as if it were a past tense marker. Example 3.29 is a sentence from the same text.

- 3.29 wŭ-ì ū-nī à-wāi ā-nì-tʃó. . .
 3HSInd-DEF CL1-person CL1-this 3HS-PFV-wrote
 This young man wrote [something]. . .
 from "Language Meeting", line 5

In response to English sentences in the Simple Past tense, Kuche sentences marked with *nì-* are cited; also, in the texts whose forms are tabulated in this study, *nì-* is translated as past tense more than 92% of the time. But since perfective and past time reference tend to coincide so frequently (see Dahl 1985:79, cited above), it is probably more accurate to identify *nì-* as a Perfective prefix in Kuche.

3.3.3.2 Tomorrow Future or a Relative Tense

Indeed, most of the grammatical morphemes of the Kuche TAM system tend to be more like aspect markers and less like tense markers. While conceding that it is a mere pretense that tense or aspect or mood "forms a separate, self-contained functional domain"

(Givón 1984:272), we define tense as that part of the system that is deictic (see Comrie 1976:5). Tense points in the direction of future time or past time or present time. The one form in the Kuche verb system that is unambiguously deictic is the Tomorrow Future verb *tʃi* (form 25 in Table 3.8). My informant identifies it as meaning ‘tomorrow’, but it would more accurately termed ‘next day future’. For instance, in this line from “Uyho,” the point of reference is not “today” but the day of the most recent story event.

3.30 *ũ-yó* *á-tʃi* *é-yú*
 CL1-NAME 3HS-next.day 3HS-go.out
 Next day, Uyho went out.
 from “Uyho” line 30

Comrie (1985:36-82) discusses at length the distinction between absolute tenses—whose reference point is *now*—and relative tenses—whose reference point is established in the context. However, he states emphatically (32) that relative tenses are tenses nonetheless, not aspects.

3.3.3.3 Simple Present Tense or Simply Unmarked

It should be noted that the “the Unmarked form” (#3 in table 3.6) is alternatively labeled Simple Present tense. However, it is not generally the form given during elicitation to translate an English Present tense sentence: an English Present Progressive elicits a Kuche Progressive form, and an English Simple Present tense elicits a Kuche Habitual form. My informant responded with this form only when specifically requested to do so, and only in response to sentences carefully constructed with sensory verbs (i.e. ‘I see a child’ or ‘I hear a voice’). This supports the conclusion by Bybee (1994b:126) that “we find it difficult to view the so-called present tense as a “tense,” that is, as having to do

primarily with deictic temporal reference. What present covers are various types of imperfective situations with the moment of speech as the reference point.” In other words, Present is not so much a tense, but a cluster of aspects that are appropriate when discussing the present moment.

As outlined in section 2.1.1.2, what is traditionally called Present tense tends to include these “aspectual types” (Bybee 1994b:140-141):

1. Progressive activities ongoing at the moment of speech.
2. Habitually occurring situations that include the moment of speech.
3. States that exist at the moment of speech.
4. Generic or gnomic—timeless, but they do hold at the moment of speech.

Some languages, like French and Spanish, have one basic Present Tense form that is used in virtually all these instances. Other languages, like English, have special forms that mark only one kind of present; in English, the Present Progressive encodes events such as #1 above. It is not unusual for Bantu languages to have a special form to encode a Habitual aspect (#2)—for instance Lubwisi, a Bantu language spoken in Uganda, marks Habitual aspect with a prefix (Cullen 1999:67). Kuche has both a Progressive construction (table 3.7, forms #20 and #21) and a Habitual construction (table 3.6, form #9). The result is that, in Kuche, Simple Present tense would be semantically specific to half as many situations as the French or Spanish Simple Present Tenses, and about two-thirds as many as the English one. When a Kuche speaker talks about events that are in progress at the time of speech, s/he uses the Progressive construction; when s/he talks about events that occur with regularity, s/he uses the Habitual construction. Only two situations remain,

would be appropriate in Kuche—after all, (Kuche) Progressive verbs cover the (English) Present Progressive situations and (Kuche) Habitual verbs cover the (English) habitual situations. But it is not the verb that comes to mind when Kuche speakers hear an English Present tense sentence, and, besides, there are so many situations in which the Unmarked verb is used with other interpretations that it cannot be classified simply as the Simple Present tense.

Simple Present tense is only one of the manifold uses of the Unmarked verb form. It is appropriately called *Unmarked*, not just because of its relative lack of morphological marking, but also because, in discourse, it is the “unmarked” (or default) choice; that is, it is the form used with the greatest frequency and in the greatest variety of environments. Though earlier studies by this researcher reveal that use of the Unmarked form is concentrated in foregrounded clauses (as defined by Hopper and Thompson 1980), the Unmarked form may occur, with various frequencies, throughout a text. Whatever the context, be it the unmarked context of interactive language or the marked context of narrative discourse, whenever the tense/aspect/mood is predictable from the context, speakers choose the Unmarked form.

CHAPTER 4

METHODOLOGY

For this study, Kuche language texts and elicited data were audio-recorded, transcribed, and analyzed. The analysis consists of (1) visual inspection of all data, including charted discourses, (2) tabulating the various verb forms in five of the texts and comparing distribution, and (3) tracking—via line graphs—verb form distribution and semantics in the tabulated texts.

4.1 Recording and Transcription

The data upon which this study is based was recorded during two separate stays in Nigeria. Between 1991 and 1994, the author lived with her family in Jos, in Northern Nigeria, and recorded a few texts, an extensive word list, and a great number of elicited sentences. Then, during the summer of 2001, I traveled to Nigeria and stayed for ten weeks, recording more texts and eliciting more sentences for more extensive language analysis. My language assistant during both these endeavors was Ms. Ruth Adiwu, a native speaker of Kuche and an instructor at the Polytechnic Institute in Jos during the 1991-1994 research, retired during the 2001 research. As a child, Ms. Adiwu lived on the mission compound in Zagun (a village formerly known as Kakkek) and was instructed by the early missionaries to read and write Kuche. As an adult, she received a B.A. in business education from the University of Kansas, and taught business for more than twenty years at the Polytechnic. She is fluent in Kuche, Hausa, and English.

Recordings from 1991-94 were made on a Sony cassette recorder and have deteriorated to the point that they are not useful; only data that was transcribed immediately is used here. The author and Ms. Adiwu would obtain permission from native speakers and record their speech in various social contexts. With Ms. Adiwu's help, the texts were transcribed by hand, leaving blank lines for morpheme-by-morpheme gloss and for free translation, Ms. Adiwu supplied both the gloss and the translation. Four of those texts (two different speakers) have been transferred on a Macintosh computer to Excel charts (see texts 1, 2, 3, and 10 in Appendix A). In addition, she translated English sentences designed to elicit as large a variety of grammatical constructions and lexical items as possible. None of these sentences are in computer format; they are hand-transcribed and photocopied. The author also had access to word lists prepared by another native speaker, Mr. Gideon Asukutuk, for an Introductory Course in Applied Linguistics offered by the Nigeria Bible Translation Trust in Jos. Mr. Asukutuk agreed to record the isolated words on tape and allowed the lists to be photocopied. The word lists have been transferred on a Macintosh computer to a Microsoft Word table; the words are arranged alphabetically and appended to Wilson 1996b.

Recordings made in the summer of 2001 are more permanent: they are digital sound files. These were originally recorded in various villages on a Sony cassette recorder and/or a Panasonic digital recorder. I obtained written permission from native speakers and requested that they tell a folk tale or some kind of history; we recorded folk tales, personal histories, tribal histories, and descriptions of Bache traditions. At the end of the day, the oral discourses were transferred onto an Acer notebook computer as sound files in

- 1.0200 [nā bā-fī-úú kā kàtàntūsí]
 [that 3HPL-do-3HS PREP responsibility]
 Well, then the man who had the responsibility of keeping watch would see.

Example 4.1 shows the dependent clause twice, once in its original position in the sentence, and then repeated again on a separate line—where it is numbered according to its actual order in the text. This differs from the charting procedures used by Longacre and Levinsohn (1978), but it proves very useful in that it provides a separate line of the spreadsheet to write codes for each verb: one code for each form and three codes for semantic interpretation. Fortunately, many dependent clauses occur in an order that makes it unnecessary to adjust the word order. For instance, this sentence from “Ados Kago” (line 4, text 5, Appendix A) fits into the chart just fine in its original word order.

- 4.2 0.0010 ĩn-fĩ kì-tēt ĩ-bá ā-bírríjé
 1S-be PROG-tell CL10-matter CL8-hero
- 0.0100 ná á-nā-fĩ-yá kà-kèèk
 that CL8-PFV-be-LOC CL12-PLACE
 I am speaking about heroes that existed here in Kakkek.

A trial was made of a code to distinguish independent clauses from dependent; that distinction did not lead to useful insights for this study, so it was eliminated. A list of the codes that were used is attached as Appendix B, and four of the charted and coded texts are displayed in Appendix C.

Time and equipment constraints are significant factors in determining which narratives are tabulated for quantitative investigation. Because some texts were transcribed on a MacIntosh and some on a PC, it is difficult to merge the linguistic input. The coding

system was developed and refined using the texts on the PC, so those are the texts that are tabulated and investigated quantitatively. Those texts are #4 "The Frog and the Fly," #5 "Ados Kago," #6 "Ude Aruku," #7 "Raids," and #8 "The Coming of the White Man."

4.2.1 Seeking for Patterns of Linguistic Forms

This researcher's early examinations of Kuche text did not identify any patterns of verb usage that fit into familiar discourse models. Furthermore, there was a more basic question than, "How is a narrative's plot structure revealed in the pattern of TAM forms?" or "How are TAM forms distributed across the narrative's bands of salience?" The basic question was, "How do speakers of Kuche know what each form means?" There was little consistency in the translation of a given form from one occurrence to the next. Doubtless, speakers of Kuche know how to correctly interpret their verbs in context, but the question that motivates this research is: **How** do they know? What clues tell them, "Interpret this Unmarked verb as future, interpret this Unmarked verb as habitual" or even "Interpret this Habitual verb as past habitual, interpret this Habitual verb as present Habitual."

The discourse model that promised the best fit was a model of initial-consecutive clause-chaining (Longacre 1990); but that model only fits the Kuche data with major modification because clause-chaining does not allow for gaps in a chain. A linguistic model from outside of discourse offers an alternative solution: the TAM features of a clause can be arranged on tiers and spread to other clauses like phonological features in autosegmental phonology. The model of autosegmental phonology allows features to spread to non-adjacent elements, as when vowel features spread to other vowels, skipping

the intervening consonants. A model fashioned on autosegmental phonology allows for features to spread over a gap.

However, TAM-spreading in Kuche is not completely analogous to phonological feature-spreading. The feature that spreads in TAM-spreading is not a physical feature like tone (whose physical correlate is pitch) or vowel quality (whose physical correlate is formant structure); rather, it is a semantic feature. Because it is not a physical feature like pitch or formant structure, it cannot be detected by the researcher's inspection of the transcribed Kuche text or inspection of sound wave files. It can only be detected when the language data is semantically interpreted, as it is in translation. Clauses that are identically marked in Kuche yield English translations that are quite varied: an Unmarked Kuche verb might be translated sometimes as past, sometimes as future, sometimes as perfective, sometimes as habitual. Even overtly marked verbs can be translated variously; for instance, a verb marked Habitual might be translated as present habitual in one context and past habitual in another context. The only way to *see* patterns of linguistic use was to make semantic categories as visible as formal grammatical categories.

The charting and coding and graphing made it possible for this author to *look at* patterns of formal grammatical categories in text and compare them side-by-side with patterns of semantic categories in text. After examining some very abstract representations (the line graphs) of grammatical and semantic categories as they occur throughout a discourse, it was possible to return to the transcribed texts, pick out the patterns, and describe them in prose.

The purpose in constructing the line graphs was to reveal patterns of semantic spreading on which to base a model of TAM-spreading that would be analogous to phonological feature-spreading. The patterns revealed in the line graphs actually suggested another alternative model that promises to explain TAM in Kuche discourse even better than a spreading model: it is a new model that combines the concept of transparency with the concept of embedded domains.

4.2.2 Coding Criteria

The original intent of the coding system developed by this author was to allow for the construction of line graphs. The line graphs do not constitute a quantitative analysis of the data: they are simply graphic displays that happen to use numbers to yield an Excel chart. However, it was evident that quantitative analysis (tabulation) would also prove useful and that certain of the codes could be used for such an analysis. Therefore, the codes become the basis of both the tabulation of TAM forms and the line graphs, while the prose description of linguistic cues depends more on a visual inspection of the texts subsequent to the other two processes.

For tabulation and line graphs, the 508 clauses of the five selected texts were coded and sorted into categories for comparison, along several parameters. First, conversation clauses¹ were separated from all story clauses. Second, all the unique story clauses were separated from all the habitual story clauses. Third, the foregrounded clauses (mainline clauses) were separated from background clauses, in each kind of narrative. The verb forms used in each of these categories are counted separately for time reference,

¹ Both real-time conversation between the storyteller and the listener and constructed conversation between story characters—i.e. story dialog—are considered conversation clauses.

aspect, and modality, and the numbers are arranged in grids and also charted as bar graphs (see Appendix D).

4.2.2.1 Column H Codes

Details of the coding system used to identify and count clauses are outlined in Appendix B, titled "Codes." Most of the clauses include at least one of the verb forms listed in tables 3.6-3.9; some clauses have morphologically marked verbs, other clauses have serial verbs or auxiliary verb constructions. A few "clauses" have no verbs; these include speaker turns that may be a brief "yes" or "no," clauses with deleted copulas, and clauses with an unarticulated verb.² The chart of "The Frog and the Fly" appears on pages 96-98 for reference in this discussion. The other four texts that are coded and tabulated appear in Appendix C.

The first code assigned (refer to page 96, column H) is a sequence code, which keeps the clauses in sequence, but also assigns each clause a "story status," in terms of the three sorting processes mentioned above (see the last paragraph of the preceding page). That is, the sequencing code was intended to separate conversation clauses from story clauses, foreground clauses from background clauses, and so on. It was soon discovered that the Excel sort and filter features are not able to accomplish these tasks on the basis of the sequence codes developed here, but the number sequencing system still proves useful and still merits explanation.

The intent of the clause sequence code in column H was to correlate the coding system with a ranking system similar to Longacre's (1996) bands of salience or to the

² The most important instances of unarticulated verbs are sentences of story dialog without any introductory "he/she said."

Table 4.1: "The Frog and the Fly," Charted and Coded

| A | B | C | D | E | F | G | H | Sequence | Introducer | Subject | Verb | Object |
|---------|-------|------|--------|------|-----|------------|---|----------|---|--|----------------------|---|
| Breaks | TAM # | Time | Aspect | Mood | TAM | Introducer | | | | | | |
| S, P, T | 25 | 89 | 63 | 69 c | m | m | | 0.0010 | à-yùùyō à-mū-ī
CL7-folkTale CL7-1S-DEF | My folk tale is about a frog and a fly | à-ī
CL7-be | à-yùùyō à-ŋkpúsók bā è-bèēntī
CL7-folkTale CL7-frog and CL7-fly. |
| S, P | 60 | 99 | 83 | 69 n | m | m | | 1.0000 | à-ŋkpúsók bā è-bèēntī
CL7-frog and CL7-fly | bā-nì-blō
3HPI-ASP-go
ì-hàk
INF-cut | | |
| S | 40 | 99 | 83 | 69 | e | e | | 1.2000 | A frog and a fly went to cut grass. | bā-blō
3HPI-go | | |
| | 15 | 99 | 83 | 69 b | m | m | | 1.3000 | then- | bā-bī-hàk
3HPL-ASP-cut | à-gāā
CL8-grass. | |
| | 25 | 99 | 63 | 69 c | e | e | | 1.3100 | When they went and cut the grass, | à-yī à-ŋkpúsók-ì
CL8-of CL7-frog-DEF | à-ī
CL8-be | à-kpāāgó,
CL8-very.big |
| | 25 | 99 | 63 | 69 a | e | e | | 1.3200 | the frog's [bundle of grass] was very big, | à-yī à-bèēntī-ì
CL8-of CL7-fly-DEF | à-bā-ī
CL8-ASP-be | à-kpāāgó
CL8-very.big |
| | | | | | | | | | and the fly's was also very big. | | | |

Table 4.1: "The Frog and the Fly," Charted and Coded (Continued)

| A | B | C | D | E | F | G | H | Sequence | Introducer | Subject | Verb | Object |
|--------|-------|------|--------|------|------------|------------|-------------|-------------------|--|----------|-------------------------|---------------|
| Breaks | TAM # | Time | Aspect | Mood | TAM | Introducer | | | | | | |
| S | 40 | 99 | 83 | 69 | h, y | 2.0000 | ù-mbà-ì nā | CL3.time-DEF that | When they tied the grass, | | bā-yōsó | ā-gāāŋ-ì, |
| | | | | | | | | | | | 3HPL-tie | CL8-grass-DEF |
| | 40 | 99 | 83 | 69 | e | 3.0000 | àà- | à-ŋkpúsók | then- | CL7-frog | à-tàā-nà | è-bèèntfi |
| | | | | | | | | | the frog said to the fly, | | 3HS-say-to | CL7-fly. |
| | 55 | 84 | 83 | 54 | o, s, e | 3.0001 | nàà, | that | | | ìmbī ò-nī-sák-ì | |
| | | | | | n | | | | "Come, lift it to me (ie, onto my head)." | | come 2S-ASP-put-1S | |
| S | 40 | 99 | 83 | 69 | e | 4.0000 | àà- | è-bèèntfi | | | ā-fī-nāà | à-ŋkpúsók-ì |
| | | | | | | | | CL7-fly | Then the fly said to the frog, | | 3HS-say-to | CL7-frog-DEF |
| | 55 | 84 | 83 | 54 | u, o, y | 4.0001 | nā | ŋŭ-ì | | | bā-ìmbī ò-nī-sák | mī |
| | | | | | a, s, | | | 2S-DEF | | | also-come 2S-ASP-put | (to)me |
| | | | | | n | | | | "You help me also lift it to me (ie, onto my head)." | | | |
| S, P | 25 | 99 | 68 | 49 | x, g, h, y | 4.0100 | ŭ-mbà-ì nāà | CL7.time.DEF that | When they couldn't help each other, | | bè-tègèk kī-dōl | ā-kpá |
| | | | | | | | | | | | 3HPL-not.able PROG.help | CL7-skin |

Table 4.1: "The Frog and the Fly," Charted and Coded (Continued)

| A | B | C | D | E | F | G | H | Sequence | Introducer | Subject | Verb | Object |
|------|----|----|----|----|------|---|--------|-------------------|--|--|-------------------------------|--------------------------|
| | 25 | 99 | 83 | 69 | s, p | e | 5.0000 | àà- | à-ŋkpúsók-ì | 3HS-getUp 3HS-try 3HS-be PROG-put CL8-grass CL8-3HS-DEF PREP | á-lík à-tà à-ji kì-sók | ā-gáá ā-mā-ì nà āntāā-mā |
| | | | | | | | | then- | CL7-frog-DEF | 3HS-getUp 3HS-try 3HS-be PROG-put CL8-grass CL8-3HS-DEF PREP | | himself-with |
| S | 25 | 99 | 73 | 69 | s | e | 6.0000 | àà- | Then the frog [got mad and] tried to lift his bundle by himself. | | ē-tù ē-tù | |
| | | | | | | | | then- | | | 3HS-grunt 3HS-grunt | |
| | 40 | 99 | 83 | 69 | h, h | | 7.0000 | gbé hář | then he grunted and grunted | kì-nè | kī-tārā | |
| | | | | | | | | until until | CL5-stomach | | CL5-break.open | |
| | | | | | | | | until his stomach | broke open. | | | |
| S | 25 | 99 | 83 | 69 | s, x | e | 8.0000 | èè- | è-bèēnt[ŋ]-ì | | ā-lík ā-dòŋ ì-ŋmálá | |
| | | | | | | | | then | CL7-fly-DEF | | 3HS-getUp 3HS-start INF-laugh | |
| | | | | | | | | Then the fly | started to laugh. | | | |
| S | 25 | 99 | 73 | 69 | s | m | 8.0100 | | | | á-ŋmálá á-ŋmálá | |
| | | | | | | | | He laughed | and laughed | | 3HS-laugh 3HS-laugh | |
| | 35 | 99 | 83 | 69 | r | h | 9.0000 | gbē | kī-tú-ì | | kī-túsú | |
| | | | | | | | | until | CL5-head-DEF | | CL5-break.off | |
| | | | | | | | | until his head | broke off. | | | |
| S, P | 25 | 89 | 63 | 69 | c, l | m | 9.0010 | | ī-yī à-yūùyò à-mù-ì | | ā-ŋèè | |
| | | | | | | | | | CL10-this CL7-folkTale CL7-1S-DEF | | CL7-be | |
| | | | | | | | | | This is my folk tale. | | | |

foreground/background distinction as defined by Hopper and Thompson (1980) or to Labov's (1972) definition of narrative clauses. Labov's narrative clauses (which correlate well with Longacre's band 1 and with Hopper and Thompson's foreground) are numbered with whole numbers; that is, whole numbers are assigned to the **first mention of a unique, bounded event** when there are at least two such reported events **in sequence**. For instance, example 4.3 is the first mention of the white man's coming (through Iregweland); since this is a bounded event and it is in sequence (the next event is someone coming to Azagun and telling him about it) it is numbered 1.0000.

H
4.3 1.0000 à-nàsará é-bí-yú bì ì-ṅkūn á-pyé
CL1-white.person 3HS-SBJV-follow PREP CL9-Iregweland 3HS come
The white man came through Iregweland. . .
from "White Man" line 5

The same event is mentioned just a few lines later in the story. It is still the same, unique, bounded event, but this mention of it is not the first mention, so the code is not a whole number. Instead, it is coded 2.8000.

H
4.4 2.8000 t̀, à-bá-pyé
well, then-3HPL-come
Well, then they came
from "White Man" line 21

So the whole numbers and the first decimal both encode unique, bounded events. The first decimal encodes either events that are mentioned a second time or events that are mentioned out of sequence. When the storyteller first mentions the Berom friend's pre-dawn warning to Azagun, it is mentioned out of sequence, after the clause mentioning that

“they” told Azagun. So, even though both storyteller and listener emphatically refer to this event again and again, it is not originally reported in a narrative clause; its code is 2.4000.

H
 4.5 2.4000 . . .é-nī-dī à-zāgūn-ì
 3HS-PFV-tell CL1-NAME-DEF
 . . .he warned Azagun
 from “White Man” line 15

The next decimal place also encodes clauses that are part of the story: it encodes non-real propositions or non-unique actions or non-bounded situations. Many stative and progressive clauses are coded thus, as well as conditional sentences and negative clauses. Consider example 4.6.

H
 4.6 0.0100 ā-tā-fī kī-bló
 3HS-HAB-be PROG-go

 0.0200 àà-ā-fī kī-kō ì-dōr-ì
 then-3HS-be PROG-ride CL9-horse-DEF
 When he was going, he would ride the horse.
 from “Ude Aruku” line 4

Clause 0.0100 in example 4.6 is coded with the second decimal on two different accounts: it is both non-unique (note the Habitual marking and the habitual rendering into English) and non-bounded (note the Progressive aspect). Clause 0.0200 is interpreted as both non-unique and non-bounded as well, even though there is no grammatical marking of Habitual. The codes in this column are based more on how the clause is interpreted *in the context of the story* than on how the clause is marked.

The last two decimal places encode interactive conversation: either real-time conversation between the storyteller and the listener (3rd decimal place) or the constructed conversation between characters (last decimal place). It often includes the quoted thoughts and wishes of the story characters as well, as in clause 0.3401, example 4.7.

| | | | | |
|-----|--------|---|---------------------------|-------------|
| | H | | | |
| 4.7 | 0.3400 | ā-yī | kū-tjílíŋ ^y -i | |
| | | 3HS-know | CL15-road-DEF | |
| | 0.3401 | nā | bā-ŋī | kī-yūéŋē |
| | | that | 3HPL-be | PROG-follow |
| | | He would know which road they were following. | | |
| | | from "Ude Aruku" lines 22-23 | | |

Conversation completely off the topic has no clause sequence number. For instance, in "Ados Kago," lines 13-43, the storyteller and listener have a long exchange about the storyteller's use of non-Kuche words. Those clauses are unnumbered in the charted text.

This system works well for those narratives that are "stories" in the traditional sense—that is, the recitation of a unique series of events that happened one time. But, of the narratives that are charted and tabulated for this study, only two are stories that report a unique series of events that happened one time: "The Frog and the Fly" and "The Coming of the White Man." For these unique narratives, the whole numbered clauses are expected to form the storyline; after all, the criteria for whole numbered clauses is based more or less on the definition of narrative clauses: "temporally ordered clauses" (Labov 1972:361).

The other three narratives are termed *habitual* narratives: "Ados Kago," "Ude Aruku," and "Raids." They report behavior that was typical of a certain hero or of a

certain epoch of time. The habitual narratives have very few narrative clauses, and so very few clauses that are coded with whole numbers. This makes the process of determining their storylines more complicated, because it is not possible to just pick out the whole numbered clauses. However, the sequence codes still distinguish interactive conversation (in the third and fourth decimal place) from all the story clauses, and prove useful in keeping the clauses in order.

4.2.2.2 Codes in Columns A-G

The other codes indicate various kinds of linguistic forms, along with three kinds of semantic interpretations. There is a great deal of redundancy built into the coding system, but in order to get all the results expected, it is expedient to include more information than is actually required. The meanings of all the individual codes are listed in Appendix B. Referring again to “The Frog and the Fly” (pages 96-98), column G identifies the type of clause introducer, and column F contains a code for the TAM markings of the verb. Consider example 4.8 below.

| | | | | | | | | |
|-----|-------|---|--------|---|-------------|-------------------|-----------|--------------|
| | F | G | H | | | | | |
| 4.8 | x | m | 1.0000 | yī | ì-ŋkũŋʸ-ì | ì-dòŋ | ī-tī | ī-sù |
| | | | | CL9.it | CL9 war-DEF | CL9-start | INF-do | CL10-end |
| | n,t,s | d | 1.0100 | ànā | mīnìŋʸì | bē-nǐ-té-dī | bā-dī | yèl-yèl |
| | | | | and.then | like.that | 3HPL-PFV-HAB-tell | 3HPL tell | secretly-RED |
| | i,s | m | 1.0101 | ì-bló | ì-hìk | bā-zànà | | |
| | | | | INF-go | INF-find | CL2-his.friends | | |
| | | | | The war was coming to an end, but they would still invite their friends to go with them secretly. | | | | |
| | | | | from “Raids” lines 2-3 | | | | |

In clause 1.0000 of 4.8, the code “m” in column G indicates the there is no clause introducer and the “x” in column F is the code assigned to the auxiliary construction *ì-dòlì ì-ìlì*. In clause 1.0100, the code “d” indicates that the clause begins with the conjunction *àná*, and the codes “n,” “t,” and “s” label the verb as Perfective (prefix *nì-*), Habitual (prefix *tó-*), and serial (two verbs with the same subject agreement prefix). Clause 1.0101 is another clause that has no introducer—hence the code “m”—and includes two infinitives in a serial construction (“i” and “s”).

While columns G and F mark grammatical categories that are manifested on the surface, the next three columns (C, D, and E) identify semantic categories that speakers associate with each clause. The semantic categories are identified by the way the clauses are translated into English and by the relationship of the clause to the rest of the story. The modality is indicated in column E, the aspect interpretation in column D, and the time reference in column C. Consider example 4.9.

| | C | D | E | H | |
|-----|----|----|----|--------|---|
| 4.9 | 99 | 73 | 69 | 0.2500 | . . . <i>ā-fī-bā</i>
3HS-say-to.3HPL |
| | 89 | 68 | 69 | 0.2501 | <i>nā, tò bā-nī bā-yùṅó bā-fī kì-nyē kā-ṅkāi. .</i>
that, well CL2-person CL2-that 3HPL-be PROG-come CL12-
today
. . .he would say, “Well, those people are coming today. . .”
from “Ude Aruku” lines 18-19 |

Recall that the numbers in columns C, D, and E do not actually refer to some quantity: they are merely the device required by Excel to construct a line graph. The numbers chosen to represent the semantic categories are basically arbitrary; they are

chosen to give some separation between the 4 lines of the line graphs and to correlate as much as possible with prototypical transitivity (Hopper and Thompson 1980:252). For instance, punctual and telic situations are more transitive than durative activities or states; therefore, states are low numbers on the aspect line and unique, bounded events are at the top. Also, negative or irrealis propositions are low on the transitivity scale while affirmative and realis are higher; therefore, negative is represented by zero on the modality line and real, affirmative situations are at the top. The lines of the graphs should iconically represent transitivity.

Clause 0.2500 (example 4.9) refers to past time, indicated in column C by the number "99." Even though there is no mark in the clause that indicates past time, the listener uses a Past tense English verb to translate it, and the storyteller makes it plain from the beginning that he plans to tell stories of heroes from the past. The semantic category "past time reference" cannot be read directly off the verb, but must be inferred from the context of the story and the listener's English translation. This clause also refers to non-unique action, indicated in column D by the number "73." Again, there is no mark in the Kuche clause that indicates past habitual, but the listener translates the sentence with English 'would', indicating that she understands it as habitual.³ In column E the number "69" indicates "reality;" most of the story clauses refer to real events.

Clause 0.2501 (example 4.9 above) is marked Progressive. This clause is within a direct quotation; the number "89" in column C indicates present time reference, but it is the present of the story world, not the present of the story-teller's world. The clause is

³ In Appendix A, the English word "would" does not occur in the free translation of this clause, but rather at the beginning of the sentence: 'He would come out and tell his friends, saying, . . .'

interpreted as “durative action” number “68;” the semantic category matches the grammatical category (Progressive) in this clause. Again, the modality is “real,” number “69.”

The codes described so far are adequate for the tabulation of all the grammatical forms and the semantic categories associated with them in text. However, the letters used to code morphological or syntactic forms (in column F) do not produce a line graph. To produce line graphs like the ones in Appendix E, the TAM forms also had to be coded with a number, which appears in column B. As with the semantic categories that appear on the line graphs, the grammatical categories are paired with number codes more or less arbitrarily. But again, the researcher had some expectations about which TAM forms might be used in clauses higher on the transitivity scale (Hopper and Thompson 1980:252). So, forms that were expected to occur in highly transitive clauses were given high numbers and forms that were expected to occur in low transitivity clauses were given lower numbers. It was hoped that, by basing both the grammatical number codes and the semantic number codes on high and low transitivity, patterns would show up in the form of parallel lines.

In order to translate the information in column F into a number code in column B, some compromises have to be made. Column F often indicates more than one grammatical category, but the construction of line graphs allows for only one number in column B; so a lot of the categories distinguished in column F must be combined in column B. Consider example 4.10.

| | | | | | | | | | | |
|------|---|-------|---|----|--------|----------------------|-------------|------------|-----------------|----------|
| 4.10 | B | F | H | 25 | 1.6670 | ù-ù-tá | á-hílí | ā-tík-ēē | | |
| | | | | | | then-CL1-who | 3HS-return | 3HS-remain | | |
| | | | | | | kātāāmā | kā-māī | à-ā-bíríjé | ā-nó | |
| | | | | | | after | CL12-these | then | CL8-hero | CL8-some |
| | 0 | g,a,s | | | 1.6680 | á-sā-ŋá-hílē | á-nyé | | | |
| | | | | | | CL8-NEG-even-return | CL8-come | | | |
| | | | | | | Is there any more? | After these | there were | no more heroes? | |
| | | | | | | from "Raids" line 99 | | | | |

Clause 1.6670 (4.10 above) is marked "s" (serial verb) in column F; in column B, the number "25" is a category that includes not only serial verbs, but also Progressive verbs ("p") and various affixes ("a") and the verb 'be' ("c"). Clause 1.6680 (which does not all fit on one line) is marked "g" (negative), "a" (affix, referring here to the affix *ŋá*- 'even') and "s" (serial). The code for column B is the number "0," the code for clauses marked Negative; the information about the affix and the serial construction is lost.

Lastly, column A marks the beginning of sentences, of paragraphs, and of speaker conversational turns.

| | | | |
|------|-------|--------|--|
| | A | H | |
| 4.11 | S,P,T | 2.0000 | tò, à-bé-nī-dī à-zāgūn-ì |
| | | | well, then-3HPL-PFV-tell CL1-NAME |
| | | 2.0001 | wó-ī, ū-tū kī-yā-ī. . . |
| | | | 3HSInd-DEF CL1-chief CL5-world-DEF |
| | S,T | 2.1000 | bā-tí-[y]á. . . |
| | | | 3HPL-say-to.3HS |
| | | | Well, then someone told Azagun, "The king of the world. . ." |
| | | | They said, . . . |
| | | | from "White Man" line 12 |

Clause 2.0000 (example 4.11) is the beginning of the speaker's turn ("T"), the beginning of a paragraph ("P"), and the beginning of a sentence ("S). Before the storyteller finishes his sentence, the listener begins essentially the same sentence again, so that her contribution is marked for the beginning of a sentence and also for the beginning of a turn. Because there's no shift in subject matter, though, it is not considered the beginning of a paragraph. All the tabulated texts are coded for breaks like this, but no way was found to extract insights from the information.

Another line of inquiry that proved more or less unproductive was an investigation of dependent versus independent clauses. A few texts were coded in a separate column, "i" for independent and "d" for dependent. A correlation could be seen between the type of clause introducer and the dependent/independent status of clauses, but no direct relevance could be found to the question of how TAM forms are distributed and interpreted. Those codes are eliminated from the texts in Appendix C.

4.2.3 Tabulation Procedures

For the purpose of the quantitative analysis undertaken here, it proves inadequate to simply count clauses. Many clauses have more than one TAM marking: counting only one mark per clause obscures some of the important results. It is more productive to count total TAM markings rather than total clauses. Instead of analyzing 508 clauses, the quantitative analysis deals with 603 verb markings of various kinds. So that a sentence like example 4.12 below is coded in column F as a serial verb ("s"), as 1st person pronoun subject ("u"), and as a Progressive verb("p").

| | | | | | | | | |
|------|-------|--------|------------------------------|-----------|-------|---------|------|----------|
| | F | H | | | | | | |
| 4.12 | u,s,p | 4.2230 | mī | īn-hīlī | īn-ḥī | kì-bl̄ | kā | à-dí. |
| | | | 1SInd | 1S-return | 1S-be | PROG-go | PREP | CL1-NAME |
| | | | I was going to refer to Adi. | | | | | |
| | | | from "Ados Kugo" line 100 | | | | | |

Then, in column E (modality), the code is "unlikely" (49), in column D (aspect) the code is "bounded/unique" (83), and in column C (time), the code is "future of past" (94).

| | | | | | | | | | |
|------|----|----|----|------------------------------|-----------|-------|---------|------|----------|
| | C | D | E | | | | | | |
| 4.13 | 94 | 83 | 49 | mī | īn-hīlī | īn-ḥī | kì-bl̄ | kā | à-dí. |
| | | | | 1SInd | 1S-return | 1S-be | PROG-go | PREP | CL1-NAME |
| | | | | I was going to refer to Adi. | | | | | |
| | | | | from "Ados Kugo" line 100 | | | | | |

In Appendix D there are grids for Form vs. Time, one for Form vs. Aspect, and one for Form vs. Modality. Rather than guess which mark contributes the "unlikely" interpretation, which contributes the "bounded/unique" interpretation, and which contributes the "future of past" interpretation, all the interpretations are assigned to all three markings. This does indeed blur the distinction between tense, aspect, and mood, but that is exactly what happens in real language. Nonetheless, the results are fairly consistent once the counts are totaled.

Grammatical forms and semantic categories were counted for several different kinds of clauses. The *sequence* code (column H) was designed to allow each narrative to be sorted into six categories:

- Bounded, unique, sequential events: Whole Numbers.

- Bounded, unique, non-sequential events; or a subsequent mention of an event first mentioned at a whole number clause: 1st decimal.
- Non-bounded situations and irrealis: 2nd decimal.
- Conversation on the story topic: 3rd decimal.
- Story dialog: 4th decimal
- Other conversation: Blank in the Sequence column

Two problems with this method of sorting soon became apparent. First, the patterns of use in habitual narratives are very different from the patterns of use in unique narratives, so it was unproductive to classify the whole number clauses of all the narratives into one category. That had the effect of doubling the six categories listed above to make twelve. Second, the sorts had to be made by hand, because the computer application is not programmed to do such a sort automatically. Trial and error experiments on "The Coming of the White Man" revealed seven categories which are actually critical to the analysis.

- Conversation and Dialog: 3rd and 4th place decimals and blanks.
- Unique Story Clauses: eliminate the 3rd and 4th place decimals and blanks from the Unique Narratives.
- Habitual Story Clauses: eliminate the 3rd and 4th place decimals and blanks from the Habitual Narratives.
- Unique Mainline Clauses: Whole Numbers in Unique Narratives.
- Habitual Mainline Clauses: decisions based on story meaning—conservatively eliminate background from Habitual Story Clauses.
- Unique Background: subtract mainline clauses from story clauses in Unique Narratives.
- Habitual Background: subtract mainline clauses from story clauses in Habitual Narratives.

The coding system was not adjusted to reflect the new categories. Rather, it is hoped that this coded corpus will be available for future research.

The total forms in each type of clause were counted with respect to time interpretation, then with respect to aspect interpretation, then with respect to modality. Actually, the background clauses were not counted separately—the totals of mainline clauses were subtracted from the totals of story clause. The totals were compiled and are displayed in the form of grids and charts in Appendix D. Selected grids and charts are discussed in section 5.1.

4.2.4 Procedures for Constructing Line Graphs

The data for the line graphs are from columns B (TAM Codes), C (Time), D (Aspect), and E (Modality). For instance, the short stretch of coded text in example 4.14 is converted into the line graph in figure 4.1.

Example 4.14

| B | C | D | E | H | Clauses |
|----|----|----|----|---------|---|
| 40 | 99 | 83 | 69 | 26.0000 | ā-ḥī[y]-á-
3HS-say-to.3HS- |
| 25 | 89 | 63 | 69 | 26.0001 | nā ḥ-sók à-wāī...ḥ-sók-ī.. ḥ-bló bā-nī ḥ-kó kī-mū
that INF-take CL7-this...INF-take...INF-go CL2-person CL5-
home CL-5-1SPoss
he said, "From here...from...to there, the people are part of
my family." |
| 40 | 99 | 83 | 69 | 27.0000 | à-ḥī[y]-á
3HS-say-to.3HS |
| 25 | 89 | 63 | 69 | 27.0001 | ásák ā-yūḥón-ā
X CL8-that-Q
He said, "What of that?" |
| 40 | 99 | 83 | 69 | 28.0000 | à-ā-ḥī[y]-á-
then-3HS-say-to.3HS |

25 89 63 69 28.0001 nā bā-nī bē-mù
 that CL2-person CL2-1SPoss
 0 89 63 49 28.0002 wù, àná bā-sā-ma
 just, and.then 3HPL-NEG-be
 He said, "They are my people, but they are not..."
 from "The Coming of the White Man" lines 85-87

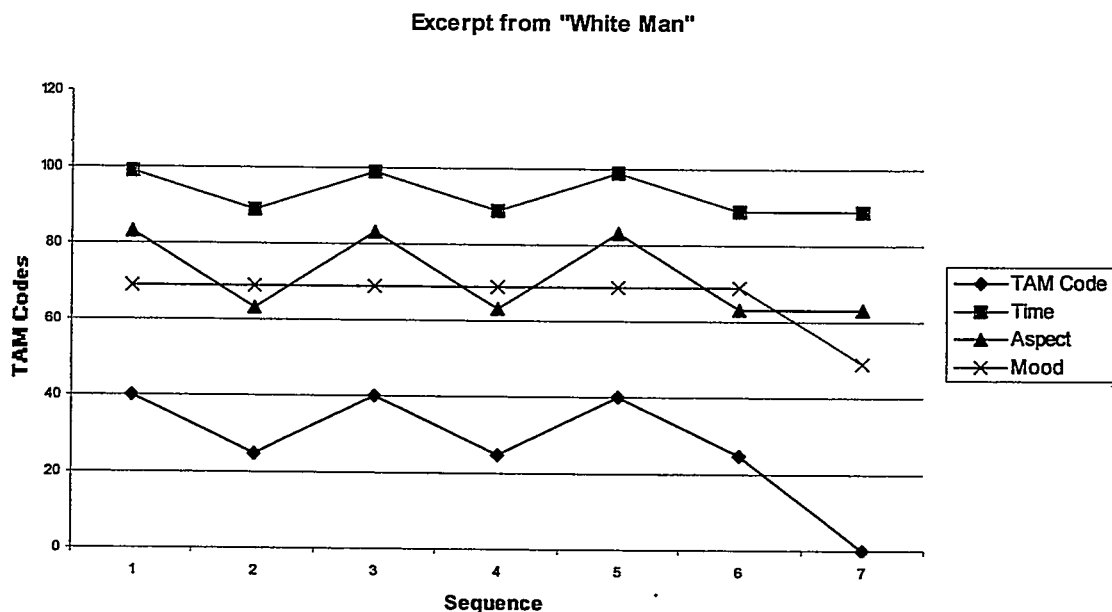


Figure 4.1: Line Graph of Clauses 26.0000 Through 28.0002

The line that goes across the bottom of the graph in figure 4.1 (the line with the diamond points) is from the information in column B, the code for TAM forms. The second line up (with the x points) represents the modality interpretation⁴ of each clause and is taken from the information in column E. The next line up (with the triangle points) comes from the information in column D, the aspect interpretation. The top line (with square points) is the time reference and corresponds to column C.

⁴ The legend on the line graph says "Mood" instead of "Modality", in an effort to save space. Since mood refers to the grammatical category and modality to the semantic category, the legend should more accurately read "Modality" for the line with the x-points.

Though the summary totals, displayed as number grids and charts, give a good idea of the results of the analysis, the model of TAM-spreading grew out of the construction of the line graphs (Appendix E), rather than out of frequency counts. The line graphs are visual representations of the verb forms superimposed on the interpretation of time reference, aspect, and modality. Four of the code columns are used to construct line graphs that track certain clause features throughout the texts (refer to section 5.2).

The line graphs are an invaluable tool for visualizing the process of semantic spreading. The investigation reported in this paper did not begin with the concept of TAM spreading; it began with a need to account for TAM form distribution in Kuche text. The line graphs are an integral part of the question process: they allow the investigator to see selected portions of the data and to arrange and rearrange the data. Arranging data into models is not a new practice in linguistics: linguists arrange words in paradigms so that they can see morphological patterns, they group words by similarity of sounds so that they can see phonological patterns, and they draw syntactic tree diagrams so that they can see syntactic patterns. The line graphs, along with the coding system that created them, allow a discourse analyst to focus on certain aspects of text and to collect all the relevant data onto one page for viewing. Of course, there is always the risk that the analyst may neglect to code some piece of relevant data, or may code some things in a way that is not insightful. The codes and diagrams used in this research are not perfect in either of these respects, but have been altered and refined again and again so that coherent and illuminating patterns are now apparent. Those patterns are explained in chapters 5 and 6.

CHAPTER 5

RESULTS

This chapter presents quantitative accounts of verb forms in discourse as well as graphs that track those verb forms through the texts. Following those is a discussion of linguistic cues that signal the boundaries of selected domains.

Section 5.1 provides numerical evidence that grammatically marked verbs are not the norm for Kuche discourse and that Unmarked verbs are used in a wide variety of contexts with a wide variety of interpretations. The line graphs in section 5.2 suggest that certain context-based principles are used to interpret both Unmarked verbs and grammatically marked verbs. Visual inspection of the charted texts was necessary to determine which linguistic cues are associated with which domains, as outlined in section 5.3. The model of TAM in Kuche narrative discourse is based on the data described in this chapter. The summary totals and the line graphs suggest the basic outline of the model, but the details must be articulated and illustrated through reference to the texts.

5.1 Summary Totals

As indicated in section 4.2.1, it was the tabulating of verb forms in text that highlighted the linguistic cues critical to interpreting TAM forms. Though the lists of numbers presented in this section are not nearly so interesting as the language examples presented in section 5.3, the numerical information adds credibility to the generalizations made there.

The total verb markings (including Unmarked verbs) that occur in the tabulated texts are 603¹, distributed as shown below in table 5.1. The percentage figure, in the third column, is the percent of clauses that have each mark; since many clauses are multiply marked, the total adds to more than 100%. There are 508 clauses.

Table 5.1
Total Verb Forms in Five Narratives

| Marking | # | % | Marking | # | % |
|------------------------|-----|-------|---|----|-------|
| Unmarked | 178 | 35.0% | Affixes | 30 | 5.9% |
| ni- | 51 | 10.0% | Auxiliaries | 6 | 1.2% |
| ta- | 35 | 6.9% | Serial | 52 | 10.2% |
| Falling or Rising Tone | 12 | 2.4% | Serial "if" | 20 | 3.9% |
| bi- | 12 | 2.4% | Imperative | 14 | 2.8% |
| Progressive | 47 | 9.3% | 1 st & 2 nd Independent Subject | 11 | 2.2% |
| Non-finite | 14 | 2.8% | Unfamiliar Form | 3 | 0.5% |
| Copula | 67 | 13.2% | Negative | 17 | 3.3% |
| | | | Verb Deleted/Verbless | 34 | 6.7% |

The question that needs an answer, though, is not how often each form is used in the total corpus. The question is about the distribution and interpretation of forms. Grids that tally each form against each possible TAM interpretation for each of the seven different clause types² are attached as Appendix D. Following the number grids, Appendix D also has graphs that display some of the numerical information.

¹ The texts that are tabulated are "The Frog and the Fly," "Ados Kago," "Ude Aruku," "Raids," and "The Coming of the White Man."

² The clause types are (1) story clauses in unique narratives, (2) story clauses in habitual narratives, (3) background clauses in unique narratives (4) background clauses in habitual narratives, (5) mainline clauses in unique narratives, (6) mainline clauses in habitual narratives, and (7) all conversation and dialog clauses.

The motivating question behind this research is illustrated by comparing these three charts below, from Appendix D—they show how Unmarked verbs are interpreted in various contexts.

Aspect Interpretations of Unmarked Verbs in All Conversation & Dialog

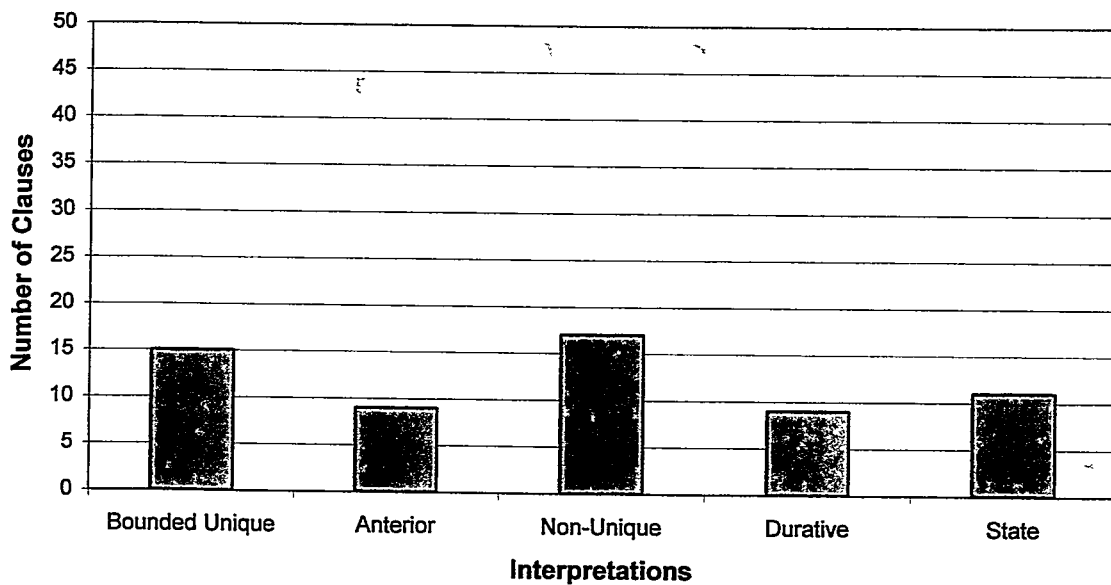


Figure 5.1: Unmarked Verbs in Conversation

In conversation and dialog, as illustrated above in figure 5.1, the Unmarked verb can be interpreted with various aspectual meanings. However, in habitual narratives—stories about typical activities that endured for a certain period of time—the Unmarked verb is interpreted overwhelmingly as non-unique (see figure 5.2). Furthermore, in unique narratives—stories relating specific events performed by specific individuals—the Unmarked verb is interpreted overwhelmingly as bounded/unique (see figure 5.3).

Aspect Interpretations of Unmarked Verbs in Habitual Narrative

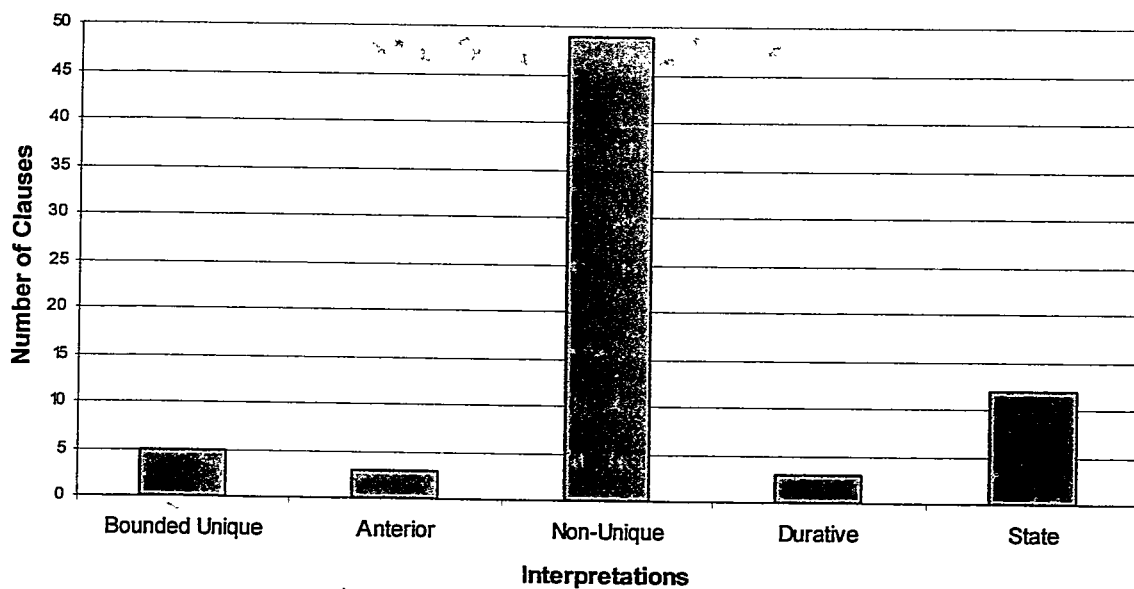


Figure 5.2: Unmarked Verbs in Habitual Narratives

Aspect Interpretations of the Unmarked Verb in Unique Narratives

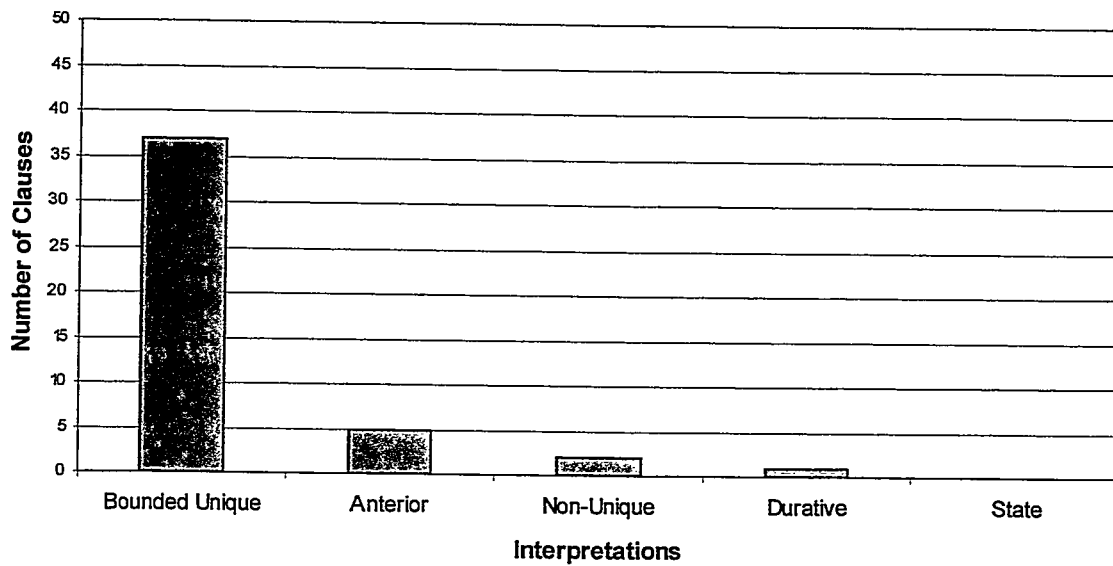


Figure 5.3: Unmarked Verbs in Unique Narrative

Table 5.2
Aspect in Unique Narratives vs. Aspect in All Conversation

Unique Narratives All Conversation

| | Bounded Unique | Anterior | Non-Unique | Durative | State | Bounded Unique | Anterior | Non-Unique | Durative | State | No TAM |
|-------------------------------|----------------|----------|------------|----------|-------|----------------|----------|------------|----------|-------|--------|
| Totals | 63 | 19 | 5 | 7 | 11 | 79 | 18 | 53 | 56 | 81 | 30 |
| Unmarked | 37 | 5 | 2 | 1 | | 15 | 9 | 17 | 9 | 11 | |
| ni- | 6 | 5 | | 1 | 4 | 6 | 1 | 8 | 1 | 6 | |
| ta- | | | 1 | | | | | 15 | 6 | 2 | |
| Falling or Rising | 1 | 2 | | | | 2 | 2 | 2 | | | |
| bi- | 3 | 1 | | | | 4 | 1 | | | | |
| Progressive | 1 | | | 3 | | 1 | 2 | 1 | 22 | 1 | |
| Non-finite | 2 | | | | | 5 | | 3 | 3 | | |
| Copula | | | | | 6 | | | | 1 | 46 | |
| Affixes | 3 | 4 | | | 1 | 8 | 1 | 1 | 3 | 2 | |
| Auxiliaries | 2 | | | 1 | | 1 | | | 1 | | |
| Serial | 6 | 2 | 2 | 1 | | 12 | 2 | 2 | 2 | 6 | 1 |
| Serial "if" | | | | | | 4 | | 1 | 1 | | |
| Imperative | | | | | | 10 | | | 4 | | |
| 1st & 2nd Independent Subject | | | | | | 6 | | 2 | 2 | 1 | |
| Unfamiliar Form | | | | | | | | 1 | | | 1 |
| Negative | | | | | | 4 | | | 1 | 5 | 1 |
| Verb Deleted | 2 | | | | | 1 | | | | 1 | 27 |

For the sake of time, not every chart and graph in the appendix is discussed in this chapter, but a few representative examples are included in this section. Table 5.2 (above) contrasts verb use in unique narratives with verb use in conversation and dialog. The bar graphs in figures 5.4 and 5.5 summarize the information from table 5.2.

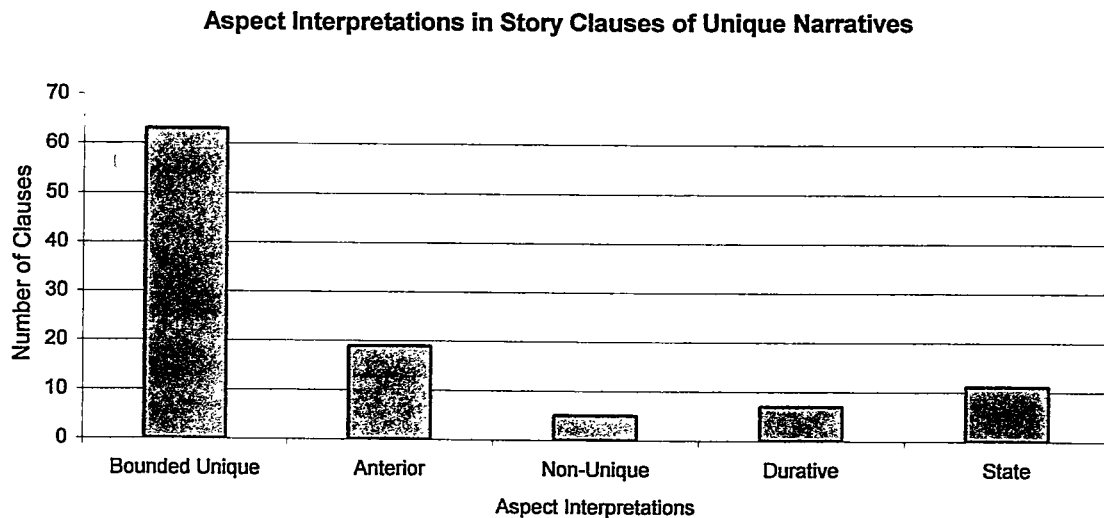


Figure 5.4: Aspect in Unique Narratives

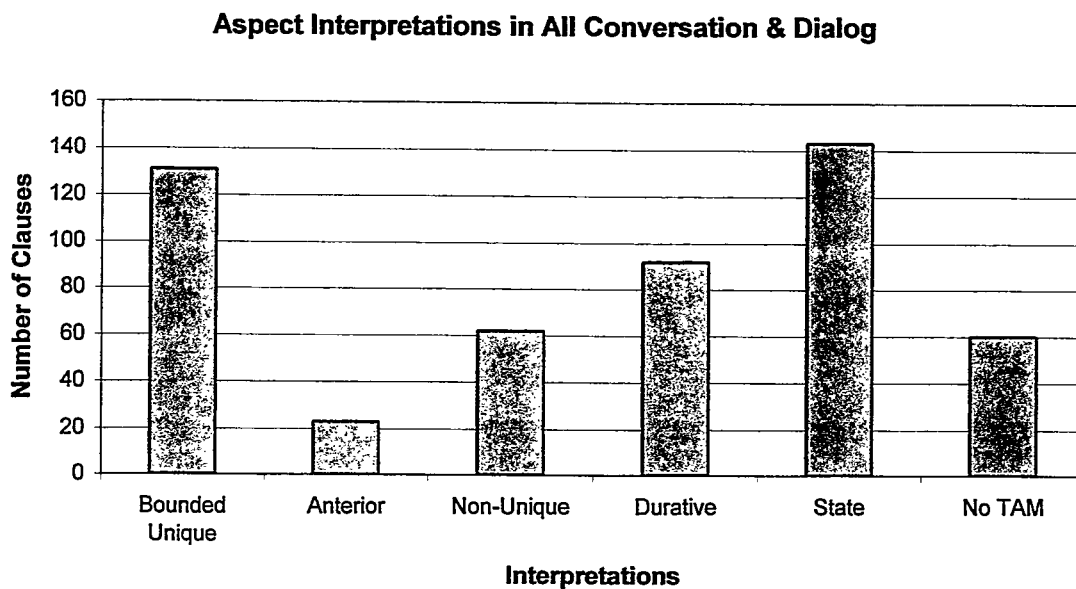


Figure 5.5: Aspect in Conversation

It should be noted that the bar graphs are not to the same scale: for instance, figure 5.4 has 70 as the highest point on its y-axis while figure 5.5 has 160 as the highest point on its y-axis. They are left like this so that they represent the proportional frequencies, rather than the actual numbers, of the various categories that are counted.

The difference between aspect interpretations found in conversation and those found in a unique story is not a surprising outcome. After all, the forms used in a story are a limited subset of the forms used in conversation, as the numbers in table 5.2 confirm, and as figures 5.6 and 5.7 illustrate. Several verb forms that are used in conversation are not used at all in unique narratives; for instance, there are no negative verbs, no imperatives, no if/then sentences in the narrative, and very few copulas.

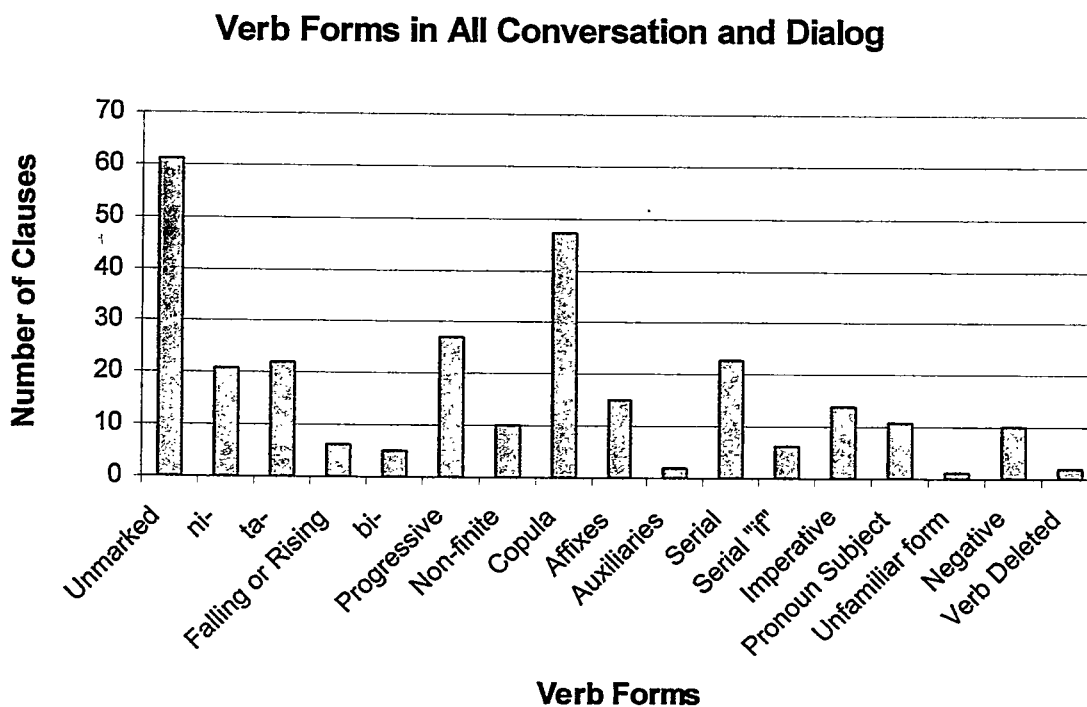


Figure 5.6: Verb Forms in Conversation

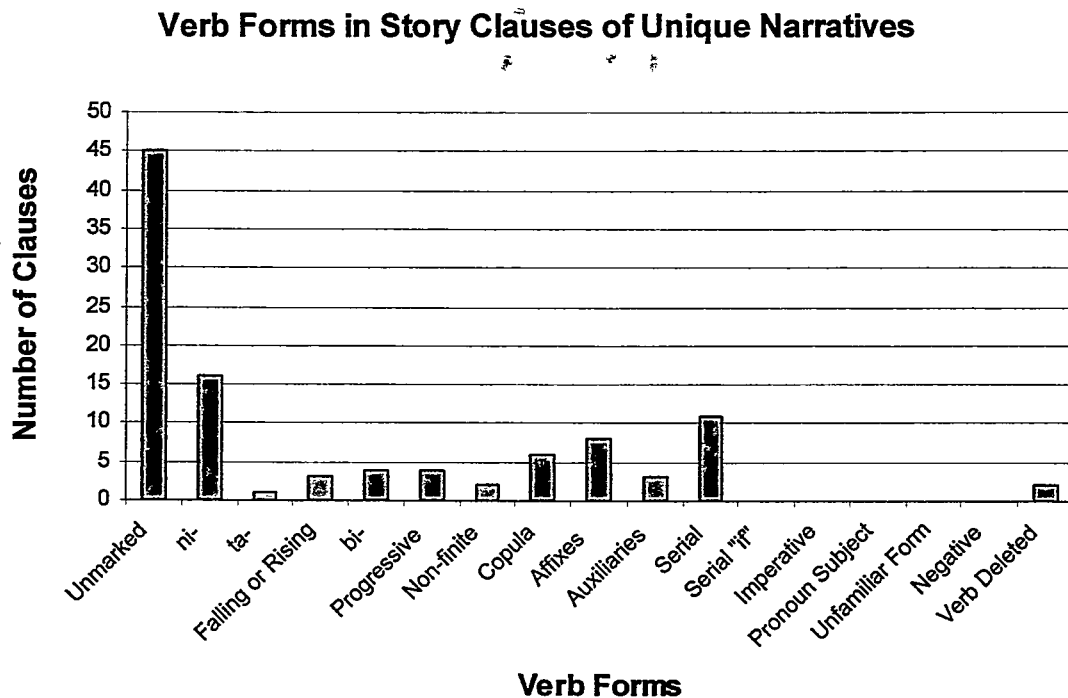


Figure 5.7: Verb Forms in Unique Narratives

The one pattern that stands out when comparing figure 5.6 with 5.7 is that both graphs record a large number of Unmarked verbs. Indeed, as far as numbers go, there are more Unmarked verbs in the conversation and dialog than in the unique narratives. However, in the clauses of unique narrative, there are almost as many Unmarked verbs as all the other categories combined.

A similar contrast can be observed by comparing verb form use in habitual narrative with use in unique narrative. Table 5.3 repeats half of the information from table 5.2 above, for the purpose of comparing it this time to another kind of narrative. Again the information is summarized in the two figures that follow, figure 5.8 and 5.9. In neither type of narrative is the aspect interpretation evenly distributed. In habitual narrative,

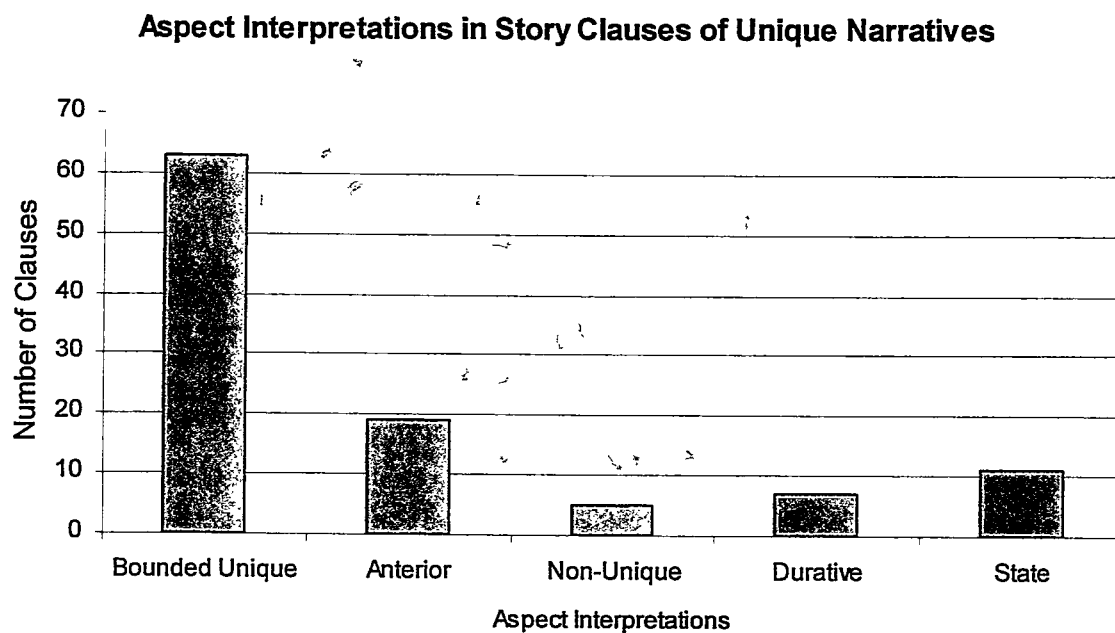


Figure 5.8: Aspect in Unique Narratives (Repeated from figure 5.4)

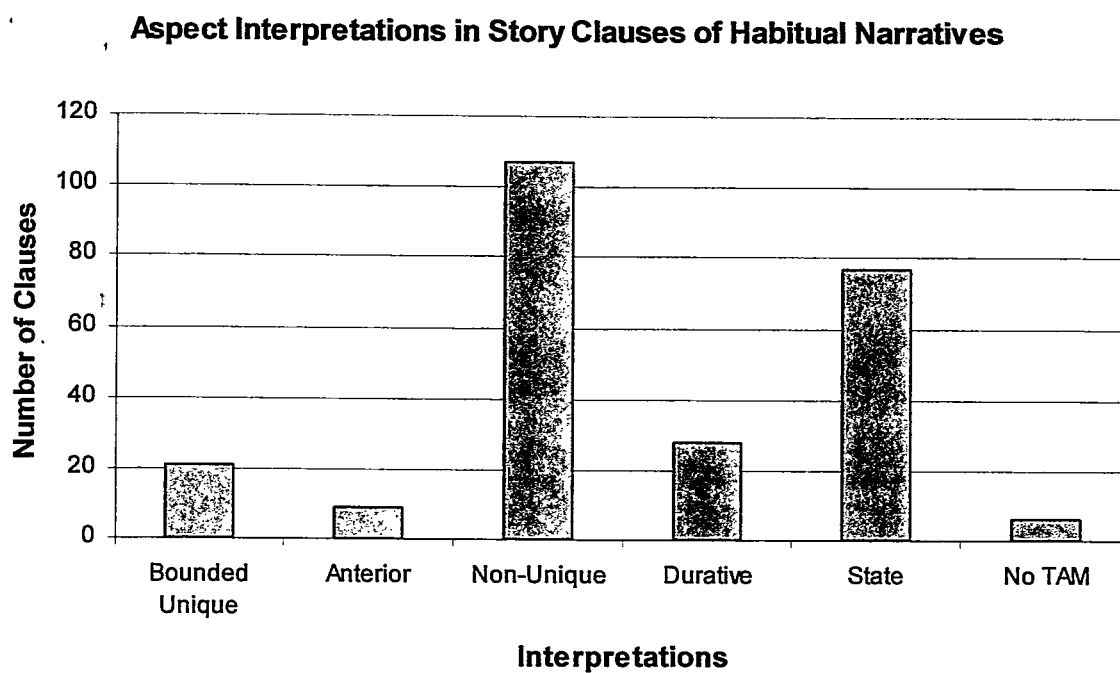


Figure 5.9: Aspect in Habitual Narratives

instead of the totals being skewed toward bounded/unique, they are skewed toward non-unique. The skewing of the totals (the first row of numbers) in both table 5.2 and table 5.3 is largely the result of a shift in the interpretation of the Unmarked forms. But even marked forms whose interpretation is fairly evenly distributed in conversation are skewed in the narratives. For instance, falling/rising tone forms are interpreted bounded/unique or anterior in the unique narratives, but non-unique or stative in habitual narratives; and non-finite verbs are only interpreted bounded/unique in unique narratives, but only as non-unique in habitual narratives.

This is the phenomenon—this overall shift of all forms—that makes an analysis that focuses solely on the Unmarked form unsatisfactory. The subtle shift of interpretation even in forms overtly marked in some way suggests that whatever linguistic process is affecting the Unmarked form is also affecting the other forms, albeit to a lesser extent.

Table 5.4 contrasts verb forms in the mainline clauses of a unique narrative with forms in the background; the information is summarized in figures 5.10 and 5.11. The contrast between the left side of the table and right side are striking: most of the columns under “Unique Mainline” are blank, while almost every column under “Unique Background” is filled in. And more than 60% of the verbs in the mainline are Unmarked verbs, while only 26% of the verbs in the background are Unmarked.

Table 5.4
Aspect in Unique Narrative Mainline vs. Aspect in Unique Narrative Background

| | Unique Mainline | | | | Unique Background | | | | No TAM | | |
|-------------------------------|-----------------|----------|------------|----------|-------------------|----------------|----------|------------|----------|-------|--------|
| | Bounded Unique | Anterior | Non-Unique | Durative | State | Bounded Unique | Anterior | Non-Unique | Durative | State | No TAM |
| Totals | 44 | 0 | 1 | 0 | 0 | 19 | 19 | 4 | 7 | 11 | |
| Unmarked | 29 | | | | | 8 | 5 | 2 | 1 | | |
| ni- | 3 | | | | | 3 | 5 | | 1 | 4 | |
| ta- | | | | | | | | 1 | | | |
| Falling/Rising | 1 | | | | | | 2 | | | | |
| bi- | 1 | | | | | 2 | 1 | | | | |
| Progressive | 1 | | | | | | | | 3 | | |
| Non-finite | | | | | | 2 | | | | | |
| Copula | | | | | | | | | | 6 | |
| Affixes | 1 | | | | | 2 | 4 | | | 1 | |
| Auxiliaries | 1 | | | | | 1 | | | 1 | | |
| Serial | 5 | | 1 | | | 1 | 2 | 1 | 1 | | |
| Serial "if" | | | | | | | | | | | |
| Imperative | | | | | | | | | | | |
| 1st & 2nd Independent Subject | | | | | | | | | | | |
| Unfamiliar Form | | | | | | | | | | | |
| Negative | | | | | | | | | | | |
| Verb Deleted | 2 | | | | | | | | | | |

Aspect Interpretations for Mainline Clauses of Unique Narratives

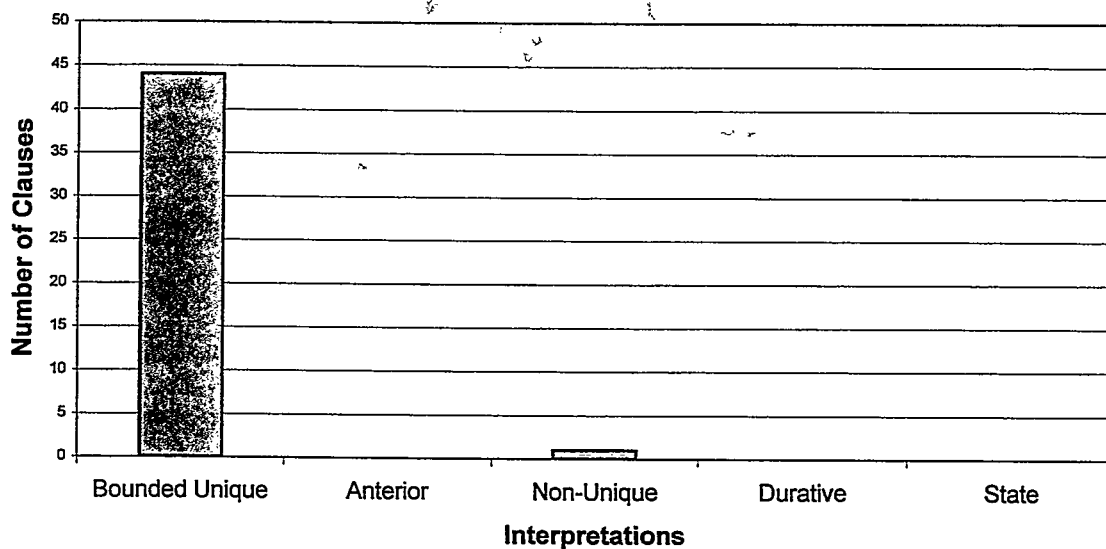


Figure 5.10: Aspect in Mainline of Unique Narratives

Aspect Interpretations in Background Clauses of Unique Narratives

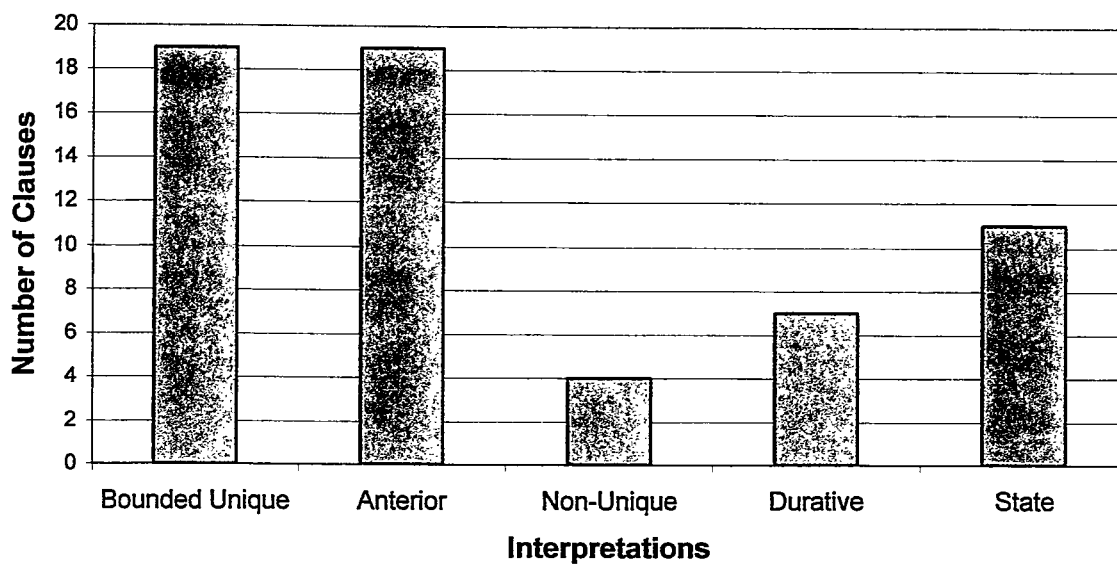


Figure 5.11: Aspect in Background of Unique Narratives

The overall difference in aspect is not a totally unexpected result. After all, the definition of mainline clauses in a unique narrative is based for the most part on the aspect—the mainline is the total of the clauses that recount the unique events in the order of their occurrence. The only mainline clause (in unique narrative) that is coded non-unique is from line 9 of “The Frog and The Fly”:

5.1 ɛ̀ɛ̀-ɛ̀-tù ɛ̀-tù
 then-3HS-grunt 3HS-grunt
 Then he grunted and grunted.

Besides being almost exclusively bounded and unique, most of the mainline clauses of unique narratives are Unmarked verbs. Two of the clauses not coded as “Unmarked” are “verb deleted” clauses: that is, the matrix verb—actually, the entire matrix clause—has been deleted, leaving only the embedded dialog clauses. These two “verb deleted” clauses are noted in lines 80 and 81 of “The Coming of the White Man,” where two lines of dialog are recorded without any introductory “saying” verb.

The counting of the various verb forms and the semantic categories associated with them suggest that there is no one-to-one association of grammatical form with semantic category. A few forms are interpreted more or less consistently; for instance, there are 47 tokens of Progressive verbs recorded in tables 5.2 and 5.3 and 32 of those tokens are interpreted as durative. But the consistent interpretation of a verb form is unusual in Kuche narrative; it is more common for a clause’s TAM interpretation to reflect the context. That is, unique, bounded clauses occur in unique narratives, and non-unique clauses occur in habitual narratives. How does such a generalization avoid circular reasoning, though? If unique, bounded clauses occur in unique narratives, is it a unique

narrative because it contains unique, bounded clauses? Information of some other kind is required before any firm conclusions can be reached. The counting firmly eliminates one possible discourse situation: there is *not* a strong correlation between verb form and semantic category.

5.2 Line Graphs

An effective tool for visually tracking verb forms through narrative is the line graph system developed by this researcher. This tool allows the researcher to isolate selected linguistic features of a discourse and visually track their occurrence throughout the sequence. The system used here is adapted to the narratives chosen for this study and to the linguistic features that interest this researcher.

The line graphs reproduced in this chapter demonstrate that tense and aspect are overtly marked only at the beginning of a narrative, but the meaning attached to that initial verb marking remains in effect throughout the narrative. Past time reference is established in all the narratives by use of the perfective aspect marker *nì-* early in each narrative. Moreover, the habitual marker *tá-* is used along with *nì-* at the beginning of the habitual narratives.

Ideally, the line graphs for one text would be displayed on one page, but because of the length of these narratives, it works better to spread them over three pages. The graph on the next page, figure 5.12, represents all the clauses of "The Frog and the Fly;" it is the only line graph of an entire text that fits on one page. All the codes for the line graphs are listed in appendix B, but a few explanations here will assist the reader in interpreting the graphs.

TAM forms & Interpretations in Frog & Fly

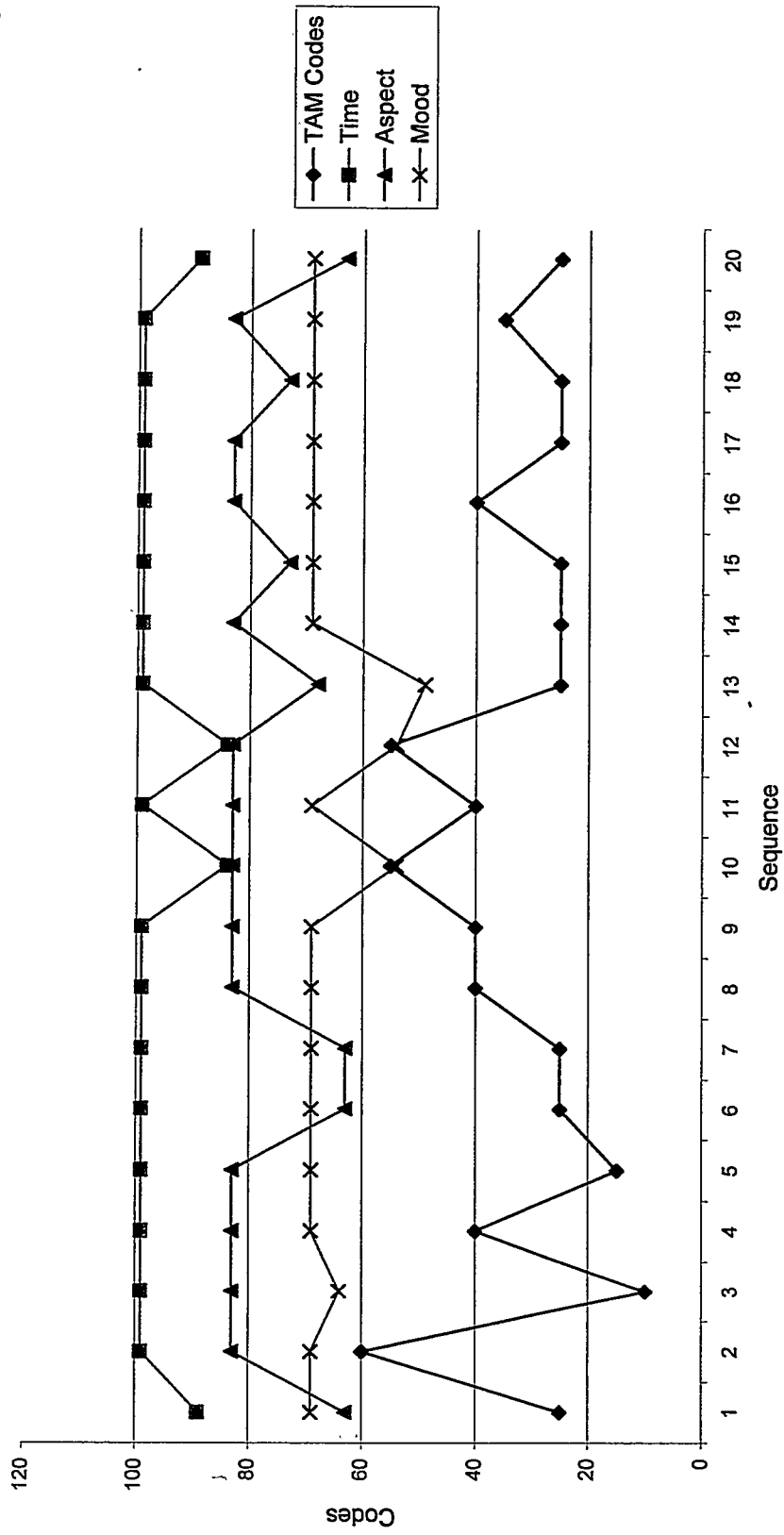


Figure 5.12: Line Graph of "The Frog and the Fly"

The points along the x axis represent the sequence of clauses; the clauses of the narrative are in the sequence represented here from left to right, but the codes used for clause sequencing (as explained in section 4.2.2.1) are not displayed. Each clause is associated with four points, one on each line: a diamond point on the TAM-form line, an "x" on the modality line, a triangle on the aspect line, and a square on the time line.

The bottom line (with diamond-shaped points) represents the kind of verb form; that line ranges from 60 down to zero. The Perfective aspect marker, *nì-*, is represented by the highest points on this line, and the lowest points are the negative prefix *sa-* (optionally *sa-ŋa-*). The Unmarked form is represented by 40 on the graph, and 25 represents a large miscellaneous category. "Miscellaneous" here is much larger than the miscellaneous category in the summary totals: it includes the Progressive form and other auxiliary constructions, copula, all affixes (except those specifically mentioned in the codes), and all serial constructions.

The next line up represents modality³; it is the line with the x's. Because most of the clauses in both story and conversation refer to real situations, the modality line varies little from the value 69—the code assigned to reality. Gaps in the lines represent verbless clauses that cannot be interpreted with any tense, aspect or mood.

The line above modality—the one with triangular point marks—is the aspect interpretation. Aspect codes range from 83 down to 63; 83 represents clauses coded as bounded/unique and 63 represents clauses coded as states.

³ The legend on the chart says "Mood" rather than "Modality", mainly in an attempt to save space. The term *mood* is generally reserved for a formal grammatical category (language-specific or established cross-linguistically), while *modality* refers to semantic interpretation.

The top line (square points) represents the time reference of the clause. The highest points on the line (99) are the clauses referring to past time, usually the “now” of the story. The lowest points (79) on the line are the “timeless” clauses, for instance, those clauses that relate generic truths.

If each verb form (or combination of forms) had its own distinct meaning, we could expect that any shift in verb form would result in a shift in one of the interpretation lines, as in figure 5.13, below.

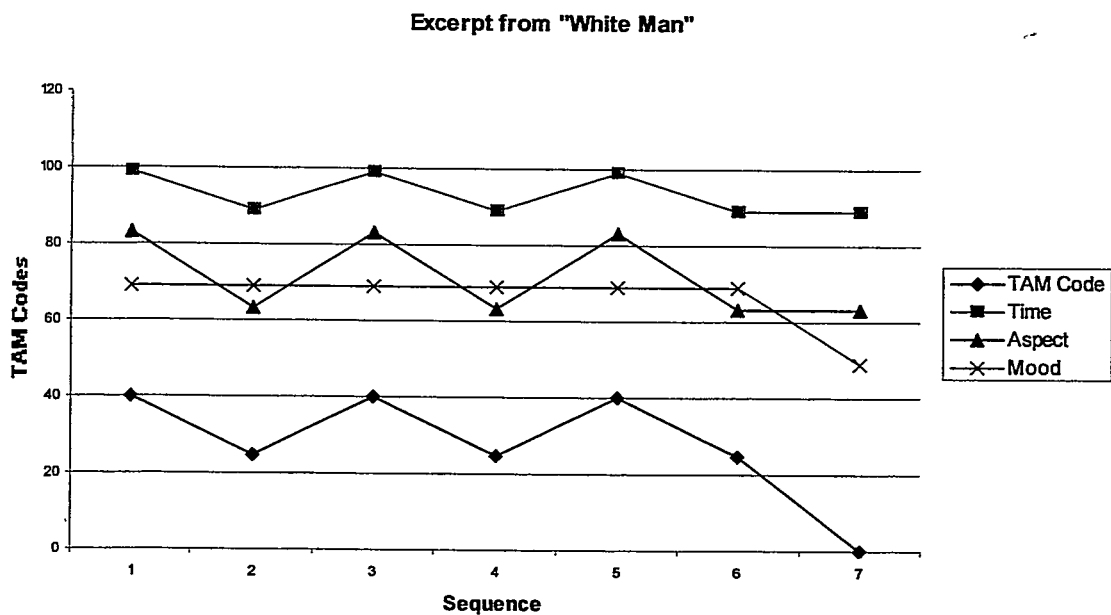


Figure 5.13: Line Graph⁴ of “White Man” clauses 25.0001 through 28.0002
(Repeated from figure 4.1)

The graph above represents the stretch of text in Appendix A in “The Coming of the White Man,” lines 85-87. The text is transcribed as example 4.24, repeated here as 5.2.

⁴ Figure 5.13 is an excerpt from figure 5.18, page 137, x-axis points 20-26.

Example 5.2

| B | C | D | E | H | Clauses |
|----|----|----|----|---------|---|
| 40 | 99 | 83 | 69 | 26.0000 | ā-ŋ[y]-á-
3HS-say-to.3HS- |
| 25 | 89 | 63 | 69 | 26.0001 | nā ì-sók à-wāì...ì-sók-ì.. ì-bló bā-nī ì-kó kī-mū
that INF-take CL7-this...INF-take...INF-go CL2-person CL5-
home CL-5-1SPoss
he said, "From here...from...to there, the people are part of
my family." |
| 40 | 99 | 83 | 69 | 27.0000 | à-ŋ[y]-á
3HS-say-to.3HS |
| 25 | 89 | 63 | 69 | 27.0001 | ásák ā-γŋóŋ-ā
X CL8-that-Q
He said, "What of that?" |
| 40 | 99 | 83 | 69 | 28.0000 | à-ā-ŋ[y]-á-
then-3HS-say-to.3HS |
| 25 | 89 | 63 | 69 | 28.0001 | nā bā-nī bē-mù
that CL2-person CL2-1SPoss |
| 0 | 89 | 63 | 49 | 28.0002 | wù, àná bā-sā-ma
just, and.then 3HPL-NEG-be
He said, "They are my people, but they are not..."
from "The Coming of the White Man" lines 85-87 |

The first six verb forms in the excerpt alternate between Unmarked (code 40) and miscellaneous (25); whenever the form changes, both tense and aspect change, yielding three roughly parallel lines. The last form is marked Negative (code 0), and at this point, the two lines representing modality and verb form run parallel.

A close inspection of the graphs in Appendix E reveals that certain stretches of text yield parallel lines (as illustrated in figure 5.13), but the exceptions are numerous. One interesting exception is reproduced here as figure 5.14. There is no change in any of the lines except for the TAM-form line. In other words, the verb form changes—indeed it is not the same for any two clauses in a row—but neither the tense (past), the

aspect (unique/bounded), nor the modality (real) changes for that entire stretch of text.

In Appendix A, this is the line graph of text from lines 21-25 of “The Coming of the White Man;” the sentence is reproduced below, without the codes, as example 5.3.

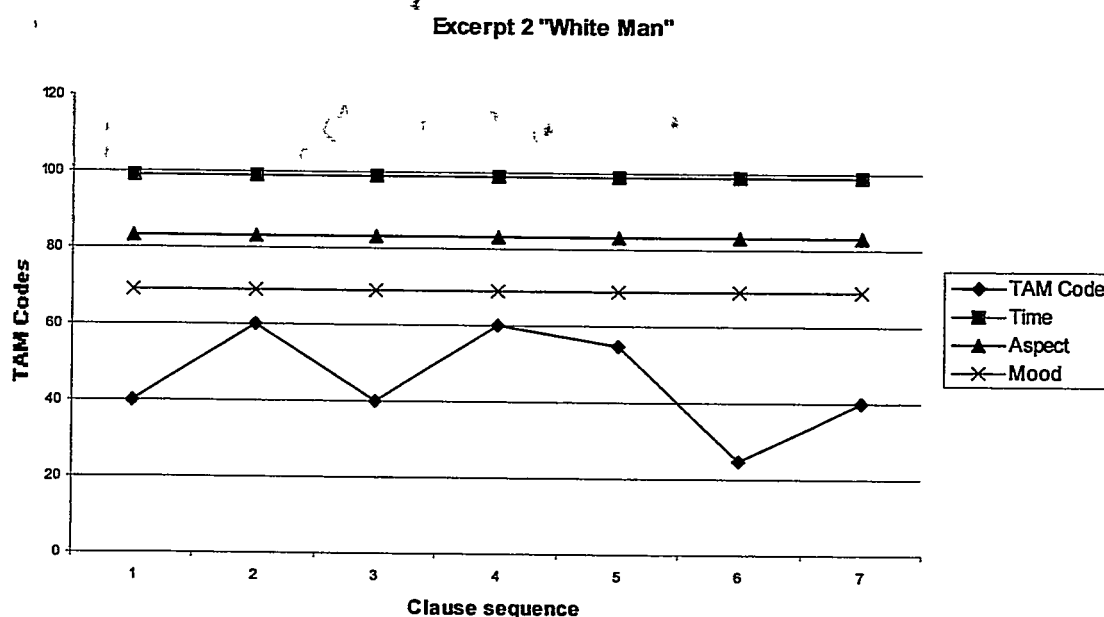


Figure 5.14: Line Graph⁵ of “White Man” Clauses 2.8000 through 5.0000

5.3 t̄, à-bá-pyē bā-nī-làt āmīnīṅī, à-bá-pyé
 well, then-3HPL-come 3HPL-PFV-pass.night like.that, then-3HPL-come
 bā-nī-dī à-zāgūn-ì. à-zāgūn ā-ní-lík
 3HPL-PERFV-tell CL1-NAME-DEF. CL1-NAME 3HS-PFV-get.up

á-tā-sāá ī-dór b-ì-kp̄i yì vát kà-kèèk-ì.
 3HS-receive-RED CL10-horse PREP-CL9-thing it all CL12-PLACE-DEF,
 á-tā-sá ī-dór-ī vát, ā-bló [ā-bī-nū-ú.]
 3HS-receive-RED CL10-horse-DEF all, 3HS-go [3HS-should-give-to.3HS.]

⁵ This excerpt corresponds to figure 5.16, page 135, the clauses numbered 28-34 on the x axis.

Well, then they came and passed the night there, and someone came and told Azagun. Azagun collected a large number of horses from Kakkek. . .he collected all the horses and went [to give them to him.]

The last clause 'to give them to him' is only included for the sake of completeness; this last clause is not charted on the line graph above. Of these past, bounded, real clauses, only 'got up collected' (*ā-nī-lík á-tā-sāá*) is counted as a serial verb construction. That means there are seven clauses in this passage, nearly every other one marked Perfective and every other one relatively unmarked. Yet all seven clauses are interpreted the same with respect to TAM.

This is a pattern that is to be expected in graphing clause-chains: if every other clause in figure 5.14 includes a fully-inflected initial (Perfective) verb, then the less-marked verbs in between could be consecutive forms. It is definitely not the pattern expected of a series of individually marked clauses; the graph of a series of individually marked clauses looks like figure 5.13.

In fact, the graph of a Kuche narrative looks like one long clause chain. Figure 5.15 (next page) displays a graph of the mainline clauses⁶ from "The Coming of the White Man." The first three clauses are fully inflected, but what follows is a long chain of mostly Unmarked verbs. The only objection to calling it a clause chain is that these clauses are not truly connected to each other. Figures 5.16, 5.17, and 5.18 on pages 135-137 represent the line graph of the entire text of "White Man." To get from

⁶ The mainline clauses of "White Man" are identified with whole number clause sequence numbers in Appendix C.

Storyline TAM in White Man

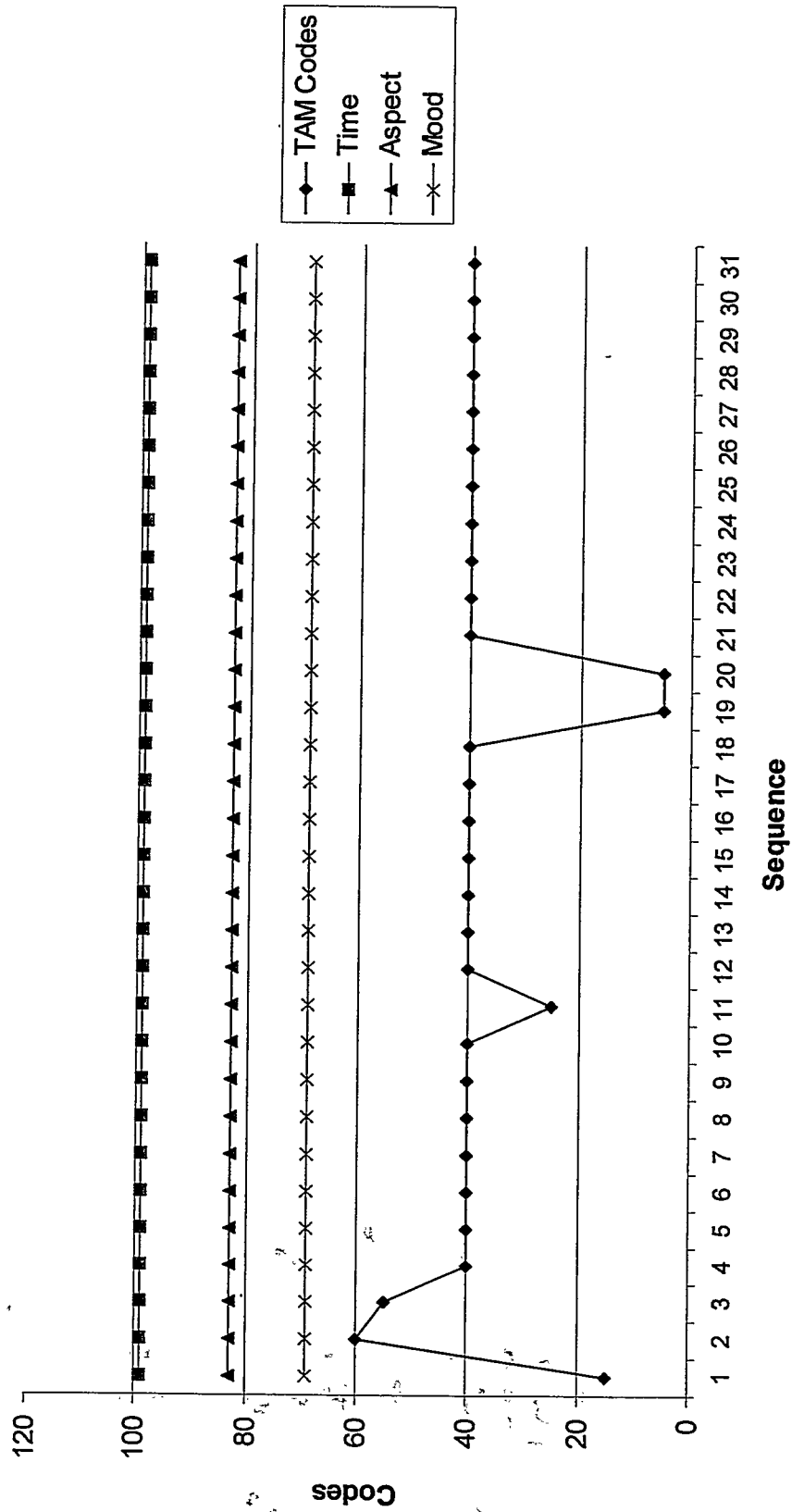


Figure 5.15: Line Graph of Storyline Clauses in “The Coming of the White Man”

Verb forms & Interpretations in White Man #1

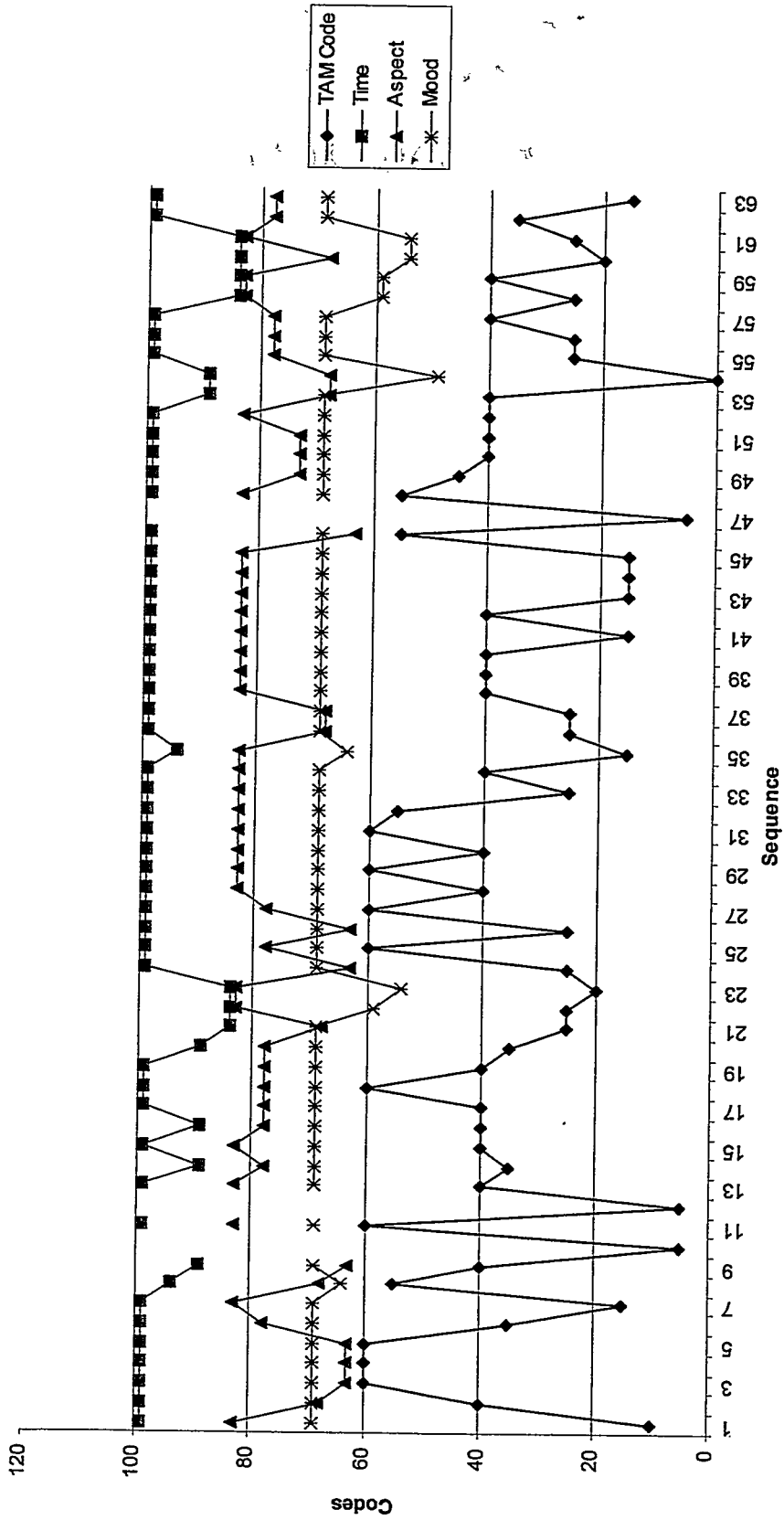


Figure 5.16: Line Graph of "The Coming of the White Man," Part 1

TAM & Interpretations in White Man #2

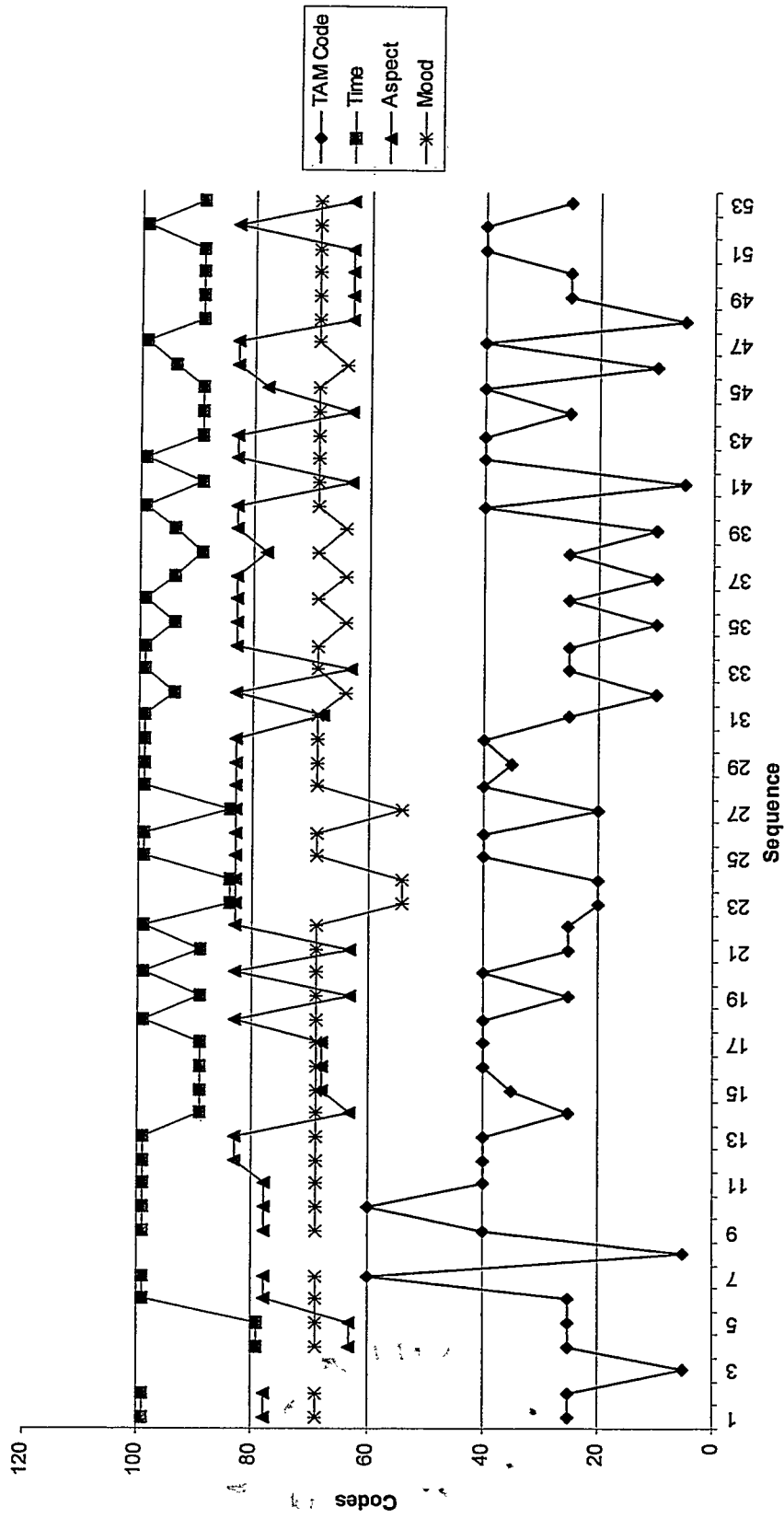


Figure 5.17: Line Graph of "The Coming of the White Man," Part 2

TAM & Interpretation in White Man #3

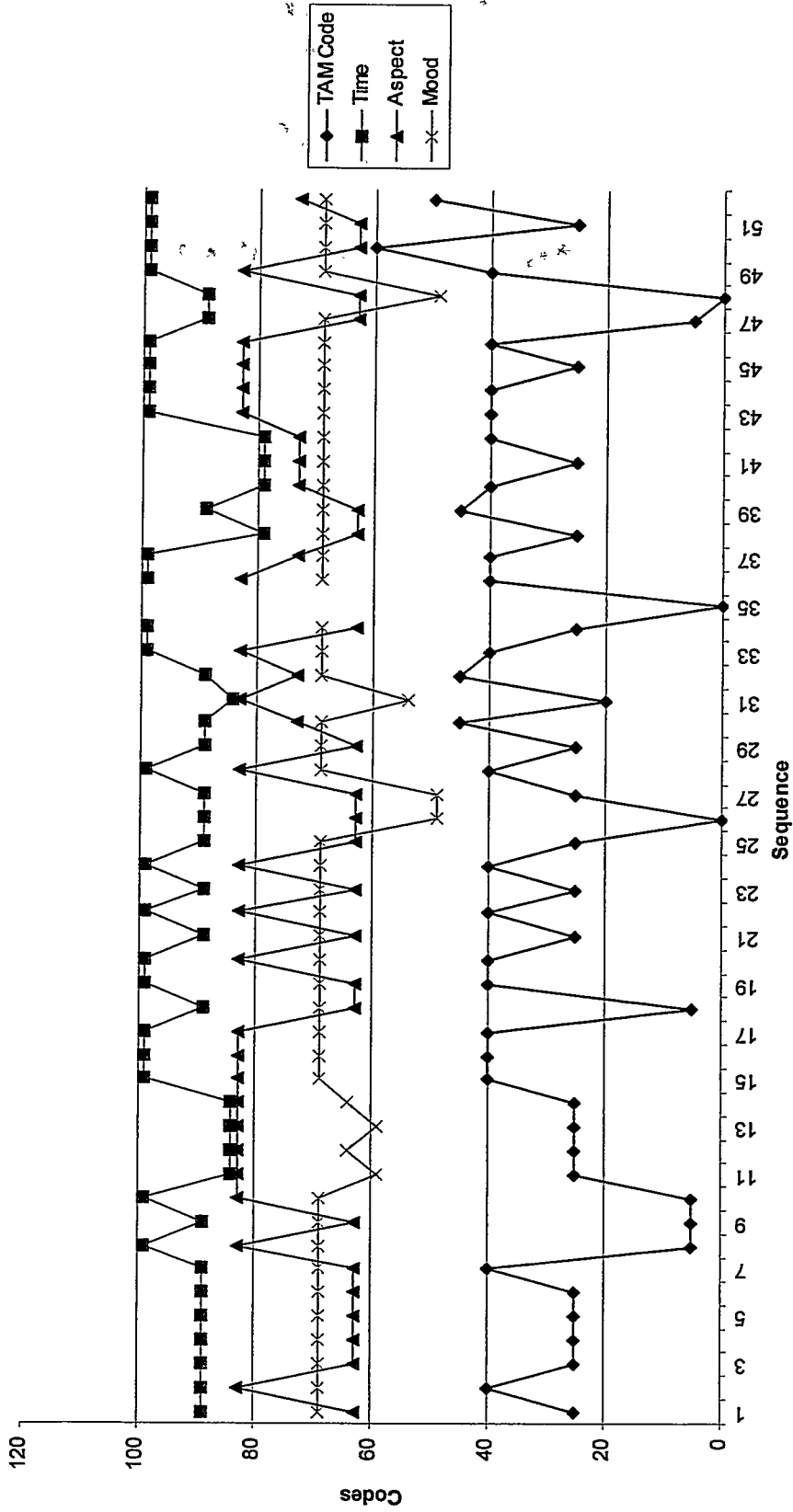


Figure 5.18: Line Graph of "The Coming of the White Man," Part 3

the three-page graph of the entire text to the one-page graph in figure 5.15, a great deal of sorting and dividing was done. In the text, there are clauses of dialog and clauses of background and even clauses of conversational interruptions scattered among these mainline clauses. It is more like the TAM of the initial verb spreads to other clauses at some distance from it, rather than simply to clauses adjacent to it in a sentence.

First, the conversation & dialog clauses, represented in figure 5.19, are removed from the story, leaving just the story clauses, figure 5.20. No clear patterns are evident in a graph of conversation and dialog. The up-and-down lines at all four levels indicate that verb marking is quite varied, as are all three kinds of interpretation. With no conversational interruptions or story dialog, the graph of the story clauses (figure 5.20) displays smoother lines than the three-page graph of the entire text. The line for forms (the bottom line of the graph) still displays a great deal of variation, but the lines for the three interpretations are already fairly smooth. In fact, this should not be surprising, because the coherence of a story depends on consistent reference to real events (modality) in the past (tense) in sequence (only bounded events can be placed end to end in sequence). But even the line for forms has stabilized to some extent, when compared with the same line in figure 5.19 (conversation & dialog). On the line graph of conversations, the line for forms stays mostly at 25 (miscellaneous) and lower. The line for verb forms in figure 5.20 has lots of high numbers at the beginning (representing perfective *ni-*, alone or in some combination), but then, as the story progresses, the forms settle down to mostly Unmarked verbs (coded 40). And that

TAM in WM Conversation & Dialog

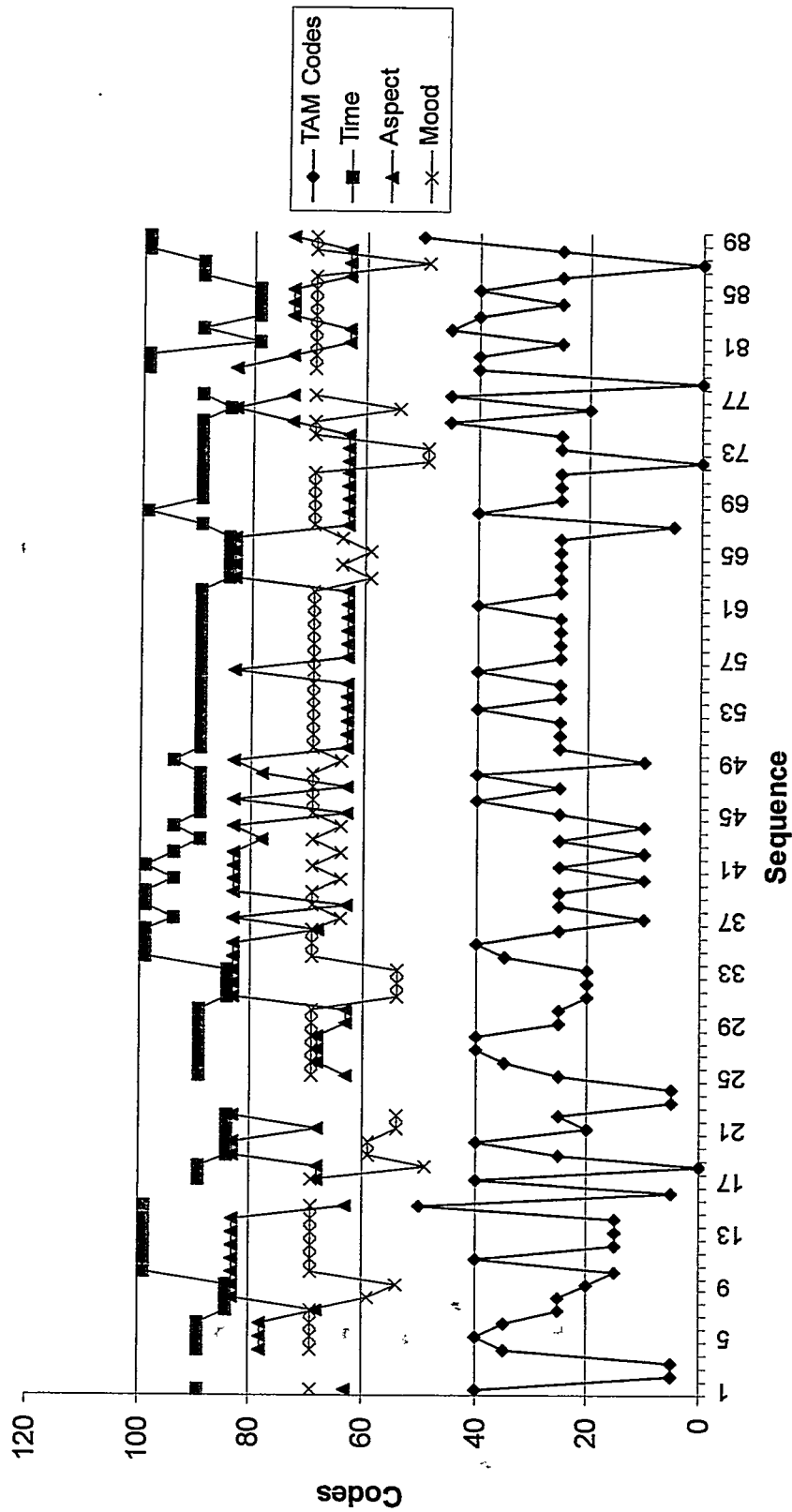


Figure 5.19: Line Graph of Conversation & Dialog Clauses in "The Coming of the White Man"

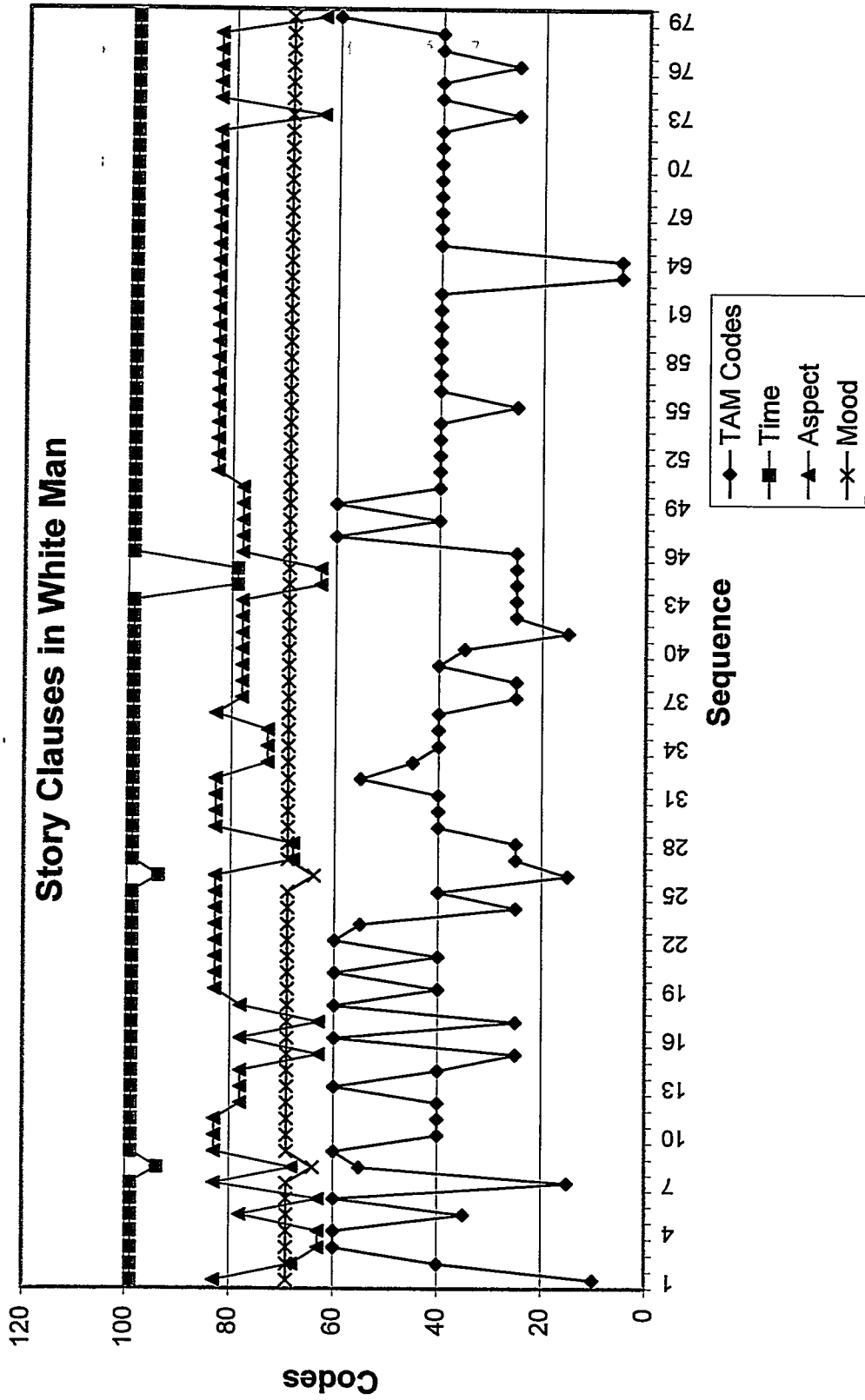


Figure 5.20: Line Graph of Story Clauses in "The Coming of the White Man"

suggests that if the discourse process observed in the texts is indeed an example of spreading, then the form that most frequently “attracts” spreading is the Unmarked form—the form marked only for subject agreement.

After removing the background clauses from the story, the clauses that remain form the line graph in figure 5.15 (page 135). The lines in figure 5.15 represent only the “storyline” clauses; again, it is no surprise to find that **all** the storyline clauses are past, real, and bounded/unique. But the pattern of verb marking is very revealing: a few marked clauses appear at the beginning of the story, but after that the form-line is basically smooth. The two low points (code 5, verb deleted) on the graph are the *virtual* clauses: those two blank spaces before lines of dialog where in introductory clause of “saying” is expected. The other gap in the nearly unbroken chain of Unmarked verbs is from line 73 of “The Coming of the White Man;” it is coded 25 (miscellaneous) and it is a serial verb construction, reproduced below as example 5.4.

5.4 *tò*, *à-á-lík* *ā-fīy-á-nā*, . . .
 well, then-3HS-get.up 3HS-say-to.3HS-that, . . .
 Well, he said to him, . . .

As noted in section 3.3.1.3, serial constructions do not comprise a uniform category: some constructions clearly contribute to TAM interpretations, but others are more like lexical expressions. I interpret this occurrence of *á-lík* ‘he-get-up’ not as a TAM marker, but as a rhetorical device to underscore the switch in conversants: up to this point, the white man has been speaking to *them* (whoever *they* are), but the next remark is directed towards Azagun himself. The borrowed Hausa discourse marker *tò* is common in Kuche discourse to signal a paragraph break, and would be enough, along

with the participant switch, to indicate a break. Evidently, the verb *á-lík* lends greater significance to this paragraph break than some of the others; and indeed, this is the only dialog in the story that is personal, in that two distinct characters actually converse back and forth.

Effectively, the only formal TAM marking in the storyline of this narrative is in the first 3 storyline clauses. These correspond to clauses 1.0000, 2.0000, and 3.0000.

The Kuche text is reproduced as examples 5.5, 5.6, and 5.7 below.

5.5 à-nàsará á-bí-yú bì ì-ḡkūn á-ḡyé . . .
 CL1-white.person 3HS-should-follow PREP CL9-PLACE 3HS-come. . .
 The white man came through Iregweland. . .

5.6 tò, à-bá-nī-dī à-zagūn-ì,
 well, then-3HPL-PFV-tell CL1-NAME-DEF
 Azagun was told, [literally: they told Azagun]

5.7 à-zāgūn ā-ní-lík á-tā-sāá ī-dór b-ì-kpì
 CL1-NAME 3HS-PFV-get.up 3HS-receive-RED CL10-horse PREP-CL9-thing
 Yì vát kà-kèk-ì
 it all CL12-PLACE-DEF
 Azagun collected all the horses from Kakkek. . .

The situation in the habitual narratives is not quite as straightforward, mostly because there are few guidelines for distinguishing mainline events in habitual narratives. All the line graphs for the habitual stories are in Appendix E. Figure 5.21 represents “Ados Kago” with all the conversation and dialog removed; the first eight story clauses (corresponding to points #1-8 on the x axis of figure 5.21) are reproduced here as examples 5.8-5.15, on page 144.

Verbs in Ados Kugo Story Only

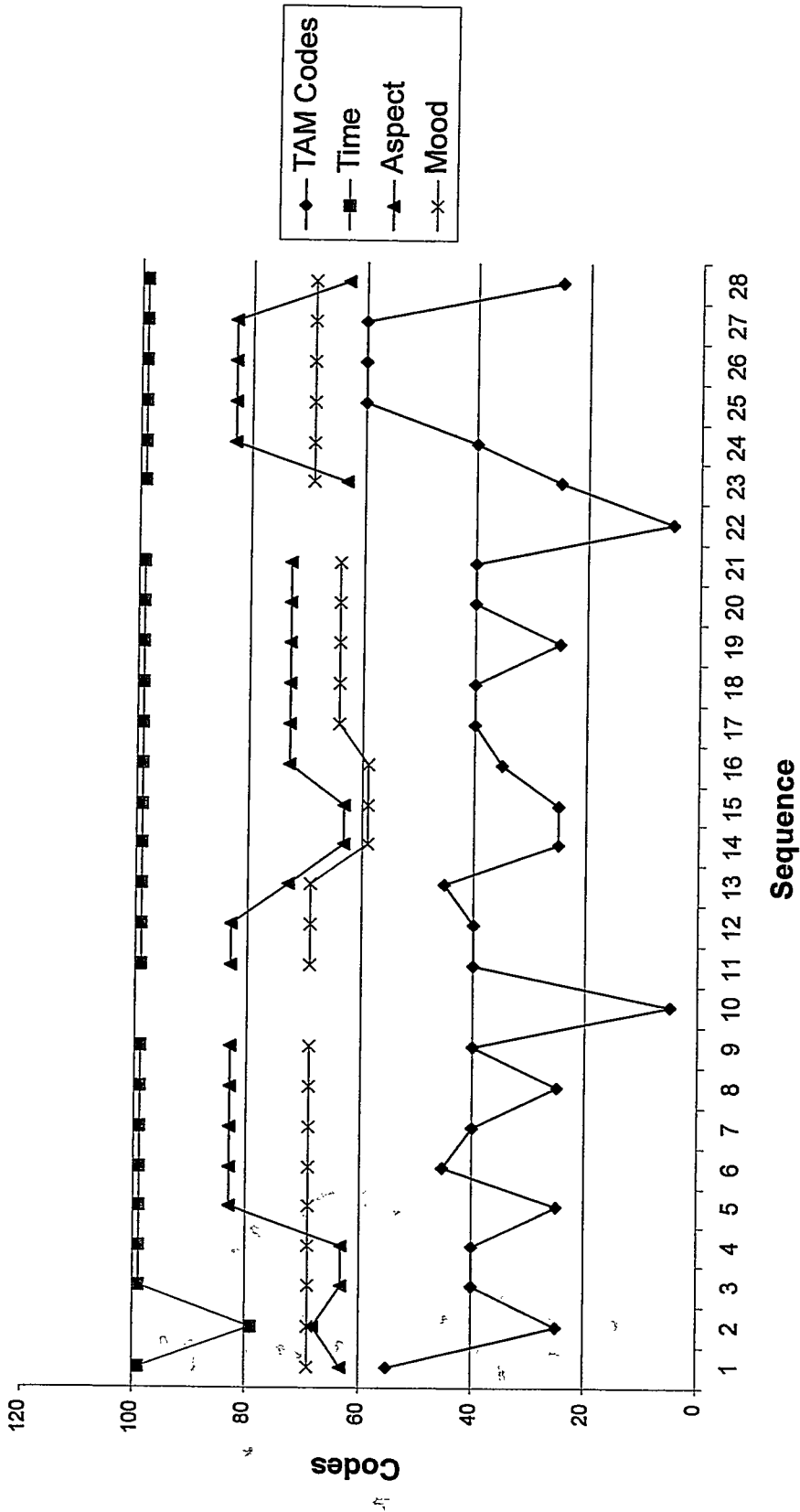


Figure 5.21: Line Graph of Story Clauses in "Ados Kugo"

- 5.8 . . .[ā-bíríjé] ná á-nā-ǰī-yā kà-kèèk
 [heroes] that 3HPL-PFV-be-LOC CL12-PLACE
 . . .[heroes] that existed here in Kakkek. (line 4)
- 5.9 . . .ā-bíríjé^y-ì ā-ǰī ì-zūsú zì-zūsú^y-ì
 CL8-hero-DEF CL8-be INF-follow RED-follow-DEF
 . . .heroes are in [groups] that follow [groups]. (lines 5-6)
- 5.10 ā-nó ā-yī kètā-àfī-ì . . .
 CL8-some CL8-eat ADV-one-DEF
 Some were the first ones, . . . (line 6)
- 5.11 ā-yī kètē-èfī
 CL8-eat ADV-one
 They came first
- 5.12 à-ā-nó ā-bíríjé á-hílí á-yā-nyè ā-yīk kà-bā-ì
 then-CL8-some CL8-hero CL8-return CL8-also-come CL8-next.to PREP 3PLH-DEF
 and then other heroes came also after them. (lines 6-7)
- 5.13 tò, à-bā-nó bā-tā-ǰī à-kāmpànī à-má
 well, then-CL2-some 3HPL-HAB-do CL7-company CL7-3HPLPoss
 Well, some came in their companies
- 5.14 bā-gāsá
 3HPL-pass
 and passed. (line 10)
- 5.15 à-bā-nó bāhīī bā-bá-nyē à-kūṅgìyā à-má
 then-CL2-some 3HPL-return 3HPL-also-come CL7-company CL7-3HPLPoss
 Then others also came in their companies. (line 10)

Then there is a long conversation that is omitted from the line graph; in the middle of the conversation the storyteller tries to resume (line 17 in the translated text, Appendix A). He says, “OK, he came in his group”, and that clause is counted as part of the story, but then he is interrupted again. He finally resumes the story in line 45,

and he would have concluded his remarks about Ados Kago in the next sentence had not the listener prompted him to give some details. The details (although sparse and not very specific) begin in line 58, reproduced here as example 5.16.

5.16 à-dòs kàgō ā-tá-tí kī-bíríjé.
 CL1-NAME NAME 3HS-HAB-do CL5-hero
 Ados Kago used to do heroic things.

The verb markings that are most interesting here are those in examples 5.8, 5.13, and 5.16. In 5.8, the storyteller shifts from the Unmarked verbs of the initial conversational clauses (interpreted as present) into a Perfective form (interpreted as Past), thereby signaling the beginning of the story. In 5.13, the storyteller uses a verb marked Habitual, but my informant does not interpret it as past habitual; perhaps this is because a Habitual verb is unremarkable when the subject is a non-specific plural subject ‘some.’ It is not until the details of the story begin (example 5.16) that she interprets the Habitual verb as past habitual.

Once the few details of this story are finished, the rest of this narrative is transitional—mostly conversation, but several strictly 3rd person, strictly past reference clauses referring to a certain war between the Bache and the Irigwe people. The boundaries between chapters are a bit fuzzy, because this kind of transitional interaction comes in between all of them; the chapter divisions are drawn at the end of the transitional material. After the storyteller and listener have collaboratively decided on the next hero’s name, the listener urges him, “Let’s go on;” then the next chapter, “Ude Aruku,” begins. Figure 5.22 is the line graph of the story clauses of “Ude Aruku.”

Ude, Minus Conversation

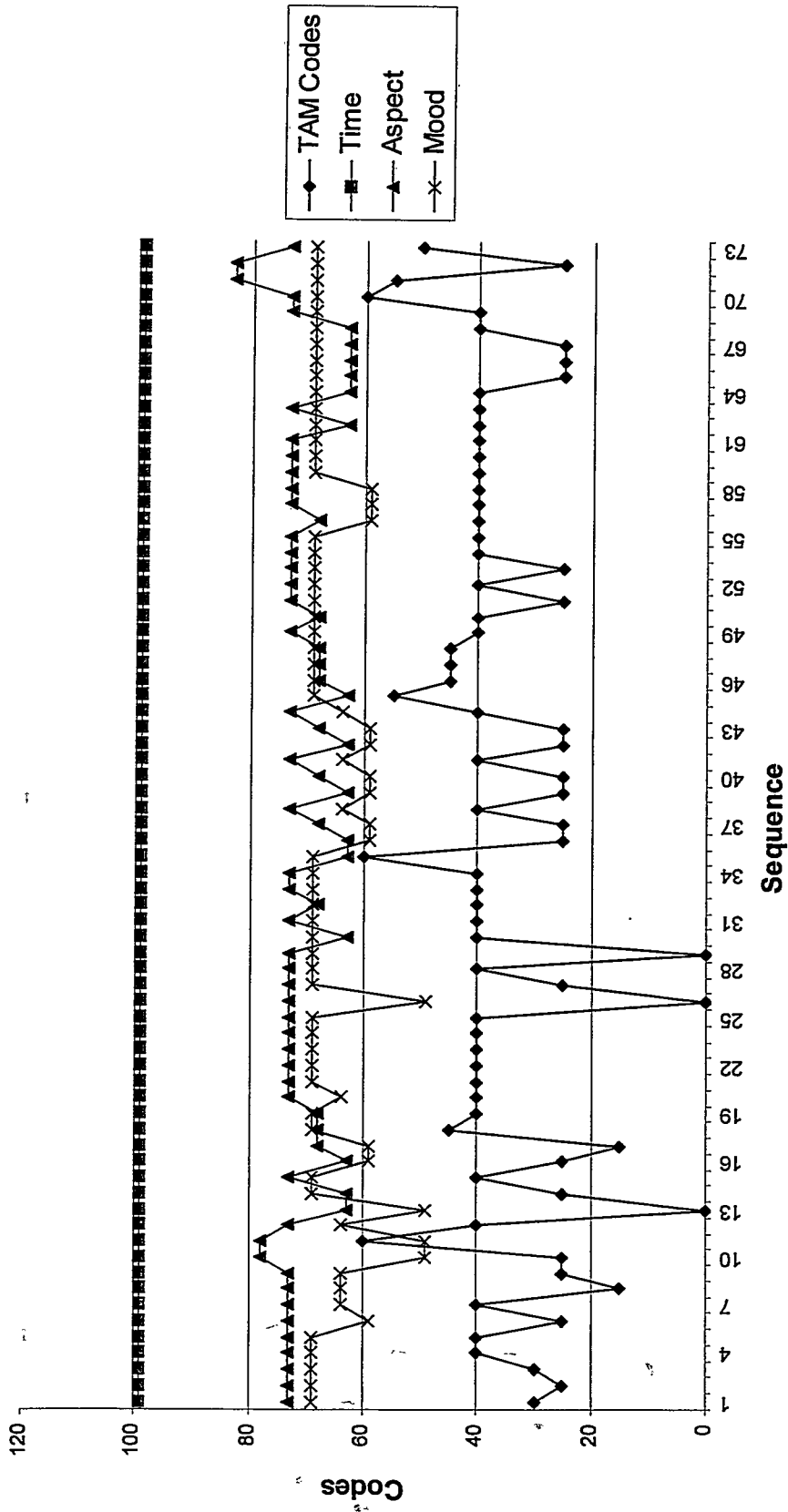


Figure 5.22: Line Graph of Story Clauses in ‘Ude Aruku’

Semantically, “Ude Aruku” could stand on its own as a narrative, but the tense and aspect interpretations from the previous chapter spill over into this one. The only clause at the beginning of this chapter marked both Habitual and Perfective (to give a past habitual interpretation) is a line counted as conversation: “We used to hear of the likes of Ude Aruku.” Two verbs marked Habitual are used early in the story, but the past time reference has to come either from “Ados Kago” or from that one line of conversation—more likely, a little of both. The first several story clauses of “Ude Aruku” (omitting the line of conversation) are reproduced here as 5.17-5.21. These clauses correspond to points #1-5 on the x-axis of figure 5.22.

- 5.17 ā-tā-ſɪ kɪ-blɔ̃
 3HS-HAB-be PROG-go
 When he was going,
- 5.18 à-ā-ſɪ kɪ-kɔ̃ ɪ-dɔ̃r-ɪ
 then-3HS-be PROG-ride CL9-horse-DEF
 he would ride the horse.
- 5.19 à-wú-í á-tá-blɔ̃ ā-tá-sɔ̃k bā-zà̀nà̀ŋʸ-ɪ nī
 then-3HSInd-DEF 3HS-HAB-go 3HS-HAB-take CL2-his.friend-DEF PREP
 He would take his friends with
 ɪ-sūn ɪ-kūrò. . .
 CL9-heart CL9-strong
 a brave heart [i.e. courageously].
- 5.20 . . . ā-blɔ̃-mā kē-tſū ɪ-ŋkūŋʸ-ɪ. . .
 3HS-go-with CL12-place CL9-war-DEF
 . . .and take them to the war zone
- 5.21 . . . ànā ē-dī-bā ɪ-fī
 and.then 3HS-tell-3HPL INF-do
 . . .and teach them how to fight.

A comparison of the first two clauses (5.17 and 5.18) with the first two points of figure 5.21 show that these clauses are coded “non-unique” (i.e. habitual) rather than “durative” (i.e. progressive). As a matter of fact, they would probably be more accurately coded as both non-unique (at 73 on the aspect line) and durative (at 68 on the aspect line), but the line graphs do not allow for multiple coding; in ambiguous cases like this one, I am forced to decide which interpretation is more critical to the analysis.

This second chapter of habitual narrative contains a lot more narrative and a lot less conversation; thus, the effects of TAM-spreading are easier to see. The aspect line of the graph remains fairly constant at 73, the code for non-unique. Only a few verbs in the discourse are actually marked non-unique, though; most verbs are simply Unmarked.

Figure 5.23 represents the third history chapter, entitled “Raids,” with the conversation and dialog eliminated. The second point on the graph represents a clause marked Habitual, but after that, overt Habitual marking nearly disappears from the story.

The ease with which my informant translated these narratives into English indicates that she sees (and hears) clues in the text that are not obvious to an outside observer. The line graphs suggest that the overt marking that occurs near the beginning of each chapter affects the interpretation of all the clauses in the story, excluding dialogue. Evidently, the speaker is constructing initial-consecutive chains, but the chains can be interrupted by story dialogue and by listener questions, and there is no need to repeat the “initial” verb form when the chain resumes again. And the “consecutive” verb forms have very little in common: what they really have in common is what is *not* marked on them—they are *not* marked again for that initial feature, either Perfective or Habitual. The

Verb forms in Raids minus Conversation

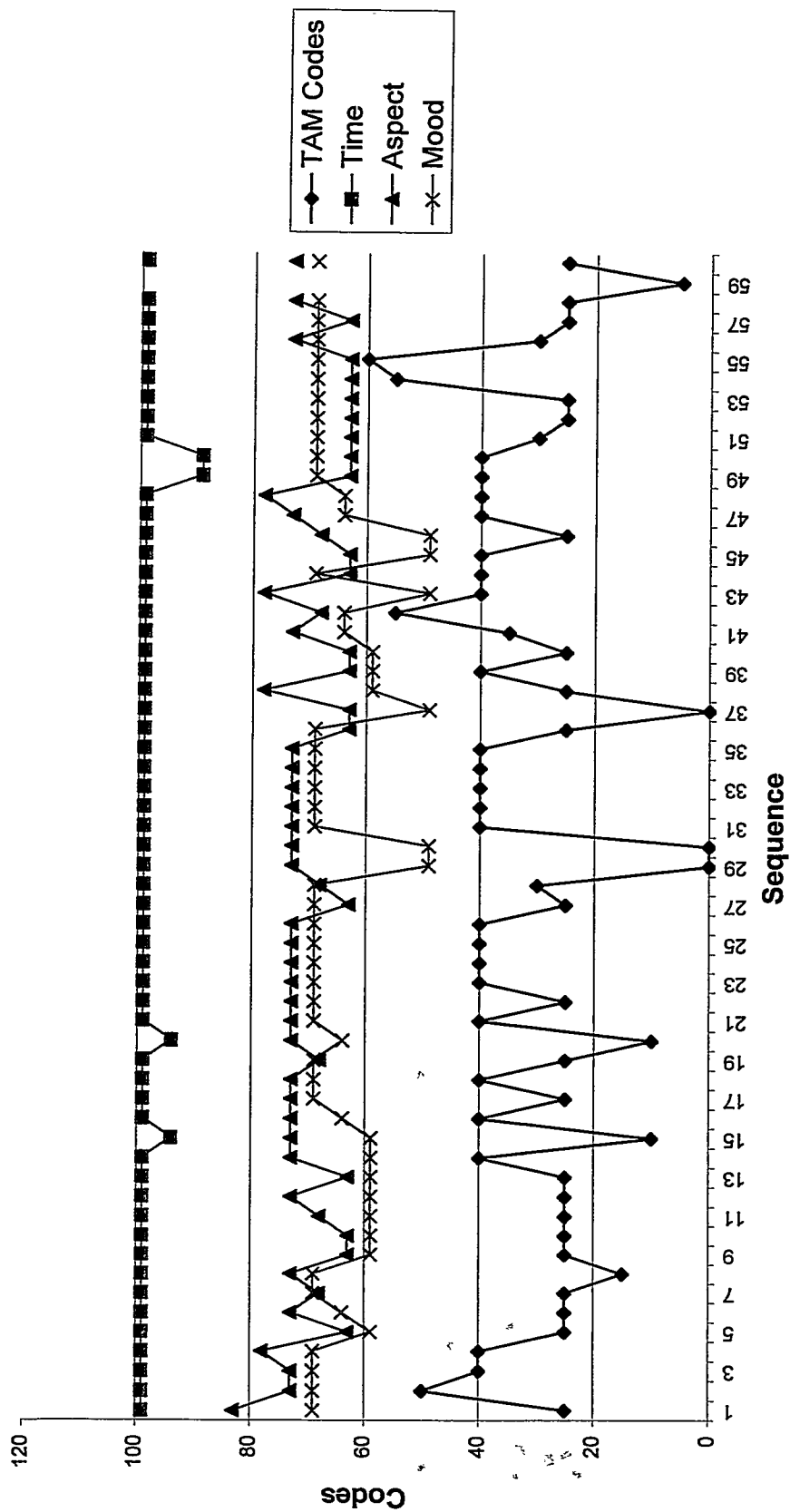


Figure 5.23: Line Graph of Story Clauses in "Raids"

frequency of the completely Unmarked verb is overwhelming, but a key feature of these texts is that all of the “consecutive” forms are formally unmarked for the one semantic feature that permeates every clause of the story. As more of the linguistic cues were discovered, it became evident that the metaphor of chaining suited the process of building Kuche discourse less than the metaphor of domains and embedded domains. Section 5.3 identifies the various linguistic cues that can be found in these texts to signal the listener (or reader) how far a domain extends and how the overt marking affects other clauses within a domain.

5.3 Linguistic Cues

It was only while constructing line graphs and counting 603 verb markings in text that the significance of certain linguistic forms became evident. Not that graphs and numbers explain language use—what they did in this study was to highlight areas of the text where I ought to be looking. It is likely that there are still a number of linguistic cues yet to be discovered which have significance in the interpretation of TAM in Kuche narrative discourse. This study has uncovered a few that are easily distinguished in form and fairly consistent in use in the texts under investigation here. They are listed in Table 5.5.

The Unmarked form is the form that most needs an explanation in Kuche. Though it is the most common verb form used in discourse, in elicitation it is never given in response to any English verb form. When it occurs in text, it is translated in various ways: as Past tense, as Past Habitual, as Present tense, or even as Future. Because the form itself does not occur in isolation, it cannot be explained in isolation; it must be

Table 5.5
Significant Forms in the Spreading of
Tense, Aspect, and Mood

1. The Unmarked Verb
2. Copula marked for fronted complement
3. First person reference
4. One discourse function of the conjunction *à-*
5. The Perfective prefix *nì-*
6. The Habitual prefix *tá-*
7. Conditional mood: a serial verb construction
8. Imperative mood: the bare lexical verb

explained as a discourse phenomenon. And because this study does not look for an explanation in isolation, the explanation that presents itself elucidates both the form and much that constitutes its typical context.

5.3.1 The Discourse as a Domain of TAM

The texts analyzed in this study are all bounded discourses, in the sense that each has a beginning and an ending. The limits of a bounded entity can be marked two different ways. The limits of discourse (in some language) might be evident through a distinct change from one kind of marking to another, like a painter might butt the blue of the sky up against the green of the grass on the horizon. English is more or less like this: a switch from conversation to an oral story would typically be indicated by a switch from verbs

marked Present or Present Progressive to verbs marked Past. In another language, only the boundaries might be drawn, like a pencil sketch that outlines figures by using lines and curves, with very little color actually filled in. *Kuche* is like the pencil sketch: boundaries are drawn, but the speaker need not fill in all the color for the listener; through shared experience the listener fills in the color with his/her imagination.

In the text analyzed here, at least two TAM markings project their interpretations onto an entire discourse: the Perfective aspect prefix *nì-* and the Habitual aspect prefix *tá-*. Although no charts or line graphs were constructed for text #10 "Language Meeting" (Appendix A), a visual inspection suggests that future time-reference can also mark an entire a discourse. Unfortunately, the beginning of that discourse occurred while the cassette tape was being turned over, so the initial overt TAM marking is not recorded. Though the form itself is not recorded, its effects are evident in the long shadow it casts over the entire discourse.

The speakers recorded for this study begin their narratives with clauses (at least one clause, sometimes a few more) marked with the tenses/aspects that apply for most of the discourse. Mood is less relevant at the level of an entire text, especially in a narrative, because Indicative mood (the mood of *realis*) tends to be unmarked and tends to hold throughout most of a story. Although the prefix *nì-* is analyzed as a marker of Perfective aspect, it simply lends a past orientation to most of the discourses studied here. Verbs that cannot strictly be interpreted as perfective—that is, stative verbs and verbs marked Habitual, Progressive, or Distributive—are interpreted as past, while Unmarked dynamic verbs can be interpreted as past perfective.

Ignoring for now the conversational comments at the beginning of some of the texts (i.e. “my name is,” or “my folk tale is about. . .”), the narratives begin with clauses marked Perfective (verb prefix *nì-*) or with clauses marked Perfective and Habitual (verb prefixes *nì-* and *tá-*). All the unique narratives—stories that relate unique events that happened one time—all begin with verbs marked Perfective, as in 5.22-5.25. These are the opening lines of all the unique narratives: that is, of “The Frog and the Fly,” “Uyho,” “Rabbit Tale,” and “The Coming of the White Man.” The beginning of “Folk Tale” is missing from the recording.

5.22 à-ŋkpúsók bā è-bèèntfi bā-nì-blō ì-hàk ā-gāā
 CL7-frog and CL7-fly 3HPL-PFV-go INF-cut CL8-grass
 A frog and a fly went to cut grass
 from “The Frog and the Fly” line 3

5.23 ū-yó á-ŋē tji á-nī⁷-bló á-nī-tfi à-hī
 CL1-NAME 3HS-be walk 3HS-PFV-go 3HS-PFV-walk 3HS-find

 bā-nī kì-kún kī-kū.
 CL2-person PROG-cry CL5-death
 Once there was Uyho, and he went walking and met some people mourning a death.
 from “Uyho” lines 1-2

5.24 bá-nī-wólò ī-nāŋ kà-bō vát bā-tà bá-wō
 CL2-PFV-call CL10-animal CL12-bush all 3HPL-say 3HPL-want

 ì-tò ì-nāŋ ì-yī nī. . .
 INF-see CL9-animal CL9-which that. . .
 The animals were all called together, they said they wanted to see which animal...
 from “Rabbit Tale” line 1

⁷ Recall from section 3.3.1.3 (see page 71) that the tone of the TAM prefixes are affected by the surrounding tones.

5.25 ū-mbà à-násará kǐ-yū à-bā-sāà. . . à-bā-tík
 CL3-time CL1-white.person PROG-follow, then-3HPL-put. . .then-3HP-appoint

ū-tù kà-kēēk á-nā⁸-yí à-zāgūn. à-nā-yí à-zāgūn.
 CL1-chief CL12-PLACE 3HS-PFV-mean CL1-NAME. 3HS-PFV-mean CL1-NAME

tò, ū-nī ā-nìŋʸí nā bāà-tūŋʸí á-nā-yí à-zāgūn.
 well, CL1-person CL1-that that 3HPL-make.responsible 3HS-PFV-mean CL1-NAME

à-násará á-bí-yú bì ì-ŋkūn á-nyé ā-nī-tà
 CL1-white.man 3HS-should-follow PREP CL9-Iregwe 3HS-come 3HS-PFV-intend

ā-fī kì-làt kà-mā kā-kāi, kā-mā kà-sāan-í
 3HS-be PROG-pass.night CL12-back CL12-this, CL12-back CL12-PLACE-DEF

At the time the white man came, the chief that was ruling at Kakkek was named Azagun. He was named Azagun. The man that was installed was called Azagun. The white man came through Iregweland and wanted to spend the night at Kasan. from "The Coming of the White Man" lines 2-5

The habitual narratives present a more complex situation: rather than interpreting them as one past habitual monologue embedded within the interactive conversation, they are best analyzed as habitual monologues embedded in perfective monologues embedded in interactive conversation. 5.26-5.28 are the opening lines of all the habitual narratives: that is, of "Ados Kago" (with some repetitive material deleted), "Ude Aruku," and "Raids." The history titled "Binchi" is not included in this analysis because its transcription is incomplete. The perfective interpretation is, in a sense, compromised by the use of the Habitual marker, but not entirely neutralized: without the Perfective prefix, there would be no past orientation to the story.

5.26 ĩn-fī kì-tēt ĩ-bá ā-bíríjé ná á-nā-fī-yā kà-kēēk. . .
 1S-be PROG-tell CL10-issue CL8-hero that CL8-PFV-be-LOC CL12-PLACE

⁸ Recall from section 3.3.1.3 that *nā* is phonologically-conditioned variant of *nì*.

tò, kū-nà-wōŋ ā-bíríjé ā-nīŋì. kū-nà-wōŋ bā-nā à-dòs kàgòŋ.
well, 1PL-PFV-hear CL8-hero CL8-that. 1PL- PFV-hear PL-with CL1-NAME NAME

tò, à-bā-nó bā-tā-fī à-kāmpànī à-má bā-gāsá.
well, then-CL2-some CL2-HAB-do CL7-company CL7-3HPLPoss 3HPL-pass

I'm telling about heroes that existed here in Kakkek. . .

Well, we used to hear about those heroes. We used to hear of the likes of Ados Kago. Well, some came in their companies and passed.

from "Ados Kago" lines 4-10

5.27 ū-dé à-rūkù. kū-nī-tá-wō bā-nū ū-dé à-rūkù.
CL1-NAME CL1-NAME. 1PL-PFV-HAB-hear PL-with CL1-NAME CL1-NAME.

ā-tā-ŋì kì-bló àà-ā-ŋì kì-kō ì-dōr-ì. à-wú-í
3HS-HAB-be PROG-go then-3HS-be PROG-ride CL9-horse-DEF. then-3HSInd-DEF

á-tá-bló ā-tá-sōk bā-zàŋŋ^y-ì nī ì-sūn ì-kūrū. . .
3HS-HAB-go 3HS-HAB-take CL2-his.friend-DEF with CL9-heart CL9-strong

Ude Aruku. We used to hear of the likes of Ude Aruku. When he was going, he would ride the horse. He would take his friends courageously...

from "Ude Aruku" lines 2-5

5.28 yī ì-ŋkūrū^y-ì ì-dòŋì ì-fī ì-sù, ànā mīnìŋ^yì
CL9.it CL9-war-DEF CL9-start INF-do CL10-end and.then like.that

bē-nī-té-dī bē-dī yè-yèl ì-bló ì-hìk bā-zàŋà
3HPL-PFV-HAB-tell 3HPL-tell RED-secret INF-go INF-find CL2-his.friend

The war was coming to an end, but they would still invite their friends to go with them secretly.

from "Raids" lines 2-3

After these opening clauses, neither the Perfective marker nor the Habitual marker occurs with much frequency—except in dialog or prefixed to the verb 'be'—until the narrative's end. Most of the verbs in the texts are Unmarked. That is, they are inflected for subject agreement only, not for any tense, aspect, or mood. Furthermore,

verbs that are overtly marked for TAM are interpreted differently inside the boundaries of a narrative than they are in other contexts.

The terminal limit of a narrative often comes full circle, containing a clause or two overtly marked for the tense and/or aspect of the entire narrative. However, there are other distinctive boundary markers for discourse endings; the linguistic cues that have been identified in this study as marking terminal boundaries are listed in Table 5.6.

Table 5.6: Terminal Discourse Boundaries

1. The copula marked for a fronted complement, in a construction where it is sometimes translated “that’s how” or “that’s why.”
 - 1a. Some other term translated as “the reason why.”
2. A repetition of the overt TAM marking that begins the discourse.
3. In the histories, a reference to the authority of the fathers who transmitted the history.
4. First person reference.

As a reminder, the common conjugation of the verb ‘be’ is shown in table 5.7 (repeated from table 3.4). And the form that occurs with a fronted copula alternates between \bar{i} - $f\bar{e}\bar{e}$ and \bar{i} - $s\acute{a}$, where the subject is typically “dummy it.”⁹

Table 5.7: The Verb ‘be’ $f\bar{i}$

| | | | |
|-----------|-------------------------|----------------------|-------------------------|
| I am | $\bar{i}n$ - $f\bar{i}$ | We are | $k\bar{u}$ - $f\bar{i}$ |
| You are | \bar{u} - $f\bar{i}$ | You (pl) are | \bar{u} - $f\bar{i}i$ |
| He/she is | \bar{a} - $f\bar{i}$ | They (human) are | $b\bar{a}$ - $f\bar{i}$ |
| It is | (x^{10}) - $f\bar{i}$ | They (non-human) are | (x) - $f\bar{i}$ |

⁹ But the subject-agreement prefix does occasionally indicate some other subject.

¹⁰ The subject agreement marker for 3rd person non-human varies according to the noun class of the subject.

5.3.1.1 The Fronted Complement Form of 'Be'

Most of the discourse cues listed in Table 5.6 have specific semantic significance and convey propositional content; but the first one, the fronted copula clause, is a highly marked construction and is not semantically distinct from the common form of 'be'. However, in form and in usage it *is* distinct from the ordinary form of 'be'. The differences in form—both morphological and syntactic—are discussed in section 3.2.2.2, but differences in meaning are not apparent at the word level or at the clause level. I have identified two discourse functions of $\bar{i}\text{-}f\bar{e}\bar{e}$ (in some contexts the form is $\bar{i}\text{-}s\acute{a}$). First, as discussed in section 3.2.2.2, it is used in a cleft construction, where the fronted copula complement is the focus of the sentence; see example 3.7, reproduced as 5.29. In the cleft constructions there are two clauses: the independent clause below includes the verb $\bar{i}\text{-}s\acute{a}$ 'it is' and the dependent clause the verb $\bar{a}\text{-}t\acute{i}$ 'she does'.

- 5.29 $\bar{u}\text{-}v\bar{i}$ $\bar{u}\text{-}w\bar{a}$ $\bar{i}\text{-}s\acute{a}$ $\bar{a}\text{-}t\acute{i}$ $\bar{u}\text{-}\eta\tau\acute{\upsilon}\eta$. . .
 CL1-child.of CL1-woman it-be 3HS-do CL3-excrement
 it was the woman's child who wet the bed. . .
 from "Folk Tale" line 8

Secondly, it is used at discourse boundaries, where it cues the listener to expect a change in tense or aspect—changes in mood seldom affect entire discourses. Several (but not all) of the speeches recorded for this study announce their endings by using the alternative form of 'be' and a fronted complement. For instance, "The Frog and the Fly" ends as in example 5.30

- 5.30 $\bar{i}\text{-}y\bar{i}$ $\bar{a}\text{-}y\bar{u}\bar{u}\bar{y}\bar{d}$ $\bar{a}\text{-}m\bar{u}\text{-}\bar{i}$ $\bar{a}\text{-}f\bar{e}\bar{e}$
 CL10-this CL7-folk.tale CL7-1SPoss-DEF CL7-be
 This is my folk tale.

In example 5.30, there is only one clause in the sentence, the clause that includes the verb \bar{a} - $f\bar{e}\bar{e}$ ‘it is’. Occasionally, the discourse boundary will be a construction with both an independent and a dependent clause, but the single-clause construction with \bar{a} - $f\bar{e}\bar{e}$ is not used except as a discourse boundary. In 5.30, evidence points to the copula complement being the first word in the sentence (the demonstrative pronoun \bar{i} - $y\bar{i}$) because the subject agreement prefix indicates that \bar{a} - $y\bar{u}\bar{u}\bar{y}\bar{c}$ \bar{a} - $m\bar{u}$ - \bar{i} is the subject. A more literal translation would be ‘My folk tale is these’ where “these” refers to the sentences or words that comprise the story.

And “The Coming of the White Man” ends with this sentence.

- 5.31 \bar{i} - $ny\bar{e}$ \bar{a} - $n\bar{a}s\bar{a}r\bar{a}n^y$ - \bar{i} $n\bar{a}$ $k\bar{u}$ - $n\bar{i}$ - $t\bar{a}$ - $w\bar{o}\bar{o}$ $k\bar{a}$
 INF-come CL1-white.person-DEF that 1PL-PFV-HAB-hear PREP
 $b\bar{a}$ - $n\bar{a}$ \bar{a} - $\bar{n}\bar{i}$ \bar{i} - $f\bar{e}\bar{e}$
 PL-with CL1-father it-be
 That’s how we heard of the white man’s coming from our fathers.
 [more literally] The coming of the white man that we heard from our fathers it is.
 from “The Coming of the White Man” line 105

The storyteller of the histories tries to make an end to his discourse in an earlier chapter with this line:

- 5.32 $t\bar{o}$, \bar{i} - $\bar{n}\bar{i}$ $n\bar{a}$ $b\bar{a}$ - $n\bar{i}$ - $t\bar{a}$ - $\bar{n}\bar{i}$ \bar{i} - $f\bar{e}\bar{e}$
 well, INF-do that 3HPL-PFV-HAB-do it-be
 Well, that’s how it was done.
 [more literally] Well, the doing that they did it is.
 from “Raids” line 90

The storyteller does not use \bar{i} - $f\bar{e}\bar{e}$ to try to end his discourse in his first two chapters. In “Ados Kago,” he merely indicates that he intends to change topics—in line 62

when he says, “And so, the group like Ados Kago passed;” however, in “Ude Aruku” (chapter II) he uses some of the other cues to signal a terminal boundary. He appeals to the authority of the fathers and repeats the TAM marking (5.33). Even though he only repeats the Perfective prefix *nì-* without the Habitual prefix *tá-*, the sentence is recognizable as an ending, especially since he specifically mentions the ending of the war in his next sentence (see “Ude Aruku” line 74).

5.33 *bā-nì-hīlè mīnìṅ̀̀ kà bá-ná ā-tī ū-nī ā-nìṅ̀̀*
 3HPL-PFV-return like.that PREP PL-with CL1-father CL1-person CL1-that

nī ín-tēfí
 that 1S-tell

It happened like that to people like our father, the person I’m talking about.
 from “Ude Aruku” line 66

It should also be noted that there is no tense or aspect change after the first chapter or after the second chapter. In the texts analyzed for this study, discourse-long tense and aspect do not generally change except at boundaries marked with *ī-fēè*. It is not known at this time whether this is a general rule that has wide application throughout the language, but it is an issue that deserves further inquiry.

5.3.1.2 Boundaries of Embedded Discourse

The identification of *ī-fēè* as a discourse boundary marker illuminates an earlier analysis (Wilson 1998) of text #10 in Appendix A. That discourse seems to switch back and forth from future time reference to past, back to future, and even to present, without any morphological or syntactic markings to differentiate the verbs in the various clauses. Because verb marking were not well understood at the time that analysis was completed,

the focus was on other features of transitivity (defined by Hopper and Thompson 1980) as it relates to textual foregrounding. Though I mentally noted that the English translation of certain verb forms seemed utterly inconsistent, I could not explain it and therefore made no comment. Observations from this study now allow me to expand the earlier analysis and explain how interpretations of tense, aspect, and mood are made in “Language Meeting”.

In Wilson 1998, “Language Meeting” is analyzed as a hortatory text with a long procedural text embedded in it, as well as some embedded texts of other types. Since the speech exhorts a group of people to a course of action, the discourse is basically future-oriented. Even verbs marked Perfective with the prefix *nì-* are interpreted as referring to future time, as in example 5.34.

- 5.34 àà-bā-ī bā-nì-hīlè bā-yī ì-blō ì-dīsīŋ^y-ī
 then-3HPLInd-DEF 3HPL-PFV-return 3HPL-know INF-go INF-teach-DEF
 nā bè-dīsīŋ^yī
 that 3HPL-teach
 Then they **will** go back and decide how to teach [it].
 from “Language Meeting” line 53

In elicitation, verbs marked Perfective are typically given in response to English sentences in the Simple Past tense; this researcher, for one, assumed that *nì-* was a Past tense prefix until “Language Meeting” was recorded and analyzed. But there is apparently some overriding factor that gives a future orientation to the entire discourse: both Unmarked and overtly marked verbs are interpreted as future in the bulk of this text. It would seem that, whatever the overt mark of future orientation is, future interpretation can spread throughout a discourse, just like Perfective aspect and Habitual aspect do. It is still a mystery what the overt mark may be, because no verb marking—neither prefix, suffix,

nor tone melody— has yet to be consistently associated with future time orientation (except the Imperative form). Until further study can be completed, that mystery will remain; however, there is sufficient evidence in this data to say with confidence that an entire discourse may be marked future.

* The hortatory purpose of the text is evident in just a few sentences; however, it should be noted that this speech is followed up with a passing of the hat (see line 82), and this entire monologue is a pep talk to motivate the listeners to give. The motivation comes in the form of explanations, narratives, and especially a long outline of the procedures that need to be completed for language development. The embedded procedural discourse outlines five major steps (Wilson 1998:9), listed below in Table 5.8.

Table 5.8

Major Procedural Steps in “Language Meeting”

1. And we will write what the English people call an alphabet.
(line 1)
2. Then we will write that big book which is called. . .[a dictionary].
(line 16)
3. And then we will write or translate books that are in English into Kuche.
(line 38)
4. . . .[and] we will do a little course for those who are Bache.
(line 51)
5. Then they will go back they will decide how to teach it.
(line 53)

After a bit of expounding on what it means to “decide how to teach it”, the speaker says (line 55), “So that’s [the reason].” This sentence uses the alternative ‘be’

construction, which serves as a boundary to the procedural text, just as it served as a boundary to the narratives in the examples above. The Kuche text is reproduced here as example 5.35.

- 5.35 í-yí ì-bāŋ-ì ī-ſĕē
 it-mean CL9-issue-DEF it-be
 So that's the reason.
 from "Language Meeting" line 55

A paragraph break is not indicated at this point, because the speaker continues for a few more lines, summarizing what "we" (the Bache people) will do and will not do, and why "we" want to do it. After that, she leaves procedural discourse behind completely, exhorts her listeners, "Let's not forget," and turns to a short narrative about what happened "last Sunday." This little narrative *begins* with ī-ſĕē; the sentence is transcribed below:

- 5.36 tò, wù ī-bāŋ-ì ī-ſĕē nū kú-nù-tēfī
 well, then CL10-issue-DEF it-be that 1PL-PFV-say
 Well, then, that is what we said. . .
 from "Language Meeting" line 59

This ī-ſĕē also forms a boundary, though here it seems more like a beginning to what follows than an end to what precedes it. The important observation is that the time reference changes at this point. Up to this point, most Unmarked verbs—and even verbs marked Perfective—are translated as English future tense verbs. From this ī-ſĕē on, reference is to past time (mostly Perfective marked verbs) or to the present (mostly Unmarked verbs). Though it may not be clear what the overt marking is at the beginning of the procedural discourse that lends the future orientation, it is clear that the end of the future time orientation coincides with the end of the procedural discourse. It is also clear

that the fronted copula construction marks boundaries of embedded discourse in this speech.

Furthermore, since it is now evident that \bar{i} - $\hat{e}\bar{e}$ is a marker of discourse boundary, then at least one clause needs to be reinterpreted in light of its discourse significance. Line 2 of “Language Meeting” is translated, “That’s why I’m begging those of you who were not there when we met. . .” and is interpreted as an unfinished remark. Such an interpretation takes the propositional content of the translation at face value, unaware of the distinction between common ‘be’ (as in table 5.7) and this form of ‘be’. Besides that, the word translated as ‘the reason’ \bar{i} - $b\bar{a}\eta$ - \bar{i} ¹¹ is not so easily translated into a specific English word or phrase. My earlier analysis interpreted the sentence as a request that was broken off; that is, it was assumed that the speaker intended to say, “I’m begging you [to take some action],” but since no action was specified, the thought seemed incomplete. Eventually, at the end of the monologue, the action is specified and a collection is taken. The analysis assumed that the speaker intended to make a short appeal in this sentence for generous contributions to the language development fund, but that she interrupted her appeal at length to bolster it with stories and explanations. In Kuche, the line reads:

5.37 \bar{i} - $b\bar{a}\eta$ - \bar{i} \bar{i} - $s\bar{e}\bar{e}$ ¹² $n\bar{i}$ $\acute{i}\eta$ - $k\acute{u}t$ \bar{a} - $g\bar{b}\bar{i}\bar{t}\bar{i}k$ - \bar{i} , $b\bar{a}$ - \bar{i}
 CL10-issue-DEF it-be that 1S-beg CL8-remainder-DEF, 3HPL-DEF
 $b\bar{a}\bar{a}$ - $s\bar{a}$ - $m\bar{a}$, $k\bar{u}$ - $bl\bar{o}$ \bar{a} - $m\bar{u}\eta$ $\eta\bar{o}$
 3HPL-NEG-with, 1PL-go CL8-there over
 That’s why I’m begging the rest of you who were not there where we met

¹¹ My informant explains that \bar{i} - $b\bar{a}\eta$ means ‘thing’, but not a tangible thing: a thing like a story, or a sentence, or (as here) a reason. I conclude that \bar{i} - $b\bar{a}\eta$ is a ‘thing’ that exists in the form of words or thoughts.

¹² [s] and [ʃ] are allophones of the same phoneme. Typically, it is pronounced [ʃ] before a front vowel, but, obviously, the palatalization is not 100% consistent.

The new analysis views this sentence, not as an unfinished exhortation, but as a boundary between a stretch of expository text and a short narrative. At this point, the narrative (lines 5-7) is embedded in exposition (from “If we don’t have an alphabet” in line 1 to “the work will not be difficult for us” in line 14), which is embedded in procedural text (lines 1-55), which is embedded in the exhortation. Only the first verb of the narrative is marked Perfective *ā-nì-ḡṣ* ‘he-PFV-wrote’, but all the verbs in the narrative are interpreted as past perfective. The end of the narrative is marked with a different phrase translated as ‘the reason’ (see example 5.37, below), and the time orientation of the speech again becomes future.

During the original analysis of “Language Meeting,” I was able to identify embedded discourse on the basis of semantics, but was unaware of the significance of the form *ī-fēē*. The current analysis, based on grammatical forms, reinforces the original analysis.

5.3.1.3 Other Discourse Boundary Markers

As mentioned above, not every discourse in this study ends with a fronted copula construction—it is just the most distinctive discourse device among those listed. One embedded narrative from text #10 “Language Meeting” ends with a phrase that may be semantically related to the fronted complement construction. As mentioned above (page 144), the phrase *ī-bāḡ-ī ī-fēē* is sometimes translated ‘that’s the reason;’ a similar phrase translated ‘the reason. . .is because’ ends the short embedded narrative in lines 5-7 of “Language Meeting.” The sentence reads:

- 5.38 à-dàlǐfǐ nū kú-tí mīnǐŋǐ í-ɲyè nì kì-dʒàsīŋʸǐ
 CL7-reason that 1PL-do like.that INF-come with CL5-problem-DEF
 kī ī-bāŋ-ì nū kū-sa-mā nà ālfābèt.
 PREP CL10-issue that 1PL-NEG-with with alphabet
 The reason that we are having problems is because we don't have an alphabet.

On the other hand, some of the folk tales end abruptly, with no boundary signals recorded. It may be that, in the early stages of data collection, the significance of certain cues was not recognized, so that even if they were recorded, they were not transcribed. Or it may be that the folk tales are so familiar to Bache people that they do not need any signal of the end. Only “The Frog and the Fly” ends with the fronted complement construction. Text #2 “Folk Tale” (Appendix A) ends with a phrase translated as “The End”(line 145); the Kuche word is *kū-ròŋgūs*. My informant commented on the term, saying that it was a traditional way to end a folk tale. Text #1 “Uyho” ends abruptly with the last narrative clause (line 38).

One very common way to end a text is with first person reference, usually combined with one or more of the other cues listed in table 5.6. Text #3 “Rabbit Tale” ends with a morality paragraph directed towards the first person plural: ‘us people’ in line 49. Besides first person reference, no other linguistic cues listed in Table 5.6 are used here, and several clauses in the paragraph refer to 3rd person; but the last sentence winds up once again directed towards first person.

The brief story “The Frog and the Fly,” text #4, ends with a first person reference within the fronted complement clause, reproduced here as example 5.39.

- 5.39 ɪ-yī à-yūùYò à-mò-ì ā-ʃēè.
 CL10-this CL7-folk.tale CL7-1SPoss-DEF CL7-be
 This is my folk tale.

“The Coming of the White Man,” text #8 in Appendix A ends not only with the fronted copula complement, but also with first person (plural) reference, a repetition of the Perfective aspect prefix *nì-*, and an appeal to the authority of the fathers (lines 103-105).

- 5.40 ỳ-pyē à-nàsáráŋ^y-ì nā kú-nī-tá-wóó kà
 INF-come CL1-white.person-DEF that 1PL-PFV-HAB-hear PREP
 bà-nā ā-tī ỳ-ʃēè
 PL-with CL1-father it-be
 That's how we heard of the white man's coming from our fathers.

As a matter of fact, all four of the history chapters (texts 5-8) are bounded by first person reference. To be sure, some of the chapters are bounded by conversation, which accounts for a lot of first person reference. For instance, at the end of “Ados Kago” and before the beginning of “Ude Aruku,” the storyteller and the listener have a brief conversation about Ude’s last name (see lines 84-100), ending with this sentence that contains a first person reference:

- 5.41 òò, kwī, ū-tà ū-sòmòŋ-ā-mī ŋā.
 yes, well, 2S-do 2S-remind-to-me even.
 mī ỳn-hīlī ỳn-ʃī kī-blō kā à-dí.
 1SInd 1S-return 1S-be PROG-go PREP CL1-NAME
 OK, well, you have reminded me. I was going to refer to Adi [that is, Ude Adi].

But it is really irrelevant to make a distinction here between intervening conversation and discourse boundaries. Monologues such as narratives or exhortations are typically embedded in conversation, unless they are written discourses (which these are

not). Just as \bar{i} - $\bar{f}\bar{e}\bar{e}$, discussed in section 5.3.1.1, indicates the limits of a narrative embedded in exposition or the limits of procedural text embedded in hortatory text, so the speaker's reference to himself indicates the limits of a narrative embedded in a conversation.

5.3.1.4 Interpreting Verb Forms within the Boundaries

Clauses of a conversation at the discourse boundaries tend to be marked similarly to any other conversation. Conversation that occurs *during* a story, interrupting it, is ambiguous: much of it is marked as if it is ordinary conversation, but some is more like the story itself. Listener interruptions that are like part of the story use Unmarked verbs that are interpreted with the same tense/aspect as the story, as in 5.42.

5.42 wā ā-tā bá-gānā kī-tō-ì yá
 why 3HS-say 3HPL-stiffen CL5-neck-DEF Q
 Why **did** he say they were stubborn?
 from "The Coming of the White Man" line 93

Other listener interruptions use marked verbs, even though the marking reflects the tense/aspect of the story, as in the second half of 5.43. Such usage is more like ordinary interactive conversation.

5.43 á-tí-yá. bā-nì-tá-tí-yá.
 3HS-do-Q. 3HPL-PFV-HAB-do-Q
 What did he do? What did they usually do?
 from "Ados Kago" line 49

Such conversational interruptions do not seem to disrupt the continuity of the discourse TAM marking; the Storyteller does not use any kind of boundary markers like he does when he plans the embedding of a monologue. For instance, after the long

conversation in “Ados Kago” lines 20-43, the Storyteller resumes as in example 5.44, without marking the discourse Perfective again; instead, he uses Unmarked verbs that are interpreted as past perfective.

5.44 fītà bā-nā à-dòs kàgòṅ^y-ī.
 like PL-with CL1-NAME NAME-DEF.

bā-nā à-dòs kàgòṅ bá-tíí . . . bá-tí
 PL-with CL1-NAME NAME 3HPL-do. . . 3HPL-do

ā-yō ā-má-ì kū-tāk kū-mā kū-gára.
 CL8-group CL8-3HPLPoss-DEF CL15-generation CL15-3HPLPoss CL15-pass

People like Ados Kago. People like Ados Kago **did...did** their group and then their generation passed.
 from “Ados Kago” lines 45-46

Conversation—both at the edges of narrative and during interruptions to the narrative—tends to have a greater variety and a greater frequency of clauses with overt TAM marking. However, not all the verbs within the narrative are Unmarked, and not all the verbs within the narrative are interpreted with precisely the same tense/aspect as the discourse-initial clauses. There are contexts in which the interpretation of verbs is unaffected by the discourse-initial tense/aspect; other contexts where verbs are overtly marked for some other tense, aspect, or mood which effects their interpretation; and some contexts where verbs are marked again for the tense/aspect that is marked at the narrative’s beginning.

5.3.1.5 Dialogue

Direct quotation is the most important context where verbs are interpreted without any reference to the story’s tense/aspect. Even though the coding system does not

differentiate between direct and indirect quotation, this is an important distinction where TAM interpretation is concerned. Indirect quotation is nearly always apparent in the language data because the reference point of the pronouns does not shift; it is apparent in the English translation because the reference point of the TAM interpretation does not shift. The verbs of direct quotations are translated just like verbs in conversation. The fact that the reference point, the “now” of the direct quotation differs from the “now” of the narrator is not marked on Kuche verbs; the researcher must attend to both the pronoun reference and the verbs of the English translation.

In conversation, the Unmarked form frequently refers to the present time, as in 5.45 below.

5.45 kī-sāk kī-mù-ì kí-yí à-rēvrènd à-xxxxx à-xxx
 CL5-name CL5-1SPoss-DEF CL5-mean CL1-reverend CL1-NAME CL1-NAME

ín-tìsìk ì-tòḡ-ì. ìn-ḡì kì-kò nānāì. kā-ḡkāì kā-ḡì kā
 1S-finish CL10-work-DEF. 1S-be CL5-house now. CL12-today CL12-be day. . .

tò, mí-ì ìn-ḡì ū-nī ànū ū-yò. ìn-ḡì bū ū-yò nānāì.
 well, 1SInd-DEF 1S-be CL1-person of CL3-PLACE. 1S-be PREP CL3-PLACE now

nī ì-sò ì-yí.
 that it-dwell it-mean.

My name is called Reverend [first name] [last name]. I have retired; I'm at home now. Today is. . . Well, I'm a man from Uyho: I'm from Uyho right now. from “Binchi” lines 1-3

Within the boundaries of the narratives, the Unmarked form usually refers to events in the past, as in 5.46.

5.46 à-à-násará á-tò à-ā-tí . . .
 then-CL1-white.person 3HS-see then-3HS-say

When the white man saw this, he asked, . . .
 from "The Coming of the White Man" line 69

Two other notable differences between 5.45 and 5.46 are that (1) the verbs in 5.45 are stative and those in 5.46 are dynamic, and (2) the clauses in 5.46 are introduced by the conjunction à- 'then'. It is quite likely that these two factors have significant impact on the interpretation of the Unmarked forms in 5.45 and 5.46. However, these two factors are not quantified in the summary totals (section 5.1) nor included in the line graphs (section 5.2), so the details of their use in discourse are not yet completely understood.

Unmarked verbs in dialogue (5.47) are likely to be translated present tense, just as they would be in conversation.

5.47 à-á-tíy-á-bā nāā ú-wóŋ-í yá?
 then-3HS-say-to-3HPL that 2H-be.wrong-PL Q
 Then he said to them, "What's wrong with you people?"
 from "Uyho" line 2

It is not only the Unmarked verb that is interpreted differently inside versus outside of dialogue. Consider, for example, verbs marked for Progressive aspect: in story clauses outside of dialogue, the translation of a Progressive verb shows the affects of the discourse tense/aspect.

5.48 bā-ŋī kī-yī ì-yáí à-bá-ì bā-bī-héēŋ
 3HPL-be PROG-eat CL9-dinner then-3HPLInd-DEF 3HPL-should-appear

bā-kúŋ
 CL2-Irigwe

They [the Iregwe] **would be eating** their dinner, and then they [the Bache] would show up in Iregwe land.
from “Raids” lines 13-14

Instead of translating this verb as a Present Progressive, my informant translates it into English as a Past Habitual Progressive. It is not that there is no such construction available in Kuche; in 5.49, the verb ‘read’ *bāī* is marked Perfective (though it is not translated as a Past tense here), and Habitual, and Progressive.

5.49 *kī-mfá kī-yī nā títā nū ú-tá-nì-ḡá-ḡī kī-bāī. . .*
CL5-word CL5-which that like that 2S-HAB-PFV-even-be PROG-read
A word, like when you are reading. . .
from “Language Meeting” line 24

But in story dialogue (and in conversation as well), a verb marked only Progressive is typically translated with an English Present Progressive verb, as in 5.50.

5.50 . . . *ē-dī bā-zàṇàṇ-ì ā-fī-bā nā, tò bā-nī bā-yùṅó*
...3HS-tell CL2-his.friend-DEF 3HS-say-to.them that, well CL2-person CL2-that

bā-ḡī kī-ḡyē kā-ḡkāī, ànū kū-ḡḡlīṅ-ì kū-ḡī
3HPL-be PROG-come CL12-today, and.then CL15-road-DEF CL15-be

nà bà-ḡī kī-yù-ēṅē àà-ū-yí kī-zíṅ
that 3HPL-be PROG-follow-IO then-2PL-know PROG-walk

. . .and he would tell his friends, saying, “Those people [the enemy] **are coming** today, and this is the road they **are following**, so be careful how you walk around.”
from “Ude Aruku” lines 18-19

5.3.1.6 Layers of Semantic Value

Both “Ude Aruku” and “Raids” begin with verbs marked Perfective and Habitual, giving those narratives a past habitual orientation—see examples 5.26 and 5.27 on pages

154-155. The Progressive construction in 5.50 adds one more layer of TAM. The past time orientation and the habitual aspect remain in effect from the discourse-initial marking, and the progressive interpretation is added on top of those. Verbs marked Progressive are in this respect similar to Unmarked verbs, in that their interpretation is effected by the discourse-initial tense/aspect marking. The difference is that the Unmarked verbs add zero to the discourse-level TAM interpretation while the Progressive verbs add extra semantic value. At the same time it adds a layer of meaning, a Progressive construction also compromises (but does not completely neutralize) the perfective aspect, just as Habitual marking does. But when it comes to dialogue, the discourse-level TAM does not penetrate (as explained in section 5.3.1.5); in dialogue the Progressive verbs are interpreted just like they are in ordinary, interactive conversation.

The added layer of semantic value is also apparent in the way infinitives are interpreted. In conversation and dialogue, infinitives generally refer to a future situation, one that cannot be asserted with confidence as real: this is because it is often used as the complement of a verb of intention ('want' for instance) or to indicate purpose. Example 5.51, below, is not from conversation, but it is from a context that is not marked past perfective.

- 5.51 í-yí kũ-wóó ì-tʃɔ̃ kũ-tʃɛŋ-ì í-sā à-kũ-sò.
 it-mean 1PL-want **INF-write** CL15-Kuche it-be then-CL15-sit.
 So, we want **to write** Kuche so that it will live.
 from "Language Meeting" lines 56-57

Of course, the English infinitive is used the same way: there is no morphology in the infinitive that uniquely marks it future, but English and Kuche speakers both know that

“we want to write” means that the writing is still in the future. Within a discourse that is marked past perfective, the infinitive adds that layer of future reference over the top of past, and it is interpreted as future of past, as in 5.52.

5.52 à-ā-lóŋ bà-kùŋ-ì ā-nyī-á à-á-tíy-á nā
 then-3HS-cook CL6-baku-DEF 3HS-come.with-it then-3HS-say-to.her that

á-wō ī-yí kī-náŋ, . . .
 3HS-want INF-eat CL5-meat.

Then she cooked the baku and brought it, and he said he wanted to eat meat, . . .
 from “Uyho” lines 16-17

The common form of the copula presents situations that are exceptions to the TAM-spreading observations described so far. For the most part, *fī* ‘be’ is interpreted as referring to past time only when it is marked with the Perfective prefix *nì-*. It seems the discourse-initial tense/aspect does not always apply to all instances of ‘be’ in the discourse; it is often individually marked. For example, in 5.53 the verb is marked Perfective and is interpreted as past, while in 5.54 it is not marked and it is interpreted as timeless (gnomic fact); it should also be noted that 5.54 is a response to a listener interruption, so there may be other factors that influence the speaker’s choice of form there.

5.53 bā-nā ā-ntŋlī bā-nì-fī bà-tàāt
 CL2-of CL8-road CL2-PFV-be CL2-three
 There were three routes.
 from “Ude Aruku” line 30

5.54 ī-báŋ kù-tŋēē ī-fī ì-kpī kpī nā
 CL10-matter CL15-Kuche CL10-be CL9-thing RED X
 Our tradition is very difficult to understand.
 from “The Coming of the White Man” line 96

This generalization applies only to the common form of ‘be’ and not to the fronted-complement form; that form is never marked for any tense or aspect or mood. And it does not apply to every instance of the common form of ‘be’, either, as in 5.55.

- 5.55 àà-ā-yí à-ŋkpúsók-ì ā-ŋī à-kpàāgó,.. .
 then-CL8-which CL7-frog-DEF CL7-be CL7-very.big
 The frog’s [bundle of grass] **was** very big.
 from “The Frog & the Fly” lines 3-4

It is not clear what all the factors are that determine when *ŋī* should be marked with *nì-* and when it should not.

On the other hand, *nì-* is not redundant when it marks an event verb in the unique narratives—those that have a past perfective orientation throughout: it adds extra semantic value. 5.56 suggests that in a narrative that is already marked Perfective at the beginning, adding the Perfective prefix to a verb later in the narrative—in this example, it is the verb ‘tell’ *dī*—can make it equivalent to an English Pluperfect.

- 5.56 .. .íntámā ū-zànà b.ì-láí. . . á-nyé nì bájyī
 .. .not.knowing CL1-his.friend PREP-Berom.land. . .3HS-come with nighttime

á-nī-dī à-zāgūn-ì
 3HS-tell CL1-NAME

.. .not knowing that Azagun’s friend from BeromLand had come in the night and **had told** him.
 from “The Coming of the White Man” lines 13-15

It would seem that adding another overtly marked Perfective verb adds another layer of “pastness” to an already past orientation. However, as mentioned above, verbs marked Perfective may be used instead to signal the beginning or the end of a narrative

(see section 5.3.1), and the copula often needs this marking to be interpreted as past. These observations indicate that not every verb within the narrative that is marked with *n̄-* can be interpreted as Pluperfect. It could be that speakers are innovating a way to refer to past anterior; this semantic category is not consistently marked with the same grammatical form.

Other factors certainly seem to influence a speaker's choice of verb form, but not all of these factors are obvious yet. Verbs that are marked Perfective are used in other situations too—situations where they are not interpreted as if they were Pluperfect, where they are not the verb 'be', and where they do not begin or end a narrative. These are just three of the contexts where the pattern is clear enough to formulate a generalization.

Furthermore, there are other constructions besides the Perfective that may be translated with an English Pluperfect, even within a past perfective narrative, as in 5.57 and 5.58. In 5.57 it is apparently the falling tone on *áā-bló* that gives the translation the Pluperfect interpretation, while in 5.58 it is the prefix *ḡn̄^yĩ-*.

5.57 *kī* : *ĩ-bán̄^yĩ* *áā-bló* *bì* *ĩ-ŋkūn* *à-bā-kūn-ĩ*
 PREP CL10-issue-DEF 3HS-go PREP CL9-Irigwe.land then-CL2-Irigwe.people-DEF

bá-bí-tà *bā-ŋĩ* *ĩ-ŋkū* *è-ē-wūsù*. . .
 3HPL-should-try 3HPL-do CL9-war then-3HS-burn.up. . .

Because he had gone to IrigweLand and when the Irigwe people tried to fight him, he burnt up. . .

from "The Coming of the White Man" line 59

5.58 *ū-zàná* *b-ĩ-láí* *ā-ḡn̄^yĩ-dū-ú-ŋā*.
 CL1-his.friend PREP-CL9-Berom.land 3HS-already-tell-to.him-even
 His Berom friend had already told him
 from "The Coming of the White Man" lines 49-50

5.3.2 Smaller Domains of TAM

5.3.2.1 Habitual

Other TAM markings within a narrative follow a similar pattern: outside of dialogue, overt verb marking adds an extra layer of semantic value to the discourse tense/aspect. In some contexts, the extra layer of semantic value may even persist in the discourse to some extent, but seldom beyond the end of the sentence. Even Habitual aspect can be observed spreading on a smaller scale, not just at the discourse level; for instance, see 5.58 below. “The Coming of the White Man” begins with several clauses marked Perfective (see example 5.25) and the Perfective marking is the cue that sets the whole narrative in the past. However, in the excerpt below, both verbs are interpreted as past habitual, even though only the first one is overtly marked Habitual.

5.59 à-ā-tā-fārā ī-mílí àná ā-mōŋ kù-kpá-ì . . .
 then-3HS-HAB-take CL10-dust and.then 3HS-put CL15-skin-DEF
 . . .and he would scoop up dirt and would put it on his body. . .
 from “The Coming of the White Man,” lines 45-46

The Habitual aspect is added to the Perfective aspect of the entire discourse, but it does not continue beyond this sentence. Instead, after a lengthy flashback (lines 49-67), the storyteller resumes narrating unique, sequential events.

5.3.2.2 Imperative Mood

Examples of small-scale spreading have also been observed in sentences marked Conditional and in sentences marked Imperative. This is illustrated in the two examples below. Example 5.60 is likely a serial verb construction, but in 5.61, the two verbs are in two different clauses. In each of these clauses, Imperative mood is marked on the first

verb by eliminating the subject agreement prefix; the second verb is marked for subject agreement, making it the same Unmarked form that is used in other contexts.

- 5.60 **sók** **bó-kók** **ū-tára** **kātánfīsē**
 IMP.take PREP-hand 2S-throw riverbank
 Take her by the hand, throw her out on the riverbank.
 from "Folk Tale" lines 47-48

- 5.61 **nī-sí** **mī á-yéréréŋ-ì** **ānó** **ú-tī** **mī kí-góŋ-ī** **yá** **kì-yīn**
 IMP.give-RED 1S CL8-small-DEF and.then 2S-do 1S CL5-big-DEF only CL5-one
 Give me [one by one] small ones, and give me just one big one.
 from "Folk Tale" line 56

These examples demonstrate the fact that the use of the Unmarked verb is not just an instance of economy of effort. For most tenses, aspects, and moods of Kuche, the substitution of the Unmarked verb for an overtly marked form does save the speaker one syllable of time and effort. However, in substituting the Unmarked form for a second Imperative verb, the speaker actually adds an extra syllable. I would argue that speakers choose the Unmarked form in sentences like 5.60 and 5.61 because its semantic value—which is zero—makes it a good choice. To be sure, there are other choices. Overtly marked Imperative verbs may be followed by verbs with the Subjunctive prefix *bī-*, which is often translated 'should' but is sometimes not translated at all.

- 5.62 **tjē** **ù-bī-wāsāŋ-á-mī**
 IMP.go 2S-should-wash-for 1S
 Go, wash it for me.
 from "Folk Tale" line 3

An Imperative interpretation may even persist from the marked verb onto a verb marked Perfective, as in 5.63 and 5.64. As a reminder, the form *imbī* 'come' is used only

as an Imperative form—it never occurs with any subject agreement prefix—and it is apparently unanalyzable.

5.63 ʔmbī ù-nī-sák-ī

come 2S-PFV-put-1S

'Come lift it to me [i.e., onto my head]

from "The Frog and the Fly" line 5

5.64 ŋū-ī bā-ʔmbī ù-nī-sák mīi

2SInd-DEF also-come 2S-PFV-put [to] me

You help me also lift it to me [i.e. onto my head].

from "The Frog and the Fly" line 6

These two examples are serial constructions and they are the only instances in my data in which an Imperative verb is paired with a verb marked Perfective. It is not clear which elements in this construction are optional and which might be required by the grammar.

5.3.2.3 Conditional Sentences

Conditional mood also tends to persist beyond the verb that is actually marked Conditional. In a simple case, where there is only one clause in the protases and one in the apodosis, the protasis is typically marked with the Conditional verb *tù-*, while the apodosis begins with the conjunction *à-* 'then' and its verb is usually Unmarked, as in 5.65.

5.65 kū-tù kū-yík kà-tʃū-ì à-mī ʔn-dī-é-yē
 1PL-if 1PL-arrive CL12-place-DEF then-1SInd 1S-tell-to-2PL
 When we get there I will tell you.
 from "The Coming of the White Man" line 82

If the protasis is more than one clause, sometimes both clauses are marked Conditional, but just as often, only the first clause is marked. In 5.66, both clauses are marked, but in 5.67, the second clause of the protasis consists of simply an Unmarked verb.

5.66 *bā-tà bā-tō ū-wā, bā-tà bā-tō ' ū-vīn nī bā-tú*
 3HPL-if 3HPL-see CL1-woman, 3HPL-if 3HPL-see CL1-child that 3HPL-send

ū-vīn nī ì-kpòū ì-blō ì-nīk-ī bù ù-bāk ū-wù,
 CL1-child with CL9-food INF-go INF-give-* PREP CL3-apartment CL3-this,

à-bá-tará.

then-3HPL-shoot

If they saw a woman, [or] if they saw a child sent with food from one apartment [to another], then they would shoot [him/her].

from "Raids" lines 15-16

5.67 *ū-tū ū-hīk á-pyé, à-ŋū tī lùt ànú ú-tīn*
 2S-if 2S-find 3HS-come, then-2SInd do humbly and.then 2S-leave.off

ū-tù ù-tī ì-ŋkū bā wú

2S-attempt 2S-do CL9-war PREP 3HSInd

When he comes, be humble and don't try to fight him.

from "The Coming of the White Man" line 56

As with verbs following an Imperative, a verb that follows a Conditional may be marked Subjunctive *bí-*.

5.68 *ī-tī ì-yī bā-nī bā-bí-ŋī kī-nyē, . . .*
 it-if it-mean CL2-person 3HPL-should-be PROG-come
 If it happens that people [enemies] are coming, . . .
 from "Ude Aruku" line 16

In the coding system used for this study, even the clauses of the apodosis are not coded 'realis'; instead, they are coded 'likely situations'. This distinction may not be as

pertinent for Conditional sentence that are set in the past—where they mean something like ‘whenever this, then that’—as it is for Conditionals set in the present or future. The coding choice is reasonable, though; my informant consistently translates *tù* ‘if’ (rather than, say, ‘whenever’). Translated thus, the sentence does not *assert* the reality of the proposition, even though the speaker may intend it to be real and the listener interpret it so.

Conditional sentences apparently comprise two embedded domains: the protasis is a domain in which Conditional mood spreads and the apodosis is a domain in which the mood labeled ‘likely situation’ spreads.

Though not every TAM form from tables 3.6-3.9 has been individually investigated, it is assumed that all the overtly marked forms within the Kuche TAM system add semantic value to the discourse-long tense/aspect. Some of them add elements that have little to do semantically with tense or aspect or mood: some of the prefixes seem to mean little more than ‘also’ or ‘already’ or ‘even’ or ‘again’. Evidence for sentence-level TAM spreading domains is only observed for the Habitual aspect and the Imperative mood and Conditional mood.

5.3.2.4 The Conjunction à-

The conjunction *à-* is an important linguistic device for dividing a conditional sentence into two TAM domains. Kuche has only a few conjunctions. Occasionally, words of other classes do double duty as clause introducers—such as the verb ‘mean’ *íyí* or the adverb ‘just’ *wò*. A third of the clauses in the tabulated texts are introduced by *à-* ‘then’ or *àná* ‘and then’ or *nā* ‘that’, and 42% of them have no clause introducer at all. The conjunction *à-* ‘then’ is by far the most common coordinating conjunction, being used

in nearly 19% of the tabulated clauses; *nā* ‘that’ is a complementizer and introduces subordinate clauses or direct quotations, but not independent clauses; *ànā* ‘and then’ is another coordinating conjunction and it introduces only 6% of the tabulated clauses. Though *à-* and *ànā* seem to be related semantically and morphologically, they have different discourse functions. A complete analysis of their discourse functions is not attempted here; it is a topic that awaits further research. The general semantic distinction is discussed here, along with one specific discourse function of the conjunction *à-*: its use in a conditional sentence.

The conjunction *ànā* may actually be nearer ‘and’ semantically, and less like ‘then’. It is the conjunction of choice when the conjoined clauses are not sequenced, as in 5.69.

5.69 à-ā-ḥī ḥ-rùū àn’ ā-ḥī nā bā-ḥī kī-yū
 then-3HS-do CL9-scream and.then 3HS-say that 3HPL-be PROG-follow
 kū-ḥīlī kū-māī
 CL15-road CL15-this

He would scream **and** say they are following this road.
 from “Ude Aruku” line 59

In 5.69, there is no sequence of events because the clauses are just two ways of describing one event. Similarly, *ànā* is also used to join two simultaneous actions or an action and its purpose. Furthermore, when clauses stand in contrast to each other, speakers choose *ànā* over *à-*; in those contexts, it is often translated ‘but’, as in 5.70.

5.70 yī ḥ-ḥkūḥ-ḥī ḥ-dòḥ ḥ-ḥī ḥ-sù ànā mīnìḥ-ḥī
 CL9.it CL9-war-DEF CL9-start INF-do CL10-end and.then like.that

bē-nǐ-té-dī bē-dī yèl-yèl ì-bló ì-hìk bā-zàná
 3HPL-PFV-HAB-tell 3HPL-tell secretly-RED INF-go INF-find CL2-his.friend
 The war was coming to an end, **but** they would still invite their friends to go with
 them secretly.
 from “Ude Aruku” lines 80-81

Generally, speakers use à- when clauses report events in sequence, as in 5.71

(repeated from 5.57 above):

5.71 kī ī-báŋ^y-ì áā-bló bì ì-ŋkūn à-bā-kūn-ì
 PREP CL10-issue-DEF 3HS-go PREP CL9-Irigwe.land then-CL2-Irigwe.people-DEF
 bá-bí-tà bā-ŋī ì-ŋkū è-ē-wūsù. . .
 3HPL-should-try 3HPL-do CL9-war then-3HS-burn.up. . .

Because he had gone to IrigweLand and when the Irigwe people tried to fight
 him, he burnt up. . .
 from “The Coming of the White Man” line 59

There are plenty of exceptions to this rule of thumb, so the semantic distinction
 between à- and ànā is not always so clear-cut; but 5.69-5.71 illustrate the prototypical
 semantic core of the two conjunctions. Its use in marking sequence makes à- the ideal
 choice for joining the protasis of a conditional sentence with the apodosis. It is only this
 use of à- that is incorporated into the model of TAM spreading.

Out of 65 “if-then” sentences in the data, in 59 of them à- is the conjunction
 translated ‘then’. This is the case even when the conditional clause is very long and
 complex, as in 5.72. (All clause introducers are in bold-face type in the Kuche data, but
 only ‘then’ of the “if-then” sequence is bold in the English translation.)

5.72 ū-tù ù-hī ā-ŋī ā-bī-tū ŋù **nā** ù-ŋī kī-blō
 2S-if 2S-find CL1-father 3HS-should-say 2SInd that 2S-be PROG-go

k.ì.kòŋ-ā wù ìn-nī-sī ŋù ā-ntfī ā-ŋfē
 PREP-CL9-house-* then 1S-give-RED 2SInd CL8-egg CL8-which.kind,

à-ŋú dū.ū ū-tá nā nī-sí mī ā-yéréréŋ-ī gba
 then-2SInd IMP.tell-3HS 2S-say that IMP.give-RED 1SInd CL8-small-DEF only

ànō tí mī kī-góŋ-ī yá kì-yīn.
 and.then IMP.put 1SInd CL5-big-DEF only CL5-one

If it happens that father says, “You are going home, so which kind of eggs shall I give you?” **then** you should say, “Give me only little ones, and then give me just one big one.”

from “Folk Tale” lines 51-52

There is one example in the data where à- is used before the end of the protasis; in this instance (5.73) it joins two coordinate clauses in a parenthetical remark.

5.73 ì-ŋì ì-yī bā-nī bā-bí-ŋì kì-ŋyē
 it-if it-mean CL2-person CL2-should-be PROG-come

(bā-nō bā-tá-sōŋ à-bā-nō bā-sōŋ),
 (CL2-some 3HPL-HAB-dwell then-CL2-some 3HPL-dwell),

à-à-bíŋjé ā-nó āā-tō kù-ŋfīŋ-ì nā bā-ŋì kī-yūū
 then-CL7-hero CL7-some 3HS-see CL15-road-DEF that 3HPL-be PROG-follow

If it happened that people [enemies] were coming (because some people live [here] and others live [there]), then one hero would see which route they were following.

from “Ude Aruku” lines 16-17

Other exceptional examples are: three conditional sentences which seem to have no conjunction between the protasis and the apodosis; one sentence in which wù is used to

conjoin them; and two which use *íyí*¹³. The examples using alternative conjunctions are illustrated in 5.74-5.76.

- 5.74 tò, à-kū-tù kū-tʃó ā-nìṅì mìnìṅì, wù ba-gōmīnāṅì bā-tù
 well, then-1PL-if 1PL-write CL7-that like.that, then CL2-government 3HPL-say
 kū-ḍisí. . .
 1PL-teach. . .

Well, when we write that book like that, then the government says that we should teach. . .

from "Language Meeting" line 36

- 5.75 kū-tʃé kū-tù kū-kú í-yí ì-bí ì-mōt-ī í-kú.
 CL15-Kuche CL15-if CL15-die it-mean CL9-race CL9-1PLPoss-DEF CL9-die.
 If Kuche dies, our whole tribe will die.
 from "Language Meeting" line 47

- 5.76 ū-tù ū-hú b-ǎ-kún-ì í-yí ū-gàt-ī
 2S-if 2S-climb PREP-CL9-tree-DEF it-mean 2S-surpass-1S
 . . .if you climb a tree, does that mean you are better than me?
 from "Rabbit Tale" lines 15-16

All the other 59 conditional sentences are conjoined with *à-*.

5.3.3 Summary

Though the tense, aspect, and mood of Kuche verbs are formally marked only infrequently, native speakers have no trouble decoding the appropriate TAM information: they retrieve it from the TAM domain(s) in which it occurs. All the TAM-spreading domains are ultimately embedded in interactive conversation, the unmarked context of human language (according to Fleischmann 1991:77); but domains can even be embedded in other embedded domains. Domains of TAM-spreading have been described for Perfective aspect, Habitual aspect, Imperative mood, and Conditional mood. Direct

¹³ Literally *íyí* means 'it means', but it is sometimes translated 'so' when it is used to introduce a clause

quotation is a different kind of embedded domain—perhaps it should be called an impervious domain, since the TAM of the discourse in which it is embedded does not penetrate it.

The generalizations in this section (5.3) do not hold 100% of the time. No doubt that is because there are dozens or even hundreds of other factors that influence a speaker's choice of verb form—both linguistic factors (the linguistic cues discussed above) and social factors. Native speakers must recognize most—if not all—of these factors in order to correctly interpret the speech that they hear. I have identified only a few key factors. These factors—the linguistic cues discussed in this section—are enough, though, to develop broad principles (in chapters 6 and 7) for the interpretation of Kuche verb forms in discourse.

CHAPTER 6

DISCOURSE MODELS AND TRANSPARENT VERB FORMS

The first part of the research question posed in chapter 1 asks about constructing a model that explains how Kuche verb forms are used in narrative. However, the verb form that most needs explaining is the Unmarked verb, a form marked only for subject agreement. It is nearly impossible to elicit such a form, but the quantitative results (section 5.x) confirm that the Unmarked verb in Kuche is by far the most frequently used form in naturally-occurring text, and that, moreover, it is the most variable in interpretation. The Unmarked verb cannot be described or interpreted without understanding discourse structure in Kuche; thus, question A (about a discourse model) requires an answer before question B (about the Unmarked verb) can be addressed. The basic underlying principle of TAM in Kuche discourse is that morphological or syntactic TAM marking need not be repeated again and again; most verbs in Kuche discourse are under-marked for TAM and the Unmarked verb just happens to be the most under-marked of all. In phonology, a similar principle is called *underspecification*.

This chapter explains the mechanics of TAM underspecification using two kinds of models: metaphorical models and graphic/notational models. Chapter 7 spells out a formal model that is specific to Kuche. However, there are elements in the metaphorical models and graphic models that are useful in understanding TAM in discourse cross-linguistically.

6.1 Metaphorical Models

This volume has used several different metaphors to characterize the indeterminate nature of the Kuche Unmarked verb, and the structure of Kuche discourse as it involves the entire verb system. A concrete metaphor is a way for the human mind to make sense of an abstract concept or process. Lakoff and Johnson say that, "Metaphor is pervasive in everyday life. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" (1980:3). The list below provides a summary and evaluation of some metaphors that have been used.

1. Tofu: Tofu is bland, but absorbs flavor from the food it comes into contact with. Similarly, the Unmarked verb is bland, but absorbs tense, aspect, and mood from verbs in the context. This metaphor ignores the interaction of morphologically marked verbs and emphasizes only the effect that marked verbs have on the Unmarked verb.
2. Laundry colors: The Unmarked verb is like the white items in the laundry, taking up the dye that runs from the more brightly colored items. This metaphor recognizes the processes involving marked verbs and also recognizes the complete "lack of color" of the Unmarked verb.
3. Embedded domains: A concrete example of embedded domains might be a city—which has rules that apply strictly within its borders—under the control of a county—with rules of its own—under the control of a state, under control of a nation. The rules of each smaller domain typically do not obliterate the rules of

the larger domain, but often modify the larger rules to make them more specific to the smaller domain.

4. **Transparency:** Transparency is another metaphor that characterizes the entire TAM system of Kuche. Discourse-level TAM “shows through” many clauses of the narrative, both the marked and unmarked clauses, but it “shows through” the Unmarked verb completely unmodified. Not every clause in a narrative is transparent—most notably, direct quotation is opaque—but transparency is a widespread feature in Kuche narrative.

All four of these metaphors capture the idea that Kuche discourse gives TAM information on more than one layer.

The first 2 metaphors suggest that some physical feature spreads from one clause to others in the discourse. These are metaphors that can also be applied to the phonological process of feature spreading, as outlined in autosegmental phonology (Goldsmith 1990). In autosegmental phonology, a physical feature (say, relative fundamental frequency, i.e. tone) that is lexically specified for one syllable is manifested not only on that syllable but also on certain other syllables in its vicinity. In Kuche discourse, the process of TAM spreading works somewhat differently: a physical feature (the morphological or syntactic marking) is manifested only on one clause, but is semantically significant for several other clauses in its vicinity.

The concept of embedded domains captures the idea that some TAM features apply to relatively short sections of text, while other features apply to long stretches of text. The long stretches of TAM-marked text often precede a short section and then

resume again after the shorter section, as if the short section is embedded within the long section. The embedded domain metaphor alone does not capture all the facts of TAM in Kuche discourse; it needs to be integrated with a transparency metaphor in order to accurately represent all the data. That is, the semantic TAM features of the long stretch of text are not necessarily suspended during an embedded section; rather, the TAM features of the smaller embedded section often combine with the TAM features of the larger domain.

A transparency metaphor suggests that information in one domain is perceptible in an embedded domain because the smaller, embedded domain is transparent. A transparency metaphor is incompatible with a spreading metaphor because transparency implies that spreading is illusory. While the spreading metaphors (colors running and flavors blending) suggest that physical features become evident on nearby elements because the features have spread, transparency suggests that the physical features remain static but are visible through intervening elements. A metaphor that incorporates both transparency and embedded domains is actually much better suited to the facts of Kuche TAM in discourse; however, a notational system that represents transparency is not as simple to devise as a notational system that represents spreading.

6.2 Graphic/Notational Models

A notational system is a graphic model of an abstract system: typically a system of abstract concepts in some field of science. A good notational system is simple enough to be learned quickly but complex and flexible enough to represent all the data. Ideally, the notational system for representing a system of abstract concepts is based on the

concrete metaphor that best suits the data. This ideal is only possible, though, when the concrete metaphor is amenable to graphic illustration: two-dimensional white paper only lends itself to a limited array of concrete metaphors.

Transparent layers of information are not as easy to represent on paper as the concept of feature-spreading. As a matter of fact, linguistics already has a notational system to represent feature-spreading: It is the system of feature geometry trees used in autosegmental phonology, a system that entails tiers of features along with lines of association. The system of “non-marking” that is widespread in Kuche discourse suggests the concept of underspecification, a principle that has been applied successfully to phonology, particularly in an autosegmental framework. Autosegmental phonology explains how features such as tone, nasality, or (vowel) roundness may spread from one segment to another, whether the segments are consecutive or not. For the purposes of constructing this notational model, we will consider that the clause is the element that is underspecified and that it can be underspecified for tense/aspect/mood.

6.2.1 Towards a Notational System for TAM-Spreading

With very little modification, the notational system that represents autosegmental phonology can be adapted to TAM in Kuche discourse. The clauses of Kuche might be represented as in figure 6.2, below.

What is represented in figure 6.2 is that a Kuche clause may have a verb, and that the verb may be grammatically marked for tense and/or aspect and/or mood. The grammatically-marked TAM may be any of the markings mentioned in tables 3.6-3.9. The sentence TAM node represents the fact that the grammatical marking of a verb earlier in

the sentence may affect the interpretation of this clause. In other words, TAM may spread from left to right, as in figure 6.2.

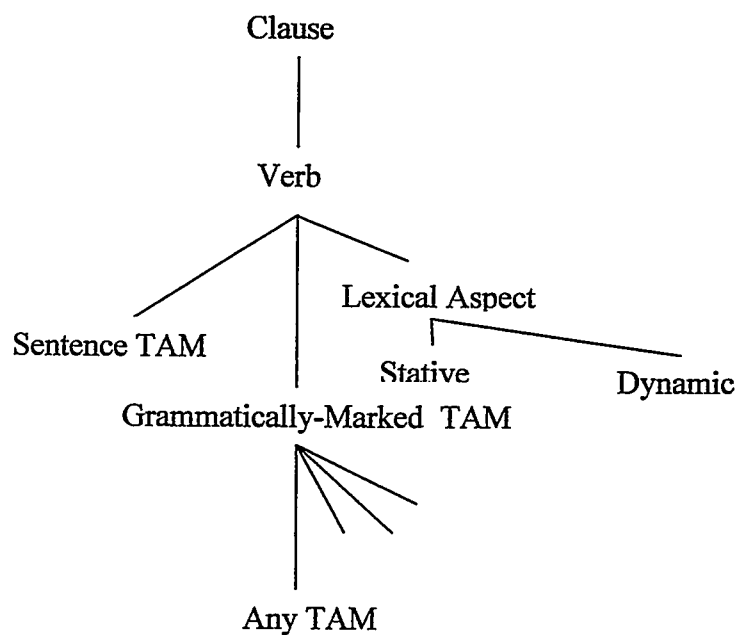


Figure 6.1 Hierarchical Structure of a Kuche Clause

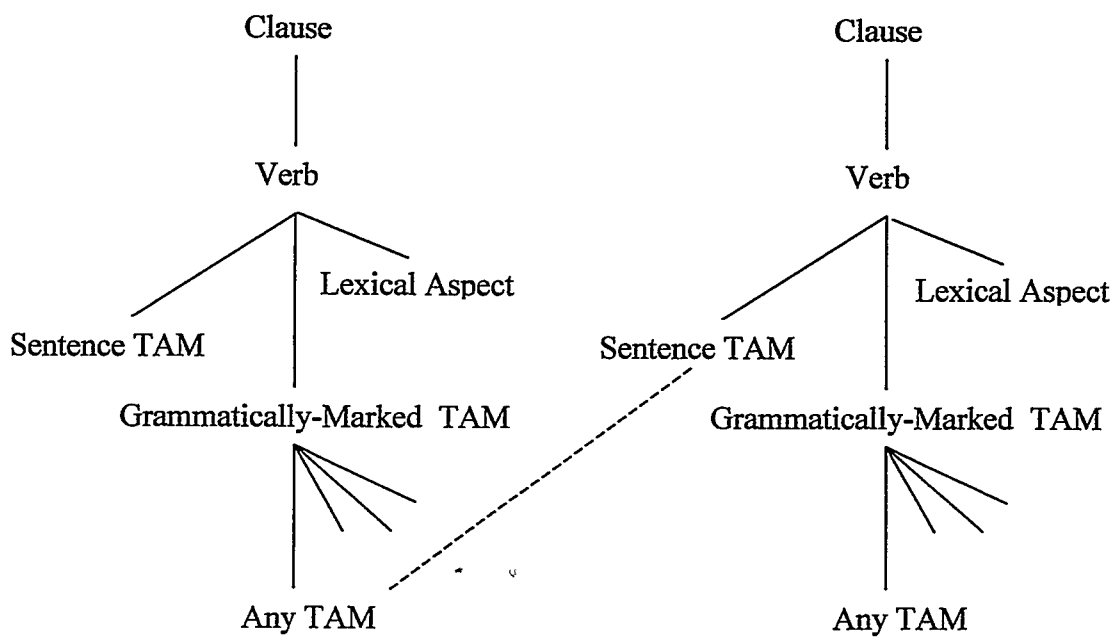


Figure 6.2 Spreading of TAM within a sentence

All clauses of Kuche have at least this much structure, and some clauses have added structure. The simpler structure represented in figures 6.1 and 6.2 is all the structure that is found on clauses of interactive conversation. When narrative is embedded within the conversation, the clauses of the narrative have added structure, as in figure 6.3.

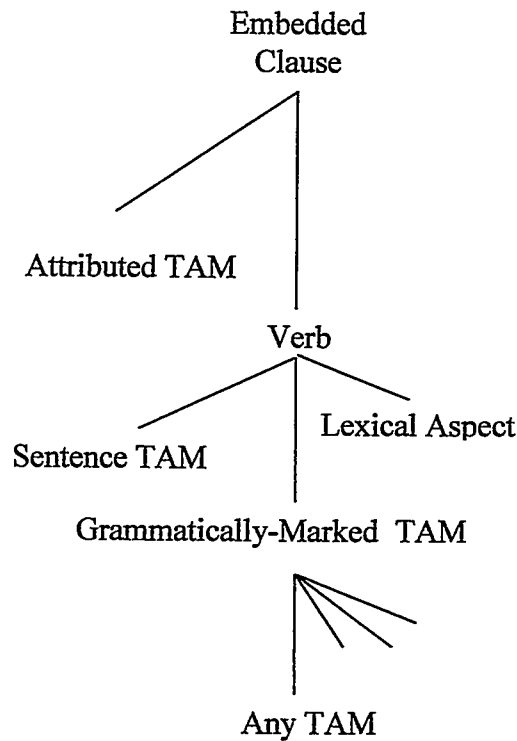


Figure 6.3: A Clause of Embedded Narrative

This structure allows for TAM to spread from the overtly marked verbs that occur in the initial clauses of an embedded narrative to all the embedded clauses, as in figure 6.4.

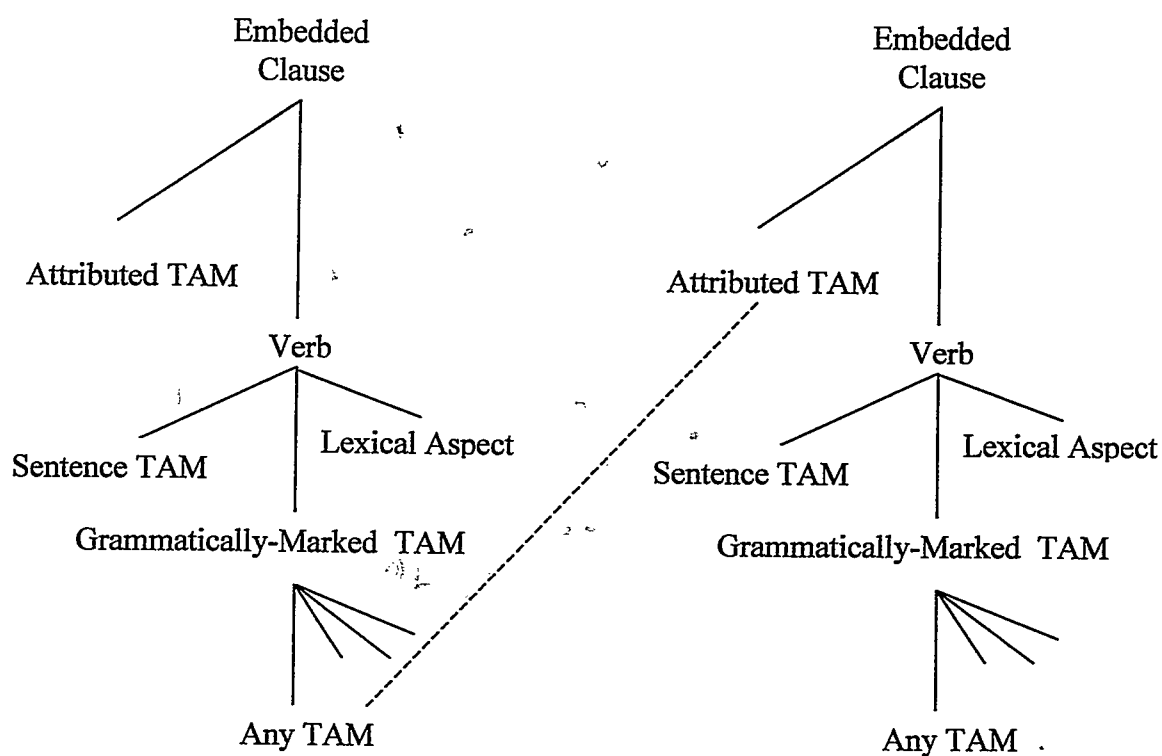


Figure 6.4: The Spreading of TAM in the Domain of a Narrative

Furthermore, this system allows for layers of embedding, as many layers as are necessary to represent the data, as in figure 6.5, page 194.

Dialog that is embedded in the narrative is different than other embedded clauses, in that its structure is like that of conversation; it has no node for attributed TAM. The TAM of the narrative skips the dialog, but can spread beyond it, as in figure 6.6, page 195. In dialog, the time deixis shifts; in narrative, the point of reference for time is the storyteller's "now," while in dialog, the point of reference is the character's "now".

In order to test the notational system of TAM feature-spreading, the clauses of the short narrative "The Frog and the Fly" are diagrammed below, in figures 6.7-6.13.

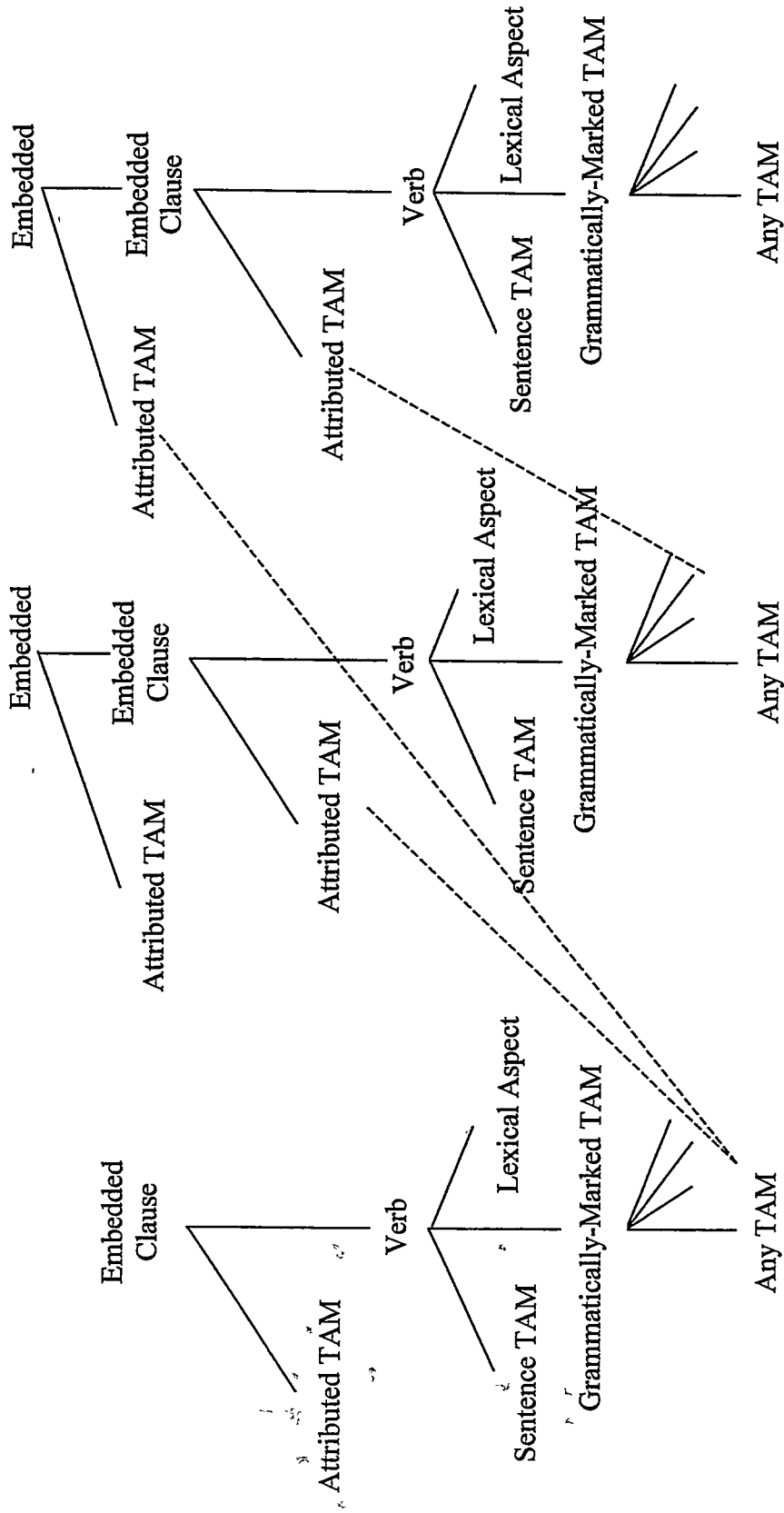


Figure 6.5:
Two Layers of
Embedded Clauses

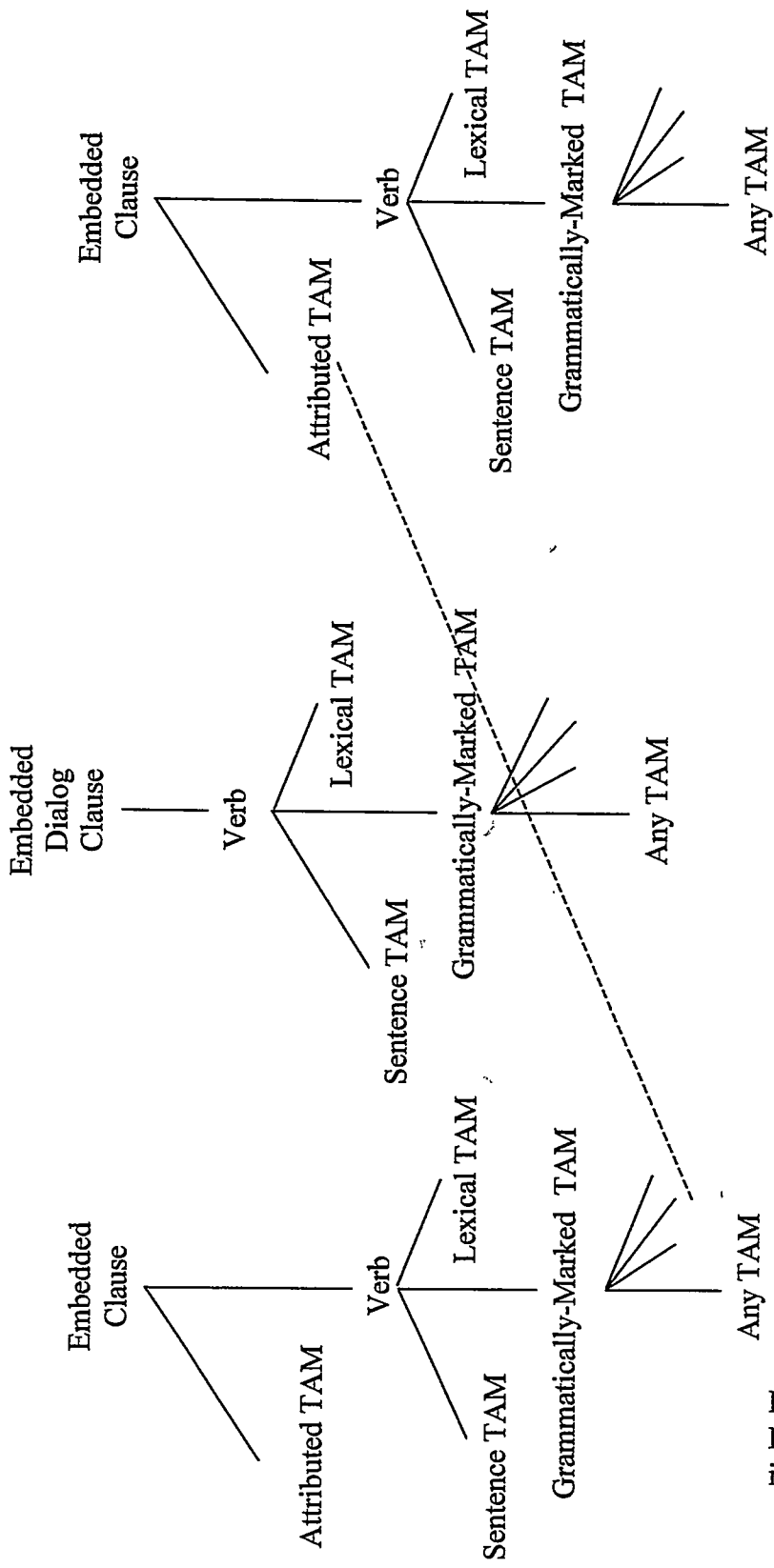
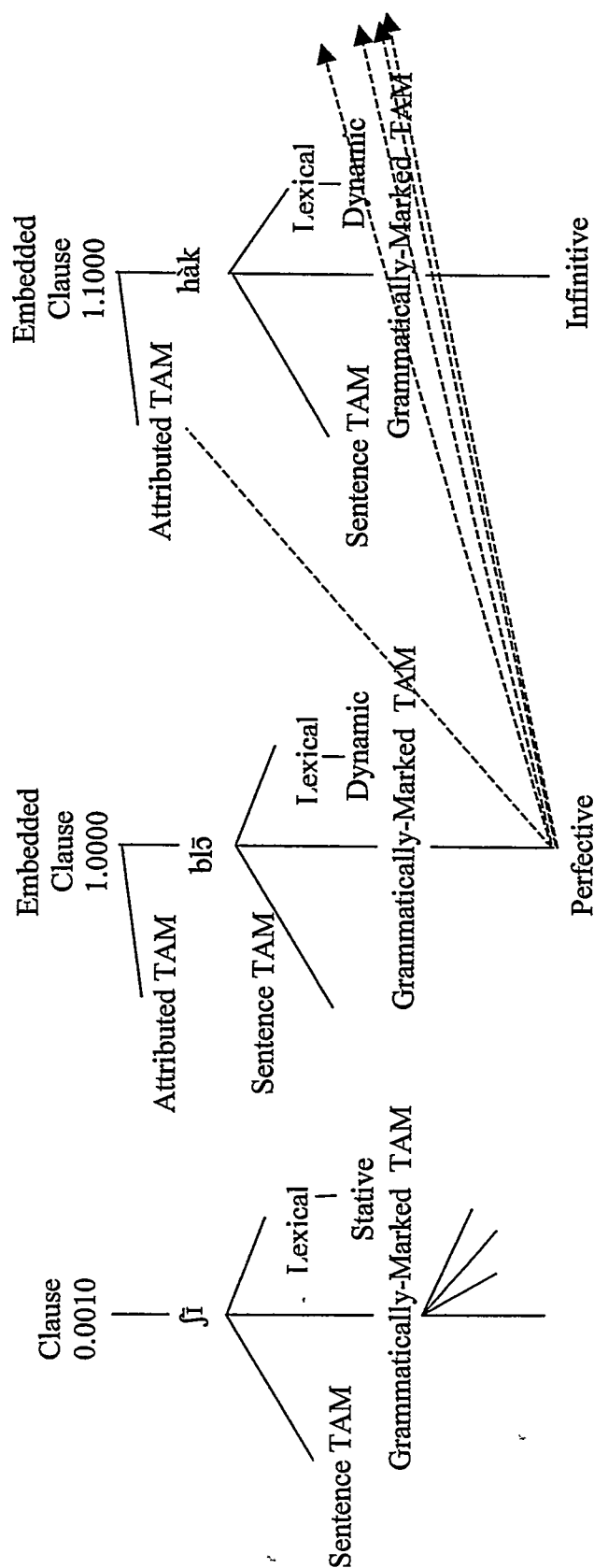


Figure 6.6:
Dialog Embedded
in Narrative

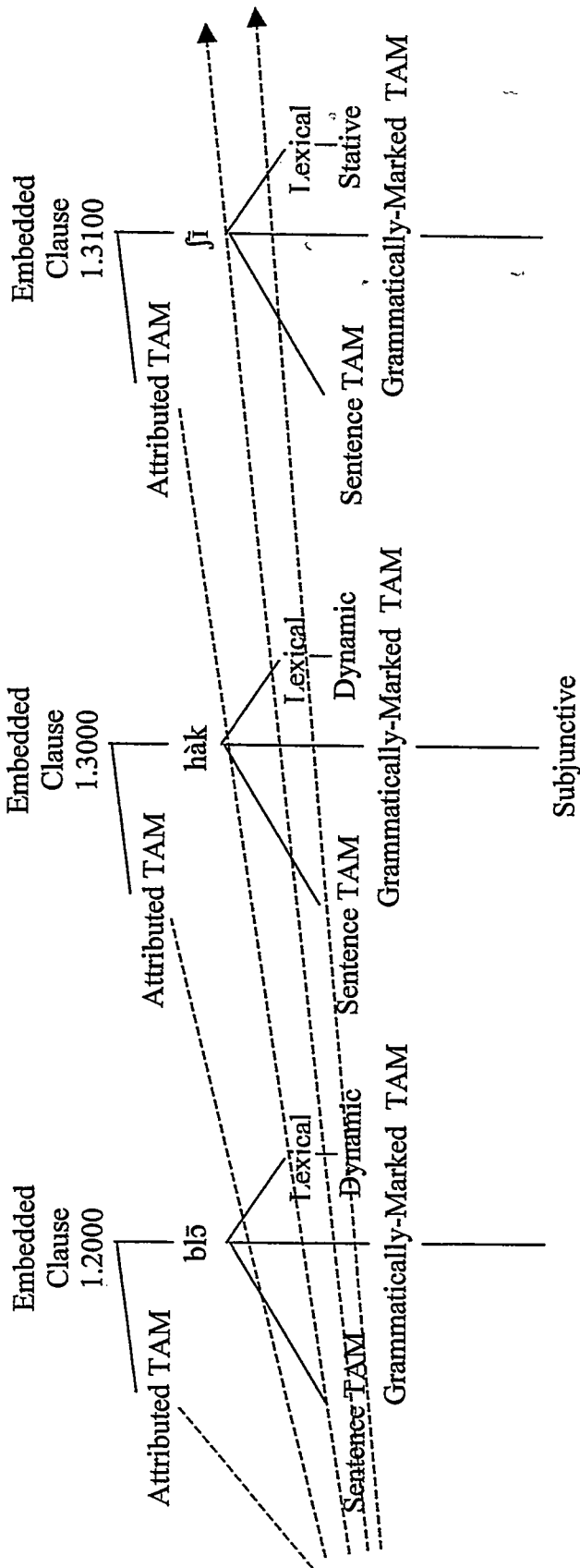


The Perfective prefix on the first verb (*bā-nī-blō*) marks more than just the one verb. All the story clauses that follow are also interpreted as Perfective, because they have been associated with the initial Perfective by the process of spreading. The dashed lines that associate subsequent clauses with the initial Perfective verb continue into the figures on the following pages.

Lexical aspect does not spread, but is marked on each verb.

Clause 1.1000 is doubly marked for TAM: an Infinitive plus Perfective.

Figure 6.7:
TAM-Spreading in
"The Frog and the Fly"
Part 1



Clauses 1.2000 and 1.3100 have no Grammatically marked TAM; the TAM for these clauses is read directly off the initial verb.

Clause 1.3000 is doubly marked: Subjunctive and Perfective.

Figure 6.8:
TAM-Spreading in
"The Frog and the Fly"
Part 2

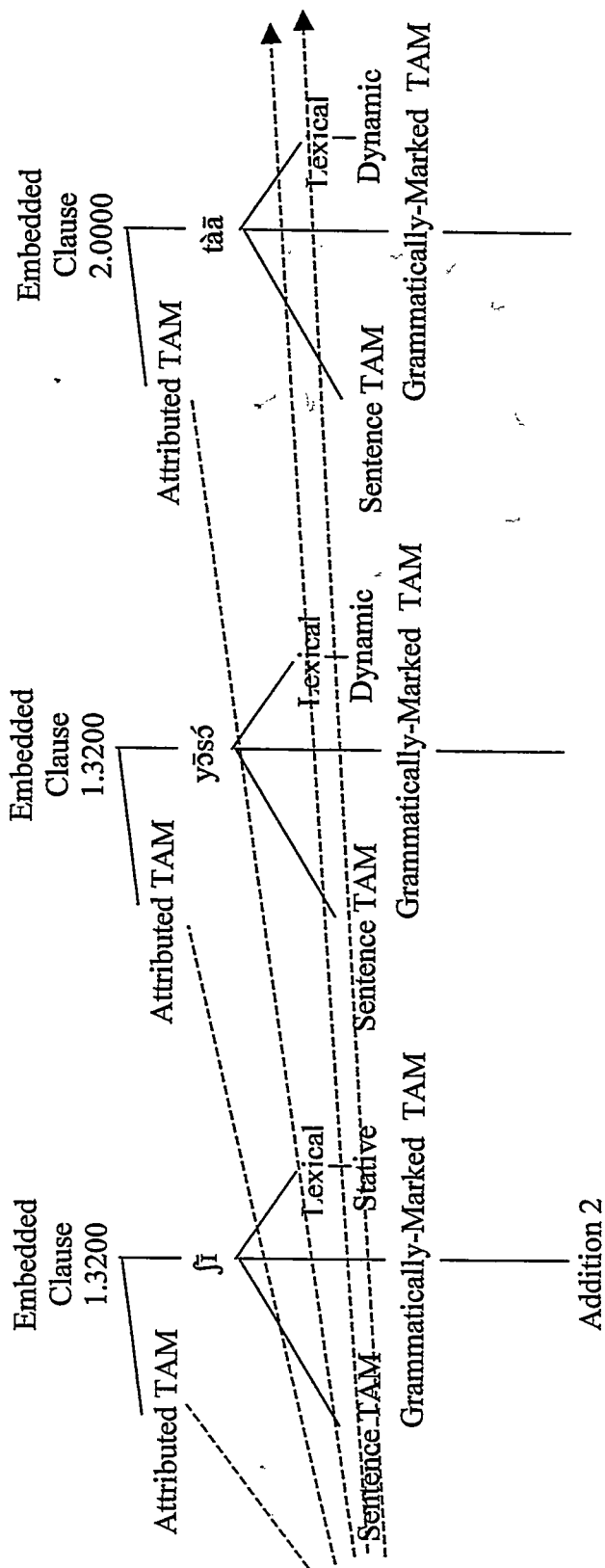
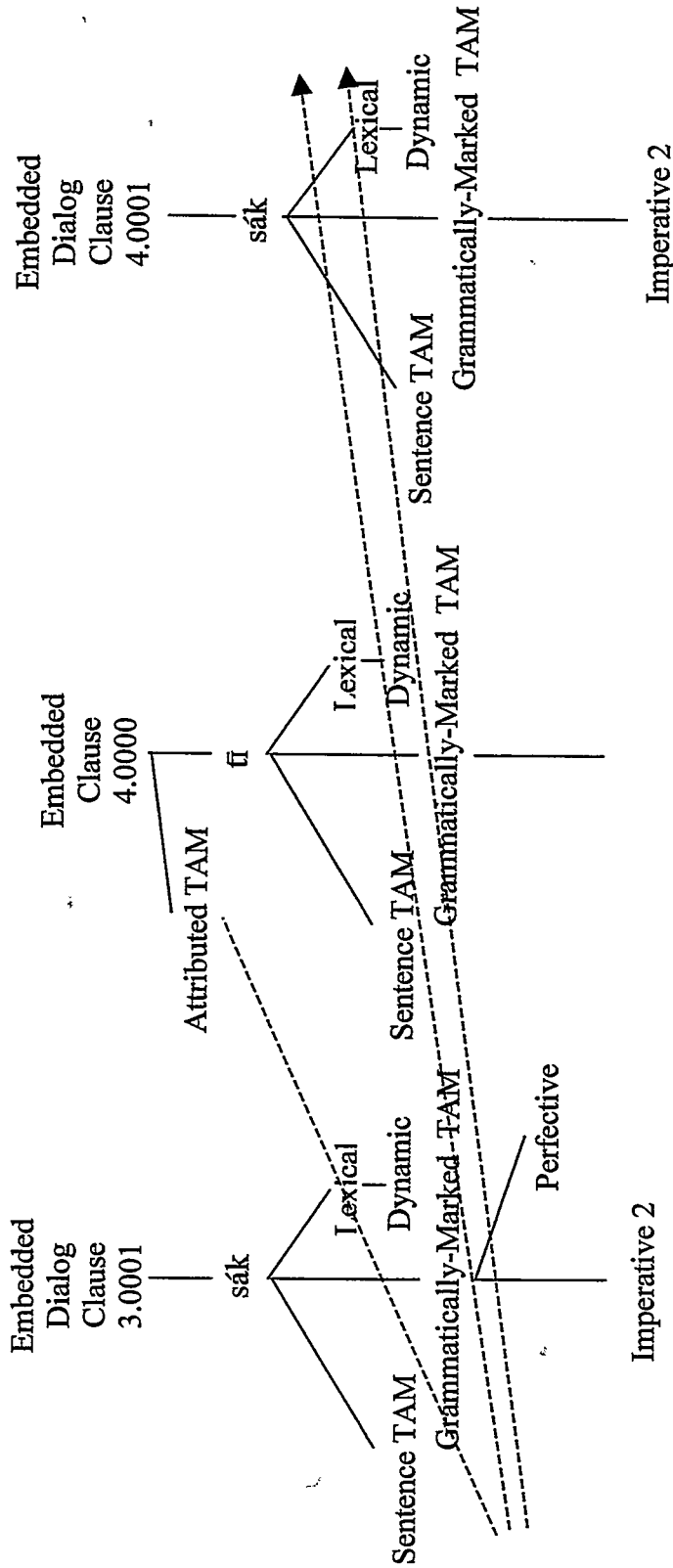
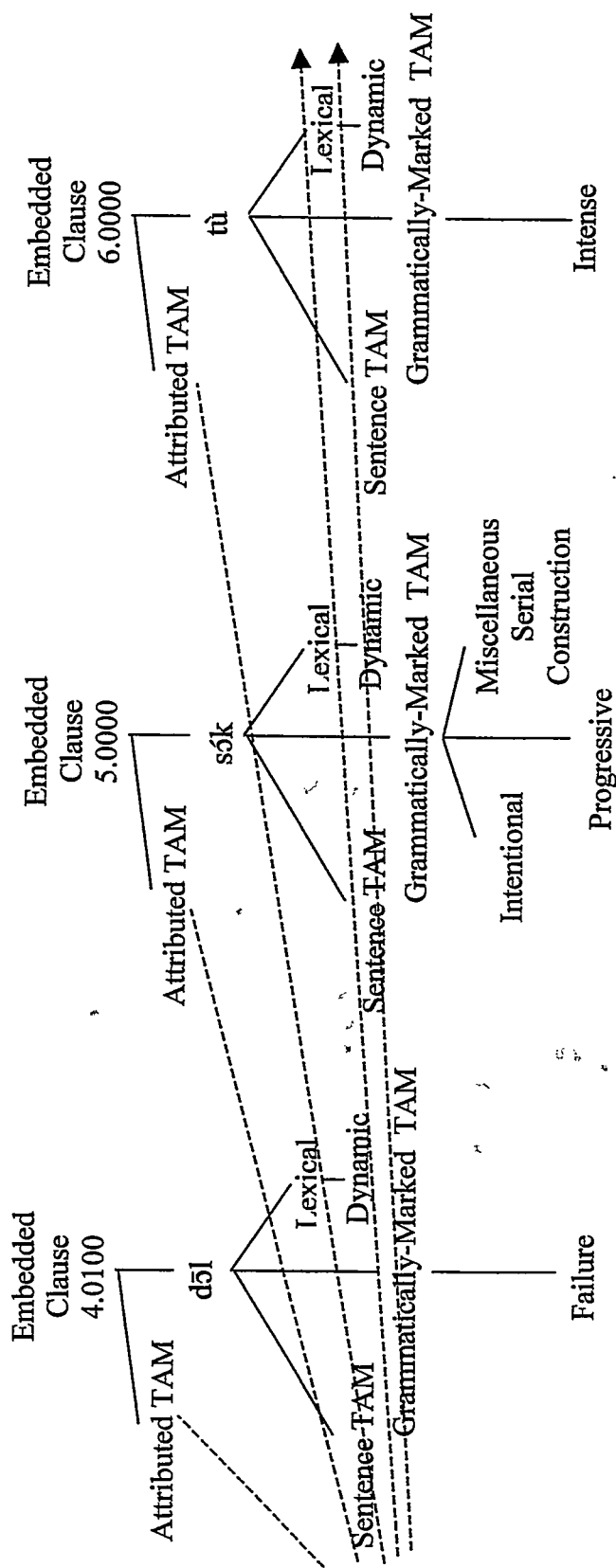


Figure 6.9:
TAM-Spreading in
"The Frog and the Fly"
Part 3



The clauses of dialog have no node for "Attributed TAM," so the Perfective cannot associate with those clauses. However, the spreading continues to spread past the dialog to the remaining story clauses.

Figure 6.10:
TAM-Spreading in
"The Frog and the Fly"
Part 4



The serial construction of clause 5.0000 is not listed in tables 3.6-3.9, even though the verb *lik* is used frequently in constructions similar to this one.

Figure 6.11:
TAM-Spreading in
"The Frog and the Fly"
Part 5

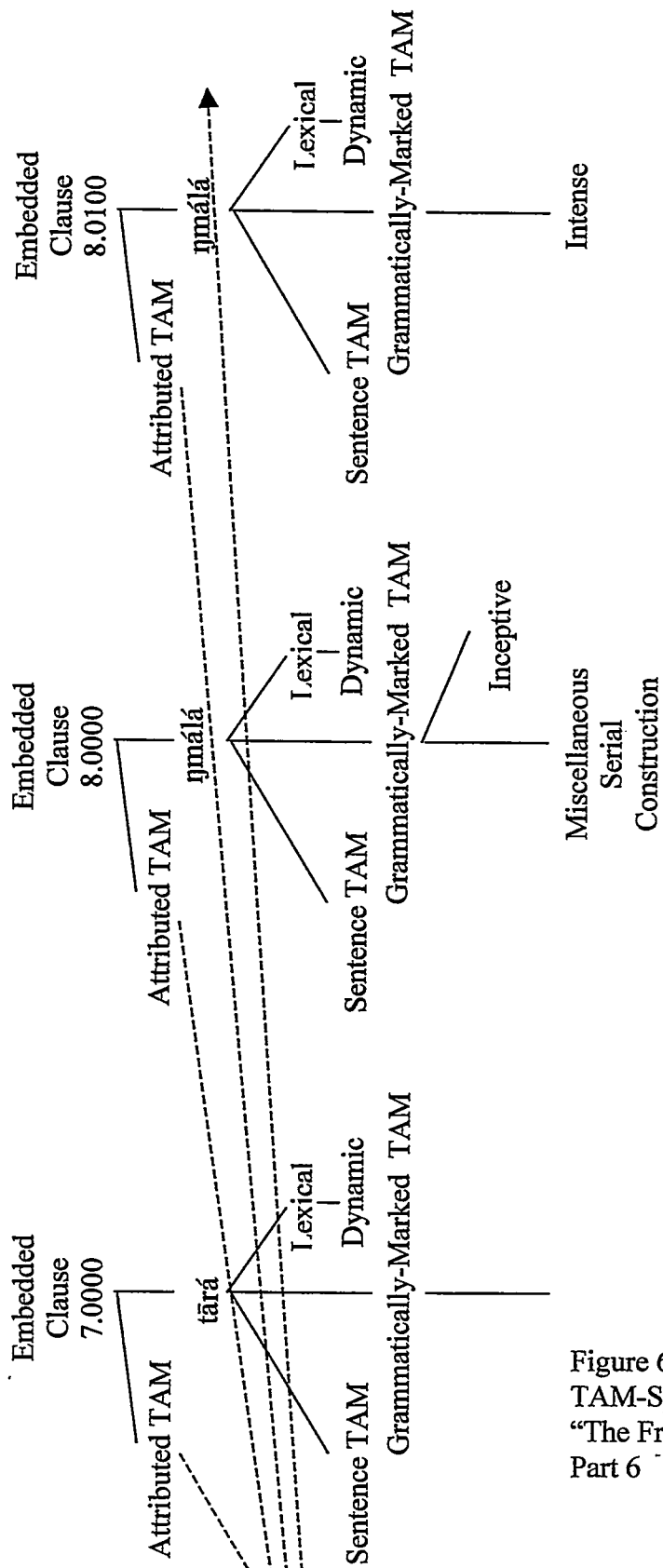
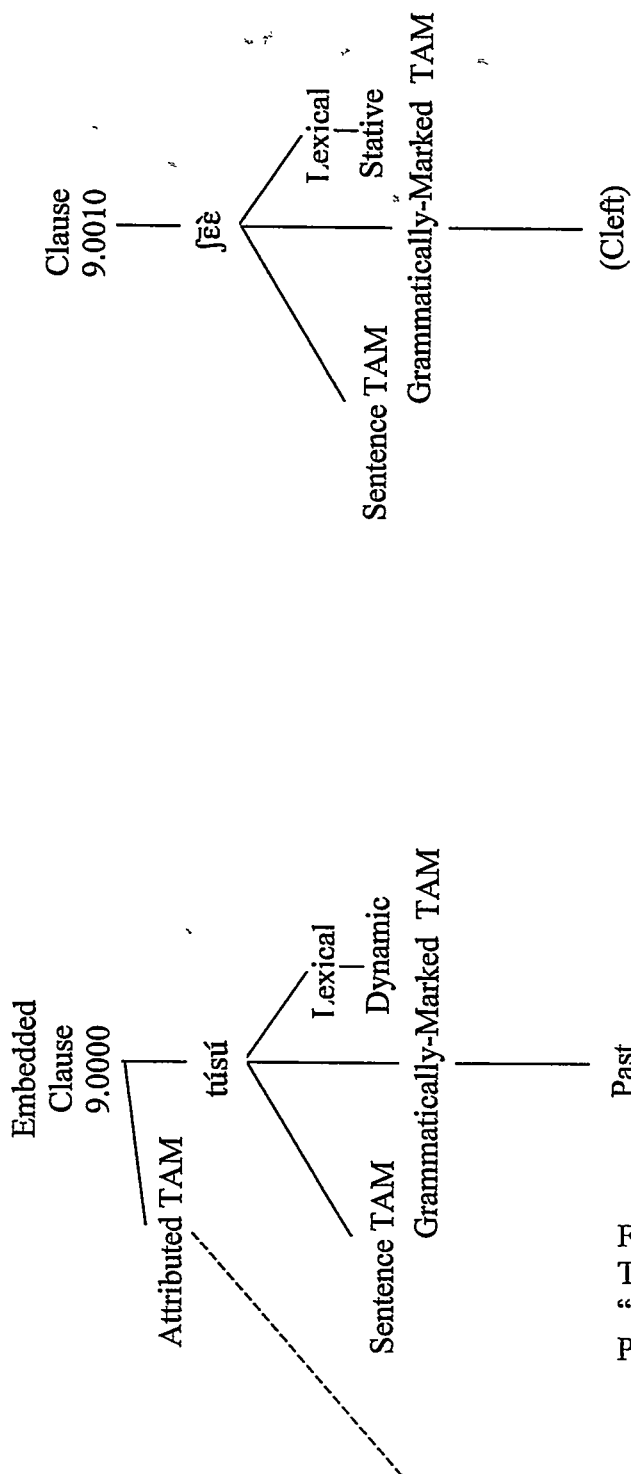


Figure 6.12:
TAM-Spreading in
"The Frog and the Fly"
Part 6



Clause 9.0000 is the last clause of the embedded narrative, so it is the last clause with an “Attributed TAM” node. Clause 9.0010 is a clause of interactive conversation, and it is the clause that signals the terminal boundary of this narrative (note the cleft construction). This Perfective marking can spread no farther.

Figure 6.13:
TAM-Spreading in
“The Frog and the Fly”
Part 7

6.2.2 Evaluation of the TAM-Spreading Notational System

The idea of feature-spreading is not new to the field of linguistics, but it has not previously been applied to discourse analysis. Discourse analysis has generally avoided formal representations in favor of prose descriptions. The formal representation demonstrated above has several positive elements.

First, it provides a new framework for discussing tense, aspect, and mood in the context of narrative discourse. It is a framework that borrows extensively from autosegmental phonology. The framework can be tested with other texts and in other languages to see if it truly reflects the structure of TAM systems in discourse.

Second, this notation acknowledges that TAM is a feature of clauses, but that it is typically marked on verbs. It does provide structure, though, for TAM to be associated with a clause without being grammatically marked on the verb.

Third, it gives a reasoned explanation the TAM of the entire narrative does not associate with clauses of dialog, but is not blocked by dialog.

The spreading notation could be much improved with the addition of symbols for sentence boundaries, rules to specify which grammatical categories spread at the sentence level and which at the discourse level, and other refinements. As a matter of fact, many of the principles that accompany the transparency model¹ could be rewritten as principles to accompany a spreading model. However, those refinements are not made to the spreading model, because it has two shortcomings that are overcome by the transparency model, described below.

¹ In section 7.2.2.

Its first shortcoming is that it suggests that some physical feature of the initial verb becomes attached to subsequent clauses. As explained above, the feature that spreads is actually a semantic category signaled by the grammatical marking in the initial clause(s). Its second shortcoming is that it gives preeminence to the clause rather than giving preeminence to the text. Discourse analysis is a discipline that examines large stretches of text; building a theory of discourse on processes at the clause level is a bit like seeing the trees and not the forest. In order to see patterns in discourse, it is necessary to display as much information as possible on one page. Instead of condensing discourse information, a TAM-spreading model inflates it. The transparency model overcomes both these problems.

6.3 Discourse Tracks and Transparent Layers

Transparency in Kuche works in conjunction with the principle of embedded domains. Though TAM marking occurs in a clause, its impact is often on the discourse. Referring again to the metaphor of embedded political domains: the state capital building is within a certain city, but its jurisdiction extends to the county it is in and to the state, too. So it is with TAM marking in Kuche narrative discourse: it must occur within a clause, but it also occurs within a sentence and within a discourse and may impact the entire sentence or the entire discourse. TAM that is overtly marked continues to impact the discourse until some kind of mark signals the conclusion of that impact. The signal of a TAM's conclusion may be the full stop at the end of a sentence or one or more of the linguistic cues discussed in section 5.3.1, depending on the TAM form. For the duration of its impact, the overt mark need not be repeated, and other overt TAM markings add new meaning without canceling out the original TAM.

Although the mechanics of transparent forms in discourse are simple to demonstrate in a face-to-face presentation, an adequate representation of transparency is not easily rendered on paper. A formal system of notation is not presented until chapter 7. This section gives a preliminary illustration of transparency processes in a hypothetical text; the formal notational system presented in the next chapter are based on the very visual diagrams constructed below in figures 6.14-6.24. Both the diagrams below and the grids of chapter 7 are referred to as the discourse's "tracks;" in order to differentiate the two, the graphic diagrams in this chapter are called "geometrical tracks" because they use symbols rather than words. The tracks are a static record of the discourse's progress, just as an animal's tracks give enduring evidence of its journey. Each discourse track can be decomposed into smaller, layered tracks that represent embedded domains of various types. If several domains of the same type occur in one narrative—for instance, a narrative may contain more than one "Conditional" domain²—then all those domains occur on the same layer. Each layer is transparent: it does not obscure the layers below it.

The shape of the graphic representations below is loosely based on the notational system of music. It was suggested (Charity Wilson-Hansberry, personal communication) that the TAM-marking on various levels bears some resemblance to the marking of sharps and flats in music. That is, the sharps or flats of the key signature at the beginning of a score apply to everything up to the end of the composition,³ while an overtly marked flat or sharp within the composition (an "accidental" in musical parlance) applies only up to the end of a measure. Transparent, embedded domains in Kuche are similar in that certain

² A better term is the "If/then" domain, because only the first half of the sentence is conditional.

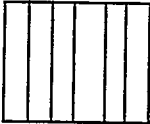
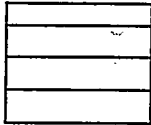
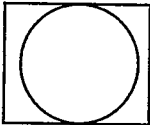
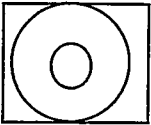
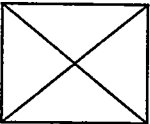

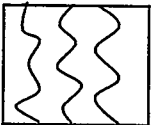

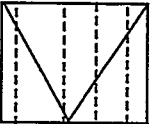
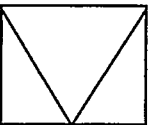

³ Actually, a key signature may change in the middle of a composition, but there is a distinctive double bar that is required before a change in key signature.

TAM markings that come near the beginning of a narrative apply to every clause in the narrative, while other TAM markings apply to every clause only up to the end of the sentence. The discourse tracks resemble musical scores, but they are vertical in orientation rather than horizontal. Musical notes positioned on five lines/four spaces are not used; instead, geometrical shapes represent the TAM marks that occur in each clause. Sentence breaks are indicated by heavy horizontal bars and individual clauses are represented by small rectangles. The sentences might be compared to a measure of music, and the clauses to individual notes.

6.3.1 A Graphic Representation of Kuche Narrative

The narratives that appear in the appendix are too long to be useful for this demonstration, and the short narrative (“The Frog and the Fly”) does not display enough variety of forms. For that reason, a short hypothetical narrative was constructed. TAM forms for each clause of the narrative are proposed for the narrative as it might be marked in Kuche and as it might be marked in English. Table 6.1 proposes visual symbols for Kuche TAM forms that could be expected in the narrative. The hypothetical narrative follows, and after that a diagram of the clauses in the narrative, as they would likely be marked in Kuche.

Table 6.1 Symbols for Kuche TAM Forms in Clauses

| Grammatical Category | | | Kuche Form |
|----------------------|---|---|--|
| (Past) Perfective |  | | nì- |
| Habitual | |  | tá- |
| Stative |  | | (Lexical) |
| Cleft | |  | (Alternative form of 'be') |
| Negative |  | | sà- |
| Conditional | |  | tà |
| Progressive |  | | ('be' with participle) |
| Imperative | |  | Bare Verb |
| Likely Situation |  | | à- introducing the clause
subsequent to a conditional |
| Sequential | |  | à- connecting two clauses |
| Unmarked |  | | (Verb with no TAM
marking) |

| A Hypothetical Narrative | Formal Marking | Clause # |
|--|-------------------------|----------|
| We heard about | Stative/ Perfective | 1 |
| a hero named Asok. | Stative/Perfective | 2 |
| He rode out of the town | Perfective | 3 |
| and called the men of that town, | Unmarked | 4 |
| but they covered their ears. | Unmarked | 5 |
| They said, | Unmarked | 6 |
| “If they fight us | Conditional | 7 |
| and kill us, | Unmarked | 8 |
| then they’ll wipe out our whole race.” | Sequential | 9 |
| The men of that town used to hear a loud noise | Habitual | 10 |
| and run from it. | Unmarked | 11 |
| They would hide in caves. | Unmarked | 12 |
| They would say, | Unmarked | 13 |
| “We are old,” or | Stative | 14 |
| “We are sick,” or | Stative | 15 |
| “We are farming right now.” | Progressive | 16 |
| [Aside] Look at me | Imperative | 17 |
| and pay attention. | Unmarked | 18 |
| [Answer] I hear you well. | Stative | 19 |
| They would never march out to war, | Negative | 20 |
| but they would always eat | Unmarked | 21 |
| and drink carelessly. | Unmarked | 22 |
| These are the men | Cleft | 23 |
| that our fathers have always warned us about. | Perfective/
Habitual | 24 |

In the tracks of the hypothetical narrative, the clause numbers are laid beside the track so that the reader can refer back to the narrative. The surface track at the right shows simply how each clause is marked for TAM. However, few of the clauses are interpreted exactly as they are overtly marked.





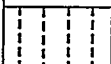

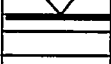


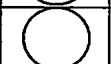
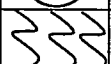




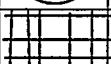
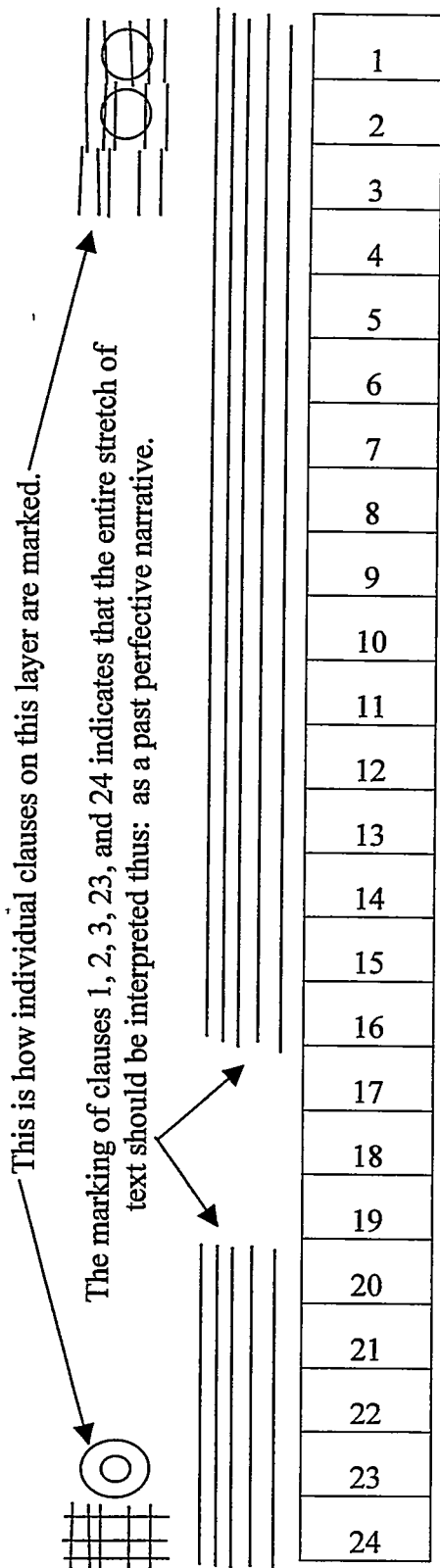
| | | |
|--------------|---|----|
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| Dialog |  | 7 |
| | | 8 |
| |  | 9 |
| |  | 10 |
| | | 11 |
| |  | 12 |
| | | 13 |
| Dialog |  | 14 |
| |  | 15 |
| |  | 16 |
| Conversation |  | 17 |
| | | 18 |
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| | | 21 |
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| |  | 23 |
| |  | 24 |

Figure 6.14:
Geometrical Track of
"Hypothetical Narrative,"
Surface TAM Marking

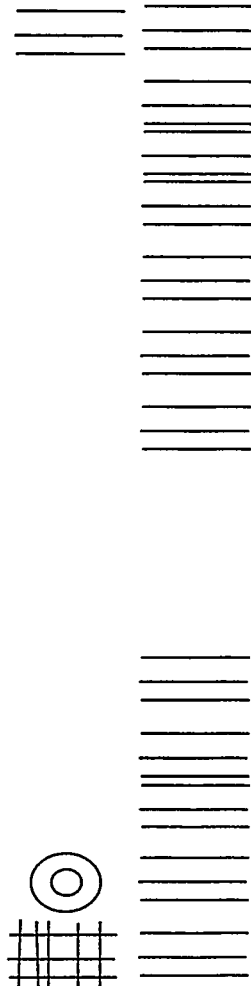


Instead, the overt grammatical TAM marking in individual clauses indicate how whole stretches of text should be interpreted. For instance, the initial clauses marked stative and Perfective mark the text as a past perfective narrative up to the terminal boundary in the final two clauses. A gap is left for the conversation—this is where the embedded narrative is interrupted and speakers revert to interactive conversation.

Figure 6.15:
Geometrical Track, Past Perfective

This is how individual clauses on this layer are marked.

The marking of clause 10 indicates that the entire stretch of text should be interpreted thus: as habitual discourse.



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Then, the Habitual marking in clause #10 marks part of the narrative as an embedded habitual narrative. The terminal boundary of the embedded habitual narrative coincides with the terminal boundary of the past perfective narrative.

The habitual narrative embedded within the past perfective narrative does not obscure the first layer of TAM marking, as shown in figure 6.x (next page). Rather, both the perfective track and the habitual track are evident, and the last half of the narrative should be interpreted as past habitual. The first half of the narrative is still interpreted as past perfective. This is an instance of a transparent embedded domain.

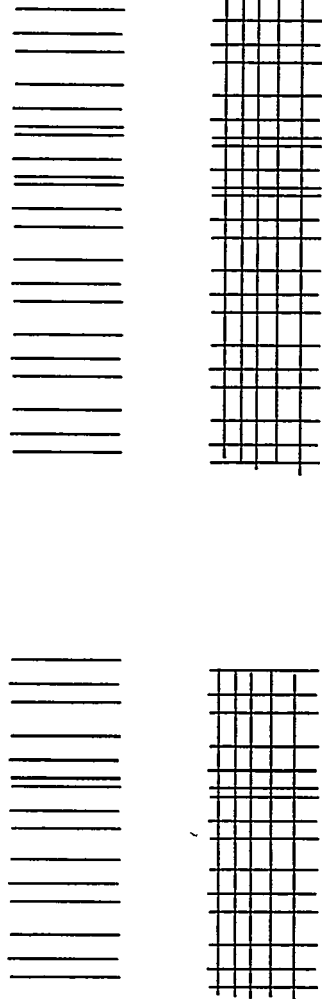
Figure 6.16:
Geometrical Track, Habitual

Figure 6.17:
Geometrical Tracks,
Showing the
Combination of Past
Perfective Track and
Habitual Track

Take the past perfective track from figure 6.x,

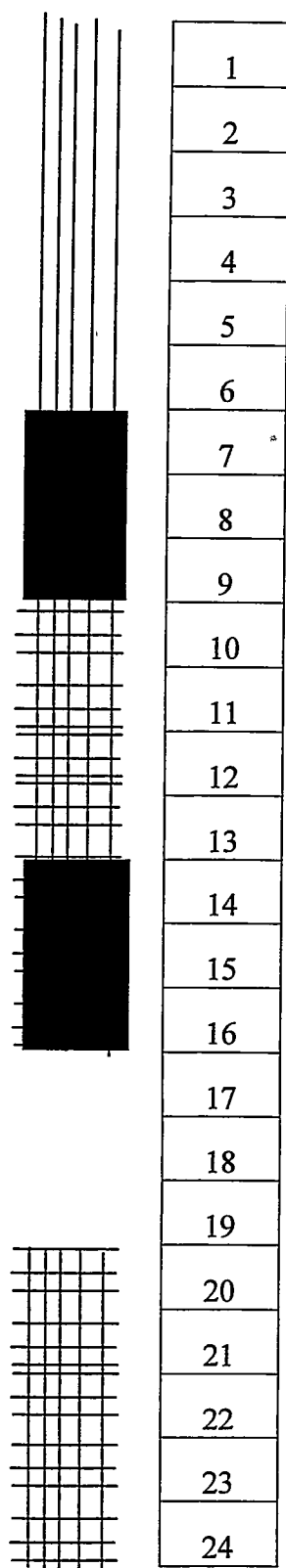


Embed within it the habitual track from figure 6.x, which is transparent,



And the combined track represents a narrative that begins as a past perfective narrative and ends as a past habitual narrative.

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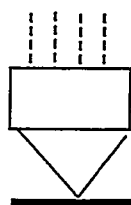


Not every layer of TAM is transparent, though. The quotative formulas in clauses #6 and #13 indicate that the clauses of the following dialog are opaque to the attributed TAM, whether it is past perfective or past habitual.

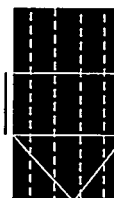
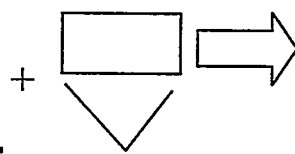
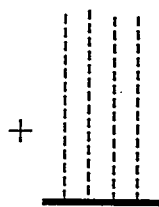
Inside dialog, most clauses are interpreted as they would be in interactive conversation. However, smaller-scale layered embedding can take place inside dialog.

For instance, figure 6.19 (next page) shows that clause 8 (with the Unmarked verb) and clause 9 (marked sequential) are interpreted differently than the surface marking would suggest. The Conditional verb in clause 7 actually marks the entire sentence conditional. The Unmarked verb in clause 8 allows the conditional mood to show through unmodified, but the marking in clause 9 (the conjunction *â-*, which signals the beginning of the apodosis) combines with the *sentence conditional mood* and the aggregated interpretations of these elements is *likely situation*.

Figure 6.18:
Geometrical Track, Showing Opaque
Dialog Embedded in Narrative



The short track at the left shows how clauses 7, 8, and 9 are marked on the surface layer. The Unmarked verb of clause 8 is represented by the empty rectangle. Interpretation of the clauses needs to make reference to three layers of information, as below



This layer represents the fact that direct quotation blocks out whatever TAM is marked on the entire narrative: in this case, Perfective..

The Conditional form in clause 7 actually marks the entire sentence.

This layer represents the surface marking of clauses 8 and 9.

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Figure 6.19:
Geometrical Tracks Showing a Conditional Sentence Embedded Within Dialog

When the dialog is embedded in the larger discourse, the combined track looks like this.

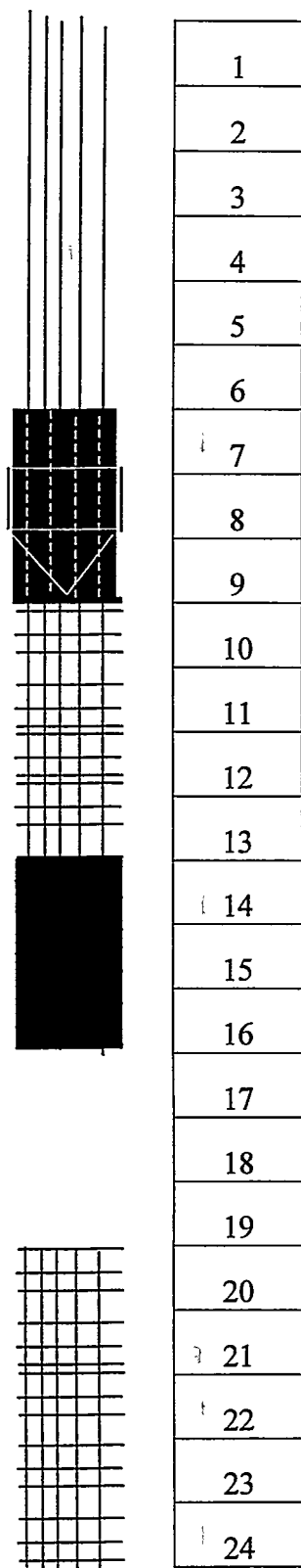
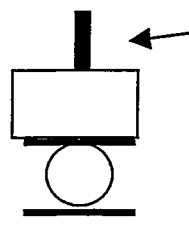
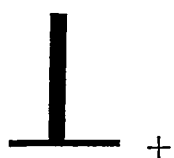


Figure 6.20:
Geometrical Track, Showing Conditional
Sentence Embedded in Dialog Embedded
in Narrative

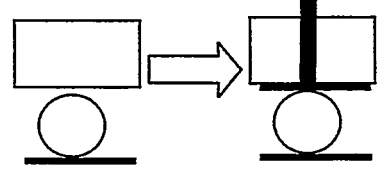


The clauses of the conversational interruption in clauses 17-19 are marked like this at the surface. They should be interpreted by referring to two layers of information, as shown below.

The Imperative form in clause 17 is a signal that all clauses should be considered imperative up till the end of the sentence, as long as the subject-agreement prefix allows for that interpretation.



The other two clauses are marked like this at the surface.



The Unmarked verb in clause #18 is marked second person singular, so it is transparent, allowing the imperative interpretation to show through without adding any other meaning to it.

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Figure 6.21: Geometrical Track Showing an Imperative Domain Combined with Surface Marking

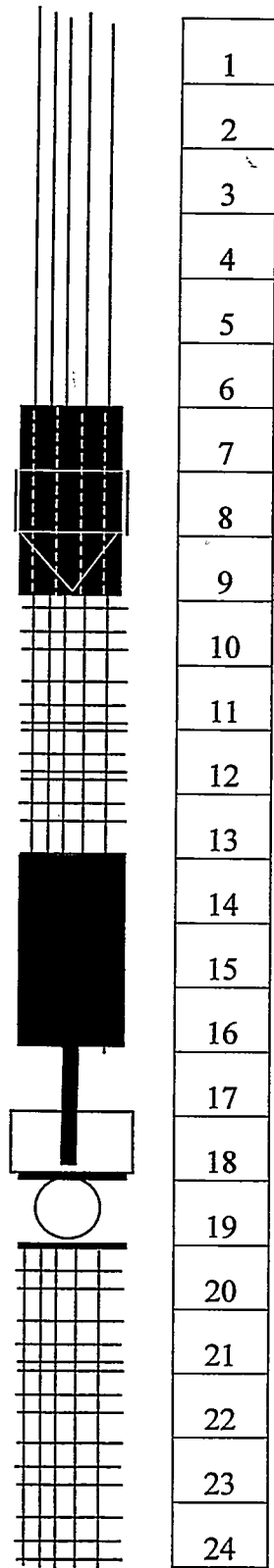
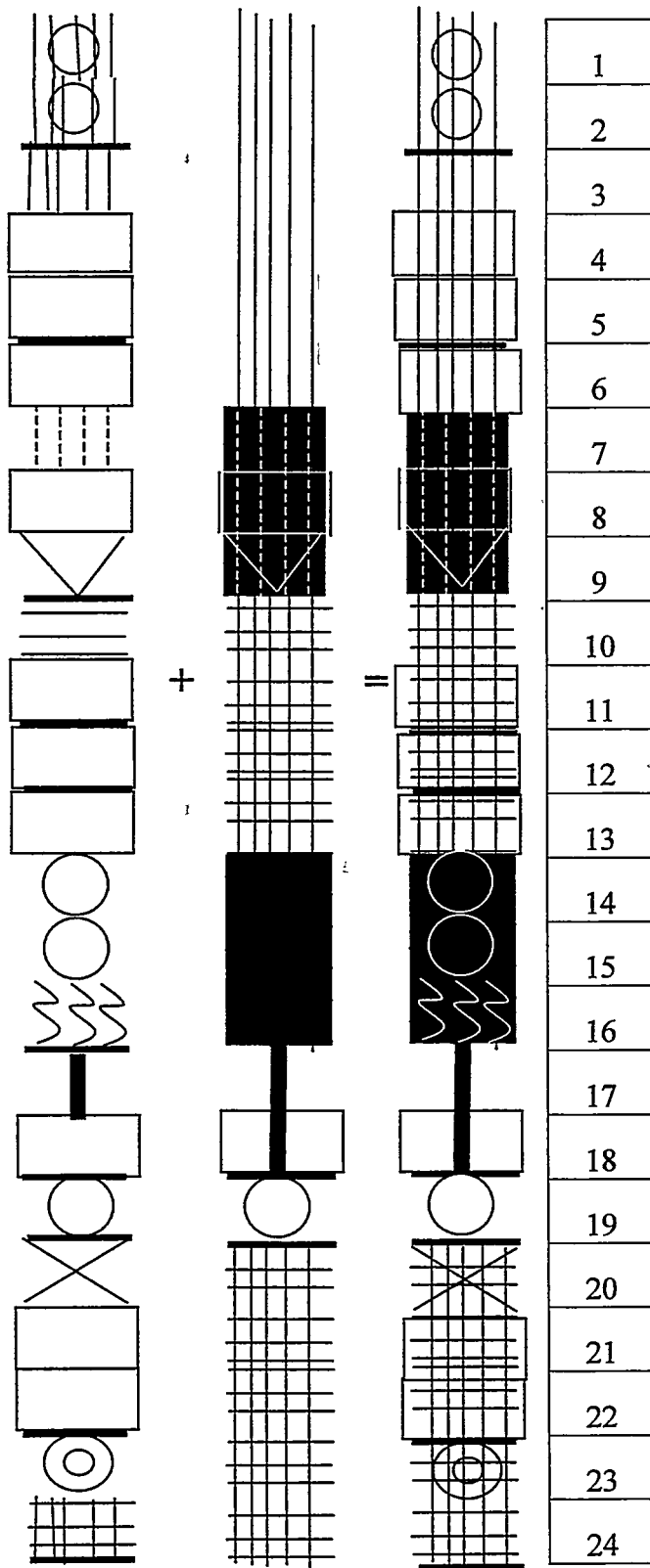


Figure 6.22:
Geometrical
Track, with
Conversation
Clauses
Showing
Through the
Gap in the
Narrative

This layer of information is not really added over the *top* of the narrative track. Rather, these clauses are a part of the interactive conversation in which the narrative is embedded. They are really part of the first layer—the *bottom* layer—of TAM information, but it is easier to explain them at this point in the diagram. Because of the gap in the perfective/habitual track, the bottom layer of interactive conversation shows through the gap.

Finally, (figure 6.23, next page) the surface marking of the remaining clauses modify the interpretation of a few clauses not yet discussed. Notice that in the complete interpretation track, clause boundaries are only shown for clauses with Unmarked verbs. The clause boundaries are not critical to the interpretation of the narrative, but the empty rectangles serve as a visual representation of a transparent object. Most of the other clauses are also transparent, but there is content in all those rectangles (refer to page 207), so there is no need to indicate their places with the borders of the rectangle.



The complete track (the track just to the left of the clause numbers) represents the interpretation of the narrative much more accurately than the surface track does. Reviewing the clauses not previously discussed: the first two clauses are past states, clause 3 is a past perfective situation, as are clauses 4, 5, and 6. Clauses 7 and 8 are conditional and clause 9 is a likely situation. Clause 10 is not simply habitual, but past habitual, as are all the rest of the clauses of the story. Clauses 14, 15, and 16—the dialog—are each individually marked for TAM. Clauses 17 and 18 are both imperative, clause 19 is a state. The negative of clause 20 is also past habitual, as is the state mentioned in clause 23.

Figure 6.23:
Geometrical Tracks

It simplifies the metaphorical model of Kuche TAM in discourse to put the overt TAM marking of individual clauses all together on one layer. For the purpose of demonstrating the mechanics of the process, the pages above have shown bits of the surface marking track being laid down over tracks of discourse. Figure 6.24 lays out the essential layers for fitting the texts of this research into a model of transparency/embedded domains, with the surface clause marking grouped together on the top layer.

Each layer should be visualized as stacked on top of the layers to the left of it. The largest domain, the domain that would be the bottom layer, is at the left edge of figure 6.24: it is the interactive conversation. It would be possible for interactive conversation to have both imperative domains and if/then domains embedded in it. However, the tabulated texts in this study have no if/then domains embedded in interactive conversation, so no track is shown for them at this layer. A past/perfective narrative is a domain embedded within conversation, but it can be a domain with gaps in it; the gaps are where interactive conversation interrupts the narrative. A habitual discourse can be embedded within a past/perfective narrative, yielding a past/habitual narrative. The hypothetical narrative above has no embedded if/then domains at this level, but some of the tabulated texts do, so a track for that domain is included. Dialog is not transparent, but it can be embedded in one of the larger domains; furthermore, two kinds of sentence-level domains can be embedded in dialog. The top layer represents the surface marking of all clauses; this layer is transparent, allowing all the TAM-marked domains to show through, except where blocked out by dialog.

An interactive conversation is the largest domain. All the other tracks here represent smaller, embedded domains.

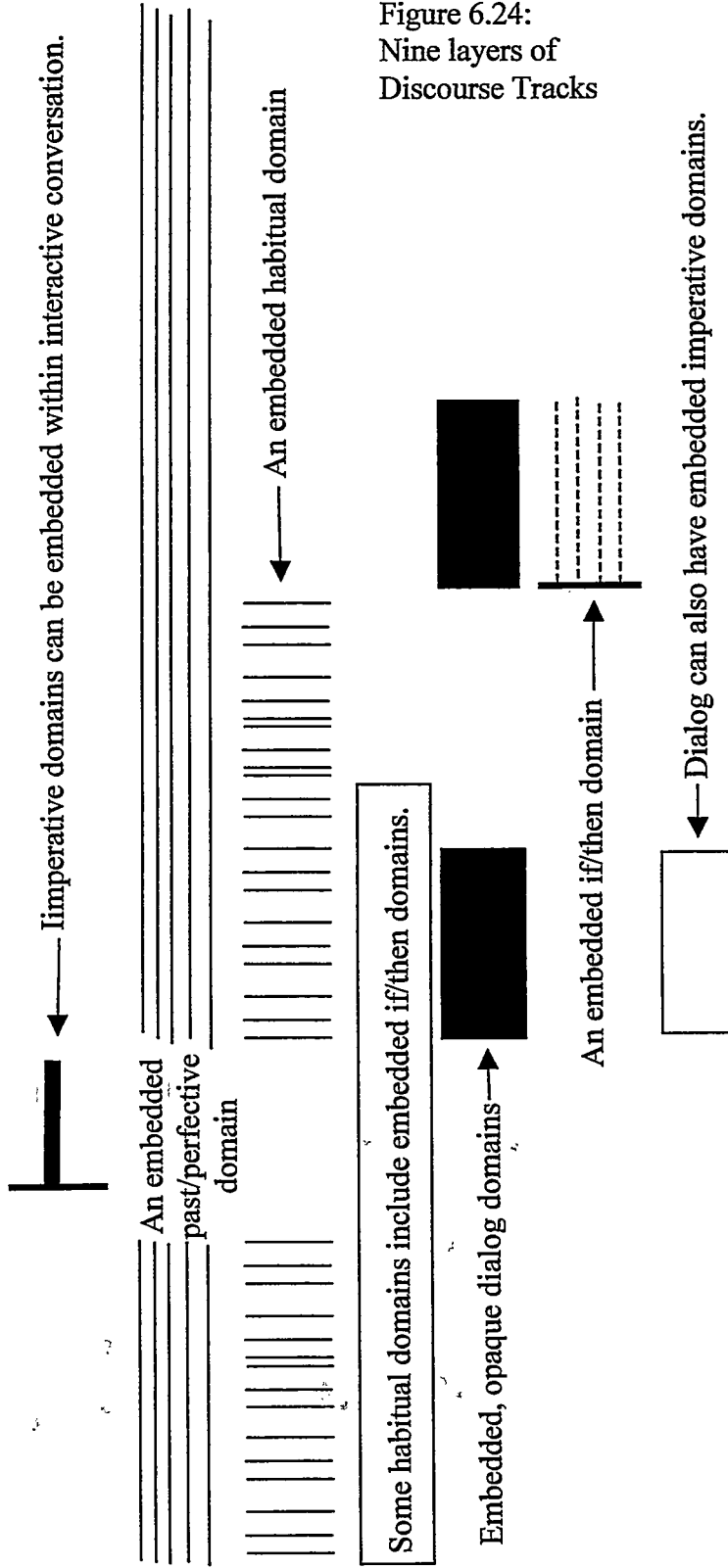
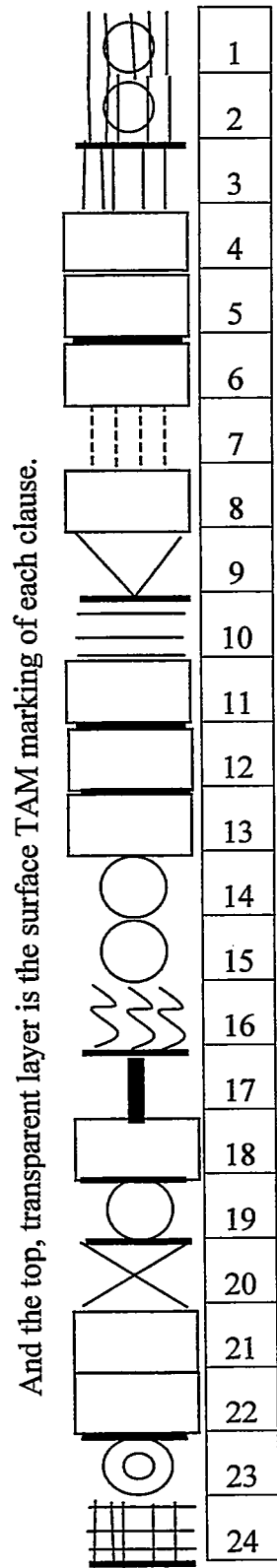


Figure 6.24:
Nine layers of
Discourse Tracks




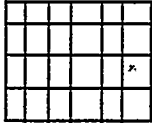
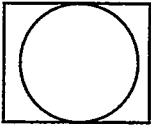
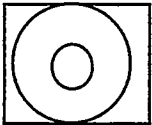
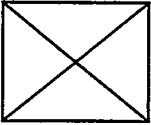

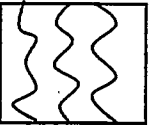

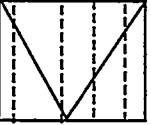
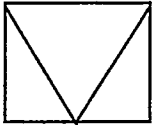
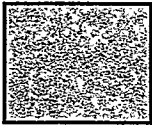
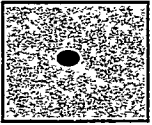
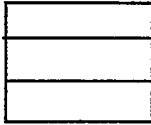
Each of the tracks in figure 6.24 represents a domain, except for the last. The last track, the surface TAM marking of each clause is not a domain, unless perhaps each individual clause is termed a domain. Narratives may vary in the number of layers required to accurately represent them, but the order of embedding would not be expected to vary much from the order represented above.

Though the detailed model of TAM in narrative described in chapter 7 is specific to Kuche, it is likely that the concrete metaphors and the graphic representations presented above can bring clarity to discourse questions in other languages. It is especially hoped that similar linguistic processes—like clause-chaining, conjunction reduction, and various uses of the Present tense in narrative—would be illuminated by the notational system proposed in this research.

6.3.2 Transparency in English Narrative

The same concept of domains embedded within domains can apply to English narrative discourse as well. The major difference is that transparency is a smaller part of English narrative—only a few forms are transparent to any extent. English forms that are transparent include the Present tense form (when used in narrative as historical Present) and non-finite forms like the present participle and the bare infinitive. Below, the hypothetical narrative is recast as it might be told in English, using four historical Present clauses and two bare infinitives.

Table 6.2: English TAM Forms in Clauses

| Grammatical Category | | | English Form |
|----------------------|---|---|---|
| Past (Perfective) |  | | -ed |
| Past Habitual | |  | used to or would |
| Stative |  | | Lexical |
| Cleft | |  | Word order + 'be' |
| Negative |  | | Auxiliary + 'not'
or lexical |
| Conditional | |  | Introduced by 'if' |
| Present Progressive |  | | 'be' with Present Participle |
| Imperative | |  | Bare Verb |
| Likely Situation |  | | Future clause subsequent
to a Conditional clause |
| Future | |  | will |
| Present |  | | Ø/-s |
| Non-finite | |  | Non-finite |
| Perfect |  | | 'have' + Past Participle |

| A Hypothetical Narrative | Formal Marking | Clause # |
|--|----------------------------|----------|
| In English | | |
| We heard about | Stative/ Past | 1 |
| a hero named Asok. | Perfective | |
| | Stative/Past | 2 |
| | Participle | |
| He rides out of the town | Present | 3 |
| and calls the men of that town, | Present | 4 |
| but they cover their ears. | Present | 5 |
| They say, | Present | 6 |
| “If they fight us | Conditional | 7 |
| and kill us, | Present | 8 |
| then they’ll wipe out our whole race.” | Future | 9 |
| The men of that town used to hear a loud noise | Past Habitual | 10 |
| and run from it. | Non-finite | 11 |
| They would hide in caves. | Past Habitual | 12 |
| They would say, | Past Habitual | 13 |
| “We are old,” or | Stative/Present | 14 |
| “We are sick,” or | Stative/Present | 15 |
| “We are farming right now.” | Present/
Progressive | 16 |
| [Aside] Look at me | Imperative | 17 |
| and pay attention. | Imperative | 18 |
| [Answer] I hear you well. | Stative/Present | 19 |
| They would never march out to war, | Negative/
Past Habitual | 20 |
| but they would always eat | Past Habitual | 21 |
| and drink carelessly. | Non-finite | 22 |
| These are the men | Cleft/Present | 23 |
| that our fathers have always warned us about. | Present/Perfect | 24 |

Figure 6.25 (at the right) is the surface track of the English narrative; it shows simply how each clause is marked for TAM. Many of the clauses are interpreted just as marked, but some are not.

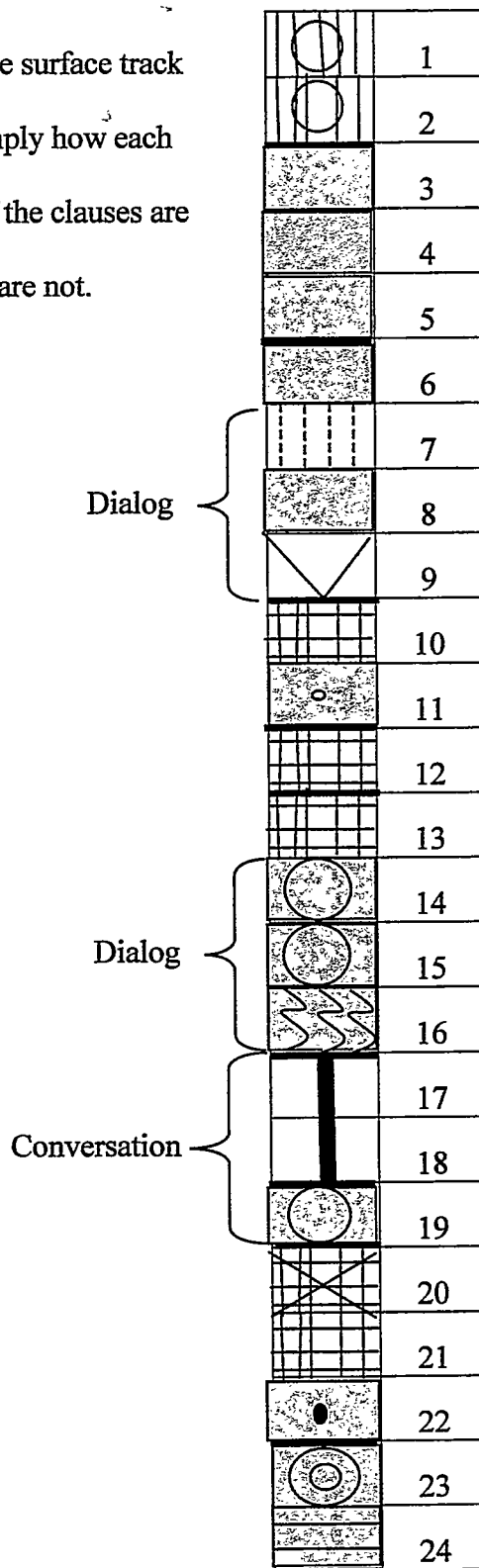
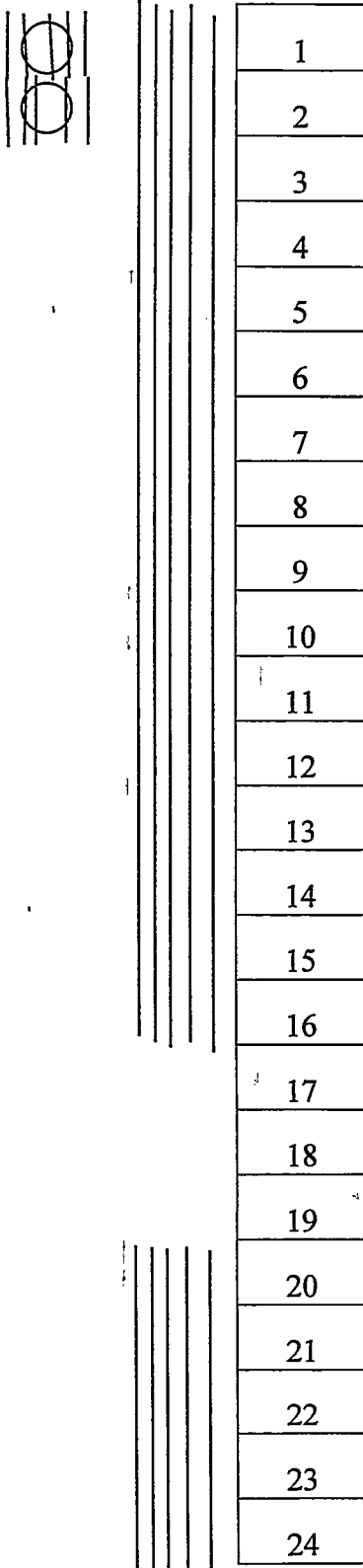


Figure 6.25:
Geometrical Track of the English
Rendering of "Hypothetical
Narrative," Surface TAM Marking



Even in English, the grammatical marking on the first few verbs can indicate a Past (Perfective) interpretation for the entire narrative.

Figure 6.26:
Geometric Track, English Past Perfective

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The Present tense forms that follow are not completely devoid of semantic content, like the Kuche Unmarked verbs, but still they are fairly transparent, allowing the Past Perfective interpretation to show through. These clauses are examples of the English historical Present.

The dialog in English is also opaque to the narrative TAM, as in figure 6.28 (next page). Within the dialog, the clause marked conditional (7) affects the interpretation of the entire sentence and the Present tense verb (clause 8) is transparent, allowing the conditional mood to show through virtually unmodified. Since the Future tense form is now subsequent to a conditional clause, it is interpreted as a likely situation.

Figure 6.27:
Geometrical Track, English Past Perfective
Combined with Surface Marking

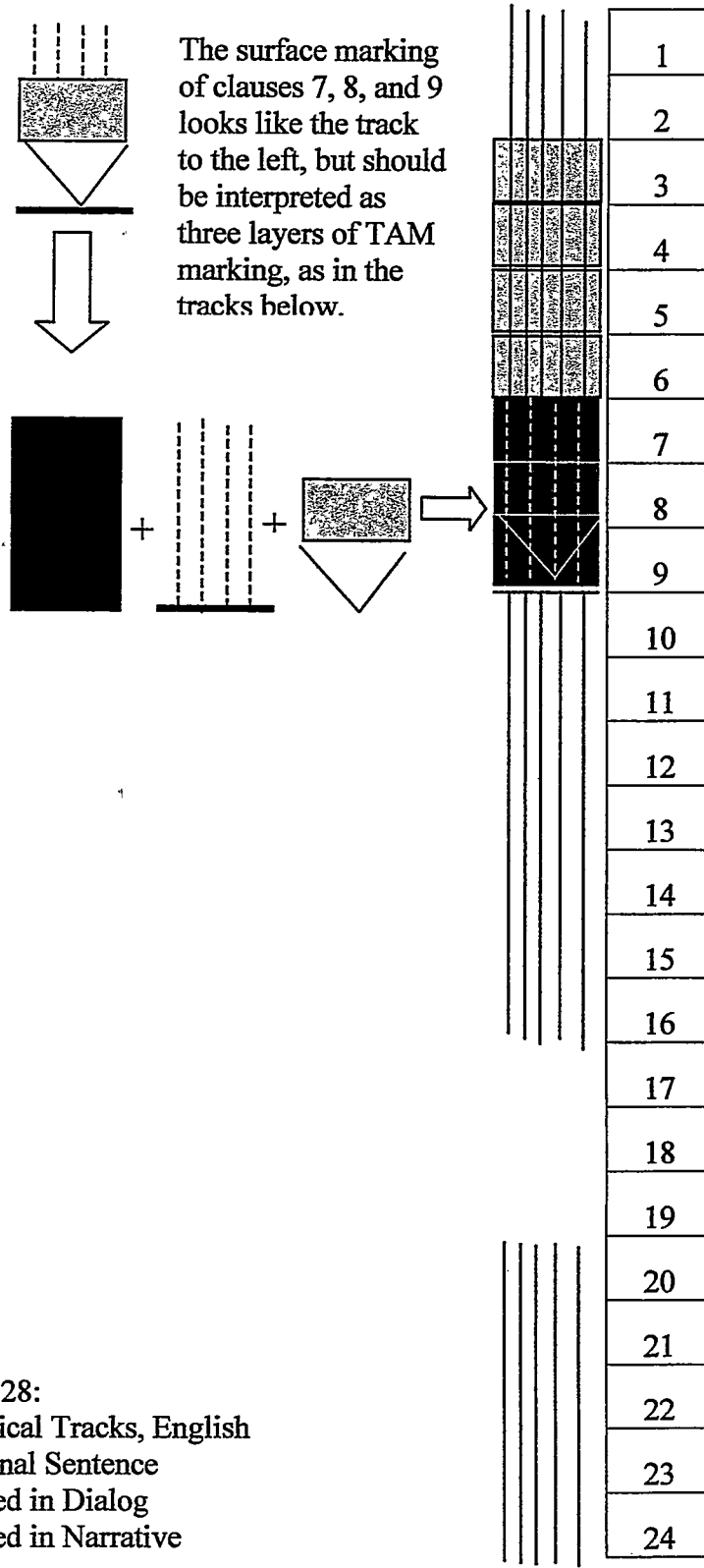
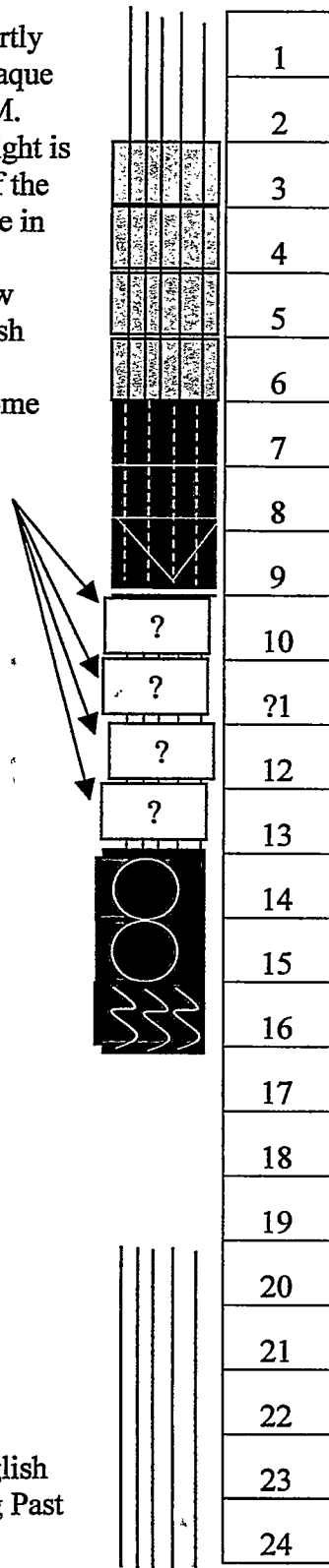


Figure 6.28:
 Geometrical Tracks, English
 Conditional Sentence
 Embedded in Dialog
 Embedded in Narrative

In English, most overtly marked verbs are opaque to the discourse TAM. The diagram at the right is not an actual track of the hypothetical narrative in English, but just a demonstration of how TAM forms in English might obscure the discourse TAM in some clauses.



However, most grammatically marked verbs in English are not transparent. They block out the reference to the Past Perfective that is marked on the entire discourse. In the case of the hypothetical narrative, the Past Perfective marking is obscured by clauses marked Past Habitual.

Just as in Kuche, though, English discourse has domains whose boundaries coincide with sentence breaks. Figure 6.30 (next page) shows that clause 10 is overtly marked Past Habitual—marking the whole sentence—and clause 11 is an example of what Kiparsky (1968) calls conjunction reduction. The non-finite form in clause 11 allows the past habitual interpretation to show through.

Figure 6.29:
Geometrical Track, English
Marked Verbs Blocking Past
Perfective Track

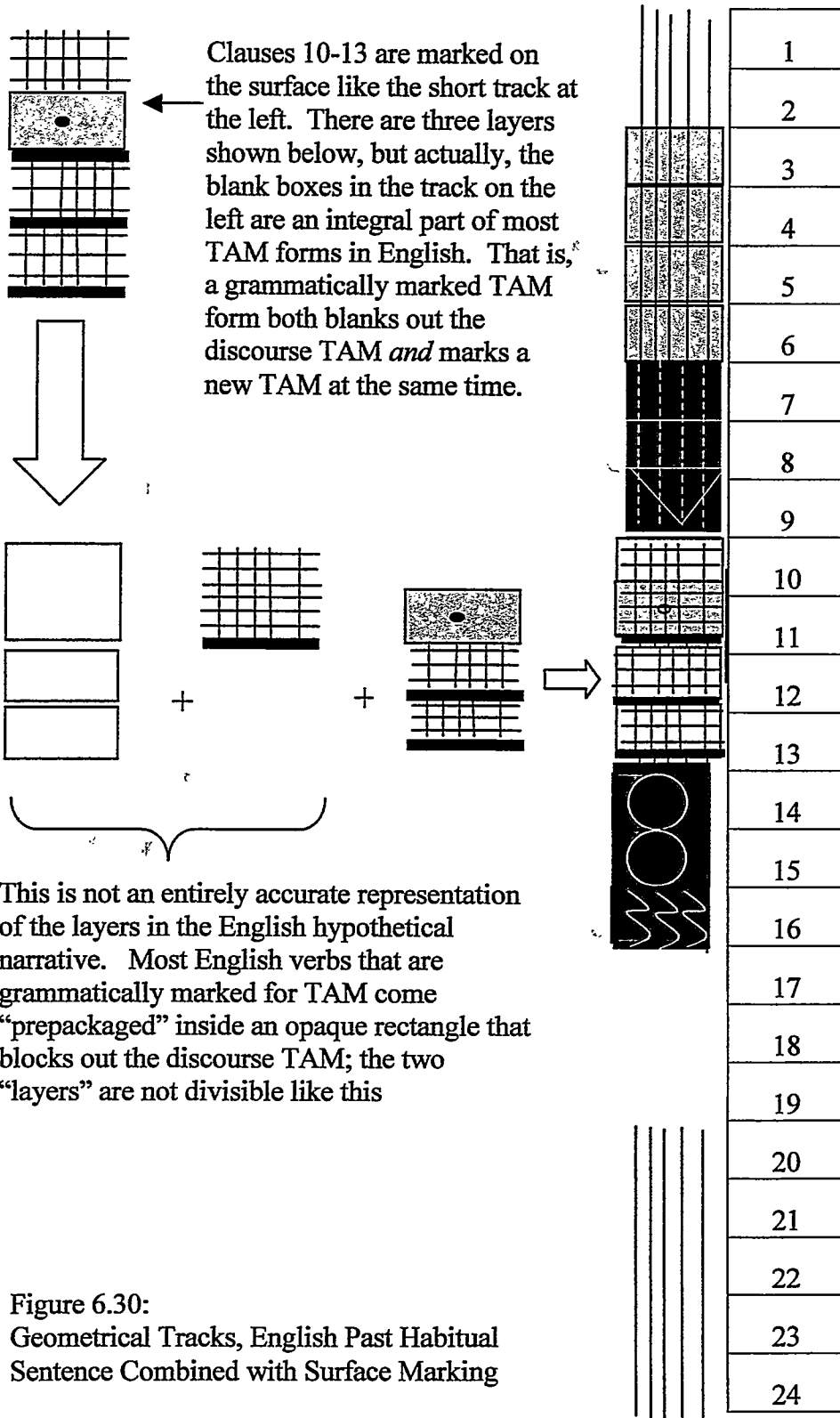
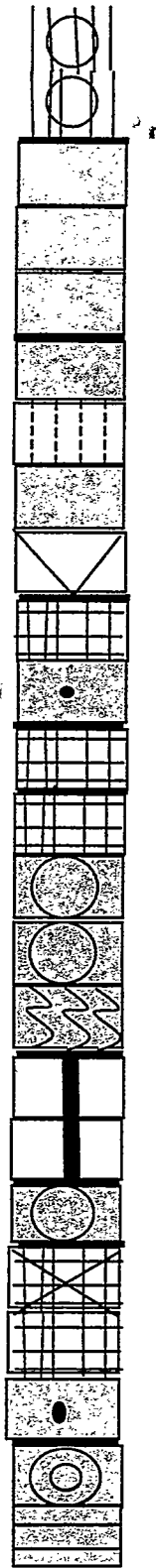


Figure 6.30:
Geometrical Tracks, English Past Habitual Sentence Combined with Surface Marking

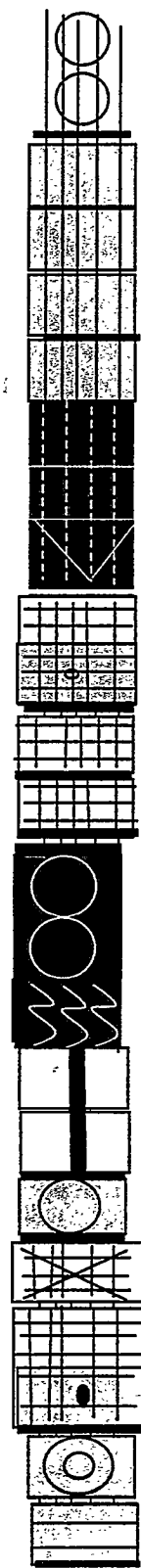
Take all the remaining surface marking



Add it to all the layers discussed so far

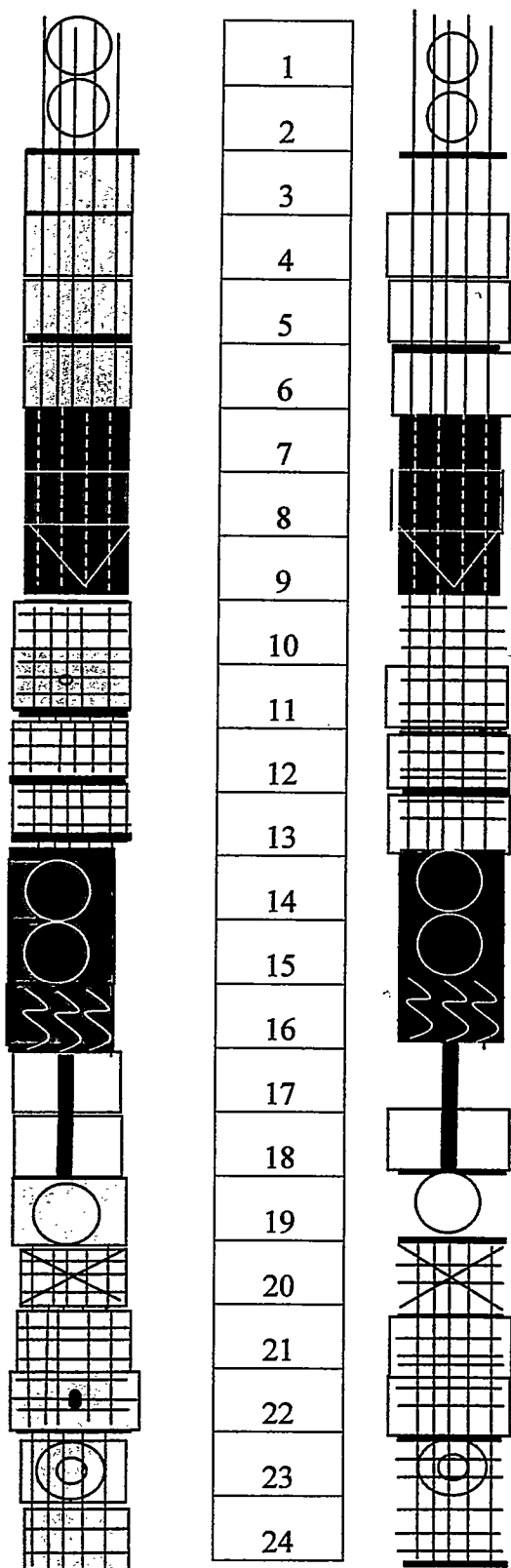


And the result is a track of the narrative as it is interpreted.



| |
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Figure 6.31
English Geometrical
Tracks



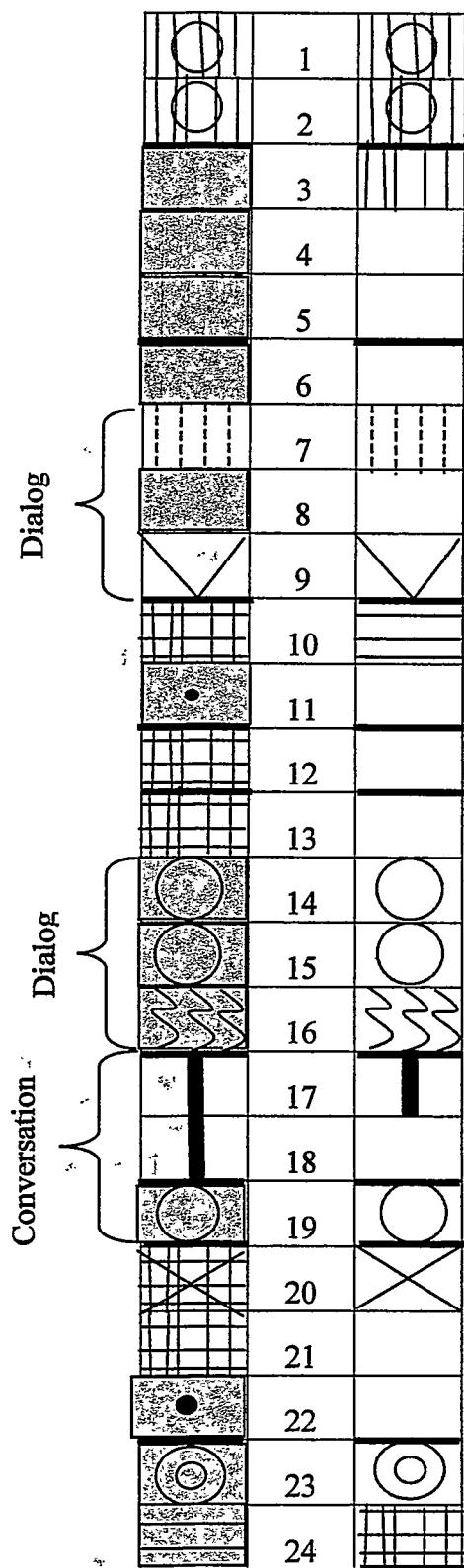
Comparing the complete Kuche track (to the right of the clause numbers) with the complete English track (to the left), it should be noted that there is a great deal of similarity.

Even though the main point of constructing the English track is not to point out similarities between English narrative and Kuche, it is a fact that should not go unmentioned.

Doubtless, in real narratives, interpretations of the "same" story would be vastly different from one language to another.

The main point of the English tracking is to demonstrate that transparency is a metaphor that is useful for understanding TAM in English discourse, not just Kuche. Transparency can account for English constructions such as the historical present (in clauses 3, 4, 5, and 6) and conjunction reduction (in clauses 11 and 22).

Figure 6.32:
Comparison of English Track with Kuche Track



This researcher proposes that many of the differences apparent in the surface tracks (English on the far left, Kuche on the near left) can be explained by the difference in the extent to which transparency is a part of the two different TAM systems. Whereas few TAM forms of English are transparent, in Kuche almost every TAM form is transparent, and the Unmarked verb is the most transparent of all. This is the feature that the Kuche verb has in common with consecutive verbs, the historical present, and the reduced verbs of conjunction reduction: transparency.

Figure 6.33:
Comparison of English Surface Track with
Kuche Surface Track

6.4 Constructing Transparent Discourse Tracks

The transparency demonstration on pages 207-232 addresses both research questions A and B (page 14). It demonstrates that a model can be constructed that explains TAM in Kuche discourse: a model that constructs discourse tracks on a number of transparent layers. It also identifies transparency as the feature that the Unmarked verb has in common with consecutive tenses and two models of the use of Present tense in narrative (historical Present and conjunction reduction).

A notational system that uses drawings to represent discourses and geometrical shapes to represent TAM forms is cumbersome to use. Chapter 7 translates the important concepts from the drawings above into a notations system that uses number and letter codes and the columns of a table.

CHAPTER 7

A FORMAL MODEL

7.1 Formatting Tracks as Tables

In order to test the model, tracks are constructed for the tabulated narratives similar to the tracks of section 6.3. However, the tracks in this chapter are not composed of rectangles filled with geometric shapes, but rather of rectangles filled with codes from Appendix C. For ease of construction, the rectangles are cells of a table, and columns of the table represent layers of TAM information, corresponding to the layers of the discourse tracks described in chapter 6. The layers that are necessary to evaluate the accuracy of the model for the tabulated texts are:

- I. Interactive Conversation track
 - A. Imperative tracks
 - B. Past Perfective tracks
 - 1. Habitual tracks
 - a. "If/then" tracks
 - b. Dialog tracks
 - i. Imperative tracks
 - ii. "If/then" tracks
- II. Surface TAM Marking

Each of the layers listed above heads a column of table 7.1 below, which is a short excerpt from the complete track of "Ados Kago." The first nine columns correspond exactly to the nine layers of discourse tracks displayed in figure 6.24.

Table 7.1: Excerpt from the Track of "Ados Kago"

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|-------------------|---------------------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations ¹ |
| 0.0530 | | | | | | | | n | 99,83,69 |
| 1.0000 | | 1.0000 | 1.0000 | | | | | t | 99,73,69 |
| 2.0000 | | 2.0000 | 2.0000 | | | | | U | 99,83,69 |
| 3.0000 | | 3.0000 | 3.0000 | | | | | s,a | 99,83,89 |
| blank | | | | | | | | U,ST ² | 89,63,89 |

The columns all represent types of domains, except for the last two: column 9 represents the individual clause marking and column 10 lists the expected interpretation of each clause. The TAM categories (the letter codes in column 9) are read straight off the morpho-syntactic marking in the clause and generally correspond to the codes in Appendix B. The semantic categories (the number codes in column 10) are generated by the nine principles of interpretation outlined below and also correspond to the codes in Appendix B.. In order to evaluate the accuracy of the model—which includes the nine principles of interpretation—the semantic interpretations generated by the principles are compared with the semantic codes assigned to each clause during the original coding phase of research. Accuracy is calculated as the percentage of generated interpretations that match the actual interpretations assigned.

¹ That is, the interpretations expected on the basis of the nine principles of interpretation listed in section 7.x.

² Codes besides those listed in Appendix B are required to complete the model. "U" means "the Unmarked form" and "ST" means "stative verb" (except for copula, which is already coded "c").

Transparency and embedding are not features of printed tables, but are represented by the placement of the information. Column 1 of table 7.1 should be visualized as the bottom layer, with the other columns all embedded in and stacked on top of it. For instance, the clause numbers under “Conversation” represents the fact that all the clauses are really a part of a conversation. The repetition of 1.0000, 2.0000, and 3.0000 under “Perfective” represents the fact that these three clauses are part of a past/perfective narrative³ embedded in the conversation. The repetition of 1.0000, 2.0000, and 3.0000 under “Habitual” represents the fact that these three clauses are part of a habitual narrative embedded in a past/perfective narrative embedded in the conversation. The columns that are blank in this sample represent layers that have smaller, embedded domains somewhere in the narrative. A clause is interpreted by a combination of its individual TAM marking (indicated in column 9) and the principles of every domain in which it occurs.

Principles of TAM in Each Domain

7.2 Principles for Combining Layers of TAM

7.2.1 A Summary

Nine basic principles describe how TAM forms are interpreted when they are embedded in Kuche narrative. Table 7.2 lists the general principles; they are outlined in greater detail in Table 7.3.

³ The beginning of the past perfective narrative occurs prior to this excerpt, and resumes here after a conversational interruption.

Table 7.2: General Principles of Interpretation

- Principle 1:** Interactive conversation is the unmarked context for human language. All clauses, discourses, and other domains are embedded in conversation.
- Principle 2:** Clauses of conversation (not embedded in smaller domains) need to be overtly marked for TAM, except as indicated.
- Principle 3:** Clauses of conversation that are overtly marked for TAM are interpreted according to their default meaning in tables 3.6-3.9 (pages 65-70).
- Principle 4:** An entire discourse can be marked past/perfective, or habitual, or future.
- A. To begin a past/perfective discourse embedded in conversation, mark the clauses at the beginning boundary with the prefix *nì-*.
 - B. To begin a habitual narrative—embedded either in conversation or in a past/perfective narrative—mark the clauses at the beginning boundary with the prefix *tá-*.
 - C. (Data incomplete) A discourse may also be marked as future oriented, but more data is needed to complete this part of the model.
- Principle 5:** To mark the end of an embedded discourse, combine 1st or 2nd person reference with one of the 3 cues indicated below.
- Principle 6:** Interruptions (conversation) and direct quotations are unaffected by the discourse TAM.
- Principle 7:** To interpret overtly marked clauses in the embedded discourse, adjust the discourse TAM and default meaning of the overtly marked verb as specified below.

Table 7.2: General Principles of Interpretation (Continued)

Principle 8: Smaller domains of TAM spreading may be embedded in larger domains, with further adjustments required (except for embedded direct quotation).

- A. Conditional mood may be embedded in conversation, direct quotation, past/perfective narrative, habitual narrative, or past/habitual narrative.
- B. Imperative mood may be embedded in conversation or direct quotation.

Principle 9: Unmarked verbs add zero meaning to the domain TAM.

The general principles outlined above provide a basic understanding of the process of interpreting clauses within domains. However, semantic categories are not numbers—they cannot simply be added together or averaged. The principles listed in table 7.2 do not make it possible to add habitual + conditional and say what the sum is with mathematical precision. It may seem intuitive to say that perfective + stative = a past state, but that is a detail that needs to be spelled out precisely. No claim to accuracy can be substantiated without clearly defined parameters. The details in the next section explain how the principles apply to every TAM situation encountered in the tabulated texts.

7.2.2 Details of the Principles

The goal of this section is to spell out precisely how Kuche grammatical categories interact on the various layers of a discourse track, and to define exactly which semantic categories are signaled by each combination of grammatical categories. The

grammatical category labels are listed in tables 3.6-3.9; the semantic category labels used in this research are:

- I. Time categories
 - A. Past
 - B. Future of Past
 - C. Present
 - D. Future
 - E. Timeless
 - F. No TAM⁴

- II. Aspect categories
 - A. Bounded, unique
 - B. Anterior
 - C. Non-unique
 - D. Durative
 - E. State
 - F. No TAM

- III. Modality categories
 - A. Real
 - B. Likely
 - C. Factual “if”⁵
 - D. Imperative
 - E. Unlikely
 - F. No TAM

The semantic categories are affected by the lexical verb as well as by the grammatical marking. For instance, the verbs ‘sit’ (also translated ‘to dwell in a certain place’) and ‘pass the night’ suggest duration, even if not marked Progressive. The category “stative” is only marked lexically; there is no grammatical marking that corresponds to it.

In the charted, coded texts, each clause has at least one grammatical label (even if that label is “verbless”) and exactly three semantic labels (except for the “verbless” clauses,

⁴ “No TAM” is a label applied to clauses that do not contain verbs and cannot be interpreted as having time reference: clauses like “Which Ude?” or “Yes” or “OK.”

⁵ The data do not contain any counter-factual “if” clauses, so the category “conditional” seems too broad and perhaps inappropriate to the clauses analyzed in this research.

which only have a TAM interpretation of zero “0”). The grammatical labels are based on the morpho-syntactic marking—or, in the case of “stative,” on the lexical verb—and the semantic labels are based on the clause’s translation and its context. The principles detailed above give instructions for figuring out a clause’s time reference, aspect, and modality based on the domains in which it is embedded, the grammatical marking on the verb, and the lexical aspect of the verb (i.e. “stative” or “dynamic”).

Table 7.3
Detailed Principles of Specific Combinations

The Unmarked Context: Interactive Conversation.

Principle 1: Everything is embedded in interactive conversation.

Principle 2: Clauses in interactive conversation only (i.e. not in any embedded domain) cannot be properly interpreted without overt TAM marking, except in these instances:

2. “Real” is not marked morphologically and is assumed to apply except when there is an irrealis marker in the clause; realis/irrealis does not change the tense/aspect of the verb except as specified in the model.
3. The Default time reference of conversation is ‘present’. Reference to other times must be specified either lexically or grammatically.
4. The Unmarked form of a stative verb is interpreted as ‘time indeterminate/state’.
5. The Unmarked form of a dynamic verb in an independent clause is interpreted as ‘present/aspect indeterminate’.
6. A verb in a dependent clause is interpreted as concurrent with the verb of the main clause—same time, same grammatically-marked aspect, same mood—as long as there is no overt marking to indicate otherwise.
7. Verb-deleted clauses are interpreted like Unmarked verbs in the same context, and verbless clauses are interpreted with no TAM.

Table 7.3: Detailed Principles (Continued)

- Principle 3:** An overtly marked verb in interactive conversation (i.e. not embedded in some smaller domain) is interpreted according to the Default meaning listed for it in Tables 3.6-3.9, with these clarifications.
- A. The Distributive form is an instance of derivational morphology and may change the lexical aspect of a verb to ‘non-unique’. However, interpretation of the derived verb’s TAM is more influenced by its grammatically-marked aspect than by the lexical ‘non-unique’ aspect.⁶
 - B. In clauses marked Intentional (see table 3.8, form 27) the lexical verb is interpreted as ‘future/aspect indeterminate/likely situation’.
 - C. In an if-then sentence (see table 3.8, form 26 *tù* ‘if’), the lexical verb(s) in the protasis are interpreted as ‘future/aspect indeterminate/conditional mood’ and the verbs in the apodosis are interpreted as ‘future/aspect indeterminate/likely situation’.
 - D. Negatives—either the prefix *sà-* or the serial construction with *tègèk*—affect only the modality of a clause, not time or aspect.
 - E. Serial or auxiliary constructions not listed in Tables 3.7 or 3.8 are interpreted according to the overt marking on either verb—if neither verb has any TAM marking, they are interpreted like an Unmarked verb in the same context.
 - F. Constructions that mean ‘aspect’ of some kind (except for Perfective *nì-*, which is treated separately) do not change the time or modality of the domain in which they are embedded.
 - G. Constructions whose time reference or aspect is labeled ‘indeterminate’ in the model may have secondary TAM-marking for time or aspect—marked either on the entire domain or on the individual verb—and be interpreted accordingly.

⁶ Two derived verbs in the narratives are interpreted ‘non-unique’: *if-sí* ‘do repeatedly’ and *nī-sí* ‘give one by one’. Two others occur frequently in the narratives and are not usually interpreted ‘non-unique’; instead they are consistently interpreted according to any grammatically-marked aspect: *dī-sí* ‘teach’ (from *dī* ‘tell’) and *wú-sù* ‘burn up’ (evidently from ‘burn’, form unknown).

Table 7.3: Detailed Principles (Continued)

- H. Imperative verbs are perfective (unless otherwise marked) and always refer to future time.
- I. Unless overtly marked otherwise, Decisive verbs are ‘future/perfective/likely situation.’
- J. Infinitives are ‘future time/aspect indeterminate/likely situation’.
- K. The nominalized proposition represented by a present participle (in a construction other than the Progressive construction in Table 3.7, form 20) is to be interpreted as concurrent with the predicate of the main clause: it refers to the same time, same mood, aspect inferred from the lexical aspect of the nominalized verb.
- L. Verb forms that are not well understood (specifically Subjunctive *bī-*, falling tone, and rising tone) and verbs that mean ‘also’, ‘even’, and ‘again’ (specifically *ɣá-*, *ʃā-*, *bā-*, *yá-*, and *zī-*) are interpreted as if these markings had no effect on TAM.⁷
- M. Except for direct quotations, clauses in an embedded domain are subject to the rules of each larger context—interactive conversation being the largest context—in addition to the rules of the embedded domain. The principles described below explain how an embedded domain may add a layer of meaning to a verb’s Default meaning (its meaning in conversation)—and in a few cases, how domain TAM and individual verb TAM must be compromised when the markings co-occur.

The Marked Context: Narrative

Principle 4: An entire narrative can be marked either (A) past, perfective, and real (as in a unique narrative) or (B) any time orientation, habitual, and real (as in a habitual narrative). Although the data is incomplete, it is apparently possible

⁷ The subjunctive prefix *bī* functions fairly predictably in interactive conversation, but its interpretation in narrative is not well understood. Principle 3L does not make the correct prediction 100% of the time, but the inaccuracy it introduces is negligible. It is expected that further research might be able to refine and expand the model to make more specific predictions about more of the TAM forms.

Table 7.3: Detailed Principles (Continued)

also to mark an entire discourse for (C) future. The grammatically marked tense, aspect, and mood of certain verbs at the beginning of the discourse spread to subsequent clauses of the discourse according to principles 4-9; if a specific principle contradicts a more general principle, the specific principle applies instead of the general one. The aspect labeled “Stative” is lexically indicated and does not spread.

- A. Verbs marked with the prefix *nì-* occur at the beginning boundary between Past Perfective narrative and the discourse in which it is embedded—typically interactive conversation. The marked verbs may occur in the last few conversation clauses (identified by 1st & 2nd person references) and/or the first few narrative clauses.
- B. Verbs marked with the prefix *tá-* occur at the beginning boundary between habitual narrative and the discourse in which it is embedded. If it is embedded in a discourse already marked Past Perfective (by Principle 4A), the entire narrative should be interpreted as past habitual.
- C. Further research is needed to determine what overt verb marking is needed to mark an entire discourse future. It is assumed that such an investigation would reveal some principles that could be labeled 4C-9C, analogous to the other discourse-interpretation principles.

Principle 5: The terminal boundary of discourses are marked.

- A. Folk tales may end abruptly, presumably because native speakers are familiar with them and recognize the end. Other perfective narratives have Closures consisting of first person reference combined with
 - (a) a fronted copula complement and/or
 - (b) a reference to those who told the story or the lesson the story teaches and/or
 - (c) verb(s) overtly marked with the prefix *nì-*.
- B. Closure of habitual narratives consist of first person reference combined with:

Table 7.3: Detailed Principles (Continued)

- (a) a fronted copula complement and/or
- (b) a reference to those who told the story or the lesson the story teaches and/or
- (c) verb(s) overtly marked with the prefixes *nì-* and/or *tá-*.

Principle 6: Interruptions (conversation) and direct quotations are unaffected by the discourse TAM.

- (a) TAM does not spread to conversation that is off the story topic—identified by 1st & 2nd person reference and semantics. TAM does not spread to direct quotations (i.e. story dialog) —introduced by a verb of saying plus *nā* ‘that’ and containing 1st & 2nd person reference. In such contexts, verbs are interpreted as in conversation.
- (b) The principles of discourse TAM-spreading do apply to conversation if the listener’s interruption helps to construct the story. In those instances, the discourse-TAM spreads to verbs in the conversation just as if they were part of the narrative.

Principle 7: To interpret overtly marked verbs after the boundary-marking verb, make adjustments as described below.

A. Within a perfective narrative:

- (a) Constructions whose time or aspect interpretation is ‘indeterminate’ for interactive conversation may have secondary TAM-marking for time or aspect; otherwise, in the past perfective narrative, the time and aspect of each clause is ‘past/perfective’.
- (b) Where the verb form is incompatible with perfective aspect (i.e. states, progressive aspect, habitual aspect), interpret as ‘past tense/aspect of individual verb’.
- (c) Copular sentences marked *nì-* (redundantly) are interpreted as ‘past/state’.
- (d) Dynamic verbs marked *nì-* (and no other TAM marking) are interpreted as ‘past/anterior’, unless they are at the boundaries of the discourse.

Table 7.3: Detailed Principles (Continued)

- (e) Infinitives and Clauses marked Intentional (a serial verb construction beginning with the lexical verb *tā*) are interpreted as ‘future of past/perfective/likely situation’.
- (f) In an if-then sentence, the lexical verb(s) of the protasis are interpreted as ‘past/perfective/conditional’ and the verbs of the apodosis ‘past/perfective/likely situation’.
- (g) Other overt markings do not change the past perfective at all, but add elements like ‘emphasis’, ‘also’, ‘again’ and the like.

B. Within a habitual narrative:

- (a) Constructions whose time reference or aspect is labeled ‘indeterminate’ for interactive conversation may have secondary TAM-marking for time or aspect; otherwise, in the habitual discourse, the time is the same as the discourse in which it is embedded, aspect is ‘habitual’.
- (b) Where the verb form is not entirely compatible with habitual aspect (i.e. states, progressives, perfective), interpret as ‘time indeterminate/aspect of the individual verb’.
- (c) Copular sentences marked *nì-* should be interpreted as ‘past/state’.
- (d) The time and mood of if-then sentences, clauses marked Intentional, and Infinitives are interpreted as in the next larger domain (i.e. like conversation if embedded in conversation or direct quotation, like a perfective discourse if embedded in perfective discourse).
- (e) Other overt markings do not change the tense or habitual aspect at all, but add elements like ‘emphasis’, ‘also’, ‘again’ and the like.

Principle 8: Smaller domains of TAM spreading may be embedded in larger domains, with further adjustments required. (NOTE: Each direct quotation is an embedded domain completely unaffected by the discourse-TAM. Clauses of direct quotation are interpreted as in interactive conversation).

Table 7.3: Detailed Principles (Continued)

- A. Conditional mood may be embedded in conversation, direct quotation, past/perfective narrative, habitual narrative, or past/habitual narrative. Conditional sentences embedded in any domain are ‘conditional mood’ followed by ‘likely situation’. A clause containing a serial construction comprised of *tù* with a subject agreement prefix and a lexical verb with the same subject agreement prefix is to be interpreted as conditional mood. Each clause conjoined to the Conditional clause that is overtly marked for some aspect or overtly marked Subjunctive mood (prefix *bī-*) or Unmarked is also conditional mood, as long as the conjunction is not the delimiting conjunction (typically the clitic *à-* ‘then’). From the beginning of the apodosis (the first clause introduced with *à-* ‘then’) up to the end of the sentence, clauses are interpreted as ‘likely situations’. Tense and aspect of the next larger domain remain in effect and are interpreted according to principles 7 and 9.
- B. Imperative mood may be embedded in conversation or direct quotation. Imperative mood embedded in conversation or direct quotation marks the entire sentence as imperative, as long as the subsequent verbs are marked for 2nd person singular subject agreement. Imperative mood is marked by the use of a bare lexical verb, with no subject agreement prefix; aspects other than Default (perfective) may be marked. If an Imperative verb begins a sentence, the subsequent verbs are imperative, provided they are marked for agreement with second person singular subject (the same subject as the Imperative verb) and provided that those subsequent verbs are Unmarked, or marked Subjunctive (*bī-*) or redundantly marked Perfective (*nī-*). Aspect of the subsequent verbs is the same as the aspect of the initial Imperative-marked verb.

Table 7.3: Detailed Principles (Continued)

Principle 9: An Unmarked dynamic verb is interpreted with the TAM interpretation of the smallest domain in which it is contained. An Unmarked stative verb is interpreted ‘time of the smallest domain/state/mood of the smallest domain’.

7.3 Constructing Discourse Tracks for Kuche Narratives

7.3.1 A Track for “The Frog and the Fly”

“The Frog and the Fly” is an easy text to examine as an example, in table 7.4.

Discourse tracks for the other four tabulated narratives are in Appendix F. In column 1, “conversation,” the clause sequence numbers are listed for the twenty clauses of this story. Most of the clauses are also included in an embedded perfective narrative, as indicated by the repetition of their clause numbers in column 3. Embedded dialog clauses are not influenced by the perfective marking of the entire narrative, but are interpreted by the same principles as interactive conversation; this fact is represented by the dashed arrows in the perfective column.

Principle 5 (pages 243-244) specifies the linguistic cues that define the limits of embedded domains; most of these linguistic cues are not TAM categories but some other kind of grammatical marking or semantic cue. Though the embedded domains are already indicated by the repetition of clauses in the corresponding columns, grammatical markings which cue the boundaries of domains are also listed in column 9. The occurrence of a first or second person pronoun in a clause is indicated by the codes “1st” or “2nd,” and the occurrence of the alternative form of ‘be’ is indicated by “aʃeε.” In other tracks for the

Table 7.4 The Discourse Track of "The Frog and the Fly"

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|---------------------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 0.0010 | | | | | | | | c
1st ⁸ | 89,63,69 |
| 1.0000 | | 1.0000 | | | | | | n | 99,83,69 |
| 1.1000 | | 1.1000 | | | | | | i | 94,83,64 |
| 1.2000 | | 1.2000 | | | | | | U | 99,83,69 |
| 1.3000 | | 1.3000 | | | | | | b | 99,83,69 |
| 1.3100 | | 1.3100 | | | | | | c | 99,63,69 |
| 1.3200 | | 1.3200 | | | | | | a,c | 99,63,69 |
| 2.0000 | | 2.0000 | | | | | | U | 99,83,69 |
| 3.0000 | | 3.0000 | | | | | | U | 99,83,69 |
| 3.0001 | | → | | | 3.0001 | | | o,s,n
2nd | 84,83,54 |
| 4.0000 | | 4.0000 | | | | | | U | 99,83,69 |
| 4.0001 | | → | | | 4.0001 | | | u,o,a,s,n
2nd | 84,83,54 |
| 4.0100 | | 4.0100 | | | | | | g | 99,83,49 |
| 5.0000 | | 5.0000 | | | | | | s,p | 94,68,64 |
| 6.0000 | | 6.0000 | | | | | | s | 99,73,69 |
| 7.0000 | | 7.0000 | | | | | | U | 99,83,69 |
| 8.0000 | | 8.0000 | | | | | | s,x | 99,83,69 |
| 8.0100 | | 8.0100 | | | | | | s | 99,73,69 |
| 9.0000 | | 9.0000 | | | | | | r | 99,83,69 |
| 9.0010 | | | | | | | | c,l
1st,
af ^{ee} | 89,63,69 |

⁸ It is necessary to code some other information besides just TAM categories. The other codes are explained below.

other narratives, various semantic cues are indicated in this column simply by the word “semantics.”

Each clause is assigned three semantic interpretations, which are listed in column 10: a time reference, an aspect interpretation, and a modality. The numbers listed in column 10 correspond to the codes (as listed in Appendix B) for the semantic categories generated by the principles of interpretation. The numbers in column 10 that do not match the codes actually assigned during the coding phase of this research are listed in bold-faced type. Accuracy is calculated as the percentage of correct interpretations out of 60. That is, the three semantic categories for each clause are not combined together as if they formed one unitary interpretation: they are counted separately.

During the process of assigning semantic categories based on the principles of interpretation, this researcher discovered that the principles make reference to subcategories of the categories that are coded in Appendix C. For instance, all serial verb constructions are coded the same, with an “s,” but principle 7.A.e refers to a subcategory of serial verb constructions: those that begin with a specific lexical verb *tā*. In such cases, it was inadequate to refer just to the coded information; the extra information required was read off the sentence, not just off the codes listed in the discourse track.⁹

7.3.2 Checking the Accuracy for “The Frog and the Fly”

Table 7.5 lists all the predictions made for the narrative “The Frog and the Fly” and explains how the various principles were applied to make the predictions. The predictions that are incorrect are in bold face type.

⁹ In an ideal scenario, I would go back and revise the coding system to reflect all the subcategories mentioned in the principles of interpretation. In the interest of time, I am not doing that.

For the 20 clauses in “The Frog and the Fly,” there are 60 predictions to be made, three for each clause. The model makes 55 correct predictions, for an accuracy rate of 92%. It is possible that the principles or some other part of the model could be fine-tuned to a higher degree of accuracy, but it would require more data.

Table 7.5
Time/Aspect/Modality Predictions for
“The Frog and the Fly”
Based on the Model

| | | |
|-------------|---|--|
| 0.0010
c | 89 ‘Present’
63 ‘State’
69 ‘Real’ | Principle 2A: The default time of conversation is present.
Principle 2C: The unmarked form of a stative verb is ‘state’
Principle 2B: Realis is unmarked |
| 1.0000
n | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 3: An overtly marked verb is interpreted according to its default meaning in Tables 3.6-3.9
Principle 4A: n̄ at the boundary of a discourse marks the entire subsequent discourse ‘past/perfective’
Principle 2B: Realis is unmarked |
| 1.1000
i | 94 ‘Future of Past’
83 ‘Perfective’
64 ‘Likely situation’ | Principle 7A(e): Infinitives in a past perfective narrative are ‘future of past/perfective/likely situation’ |
| 1.2000
U | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 9: An Unmarked dynamic verb has the same TAM as the smallest domain in which it is contained. The verb that begins this narrative (clause 1.0000) marks it ‘past/perfective’ and it’s realis by default (by Principle I2B). |
| 1.3000 | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 3L: The Subjunctive (bī-) is not well understood and is interpreted as if this mark had no affect on its TAM. Since there is no other marking, it is interpreted like an Unmarked verb in this context (as described in Principle 9). |

Table 7.5: TAM Predictions for “The Frog and the Fly” (Continued)

| | | |
|---------------------|---|---|
| 1.3100
c | 99 ‘Past’
63 ‘State’
69 ‘Real’ | Principle 7A(b): Where verb form is incompatible with a perfective interpretation, just interpret as ‘past/aspect of the individual verb.’
Principle 2C: The Unmarked form of a stative verb is ‘state’.
Principle 2B: Realis is not marked. |
| 2.0000
U | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 9: An Unmarked dynamic verb has the same TAM as the smallest domain in which it is contained. The verb that begins this narrative (clause 1.0000) marks it ‘past/perfective’ and it’s realis by default (by Principle 2B). |
| 3.0000
U | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 9: An Unmarked dynamic verb has the same TAM as the smallest domain in which it is contained. The verb that begins this narrative (clause 1.0000) marks it ‘past/perfective’ and it’s realis by default (by Principle 2B). |
| 3.0001
o, s, n | 84 ‘Future’
83 ‘Perfective’
54 ‘Imperative’ | Principle 6(a): TAM does not spread to direct quotes; they are interpreted just as in conversation.
Principle 3H: Imperative verbs are perfective by default and always refer to future time.
Principle 3: Verbs are interpreted according their default meaning listed in tables 3.6-3.9; i.e. Imperative form is interpreted as ‘imperative’ 54. |
| 4.0000
U | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 9: An Unmarked dynamic verb has the same TAM as the smallest domain in which it is contained. The verb that begins this narrative (clause 1.0000) marks it ‘past/perfective’ and it’s realis by default (by Principle 2B). |
| 4.0001
u,o,a,s,n | 84 ‘Future’
83 ‘Perfective’
54 ‘Imperative’ | Principle 6: TAM does not spread to direct quotes; they are interpreted just as in conversation.
Principle 3H: Imperative verbs are perfective by default and always refer to future time.
Principle 8B: The Perfective prefix is redundant.
Principle 3: Verbs are interpreted according the their default meaning listed in tables 3.6-3.9; i.e. Imperative form is interpreted as Imperative.
The 2 nd person independent pronoun subject has no affect on TAM. |

Table 7.5: TAM Predictions for “The Frog and the Fly” (Continued)

| | | |
|----------------|---|--|
| 4.0100
g | 99 ‘Past’
83 ‘Perfective’

49 ‘Unlikely situation’ | Principle 7A(a): In a past perfective narrative, the time and aspect are ‘past/perfective’. The modality would be realis (by Principle 2A), except that it is overtly marked irrealis. Principle 3D: Negative marking affects only the modality, not time or aspect.
Principle 3: Forms are interpreted according to their Default meaning in tables 3.6-3.9 (i.e. Negative forms are negative, labeled here ‘unlikely situation’ 49). |
| 5.0000
s, p | 94 ‘Future of Past’
68 ‘Durative’
64 ‘Likely situation’ | Principle 7A(e): In a past perfective narrative, the Intentional construction (coded simple “s” here) is ‘future of past/ perfective/likely situation’.
Principle 7A(b): If the verb form is incompatible with a perfective interpretation (here progressive), interpret according to the aspect of the individual verb (‘durative’ 68). |
| 6.0000
s | 99 ‘Past’
73 ‘Non-unique’
69 ‘Real’ | Principle 7A(a): In a past perfective narrative, the time and aspect are ‘past/perfective’. Realis by default (Principle 2A). Principle 7A(b): If the verb form is incompatible with a perfective interpretation (here, the complete verb reduplication), interpret ‘past/aspect of the individual verb.’
Principle 3: Interpret verbs according to their default meaning in tables 3.6-3.9; the Intense form can indicate prolonged or quickly repeated or intense action, here interpreted to mean a quickly repeated series of grunts. |
| 7.0000
U | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 9: An Unmarked dynamic verb has the same TAM as the smallest domain in which it is contained. The verb that begins this narrative (clause 1.0000) marks it ‘past/perfective’ and it’s realis by default (by Principle 2B). |
| 8.0000
s, x | 99 ‘Past’
83 ‘Perfective’
69 ‘Real’ | Principle 3: Interpret verbs according to their default meaning in tables 3.6-3.9; the Inceptive form (the auxiliary) is perfective, so it is compatible with the discourse TAM of ‘past/perfective.’ The serial construction is not listed in table 3.8, so, by Principle 3E, it is interpreted simply by the TAM marking on the Inceptive construction. |

Table 7.5: TAM Predictions for “The Frog and the Fly” (Continued)

| | | |
|----------------|---|--|
| 9.0000
r | 99 ‘Past’
83 ‘Perfective’

69 ‘Real’ | Principle 3L: The rising tone is not well understood, but it is interpreted as if this mark had no bearing on TAM. Since there is no other mark on the verb, it is interpreted just like an Unmarked verb in this context.
Principle 9: An Unmarked dynamic verb has the same TAM as the smallest domain in which it is contained. The verb that begins this narrative (clause 1.0000) marks it ‘past/perfective’ and it’s realis by default (by Principle 2B). |
| 9.0001
c, l | 89 ‘Present’
63 ‘State’
69 ‘Real’ | Principle 2A: The default time of conversation is present.
Principle 2C: The unmarked form of a stative verb is ‘state’
Principle 2B: Realis is unmarked |

7.3.3 Accuracy Rates for All Narratives

The accuracy of the model is around 90% for each of the tabulated narratives except for “Ados Kago,” as shown in table 7.6 below. The reason the model is less accurate for “Ados Kago” could be because that particular narrative contains numerous conversational interruptions, and the model does not work as well for interactive conversation as it does for narrative. Even so, an overall accuracy rate of 87% is important.

Table 7.6: Accuracy of TAM Interpretations Predicted by the Model

| Title of Narrative | Predictions | Correct Predictions | % Accuracy |
|--------------------|-------------|---------------------|------------|
| White Man | 499 | 433 | 93% |
| Raids | 318 | 287 | 90% |
| Ude | 336 | 305 | 91% |
| Ados Kago | 294 | 238 | 81% |
| Frog & Fly | 60 | 55 | 92% |
| Total | 1,507 | 1,318 | 87% |

7.4 Transparent Verbs

The feature of Kuche narrative that caught the attention of this author before beginning this study was: why is Unmarked form used so frequently with such a variety of meanings? Early research suggested that the form might be a Simple Present tense form. Longacre (personal communication) suggested that its use in narrative might be consistent with a historical Present, and this also seemed reasonable. Evidence from elicitation was not altogether consistent with such an analysis, but it was expected that further research would reconcile the discrepancy. Further research did indeed help to clarify the analysis, but not in the direction expected.

The confusion may begin with the fact that Unmarked verbs in Kuche do have some characteristics in common with Present tense forms cross-linguistically: they are used to express two of the four “aspectual types” that Present tenses frequently refer to.¹⁰ Bybee (1994b:126-141) observe that cross-linguistically the Present “tense” is not so much a tense as it is a cluster of aspectual types. “What present covers are various types of imperfective situations with the moment of speech as the reference point” (126). However, Kuche being much more an aspect-marking language than a tense-marking language, it should be no great surprise to find no uniformly marked category that can be labeled “Present tense;” instead, there are various grammatically-marked aspects that can refer—depending on context—to the present.

Much of the literature on the Present tense in narrative seemed to confirm the conclusion that the Kuche Unmarked verb was a Present tense form. Fleischman (1990)

¹⁰The gnomic present and states that exist at the moment of speech, but not habitual nor progressive.

describes the distribution and interpretations of Present tense verb forms in Romance narratives and Kiparsky (1969) describes the use of Present tense forms in conjunction reduction in early Indo-European. Even though in Tamil narrative, as described by Herring (1985), the Present tense forms are used in certain backgrounded portions of the narrative, the data supports the generalization that it is the Present tense that is selected when speakers want a verb form that is non-specific about time. Herring calls it “the Indeterminate Present (41). The key here is the word “indeterminate.”

“Indeterminateness” is an essential element—perhaps the most essential element—in the concept of “unmarked.” As Battistella says:

As Moravcsik and Wirth (1986:3) observe, a “classical” version of markedness can be defined that relies on three types of criteria: the distribution of elements, the amount of structure they have, and their elaboration in terms of subtypes. . . .As I examine these criteria in more detail, I will define a version of markedness in which markedness values in a particular language can be determined by a coalescence of properties—optimality, breadth of distribution, syncretization, **indeterminateness**, simplicity, and prototypicality.
(1990:26, bolding added)

He goes on to insist that, even though there are other correlates of unmarkedness, “the semantic criterion of **indeterminateness** expressed in Jakobson’s definition should be given priority” (1990:45). And then he explains semantic indeterminateness:

The unmarked element thus has two interpretations: it has a general interpretation in which the nonsignalization of the marked feature indicates the irrelevance of the poles of the opposition; and it has a specific interpretation in which the nonsignalization of the marked feature indicates the signalization of the opposite. The double use of the unmarked term both to signal the logical opposite of the unmarked feature and to deny the assertion of the marked feature reflects a natural economy: two poles of a particular feature may define three values.
(Battistella 1990:2)

Compare Battistella's characterization of "the unmarked element" with Bolinger's characterization of the English Simple Present tense:

We might call the simple present tense the BASE TENSE, to which all other tenses are oriented but which is itself oriented to nothing, expressing merely the FACT OF PROCESS. The simple present . . . is 'timeless' not in the sense of 'eternal' but of 'non-committed about time.' Whenever, then, the speaker wishes to avoid the confinement of time implicit in other tenses, he uses the simple present.

(Bolinger 1947:436)

What Bolinger posits for the English Simple Present, Fleischman (1990:54) also maintains for the Present tense in Romance languages. She says that the contrast between a Past tense and a Present tense in Romance narrative is often not a contrast between "marking of past time" and "marking of non-past time." Rather the contrast is between "marking of (past) time" and "non-marking of past time." The most important characteristic that the Kuche Unmarked verb has in common with English (and Romance) Present tense is indeterminateness, a key feature of Unmarkedness.

However, indeterminateness and reference to the present time need not be bound together in a single form. As Kiparsky (1968) demonstrates, there are verb forms in early Indo-European languages which combine present reference with indeterminateness, but there are other forms in related languages that are indeterminate without being identical to Present tense forms; these are called Injunctive verb forms. Injunctive forms are atypical in that, unlike most "unmarked elements"—as in the quotation from Battistella above—there are not two interpretations, both the irrelevance of the marked feature and the opposite of the marked feature. The Injunctive forms indicate only the irrelevance of the marked feature. He compares them with certain African language verb forms:

E.g. Maasai (Tucker and Mpaayei, 1955) has a special 'N-tense', which serves precisely to **neutralize** the category of tense and the category of mood.¹¹ Thus in conjunction, all verbs but the first are put into this 'N-tense', with the first verb indicating the underlying tense of the entire string of coordinated sentences, e.g. *ki-etuo* (past) *añ ni-k-irrag* (N-tense) 'we came home and slept'. . Exactly such a system is also found in the unrelated (Bantu) language Tswana (Cole, 1955, 445); Cole, however, calls the zero tense a 'subjunctive', perhaps because it is used, beside in conjunction, also in complements. Other Bantu languages with 'narrative tenses' that **neutralize** tense and mood in conjoined structures are Herero, Duala (the form is here called an 'aorist'), and Swahili (Meinhof, 1948, 188-9).
(Kiparsky 1968:36, bolding added)

What Kiparsky calls "N-tense" or "narrative tense" is identical, or at least nearly identical, to what Longacre (1990:109) calls "Consecutive tense." A Consecutive form follows an initial verb and has no tense/aspect interpretation of its own: the tense and aspect (and usually the mood, too) is read off the initial verb in the chain. The forms could be described as *transparent*—the tense, aspect, and mood of the initial verb shows through.

The Injunctive forms and Consecutive forms share this characteristic transparency with the Kuche Unmarked verb and certain Present tense forms, as mentioned in research question (B). The historical Present has not traditionally been interpreted thus: it is usually interpreted as a "past more vivid." The fact is, even in English narratives where the historical Present represents a "past more vivid," the actual time reference must be read off a few initial Past tense verbs: the reader (or listener) must look through the Present tense forms and retrieve the tense/aspect information from verbs that occur early in the narrative.

¹¹ As mentioned on page 44 of this volume, Kiparsky does not mention the grammatical category "aspect," apparently subsuming it under the term "tense."

CHAPTER 8

CONCLUSIONS

The question that motivates this research is: How do speakers of Kuche know how to interpret verb forms in narrative? The translation of verb forms in narrative is vastly different from the translation of verb forms in isolated sentences. There must be cues—either linguistic or contextual cues, or both—that signal the appropriate interpretation, but those cues are not immediately evident at the surface. In the early stages of language analysis, it seemed that the Unmarked verb was the key to figuring out the Kuche TAM system. I thought that when I figured out the Unmarked form, I would figure out the whole system. However, the reality is quite the other way around—I had to figure out the whole system before I could understand the Unmarked form. And the “system” depends heavily on the fact articulated in this volume on page 148¹: “unmarked” is a relative term. All the verbs of Kuche are unmarked for something (that is, no verb has **every** mark that is available). It's just that the Unmarked verb is **unmarked for everything**.

8.1 An Accurate Model

The first part of the research question asks if a model can be constructed that accurately reflects how verbs are interpreted in various contexts. Specifically, it asks:

¹ On page 148, I write, “And the ‘consecutive’ verb forms have very little in common: what they really have in common is what is *not* marked on them—they are *not* marked again for that initial feature, either Perfective or Habitual. The frequency of the completely Unmarked verbs is overwhelming, but a key feature of these texts is that all of the “consecutive” forms are formally unmarked for the one semantic feature that permeates every clause of the story.”

Does a theoretical model analogous to phonological feature-spreading explain the distribution of certain overtly-marked verb forms and the interpretation of relatively unmarked forms that follow in discourse?

A model analogous to phonological feature-spreading is proposed in chapter 6 and it is applied to the narrative “The Frog and the Fly.” However, that model is rejected for three reasons: (1) it suggests that some physical feature of the initial verb attaches to the subsequent verbs, (2) it gives preeminence to the clause rather than to the text, and (3) a model based on transparency and embedded domains is better suited to the data.

The alternative model—discourse tracks based on the metaphor of transparent, embedded domains—does indeed accurately represent the use of TAM forms in embedded domains. The domains are represented by columns of clauses numbers and the overt marking of TAM in each clause is represented by the letter codes in column 9. The information in these two columns combine with the nine principles of interpretation (listed in section 7.x) to yield three predictions that appear in column 10. The categories that are predicted in column 10 are the time reference of the clause, the aspect interpretation, and the modality. Eighty-seven percent of the predictions are correct.

8.2 Four Kinds of TAM Domains

Question A asks if the model can accurately explain four different kinds of TAM domains. The question reads:

- A. Can the model be constructed so that it accurately represents the use of TAM forms in embedded domains? Particularly, how are verbs interpreted when they fall within the domains of the widely used forms listed below, and how are these four domains defined?

- i) The Perfective prefix *nì-*.
- ii) The Habitual prefix *tá-*.
- iii) The Conditional construction: a serial construction in which the first verb is *tù*.
- iv) The Imperative form: a verb with no subject agreement prefix.

Though no goal for accuracy was specifically articulated in the research question, an accuracy rate for the predictions of 87% overall is an important result.

Question A specifically asks how a domain associated with the Perfective prefix *nì-* can be defined. Section 5.3.1 identifies the entire narrative as a typical domain of *nì-*. The beginning of the domain is identified by occurrences of *nì-* with stative verbs followed by at least one occurrence of *nì-* with a dynamic verb. The end of the narrative involves a resumption of first and second person pronouns, often combined with language-specific cues: the most distinctive of these cues is the use of the alternative form of 'be' *afèè*.

Question A also asks how verb forms are interpreted within the domain of *nì-*. Principle 7.A lists the interpretations to be expected for every verb in the data that occurs within such a domain.

The same two questions are posed for the Habitual prefix *tá-*: how is a domain defined and how are verb forms interpreted within such a domain? This research does not answer this question as well for *tá-* as it does for *nì-*. *tá-* can have a narrative as its domain or it can have a sentence as its domain: An occurrence of *tá-* signals the beginning of a domain, and the end is signaled either by the narrative's end, as described in the last paragraph or by the sentence's end. For purposes of the model, the end of a *tá-* domain had to be determined from the English translation, because no precise linguistic construction

was identified in Kuche that would cue the terminal boundary accurately. Principle 7.B lists the interpretations to be expected for verb forms within the domain of *tá-*.

The Conditional form has the sentence as its domain. A sentence that begins with the Conditional serial verb (*tò*) is marked as a conditional sentence. All the verbs in a conditional sentence are interpreted as if they were also marked Conditional, up to the apodosis. The beginning of the apodosis is signaled by the use of the clitic conjunction *à-* ‘then’. The verbs after the apodosis in a conditional sentence are interpreted, not as Conditional, but as ‘likely situations’. Further details about the verbs within a Conditional domain are outlined in Principle 8.A.

The Imperative form also has the sentence as its domain, but its impact may be curtailed before the end of the sentence by certain overtly marked forms. If a verb with the Imperative sentence is marked for a 1st or 3rd person subject, then that ends the Imperative domain; if a subsequent verb is marked Progressive, that also ends the Imperative domain. More details are outlined in Principle 8.B.

8.3 A Common Characteristic

The second half of the research question asks about the Unmarked verb in Kuche. Does it have characteristics in common with Longacre’s (1990) category “consecutive tense?” Do consecutive tenses have something in common with the simple Present tense in narrative? The question reads:

- B. Is the use of the Unmarked form in Kuche narrative explained by integrating Longacre’s (1990) notion of consecutive tenses with various models of the simple present tense in narrative?

The quality that is described in this study as “transparency” is the characteristic that they all have in common. The Kuche Unmarked verb is an exceptionally transparent verb, but not the only transparent verb. In referring to verbs in discourse, transparency includes the notion of indeterminacy, but also the notion of long-distance information retrieval. A transparent verb form does not obscure TAM information encoded behind it. This is the role of a consecutive form in narrative—to allow the TAM encoded on the initial form to be applied to the consecutive form(s). This is also the role of the historical Present—to allow the Past tense encoded at the beginning of the story to be applied to the Present tense forms in the middle. In conjunction reduction, the TAM of the first verb is applied to whatever reduced form comes after the conjunction.

There are two differences between Kuche transparency and the other instances of transparency cited in this study. First, the Kuche Unmarked verb can be described as a transparent, colorless verb, while some of the transparent forms in other languages are not completely devoid of TAM content. For instance, English Present tense forms can be used specifically with reference to present time, but Kuche Unmarked verbs have no time reference of their own. In the discourse tracks constructed for the English hypothetical narrative, it should be noted that the symbols for the historical Present forms are not left completely blank, like the symbols for the Kuche Unmarked form. That is because, in the absence of any marked domain “behind” the Present tense symbol, there would still be some content in the symbol. English Present tense forms are interpreted with a past time reference only if they are set in a narrative domain.

The second, more important difference is that in Kuche, almost every verb form has proved to be transparent to some extent; only clauses in embedded dialog are opaque to the TAM of the larger domain. Longacre (1990) does not report any language that has more than one consecutive form. Conjunction reduction is a process limited to Present tense forms in some languages, Injunctive forms in other languages (1968). The historical Present in English involves only Present tense forms. However, the term “transparency” as a unifying characteristic may be an impetus to further research. It could be that TAM transparency is more widespread than what is outlined here.

8.4. Further Questions

I am left with many questions about the verb system of Kuche. Specifically I would still like to explore the following questions.

1. What semantic contribution does Subjunctive prefix *bī-* make to a sentence in narrative? In what contexts is its use appropriate?
2. What semantic contribution does the rising tone (on subject agreement prefix) make to a sentence? In what contexts is its use appropriate?
3. What semantic contribution does the falling tone (on subject agreement prefix) make to a sentence? In what contexts is its use appropriate?
4. Do other overt TAM marks—i.e. the progressive construction, rising tone, falling tone, Subjunctive prefix, and perhaps others—define domains of spreading just as the Perfective prefix *nī-* does, and as the Habitual *tá-*, Conditional mood, and Imperative mood do?
5. What overt mark indicates that an entire discourse should be interpreted as ‘future’?

6. Do all the overt TAM marks of Kuche mark aspect and mood, or are some of the marks—besides the “tomorrow” future—predominantly tense markers?

Some question must always be left hanging. A language is a tight system in which everything is connected to everything else; it become difficult to isolate small areas of concern, because each question is connected to every other question. This research analyzes the TAM system of Kuche verbs as it is used in narrative and answers some of the questions that are raised there. The questions listed above await further research.

APPENDIX A

TRANSLATED TEXTS

Note: Each language example in the body of the paper makes reference to the line number and title of the translated text from which it is excerpted.

1
Uyho

1 Once there was Uyho, and he went walking and met some people mourning a
2 death. Then he said to them, "What's wrong with you people?" Then they told him that
3 a person had died. Then he asked them, "Who is it?" Then they told him it was a human
4 being who had died. He said, "Why are you crying about it?" Then they said to him,
5 "Indeed, we are mourning a person who has died." Then he said, "Yes."
6

7 And then he went and sat in a room. And then he said that they should give him
8 the corpse. So they gave him the corpse. Then he took the corpse and discovered that it
9 was a woman who had died and they had given him. Then he took the corpse [home] and
10 kept it in the attic.
11

12 And then he said to Apanchuk [his wife], "Apanchuk, cook me some food. I have
13 taken a wife . . . I have taken a new wife." Then Apanchuk started cooking food. Then
14 she would cook akpa. Then he would say that he would like to eat baku. Then she would
15 cook different kinds of food. Then he would say to her that he would like to eat another
16 kind. Then he said to her that. . . Then she cooked the baku and brought it, and he said he
17 wanted to eat meat, so Apanchuk cooked all those things, and then he said he wanted to
18 drink porridge, so Apanchuk cooked the porridge. Uyho took the whole pot and went to
19 sit in the attic.
20

21 And then, as he sat in the attic, he was laughing. And when he laughed, he would
22 say, "Eee, hey, hey," like a woman, so that people would think it was the new wife who
23 was laughing. And then he'd turn around and laugh like a man. Then he said, "Eee, ha,
24 ha, ay." So people said that it's the man who laughed.
25

26 Apanchuk said, "Hwayi, Uyho and those guys start sitting in the attic with his
27 wife while I'm the one who does all the cooking. I'm not going to do it any more!" And
28 then she got angry, and she sat down.
29

30 Next day, Uyho went out. Apanchuk climbed up to the attic, saying, "I'm going
31 to see Uyho's new wife, why it is that she's there, always sitting there in the attic, why
32 she doesn't even relieve herself, why she doesn't do anything at all!" And then she
33 climbed to the attic, and she tried to touch it, she tried to see the wife, and she found the
34 corpse and it rolled stumbling and fell to the ground and broke open.
35

36 Uyho came walking from the bush, he came walking from outside, he showed up.
37 . . he showed up. He said, "Apanchuk has killed Uyho's wife! Apanchuk has killed
38 Uyho's wife!" And then he took the corpse out and buried it.

2

Folk Tale

1 . . . that child always wet the bed and then said that that one did it. And then she [mother]
2 took the mat and beat it. . .she beat it. . .she said, "Take. . ." And then she took the mat
3 and said, "Go, wash it for me."
4

5 Then she [step-daughter] went out, she wanted to wash the mat. Then, as she was
6 going, she found a lump of baku. The lump of baku said, "Abracadabra, abracadabra, is
7 Adiyé there? And what is the name of the lump of baku for the chief?" She said to it,
8 "The woman's child is the one who wet the bed, but she said I was the one who did it.
9 She said I should take the mat and wash it for her." It [the lump of baku] said, "Go, if
10 you find that black water, pass it up, but if you find the sparkling white [water], wash
11 with it." She said to it, "Yes." It said to her, "Why don't you take me and swallow me?"
12 She said to it, "Sorry, I can't even take a lump of baku, so how can I turn around and take
13 you?" It said to her, "Yes, then go on."
14

15 Then she went on a little way and she found a certain grasshopper. Then it said,
16 "Abracadabra, abracadabra, is Adiyé there? Mumbo jumbo chief." She said to it, "It
17 was the woman's child who wet the bed, but she said I did it, and she said I should take
18 the mat and wash it for her." It said to her, "Why don't you take me and roast me?" She
19 said to it, "I'm just a grasshopper, how could I roast you?" "Go, please, and if you find
20 the black water, pass by, but if you find the sparkling white [water], then wash with it."
21

22 And then she went on and jumped down on the thing, and she found red gorillas
23 there. He said, "Abracadabra, abracadabra, is Adiyé there? Mumbo jumbo chief." She
24 said to him, "The woman's child was the one who wet the bed, she said I was the one
25 who did it. She said I should take the mat and wash it for her." He said, "Why don't you
26 take me and beat me with your hands?" She said, "Because I don't have bracelets, how
27 can I take you?" He said to her, "Yes, then go, and if you find that black water, pass by,
28 but if you find the sparkling white [water], then wash with that."
29

30 Then she showed up, she wanted to wash it ([repeats] she wanted to wash it). She
31 found the black [water], she found the black [water], she passed by. She went, she
32 wanted to wash it in the white [water]. The she found a cool parlor and jumped down
33 into it. [Apparently, under the water] Then she heard, "Tuturupa tuturupa, tuturupa
34 tuturupa [the sound of playing and dancing], the chief has taken a wife, the chief has
35 taken a wife," and then they received her and put her in a room.
36

37 They passed the day and passed the night, and were getting up when they heard,
38 "Boo-hoo," she said, "Have you come? Take her by the hand, throw her out on the
39 riverbank, take father's new wife, put her back into the world." Then she went out and
40 said, "Why don't you throw her into some bees?" That is to say, take me and throw me
41 into the nettle bush. That is to say, take me and throw me to the bees." He said to her,
42 "I'm not like that." She said, "Yes." "I'm telling you this so that if father spends the
43 night making marks on you and it bleeds." She said, "Yes." "Then you just keep quiet.

44 And then, leave off crying." She said, "Yes." Then father spent the night making marks
45 on her and it bled, but she kept quiet.

46
47 Early in the morning, at dawn, she heard, "Boo-hoo," she said, "Boo-hoo. Take
48 her by the hand, throw [her] out onto the riverbank, take father's new wife, put her into
49 the world." Then he went out and took her to a dim place, and she said once again, "Why
50 don't you put me over there?" He said, "No, I told you I'm not like that." He said to her,
51 "I'm telling you so that if it happens that father asks you, 'Which kind of eggs shall I give
52 you [one by one]?' then say to him 'Give me little ones, and just give me one big one.'"
53

54 Then they went and spent the night and father woke her and said, "Are you about
55 to go home?" She said, "Yes." He said, "So, which kind of eggs shall I give you?" She
56 said, "Give me small ones, and give me just one big one." He said, "Go." And then he
57 showed up and they went out with her, that is, they took her out of the water. That is,
58 they took her outside. He said, "Go, and when you nearly reach that field, then break
59 them open and see what's there."
60

61 When she broke them open, she found her own people who had died, even her
62 fathers [ancestors] and mothers, even her sisters and brother were there. Then, in the big
63 one, she found them, the water people [spirits] and they drove her away, and they went
64 back and wanted to show up.
65

66
67
68 That woman slept with her child, and she woke up and saw urine. She said, "So,
69 you're the one who has been wetting the bed, and I was blaming your companion [half-
70 sister?]. Take it and wash it for me." Then she took. . .
71

72 ([An aside] It's Amabu's children that I usually tell [this story] to.)
73

74 Then she took it and when she nearly reached the thing, then they said,
75 "Abracadabra, abracadabra, is Adiye there? Mumbo jumbo chief." She said, "You ugly
76 red thing! Don't you see me with the mat? What are you?" He said, "The reason I tell
77 you this is so that if you find that black water, please." He said, "Why don't you put me
78 in your hands." Then she put him [in her hands] and went and jumped down. He said,
79 "If you find that black water, please pass by. Then you find that sparkling white [water],
80 then wash with it." Then she said to him, "If I find the black [water], I will wash with it."
81

82 Then she went out and found a certain grasshopper, and she did the same again.
83 Then she went and said again, "See the ugly pointy-head! What are you asking me?
84 Don't you see me with the mat?" It said, "Why don't you take me and roast me?" She
85 pulled her hand free. Then she said, "Hey, pointy-head, I was just walking along
86 [minding my own business], what did I do to you?" Then it said, "They reason I'm
87 telling you this is so that if you find black water, pass by. Then, find the sparkling white
88 [water] and wash with it." She said, "If I find the black [water], I will wash with it."

89 Then she went on her way and found the lump of baku. Again, it asked her the
90 same thing, and she abused the lump of baku with curses. She said to it, "See the huge
91 head! Don't you see me with the mat? Or, what are you asking me?" It said, "The
92 reason I say this is so that if you find that black water, please pass by, and then if you find
93 that sparkling white [water], then wash with it." She said, "If I find the black [water], I
94 will wash with it."
95

96 And then she went along and saw a black pool, and she started to wash in it. She
97 jumped down [off] the riverbank. And then she heard, "Tuturupa tuturupa, tuturupa
98 tuturupa [the sound of playing and dancing], the chief has taken a wife, the chief has
99 taken a wife, the chief has taken a wife, the chief has taken a wife!" She said, "Ugh, the
100 chief has taken a wife! Who is she to you? Rough-skinned things!" And then they
101 passed by and kept her.
102

103 Then they lay down [for the night?]. Then she woke up, then she said, "Boo
104 hoo," she said, "Boo hoo. Take her by the hand, throw her on the riverbank, take father's
105 new wife, put her in the world."
106

107 She said, "Who is going to follow you, you rough-skinned thing?" And then he
108 took her and went out with her. He went on and said, "Why don't you throw me in the
109 nettle bushes?" Then she took him and threw him in. He said, "Then what do I do to
110 you?" She said to him, "That is to say, throw me in the bees." He said, "I won't throw
111 you in." He said, "The reason I say this, I ask you, so that if it happens that father spends
112 the night making marks on you, and it bleeds, please, keep quiet." She said to him,
113 "Yes." He said, "Then you keep quiet." She said to him, "If it hurts me, then I keep
114 quiet! Ugh! I'll do screams."
115

116 Then the father wanted to do the marks on her and she started doing screams. She
117 went to bed screaming. She heard a rooster crow. Then she did, "Boo hoo hoo," she did,
118 "Boo hoo. Take [her?] by the hand, throw her on the riverbank. Take father's new wife
119 and put her in the world."
120

121 He said, "My problem is with the black thing. I say, who used to take her
122 outside?" And then he went out. He went, and again he brought her along. He showed
123 up, he tried to put her down in that place. Then she held onto him. He said, "Put her
124 down in that place." He took her and threw her there. He came back and said to her,
125 "The reason I say this is to ask you, if it happens that father says, 'You are going home,
126 so which kind of eggs shall I give you?' you should say, 'Give me only little ones, and
127 then give me just one big one.'" (Her mother had given birth to children who had died
128 [one by one].) She said, "Ugh! If he says that to me, I will tell him to give me the big
129 ones."
130

131 Then she passed the night, then father asked her. Then he said, "Which kind of
132 eggs shall I give you?" Then she said, "Give me the big ones, and then give me only one
133 small one." Then he gave her all big ones. And then they took her out and saw her off.
134

135 Early in the morning, he said to her, "If you approach that field, then break [the
136 eggs] and see what's there." Then she went on, she approached that place, and she broke
137 [the eggs] and found water people [spirits]. She broke them all and found spirits. Then
138 she broke the small one and found her sister who had died. Then you take a whole crowd
139 of spirits and they go along with [her].

140
141 Then she showed up with them, and her mother took a stick and drove them away,
142 including the spirits, and she kept the sister.

143
144

The End

3

Rabbit Tale

1 The animals were all called together, they said they wanted to see which animal
2 had more knowledge than all the rest. A different kind of animal would come out and
3 say, "I know how to do this and to do that." Another one would show up and say the
4 same.

5
6 The cow got up and said, "If you bring grass, a heap of grass however big, then I
7 will eat it all." The elephant said, "If I get up, I eat ten times more [grass] than the cow."
8 The lion said, "An animal of the bush, no matter how strong it is, I will break it with my
9 strength, I will kill it and eat it." The antelope said, "If I get up, I run," the gazelle also
10 got up and said, "I run very fast, that's my knowledge, it's running very fast." The snake
11 said, "If people gather in a place however wide or narrow, I pass through by writhing."
12 They were talking like that.

13
14 The hyena said, "No matter how big a bone is, I will chew it." Little squirrel said,
15 "However big a tree is, I will climb it," and the monkey got up and said, "So, you climb a
16 tree, does that mean you are better than me? I can also climb a tree. I always climb any
17 tree, and I sit at the top, then I jump to another tree, and another. But you only climb up
18 the tree trunk." They were all talking like that.

19
20 Rabbit got up and his heart became angry, and he said, "I, who people say know
21 more than all the animals of the bush, and they are talking like this? I know what I'll do,
22 that is, how I can receive the things of all those people, the things all those people know
23 how to do, I'll get them all and keep them. Then it will be me who is the greatest. Then
24 all the animals of the bush will fear me." Then they went and were sitting.

25
26 Then they said to him, "What will you do to receive all the animals' knowledge?"
27 Then they said to him, "What will you do to receive [the knowledge of] all those
28 animals?" Then he said that he would kill them.

29
30 And then, if he found the thing that a certain animal eats, he put a little poison [in
31 it]. If that animal came and ate, it died. Then he took that animal's knowledge and made
32 it his own. Then he realized that all the animals in that part [literally, 'city'] of the world
33 had died. Then he said, "I feel lonely here, so am I a person of knowledge? Being alone
34 is not having knowledge, foolishness is what it is."

35
36 And then he goes and leaves this city and goes to another, and if he finds one of
37 that kind of animal remaining that hasn't died, he gives it, like if he finds the knowledge
38 of the cow, he returns and like the knowledge of the cow he gives to the cow, if it's the
39 knowledge of a lion, then he gives it to the lion. Then if he goes and meets the lion in
40 another city, he takes the knowledge of the lion, he gives it to him. Then if he finds one
41 monkey remaining in another city, he gives to the monkey and then he asks forgiveness.

42

43 Then he said, "It turns out that loving one's self [literally, 'head'] is not good at
44 all. I loved myself a great deal. That's why I said I would kill all those people and
45 receive their knowledge, and then their knowledge would be mine alone, then I have
46 received their knowledge and it has become mine alone and that's why I'm dwelling
47 alone in the city and I am not happy."
48

49 So, this thing teaches us people something, the thing says loving one's self is
50 useless. It never brings a man anything good. Loving one's self brings great sadness
51 [literally, 'black, black stomach'], and then also it makes a person dwell alone, like this
52 rabbit who killed the people of the city and then received all their knowledge, and then he
53 was dwelling alone. He discovered that he dwelt alone and great sadness came. So, this
54 thing teaches us [something]. It says we should leave off loving ourselves so much. And
55 then, we should love other people, and we should stop loving only ourselves all the time.

4

The Frog and the Fly

1 My folk tale is about a frog and a fly.

2

3

4

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6

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8

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11

12

A frog and a fly went to cut grass. When they went and cut the grass, the frog's [bundle of grass] was very big, and the fly's was also very big. When they tied the grass, the frog said to the fly, "Come, lift it to me [i.e. onto my head]." Then the fly said to the frog, "You help me also lift it to me [i.e. onto my head]."

When they couldn't help each other, then the frog [got mad and] tried to lift his bundle by himself. Then he grunted and grunted until his stomach broke open. Then the fly started to laugh. He laughed and laughed until his head broke off.

This is my folk tale.

History

5

Chapter I Ados Kago

1 I am [first name] [last name]. I, the one who is telling this speech, I am named [first
2 name] [last name], the one who is speaking.

3
4 I am speaking about heroes that existed here in Kakkek, that, when we grew up,
5 we heard about them. We used to hear about the heroes. You know, heroes are in
6 [groups] that follow [groups]. Some were the first ones; they came first, and then other
7 heroes came also after them. I am telling of the first ones.

8
9 Well, we heard about these heroes. We heard about people like Ados Kago.
10 Some came in their company and passed. Then others also came in their companies.

11
12 Listener

13 Do you hear the man who is speaking Kuche?
14

15 Storyteller

16 OK, you see; just let me go on.

17 OK, he came in his group.
18

19 Listener

20 Wait, you are speaking. . ., think carefully, you are speaking quickly. That's why
21 you are mixing it with Hausa. Kuche dies when you are mixing it with Hausa. That
22 makes me feel like crying.
23

24 Storyteller

25 I agree, it's good.
26

27 Listener

28 I would like you to be speaking Kuche only.
29

30 Storyteller

31 Good. I agree, it's good. Only Kuche.
32

33 Listener

34 Keep on speaking slowly, but speak only Kuche, do you hear?
35

36 Storyteller

37 OK
38

39 Listener

40 Yes. Hausa is not better than Kuche.

- 41
42 Storyteller
43 We have heard that it's like that.
44
45 People like Ados Kago. People like Ados Kago did...did their group and then
46 their generation passed.
47
48 Listener
49 What did he do? What did they usually do?
50
51 Storyteller
52 Ados Kago?
53
54 Listener
55 What acts of heroism did he usually do?
56
57 Storyteller
58 Ados Kago used to do heroic things. If it so happened that they caught game in
59 the bush, he would show up and scatter the people and take the meat away. Ados Kago.
60 He was also a horse-rider.
61
62 And so, the group like Ados Kago passed.
63
64 Listener
65 And what about the war?
66
67 Storyteller
68 They were fighting the war, they fought it during the time of Ude.
69
70 Listener
71 Didn't Ados Kago fight the war with the Irigwe people?
72
73 Storyteller
74 Yes, he fought the war, he fought the war, and he. . .
75
76 You said only heroes? [*The sense of this is that, as far as war goes, Ados is not a*
77 *hero. He's a hunting hero, so when talking about the war, we don't discuss him among*
78 *the heroes.*] He fought it also. When a person goes to fight a war, does he go by
79 himself? He goes with his friends. They are just the ordinary fighters [lit. "doers just"],
80 but it's the one who's the hero whose name they say. So, he was there and he is included
81 in that group. You always hear of people like. . .people like Ude in the matters of war.
82
83 Listener
84 You have been talking about Ados Kago. Where was Ude from? Whose son was
85 he?
86

- 87 Storyteller
88 Ude was from Buhuk.
89
90 Listener
91 Whose son was he? He was named Ude who?
92
93 Storyteller
94 Ude...Ude...
95
96 Listener
97 Isn't he Ude Aruku?
98
99 Storyteller
100 Ude Aruku. OK, well, you have reminded me. I was going to refer to Adi.
101
102 Listener
103 Let's go on.

Chapter II
Ude Aruku

1 Storyteller

2 Ude Aruku. We used to hear of the likes of Ude Aruku.

3

4 When he was going, he would ride the horse. He would take his friends
5 courageously to the war zone and teach them how to fight. They would go on horses and
6 show themselves, and then return as if they had withdrawn, then they would return to the
7 war zone and [the enemy] would not know when they had returned. Well, and he was the
8 one who told them the routes and [things] to do to defeat those people.

9

10 Listener

11 So they would defeat who (pl)?

12

13 Storyteller

14 The Irigwe. So they would defeat the Irigwe people.

15

16 If it happened that people [enemies] were coming, because some people live
17 [here] and others *live* [there], one hero would see which route they were following. He
18 would come out and tell his friends, *saying*, "Those people [the enemy] are coming today,
19 and this is the road they are following, so be careful how you walk around." Then they
20 would choose one hero and keep him at that junction in the road. *So* they did not take
21 chances. They would also choose another hero and keep him at a different junction.
22 Well, then, that hero wouldn't sleep that night. He would know which road they were
23 following. He would climb a mountain and sit there, and the road they were following he
24 would tell them. He would say to them, "These people *have come out* and they are
25 coming on this road."

26

27 You know, there were many routes. If it happened that they were coming
28 following the Kakkek road, he would see. If it happened that they were following the
29 Igbak road, he would see. If it happened that they were following the Agbaji road, he
30 would see. There were three routes.

31

32 Listener

33 On what would he sit while he was watching?

34

35 Storyteller

36 Ok, he used to sit on a rock. He would sit on a hill, usually at Kisakasuku, and he
37 would see.

38

39 Listener

40 They would.. .he would hide on the hill among the trees and be watching them?

41

42 Storyteller

43 Yes, he would sit on the stone until he saw [them]. And then he would warn
44 [them].

45
46 Listener

47 When he saw them coming and they were still far away, how would he tell his
48 people?

49
50 Storyteller

51 He would tell them to be ready [lit: *gather themselves*].

52
53 Listener

54 Would he scream? Or beat the drum?

55
56 Storyteller

57 He would scream and say they were following this route. Even when they were
58 just leaving their homes, he would scream and *say* they are coming through so & so
59 route. He would scream and say they are following this road. He would only scream.

60
61 Well, it was meant as a warning to his hero friends. So that the people would
62 know the roads. Because that route had a hero, this route had a hero, and this route had a
63 hero. Well, then they would know the place where. . .the road where they would meet.
64 Well, then they would know the place where. . .the road where they would meet.

65
66 It happened like that to people like our father, the person I'm talking about.

67
68 Listener

69 Which father?

70
71 Storyteller

72 Father Ude.

73
74 Well, then a time came when that thing was coming to an end.

75
76 Listener

77 Which thing?

78
79 Storyteller

80 The war was coming to an end, (but they would still invite their friends to go with
81 them secretly.)

7
Chapter III
Raids

1 Storyteller

2 (The war was coming to an end,) but they would still invite their friends to go
3 with them secretly. And then the man who had the responsibility of keeping watch would
4 see.

5
6 Listener

7 Who (pl) organized [attacks] secretly?
8

9 Storyteller

10 The Bache people.
11

12 If it happened the Bache wanted to go and steal from the Irigwe, they would plan
13 secretly. They [the Irigwe] would be eating their dinner, and then they [the Bache] would
14 show up in Irigwe land. When they were eating dinner. . .if they were going to Irigwe
15 territory. . . If they saw a woman, [or] if they saw a child sent with food from one
16 apartment [to another], they would shoot [him/her]. Again, they would see [another]
17 child come out of an apartment, taking food, and they would shoot [him/her].
18

19 Some people would take old mats and lift the horse's hoofs. . .they would lift the
20 horse's hoofs and tie them with the old mats and rags. They tied them.
21

22 Listener

23 Is that so that when it [the horse] is walking, they won't hear [it] coming?
24

25 Storyteller

26 Yes, so they wouldn't hear it coming. And they would stop the horse's bell; they
27 would take something and stop the horse's bell with it. Well, and they would pluck old
28 leaves and stop the horses' bell with them. They would be there and they [the enemy]
29 wouldn't know.
30

31 When they had looted and they knew that they had gone far away, then one man
32 would come and tease them as if he had just arrived and they would think he had just
33 arrived, instead of knowing they had already stolen those things and run away with them.
34 Before they could scream, they discovered those people had got away.
35

36 Listener

37 Go on.

38 Is that the end of the heroes?
39

40 Storyteller

41 Are you still talking about heroes?
42

- 43 Listener
44 Yes.
- 45
46 Storyteller
47 Yes, we heard it like that from our fathers.
- 48
49 Listener
50 You've talked about Father Ados and you've talked about Father Ude? Then who
51 else remains?
52
- 53 Storyteller
54 Yes
- 55
56 Listener
57 That is, you are moving backwards to this our generation.
58
- 59 Storyteller
60 Yes. Only Ude's friend Angau remains.
61
- 62 Listener
63 Angau?
64
- 65 Storyteller
66 Angau from Igbak. . .Angau Ashiko
67
- 68 Listener
69 Angau who?
70
- 71 Storyteller
72 Angau Ashiko
73
- 74 Listener
75 Angau Ashiko
76
- 77 Storyteller
78 That's the hero on one of those routes. Because there was a hero on this road and
79 another on this road and another on this road.
80
- 81 Listener
82 Yauwa [a Hausa response indicating agreement]
83
- 84 Storyteller
85 That one of Agbaji that I have talked about, he was a foot soldier and he's named
86 Aana Ahomo, Aana Ahomo from Agbaji. Well, *so* he would organize the foot soldiers;
87 they would be the people [ordinary soldiers] and he would organize them. Like the horse
88 soldiers, he too would organize his hero friends.

89
90 They used to say like that. Well, that's how it was done.
91
92 Listener
93 Do we still have more heroes?
94
95 Storyteller
96 After these there were no more heroes.
97
98 Listener
99 Is there any more? After these there were no more heroes?
100
101 Storyteller
102 No. No more heroes. The war was over.
103
104 Listener
105 So, all the schooling and working we undergo and the expertise in them is just a
106 waste of time?
107
108 Storyteller
109 Yes.
110
111 Listener
112 So none of us is a hero?
113
114 Storyteller
115 The war finished.
116
117 Listener
118 There are different kinds of wars.
119
120 Storyteller
121 Yes, that will bring me to the coming of the white man.

Chapter IV
The Coming of the White Man

- 1 Storyteller
2 At the time the white man came, the chief that was ruling at Kakkek was named
3 Azagun. He was named Azagun. The man that was installed was called Azagun.
4
5 The white man came through Iregweland and wanted to spend the night at Kasan.
6 You know about. . .
7
8 Listener
9 Yes.
10
11 Storyteller
12 Azagun was told, "The king of the world..." [Listener] they said someone had
13 come...[Storyteller] They said, "A certain person has come." Not knowing that Azagun's
14 Berom friend. . .his friend from BeromLand. . . his Berom friend had sent word in the
15 night to warn him. He said, "Something has come; when it comes, bow down prostrate."
16
17 Listener
18 It was his friend from Berom territory who had told him.
19
20 Storyteller
21 Yes; it was the Berom man who told him. Well, then they came and spent the
22 night there and someone came and told Azagun.
23
24 Azagun collected a large number of horses from Kakkek. . .he collected all the
25 horses and he went to give (them to) him. When he was approaching [the white man], he
26 bowed down and put the dirt on his head.
27
28 Listener
29 What did he (Azagun) give him?
30
31 Storyteller
32 He took horses horses.
33
34 Listener
35 He gave him as a gift?
36
37 Storyteller
38 Yes, he gave [them to] him [as a gift]. Meaning. . .he gave [them to] him [as a
39 gift].
40
41 Listener
42 So there were many horses at that time?

- 43
44 Storyteller
45 Gracious [yes]!! Well, then they started going to meet him; he would put the dirt
46 on his head and body, and put it on his body.
47
48 Listener
49 Saying, "I have come for friendship not with anger or fighting." His Berom friend
50 had already told him.
51
52 Storyteller
53 He had already told him.
54
55 Listener
56 He *said*, "When he comes don't fight, be humble and don't try to fight him."
57
58 Storyteller
59 Because he had gone to Iregweland and when they tried to fight him, he burnt
60 most of Irigwe; he burnt most of Irigwe.
61
62 Listener
63 So the Berom being a relation of Bache had already sent early in the morning to
64 warn him.
65
66 Storyteller
67 Yauwa. He came in the night to tell him; he told him.
68
69 When the white man saw that, he asked, "Who is that walking in front and *putting*
70 the dust all over his body?" Then they said to him, "The chief of this village;" they said
71 to him, "The chief of the village."
72
73 Well, he said to him, "Stop there, stop there." He stopped, and he said to him,
74 "Ask him what is wrong?" Then he said, "Well, we heard that you were coming to greet
75 me, so I came first to greet and welcome you, and to meet you; I have also come to greet
76 you." Then he said, "What of these horses?" He said, "Well, they're my horses and I
77 have come to greet you with them." He said, "OK. Well, then what of all this land? Is
78 all this your village? Or is there any more land; who is at your boundary over there?" He
79 said to him, "There is more. . .there is more. I said. . .I said. . ., these people are mine. I
80 mean they are also mine; these people are like my family." [deleted saying verb]
81 "What of those over there?" [deleted saying verb] "When we leave, I will show you. .
82 .when we get there I will show or tell you."
83
84 When they left with Azagun leading the way, they reached Kasancam; he pointed
85 his hand to Uhit. "From here," meaning Uhit, he said, "From here. . .from. . .from. .
86 .from. . .to [there] they are part of my family." He asked, "What of that?" He said, "They
87 are my people, but they are not, they are on their own." Then he said, "Which of them
88 bother you [lit: stiffen their neck to you]? Tell me which of them bother you." He

89 showed him people from the eastern part, people from Assak. [a short phrase
90 untranslated]

91
92 Listener

93 Why did he say they were stubborn [lit: stiffen their necks]?

94
95 Storyteller

96 Our tradition is very difficult to understand. Don't you know that when people are
97 asleep, others go about in the night doing bad things?

98
99 He stood where he was, shot the gun, and burnt up all those villages. Then he
100 asked, "What of this area? That is, is there no other problem except those people who
101 were bothering you?" Then he said, "Yes" [that is, "you're right"].

102
103 The chief at that time was Azagun.

104
105 That's how we heard of the white man's coming from our fathers.

9

Binchi

1 My name is called Reverend [first name] [last name]. I have retired; I'm at home
2 now. Today is. . .the 27th of June, 2001. Well, I'm a man from Uyho: I'm from Uyho
3 right now. I'm going to tell about how the gospel came to Uyho.

4
5 The gospel came to us in Uyho through a man from Kakkek; he was called
6 Atuhuk. When he brought the gospel from Kakkek; he showed up and lived in Ukaya,
7 preaching the gospel to the people. He lived in Ukaya like that and preached the gospel,
8 covering all that area from Ukaya to Ikang, to Karambana and to the Incazi and Kimoro
9 people. If a person wanted to repent, he would climb the hill to Ukaya to repent; and if a
10 person wanted to repent from the upper side of Ukaya, he would come down to Ukaya to
11 repent.

12
13 Well, the people of Ukaya that Atuhuk lived with, they didn't bother to accept the gospel.
14 He would preach to them, but they would not accept; he would preach to them, but they
15 would not accept. But the first person to repent, the very first, was from Uyo, they called
16 him Ukpire, from the part (of Uyo) called Umalabu.

17
18 *[I left off transcribing here because I realized that this history was not a narration of*
19 *specific events, but more a summary of typical events.]*

10

Language Meeting

1 . . .and we will write what the English people call an alphabet. If we don't have an
2 alphabet, how will we write? That's why I'm begging the rest of you who were not there
3 where we met. . .
4

5 This young man wrote [something] and I read it and changed some things. I went
6 back and increased some places, and cut others. Then another person went and read it
7 and increased some things and cut some things too. The reason that we are having
8 problems is because we don't have an alphabet.
9

10 Listeners

11 Yauwa
12

13 Speaker

14 If we have our own alphabet, the work will not be difficult for us. We will make
15 an alphabet. We will choose our own alphabet, which we will be using. We will work
16 with [it]. Then we will write that big book which is called. . .that when you are reading
17 and you find a word you don't understand, then you look and you say, what about this
18 word?
19

20 One Listener

21 "bab^ve, bab^ve."
22

23 Speaker

24 No, not that one. A word, like when you are reading in English or in Hausa [and
25 you can't understand a word], you look for the book which is called a dictionary, and you
26 find out. In that dictionary that we will write, we will write the words in Kuche, and we
27 *will write* their meanings in Hausa, and we will also write the meanings in English.
28

29 Well, for example, one word, like, if I write saying "iyho" ['hunger'] and I write
30 in Kuche saying, "iyho", it means you are hungry and you feel like eating food, isn't it
31 so? Uh-huh. Then I will translate [it] into English and Hausa, saying "yunwa" [Hausa:
32 'hunger'], when you are hungry, then you feel like eating food. It means. . .uh-huh, then
33 I will write it again in English. Only on that same word. We will write all these words in
34 that big book that we will be working with in Kuche.
35

36 Well, and when we write that book like that, then the government *says* that we
37 should teach our children our language. We will sit, we who are teachers along with her
38 who translates, and we will put our heads together. And we will write or translate books
39 that are in English into Kuche, so Bache children will learn Kuche, and they will know it.
40 And then they will learn English. If you learn Kuche and then later you learn English
41 you pay more attention than a person who begins with learning English. We who did it
42 long ago, if you consider, you will discover that our knowledge of English exceeds that

43 of the present generation who are only pretending [to learn English]. They mix them up
44 and you end up not understanding what they want to say.

45

46 Well, that's why we want to go back, because if we leave it then Kuche will die,
47 and if Kuche dies our whole tribe will die. Isn't that right?

48

49 Well, then, if we write little books in Kuche from which the children will start
50 learning how to read, then we will call all the school-teachers who are teaching in the
51 primary schools of the Kiche area and we will do a little course for those who are Bache.
52 We will hold them a course of maybe two or three days or two or three weeks. We will
53 teach [it to] them, so they will know [it]. Then they will go back and decide how to teach
54 [it]. They will say, this time period is for an English lesson and this one is for Kuche and
55 this one is for Hausa. Isn't that right? So that's [the reason]. Don't take it like it is only
56 the Bible that will be translated. We will write them all. So, we want to write Kuche so
57 that it will live. Let's not forget [it].

58

59 Well, then that is what we said. . . We *said* that on Sunday and most of the people
60 who gave money that day were Fulanis. . .Fulani chiefs.

61

62 Listeners

63 That's so

64

65 Speaker

66 They were the ones who kept giving. On the other hand, then, our chiefs from
67 Kiche didn't give much. But the Fulani chiefs gave more.

68

69 Listeners

70 It was a lot!

71

72 Speaker

73 So that's [it], that's the reason we are telling you, so that you know.

74

75 Chief

76 Uh. . .Uh. . .Reverend [NAME]

77

78 Reverend [NAME]

79 Here I am!

80

81 Chief

82 Tell the treasurer to go round and collect [the money].

APPENDIX B

CODES

Note: Discussion of the codes is found in section 4.2.2. The codes are applied to the tabulated texts, in Appendix C and in Figure 4.1

Codes

Column H: Numbering clauses to keep them in sequence

| | |
|---|-------------------------------|
| Bounded, real, unique events, in sequence, in the story | Whole numbers |
| Story events out of sequence (flashbacks, simultaneous bounded events, repetitions/expansions, projected activities if the listener interprets them as actualized at a later time) | 1 st decimal place |
| Irrealis (including negatives and purpose clauses, whether finite or non-finite forms) or non-bounded situations (states, including states of mind, or durative or summative or habitual) in story "now" | 2 nd decimal place |
| Conversation on the story topic, including universal truths connected to story | 3 rd decimal place |
| Story dialog (including complements of "know/learn/ say/want" verbs) | 4 th decimal place |
| Conversation off the story topic or deverbal forms used as subject, object, preposition, or conjunction (but not purpose infinitives and not complements of "know/learn/say/want" verb) | No number |
| Serial verbs: 2 or more verbs together, no clause introducer between them, with the same s-a prefix and no separate arguments, or the first an imperative and the following verb(s) a 2 nd person s-a prefix | numbered as one verb |
| Auxiliary verb construction: 2 verbs together, the first inflected for person (including imperative), 2 nd with a deverbal prefix | numbered as one verb |

Column G: Introducers

| Clause Introducer | Code |
|---|------|
| à- (then) | e |
| ànā | d |
| semantic content,
ḡbē, ḡbē har, kī ìbá, kàfīn, ìntámā, kātāāmā, íyí, ìtī ìyī, ha, ūmbàì,
adverbials (including question word) | h |
| Interjections
yauwa, òò, á'à, àhá, kwī, kwáyáì | z |
| wù (wa/wɔ) | w |
| tò | q |
| nā | y |
| relative pronoun | j |
| no introducer | m |

Column F: Verb forms

| TAM form | Code |
|---|-------|
| unmarked | Blank |
| verb deleted (either copula or other) | v |
| nì- | n |
| tá- | t |
| falling tone | f |
| rising tone | r |
| copula | c |
| cleft form of copula | l |
| Finite progressive (either auxiliary, either non-finite form) | p |
| bī- | b |
| sà- (negative) | g |
| Any other affix (including ṅá-) | a |
| Any other auxiliary construction | x |
| Non-finite form (either infinitive or present participle)* | i |
| A serial verb construction, or complete verb reduplication, or stem reduplication | s |
| No s-a marker (Imperative form, an order) | o |
| Independent pronoun subject (1 st or 2 nd person) | u |
| Unfamiliar | ? |

*Especially if the non-finite forms have arguments like subject or objects. Sometimes the non-finite forms are so noun-like that I cannot put them in the verb column; I have to put them in the *subject* or *object* column instead. Sometimes they are so preposition-like that I have to leave them in a *prepositional phrase*, or so conjunction-like that I have to leave them in the *connector* column.

Column E: Modality

| | # |
|--|----|
| Real | 69 |
| Likely situations, including purpose, intent, desire—assumed as fulfilled immediately—and factual results of if-clauses | 64 |
| Factual if-clauses (kind of like a “whenever” clause) | 59 |
| Imperative | 54 |
| Unlikely situations, including purpose, intent, desire—fulfillment delayed or unrealized—and many futures, negatives, counterfactual and unlikely if-clauses | 49 |

Column D: Aspect

| Kind of predication | # |
|--|----|
| Unique, bounded event (w/an end point) | 83 |
| Out of sequence (anterior or simultaneous, events or activities) | 78 |
| Non-unique event (repetitious events or summaries) | 73 |
| Durative (activities or processes) | 68 |
| States (including gnomic or generic, etc.) | 63 |

*Anterior should perhaps be among the "Time Interpretation" codes, but if I put it there, then I have to add two time codes. By putting it among the "Aspect Interpretation" codes, I only had to add one code overall.

Column C: Time reference

| Time | # |
|---|----|
| Past, usually "story now" | 99 |
| Future of past, includes future in indirect quotes | 94 |
| Present, usually "speaker now", but includes present in direct quotes | 89 |
| Future, including future in direct quotes | 84 |
| Timeless (generic truths, etc.) | 79 |

Column B: TAM Number Codes

| TAM form or combination of forms | # |
|--|----|
| ni- | 60 |
| ni- plus various forms | 55 |
| ni- plus ta- | 50 |
| ta- | 45 |
| Unmarked | 40 |
| Falling/rising | 35 |
| ta- plus various forms | 30 |
| Various forms (including copula, overt or deleted) | 25 |
| Imperative form | 20 |
| bi- | 15 |
| Non-finite forms | 10 |
| Verb deleted (but not copula deleted) | 5 |
| Negative | 0 |

Column A: Breaks

| | |
|------------------------------|---|
| Beginning of a sentence | S |
| Beginning of paragraph | P |
| Beginning of a speakers turn | T |

APPENDIX C

FOUR CHARTED AND CODED TEXTS

Note: A slightly different transcription system is used in Appendix C than in the language examples in the text. Early in the analysis process, I used SIL Doulos IPA 93 as the phonetic font for transcription, even though it is not perfectly suited to the Kuche sound system. As I began writing the paper, I deemed it necessary to create a font that would handle all the phonemes of Kuche more accurately, but I left the charted and coded texts in the old font.

| Breaks | TAI | Tim | Aspe | Mood | TAM | Intro | Sequenc | Connect | Subject | Verb | Object |
|---------|-----|-----|------|------|------|-------|---------|---------|--|------------------------------------|---|
| S, P, T | 40 | 89 | 63 | 69 | m | | | | mī | īn. yī | à.xxxxxx à.xxxx
CL1.NAME CL1.NAME |
| | | | | | | | | | 1SInd | 1S.beNamed | |
| | | | | | | | | | I am [first name] [last name]. | | |
| S | 25 | 89 | 68 | 69 | p | m | | | mī.ī, ūnī nī īn fī kī.tēt | | kū.yīnyí kú.kū.ī,
CL15.speech CL15.this, |
| | | | | | | | | | 1SInd, CL1.person that | 1S.be PROG:speak | à.xxxxxx à.xxxx,
CL1.NAME CL1.NAME, |
| | | | | | | | | | mī | īn. yī | kò kò.yīnyí kú.kūī
in CL15.speech CL15.this. |
| S | 25 | 89 | 68 | 69 | c | y | | | 1SInd | 1S.beNamed | |
| | | | | | | | | | nī | īn. fī | |
| | | | | | | | | | that | 1S.be | |
| S, P | 25 | 89 | 68 | 69 | p | m | 0.0010 | | I, the one who is telling this speech, I am named [first name] [last name], the one who is speaking. | | ī.bá ā.bírjé |
| | | | | | | | | | | | CL10.matter CL8.hero |
| | | | | | | | | | | | kā.kèèk
CL12.Kaktek |
| | | | | | | | | | 0.0100 ná | 1S.be PROG.tell | |
| | | | | | | | | | that | á.nā fī.yā | |
| | | | | | | | | | I am speaking about heroes that existed here in Kaktek. | CL8.ASP be.LOC | |
| | | | | | | | | | | kū.fī | |
| | | | | | | | | | 0.0110 nū | 1PL.wakeUp | |
| | | | | | | | | | that | kū.wōj | |
| | | | | | | | | | | 1PL.hear | |
| | | | | | | | | | 0.0120 | | |
| | | | | | | | | | When we grew up, we heard about them. | | ā.bírjéj.ī |
| S | 50 | 99 | 73 | 69 | n, t | m | 0.0130 | | | kū.nī.tá.wój | CL8.hero.DEF |
| | | | | | | | | | | 1PL.ASP ASP hear | CL8.hero.DEF |
| | | | | | | | | | We used to hear about the heroes, | | |
| | | | | | | | | | | ù.yī ū.tā | |
| S | 25 | 89 | 63 | 69 | s | m | 0.0140 | | | 2S.know 2S.say | |
| | | | | | | | | | | ā.fī ī.zūsú z.ī.zūsúj.ī | |
| | | | | | | | | | 0.0200 | | |
| | | | | | | | | | ā.bírjéj.ī | CL8.be INF.follow X.INF.follow.DEF | |
| | | | | | | | | | CL8.hero.DEF | | |
| | | | | | | | | | You know, heroes are in [groups] that follow [groups]. | | |

| Breaks | TAI | Tim | Aspe | Mood | TAM | Intro | Sequence | Connect | Subject | Verb | Object |
|---------|-----|-----|------|------|-----|--------|----------|---------|---|--|---|
| S | 40 | 99 | 63 | 69 | m | 0.0300 | | | ā.nó
CL8.some
Some were the first ones, | ā.yī
CL8.eat | kà.tààfī.ì
CL12.first.DEF |
| S | 40 | 99 | 63 | 69 | m | 0.0400 | | | ā.yī
CL8.eat | kà.tààfī
CL12.first | |
| S | 25 | 99 | 83 | 69 | s | e | 0.0500 | à. | ā.nó ā.bírjé
CL8.some CL8.hero
then
They came first, and then other heroes came also after them. | á.hílí á.yā.ɲyè
CL8.return CL8.ASP come
īn.ɟì kì.tēt
1S.be PROG.speak | ā.yīk kà.bā.ì
CL8.nextTo PREP.3PLH.DEF |
| S | 25 | 89 | 68 | 69 | p | m | 0.0510 | | I am telling of the first ones. | kū.nà.wōɲ
1PL.ASP.hear | ā.yī kà.tààfī.ì
CL8.which CL12.first.DEF |
| S, P | 60 | 99 | 83 | 69 | n | q | 0.0520 | tò, | Well, we heard about these heroes. | kū.nà.wōɲ
1PL.ASP.hear | ā.bírjé ā.nīɲì
CL8.hero. CL8.DEMO. |
| S | 60 | 99 | 83 | 69 | n | m | 0.0530 | | We heard about people like Ados Kago. | kū.nà.wōɲ
1PL.ASP.hear | bā.nā à.dòs kàgòɲ.
CL2.X CL1.NAME NAME |
| S | 45 | 99 | 83 | 69 | t | q, e | 1.0000 | à. | well, then CL2.some | bā.tā.fī
3HPL.ASP.do | à.kāmpàni à.má
CL7.company CL7.POSS
[English] |
| S | 40 | 99 | 83 | 69 | m | m | 2.0000 | | Some came in their company and passed | bā.gāsá
3HPL.pass | |
| S | 25 | 99 | 83 | 69 | s | e | 3.0000 | à. | then CL2.some
Then others also came in their companies. | bā.hílí bā.bá.ɲyè
3HPL.return 3HPL.ASP.come CL7.company CL7.POSS
[Hausa] | à.kūɲgɲyā à.má
CL7.company CL7.POSS |
| S, P, T | 40 | 89 | 83 | 69 | m | | | | Listener | ū.wōō | ū.nīt.á |

| Breaks TAI Tim. Aspe Mood TAM Intro Sequence Connect Subject | | | | Verb | Object |
|--|----|----|-----------------|---|--|
| 25 | 89 | 68 | 69 p y | 2S.hear
à.ʃī kī.yɪŋʲ.ɪ
3HS.be PROG.speak.X | CL1.person.X
kū.tʃéŋ.àà
CL15.Kuche.? |
| Storyteller | | | | | |
| S, T | 20 | 84 | 83 54 o, u z, e | tò,
see;
télék
stand
ɪn.tʃī.tʃī wù
1S.go.RED just | |
| S, P | 40 | 99 | 83 69 z | ā.yí
3HS.eat | à.yō ā.má
CL7.group CL7.POSS |
| OK, you see; just let me go on.
3.1000 ɔ̄ɔ̄,
OK
OK, he came in his group. | | | | | |
| Listener | | | | | |
| S, P, T | 20 | 84 | 83 54 o, a m | ŋā tɛ̀lɛ̀k
even stand
ù.ʃī tɛ̀t.ɪ...
2S.be speak.X... | |
| S | 20 | 84 | 68 54 o, t m | tā.bàì
ASP.count
ù.ʃī tet.ɪ
2S.be speak.X | ì.bāŋ,
CL9.matter,
kākā
quickly |
| S | 25 | 89 | 63 69 c, l m | Wait, you are speaking. . . , think carefully, you are speaking quickly.
ì.ʃèè | |
| S | 35 | 89 | 73 69 f, t m | CL9.matter.DEF
ùù.tā.dùp
2S.ASP.mix | kù.kpèsèk.āŋʲ
CL15.Hausa.X |

| Breaks | TAM | Tim | Aspe | Mood | TAM | Intro Sequenc | Connect | Subject | Verb | Object |
|--------|-----|-----|------|------|------|---------------|--|--|--|---|
| S, T | 40 | 89 | 63 | 69 | m | Storyteller | | | í.tʃí
it.goes
ĩn.ɸí
1S.say
í.tʃí
it.goes | |
| S | 40 | 89 | 83 | 69 | m | | | Good. I agree, it's good.
yāā kŭ.tʃééŋ.ì
only CL15.Kuche.DEF | | |
| S | 40 | 89 | 63 | 69 | m | | | Only Kuche. | | |
| S, T | 45 | 84 | 68 | 54 | t | Listener | | | ũ.tá.tēt
2S.ASP.speak
ũ.tēt.ì
2S.speak.X
ũ.wō.à
2S.hear.? | ʃèùù wù
slowly just
yá kŭ.tʃéé
only CL15.Kuche |
| S, T | 40 | 84 | 68 | 54 | d | | àñ.
and | | | |
| S, T | 40 | 89 | 83 | 69 | m | | | Keep on speaking slowly, but speak only Kuche, do you hear? | | |
| S, T | 5 | | | | v | Storyteller | òò
OK | | | |
| S, T | 0 | 79 | 63 | 49 | g, a | Listener | òò
OK
Yes. Hausa is not better than Kuche. | kŭ.kpèsèk.ì
CL15.Hausa.DEF | kŭ.sá.ñ.à.gāt
CL15.not.even.surpass | kŭ.tʃééŋ.ì
CL15.Kuche.DEF |
| S, T | 60 | 89 | 78 | 69 | n | Storyteller | | | kŭ.nà.wōò | mĩñĩ |

| Breaks | TAM | Time | Aspect | Mood | TAM | Intro | Sequence | Connect | Subject | Verb | Object |
|---------|-----|------|--------|------|--------|--------|----------|---------|--|---|----------|
| S, P | 5 | | v | m | 3.2000 | | | | We have heard that it's like that.
fītà bā.nā à.dòs kàgōŋ'īī
like PL.of CL1.NAME NAME.X | 1PL.ASP.hear | likeThat |
| S | 40 | 99 | 83 | 69 | q | 3.3000 | tò | | People like Ados Kago.
bā.nā à.dòs kàgōŋ bá.tíí. . .bá.tí
PL.of CL1.NAME NAME 3HPL.do. . .3HPL.do
kū.tāk kū.mā kū.gará
CL15.generation CL15.POSS CL15.pass | ā.yō ā.māī
CL.8.group CL.8.POSS | |
| S, P, T | 40 | 99 | 83 | 69 | m | 3.4010 | | | People like Ados Kago did... did their group and then their generation passed.
á.tí.yá
3HS.do.?
bā.nì.tá.tí.yá
3HPL.ASP.ASP.do.? | | |
| S | 50 | 99 | 73 | 69 | n, t | 3.4020 | | | What did he do? What did they usually do?
What did they usually do? | | |
| S, T | 5 | | v | m | 3.4030 | | | | Storyteller
à.dòs kàgōŋ.ì
CL1.NAME NAME.DEF
Ados Kago? | | |
| S, T | 45 | 99 | 73 | 69 | t | 3.4040 | | | What acts of heroism did he usually do?
á.tá.tí
3HS.ASP.do | kī.bíríjéŋ kī.fī.yá
CL5.hero PROG.do.? | |
| S, T | 45 | 99 | 73 | 69 | t | 3.4100 | | | Storyteller
à.dòs kàgō
CL1.NAME NAME 3HS.ASP.do
Ados Kago used to do heroic things.
ī.tī ì.yī | kī.bíríjé
CL5.hero | |
| S | 25 | 99 | 63 | 59 | S | 3.4200 | | | | | |

Breaks TATim.Aspe.Mood.TAM Intro Sequenc Connect Subject

| Breaks | TATim | Aspe | Mood | TAM | Intro | Sequenc | Connect | Subject | Verb | Object |
|--------|-------|------|------|------|-------|---------|---------|--------------------|-------------------------------------|-----------------------|
| 25 | 99 | 63 | 59 | c, l | m | 3.4300 | | kī.náj
CL5.meat | it.if.it.mean
í.ǰí
CLX.be | |
| 35 | 99 | 73 | 59 | f | m | 3.4400 | | | bā.ǰū
3HPL.catch
ā.hē | kā.bú
bush |
| 40 | 99 | 73 | 64 | e | | 3.4500 | à. | | 3HS.appear
à.vū | bā.ǰū
CL2.person |
| 40 | 99 | 73 | 64 | m | | 3.4600 | then | | 3HS.catch
ā.tǰū ā.tǰū ā.tǰū | |
| 25 | 99 | 73 | 64 | s | m | 3.4700 | | | 3HS.scatter
ā.tǰū ā.tǰū ā.tǰū | |
| 40 | 99 | 73 | 64 | d | | 3.4800 | à.nā | | á.sók | kī.náj.ǰí
CL5.meat |
| 40 | 99 | 73 | 64 | m | | 3.4900 | andThen | | 3HS.take
à.bló.mā
3HS.go.with | |

If it so happened that they caught game in the bush, he would show up and scatter the people and take the meat away.

| | | | | | | | | | | |
|---|----|----|----|----|---|--------|--------|-----------------------------|--------------------------|----------------------------|
| S | 5 | | v | m | | 3.5100 | | à.dòs kàgò
CL1.NAME NAME | á.yá.kòò
3HS.ASP.ride | ǰí.dòr.ǰí
CL9.horse.DEF |
| S | 25 | 99 | 63 | 69 | a | q | 3.5200 | tò,
well | | |

He was also a horse-rider.

| | | | | | | | | | | |
|---|----|----|----|----|---|--------|--|--|--|--|
| S | 40 | 99 | 83 | 69 | q | 3.5300 | tò,
well,
And so, the group like Ados Kago passed. | à.yò à.nà à.dòs kàgá.gárá
CL7.group CL7.of CL1 CL8.pass | | |
|---|----|----|----|----|---|--------|--|--|--|--|

Listener

| | | | | | | | | | | |
|---------|---|----|----|----|---|---|--------|---------------------------------------|-----------------------------------|--|
| S, P, T | 5 | 99 | 63 | 69 | v | e | 3.5310 | ǰí
then
And what about the war? | ǰí.ǰkǰǰ.ǰí ǰá
CL9.war.DEF even | |
|---------|---|----|----|----|---|---|--------|---------------------------------------|-----------------------------------|--|

| Breaks | TAM | Tim | Aspe | Mood | TAM | Intro | Sequenc | Connect | Subject | Verb | Object |
|--------|-----|-----|------|------|---------|-------|---------|---------|--|--|---|
| S, T | 5 | | v | m | | | | | ì.ŋkũŋ... ì.ŋkũŋ...
war...war... | | |
| S | 55 | 99 | 68 | 69 | n, p, a | m | 3.5320 | | | bā.nī.ŋī.ŋī ì.fī
3HPL.ASP.even.be INF.do CL9.war.DEF | ì.ŋkũŋ'ì |
| | 60 | 99 | 83 | 69 | n | e | 4.0000 | à. | bā.nā.fī
3HPL.ASP.do | kò ū.mbà ànà ū.dé
in CL3.time of CL1.NAME | |
| | | | | | | | | | then
They were fighting the war, they fought it during the time of Ude. | | |
| S, T | 55 | 99 | 83 | 49 | n, g | m | 4.0010 | | wú à.dòs kàgò
3Hnd CL1.NAME NA 3HS.ASP.NEG.do | ā.nī.sā.fí | ì.ŋkũŋ'ì bānà bà.kōn.ì
CL9.war.DEF with CL2.Irigwe.D |
| | | | | | | | | | Didn't Ados Kago fight the war with the Irigwe people? | | |
| S, T | 60 | 99 | 83 | 69 | n | z | 4.1000 | dò | à.dòs kàgò | á.nī.fí | ì.ŋkũŋ'ì
CL9.war.DEF |
| | | | | | | | | OK | CL1.NAME NAME | 3HS.ASP.do | |
| | | | | | | | | àná | yá... | | |
| | | | | | | | | andThen | he... | | |
| | | | | | | | | | Yes, he fought the war, he fought the war, and he... | | |
| S, P | 40 | 99 | 83 | 69 | | m | 4.1010 | | ù.tā.í
2S.say.X | ā.bíríjéŋ.ā
CL8.hero.? | |
| | | | | | | | | | You said only heroes? | | |
| S | 60 | 99 | 83 | 69 | n | m | 4.2000 | | | [The sense of this is that, as far as war goes, Ados is not a hero.
He's a hunting hero, so when talking about the war, we don't dis- | |
| | | | | | | | | | ā.nā.fí wù
3HS.ASP.do just | | |
| | | | | | | | | | He fought it also. | | |
| S | 30 | 79 | 73 | 69 | t, s, p | m | 4.2010 | | ū.nī
CL1.person | á.tá.hílé à.ŋí kì.bíō
3HS.ASP.return 3HS.be PRO(CL12.place CL9.war.DEF | kà.tŋũ ì.ŋkũŋ'ì
nì kì.tũ kī.mā.à |
| | 40 | 79 | 73 | 69 | | e | 4.2020 | à. | | | |

| Breaks | TAM | Tim | Aspe | Mood | TAM | Intro | Sequenc | Connect | Subject | Verb | Object |
|---------|-----|-----|------|------|------|--------|---------|-----------------|--|------------------------|---|
| S | 40 | 79 | 73 | 69 | e | 4.2030 | à. | then | When a person goes to fight a war, does he go by himself? | 3HS.go
ā.blō | with CL5.head CL5.POSS.?
bānà bà.zà.nà
with CL2.friends |
| S | 25 | 79 | 63 | 69 | c | 4.2040 | m | | He goes with his friends. | bā.fī | bā.nī ì.fī wò
CL2.person INF.do just |
| | 25 | 79 | 63 | 69 | c, l | 4.2060 | d | andThen one | àyì [nā āā.fī à.bírjéj.ì.sà | 3HPL.be | |
| | 25 | 79 | 63 | 69 | c | 4.2050 | y | it.be | | it.be | à.bírjéj.ì] |
| | 40 | 79 | 73 | 69 | e | 4.2070 | à. | that | | āā.fī | CL7.hero.DEF |
| | | | | | | | | | | 3HS.be | kī.sāk kī.mā.ì |
| | | | | | | | | then | | bā.fēt | CL5.name CL5.POSS.DEF |
| | | | | | | | | | They are just the ordinary fighters [lit. "doers just"], but it's the one who's the hero whose name th | 3HPL.say | |
| S | 25 | 99 | 63 | 69 | c | 4.2080 | h, d | it.mean andThen | àyì [nā āā.fī à.bírjéj.ì.sà | ā.fī.yà wò | |
| | 25 | 99 | 63 | 69 | s, c | 4.2100 | d | andThen | | 3HS.be.LOC just | bà à.yō bá.nīŋ'ì |
| | | | | | | | | | So, he was there and he is included in that group. | ā.pàtāk à.fī | PREP CL7.group CL2.this |
| S | 45 | 89 | 73 | 69 | t | 4.2110 | m | | You always hear of people like. . . people like Ude in the matters of war. | 3HS.putTogether 3HS.be | bānā. . .bānū ū.dé kī ì.bā ì.ŋ |
| | | | | | | | | | | ù.tá.wō | with. . .with CL1.NAME PREP C |
| S, P, T | 40 | 89 | 78 | 69 | m | 4.2120 | m | Listener | You have been talking about Ados Kago. | 2S.ASP.hear | |
| | | | | | | | | | | ù.tí.nā | à.dòs kàgòn |
| S | 55 | 99 | 63 | 69 | n, c | 4.2130 | m | | Where was Ude from? | 2S.say.that | CL1.NAME NAME |
| | | | | | | | | | | á.nī.fī | ù.nī ànà.tā |
| | | | | | | | | | | ū.déj.ì | CL1.person fromWhere.Q |
| | | | | | | | | | | CL1.NAME.DEF | |
| | | | | | | | | | | 3HS.ASP.be | |

| Breaks | | TA | Tim | Aspe | Mood | TAM | Intro | Sequenc | Connect | Subject | Verb | Object |
|---------|----|----|-----|------|------|-----|-------------|---------|--------------|---|-------------|---------------------------|
| S, P, T | 20 | 84 | 68 | 54 | o, u | e | | | | 1SInd | 1S.return | PREP CL1.NAME |
| | | | | | | | Listener | | | I was going to refer to Adi. | | |
| | | | | | | | | àà | then | ñú | ndā | |
| | | | | | | | | | Let's go on. | 2SInd | goOn | |
| | | | | | | | Storyteller | | | | | |
| S, P, T | 50 | 99 | 73 | 69 | n, t | m | 4.2240 | | | õ.dé à.rükù, | ku.ni.ta.wo | ba.nu õ.dé à.rükù |
| | | | | | | | | | | CL1.NAME CL1.NAM 1PL.ASP.ASP.hear | | CL2.with CL1.NAME CL1.NAM |
| | | | | | | | | | | Ude Aruku. We used to hear of the likes of Ude Aruku. | | |

| Break: TAN Tim Asp. Mo: TAM Intro: Sequenc | | Intro: Sequenc | | Intro: Subject | | Verb | | Object | |
|--|----------------------------|----------------|------------|---|-------------------------|-----------------------------|---------------------------------|---------|--|
| S, P, T | 50 99 73 69 n, t | m | 0.0010 | ũ.dé à.rũkù, | ku.ni.ta.wo | ba.nu ũ.dé à.rũkù | CL2.with CL1.NAME | CL1.NAM | |
| S | 30 99 73 69 t, p | m | 0.0100 | Ude Aruku. We used to hear of the likes of Ude Aruku.
ā.tā.ʃĩ kì.bló | 3HS.ASP.be PROG.go... | ĩ.dõr.ì | CL9.horse.DEF | | |
| S | 30 99 73 69 t, s | e | 0.0300 à. | When he was going, he would ride the horse.
wú.í | á.tá.bló á.tá.sõk | bā.zànàŋj.ì nĩ ì.sũn ì.kũrò | CL2.friend.DEF with CL9.heart C | | |
| S | 40 99 73 69 | m | 0.0400 | 3HSInd.DEF | 3HS.ASP.go 3HS.ASP.take | kā.tʃũ ì.ŋkũŋj.ì | CL12.place CL9.war.DEF | | |
| S | 40 99 73 69 | d | 0.0500 ànā | andThen | 3HS.go.with | ĩ.tĩ | | | |
| S | 25 [*] 99 73 59 S | m | 0.0600 | He would take his friends courageously to the war zone and teach them how to fight. | 3HS.tell.3HPL | INF.do | | | |
| | 40 99 73 64 | e | 0.0700 à | | bā.tà bā.tʃĩ | nĩ ì.dõr.ì | | | |
| | 15 99 73 64 b | m | 0.0800 | then | 3HPL.if 3HPL.walk | with CL9.horse.DEF | | | |
| | 25 99 73 64 s | d | 0.0900 ànā | | bā.bló | | | | |
| | 25 99 78 49 p, ? | m | 0.1100 | andThen | 3HPL.go | àzá | | | |
| | 60 99 78 49 n | m | 0.1200 | | bā.bĩ.yõk | X | | | |
| | | | | | 3HPL MOD.show | | | | |
| | | | | | bāhĩlehĩlè | | | | |
| | | | | | bā.hĩlè bā.hĩlè | | | | |
| | | | | | 3HPL.return 3HPL.return | | | | |
| | | | | | bā.ʃĩ kì.ŋyē sō | | | | |
| | | | | | 3HPL.be PROG.come X | | | | |
| | | | | | bā.nĩ.tèlèk | kā.tʃũ.ì. . . | | | |

Break: TAM Asp, Mo, TAM Intro, Sequenc, Intro, Subject

| | 40 | 99 | 73 | 64 | m | 0.1300 | Verb | Object |
|------|---|----|----|----|------|-----------------------------|---------------------------|--|
| | 40 | 99 | 73 | 64 | m | 0.1300 | 3HPL.ASP.stand
bā.hīlè | CL 12.place.DEF
nī ì.tèlèk kà.tfū.ì.ì.tèlèk.ì |
| | 0 | 99 | 63 | 49 | e | 0.1400 àà
then | 3HPL.return
bā.sà.yī | with INF.stand CL12.place.DEF 1
ū.mbà.ì |
| | 40 | 99 | 78 | 64 | y | 0.1401 nā
that | 3HPL.not.know
bā.hīlè | CL3.time.DEF |
| | | | | | | | 3HPL.return | |
| | They would go on horses and show themselves, and then return as if they had withdrawn,
then they would return to the war zone and [the enemy] would not know when they had returned. | | | | | | | |
| S | 25 | 99 | 63 | 69 | c, l | q, d
0.1500 tò, àná wú.í | í.sá | |
| | | | | | | well, and 3HSInd.DEF | it.be | |
| | 40 | 99 | 73 | 69 | m | 0.1600 | á.dí.bá | bàná ā.nt.fīlīŋ.ì.ì.fī |
| | | | | | | | 3HS.tell.3HPL | about CL8.road.DEF INF.do |
| | 40 | 99 | 73 | 69 | y | 0.1601 nā
that | bāā.fī | |
| | | | | | | | 3HPL.do | |
| | 40 | 99 | 73 | 64 | e | 0.1602 à.
then | bā.món | bā.nī bā.nīŋī |
| | | | | | | | 3HPL.defeat | CL2.person CL.that |
| | Well, and he was the one who told them the routes and [things] to do to defeat those people. | | | | | | | |
| | | | | | | Listener | | |
| S, T | 40 | 99 | 73 | 69 | e | 0.1610 àà
then | bā.mūn | bā.tá |
| | | | | | | | 3HPL.defeat | CL2.who |
| | So they would defeat who (pl)? | | | | | | | |
| | | | | | | Storyteller | | |
| S, T | 40 | 99 | 73 | 69 | e | 0.1620 àà
then | bā.mūn | bā.kūn.ì |
| | | | | | | | 3HPL.defeat | CL.Irigwe |
| | The Irigwe. So they would defeat the Irigwe people. | | | | | | | |
| S, P | 25 | 99 | 63 | 59 | S | m
0.1700 | ī.ī.ì.yī | |
| | | | | | | | it.if it.mean | |
| | 15 | 99 | 68 | 59 | p, b | m
0.1800 | bā.bí.ŋī kì.nyē | |

| Break | TAN | Tim | Asp | Moc | TAM | Intro | Sequenc | Introdu | Subject | Verb | Object |
|-------|-----|-----|-----|-----|-----|-------|---------|---|---------------------------|------------------------------------|----------------------------|
| | 45 | 99 | 68 | 69 | t | m | 0.1900 | | CL2.person
bā.nō | 3HPL.MOD.be PROG.come
bā.tá.sōŋ | |
| | 40 | 99 | 68 | 69 | e | e | 0.2100 | à. | CL2.some
bā.nō | 3HPL.ASP.dwell
bā.sōŋ | |
| | 40 | 99 | 73 | 64 | e | e | 0.2200 | à. | CL2.some
à.bírdjé ā.nó | 3HPL.dwell.X
āā.tō | kù.tʃíŋ.ì
CL15.road.DEF |
| | 25 | 99 | 68 | 69 | p | y | 0.2201 | nà | CL7.hero CL7.some | 3HS.see
bā.ʃi kì.yūū | |
| | | | | | | | | that | | 3HPL.be PROG.follow | |
| | | | | | | | | If it happens that people [enemies] are coming, because some people live [here] and others live [there] | | | |
| | | | | | | | | one hero would see which route they were following. | | | |
| S | 40 | 99 | 73 | 69 | m | m | 0.2300 | | | ā.yú | |
| | | | | | | | | | | 3HS.comeOut | |
| | 40 | 99 | 73 | 69 | m | m | 0.2400 | | | ā.dí | bā.zànàŋ.ì |
| | | | | | | | | | | 3HS.tell | CL2.friend.DEF |
| | 40 | 99 | 73 | 69 | m | m | 0.2500 | | | ā.fī.bā. | |
| | | | | | | | | | | 3HS.say.3HPL | |
| | 25 | 89 | 68 | 69 | p | y, q | 0.2501 | nā, tò | bā.ní bā.yùjò | bā.ʃi kì.nyē | kā.ŋkāi,
CL12.today |
| | | | | | | | | that, wél. | CL2.person CL2.that | 3HPL.be PROG.come | |
| | 25 | 89 | 63 | 69 | c | d | 0.2502 | ànū | kū.tʃíŋ.ì | kū.ʃi | |
| | | | | | | | | | CL15.road.DEF | CL15.be | |
| | 25 | 89 | 68 | 69 | p | y | 0.2503 | nà | | bā.ʃi kì.yùāŋ.ā | |
| | | | | | | | | that | | 3HPL.be PROG.follow.X | |
| | 40 | 84 | 68 | 54 | e | e | 0.2504 | àà. | | ū.yí | kì.zín |
| | | | | | | | | then | | 2S.know | PREP.walk |
| | | | | | | | | He would come out and tell his friends, saying, "Those people [the enemy] are coming today, and t | | | |
| | | | | | | | | they are following, so be careful how you walk around." | | | |
| S | 40 | 99 | 73 | 69 | e | e | 0.2600 | àà. | | bā.ʃēm | à.bírdjé ā.nó |
| | | | | | | | | then | | 3HPL.choose | CL7.hero CL7.some |

| Break: TAN Tim Asp. Mot TAM Intro: Sequenc | Intro: Subject | Verb | Object |
|--|----------------------------|--|--|
| 40 99 73 69 | m 0.2700 | bā. t̃k
3HPL. keep | à. bírdzɛ̃ k̄. nū k̄. t̃f̃l̃ k̄. n̄
CL7. hero CL12. mouth CL15. roac |
| S 0 99 73 49 g | h 0.2900 í. yí
it. mean | bā. sà. yí
3HPL. NEG. mean | Then they would choose one hero and keep him at that junction in the road.
ù. g̃aj
CL3. chance |
| S 25 99 73 69 s | d 0.3100 ànā
and Then | bā. h̃l̃ è bā. j̃em
3HPL. return 3HPL. choose | à. bírdzɛ̃ à. nó
CL7. hero CL7. some |
| 40 99 73 69 | m 0.3200 | bā. t̃k
3HPL. keep | k̄. nū k̄. t̃f̃l̃ k̄. k̄
CL12. mouth CL15. road CL12. dif |
| S 0 99 73 69 s, g | q, e 0.3300 tò, àà | wú à. bírdzɛ̃ á. ñp̃ í. à. làt à. sà. k̄ù n̄ | They would also choose another hero and keep him at a different junction. |
| S 40 99 63 69 | m 0.3400 | à. yí
3HS. know | well, the 3HS Ind CL7 hero CL7 3HS. pass Night 3HS. NEG. sleep
Well, then, that hero wouldn't sleep that night. |
| 25 99 68 69 p | y 0.3401 nā
that | bā. j̃i k̄i. yù á n̄
3HPL. be PROG. follow | k̄. t̃f̃l̃ l̃. í
CL15. road. DEF |
| S 40 99 73 69 | e 0.3500 à. | á. kpá
3HS. climb | k̄i. táí
CL5. stone (hill) |
| 40 99 68 69 | m 0.3600 | ā. sō. mā
3HS. sit. with | |
| 40 99 73 69 | m 0.3700 | k̄. t̃f̃l̃ l̃. í [nā bā. tà. à. ā. d̃f̃. b̄
CL15. road [that 3HPL. then. 3HS. tell. them | |
| 25 99 68 59 S, p | y 0.3701 nā
that | bā. tà bā. j̃i k̄i. yū ā
3HPL. if 3HPL. be PROG. follow | |
| S 40 99 73 69 | q 0.3800 tò | He would climb a mountain and sit there, and the road they were following he would tell them.
ā. t̃f̃y: à. bā | |

| Break | TAN | Tim | Asp | Moc | TAM | Intro | Sequenc | Introdu | Subject | Verb | Object |
|-------|-----|-----|-----|-----|------|--------|---------|---------|---|--|--|
| | 40 | 89 | 78 | 69 | y | 0.3801 | nā | that | bā.nī bà.bāi
CL2.person CL2.this | 3HS.say.to.them
bā.yū
3HPL.comeOut
bā.ʃi kī.nyé
3HPL.be PROG.come
bā.ʃi kī.yūā
3HPL.be PROG.follow | bà.kāŋ'ì
CL6.outside.DEF |
| | 25 | 89 | 68 | 69 | m | 0.3802 | | | | | |
| | 25 | 89 | 68 | 69 | d | 0.3803 | àná | andThen | | | kū.tʃíí kō.kòì
CL15.road CL15.this |
| | 25 | 89 | 63 | 69 | m | 0.3810 | | | | | "These people have come out and they are coming on this road." |
| S, P | 60 | 99 | 63 | 69 | m | 0.3900 | | | ān.tʃíí
CL8.road | 2S.know 2S.say
ā.nì.mòsò
CL8.ASP.gather | wù ɲá
just even |
| | 25 | 99 | 63 | 59 | S | 0.4100 | | | You know, there were many routes. | | |
| S | 25 | 99 | 68 | 59 | p, s | 0.4200 | | | | ī.tì ì.yī
it if it.mean
bā.ʃi kī.nyé bā.ʃi kī.yū
3HPL.be PROG.come 3HPL.be CL15.road of CL12.PLACE | kō.tʃíí àná kà.kék |
| | 40 | 99 | 73 | 64 | e | 0.4400 | à. | then | | ā.tò
3HS.see | |
| | 25 | 99 | 63 | 59 | S | 0.4500 | | | If it happened that they were coming following the Kakkek road, he would see. | | |
| S | 25 | 99 | 68 | 59 | p | 0.4600 | | | | ī.tì ì.yī
it if it.mean
bā.ʃi kī.yū
3HPL.be PROG.follow | kō.tʃíí àní ī.gbák
CL15.road of CL10.PLACE |
| | 40 | 99 | 73 | 64 | e | 0.4700 | à. | then | | ā.tò
3HS.see | |
| | 25 | 99 | 63 | 59 | S | 0.4800 | | | If it happened that they were following the Igbak road, he would see. | | |
| S | 25 | 99 | 63 | 59 | S | 0.4800 | | | | ī.tì ì.yī
it if it.mean | |

| Break | T | A | N | Tim | Asp | Mo | TAM | Intro | Sequenc | Introdu | Subject | Verb | Object |
|---------|----|----|----|-----|------|----|-----|--------|--|------------|---------|-----------------------------|-------------------------|
| | 25 | 99 | 68 | 59 | p | m | | 0.4900 | | | | bā.ɸi kɪ.yū | kū.ɸɸiɸi ānī à.gbàdʒi |
| | 40 | 99 | 73 | 64 | e | | | 0.5100 | à. | | | 3HPL.be PROG.follow | CL15.road of CL10.PLACE |
| | | | | | | | | | then | | | 3HS.see | |
| | | | | | | | | | If it happened that they were following the Agbaji road, he would see. | | | | |
| S | 55 | 99 | 63 | 69 | n, c | m | | 0.5200 | bā.nā ā.ntɸiɸi | | | bā.ni.ɸi | bà.tàāt |
| | | | | | | | | | CL2.of CL8.road | | | CL2.ASP.be | CL2.three |
| | | | | | | | | | There were three routes. | | | | |
| | | | | | | | | | Listener | | | | |
| S, P, T | 45 | 99 | 68 | 69 | t | m | | 0.5210 | | | | à.tá.sò | bì ɪ.ŋkpè |
| | | | | | | | | | | | | 3HS.ASP.sit | PREP CL10.thing |
| | 25 | 99 | 68 | 69 | p | d | | 0.5220 | àn. | | | ā.ɸi kɪ.tò.à | |
| | | | | | | | | | andThen | | | 3HS.be PROG.see.? | |
| | | | | | | | | | On what would he sit while he was watching? | | | | |
| | | | | | | | | | Storyteller | | | | |
| S, T | 45 | 99 | 68 | 69 | t | z | | 0.5300 | òò | | wú.ɪ | ā.tá.sò . . ā.tá.sò | kì.tāi |
| | | | | | | | | | OK | 3HSInd.DEF | | 3HS.ASP.sit . . 3HS.ASP.sit | CL5.rock |
| | | | | | | | | | Ok, he used to sit on a rock. | | | | |
| S | 45 | 99 | 68 | 69 | t | m | | 0.5400 | | | | ā.tá.sò | kì.gbát |
| | | | | | | | | | | | | 3HS.ASP.sit | CL5.hill |
| | 45 | 99 | 68 | 69 | t | m | | 0.5500 | | | | ā.tá.sò | kì.sākāsūkūŋ.ɪ |
| | | | | | | | | | | | | 3HS.ASP.sit | CL5.PLACE |
| | 40 | 99 | 73 | 69 | d | | | 0.5600 | àn. | | | ā.tò | |
| | | | | | | | | | then | | | 3HS.see | |
| | | | | | | | | | He would sit on a hill, usually at Kisakasuku, and he would see. | | | | |
| | | | | | | | | | Listener | | | | |
| S, T | 40 | 99 | 68 | 69 | m | | | 0.5610 | | | | bā.dōŋ . . à.dōŋ | kì.gbát.ɪ kɪ.kūn |
| | | | | | | | | | | | | 3HPL.hide. . 3HS.hide | CL5.tree CL5.hill |

| Break | TAN | Tim | Asp | Mov | TAM | Intro | Sequenc | Introdu | Subject | Verb | Object |
|---------|-----|-----|-----|-----|------|-------|---------|---------|---|--|---|
| | 25 | 99 | 68 | 69 | p | d | 0.5620 | àn. | then | ā.ŋ̄ k̄i.tò.bā
3HS.be PROG.see.them | |
| | | | | | | | | | They would... he would hide on the hill among the trees and be watching them? | | |
| | | | | | | | | | Storyteller | | |
| S, T | 40 | 99 | 68 | 69 | z | | 0.5700 | òò | | ā.sò
3HS.sit | k̄i.tāi
CL.5.stone |
| | | | | | | | | | OK | | |
| | | | | | | | | | | | |
| | 25 | 99 | 73 | 69 | p | h, d | 0.5800 | gbā ànā | until andThen | ā.ŋ̄ k̄i.tò.ì
3HS.be PROG.see.PROG | |
| | | | | | | | | | Yes, he would sit on the stone until he saw [them]. | | |
| S | 40 | 99 | 73 | 69 | q, e | | 0.5900 | tò, à. | Well, then | á.tēt
3HS.tell | |
| | | | | | | | | | And then he would warn [them]. | | |
| | | | | | | | | | Listener | | |
| S, P, T | 25 | 99 | 73 | 59 | S | m | 0.5910 | wú | 3HSInd | á.tà à.tò.bá
3HS.if 3HS.see.3HPL | k.ì.t(ŋ̄) ì.ɲyé ɲá
PREP.INF.go INF.come even |
| | | | | | | | | | | bā.ŋ̄ bà.gbáŋì ɲá
3HPL.be 3HPL.beFar even | |
| | | | | | | | | | andThen | ā.tēt.ì
3HS.tell.* | yá
how |
| | 40 | 99 | 73 | 64 | e | | 0.5950 | à. | then | | |
| | | | | | | | | | When he saw them coming and they were still far away, how would he tell his people? | | |
| | | | | | | | | | Storyteller | | |
| S, T | 25 | 99 | 73 | 69 | s | m | 0.6100 | | | ā.tēt ā.tā
3HS.tell 3HS.say | |
| | | | | | | | | | | bā.mōsō
3HPL.gather | kū.kpá
CL.15.skin [selves] |
| | 40 | 94 | 73 | 54 | m | | 0.6201 | | | | |
| | | | | | | | | | He would tell them to be ready [lit: gather themselves]. | | |
| | | | | | | | | | Listener | | |

Break: TAN Tim Asp: Mo: TAM Intro: Sequenc Intro: Subject

| S, T | 40 99 | 73 69 | e | 0.6210 à. | then | Would he scream? | Verb | Object |
|------|-------|---------|------|---------------|-------------------|---|--|---|
| | 40 99 | 73 69 | h, e | 0.6220 hā, à. | or, then | | á. fī .
3HS.do | ì. rùù. ù .
CL9.scream.? |
| | 40 99 | 73 69 | | | Or beat the drum? | | ā. wūt
3HS.beat | à. gàngà. à
CL7.drum.? |
| S, T | 40 99 | 73 69 | e | 0.6300 à. | Storyteller | | ā. fī
3HS.do | ì. rùù
CL9.scream |
| | 40 99 | 73 69 | d | 0.6400 àn. | then | | ā. fī.
3HS.say. | |
| | 25 99 | 68 69 p | y | 0.6401 nā | then | | bā. fī kǐ. yū
3HPL.be PROG.follow | ā. mbāi
CL8.this |
| | | | | | that | He would scream and say they were following this route. | | |
| S | 40 99 | 68 59 | e | 0.6500 à. | then | | bā. bī. fī kǐ. yū
3HPL.MOD.be PROG.comeOu CL6.house,DEF | bā. kō. ì
ì. rùù
CL9.scream |
| | 40 99 | 73 59 | e | 0.6600 à. | then | | ā. fī
3HS.do | |
| | 40 99 | 73 59 | d | 0.6700 àn. | andThen | | ā. fī.
3HS.say. | |
| | 25 89 | 68 69 p | y | 0.6701 nā | that | Even when they were just leaving their homes, he would scream and say they are coming through s | bā. fī kǐ. yū
3HPL.be PROG.follow | ā. mbāi
CL8.this |
| | 40 99 | 73 69 | e | 0.6800 à. | then | | ā. fī
3HS.do | ì. rùù
CL9.scream |
| | 40 99 | 73 69 | d | 0.6900 àn. | andThen | | ā. fī.
3HS.say. | |
| S | 25 89 | 68 69 p | y | 0.6901 nā | that | | bā. fī kǐ. yū
3HPL.be PROG.follow | kū. fǐlǐ kū. mǎi
CL15.road CL15.this |

| Break: TAN Tim Asp: Mo: TAM | Intro: Sequenc | Intro: Subject | Verb | Object |
|-----------------------------|----------------|----------------|---|--|
| S | 40 99 73 69 | e | 0.7100 à.
then | yā ì.rùũŋ'ì
how CL9.scream.DEF |
| S, P | 40 99 63 69 | q | 0.7200 tò,
well, | bā.zà ā.bírjéŋ'ì
CL2.friend CL8.hero.DEF |
| | 40 99 73 69 | m | 0.7300 | bānā ā.ntʃíŋ'ì
about CL8.road.DEF |
| S | 40 99 63 69 | e | 0.7400 à.
then | nà à.bírjé
with CL7.hero |
| | 25 99 63 69 | h | 0.7500 kì ì.bá kũ.tʃíŋ'ì kũ.yũŋó
because CL15.road CL15.that | nà à.bírjéŋ'ì
with CL7.hero |
| | 25 99 63 69 | m | 0.7600 kũ.tʃíŋ'ì kũ.kũ
CL15.road CL15.this | nà à.bírjéŋ'ì
with CL7.hero |
| | 25 99 63 69 | e | 0.7700 à.
then | nà à.bírjéŋ'ì
with CL7.hero |
| S | 40 99 63 69 | q, e | 0.7800 tò, à
well, then | bàn.tʃũ nā. . . kũ.tʃíŋ'ì
CL6.place that. . . CL15.road |
| | 40 94 73 69 | y | 0.7801 nā
that | |
| | 10 94 73 69 | i | 0.7802 | |
| S | 40 99 73 69 | q, e | 0.7900 tò, à
well, then | bàn.tʃũ nā. . . kũ.tʃíŋ'ì
CL6.place that. . . CL15.road.DEF |
| | 40 99 73 69 | y | 0.7901 nā | |

| Break | TAN | Tim | Asp | Moc | TAM | Intro | Sequenc | Intro | Subject | Verb | Object |
|---------|-----|-----|-----|-----|------|-------|---------|--|---|--|--------|
| | 10 | 94 | 73 | 69 | i | m | 0.7902 | that | | 3HPL.come
ì.ràsá
INF.meet | |
| S, P | 60 | 99 | 73 | 69 | n | m | 0.8100 | Well, then they would know the place where. . .the road where they would meet. | bā.nì.hēlè mīnìjì
3HPL.ASP.return likeThat
ín.tēt.í .
1S.tell.X | kà bá.ná āfī ū.nī ā.nìjì
PREP CL2.of CL1.father CL1.pei | |
| S, T | 5 | 69 | v | 69 | v | m | 0.8120 | Listener
It happened like that to people like our father, the person I'm talking about. | ā.fī ū.tá
CL1.father CL1.who
Which father? | | |
| S, T | 5 | 69 | v | 69 | v | m | 0.8130 | Storyteller
Father Ude. | ā.ti ū.dèŋ'j.ì
CL1.father CL1.NAME.DEF | | |
| S, P, T | 55 | 99 | 83 | 69 | n, s | q, e | 0.9000 | tò, à.
well, then. | bā.nì.hēlè bā.yì bá.nyé
3HPL.ASP.return 3HPL.know 3HPL.come
ì.dòlì ì.fī
CL9It CL9.thing CL9.t CL9.start INF.do | ì.sù
CL10.end | |
| S, T | 5 | 69 | v | 69 | v | m | 1.0010 | Listener
Which thing? | yī ì.ŋkṗīŋ.à
CL9It CL9.what.? | | |
| S, T | 25 | 99 | 83 | 69 | x | m | 1.0020 | Storyteller
Which thing? | yī ì.ŋkṗīŋ.ì
CL9It CL9.war.DEF
CL9.start INF.do | ì.sù
CL10.end | |

Breaks TAM Tim Aspe Moo TAM Intro Clause# Connector Subject

| | Storyteller | Verb | Object |
|---------|--|---|---------------------|
| S, P, T | 25 99 83 69 x m | ì.dòlì ì.fī | ì.sù |
| | 1.0000 | CL9ft CL9.war.DEF | CL10.end |
| | 50 99 73 69 n, t, s d | bā.nǐ.tǎ.dǐ bā.dǐ | Yèl.Yèl |
| | 1.0100 ànā | 3HPL.ASP.ASP.tell 3HPL.tell secretly.RED | |
| | andThen | ì.bló ì.hǐk | bā.zànà |
| | 10 94 68 64 i, s m | INF.go INF.find | CL2.hisFriends |
| | 1.0101 | | |
| S | 40 99 73 69 q, e | The war was coming to an end, but they would still invite their friends to go with them secretly. | |
| | 1.0300 tò, ò | ū.nǐ ā.nǐjǐ [nā bā.fǐú] | āā.tò |
| | well, then | CL1.person CL1.that [i | 3HS.see |
| | 1.0200 [nā | bā.fǐ.úú | kā kàtàntǔsǐ] |
| | that | 3HPL.do.3HS | PREP responsibility |
| | And then that man who had the responsibility of keeping watch would see. | | |
| S, T | 45 99 73 69 t m | bā.tǎ.dǐ | Yè.Yèl.à |
| | 1.0310 | CL2.who | secretly.? |
| | Who (pl) organized [attacks] secretly? | | |
| S, T | 5 69 v m | bā.ì bā.ì bā.tǐé | |
| | 1.0320 | 3HPL.DEF 3HPL.DEF Bache. | |
| | Storyteller | | |
| S, P | 25 99 63 59 S h | bā.tà bā.yī bā.wō | |
| | 1.0400 ì.tǐ ì.yī | 3HPL.if 3HPL.know 3HPL.feel | bā.kún |
| | it.if it.mean CL2.Bache | ì.bló ì.yíP | CL2.Irigwe |
| | 1.0401 | INF.go INF.steal | Yè.Yèl |
| | 25 99 73 64 s,a e | bā.bló bā.dǐ.sǐ | secretly.RED |
| | 1.0500 à. | 3HPL.go 3HPL.tell.RED | |
| | then. | | |
| | If it happened the Bache wanted to go and steal from the Irigwe, they would plan secretly. | | |

Breaks TAM/Time/Aspect/Mood/TAM/Intro Clause# Connector Subject

| S | 25 | 99 | 68 | 69 | p | m | 1.0600 | Verb | Object |
|---|----|----|----|----|------|---|-----------|--|--|
| | 15 | 99 | 73 | 69 | b | e | 1.0700 à. | bā.ʃ̣ ḳì.yī
3HPL.be PROG.eat | ì.yáí
CL9.dinner |
| | | | | | | | then. | bā.bí.héēŋ .
3HPL.MOD.appear | bā.kóŋ .
CL2.Irigwe |
| S | 25 | 99 | 63 | 59 | S, p | m | 1.0800 | They [the Irigwe] would be eating their dinner, and then they would show up in Irigwe land. | |
| | 25 | 99 | 63 | 59 | S | m | 1.0900 | bā.tà bā.ʃ̣ ḳì.yī
3HPL.if 3HPL.be PROG.eat | ì.yáí . . .
CL10.dinner |
| | 25 | 99 | 68 | 59 | p | m | 1.1100 | ì.ṭ ì.yī
it.if it.mean | |
| | 25 | 99 | 73 | 59 | S | m | 1.1200 | bā.ʃ̣ ḳì.blō
3HPL.be PROG.go | bī ì.ŋkón . . .
PREP CL10.Irigwe. . . |
| | 25 | 99 | 63 | 59 | S | m | 1.1300 | bā.tà bā.tō
3HPL.if 3HPL.see | ū.wā
CL1.woman |
| | 40 | 99 | 73 | 59 | y | y | 1.1400 nī | bā.tú
3HPL.if 3HPL.see | ū.vīn
CL1.child |
| | 10 | 94 | 73 | 59 | i,s | m | 1.1500 | bā.tú
3HPL.send | ū.vīm n̄ ì.kpòù
CL1.child with CL9.food |
| | 40 | 99 | 73 | 64 | e | e | 1.1600 à. | ì.blō [̣].n̄k.ī
INF.go [INF].give.* | bù ù.bāk ū.wù
PREP CL3.apartment CL3.this |
| | 40 | 99 | 73 | 69 | s | e | 1.1700 à. | bá.tará .
3HPL.shoot | |
| S | 25 | 99 | 73 | 69 | s | e | 1.1800 | If they saw a woman, [or] if they saw a child sent with food from one apartment [to another], they w | |
| | 40 | 99 | 73 | 69 | m | m | 1.1800 | bā.hēìè bā.tō
3PLH.return 3PLH.see | bù ù.bāk ū.wù
PREP CL3.apartment CL3.this |
| | 25 | 99 | 68 | 69 | p | m | 1.1900 | ā.yū
3HS.comeOut | |
| | | | | | | | | ā.ʃ̣ ḳì.blō
3HS.be PROG.go | |

| Breaks | TAM | Time | Aspe | Mood | TAM | Intra | Clause# | Connector | Subject | Verb | Object |
|--------|-----|------|------|------|------|--------|---------|--|---------------------|---|-------------------------------------|
| S | 40 | 99 | 73 | 69 | d | 1.3300 | ànā | | | bá.hám | ì.yák.ì b.ì.dór.ì |
| | 40 | 99 | 73 | 69 | m | 1.3400 | andThen | | | 3HPL.close
bā.sōk | CL9.bell.DEF PREP.CL9.hors
ì.kpì |
| | 40 | 99 | 73 | 69 | m | 1.3500 | | | | 3HPL.take
bá.hám | CL9.thing
ì.yák.ì mā |
| S | 40 | 99 | 73 | 69 | q, d | 1.3600 | tò, ànā | And they would stop the horse's bell; they would take something and stop the horse's bell with it. | | bá.wúp | CL9.bell.DEF with
ā.bùp bā ā.vũ |
| | 40 | 99 | 73 | 69 | m | 1.3700 | | Well, andThen | | 3HPL.pluck
bá.hám | CL8.old X CL8.leaf
ì.yák.ì mā |
| S | 25 | 99 | 63 | 69 | p | 1.3800 | | Well, and they would pluck old leaves and stop the horses bell with them. | | 3HPL.close
bā.ŋ kì.yüi | CL9.bell.DEF with |
| | 0 | 99 | 63 | 49 | g | 1.3900 | à. | then. | bá.ì | 3HPL.be PROG.comeOut
bā.sā.Yì | |
| S, P | 25 | 99 | 78 | 59 | a, S | 1.4100 | | They would be there and they [the enemy] wouldn't know. | | 3HPL.NEG.know
bā.tà.dül bā.túl bā.yú.ā | |
| | 40 | 99 | 63 | 59 | m | 1.4200 | | | | 3HPL.if.doSuddenly 3HPL.remove 3HPL.comeOut.with
bā.Yì | |
| | 25 | 99 | 63 | 59 | S, f | 1.4300 | | | | 3HPL.know
bā.tà bāā.bló | kàat |
| | 35 | 99 | 73 | 64 | r | 1.4400 | à. | | ũ.nĩ ũ.nó | 3HPL.if 3HPL.go
àā.nyē | far |
| | 55 | 99 | 68 | 64 | n, a | 1.4500 | | | CL1.person CL1.some | 3HS.come
ā.nì.nā.bā | |
| | 40 | 99 | 78 | 49 | m | 1.4600 | | | | 3HS.ASP.tease 3HPL
ā.cìŋ'ĩ | |
| | | | | | | | | | | 3HS.arrive.just | |

Breaks TAM Tim Aspe Moo TAM Intro Clause# Connector Subject

Verb Object

When they had looted and they knew that they had gone far away, then one man would come and tell

| S | P | T | Tim | Aspe | Moo | TAM | Intro | Clause# | Connector | Subject | Verb | Object |
|---------|----|----|-----|------|--------|--------|---|---------|------------------|--|--|----------------|
| 40 | 99 | 63 | 69 | e | 1.4700 | à. | then. | | | ì. cíŋ'í . | bā. tāmālā | |
| 25 | 99 | 63 | 49 | c, l | 1.4701 | m | | | INF. arrive,just | í. sá . | 3HPL.think | |
| 40 | 99 | 78 | 49 | m | 1.4702 | | | | | it.be | | |
| 40 | 99 | 63 | 49 | h | 1.4800 | ĩntámá | insteadOf | | | á. cíŋ'í . | 3HS.arrive,just | |
| 15 | 99 | 78 | 69 | b, s | 1.4801 | m | | | | ì. YÍ | INF.know | |
| 25 | 99 | 68 | 49 | S, p | 1.4900 | kàmin | and they would think he had just arrived, instead of knowing they had already stolen those things and | | | bā. bī. tóí [ĩ. kpī ĩ. nìŋ'í] bā. ĩ. kpī ĩ. nìŋ'í | 3HPL.MOD.remove [CL10.thi CL10.thing CL10.that | |
| 40 | 99 | 73 | 64 | e | 1.5100 | à. | then. | | | bā. tà. bà. ſi kà. fī | 3HPL.if 3HPL.be PROG.do | CL9.scream |
| 40 | 99 | 78 | 64 | m | 1.5200 | | | | | bā. nī. bā. nìŋì | 3HPL.find | |
| | | | | | | | | | | CL2.person CL2.that | bà. vù. . . bà. vù | ā. káŋ . |
| | | | | | | | | | | Before they could scream, they discovered those people had got away. | 3HPL.catch.. 3HPL.catch | outside |
| S, P, T | 20 | 84 | 68 | 54 | o, a | m | Listener | | | | zi. tʃe | furthermore,go |
| S, P | 40 | 89 | 83 | 69 | m | 1.5220 | Go on. | | | āſĩm. bīrĩdžēŋ'í . | á. tú. ũ . | |
| | | | | | | | | | | Is that the end of the heroes? | ALTERNATIVE.hero.D. CL8.stop.? | |
| S, T | 5 | 69 | v | m | 1.5230 | | Storyteller | | | ĩ. bá āſĩm. bīrĩdžēŋ'í . | CL10.matter ALTERNATIVE.hero.DEF | |

Breaks TAM/Time/Aspect/Mood/TAM Intro Clause# Connector Subject

Are you still talking about heroes?

Object

Verb

| Breaks | TAM | Time | Aspect | Mood | TAM Intro | Clause# | Connector | Subject |
|---------|-----|------|--------|------|-----------|---------|--|---|
| S, T | 5 | 69 | v | z | 1.5240 | òò | yes | <p>Listener</p> <p>títì ì.wǒŋ.ì
like INF.hear.DEF
nā bān.ā.ŋ
from PREP.CL1.father</p> |
| S, T | 25 | 79 | 63 | 69 | v, c | z | yes | <p>Storyteller</p> <p>kū.nà.wǒŋ
1PL.ASP.hear</p> |
| S, P, T | 40 | 89 | 78 | 69 | m | 1.5270 | <p>Listener</p> <p>tūt
1PLInd
Yes, we heard it like that from our fathers.</p> | |
| S | 25 | 89 | 63 | 69 | a | e | <p>Storyteller</p> <p>andThen
then.
You've talked about Father Ados and you've talked about Father Ude? Then who else remains?</p> | |
| S, T | 25 | 89 | 68 | 69 | p | h | <p>Listener</p> <p>it.mean
That is, you are moving backwards to this our generation.</p> | |
| S, P, T | 40 | 89 | 63 | 69 | z, w | 1.5400 | <p>Storyteller</p> <p>yes, just</p> | |

Breaks TAM Tim Aspe Moo TAM Intro Clause# Connector Subject Verb Object

| | | | | | | | | | | |
|------|----|----|----|----|--------|-------------|---|---|------------|---------------------------|
| S, T | 5 | 69 | v | m | 1.5410 | Listener | Yes. Only Ude's friend Angau remains. | ā.ŋgāū | | |
| | | | | | | | Angau? | | | |
| S, T | 5 | 69 | v | m | 1.5420 | Storyteller | | ā.ŋgāū bī ī.gbák. . . ā.ŋgāū à.ʃkò | | |
| | | | | | | | Angau from Igbak. . . Angau Ashiko | CL1.1.NAME PREP CL10.PLACE. . . CL1.1.NAME CL1.1.NAME | | |
| S, T | 5 | 69 | v | m | 1.5430 | Listener | | ā.ŋgāū ū.tá.ā | | |
| | | | | | | | Angau who? | CL1.1.NAME CL1.who.? | | |
| S, T | 5 | 69 | v | m | 1.5440 | Storyteller | | ā.ŋgāū à.ʃkò | | |
| | | | | | | | Angau Ashiko | CL1.1.NAME CL1.1.NAME | | |
| S, T | 5 | 69 | v | m | 1.5450 | Listener | | ā.ŋgāū à.ʃkò | | |
| | | | | | | | Angau Ashiko | CL1.1.NAME CL1.1.NAME | | |
| S, T | 40 | 89 | 63 | 69 | m | 1.5500 | Storyteller | à.bírídžé . | í.yí | kàn.ū.tʃíí kũ.nó kènàn |
| | | | | | | | That's the hero on one of those routes. | CL7.hero | it.mean | X.CL15.road CL15.some EMI |
| S, T | 30 | 99 | 63 | 69 | t, c | h | 1.5600 | kì ī.báŋ'.ì à.bírídžé . | à.tá.ʃí . | kàn.ū.tʃíí kũ.kù |
| | | | | | | | | PREP CL10. CL7.hero | CL7.HAB.be | X.CL15.road CL15.this |
| | 25 | 99 | 63 | 69 | c | e | 1.5700 | à.à.nó | á.ʃí . | kàn.ū.tʃíí kũ.kù |
| | | | | | | | then | CL7.some | CL7.be | X.CL15.road CL15.this |

Breaks TAM|Tim|Aspe| Moo| TAM|Intro| Clause#| Connector| Subject

Object
 kũ.tʃíí kũ.kò
 CL15.road CL15.this

Verb
 á.ʃí
 CL7.be

Because there was a hero on this road and another on this road and another on this road.

| | | | | | | | | | |
|---------|----|---------------|---|--------|-------|-------------|---|---------------------------|----------------|
| S, T | 5 | 69 v | z | 1.5810 | yauwa | Listener | | | |
| | | | | | OK! | | | | |
| S, P, T | 5 | 69 v | q | 1.5820 | tò, | Storyteller | | | |
| | 40 | 89 78 69 | y | 1.5830 | ní | To, | à.yì ..à.yì bà à.gbàjì | CL7.which. . .CL7.which | PREP CL7.PLACE |
| | | | | | | that | Ìn.tět.à njá | | |
| | 55 | 99 63 69 n, c | m | 1.5900 | | | 1S.speak.* even | | |
| | | | | | | | á.nā.ʃí . | ũ.nĩ à.zá | |
| | 60 | 99 63 69 n | m | 1.6100 | | | 3HSInd.DEF | CL1.person CL8.foot | |
| | | | | | | | wú.ì . | à.āná à.hōmō, à.āná à.hōn | |
| | | | | | | | wú.ì . | CL1.NAME CL1.NAME, CL1 | |
| S | 40 | 89 63 69 | q | | tò | | 3HSInd.DEF | CL1.NAME CL1.NAME, CL1 | |
| | | | | | | | That one of Agbaji that I have talked about, he was a foot soldier and he's named Aana Ahomo, Aan | | |
| | | | | | | | í.yí . | | |
| | | | | | | | it.mean | | |
| | 30 | 99 73 69 t, a | m | 1.6200 | | | wú.ì . | bā.nĩ à.zá.ì | |
| | | | | | | | 3HSInd.DEF | CL2.person CL8.foot.DEF | |
| | 25 | 99 63 69 c | m | 1.6300 | | | bā | bā.nĩt | |
| | | | | | | | 3HPLInd | CL2.person | |
| | 25 | 99 73 69 a | e | 1.6400 | à. | | 3HPL.be. . . | | |
| | | | | | | | á.dí.sí.bá . | | |
| | | | | | | | 3HS.teach.3HPL | | |
| | | | | | | | then. | | |
| | | | | | | | Well, so he would organize the foot soldiers; they would be the people [ordinary soldiers] and he would | | |
| S | 5 | 69 v | e | 1.6500 | à. | | bá bā.nĩ Ì.dòr.ì | | |
| | | | | | | | 3HPLInd. CL2.person CL10.horse | | |
| | | | | | | | then. | | |
| | 25 | 99 73 69 a | e | 1.6600 | à. | | ā.bā.dí.sí | ā.bírjé bā.zàná | |
| | | | | | | | 3HS.also.teach | CL8.hero CL2.hisFriend | |

Breaks TAM Tim Aspe Moo TAM Intro Clause# Connector Subject Verb Object

S, P 50 99 73 69 n, t m 1.6610 Like the horse soldiers, he too would organize his hero friends.
 bā.nì.tá.ḥī 3HPL.ASP.ASP.say mìnìḥī
 likeThat

S 25 99 63 69 c, l q 1.6620 tō, They used to say like that.
 ì.ḥī [nà bā.nì.tá.ḥī] ì.ḥēē
 Well, INF.do [that 3HPL.ASP.it.be
 1.6630 [nà bā.nì.tá.ḥī] 3HPL.ASP.ASP.do
 that

Well, that's how it was done.
 Listener
 S, P, T 25 89 83 69 s e 1.6650 ò. Û.tá á.hílí ā.ḥík.āā
 then CL1.who 3HS.return 3HS.remain.?
 Do we still have more heroes?

Storyteller
 S, T 0 99 83 49 g, a, sh 1.6660 kātāāmā kī à.ā.bírjé ā.nó.á.sā.ḥílē á.ḥyé
 after.CL12.then.CL8.hero CL8.some CL8.NEG.even.return CL8.come
 After these there were no more heroes.

Listener
 S, T 25 89 63 69 s e 1.6670 ò. Û.tá á.hílí ā.ḥík.āā
 then CL1.who 3HS.return 3HS.remain.?
 S 0 99 83 49 g, a, sh 1.6680 kātāāmā kī à.ā.bírjé ā.nó.á.sā.ḥílē á.ḥyé
 after.CL12.then.CL8.hero CL8.some CL8.NEG.even.return CL8.come
 Is there any more? After these there were no more heroes?

Storyteller
 S, T 0 99 83 49 g, a, sz 1.6690 á?à . ā.bírjé ā.nó á.sā.ḥílē á.ḥyé
 no CL8.hero CL8.some CL8.NEG.even.return CL8.come
 No. No more heroes.

S 60 99 83 69 n e 2.0000 ì. ì.nkū ì.nī.ḥī ì.sū ḥā
 then CL9.war CL9.ASP.do CL9.end even

| Breaks | TAM | Time | Aspect | Mood | TAM | Intr | Clause# | Connector | Subject | Verb | Object |
|---------|-----|------|--------|------|-----|---------|------------|---|-------------------|-------------------|--------|
| S | | 40 | 89 | 63 | 69 | m | 2.0100 | The war was over. | | í.yí .
it.mean | |
| S, P, T | | 0 | 89 | 63 | 49 | g, p, c | 2.0130 | à.mākārāntā ā.wái wát [nū kū.ŋ kī.tī] nī ì.tōŋ.ī wát [nū kū.ŋ kī.tū] | a.sa kī.ma | | |
| | | 25 | 89 | 68 | 69 | p | 2.0110 [nū | CL7.school.CL7.this all [that 1PL.be PROG.do] with CL9.work.* all [1PL.be PROG.p | 3HS.be PROG.with | | |
| | | | | | | | that | | kū.ŋ kī.tī] | | |
| | | 25 | 89 | 68 | 69 | p | 2.0120 [nū | | 1PL.be PROG.do | | |
| | | | | | | | that | | kū.ŋ kī.tū] | | |
| | | 25 | 89 | 68 | 69 | p | 2.0140 | | 1PL.be PROG.pull | | |
| | | | | | | | | | kū.ŋ kī.láj | ū.mbà | |
| | | | | | | | | | 1PL.be PROG.waste | CL3.time | |
| S, T | | 5 | 69 | v | z | | 2.0150 | So, all the schooling and working we undergo and the expertise in them is just a waste of time? | | | |
| | | | | | | | òò | Storyteller | | | |
| | | | | | | | | yes | | | |
| S, T | | 0 | 89 | 63 | 49 | g, a, c | 2.0160 | tút.ì . | kú.ŋ.á.sā.mā . | ā.bíríjé . | |
| | | | | | | | | 1PLInd.DEF | 1PL.even.NEG with | CL8.hero | |
| | | | | | | | | So none of us is a hero? | | | |
| S, T | | 60 | 99 | 83 | 69 | n | 2.0170 | ì.ŋkū | ì.nī.tí . | ì.sūŋ | |
| | | | | | | | | CL9.war | CL9.ASP.do | CL9.finish | |
| | | | | | | | | The war finished. | | | |
| S, T | | 25 | 79 | 63 | 69 | c | 2.0180 | ì.ŋkū | ì.ŋ.yā | ì.gówù . | |
| | | | | | | | | Listener | | | |

Breaks TAM/Tim/Aspe Moo: TAM Intro Clause# Connector: Subject

CL9.war

There are different kinds of wars.

Storyteller

| S, P, T | 40 | 89 | 63 | 69 | z | 2.0190 | òò | í.yí | it.mean | Verb | CL9.be.there | Object | CL9.different. |
|---------|----|----|----|----|---|--------|--------|------|---|----------|--------------|-------------------------|---------------------------|
| | 25 | 89 | 83 | 69 | s | e | 2.0210 | Ì. | Ìn.Ìk ín.nyé | ÌS.getUp | ÌS.come | kù ù.mbà à.násará kǐ.yū | PREP CL3.time CL1.whiteMa |
| | | | | | | | | then | Yes, that will bring me to the coming of the white man. | | | | |

| Breat | TA | Tim | Asp | Mo | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|---------|----|-----|-----|----|---------|------|---------|------------|---|---|----------------------|
| S, P | 10 | 99 | 83 | 69 | i | h | | ū.mbə | à.násará | kǐ.yū | |
| | 40 | 99 | 68 | 69 | e | | 0.0100 | CL3.time | CL1.whitePerson | PROG.follow | ū.tù kà.kēēk |
| | | | | | | | | then. | bā.sāa . . à.bā.tík | | |
| | 60 | 99 | 63 | 69 | n | m | 0.0200 | | 3HPL.X . . then.3HPL.appoint | | CL1.chief CL12.PLACE |
| | | | | | | | | | á.nā.yí . | | à.zāgūn |
| | | | | | | | | | 3HS.ASP.mean | | CL1.NAME |
| S | 60 | 99 | 63 | 69 | n | m | 0.0300 | | At the time the white man came, the chief that was ruling at Kakkek was named Azagun. | | à.zāgūn |
| | | | | | | | | | á.nā.yí . | | CL1.NAME |
| | | | | | | | | | 3HS.ASP.mean | | CL1.NAME |
| S | 60 | 99 | 63 | 69 | n | q | 0.0500 | tò | He was named Azagun. | | à.zāgūn |
| | | | | | | | | | ū.nī ā.nìŋ'ì [nā bāà.f.á.nā.yí . | | CL1.NAME |
| | 35 | 99 | 78 | 69 | f | y | 0.0400 | [nā | CL1.person CL1.that [t' 3HS.ASP.mean | | CL1.NAME |
| | | | | | | | | that | bāà.tiūŋ'.ì] | | |
| | | | | | | | | | 3HPL.makeResponsible | | |
| S, P | 15 | 99 | 83 | 69 | b, s | m | 1.0000 | | The man that was installed was called Azagun. | | |
| | | | | | | | | | à.násará . | á.bí.yú [bì ì.ŋkūn] á.nyé [bì ì.ŋkūn] | |
| | 55 | 94 | 68 | 64 | n, s, p | m | 1.0100 | | CL1.whitePerson | 3HS.ASP.follow [PREP CL9.Ir.PREP CL9.Irigweland | |
| | | | | | | | | | ā.nī.tà ā.ŋì kì.làt | kà.mā kà.kāi, kà.mā kà.sāàn.í | |
| | | | | | | | | | 3HS.ASP.intend 3HS.be PROG.passNight CL12.back CL12.this, CL12.back C | | |
| S, P | 40 | 89 | 63 | 69 | m | m | 1.0110 | | The white man came through Iregweland and wanted to spend the night at Kasan. | | |
| | | | | | | | | | ŋú.ì . | ū.yí | ájā. . . |
| | | | | | | | | | 2SInd.DEF | 2S.know | X |
| | | | | | | | | | You know about. . . | | |
| S, T | 5 | | | | v | z | 1.0120 | tò | Listener | | |
| | | | | | | | | | yes | | |
| | | | | | | | | | Storyteller | | |
| S, P, . | 60 | 99 | 83 | 69 | n | q, e | 2.0000 | tò, à | bá.ní.dí . | | à.zāgūn.ì |
| | | | | | | | | | well, then | | CL1.NAME.DEF |
| | | | | | | | | | 3HPL.ASP.tell | | |

| Breal | TA | Tim | Asp | Mo | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|----------|-----------|-----------|--|------------|-------------------------------------|------|--------------|
| 5 | | v | m | 2.0001 | | | | | wó.ĩ, ũ.tũ kí.yá.ĩ... | | |
| | | | | Listener | | | | | 3HS.DEF, CL1.chief CL5.world.DEF... | | |
| S, T | 40 | 99 | 83 | 69 | m | 2.1000 | | | bā.tí.[y]á. | | |
| | | | | | | | | | 3HPL.say.to3HS | | |
| | 35 | 89 | 78 | 69 | f | y | 2.1001 nā | | āā.ɲyē... | | |
| | | | | | | | that | | CL1.person | | |
| | | | | | | | Storyteller | | | | |
| S, T | 40 | 99 | 83 | 69 | m | 2.2000 | | | bā.tí.[y]á. | | |
| | | | | | | | | | 3HPL.say.to3HS | | |
| | 40 | 89 | 78 | 69 | y | 2.2001 nā | | | ā.ɲyē | | |
| | | | | | | | that | | CL1.person CL1.other | | |
| | | | | | | | Azagun was told, "The king of the world..." [Listener] they said someone had come... | | | | |
| | | | | | | | [Storyteller] They said, "A certain person has come." | | | | |
| S | 40 | 99 | 78 | 69 | h | 2.3000 | ɪntámā | | ũ.zànà b.ì.láí... bā.íá.ɲyē | | nĩ bápĩ |
| | | | | | | | notKnowing | | CL1.hisFriend PREP.CI 3HS.come | | PREP X |
| | 60 | 99 | 78 | 69 | n | 2.4000 | | | á.nĩ.dí | | à.zāgūn.ì |
| | | | | | | | | | 3HS.ASP.tell | | CL1.NAME.DEF |
| | | | | | | | Not knowing that Azagun's Berom friend, ...his friend from BeromLand... | | | | |
| | | | | | | | his Berom friend had sent word in the night to warn him. | | | | |
| S | 40 | 99 | 78 | 69 | m | 2.5000 | | | bā.tí.[y]á. | | |
| | | | | | | | | | 3HS.say.to3HS | | |
| | 35 | 89 | 78 | 69 | f | y | 2.5001 nā | | ĩ.yũ | | |
| | | | | | | | that | | 3HShas.come | | |
| | 25 | 84 | 68 | 69 | p | w | 2.5002 wù | | ì.ĩ kì.ɲyē | | |
| | | | | | | | then | | CL9.be PROG.come | | |
| | 25 | 84 | 83 | 59 | S | m | 2.5003 | | í.fĩ [ĩ.ɲyē | | |
| | | | | | | | | | CL9.if it.come | | |
| | 20 | 84 | 83 | 54 | o, u, s e | | 2.5004 à. | | zírí ò.làt | | |
| | | | | | | | | | ɲú | | |

| Breat | TA | Tim | Asp | Mo | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|----|---------|--------|---------|---|--|-------------------|--|
| | | | | | | | | then. | 2SInd | goDown 2S.lieDown | |
| | | | | | | | | He said, "Something has come; when it comes, bow down prostrate." | | | |
| | | | | | | | | Listener | | | |
| S, T | 25 | 99 | 63 | 69 | c, l | m | 2.5100 | | ũ.zàná b.ì.láí . | í.sá . | |
| | 60 | 99 | 78 | 69 | n | m | 2.6000 | CL1.hisFriend PREP.CL9.BeromLand it.be | á.ní.dũ.ú . | | |
| | | | | | | | | It was his friend from Berom territory who had told him. | | 3HS.ASP.tell.3HS | |
| | | | | | | | | Storyteller | | | |
| S, T | 25 | 99 | 63 | 69 | c, l | z | 2.6100 | òò | ũ.nĩ ā.láí . | í.sá . | |
| | 60 | 99 | 78 | 69 | n | m | 2.7000 | yes | CL1.person CL1.Berom it.be | | |
| | | | | | | | | Yes; it was the Berom man who told him. | | á.ní.dũ.ú . | |
| | | | | | | | | | | 3HS.ASP.tell.3HS | |
| S | 40 | 99 | 83 | 69 | q, e | 2.8000 | tò, à. | | bá.nyé . | | |
| | 60 | 99 | 83 | 69 | n | m | 2.9000 | well, then. | 3HPL.come | | āmìnṛĩ |
| | | | | | | | | | bā.nĩ.làt | | likeThat |
| | 40 | 99 | 83 | 69 | e | 3.1000 | à. | | 3HPL.ASP.passNight | | |
| | 60 | 99 | 83 | 69 | n | m | 3.2000 | then. | bá.nyé . | | |
| | | | | | | | | | 3HPL.come | | |
| | | | | | | | | | bā.nĩ.dĩ | | à.zāgũn.ì |
| | | | | | | | | | 3HPL.ASP.tell | | CL1.NAME.DEF |
| S, P | 55 | 99 | 83 | 69 | n, s, a | m | 4.0000 | | Well, then they came and spent the night there and someone came and told Azagun. | | |
| | 25 | 99 | 83 | 69 | a | m | 4.1000 | | à.zāgũn | | ĩ.dór b.ì.kpì yì vát kà.kèèk.ì. . |
| | | | | | | | | | CL1.NAME | | 3HS.ASP.getUp 3HS.receive.R CL10.horse PREP.CL9.thing it all C |
| | 40 | 99 | 83 | 69 | m | 5.0000 | | | á.tā.sá . | | ĩ.dór.ĩ vát |
| | | | | | | | | | 3HS.receive.RED | | CL10.horse.DEF all |
| | | | | | | | | | ā.bló | | |
| | | | | | | | | | 3HS.go | | |

| Breal | TA | Tim | Asp | Mo | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|--|------|-----|-----|----|-----|--------|---------|------------|-------------|---|-----------------------|
| 15 | 94 | 83 | 64 | b | m | 5.1000 | | | | ā.bí.nū.ú .
3HS.ASP.give.3HS | |
| Azagun collected a large number of horses from Kakkek. . .he collected all the horses and he went to give (the | | | | | | | | | | | |
| S | 25 | 99 | 68 | 69 | p | d | 5.1100 | ānā | | ā.tʃī kī.bló | |
| andThen | | | | | | | | | | | |
| | 25 | 99 | 68 | 69 | p | e | 5.1200 | ā. | | 3HS.go PROG.go
ā.tʃī kī.bòk | |
| then. | | | | | | | | | | | |
| | 40 | 99 | 83 | 69 | m | m | 6.0000 | | | 3HS.go PROG.X
ā.dũkī | nāī
now |
| | 40 | 99 | 83 | 69 | m | m | 7.0000 | | | 3HS.X
ā.fará . | ī.mílí . |
| | 40 | 99 | 83 | 69 | d | d | 8.0000 | ān. | | 3HS.scoop
á.físí . | CL10.dust
kù.kpā.ì |
| andThen | | | | | | | | | | | |
| When he was approaching [the white man] he bowed down and put the dirt on his head. | | | | | | | | | | | |
| S, T | 15 | 99 | 83 | 69 | s,b | m | 8.0010 | | Listener | ā.sòk [ī.ŋkpè] ā.bī.nū.ú.ù [ī.ŋkpè] | |
| What did he (Azagun) give him? | | | | | | | | | | | |
| | S, T | 40 | 99 | 83 | 69 | m | 8.0020 | | Storyteller | á.sòk . | ī.dór ī.dór |
| He took horses horses. | | | | | | | | | | | |
| | S, T | 15 | 99 | 83 | 69 | b | 8.0030 | | Listener | 3HS.take | CL10.horse CL10.horse |
| He gave him as a gift? | | | | | | | | | | | |
| | S, T | 15 | 99 | 83 | 69 | b | 8.0040 | òò | Storyteller | ā.bī.bàrà.ū.ù
3HS.ASP.giveAsGift.to3HS.Q | |
| | S, T | 15 | 99 | 83 | 69 | b | z | 8.0040 | òò | ā.bī.bàrà.ū | |

| Breal | TA | Tim | Asp | Mo | TAM | Intri | Sequenc | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|----|---------|-------|---------|--|--|---|-------------------------------|
| S | 15 | 99 | 83 | 69 | b | h | 8.0050 | í.Yí. . . .
it.mean. . . .
Meaning. . . he gave [them to] him [as a gift]. | Yes, he gave [them to] him [as a gift]. | 3HS.ASP.giveAsGift.to3HS
ā.bī.bàrā.ū
3HS.ASP.giveAsGift.to3HS | |
| S, T | 55 | 99 | 63 | 69 | n, t, c | h | 8.0060 | ū.mbà ū.nìŋj̄ ɪ.dór
CL3.time CL3.th:CL10.horse
So there were many horses at that time? | Listener | ɪ.nī.tā.ɸt.yá
CL10.ASP.ASP.be.LOC.X | lák
numerous |
| S, T | 5 | | | | v | z | 8.0070 | kwáyáɪ .
gracious! | Storyteller | | |
| S | 55 | 99 | 83 | 69 | n, x | q, e | 8.1000 | tò, à.
well, then. | | bā.nī.ɪk ɪ.blɔŋj̄.ɪ
3HPL.ASP.getUp INF.go.* | ɪ.mílí
CL10.dust |
| | 45 | 99 | 73 | 69 | t | e | 8.1200 | à.
then. | | ā.tā.fārā
3HS.HAB.take | kù.kpá.ɪ
CL15.skin.DEF |
| | 40 | 99 | 73 | 69 | | ɖ | 8.1300 | à.ná. . . à.ná
andThen...andThen | | ā.mōŋ
3HS.put | kù.kpá.ɪ
CL15.skin.DEF |
| | 40 | 99 | 73 | 69 | | ɖ | 8.1400 | à.ná .
andThen | | 3HS.put | CL15.skin.DEF |
| S, T | 40 | 99 | 83 | 69 | | m | 8.1500 | | Listener | ā.tá.
3HS.say. | |
| | 40 | 89 | 68 | 69 | | y | 8.1501 | nā
that | | ɪŋ.ŋyé
1S.come | nì kī.zàrà
with CL5.friend |
| | 0 | 89 | 68 | 49 | g | m | 8.1502 | | | ɪn.sā.ŋyé .
1S.NEG.come | nù kù.lōɪ
with CL15.anger |
| | | | | | | | | | Saying, "I have come for friendship not with anger or fighting." | | |

| Breal | TA | Tim | Asp | Mo | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|--|----|-----|-----|----|------|------|---------|---|---|--|--------------------------|
| S | 25 | 99 | 78 | 69 | a | m | 8.2000 | | ũ.zàná b.ì.láí .
CL1.friend PREP.CL9.BeromLand | ā.g̀ŋj'ĩ dũ.ú.ŋā .
3HS.already.teill.to3HS.even | |
| His Berom friend had already told him. | | | | | | | | | | | |
| Storyteller | | | | | | | | | | | |
| S, T | 25 | 99 | 78 | 69 | a | m | 8.3000 | | | ā.g̀ŋj'ĩ dũ.ú.ŋā .
3HS.already.teill.to3HS.even | |
| He had already told him. | | | | | | | | | | | |
| Listener | | | | | | | | | | | |
| S, T | 40 | 99 | 78 | 69 | m | | 8.4000 | | | ā.fī.yá. .
3HS.say.to3HS | |
| | 25 | 84 | 83 | 59 | S | y | 8.4001 | nā | | ũ.tũ ũ.hĩk
2S.if.2S.find | |
| | 40 | 84 | 83 | 59 | m | | 8.4002 | that | | á.ŋyé .
3HS.come | |
| | 20 | 84 | 68 | 54 | o, u | e | 8.4003 | à. | ŋũ | fī | lùt |
| | 25 | 84 | 83 | 54 | s | d | 8.4004 | ànú | then. | do | humbly |
| | | | | | | | | andThen | | ú.tʃɪn ũ.tũ ù.̀tì | ì.ŋkũ bā.wũ |
| | | | | | | | | He said, "When he comes don't fight, be humble and don't try to fight him." | | 2S.leaveOff 2S.attempt 2S.do | CL9.war X.3HSInd |
| Storyteller | | | | | | | | | | | |
| S, T | 35 | 99 | 78 | 69 | f | h | 8.5000 | kĩ ì.báŋ'ì | | áā.bló .
3HS.go | bì ì.ŋkũn |
| | 15 | 99 | 78 | 69 | b, s | e | 8.6000 | à. | bā.kũn.ì | bá.bí.tà bā.fī | PREP IrigweLand
ì.ŋkũ |
| | 25 | 99 | 78 | 69 | a | e | 8.7000 | à. | CL2.Iregwe.DEF | 3HPL.ASP.attempt 3HPL.do | CL9.war |
| | | | | | | | | then. | | ā.wũ.sù | ì.ŋkũn.ì vát |
| | 25 | 99 | 78 | 69 | a | e | 8.8000 | à. | then. | 3HS.burn.RED | IrigweLand.DEF all |
| | | | | | | | | then. | | ā.wũ.sù | ì.ŋkũn.ì vát |
| | | | | | | | | then. | | 3HS.burn.RED | IrigweLand.DEF.all |

| Bread | TA | Tim | Asp | Mo | TAM | Int | Seque | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|----|------|-----|-------|---|---|--------------------|---|
| | | | | | | | | Because he went to Iregweland and when they tried to fight him, he burnt most of Iregw; he burnt most of Ireg | | | |
| | | | | | | | | Listener | | | |
| S, T | 5 | | v | z | | | | 8.8010 ahā
uh-huh! | | | |
| S | 25 | 79 | 63 | 69 | c | e | | 8.8100 à.
then. | wú ũ.nī ā.lái
3HSInd.CL1.person CL [it means] 3HS.be | [í.yí] à.fī | ī.mará ũ.nī ā.tšéé.ŋá
CL10.relative CL1.person CL1.Bac |
| | 25 | 79 | 63 | 69 | c, l | m | | 8.8200 | í.sā
it.be | | |
| | 25 | 99 | 78 | 69 | s | e | | 8.9000 à. | ā.tŋí á.yú [nà cīcè] á.ŋyé
3HS.go 3HS.follow [PREP X] 3HS.come PREP X | nà cīcè | |
| | 60 | 99 | 78 | 69 | n | m | | 9.1000 | á.ní.dū.ú
3HS.ASP.tell.to3HS | | |
| | | | | | | | | | So the Berom, being a relation of Bache, had already sent early in the morning to warn him. | | |
| | | | | | | | | Storyteller | | | |
| S, T | 5 | | v | z | | | | 9.1010 yauwa | | | |
| S | 40 | 99 | 78 | 69 | | m | | 9.2000 | [Hausa response, agreement] | á.yú
3HS.follow | nà tòk
PREP X |
| | 60 | 99 | 78 | 69 | n | m | | 9.2100 | á.ní.dū.ú
3HS.ASP.tell.to3HS | | |
| | 40 | 99 | 78 | 69 | | m | | 9.3100 | á.dū.ú | | |
| S, P | 40 | 99 | 83 | 69 | | e | | 10.0000 à.
then. | He came in the night to tell him; he told him. | | |
| | 40 | 99 | 83 | 69 | | e | | 11.0000 à.
then. | à.nására
CL1.whitePerson | á.tò
3HS.sec | |
| | 25 | 89 | 63 | 69 | v, c | y | | 11.0001 nā
that | īntū
X | | |

ũ.nī ā.yúŋó ŋá. . . ũ.nī ā.yúŋó
 CL1.person CL1.other even. . . CL1.
 333

Break TA Tim Asp Mo TAM Intri Sequenc Introducer Subject Verb Object

He stopped, and he said to him [them], "Ask him what is wrong?"

| | | | | | | | | | | | |
|---|----|----|----|----|------|---------|---------|--|---------------------|-----------------|------------|
| S | 40 | 99 | 83 | 69 | e | 16.0000 | à. | then. | 3HS.say.to3HS | à.ɸ[y].á. | |
| | 35 | 99 | 83 | 69 | f | y, z | 16.0001 | nā, kūf | kúú.wō | | |
| | 40 | 99 | 83 | 69 | m | | 16.0002 | that, well | 1PL.hear | bā.tà | |
| | 25 | 99 | 68 | 69 | p | m | 16.0003 | | 3HPL.say | ù.ɸi kù.nyē | |
| | 10 | 94 | 83 | 64 | i | m | 16.0004 | | 2S.be PROG.come | ì.bín.íí.nā | |
| | 25 | 99 | 63 | 69 | c, l | w, e | 16.0005 | wù, à. | INF.greet.1S.even | í.ɸí | |
| | 25 | 99 | 83 | 69 | a, s | m | 16.0006 | so, then | it.be | ín.zì.kíú ñ.nyē | |
| | 10 | 94 | 83 | 64 | i | m | 16.0007 | | 1S.ASP.walk 1S.come | ì.bín.ū | |
| | 25 | 99 | 83 | 69 | a | m | 16.0008 | | INF.greet.2HS | ím.bá.nyē | |
| | 10 | 94 | 83 | 64 | i | m | 16.0009 | | 1S.ASP.come | ì.ràs | bā ñù |
| | 25 | 89 | 78 | 69 | a | m | 16.0011 | | INF.join | ím.bá.nyē | PREP 2SInd |
| | 10 | 94 | 83 | 64 | i | m | 16.0012 | | 1S.also.come | ì.bín.ū | |
| | | | | | | | | Then he said, "Well, we heard that you were coming to greet me, so I came first to greet and welcome you, and to meet you; I have also come to greet you." | INF.greet.2HS | | |
| S | 40 | 99 | 83 | 69 | w | 17.0000 | wà | then | | à.ɸ[y].á. | |
| | | | | | | | | | | 3HS.say.to3HS | |

Breal TA Tim Asp Mo TAM Intr Sequenc Introducer Subject Verb Object

| | | | | | | | | | | | | |
|----|----|----|----|------|------|---------|---------|--|------------------------------------|--------------------------------|-------------------------|-------------------|
| 25 | 89 | 63 | 69 | v, c | y | 17.0001 | nā | that | ī.dór.ī ī.yī ŋā | CL10.horse.CL10.this eve | ā.fī[y].á. | |
| | 40 | 99 | 83 | 69 | m | 18.0000 | | Then he said, "What of these horses?" | | | | |
| | 40 | 89 | 83 | 69 | y, z | 18.0001 | nā | that | kūī | well | 3HS.say.to3HS.
ín.fī | |
| | 25 | 89 | 63 | 69 | c, l | 18.0002 | | | ī.dór.ī ī.mū.ī | 1S.say
í.ſī | | |
| | 40 | 89 | 78 | 69 | m | 18.0003 | | | CL10.horse.DEF CL10.1S.DEF CL10.be | ín.ŋyé | | |
| | 10 | 94 | 83 | 64 | i* | 18.0004 | | | | 1S.come
ì.bīn.ōŋ.í | | |
| | | | | | | | | | | INF.greet.2S.X | | |
| S | 40 | 99 | 83 | 69 | m | 19.0000 | | He said, "Well, they're my horses and I have come to greet you with them." | | | ā.fī[y].á.nā | ēē |
| | | | | | | | | | | | 3HS.say.to3HS.that | yes |
| | | | | | | | | | | | | |
| S | 25 | 89 | 63 | 69 | v, c | q, w | 19.0001 | tò, wù | ā.wāī vát.ā | CLX.this all.Q | | |
| | | | | | | | | well, just | kū.tſŷp kū.mī | CL15.village CL15.2S CL15.be | kú.ſī | vát.ī |
| S | 25 | 89 | 63 | 69 | c | m | 19.0002 | | | | | all.DEF |
| | | | | | | | | Well, then what of all this land? Is all this your village? | | | | |
| S | 25 | 89 | 63 | 69 | c | h | 19.0003 | hā | ì.ŋgū ì.nó kàtààí | CL9.territory CL9.other CL9.be | ī.ſī | |
| | | | | | | | | or | ú.tí. . ú.tí | 2S.X.LOC | | |
| | 40 | 89 | 63 | 69 | m | 19.0004 | | | X...X | | | bū ū.nít.à |
| | | | | | | | | Or is there any more land; who is at your boundary over there?" | | | | PREP CL1.person.Q |
| S | 40 | 99 | 83 | 69 | e | 20.0000 | à. | then. | ā.fī[y].á. | | | |
| | | | | | | | | | | | | 3HS.say.to3HS. |

| Breat | TA | Tim | Asp | Mo | TAM | Inti | Sequenc | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|----|------|---------|---------|--|--|----------------------------------|------------------------------------|
| 25 | 89 | 63 | 69 | c | y | 20.0001 | nā | that | ì.ngū ì.nó
CL9.territory CL9.other CL9.be.LOC | ì.fī.yāŋ | |
| 25 | 89 | 63 | 69 | c | m | 20.0002 | | | ì.ngū ì.nó
CL9.territory CL9.other CL9.be.LOC | ì.fī.yā | |
| S | 40 | 89 | 83 | 69 | m | 20.0003 | | He said to him, "There is more. . .there is more. | ín.tū. . .ín.tū
1S.say. . .1S.say | | bà.wū. . .
X.X |
| | 25 | 89 | 63 | 69 | c | m | 20.0004 | | bā.nī bá.bāi
CL2.person CL2.this | bā.fī
3HPL.be | bā.mù
CL2.1SPoss |
| S | 25 | 89 | 63 | 69 | s | m | 20.0005 | I said. . .I said. . ., these people are mine. | ín.yí ín.tā
1S.mean 1S.say | | |
| | 25 | 89 | 63 | 69 | c | m | 20.0006 | | bā.fī
3HPL.be | | bā.mù wù
CL2.1SPoss just |
| | 25 | 89 | 63 | 69 | c | d | 20.0007 | àná | bā.bāi
CL2.this | bā.fī
3HPL.be | bā. . .
3HPL. . . |
| | 40 | 89 | 63 | 69 | m | 20.0008 | | andThen | CL2.this | í.yí .
it.mean | bā.nī ì.kò
CL2.person CL9.house |
| S | 5 | 99 | 83 | 69 | v | m | 21.0000 | I mean they are also mine; these people are like my family.
Understood "he said to him" | | | |
| | 25 | 89 | 63 | 69 | v, c | e | 21.0001 | à. | bá.yūŋó kātá.ātí[y].ó
CL2.that X.front.X | | |
| | | | | | | | | then | | | |
| | | | | | | | | "What of those over there?" | | | |
| S | 5 | 99 | 83 | 69 | v | m | 22.0000 | Understood "he said to him" | | | |
| | 25 | 84 | 83 | 59 | S | m | 22.0001 | | | kū.tò kū.lík
1PL.if 1PL.getUp | |
| | 25 | 84 | 83 | 64 | u | e | 22.0002 | à. | mí. . .
1S.tell.to.2S | ín.dī.á.yā. . .
1S.tell.to.2S | |
| | | | | | | | | then. | | | |
| | 25 | 84 | 83 | 59 | S | m | 22.0003 | | | kū.tò kū.yík | kā.tjū.ì |

| Breal | TA | Tim | Asp | Mo | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|----|------|------|---------|--|---|----------------------------------|----------------|
| | 25 | 84 | 83 | 64 | u | e | 22.0004 | à. | mĩ | 1PL.if IPL.arrive | CL12.place.DEF |
| | | | | | | | | then. | 1SInd | ĩn.dĩ.á.yā | |
| S, P | 40 | 99 | 83 | 69 | e | e | 23.0000 | à. | "When we leave, I will show you. . .when we get there I will show or tell you." | | |
| | | | | | | | | then. | bá.lík | bā.nā à.zāgūn.ì [inaudible] | |
| | 40 | 99 | 83 | 69 | m | m | 24.0000 | | 3HPL.getUp | CL2.with CL1.NAME.DEF. . . | |
| | | | | | | | | | bā.hēŋ | kā.sántfám.í | |
| | 40 | 99 | 83 | 69 | e | e | 25.0000 | à. | 3HPL.appear | CL12.PLACE.X | |
| | | | | | | | | then. | à.tóru | ŋá k ^w .òk bō ū.hít.í | |
| | | | | | | | | | 3HS.point | even CL15.arm PREP CL3.PLACE. | |
| S | 5 | 89 | 63 | 69 | v | y | 25.0001 | nā ì.sók ā.wāi | When they left with Azagun leading the way, they reached Kasancam; he pointed his hand to Uhit. | | |
| | 40 | 99 | 63 | 69 | m | m | 25.0010 | | 3HS.take CL7.this | | |
| | | | | | | | | | í.yí | ū.hít.ī | |
| | | | | | | | | | it.mean | CL3.PLACE.DEF | |
| | 40 | 99 | 83 | 69 | m | m | 26.0000 | | ā.fī[y].á. | | |
| | | | | | | | | | 3HS.say.to3HS | | |
| | 25 | 89 | 63 | 69 | v, c | y | 26.0001 | nā ì.sók à.wāi. bā.nī | | ì.kó kī.mū | |
| | | | | | | | | that INF.takeCL CL2.person | | CL5.house CL5.1SPoss | |
| | | | | | | | | "From here," meaning Uhit, he said, "From here. . .from. . .from. . .to [there] they are part of my family | | | |
| S | 40 | 99 | 83 | 69 | e | e | 27.0000 | à. | ā.fī[y].á | | |
| | | | | | | | | then. | 3HS.say.to3HS | | |
| | 25 | 89 | 63 | 69 | v, c | m | 27.0001 | | ásák | ā.yūŋóŋ.ā | |
| | | | | | | | | | X | CL7.that.Q | |
| | | | | | | | | | | | |
| S | 40 | 99 | 83 | 69 | e | e | 28.0000 | à. | He asked, "What of that?" | | |
| | | | | | | | | then. | ā.fī[y].á | | |
| | | | | | | | | | 3HS.say.to3HS | | |
| | 25 | 89 | 63 | 69 | v, c | y | 28.0001 | nā | bā.nī | bā.mù | |
| | | | | | | | | | CL2.person | CL2.1SPoss | |

| Breal TA | Tim | Asp | Mo | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|----------|-----|-----|----|------|---------|---------|--------------------------|------------------------------|---|--|
| 0 | 89 | 63 | 49 | c, g | w, c | 28.0002 | wù, àná
just, andThen | | bā.sā.mā
3HPL.be.LOC
bā.ʃi
3HPL.be | bì ì.ŋgū ì.má
PREP CL9.territory CL9.3HPLPoss |
| S | 40 | 99 | 83 | 69 | w | 29.0000 | wù
just | | He said, "They are my people, but they are on their own."
ā.tī[y].á
3HS.say.to3HS
í.sā
it.be | |
| | 25 | 89 | 63 | 69 | c, l | 29.0001 | | bā.ʃē
CL2.which | | |
| | 45 | 89 | 73 | 69 | t | 29.0002 | | | bá.tá.gāná.ŋù
3HPL.HAB.stiffen.to2S | kì.tō.ā
CL5.neck.Q |
| S | 20 | 84 | 83 | '54 | o | m | 29.0003 | | Then he said, "Which of them bother you?"
dí | |
| | 45 | 89 | 73 | 69 | t | y | 29.0004 | nā
that | tel[me]
bá.tá.gāná.ŋù
3HPL.HAB.stiffen.to2S | bā.yī
CL2.which
kì.tō
CL5.neck |
| S | 40 | 99 | 83 | 69 | e | 30.0000 | à.
then. | | ā.wūtā
3HS.X
bá.ʃi. . .bá.ʃi
3HPL.be. . .3HPL.be | k ^w .òk kà bà.nī bà.nà à.zàlii
CL15.arm PREP CL2.person CL2.P
bā.nā ā.sāk.í
CL2.PREP CL8.PLACE.X |
| | 25 | 99 | 63 | 69 | c | m | 30.0100 | | He showed him people from the eastern part, people from Assak.
bā.ʃi bà.sā.Yíp.í
3HPL.be 3HPL.NEG.X.X | |
| | 0 | | | | ?, g, s | m | 30.0101 | | | |
| | | | | | | | | [overlooked, not translated] | | |
| S, T | 40 | 99 | 83 | 69 | h | 30.0110 | wā
Listener | | ā.tā
3HS.say
bá.gāná | kì.tō.ì yá |
| | 40 | 99 | 73 | 69 | m | 30.0120 | Q | | | |

| Breal | TA | Tim | Asp | Mo. | TAM | Intr | Sequenc | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|-----|-----|------|---------|-------------|--|---------------------|-------------------------|
| S, P, | 25 | 79 | 63 | 69 | c | m | 30.0130 | Storyteller | Why did he say they were stubborn? | 3HPL..stiffen | CL5.neck.DEF why |
| | | | | | | | | | ī.báj kù.tǝǝē | ī.ǝǝ | ì.kpì kpì nā |
| | | | | | | | | | CL10.matter CL15.Kue CL10.be | | CL9.thing X X |
| S | 45 | 89 | 63 | 69 | t | m | 30.0140 | | Our tradition is very difficult to understand. | 3HPL..passNight | |
| | | | | | | | | | ú.tá.wúú . | | |
| | | | | | | | | | 2S.HAB.know | | |
| | | | | | | | | | bá.làt . | | |
| | | | | | | | | | 3HPL..do.RED | | |
| | | | | | | | | | bā.nī | ī.bá | |
| | | | | | | | | | CL2.person | CL10.matter | |
| | | | | | | | | | then. | hō | |
| | | | | | | | | | ā.lǝǝ | or | |
| | | | | | | | | | 3HS.X | | |
| S, P | 40 | 99 | 83 | 69 | e | e | 30.0200 | | Don't you know that when people are asleep, others go about in the night doing bad things? | 3HS.stood | kà.sàantǝámí . |
| | | | | | | | | | ā.tèlèk | CL12.PLACE | |
| | | | | | | | | | then. | nū ō.bíndǝgā | |
| | | | | | | | | | 31.0000 ānā | PREP CL3.gun | |
| | | | | | | | | | andThen | bā.nī bā.yǝǝǝ | |
| | | | | | | | | | | CL2.person CL2.that | |
| S | 40 | 99 | 83 | 69 | e | e | 32.0000 | | He stood where he was, shot the gun, and burnt up all those villages. | 3HS.X 3HS.burn | |
| | | | | | | | | | then. | ā.tǝǝ[y].á. . . . | |
| | | | | | | | | | à.wāǝ ñā | 3HS.say.to3HS | |
| | | | | | | | | | CL1.that even | | |
| | | | | | | | | | that | | |
| | | | | | | | | | ī.bá ī.náí | ī.sā.mā | yá bà.nī bā.nǝǝǝ |
| | | | | | | | | | CL10.issue CL10.X | it.NEG.LOC | X CL2.person CL2.that.Q |
| | | | | | | | | | it.mean | | |
| | | | | | | | | | Then he asked, "What of this area? That is, is there no other problem except those people who were bothering you?" | | |

| Bread | TA | Tim | Asp | Mo | TAM | Inti | Sequec | Introducer | Subject | Verb | Object |
|-------|----|-----|-----|----|------|---------|---------|--|---|--------------------|----------------------|
| S | 40 | 99 | 83 | 69 | e | 33.0000 | à. | then. | | ã.ɸi[y].á.nã | òò |
| | | | | | | | | Then he said, "Yes" [that is, "you're right"]. | | 3HS.say.to3HS.that | yes |
| S, P | 60 | 99 | 63 | 69 | n | e | 33.0200 | ù. | ũ.tù.ã.nj̃j̃ | á.nj̃.ýí | à.zãgũn |
| | | | | | | | | then | CL1.chief CL1.that | 3HS.ASP.mean | CL1.NAME |
| | | | | | | | | The chief at that time was Azagun. | | | |
| S, P | 25 | 99 | 63 | 69 | c, l | m | 33.0240 | ánp̃.ì | [nã kú.nj̃.tá.wóó kà.bà.nã.ã.ɸi]ì.sj̃èè | | |
| | | | | | | | | INF.come CL1.whitePerson.DEF [that IPL.ASP.HAB.hear X.X.PREP.CL1.father] it.be | | | |
| | 50 | 99 | 73 | 69 | n, t | y | 33.0230 | nã | kú.nj̃.tá.wóó | kà.bà.nã.ã.ɸi | X.X PREP CL1a.father |
| | | | | | | | | that | IPL.ASP.HAB.hear | | |
| | | | | | | | | That's how we heard of the white man's coming from our fathers. | | | |

APPENDIX D

VERB FORMS AND THEIR INTERPRETATIONS

(TABLES AND BAR GRAPHS)

Aspect, Story Clauses in Unique Narrative

| <i>Forms/Interpretations</i> | <i>Bounded Unique</i> | <i>Anterior</i> | <i>Non-Unique</i> | <i>Durative</i> | <i>State</i> |
|------------------------------|-----------------------|-----------------|-------------------|-----------------|--------------|
| Unmarked | 37 | 5 | 2 | 1 | |
| ni- | 6 | 5 | | 1 | 4 |
| ta- | | | 1 | | |
| Falling or Rising | 1 | 2 | | | |
| bi- | 3 | 1 | | | |
| Progressive | 1 | | | 3 | |
| Non-finite | 2 | | | | |
| Copula | | | | | 6 |
| Affixes | 3 | 4 | | | 1 |
| Auxiliaries | 2 | | | 1 | |
| Serial | 6 | 2 | 2 | 1 | |
| Serial "if" | | | | | |
| Imperative | | | | | |
| Pronoun Subject | | | | | |
| Unfamiliar Form | | | | | |
| Negative | | | | | |
| Verb Deleted | 2 | | | | |

Aspect, Story Clauses of Habitual Narratives

| <i>Forms/Interpretations</i> | <i>Bounded Unique</i> | <i>Anterior</i> | <i>Non-Unique</i> | <i>Durative</i> | <i>State</i> | <i>No TAM</i> |
|------------------------------|-----------------------|-----------------|-------------------|-----------------|--------------|---------------|
| Unmarked | 5 | 3 | 49 | 3 | 12 | |
| ni- | 5 | 1 | 2 | 1 | 5 | |
| ta- | 1 | | 5 | 5 | 1 | |
| Falling or Rising | | | 2 | | 1 | |
| bi- | | | 2 | 1 | | |
| Progressive | | 1 | 3 | 10 | 2 | |
| Non-finite | | | 2 | | | |
| Copula | | | | | 14 | |
| Affixes | | 1 | 4 | 1 | 1 | |
| Auxiliaries | 1 | | | | | |
| Serial Constructions | 3 | | 10 | 2 | 1 | |
| Serial "if" | 1 | | 2 | 1 | 10 | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar Form | | 1 | | | | |
| Negative | | | 4 | | 2 | |
| Verb Deleted | | | | | | 3 |

Aspect, Background Clauses in Unique Narratives

| <i>Forms/Interpretations</i> | <i>Bounded Unique</i> | <i>Anterior</i> | <i>Non-Unique</i> | <i>Durative</i> | <i>State</i> |
|------------------------------|-----------------------|-----------------|-------------------|-----------------|--------------|
| Unmarked | 8 | 5 | 2 | 1 | |
| ni- | 3 | 5 | | 1 | 4 |
| ta- | | | 1 | | |
| Falling or Rising | | 2 | | | |
| bi- | 2 | 1 | | | |
| Progressive | | | | 3 | |
| Non-finite | 2 | | | | |
| Copula | | | | | 6 |
| Affixes | 2 | 4 | | | 1 |
| Auxiliaries | 1 | | | 1 | |
| Serial | 1 | 2 | 1 | 1 | |
| Serial "if" | | | | | |
| Imperative | | | | | |
| Pronoun Subject | | | | | |
| Unfamiliar Form | | | | | |
| Negative | | | | | |
| Verb Deleted | | | | | |

Aspect, Background Clauses of Habitual Narratives

| <i>Forms/Interpretations</i> | <i>Bounded Unique</i> | <i>Anterior</i> | <i>Non-Unique</i> | <i>Durative</i> | <i>State</i> | <i>No TAM</i> |
|------------------------------|-----------------------|-----------------|-------------------|-----------------|--------------|---------------|
| Unmarked | | 3 | 17 | 2 | 7 | |
| ni- | 1 | 1 | 1 | | 4 | |
| ta- | | | 1 | 5 | 1 | |
| Falling or Rising | | | | | 1 | |
| bi- | | | | | | |
| Progressive | | 1 | 2 | 4 | 1 | |
| Non-finite | | | 2 | | | |
| Copula | | | | | 12 | |
| Affixes | | | 2 | | | |
| Auxiliaries | | | | | | |
| Serial Constructions | 1 | | | 1 | | |
| Serial "if" | | | 1 | 1 | 7 | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar Form | | 1 | | | | |
| Negative | | | 3 | | 2 | |
| Verb Deleted | | | | | | 3 |

Aspect, Mainline Clauses in Unique Narrative

| <i>Forms/Interpretations</i> | <i>Bounded</i> | <i>Unique</i> | <i>Anterior</i> | <i>Non-Unique</i> | <i>Durative</i> | <i>State</i> |
|------------------------------|----------------|---------------|-----------------|-------------------|-----------------|--------------|
| Unmarked | 29 | | | | | |
| ni- | 3 | | | | | |
| ta- | | | | | | |
| Falling or Rising | 1 | | | | | |
| bi- | 1 | | | | | |
| Progressive | 1 | | | | | |
| Non-finite | | | | | | |
| Copula | | | | | | |
| Affixes | 1 | | | | | |
| Auxiliaries | 1 | | | | | |
| Serial | 5 | | | 1 | | |
| Serial "if" | | | | | | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar Form | | | | | | |
| Negative | | | | | | |
| Verb Deleted | 2 | | | | | |

Aspect, Mainline Clauses of Habitual Narratives

| <i>Forms/Interpretations</i> | <i>Bounded</i> | <i>Unique</i> | <i>Anterior</i> | <i>Non-Unique</i> | <i>Durative</i> | <i>State</i> | <i>No TAM</i> |
|------------------------------|----------------|---------------|-----------------|-------------------|-----------------|--------------|---------------|
| Unmarked | 5 | | | 32 | 1 | 5 | |
| ni- | 4 | | | 1 | 1 | 1 | |
| ta- | 1 | | | 4 | | | |
| Falling or Rising | | | | 2 | | | |
| bi- | | | | 2 | 1 | | |
| Progressive | | | | 1 | 6 | 1 | |
| Non-finite | | | | | | | |
| Copula | | | | | | 2 | |
| Affixes | | | 1 | 2 | 1 | 1 | |
| Auxiliaries | 1 | | | | | | |
| Serial Constructions | 2 | | | 10 | 1 | 1 | |
| Serial "if" | | | 1 | 1 | | 3 | |
| Imperative | | | | | | | |
| Pronoun Subject | | | | | | | |
| Unfamiliar Form | | | | | | | |
| Negative | | | | 1 | | | |
| Verb Deleted | | | | | | | |

Aspect, All Conversation & Dialog

| <i>Forms/Interpretations</i> | <i>Bounded</i> | <i>Unique</i> | <i>Anterior</i> | <i>Non-Unique</i> | <i>Durative</i> | <i>State</i> | <i>No TAM</i> |
|------------------------------|----------------|---------------|-----------------|-------------------|-----------------|--------------|---------------|
| Unmarked | 15 | 9 | 17 | 9 | 11 | | |
| ni- | 6 | 1 | 7 | 1 | 6 | | |
| ta- | | | 14 | 6 | 2 | | |
| Falling or Rising | 2 | 2 | 2 | | | | |
| bi- | 4 | 1 | | | | | |
| Progressive | 1 | 2 | 1 | 22 | 1 | | |
| Non-finite | 5 | | 3 | 2 | | | |
| Copula | | | | 1 | 46 | | |
| Affixes | 8 | 1 | 1 | 3 | 2 | | |
| Auxiliaries | 1 | | | 1 | | | |
| Serial | 12 | 2 | 2 | 1 | 6 | 1 | |
| Serial "if" | 4 | | 1 | 1 | | | |
| Imperative | 10 | | | 4 | | | |
| Pronoun Subject | 6 | | 2 | 2 | 1 | | |
| Unfamiliar form | | | 1 | | | | 1 |
| Negative | 4 | | | 1 | 5 | 1 | |
| Verb Deleted | 1 | | | | 1 | 27 | |

Time, Story Clauses of Unique Narratives

| <i>Forms/Interpretations</i> | <i>Past</i> | <i>Future of Past</i> | <i>Present</i> | <i>Future</i> | <i>Timeless</i> |
|------------------------------|-------------|-----------------------|----------------|---------------|-----------------|
| Unmarked | 45 | | | | |
| ni- | 15 | 1 | | | |
| ta- | 1 | | | | |
| Falling or Rising | 3 | | | | |
| bi- | 3 | 1 | | | |
| Progressive | 3 | 1 | | | |
| Non-finite | 2 | | | | |
| Copula | 4 | | | | 2 |
| Affixes | 8 | | | | |
| Auxiliaries | 3 | | | | |
| Serial | 10 | 1 | | | |
| Serial "if" | | | | | |
| Imperative | | | | | |
| Pronoun Subject | | | | | |
| Unfamiliar Form | | | | | |
| Negative | | | | | |
| Verb Deleted | 2 | | | | |

Time, Story Clauses of Habitual Narratives

| <i>Forms/Interpretations</i> | <i>Past</i> | <i>Future of Past</i> | <i>Present</i> | <i>Future</i> | <i>Timeless</i> | <i>No TAM</i> |
|------------------------------|-------------|-----------------------|----------------|---------------|-----------------|---------------|
| Unmarked | 70 | | 3 | | | |
| ni- | 14 | | | | | |
| ta- | 12 | | | | | |
| Falling or Rising | 3 | | | | | |
| bi- | 3 | | | | | |
| Progressive | 15 | | | | 1 | |
| Non-finite | | 2 | | | | |
| Copula | 14 | | | | | |
| Affixes | 7 | | | | | |
| Auxiliaries | 1 | | | | | |
| Serial | 15 | | | | 1 | |
| Serial "if" | 14 | | | | | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar Form | | | | | | |
| Negative | 6 | | | | | |
| Verb Deleted | | | | | | 3 |

Time, Background Clauses of Unique Narratives

| <i>Forms/Interpretations</i> | <i>Past</i> | <i>Future of Past</i> | <i>Present</i> | <i>Future</i> | <i>Timeless</i> |
|------------------------------|-------------|-----------------------|----------------|---------------|-----------------|
| Unmarked | 16 | | | | |
| ni- | 12 | 1 | | | |
| ta- | 1 | | | | |
| Falling or Rising | 2 | | | | |
| bi- | 2 | 1 | | | |
| Progressive | 2 | 1 | | | |
| Non-finite | 2 | | | | |
| Copula | 4 | | | | 2 |
| Affixes | 7 | | | | |
| Auxiliaries | 2 | | | | |
| Serial | 4 | 1 | | | |
| Serial "if" | | | | | |
| Imperative | | | | | |
| Pronoun Subject | | | | | |
| Unfamiliar Form | | | | | |
| Negative | | | | | |
| Verb Deleted | | | | | |

Time, Background Clauses of Habitual Narratives

| <i>Forms/Interpretations</i> | <i>Past</i> | <i>Future of Past</i> | <i>Present</i> | <i>Future</i> | <i>Timeless</i> | <i>No TAM</i> |
|------------------------------|-------------|-----------------------|----------------|---------------|-----------------|---------------|
| Unmarked | 28 | | 2 | | | |
| ni- | 7 | | | | | |
| ta- | 7 | | | | | |
| Falling or Rising | 1 | | | | | |
| bi- | | | | | | |
| Progressive | 7 | | | | 1 | |
| Non-finite | | 2 | | | | |
| Copula | 12 | | | | | |
| Affixes | 12 | | | | | |
| Auxiliaries | | | | | | |
| Serial | 1 | | | | 1 | |
| Serial "if" | 9 | | | | | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar Form | | | | | | |
| Negative | 5 | | | | | |
| Verb Deleted | | | | | | 3 |

Time, Mainline Clauses of Unique Stories

| <i>Forms/Interpretations</i> | <i>Past</i> | <i>Future of Past</i> | <i>Present</i> | <i>Future</i> | <i>Timeless</i> |
|------------------------------|-------------|-----------------------|----------------|---------------|-----------------|
| Unmarked | 29 | | | | |
| ni- | 3 | | | | |
| ta- | | | | | |
| Falling or Rising | 1 | | | | |
| bi- | 1 | | | | |
| Progressive | 1 | | | | |
| Non-finite | | | | | |
| Copula | | | | | |
| Affixes | 1 | | | | |
| Auxiliaries | 1 | | | | |
| Serial | 6 | | | | |
| Serial "if" | | | | | |
| Imperative | | | | | |
| Pronoun Subject | | | | | |
| Unfamiliar Form | | | | | |
| Negative | | | | | |
| Verb Deleted | 2 | | | | |

Time, Mainline Clauses of Habitual Stories

| <i>Forms/Interpretations</i> | <i>Past</i> | <i>Future of Past</i> | <i>Present</i> | <i>Future</i> | <i>Timeless</i> | <i>No TAM</i> |
|------------------------------|-------------|-----------------------|----------------|---------------|-----------------|---------------|
| Unmarked | 42 | | 1 | | | |
| ni- | 7 | | | | | |
| ta- | 5 | | | | | |
| Falling or Rising | 2 | | | | | |
| bi- | 3 | | | | | |
| Progressive | 8 | | | | | |
| Non-finite | | | | | | |
| Copula | 2 | | | | | |
| Affixes | 5 | | | | | |
| Auxiliaries | 1 | | | | | |
| Serial | 14 | | | | | |
| Serial "if" | 5 | | | | | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar Form | | | | | | |
| Negative | 1 | | | | | |
| Verb Deleted | | | | | | |

Time, All Conversation and Dialog

| <i>Forms/Interpretations</i> | <i>Past</i> | <i>Future of Past</i> | <i>Present</i> | <i>Future</i> | <i>Timeless</i> | <i>No TAM</i> |
|------------------------------|-------------|-----------------------|----------------|---------------|-----------------|---------------|
| Unmarked | 21 | 2 | 29 | 3 | 6 | |
| ni- | 18 | 1 | | 2 | | |
| ta- | 10 | | 7 | 3 | 2 | |
| Falling or Rising | 1 | | 4 | 1 | | |
| bi- | 5 | | | | | |
| Progressive | 12 | 1 | 11 | 1 | 2 | |
| Non-finite | | 9 | 1 | | | |
| Copula | 12 | | 29 | | 6 | |
| Affixes | 6 | | 3 | 4 | 2 | |
| Auxiliaries | 1 | | | 1 | | |
| Serial | 7 | 3 | 8 | 4 | 1 | 1 |
| Serial "if" | 2 | | | 4 | | |
| Imperative | | | | 14 | | |
| Pronoun Subject | 1 | 1 | 2 | 7 | | |
| Unfamiliar Form | | | 1 | | | 1 |
| Negative | 4 | | 5 | | 1 | 1 |
| Verb Deleted | 1 | | 1 | | | 27 |

Modality, Story Clauses in Unique Narratives

| <i>Forms/Interpretations</i> | <i>Real</i> | <i>Likely</i> | <i>Factual "if"</i> | <i>Imperative</i> | <i>Unlikely</i> |
|------------------------------|-------------|---------------|---------------------|-------------------|-----------------|
| Unmarked | 45 | | | | |
| ni- | 15 | 1 | | | |
| ta- | 1 | | | | |
| Falling or Rising | 3 | | | | |
| bi- | 3 | 1 | | | |
| Progressive | 3 | 1 | | | |
| Non-finite | 1 | 1 | | | |
| Copula | 6 | | | | |
| Affixes | 8 | | | | |
| Auxiliaries | 2 | | | | 1 |
| Serial | 10 | 1 | | | |
| Serial "if" | | | | | |
| Imperative | | | | | |
| Pronoun Subject | | | | | |
| Unfamiliar Form | | | | | |
| Negative | | | | | |
| Verb Deleted | 2 | | | | |

Modality, Story Clauses in Habitual Narratives

| <i>Forms/Interpretations</i> | <i>Real</i> | <i>Likely</i> | <i>Factual "if"</i> | <i>Imperative</i> | <i>Unlikely</i> | <i>No TAM</i> |
|------------------------------|-------------|---------------|---------------------|-------------------|-----------------|---------------|
| Unmarked | 53 | 13 | 5 | | 2 | |
| ni- | 12 | 1 | | | 1 | |
| ta- | 12 | | | | | |
| Falling or Rising | | 1 | 1 | | 1 | |
| bi- | 1 | 1 | 1 | | | |
| Progressive | 8 | | 6 | | 2 | |
| Non-finite | | 1 | 1 | | | |
| Copula | 13 | | 1 | | | |
| Affixes | 4 | 2 | 1 | | | |
| Auxiliaries | 1 | | | | | |
| Serial | 12 | 3 | 1 | | | |
| Serial "if" | | | 13 | | 1 | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar form | | | | | | |
| Negative | 1 | | | | 5 | |
| Verb Deleted | | | | | | 3 |

Modality, Background Clauses in Unique Narratives

| <u>Forms/Interpretations</u> | <u>Real</u> | <u>Likely</u> | <u>Factual "if"</u> | <u>Imperative</u> | <u>Unlikely</u> |
|------------------------------|-------------|---------------|---------------------|-------------------|-----------------|
| Unmarked | 16 | | | | |
| ni- | 12 | 1 | | | |
| ta- | 1 | | | | |
| Falling or Rising | 2 | | | | |
| bi- | 2 | 1 | | | |
| Progressive | 2 | 1 | | | |
| Non-finite | 1 | 1 | | | |
| Copula | 6 | | | | |
| Affixes | | | | | |
| Auxiliaries | 1 | | | | 1 |
| Serial | 4 | 1 | | | |
| Serial "if" | | | | | |
| Imperative | | | | | |
| Pronoun Subject | | | | | |
| Unfamiliar Form | | | | | |
| Negative | | | | | |
| Verb Deleted | | | | | |

Modality, Background Clauses in Habitual Narratives

| <u>Forms/Interpretations</u> | <u>Real</u> | <u>Likely</u> | <u>Factual "if"</u> | <u>Imperative</u> | <u>Unlikely</u> | <u>No TAM</u> |
|------------------------------|-------------|---------------|---------------------|-------------------|-----------------|---------------|
| Unmarked | 23 | 1 | 4 | | 2 | |
| ni- | 6 | | | | 1 | |
| ta- | 7 | | | | | |
| Falling or Rising | | | | | 1 | |
| bi- | | | | | | |
| Progressive | 6 | | | | 2 | |
| Non-finite | | 1 | 1 | | | |
| Copula | 11 | | 1 | | | |
| Affixes | 2 | | | | | |
| Auxiliaries | | | | | | |
| Serial | 2 | | | | | |
| Serial "if" | | | 8 | | 1 | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar form | | | | | | |
| Negative | | | | | 5 | |
| Verb Deleted | | | | | | 3 |

Modality, Mainline Clauses in Unique Narratives

| <u>Forms/Interpretations</u> | <u>Real Likely Factual "if" Imperative Unlikely</u> |
|------------------------------|---|
| Unmarked | 29 |
| ni- | 3 |
| ta- | |
| Falling or Rising | 1 |
| bi- | 1 |
| Progressive | 1 |
| Non-finite | |
| Copula | |
| Affixes | 1 |
| Auxiliaries | 1 |
| Serial | 6 |
| Serial "if" | |
| Imperative | |
| Pronoun Subject | |
| Unfamiliar Form | |
| Negative | |
| Verb Deleted | 2 |

Modality, Mainline Clauses in Habitual Narratives

| <u>Forms/Interpretations</u> | <u>Real</u> | <u>Likely</u> | <u>Factual "if"</u> | <u>Imperative</u> | <u>Unlikely</u> | <u>No TAM</u> |
|------------------------------|-------------|---------------|---------------------|-------------------|-----------------|---------------|
| Unmarked | 30 | 12 | 1 | | | |
| ni- | 6 | 1 | | | | |
| ta- | 5 | | | | | |
| Falling or Rising | | 1 | 1 | | | |
| bi- | 1 | 1 | 1 | | | |
| Progressive | 2 | | 6 | | | |
| Non-finite | | | | | | |
| Copula | 2 | | | | | |
| Affixes | 2 | 2 | 1 | | | |
| Auxiliaries | 1 | | | | | |
| Serial | 10 | 3 | 1 | | | |
| Serial "if" | | | 5 | | | |
| Imperative | | | | | | |
| Pronoun Subject | | | | | | |
| Unfamiliar form | | | | | | |
| Negative | 1 | | | | | |
| Verb Deleted | | | | | | |

Modality, All Conversation & Dialog

| <i>Forms/Interpretations</i> | <i>Real</i> | <i>Likely</i> | <i>Factual "if"</i> | <i>Imperative</i> | <i>Unlikely</i> | <i>No TAM</i> |
|------------------------------|-------------|---------------|---------------------|-------------------|-----------------|---------------|
| Unmarked | 53 | 3 | 3 | 1 | 1 | |
| ni- | 18 | | | 2 | 1 | |
| ta- | 19 | | | 3 | | |
| Falling or Rising | 5 | | | | 1 | |
| bi- | 5 | | | | | |
| Progressive | 24 | | 1 | | 2 | |
| Non-finite | 7 | 1 | 1 | | 1 | |
| Copula | 39 | | 1 | | 7 | |
| Affixes | 7 | | | 3 | 5 | |
| Auxiliaries | 1 | 1 | | | | |
| Serial | 12 | 1 | 1 | 4 | 5 | 1 |
| Serial "if" | | | 6 | | | |
| Imperative | | | | 14 | | |
| Pronoun Subject | 3 | 2 | | 5 | 1 | |
| Unfamiliar Form | 1 | | | | | 1 |
| Negative | 5 | | | | 5 | 1 |
| Verb Deleted | 2 | | | | | 27 |

Aspect Interpretations of Unmarked Verbs in All Conversation & Dialog

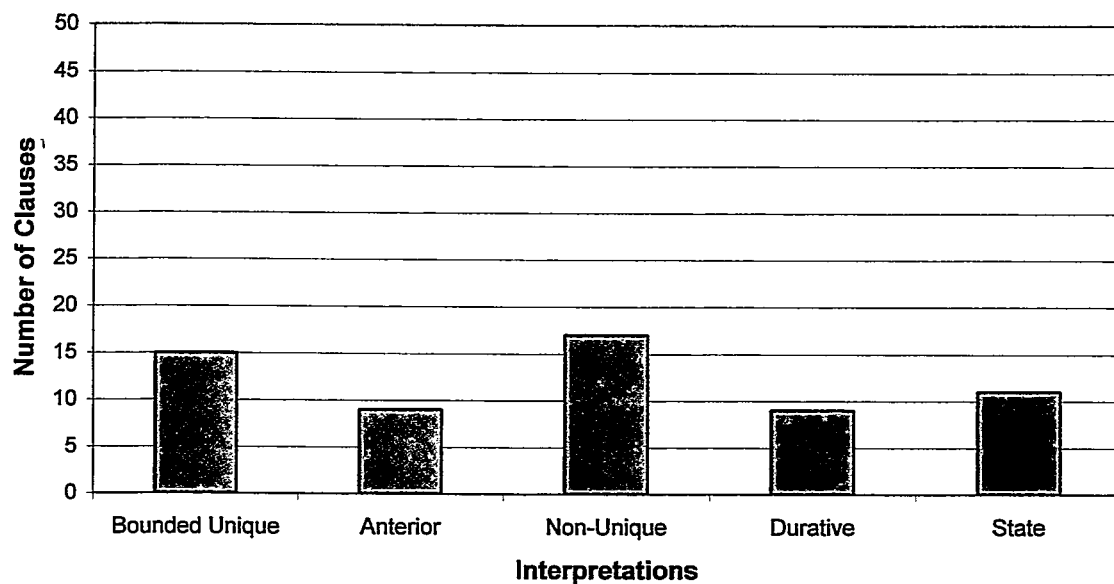
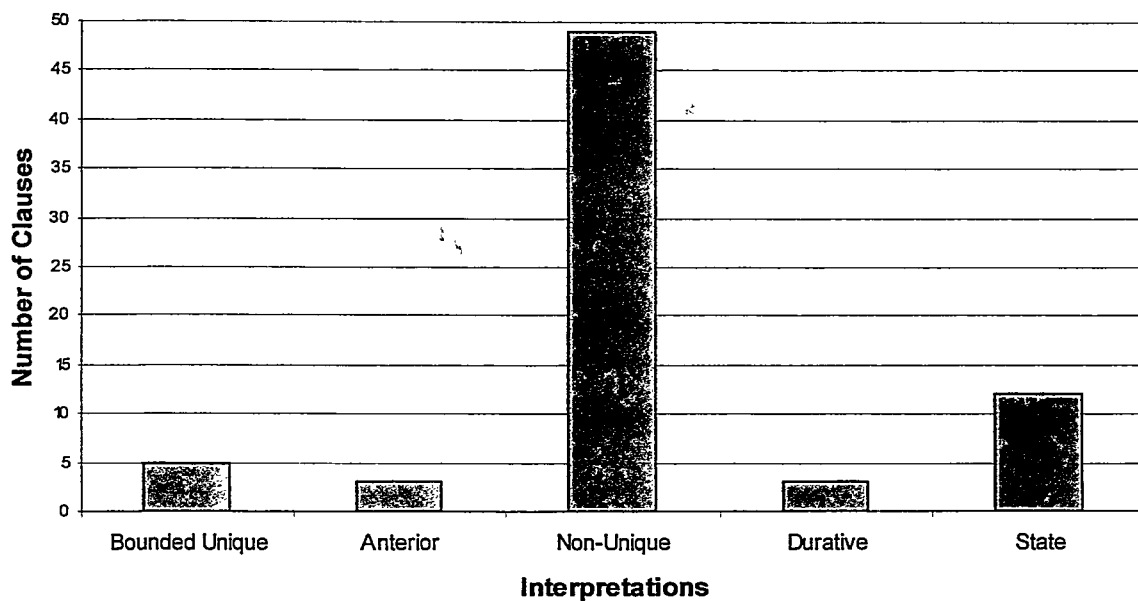
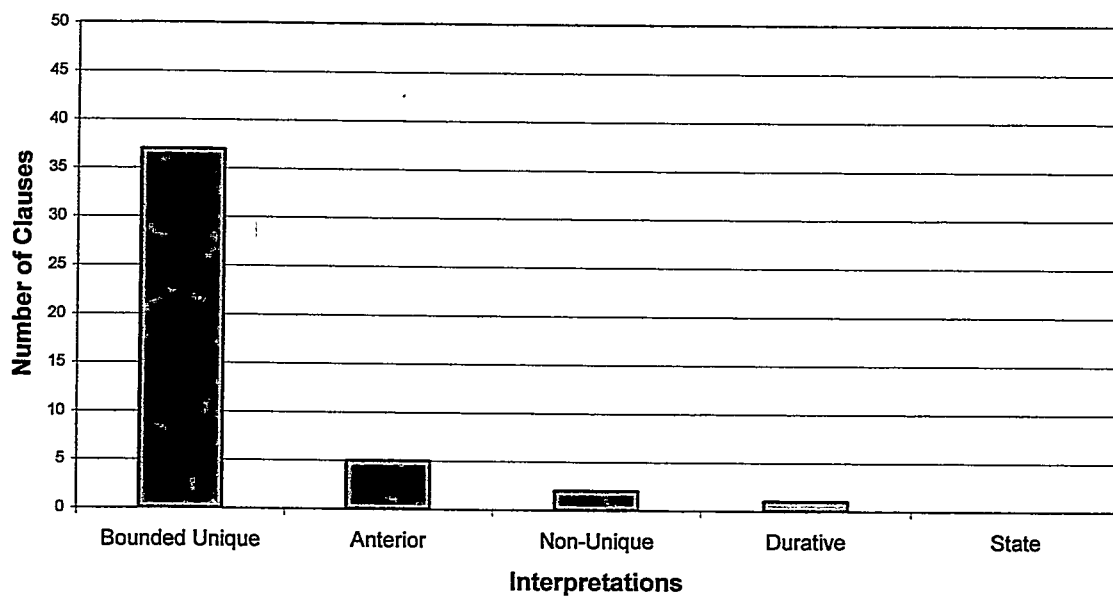


Chart 16, Aspect

Aspect Interpretations of Unmarked Verbs in Habitual Narrative



Aspect Interpretations of the Unmarked Verb in Unique Narratives



Verb Forms in Story Clauses of Unique Narratives

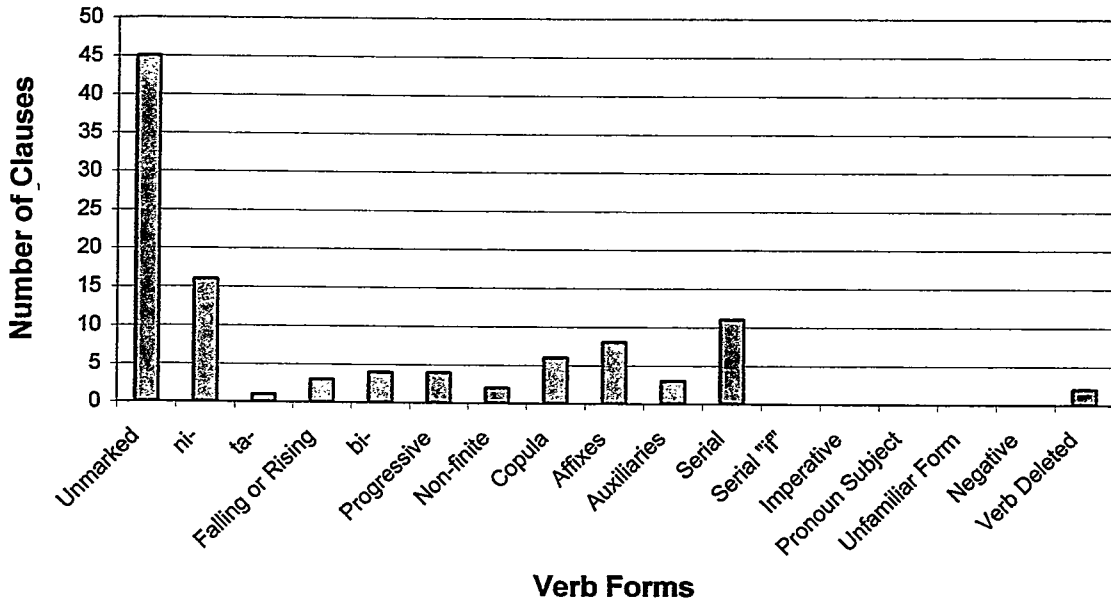
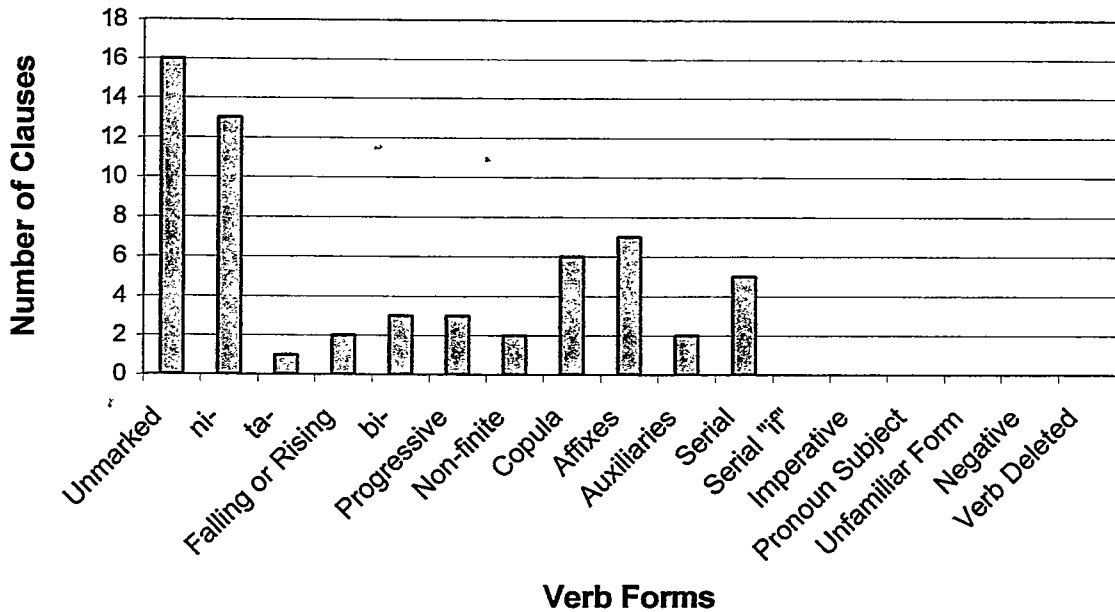


Chart 5, Aspects

Verb Forms in Background Clauses of Unique Narratives



Verb Forms in Mainline Clauses of Unique Narratives

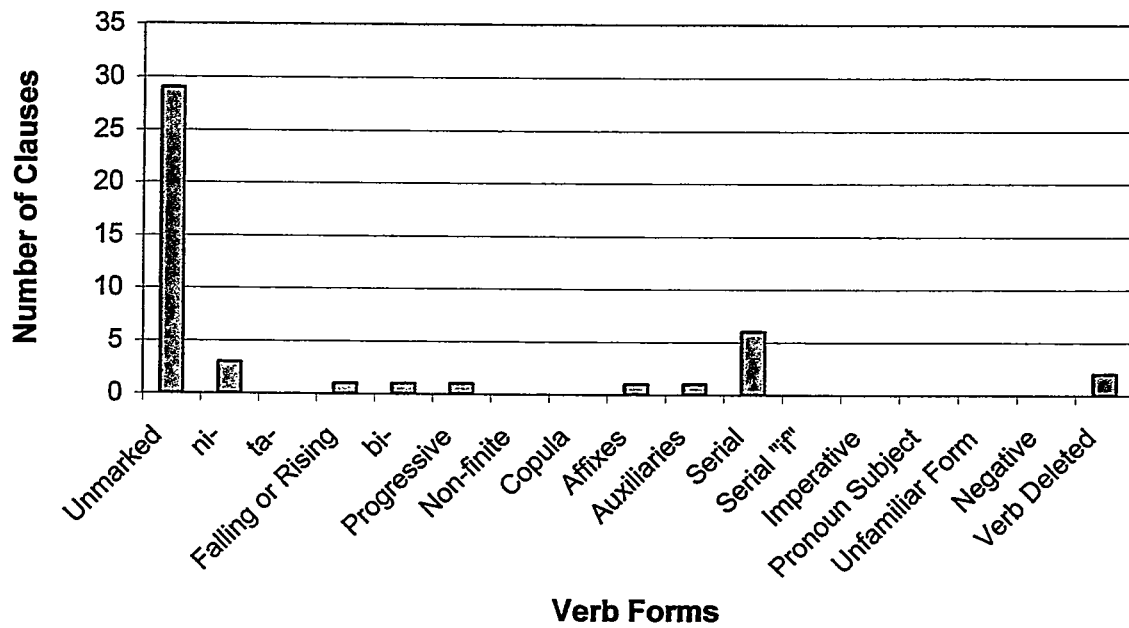
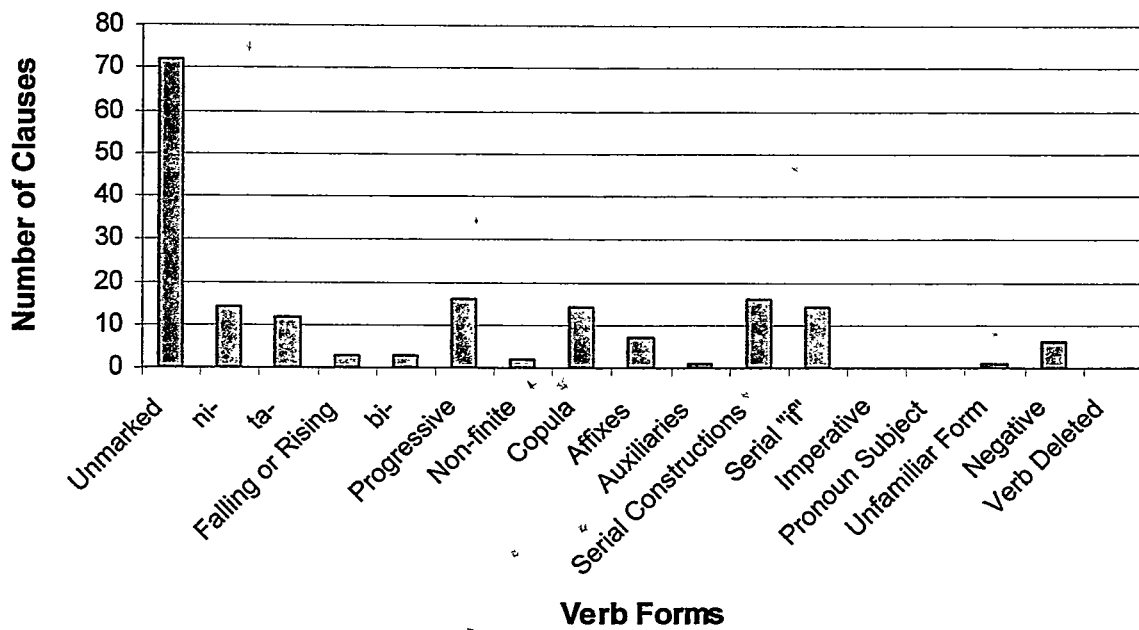


Chart 10, Aspects

Verb Forms in Story Clauses of Habitual Narratives



Verb Forms in Background Clauses of Habitual Narratives

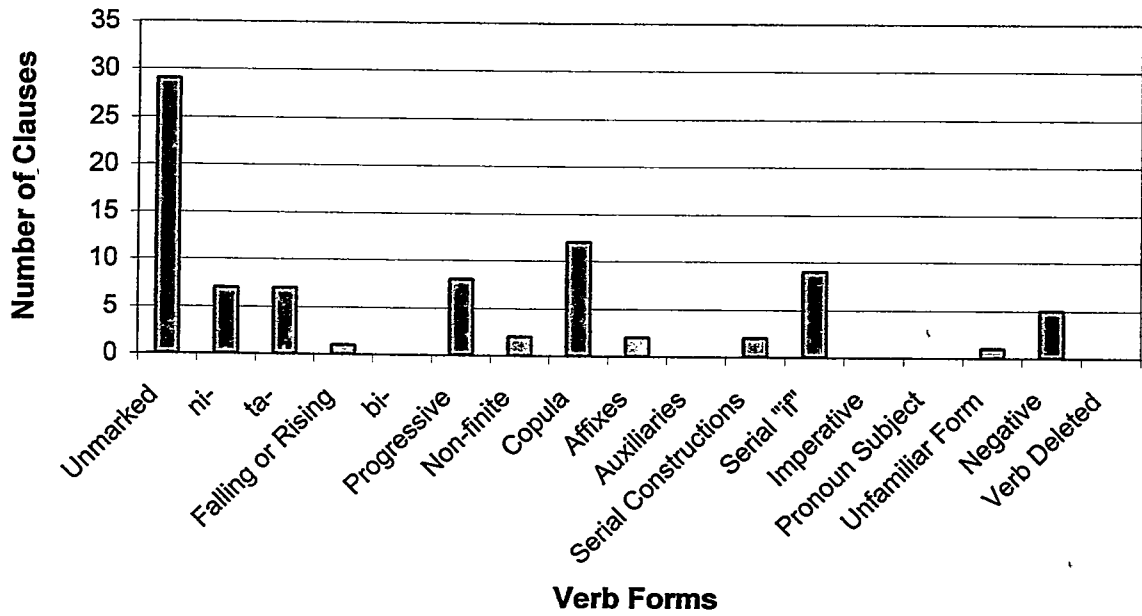
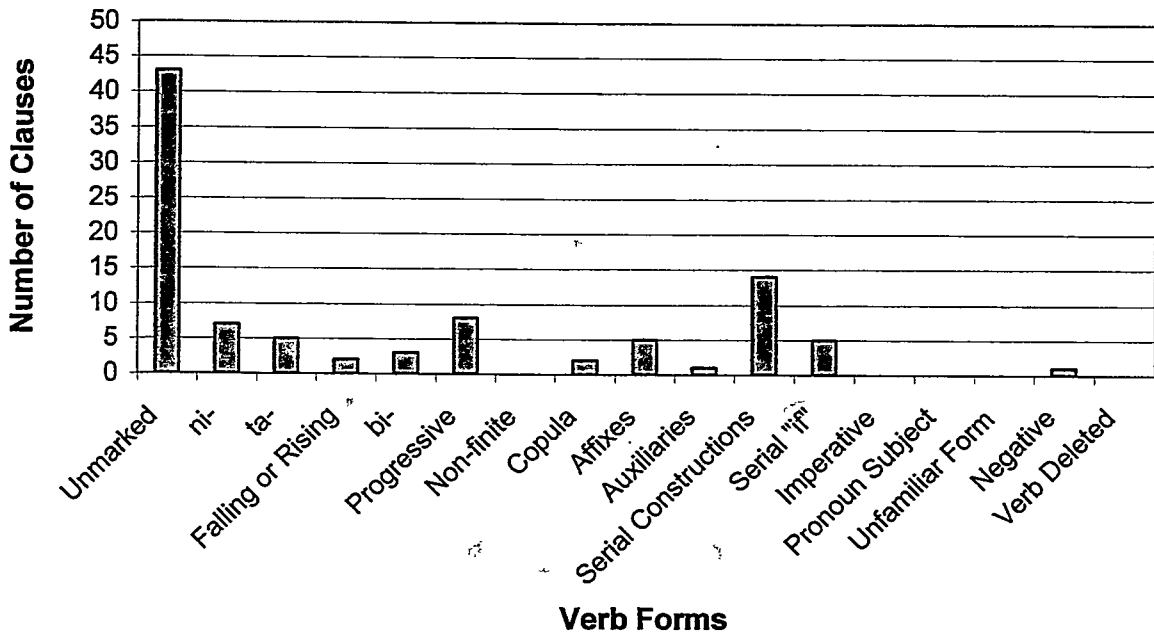


Chart 12, Aspect

Verb Forms in Mainline Clauses of Habitual Narratives



Verb Forms in All Conversation and Dialog

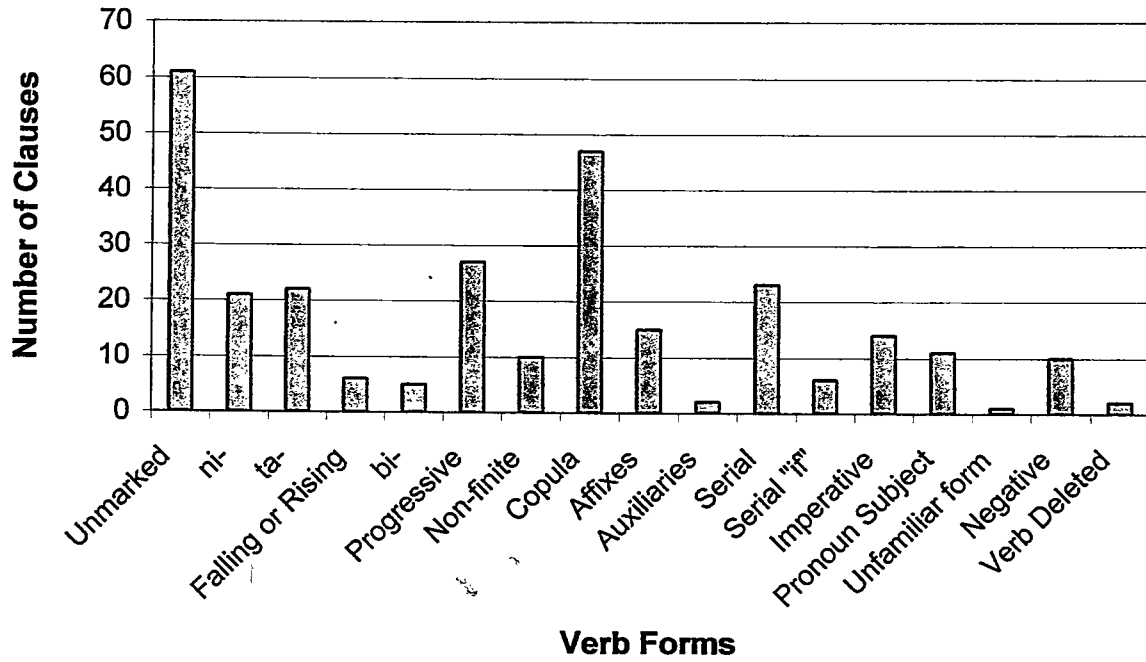
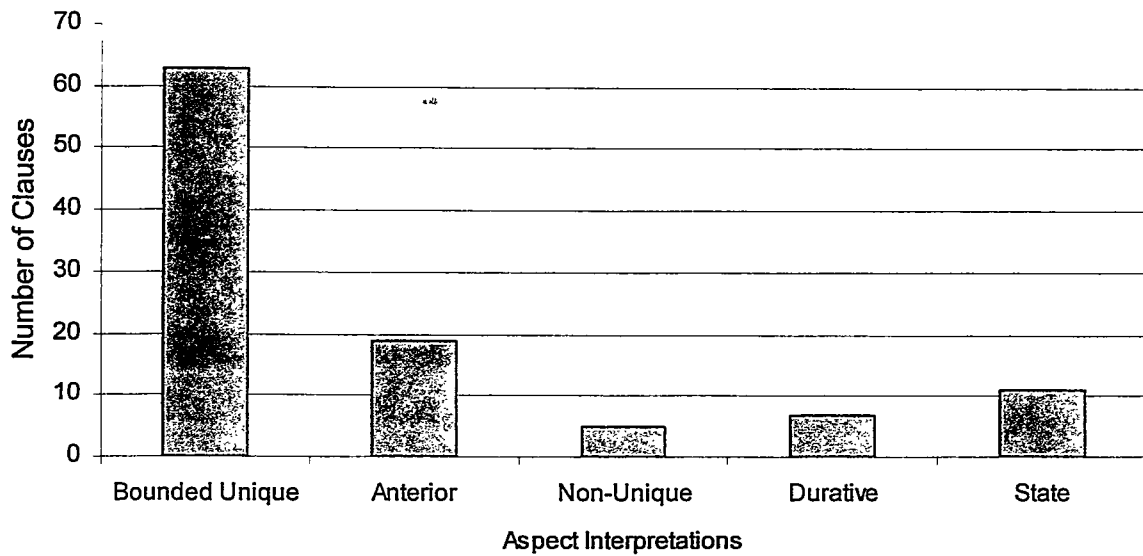


Chart 1, Aspect

Aspect Interpretations in Story Clauses of Unique Narratives



Aspect Interpretations in Background Clauses of Unique Narratives

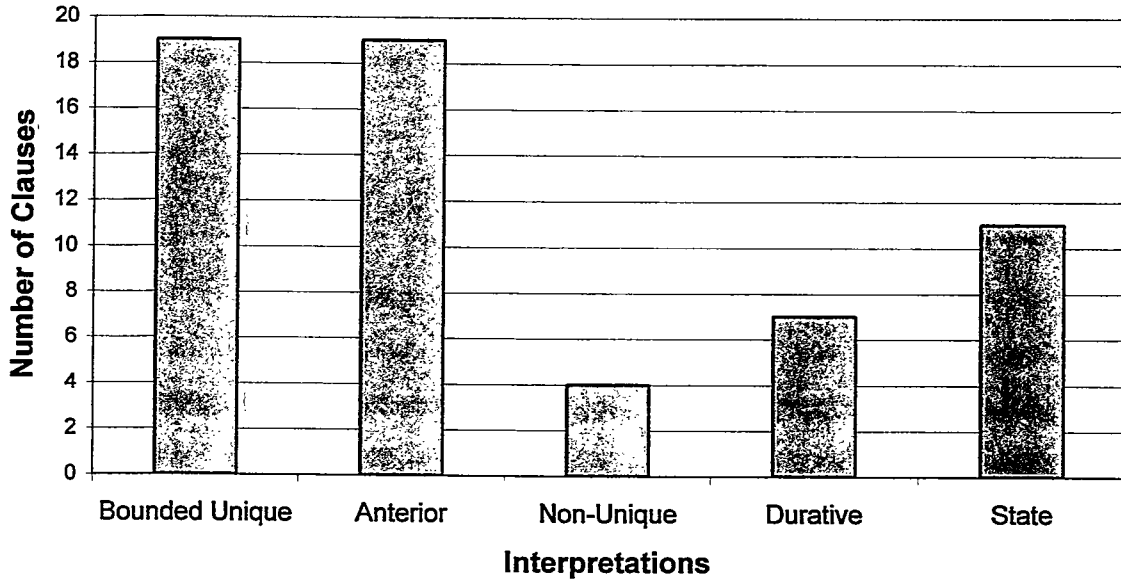
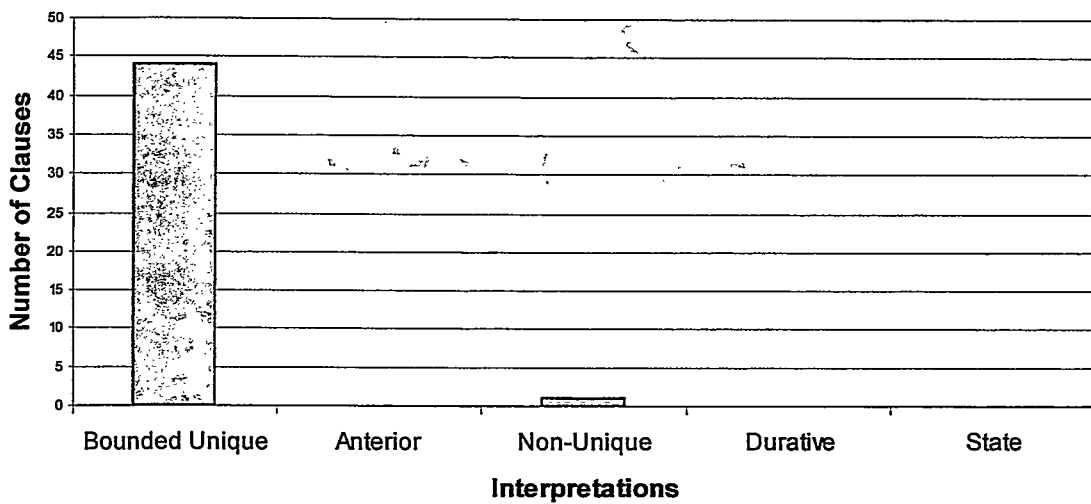


Chart 4, Aspects

Aspect Interpretations for Mainline Clauses of Unique Narratives



Aspect Interpretations in Story Clauses of Habitual Narratives

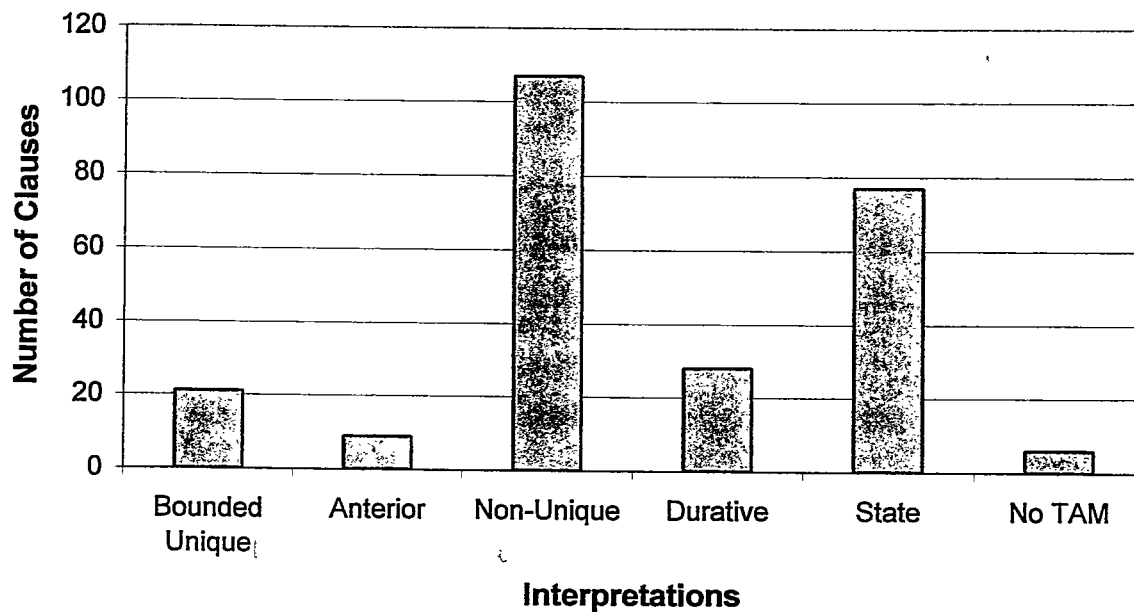
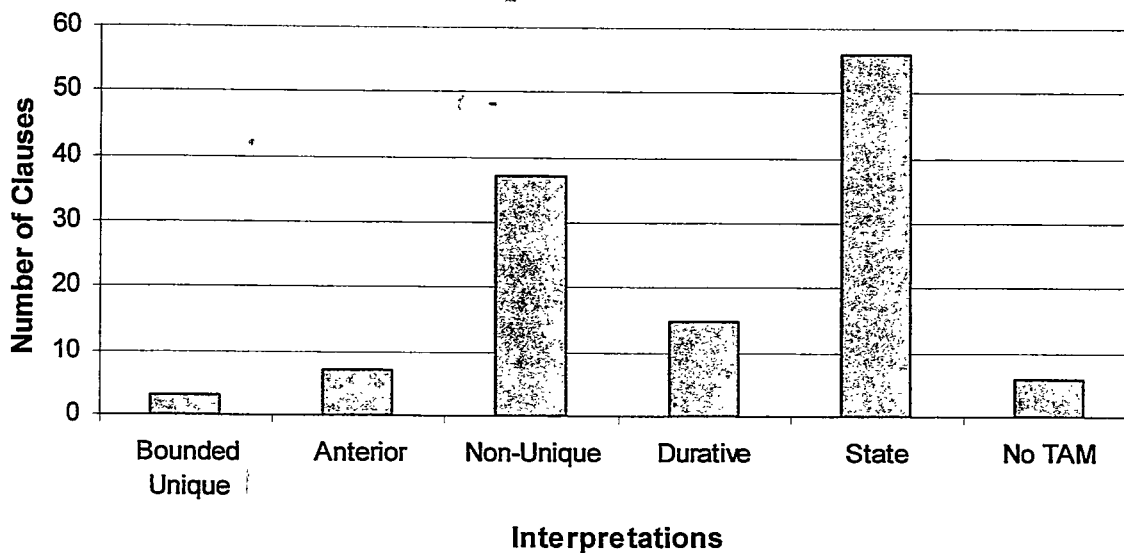


Chart 8, Aspects

Aspect Interpretations in Background Clauses of Habitual Narratives



Aspect Interpretations in Mainline Clauses of Habitual Narratives

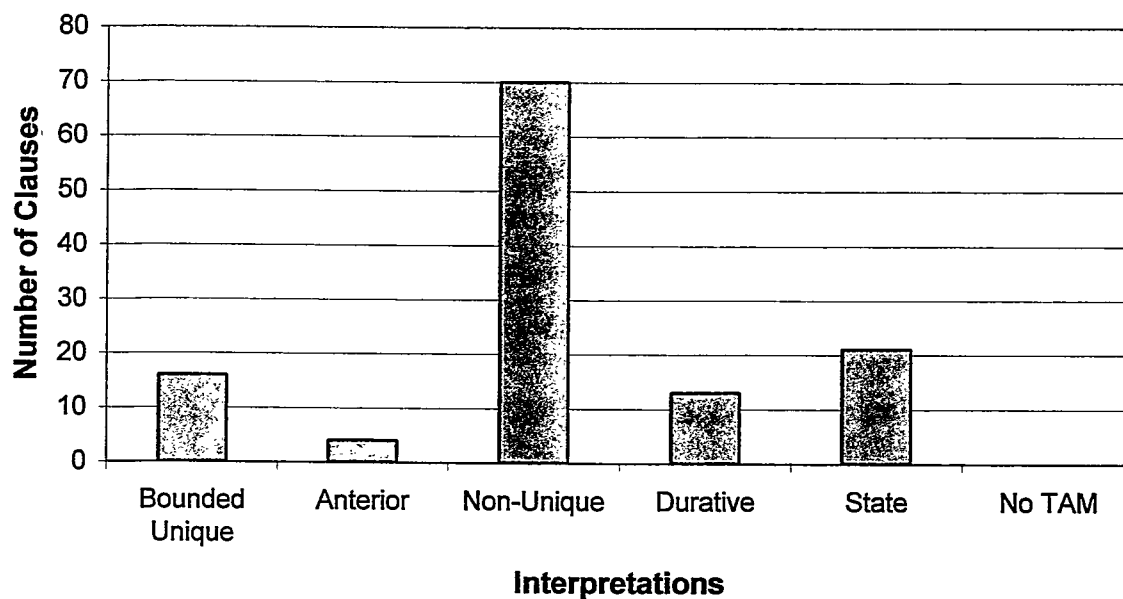
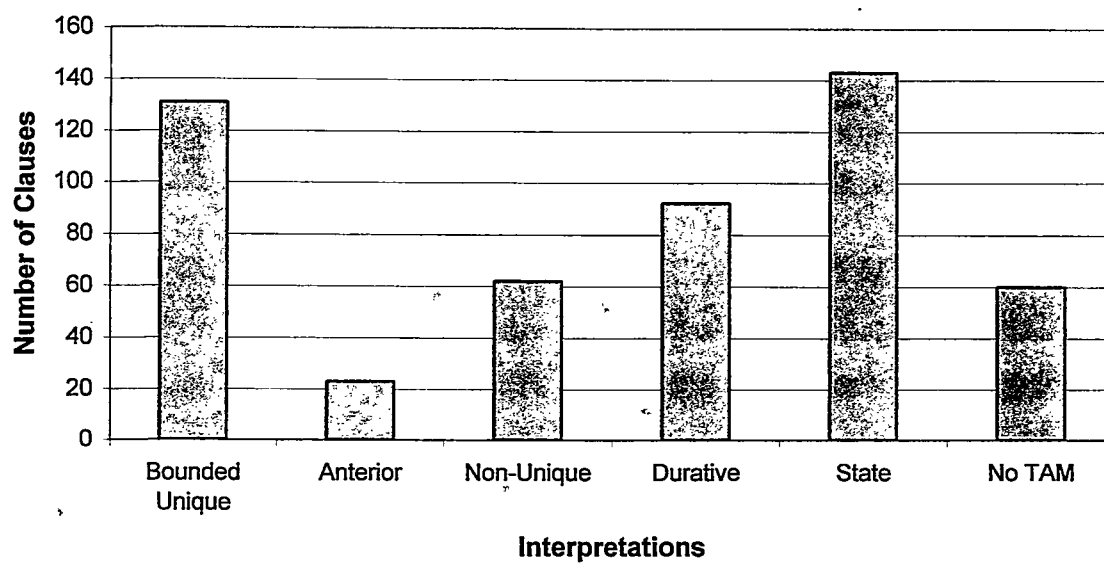


Chart 13, Aspects

Aspect Interpretations in All Conversation & Dialog



Timer References of Unmarked Verbs in Story Clauses of Unique Narratives

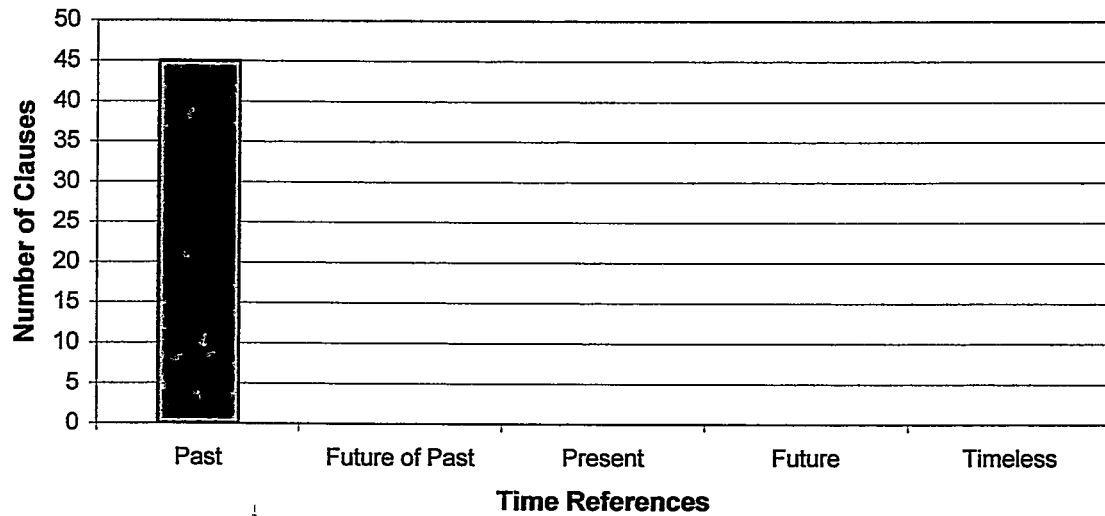
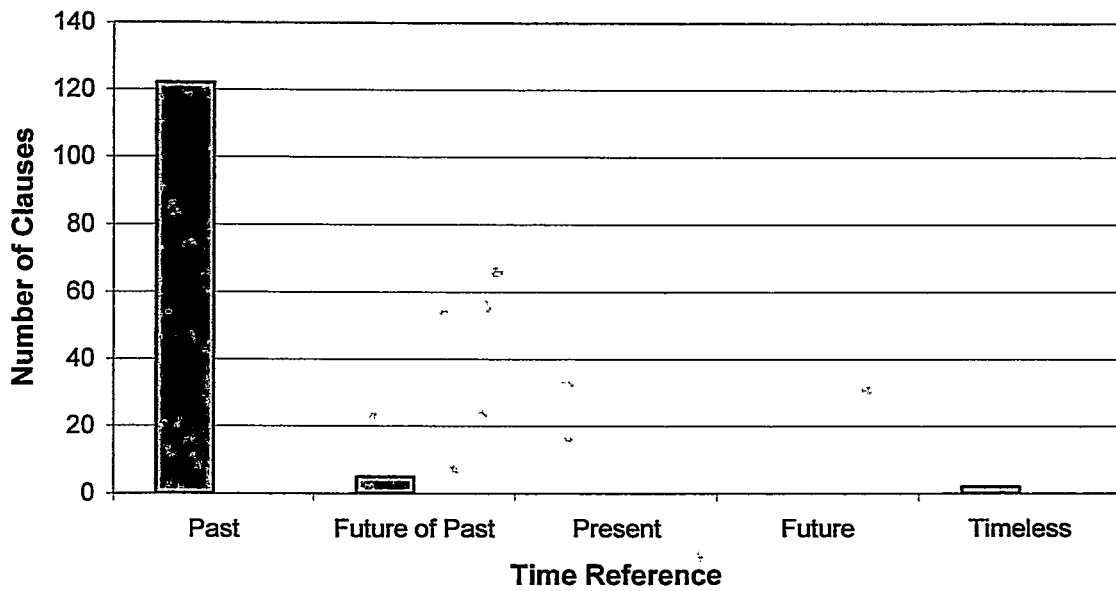


Chart 1, Time

Time References in Story Clauses of Unique Narratives



Time Reference in Background Clauses of Unique Narratives

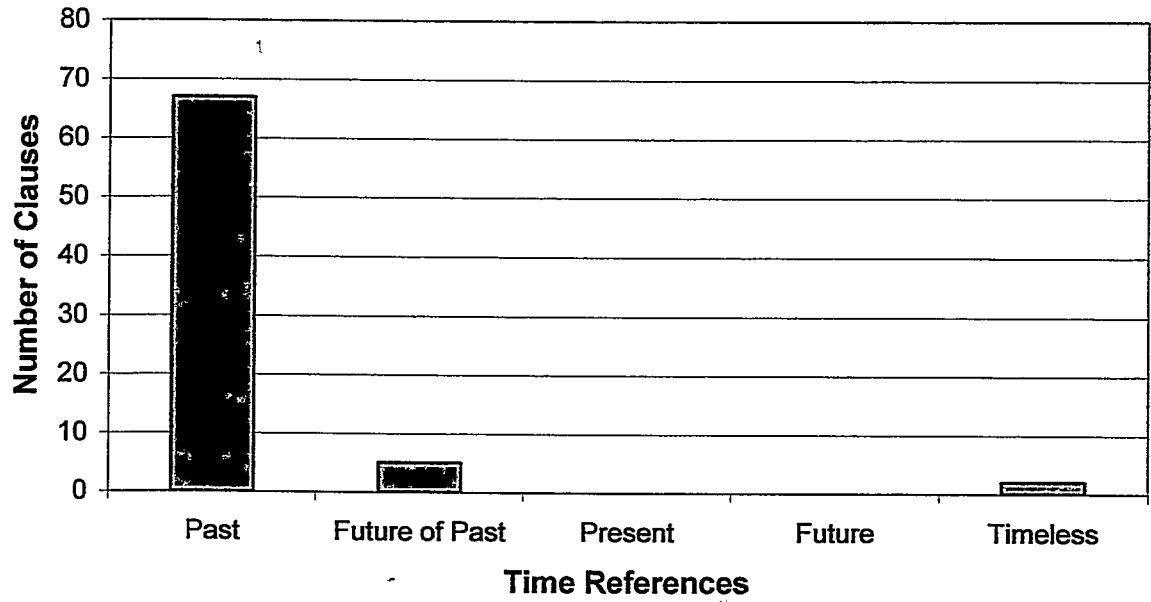
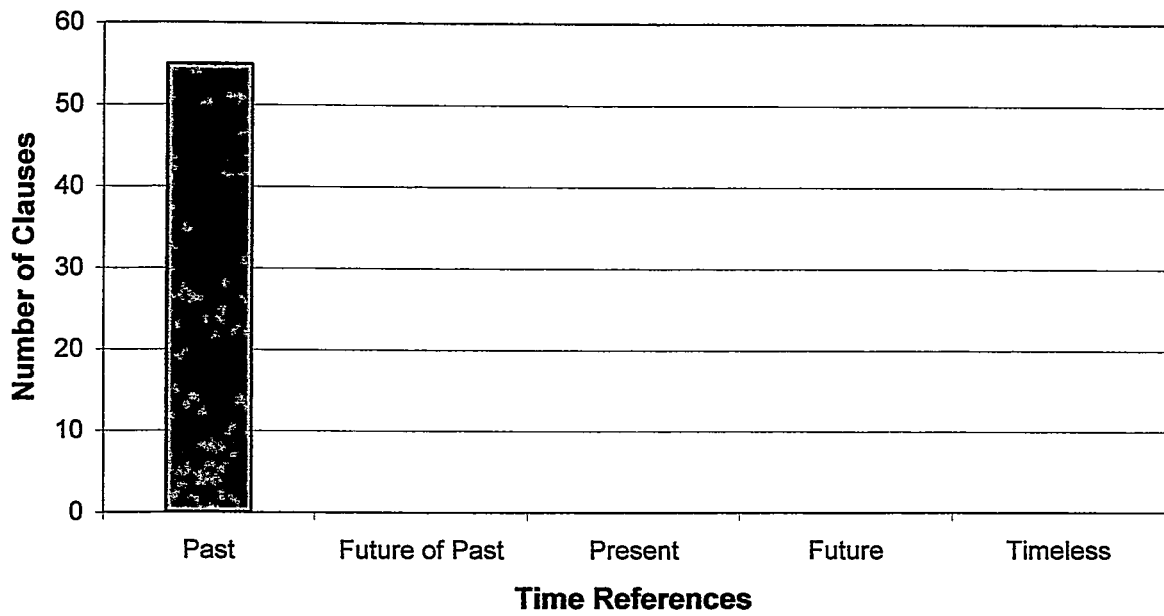


Chart 3, Time

Time Reference in Mainline Clauses of Unique Narratives



Time References of the Unmarked Verb in Story Clauses of Habitual Narratives

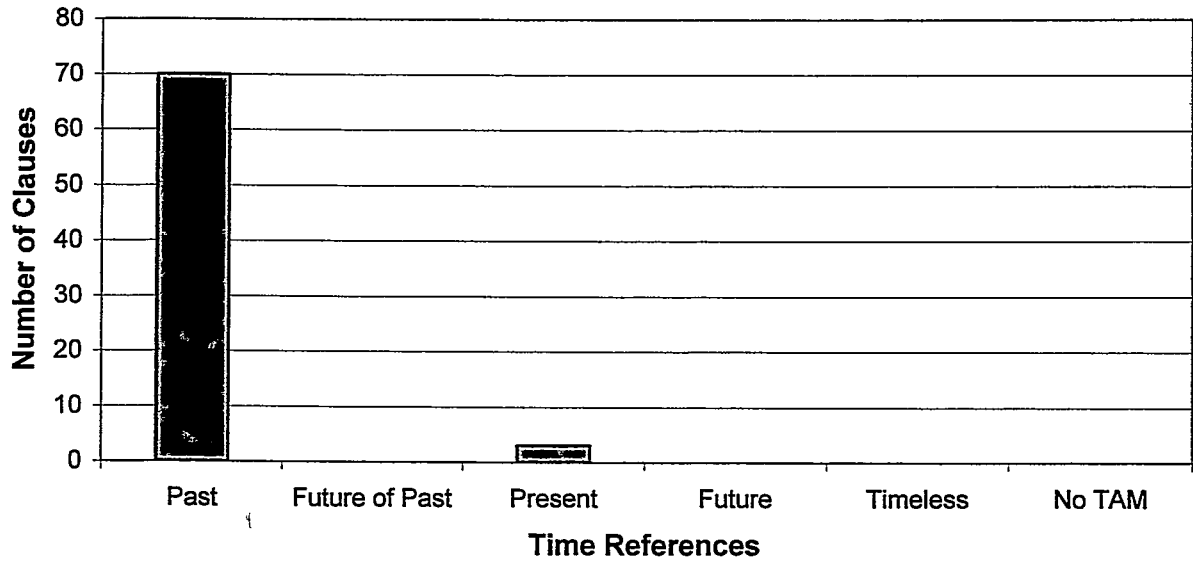


Chart 4, Time

Time Reference in Story Clauses of Habitual Narratives

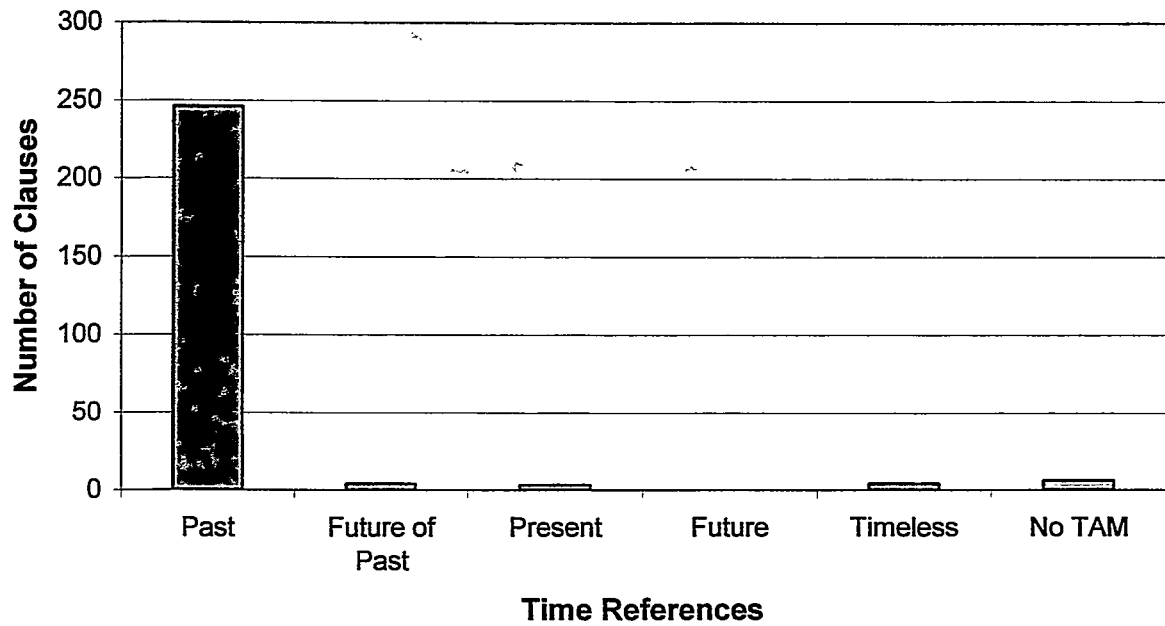


Chart 5, Time

Time Reference in Background Clauses of Habitual Narratives

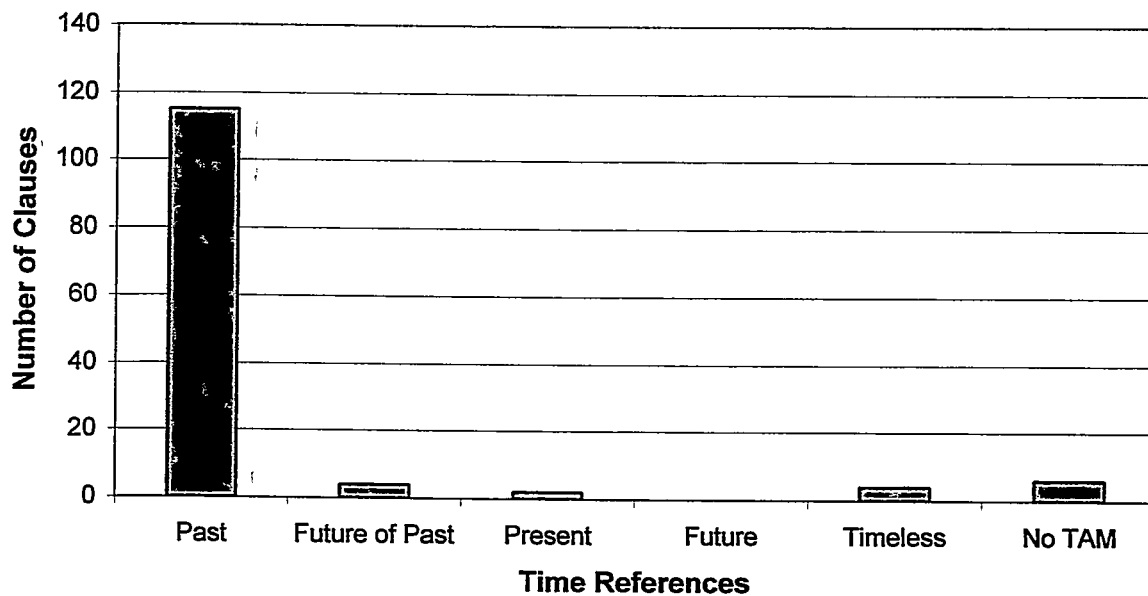
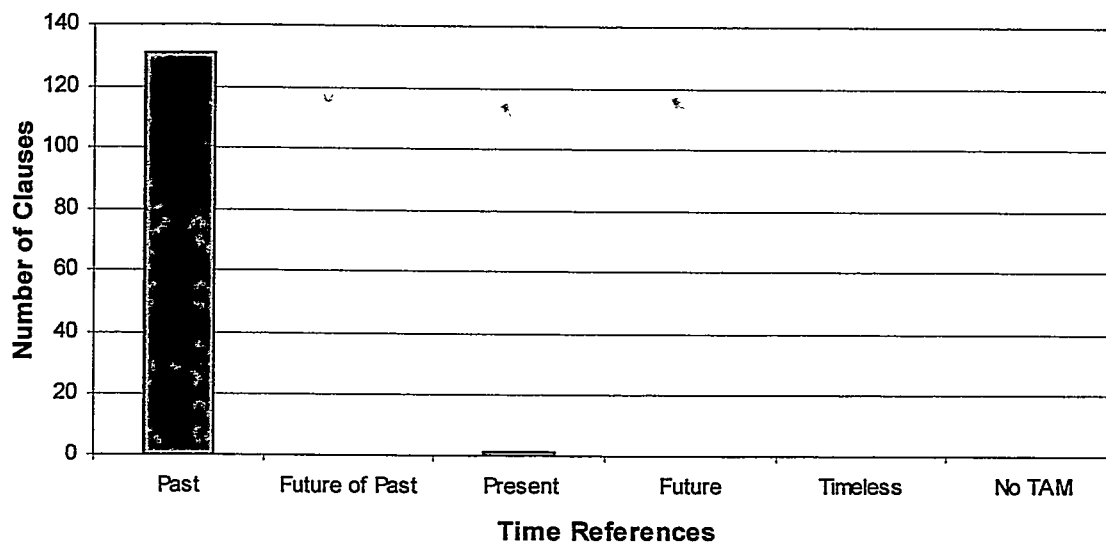


Chart 6, Time

Time Reference in Mainline Clauses of Habitual Narratives



Time Reference of Unmarked Verbs in All Conversation & Dialog

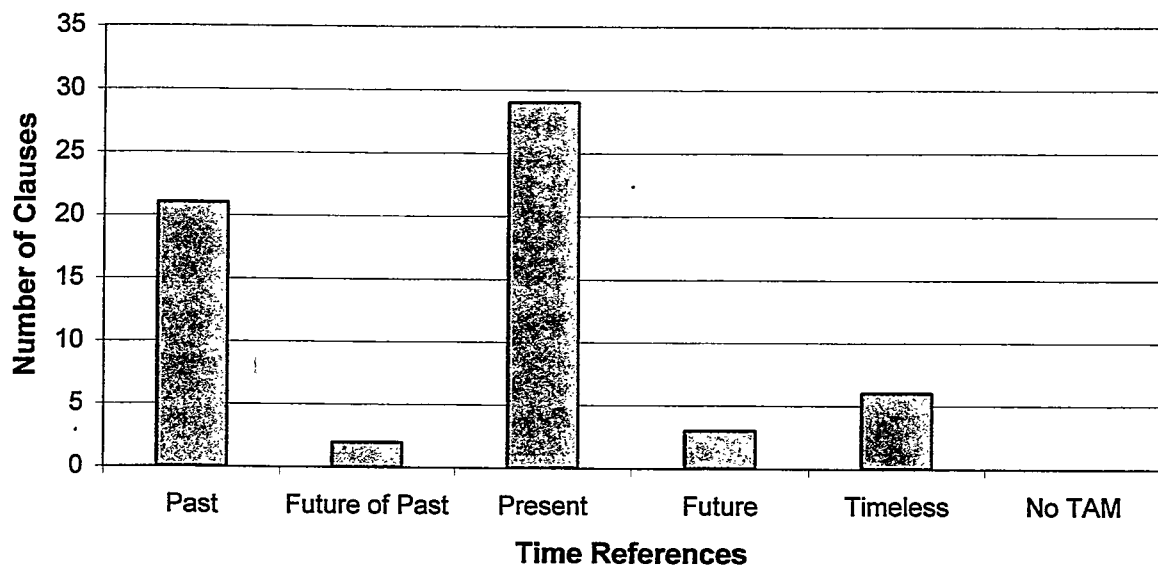
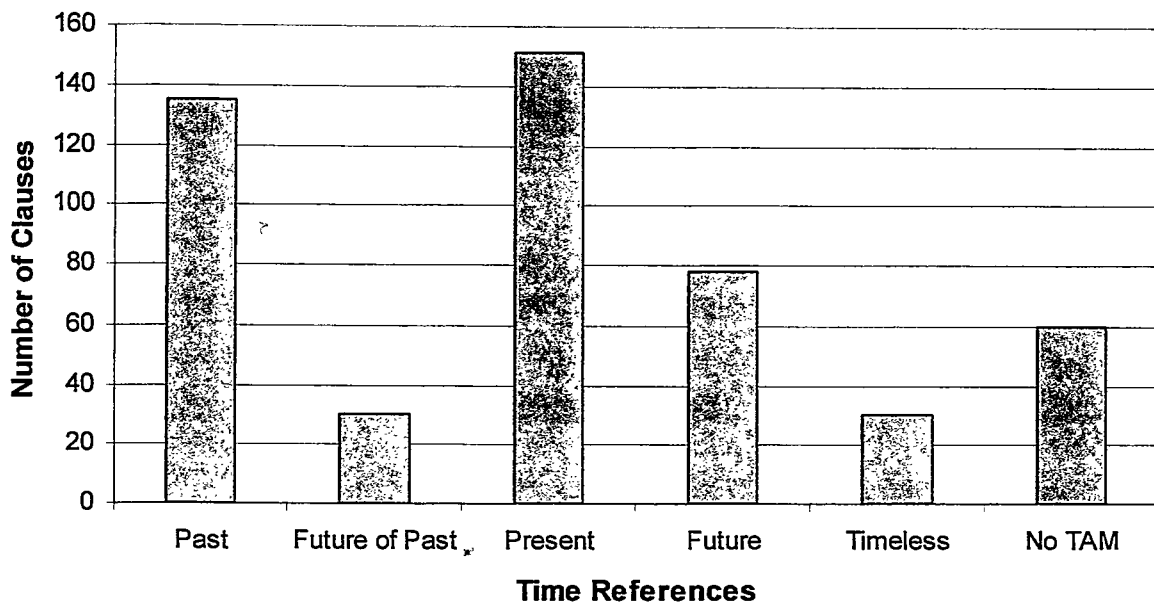


Chart 7, Time

Time References in All Conversation & Dialog



Modality of Unmarked Verbs in Story Clauses of Unique Narratives

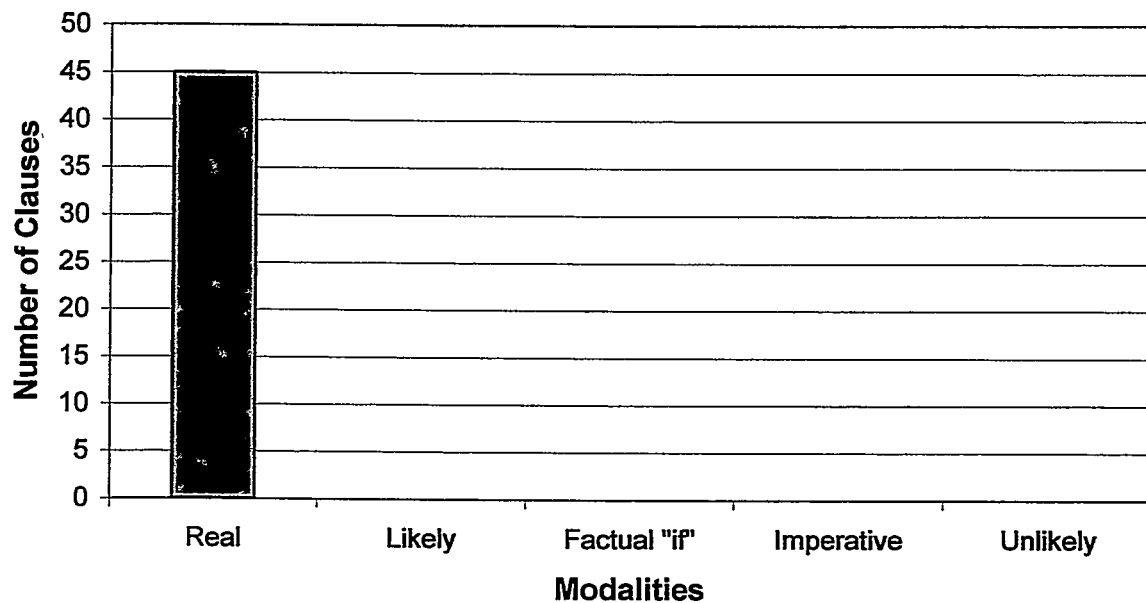
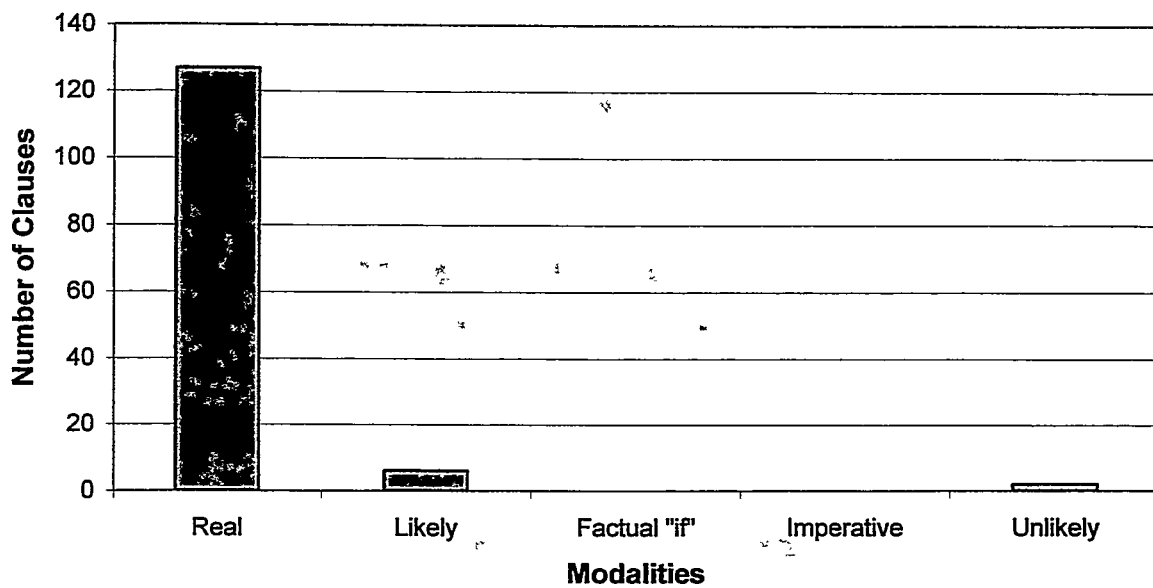


Chart 1, Modality

Modality in Story Clauses of Unique Narratives



Modality in Background Clauses of Unique Narratives

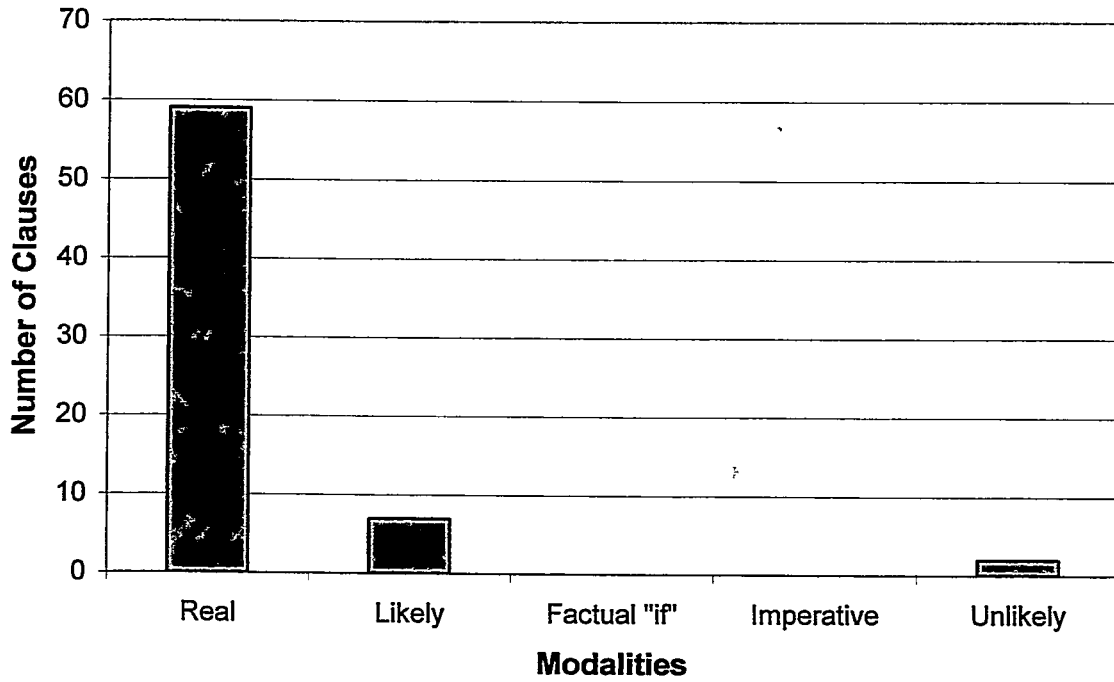
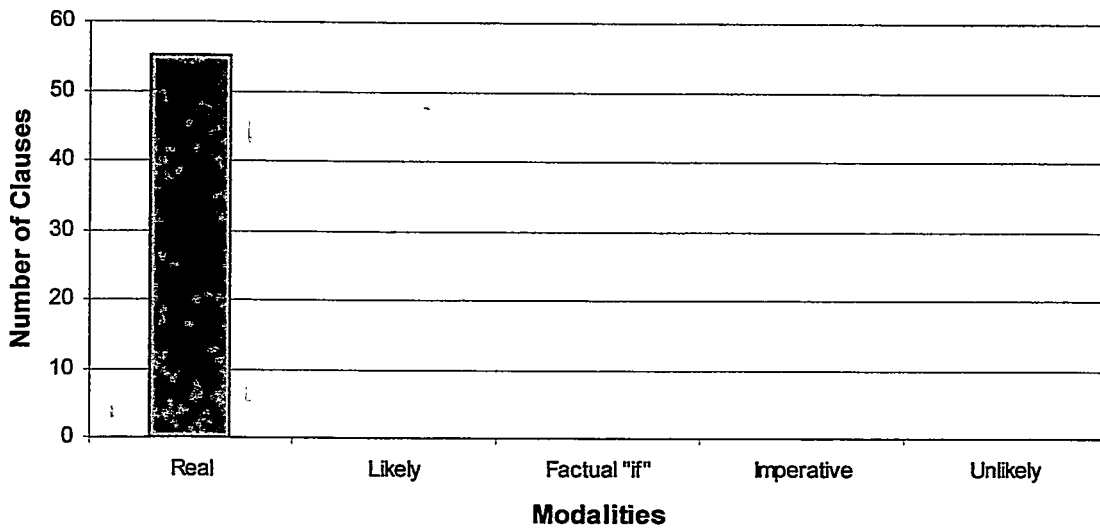


Chart 3, Modality

Modality in Mainline Clauses of Unique Narratives



Modality of Unmarked Verbs in Story Clauses of Habitual Narratives

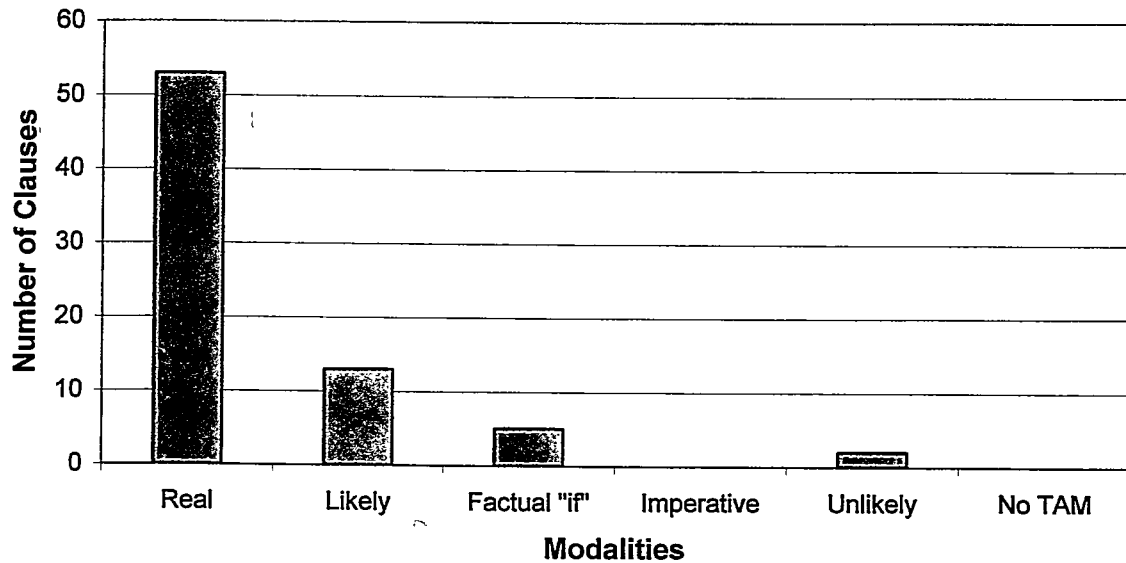
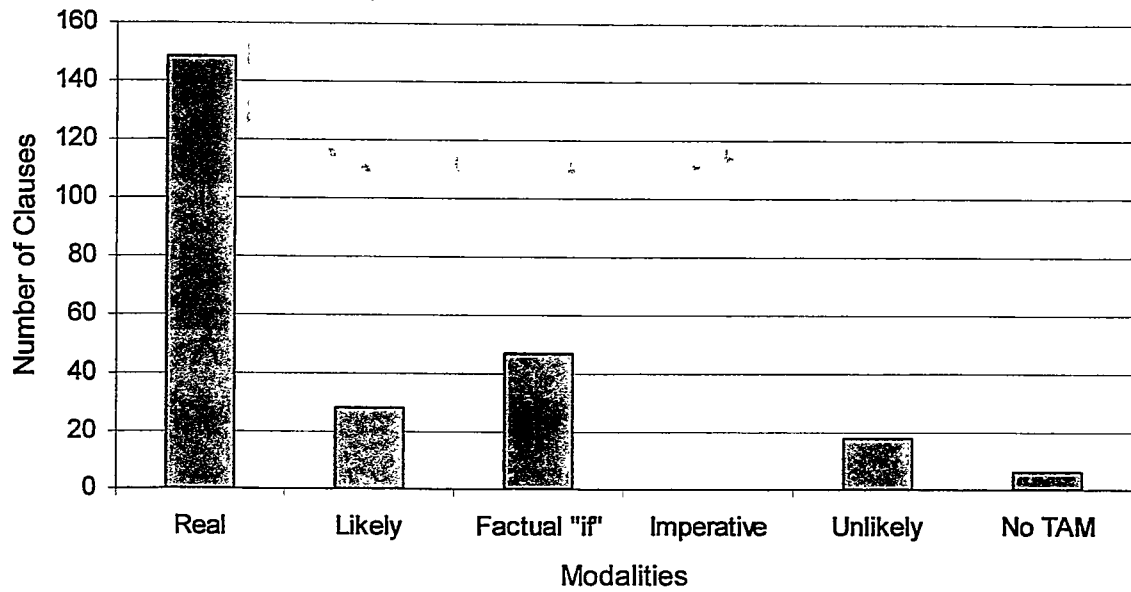


Chart 5, Modality

Modality in Story Clauses of Habitual Narratives



Modality in Background Clauses of Habitual Narratives

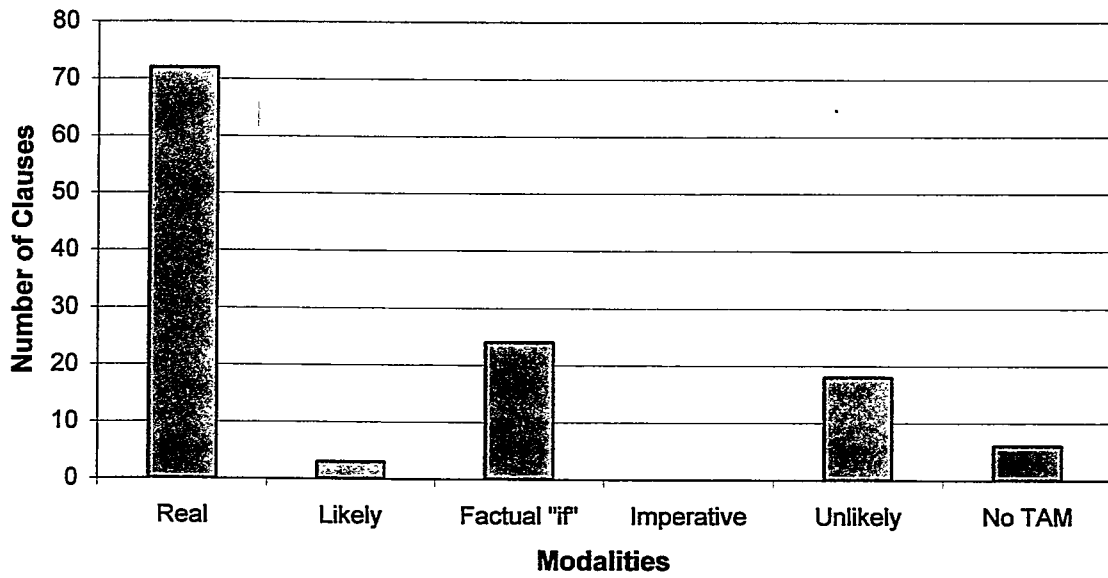
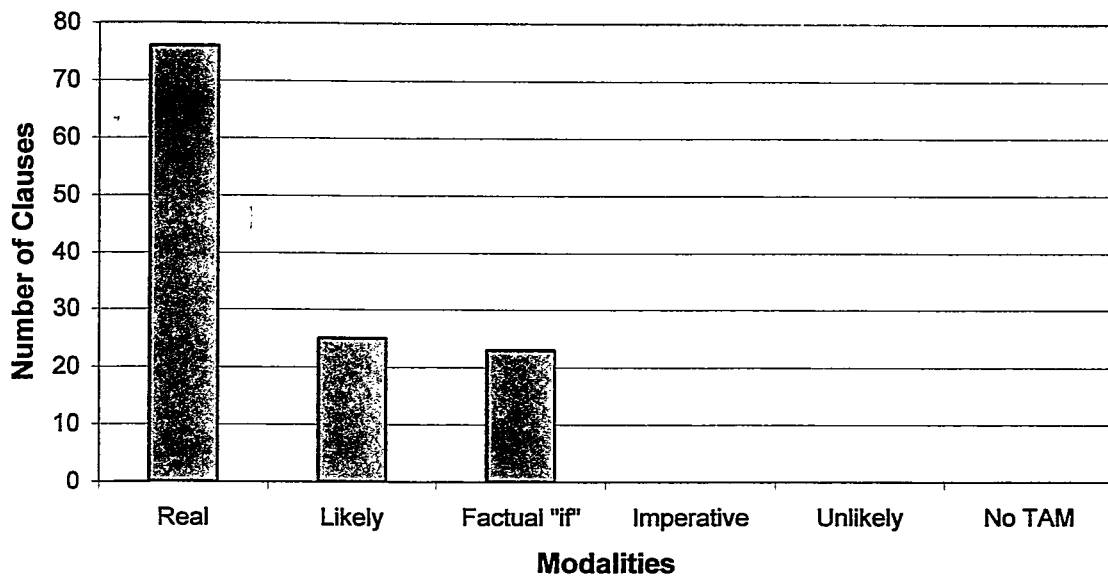


Chart 7

Modality in Mainline Clauses of Habitual Narrative



Modality of Unmarked Verbs in All Conversation & Dialog

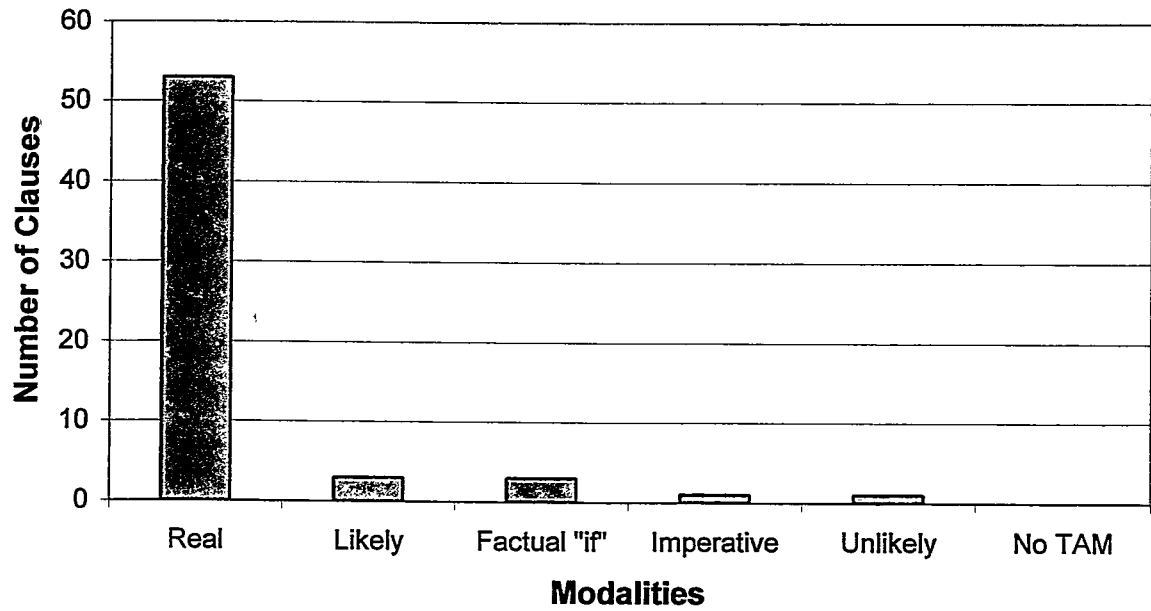
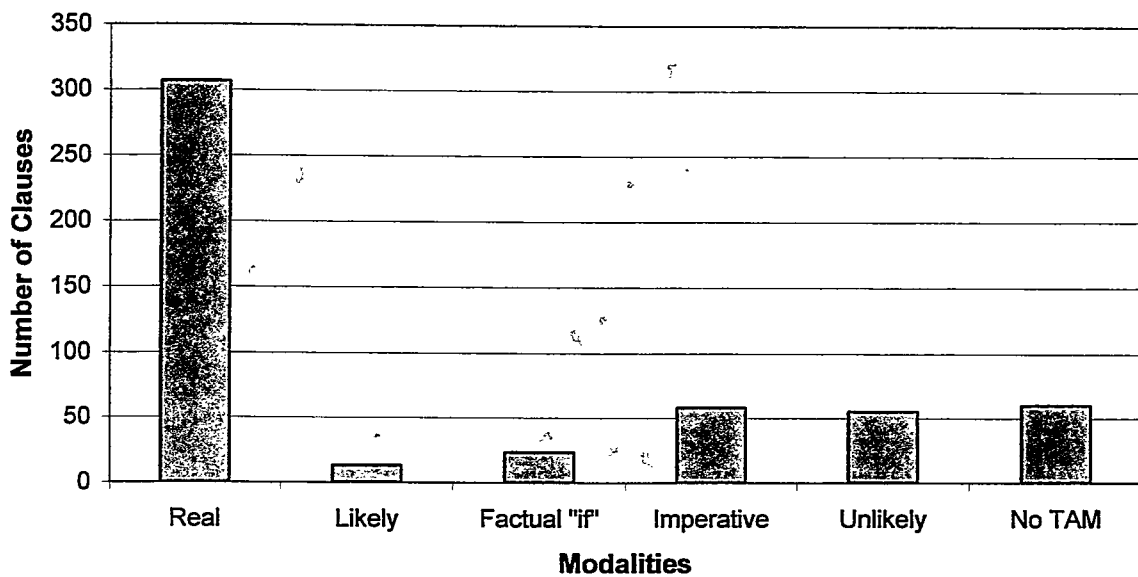


Chart 9

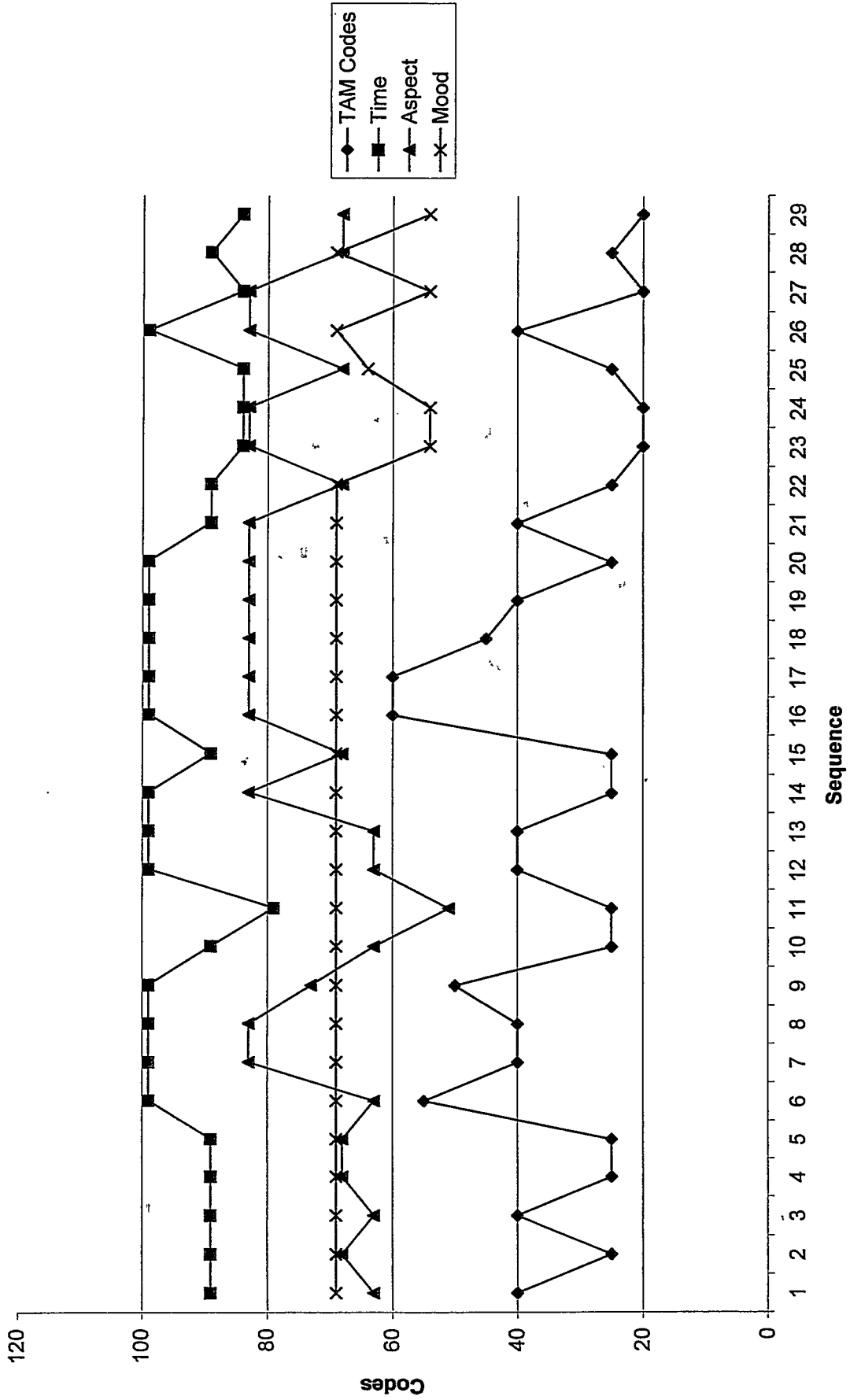
Modality in All Conversation & Dialog



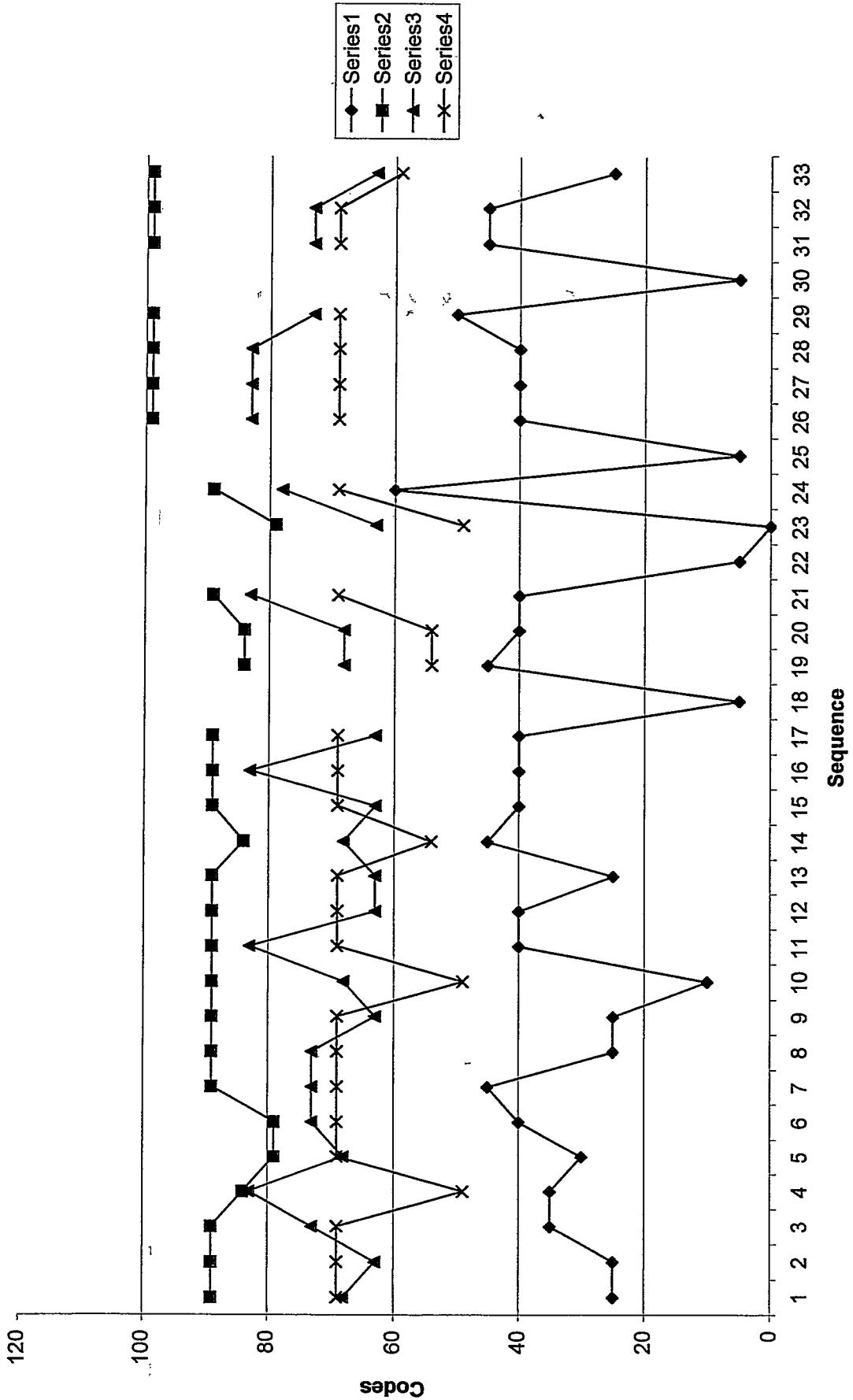
APPENDIX E

LINE GRAPHS

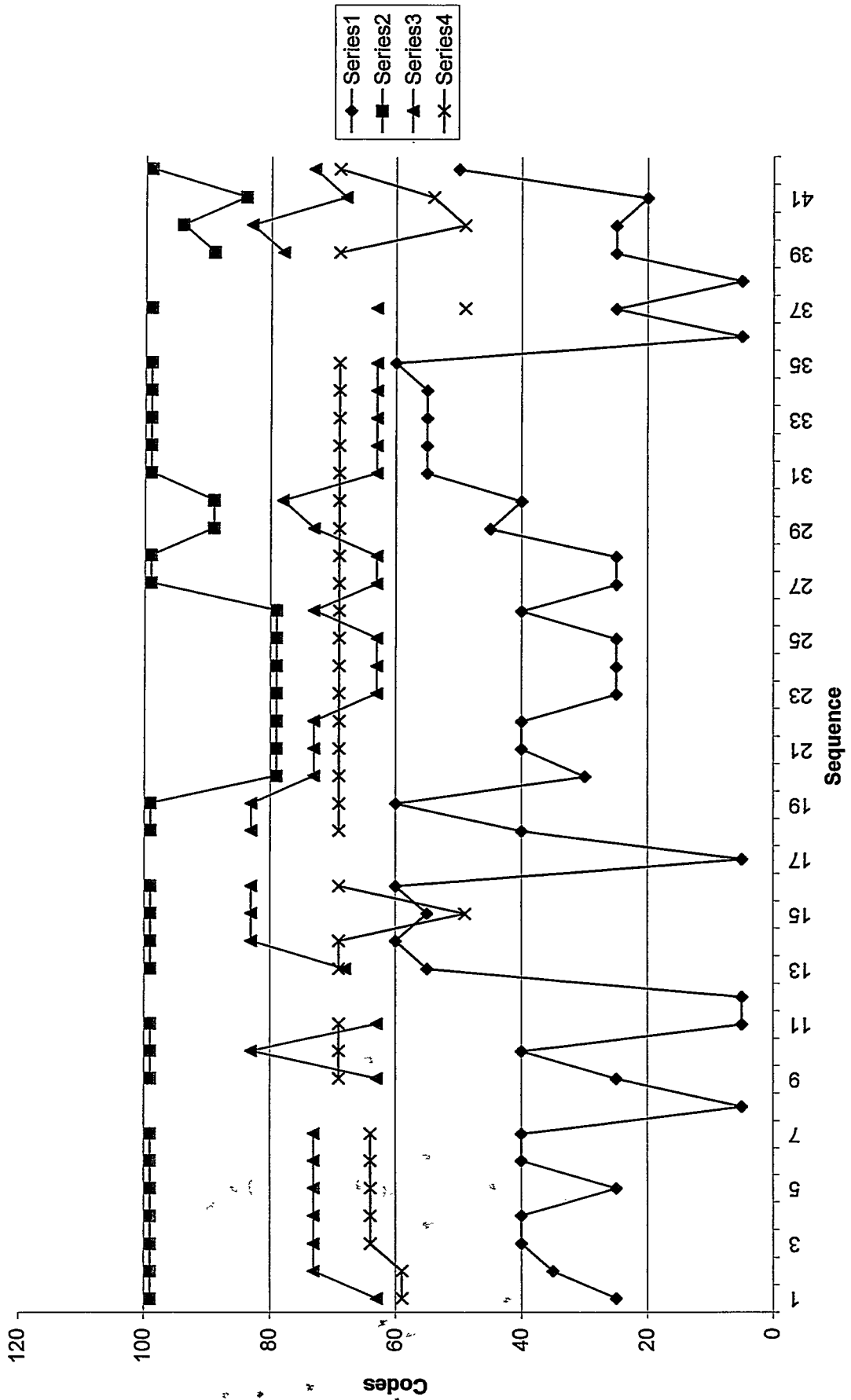
TAM forms & Interpretations in Ados Kugo #1



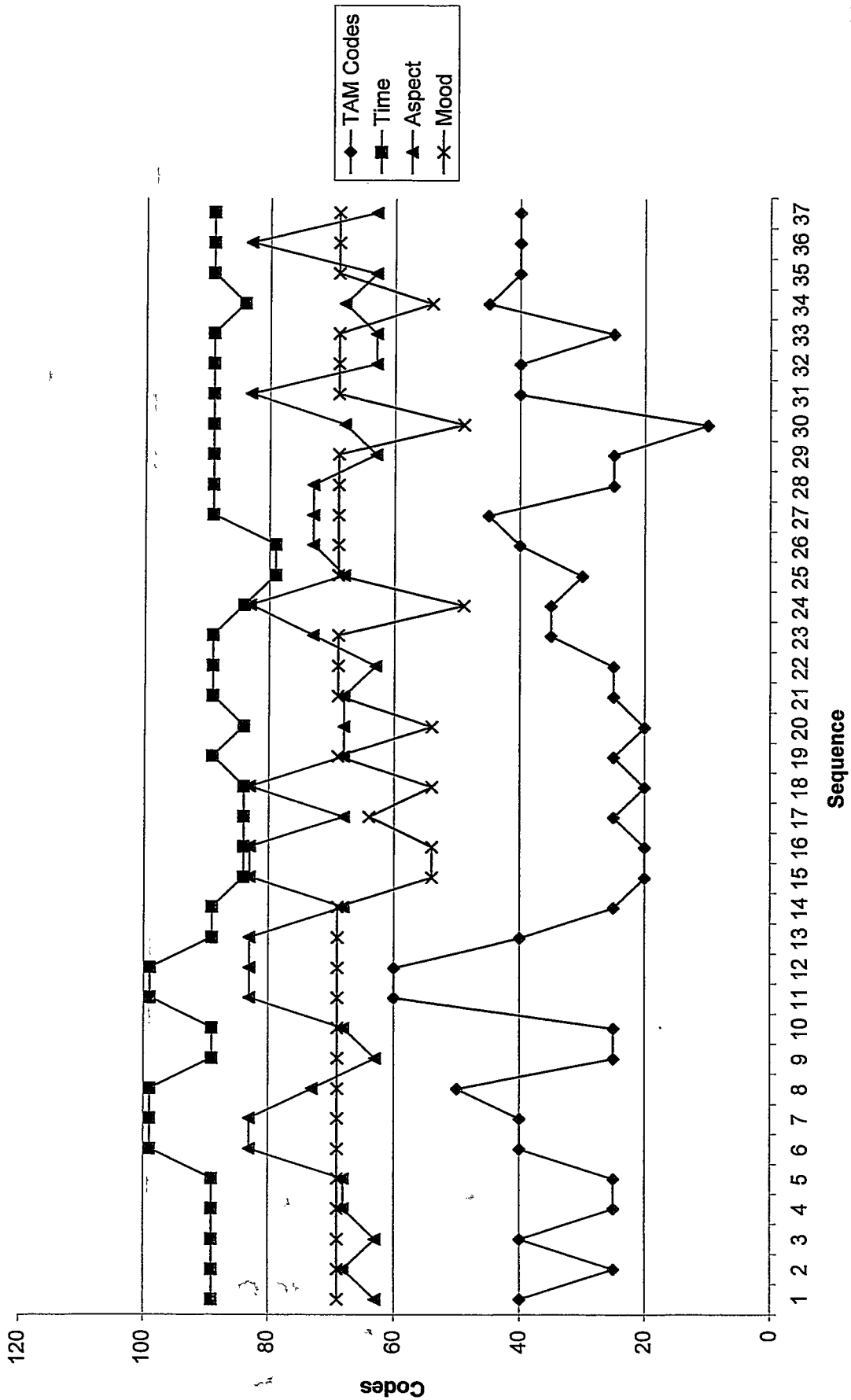
TAM forms & Interpretations in Ados #2



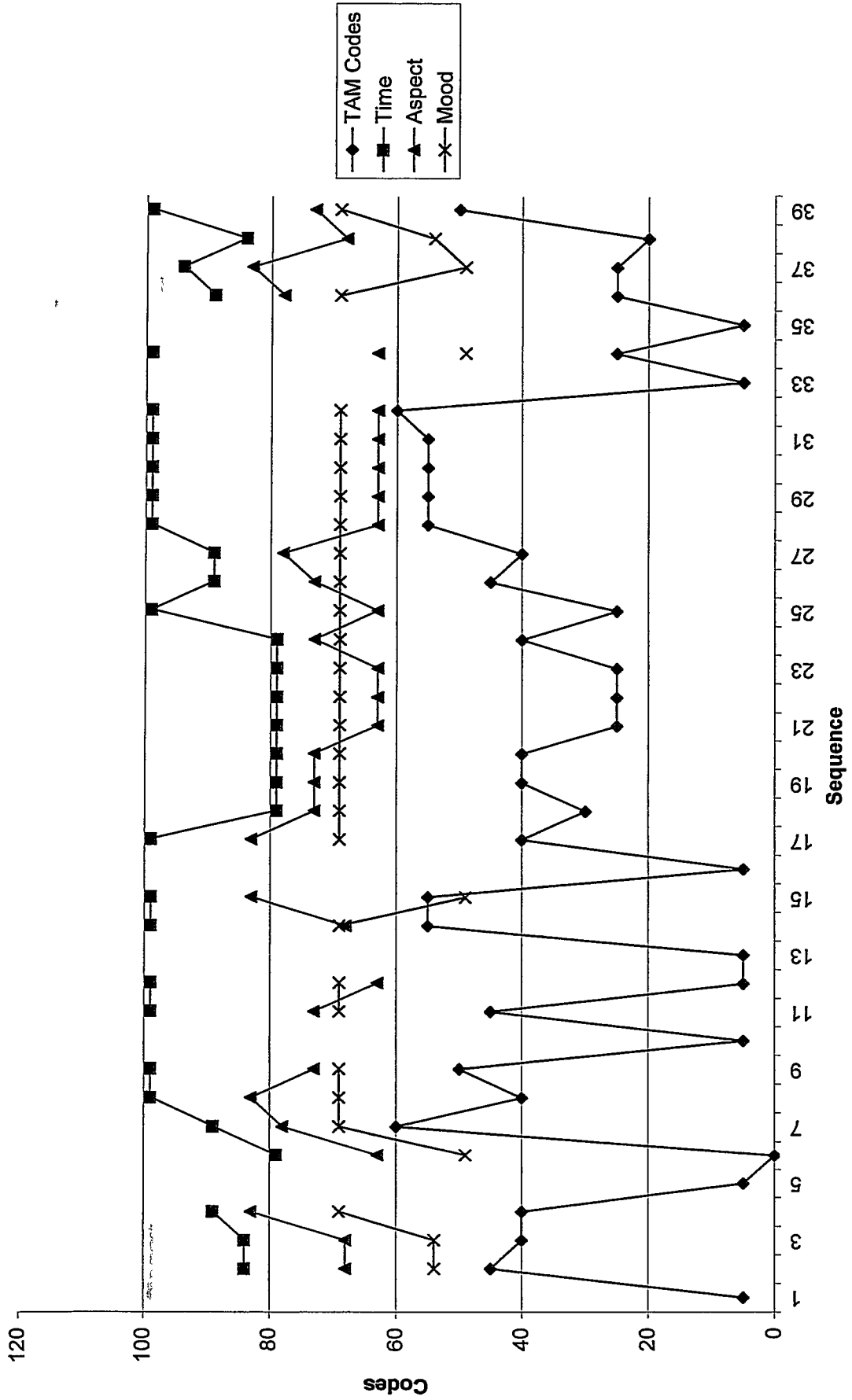
TAM forms and Interpretations in Ados #3



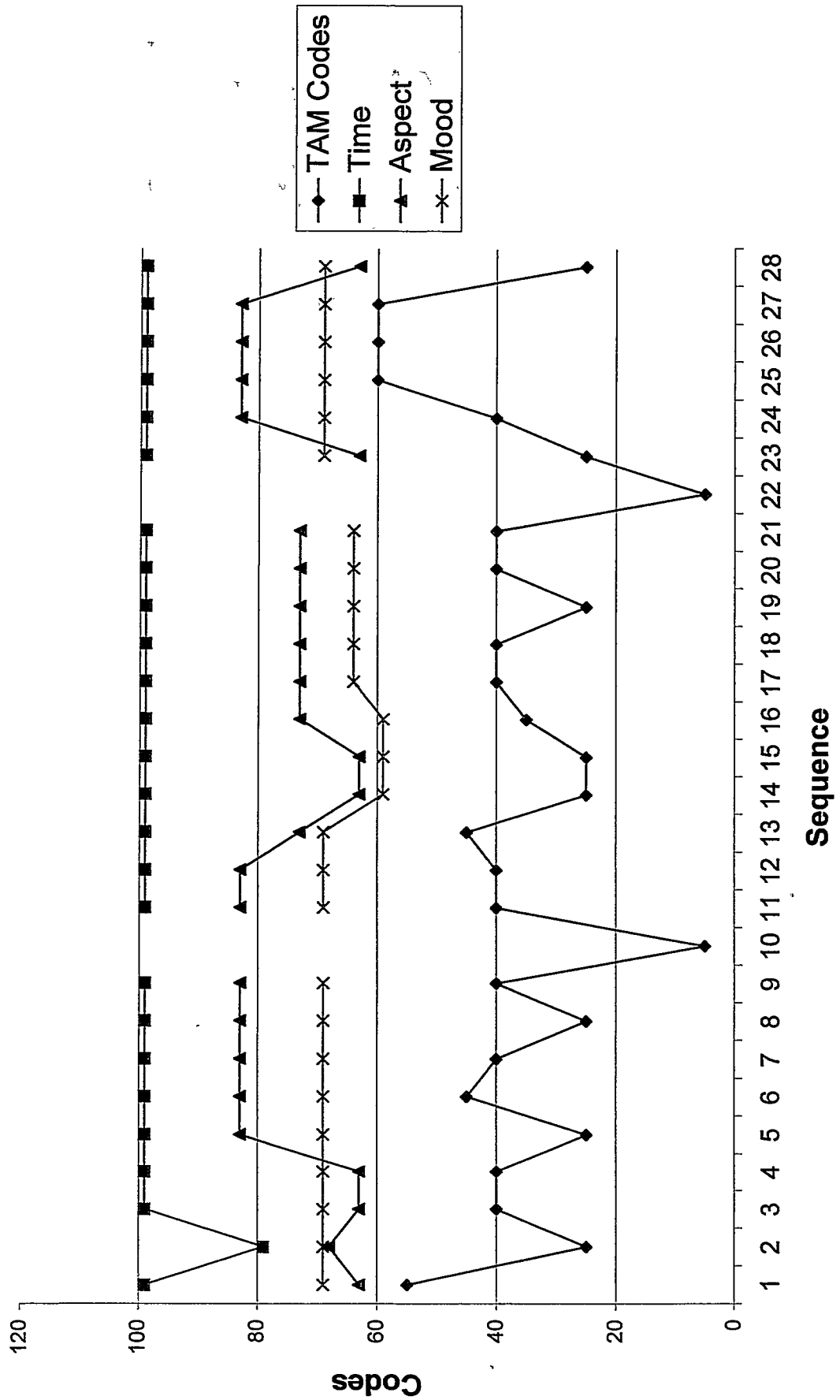
Conversation & Dialog in Ados #1



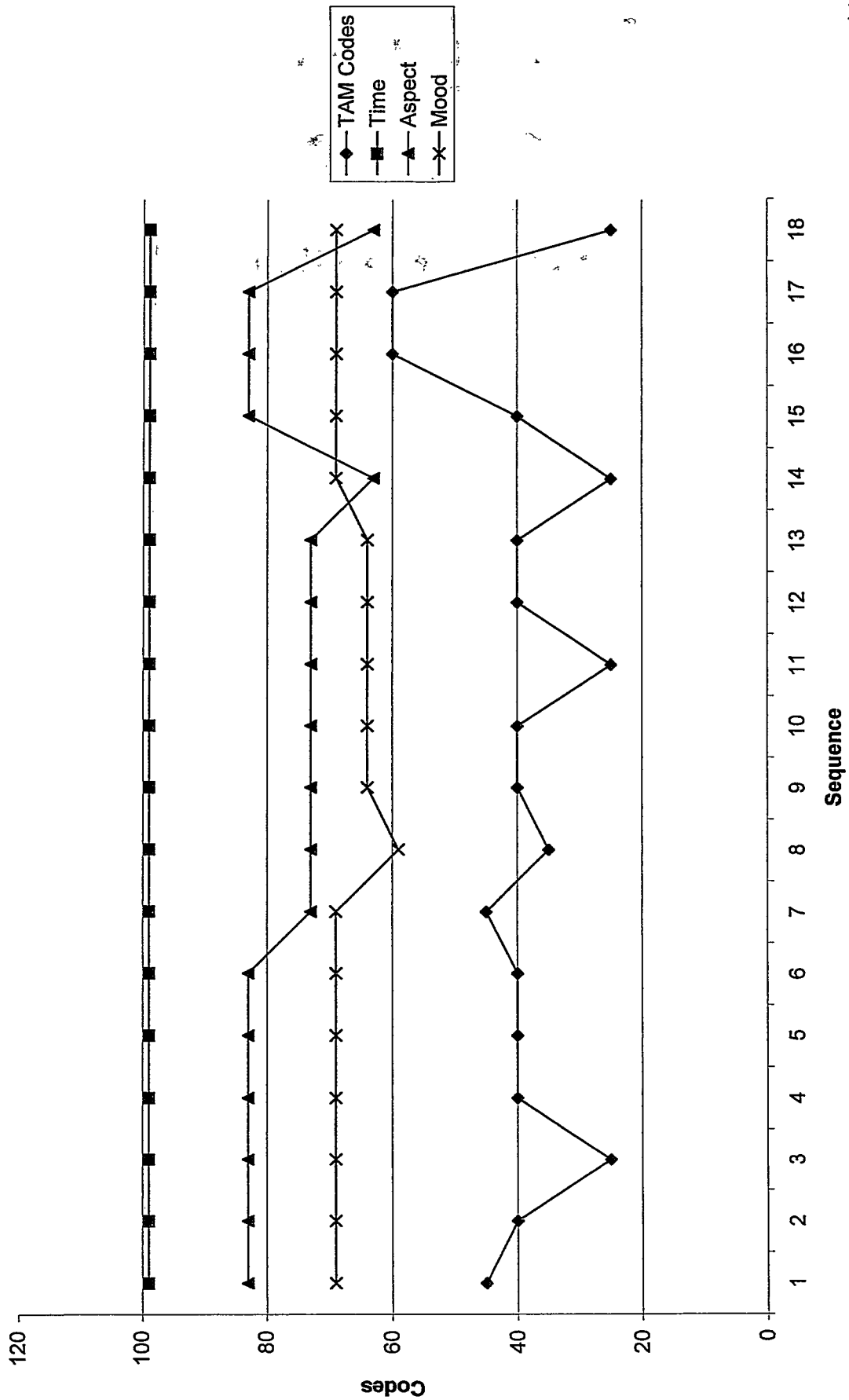
Conversation & Dialog in Ados #2



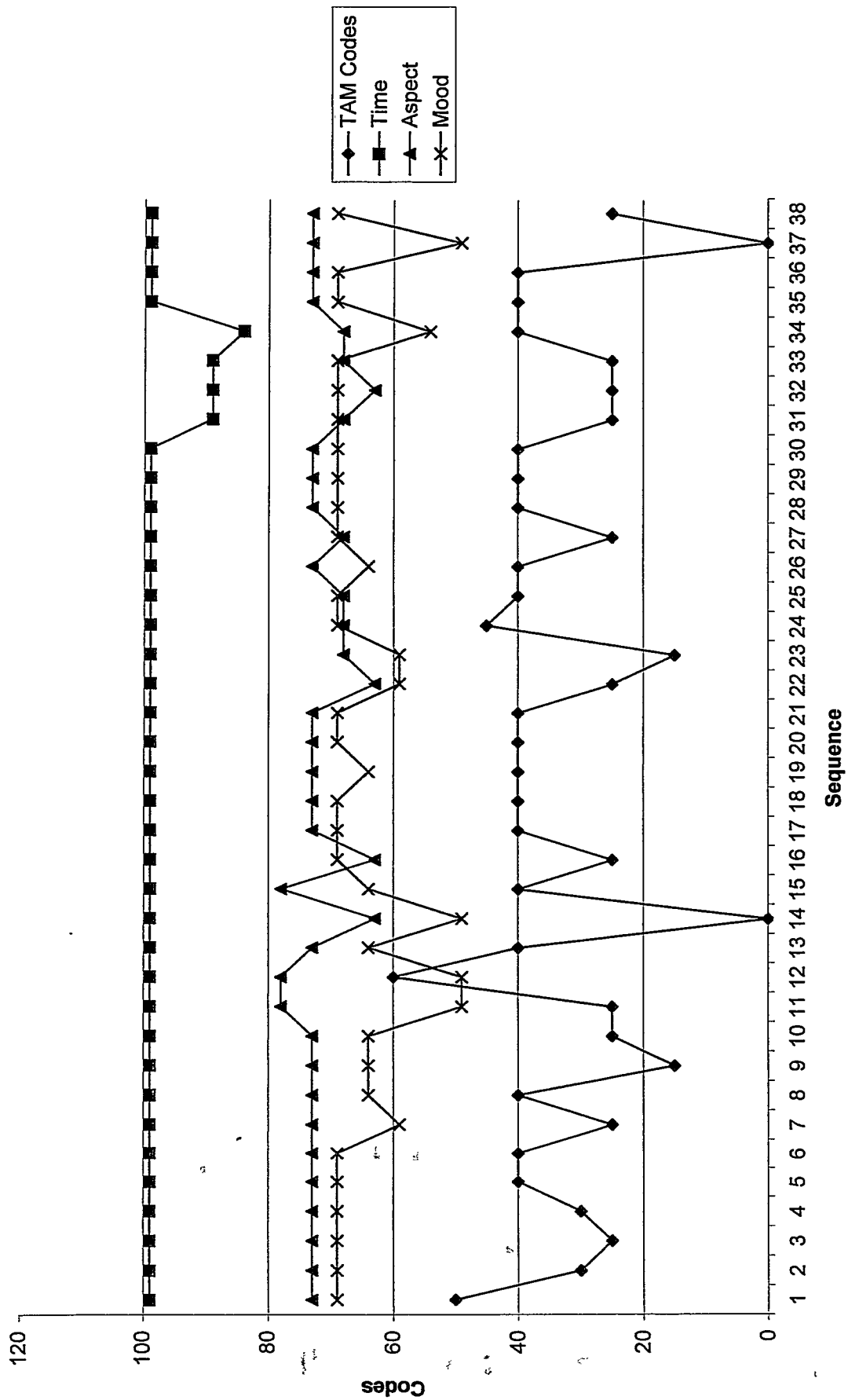
Verbs in Ados Kugo Story Only



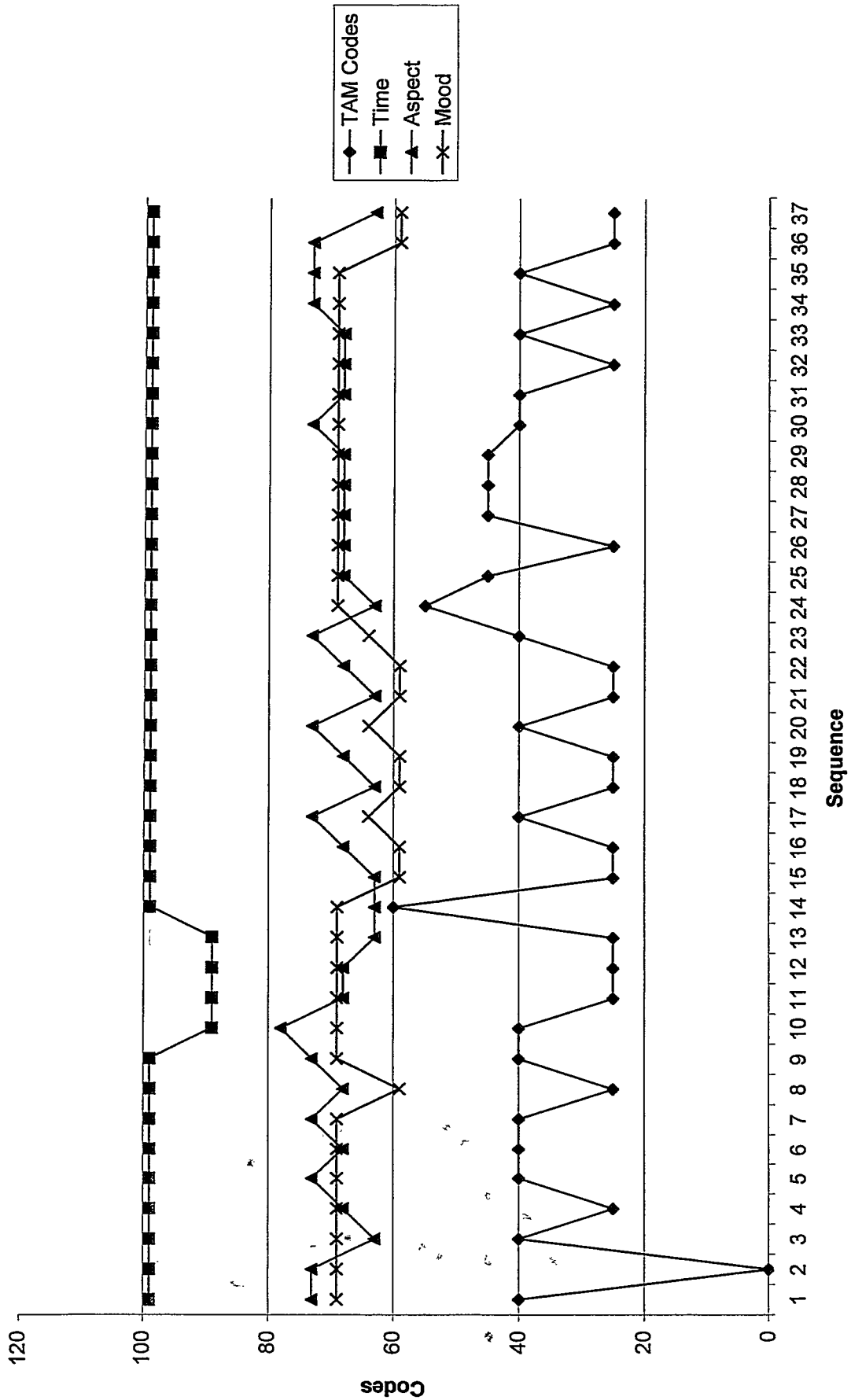
Mainline TAM forms & Interpretations in Ados



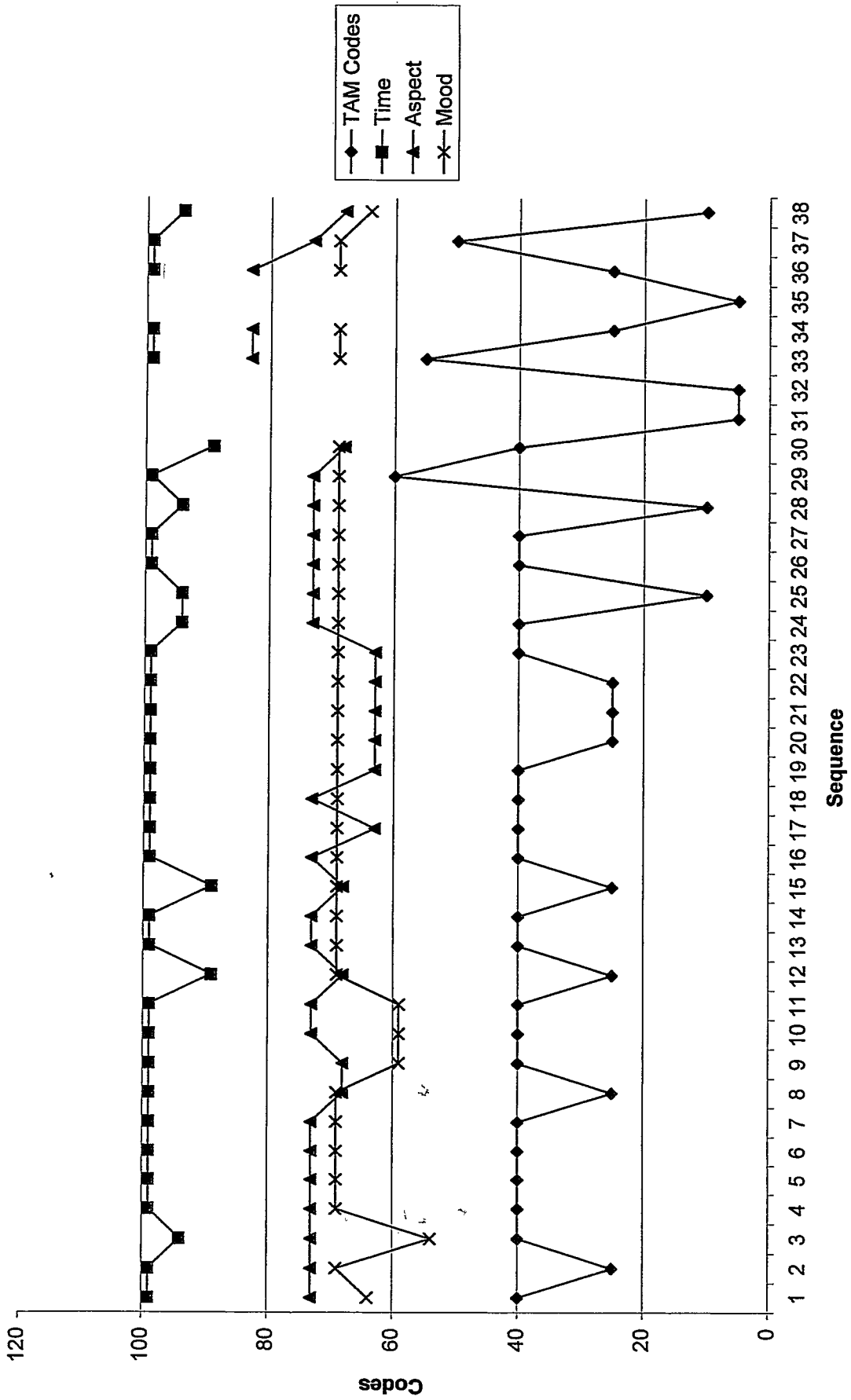
TAM forms & Interpretations in Ude #1



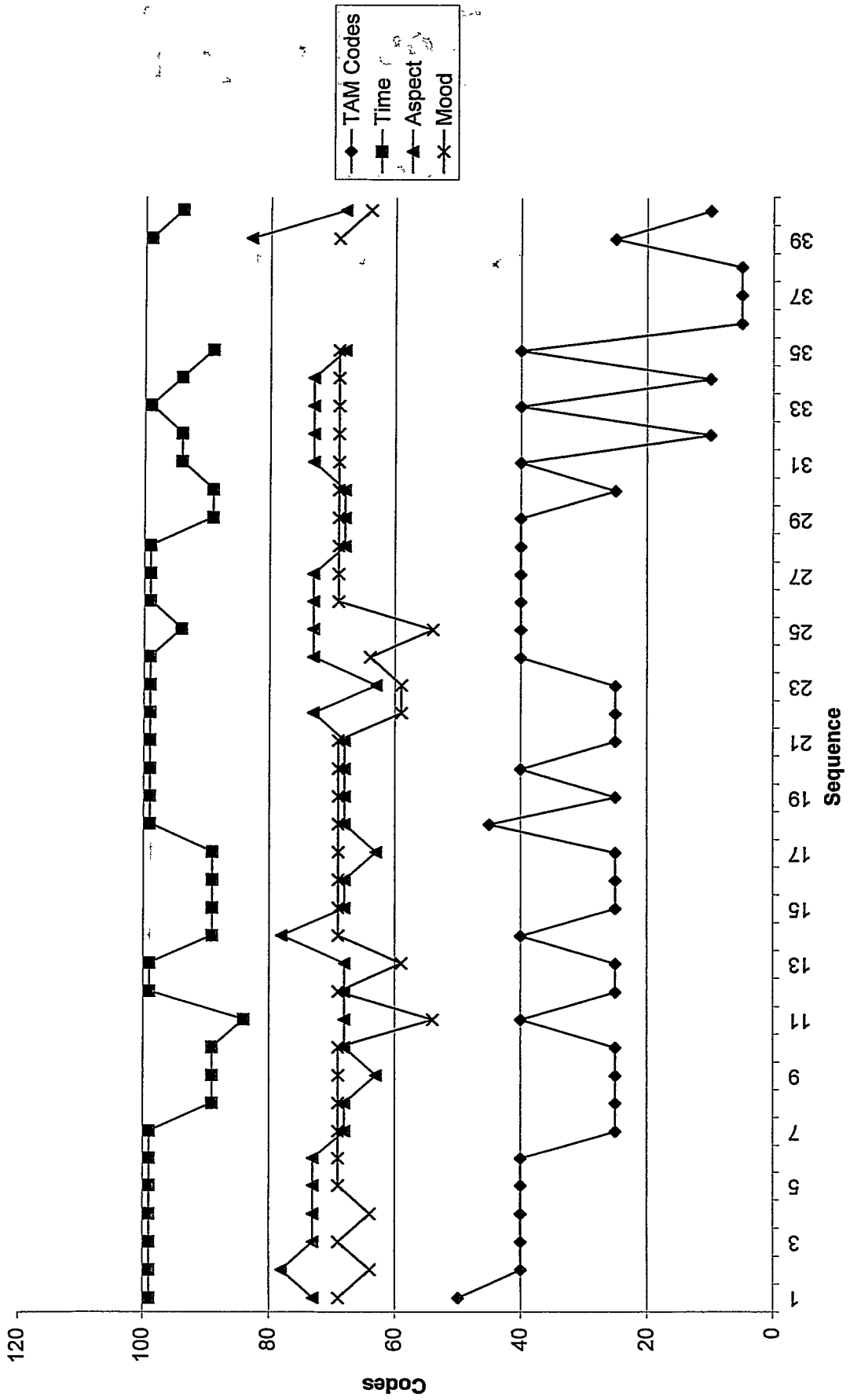
TAM forms & Interpretations in Ude #2



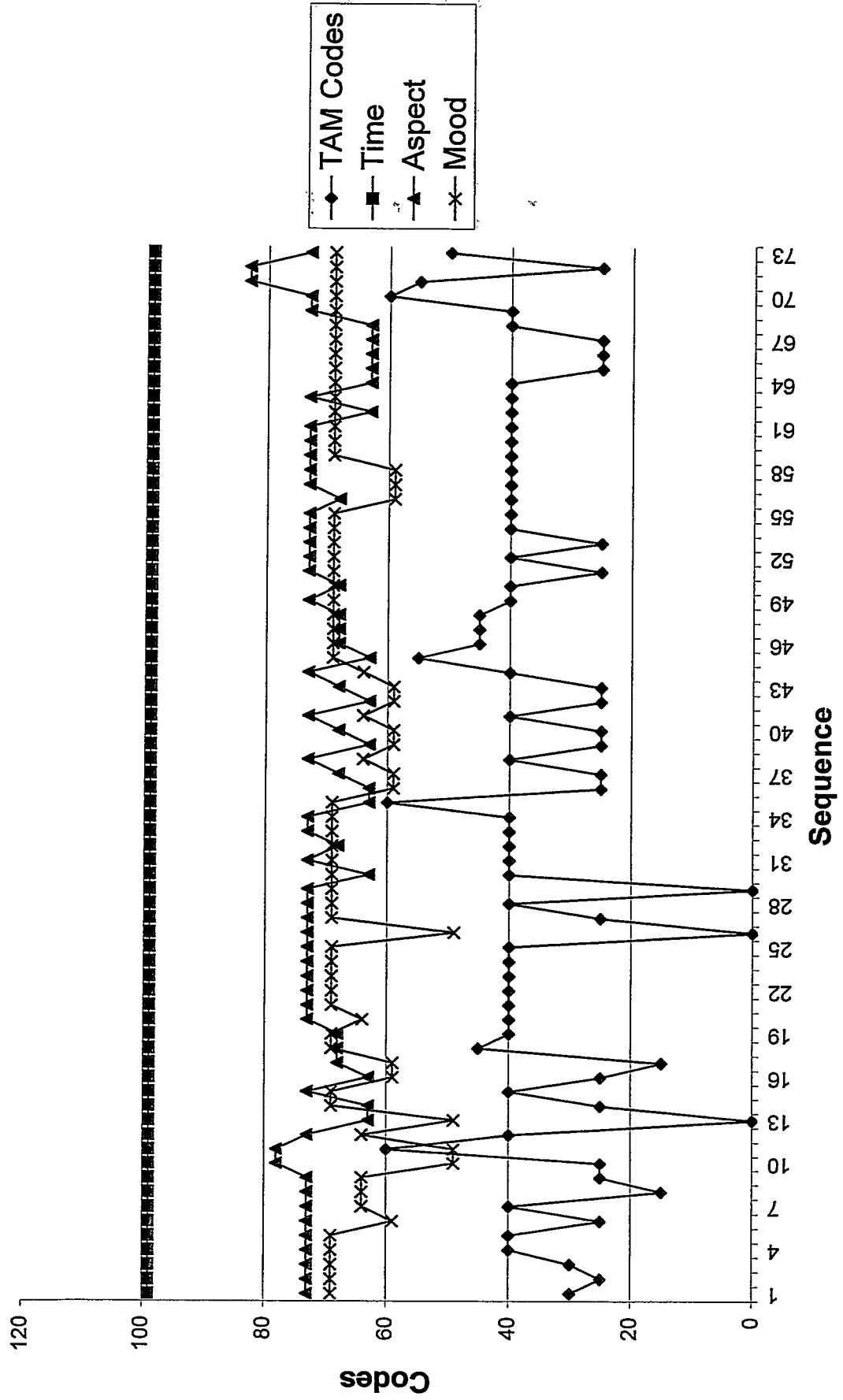
TAM forms & Interpretation in Ude #3



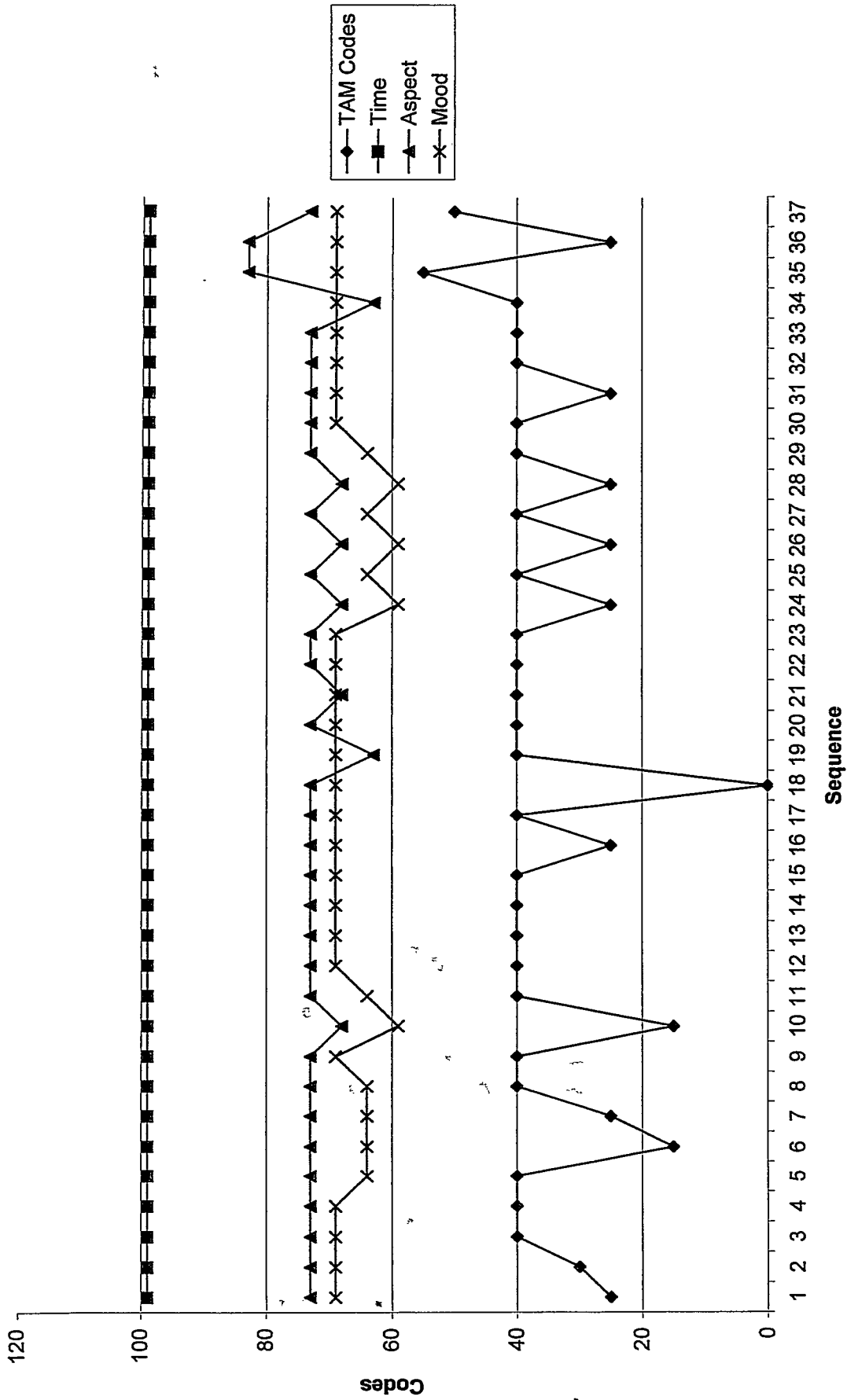
Conversation in Ude Aruku



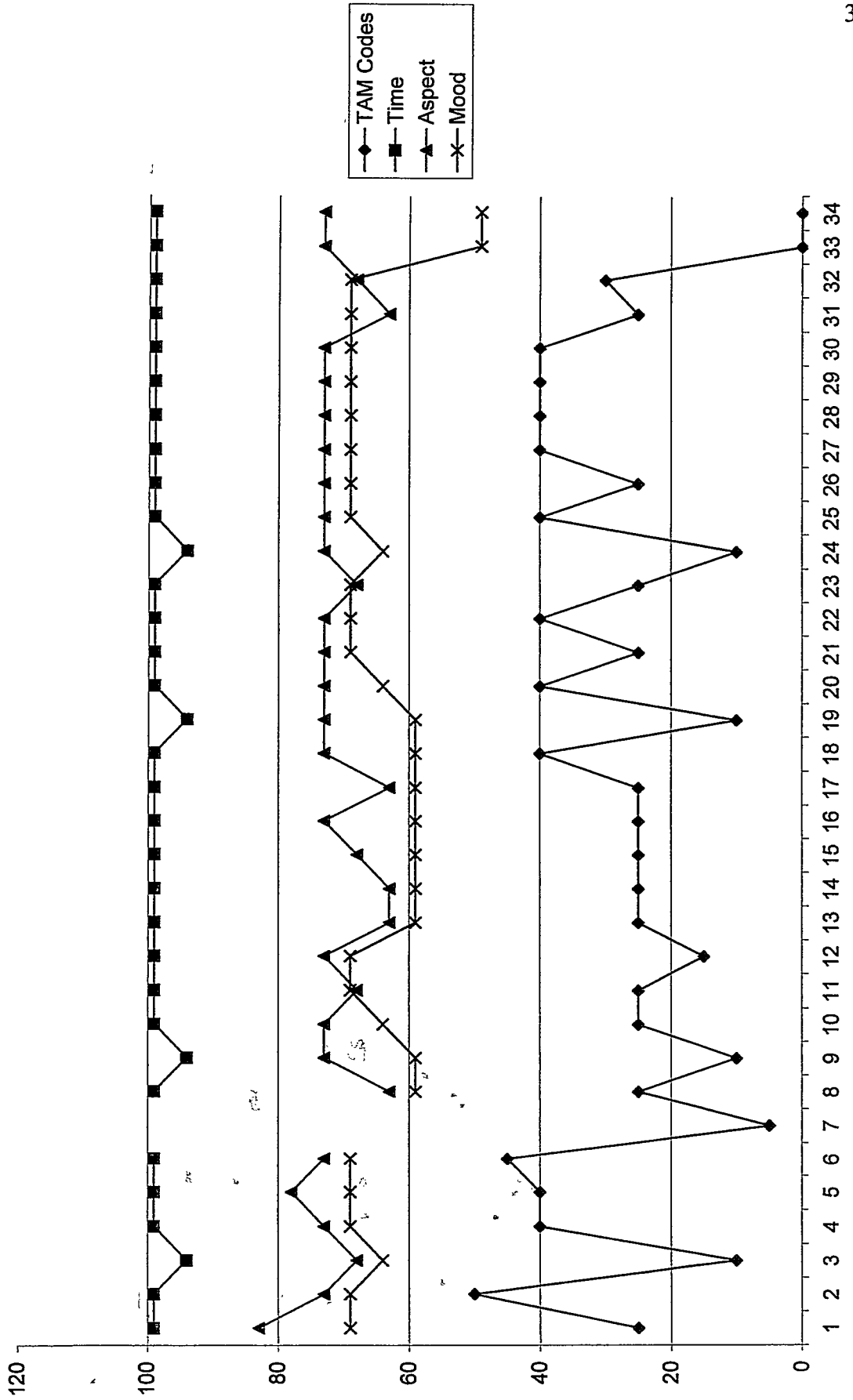
Ude, Minus Conversation



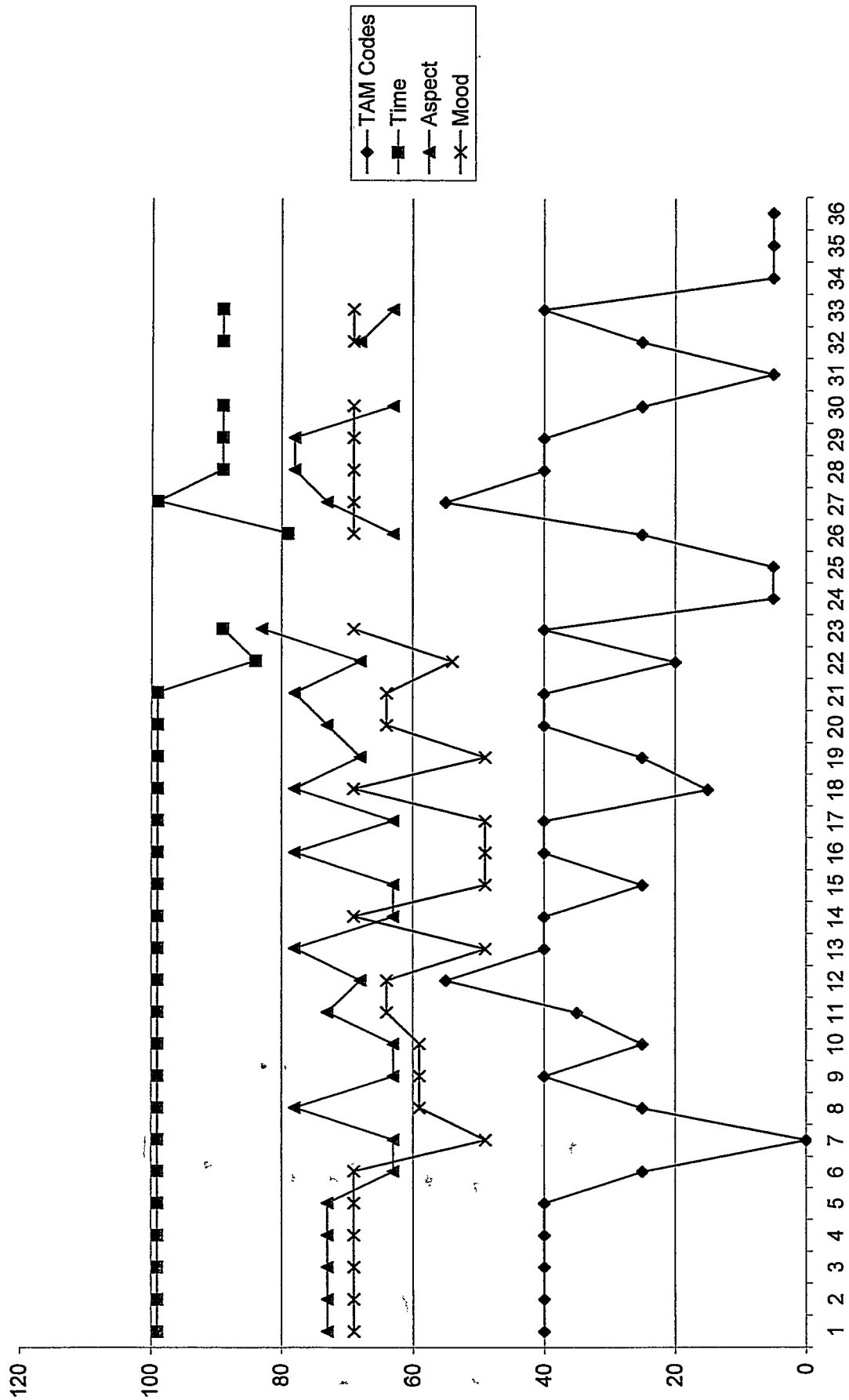
Mainline TAM forms & Interpretations in Ude



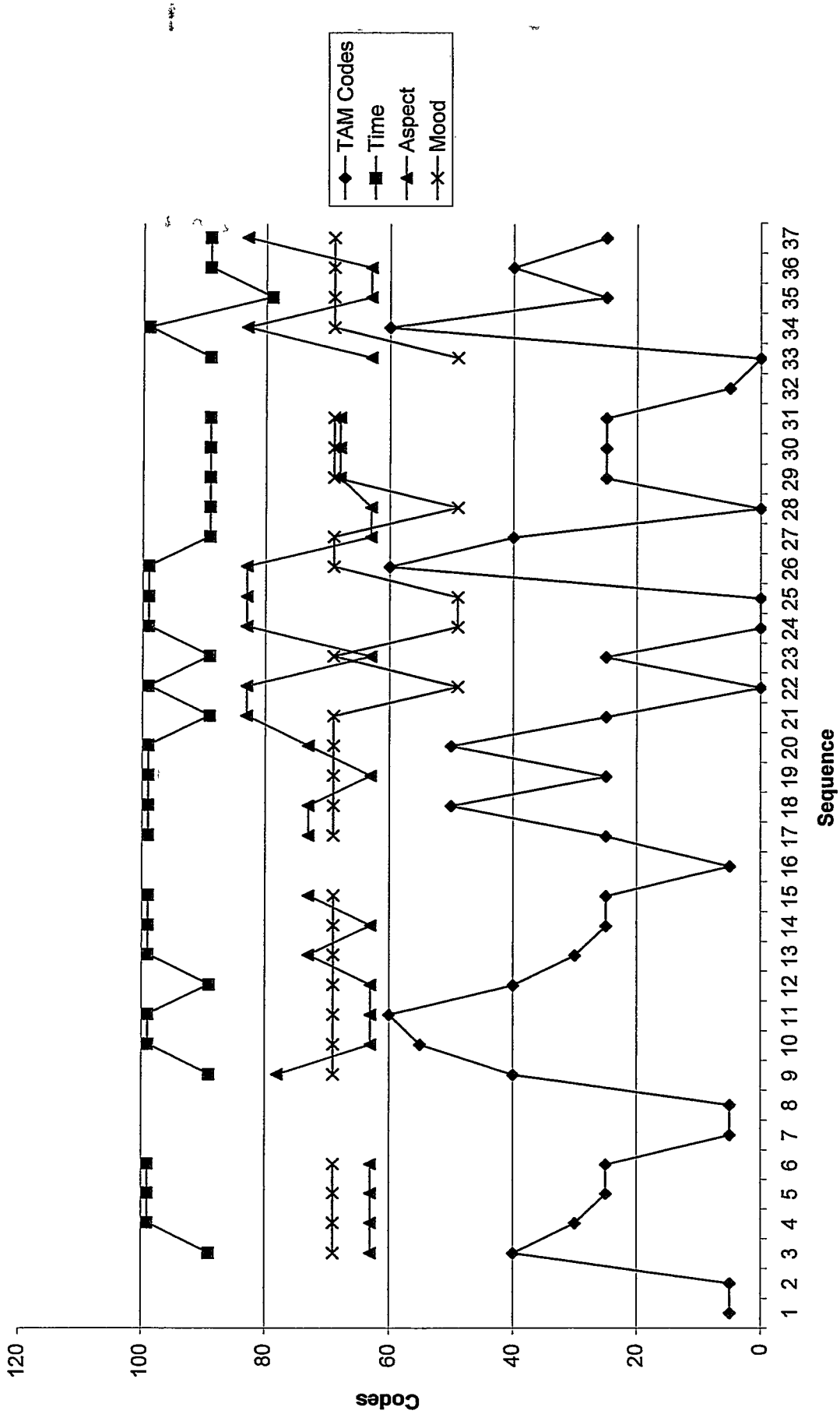
Verbs in Raids #1



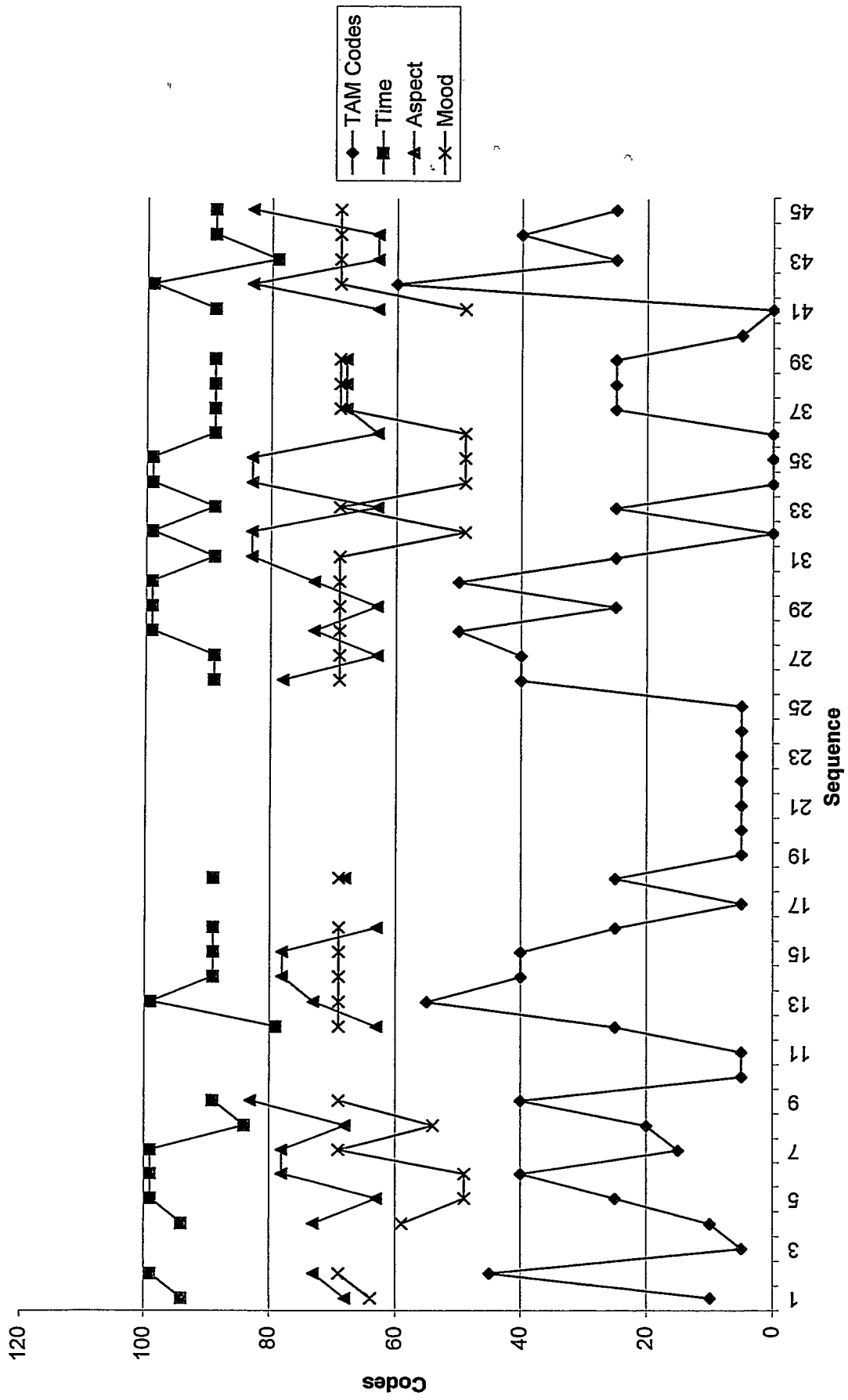
Verbs in Raids #2



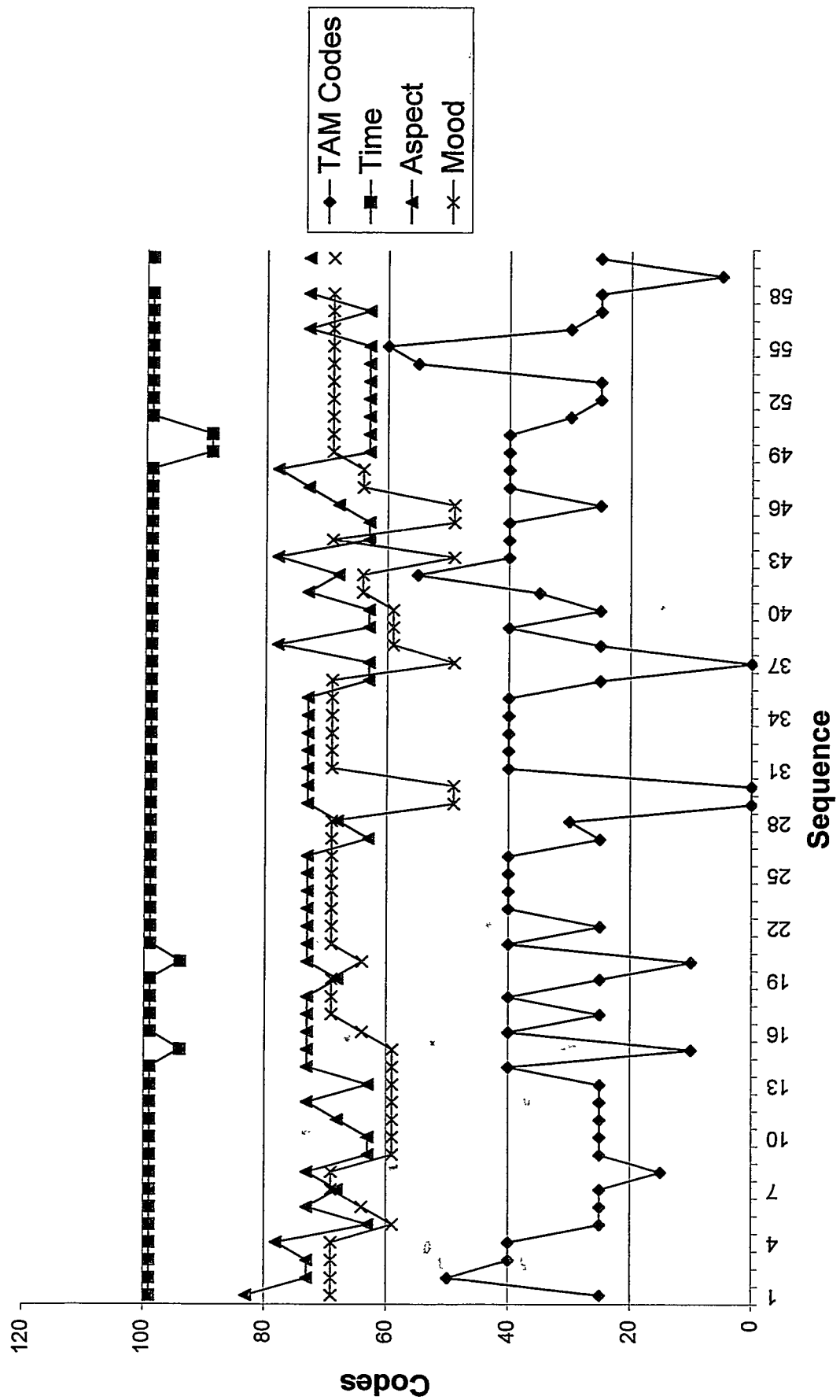
Verbs in Raids #3



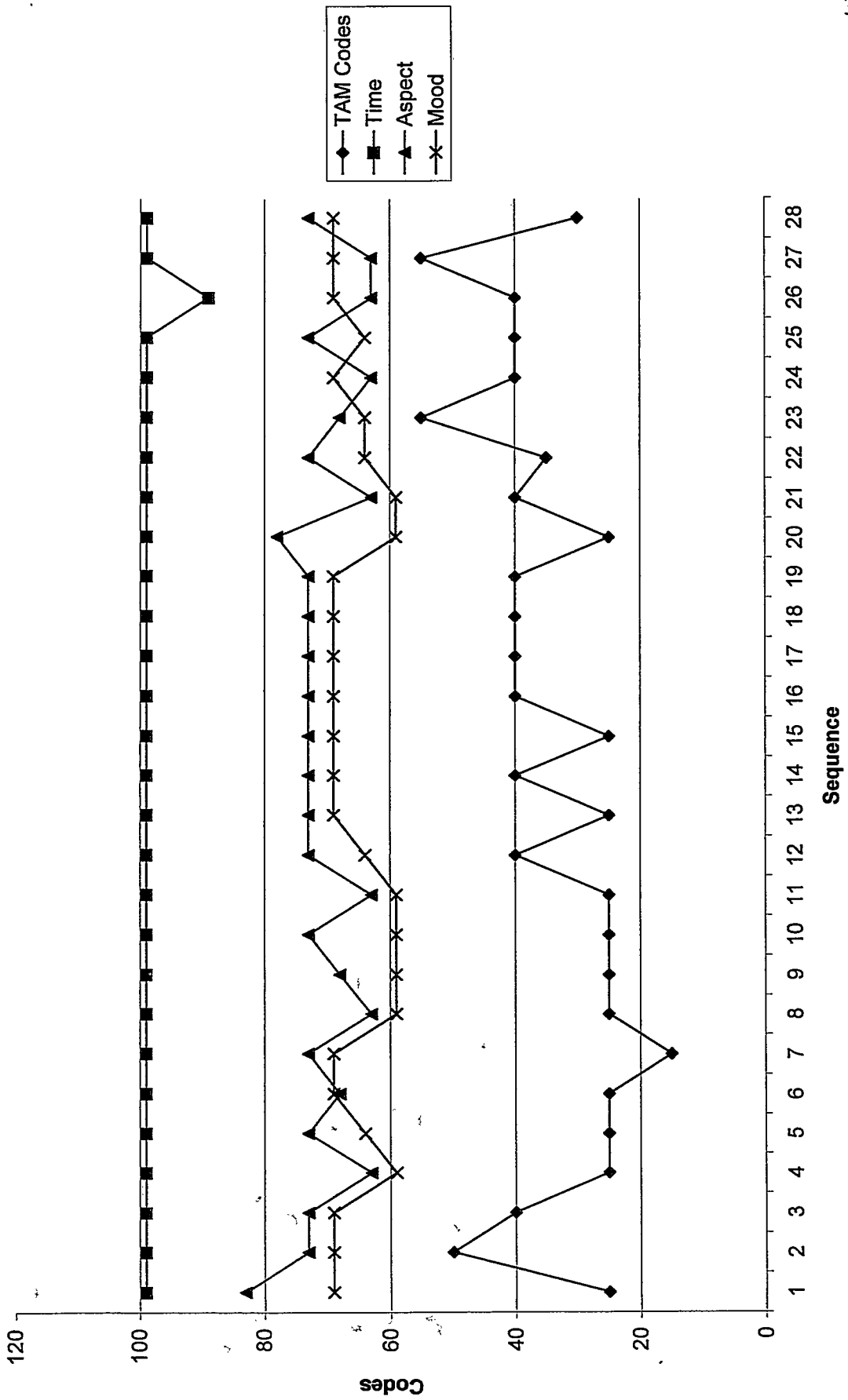
Dialog & Conversation in Raids



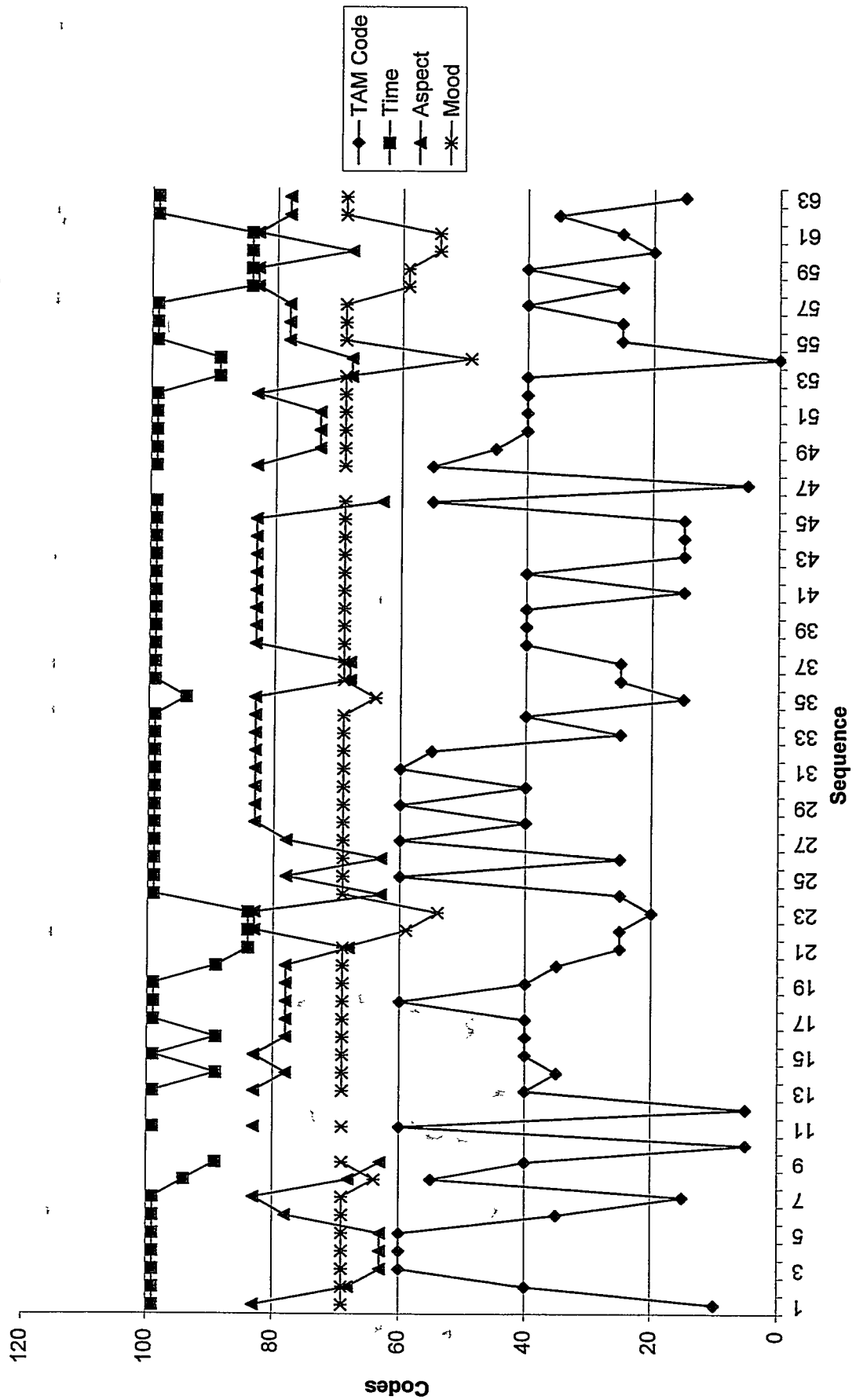
Verb forms in Raids minus Conversation



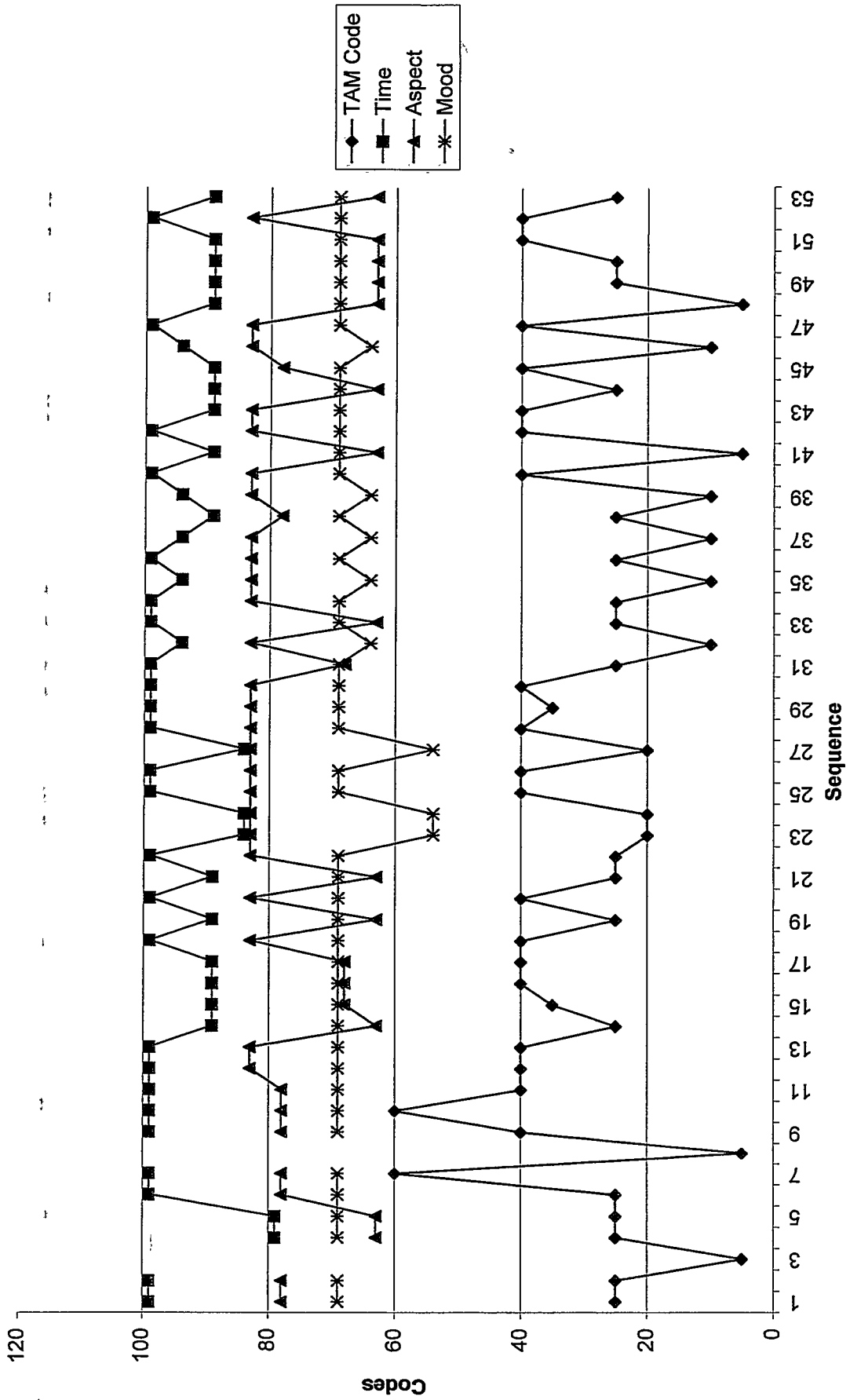
Mainline TAM forms & Interpretation in Raids



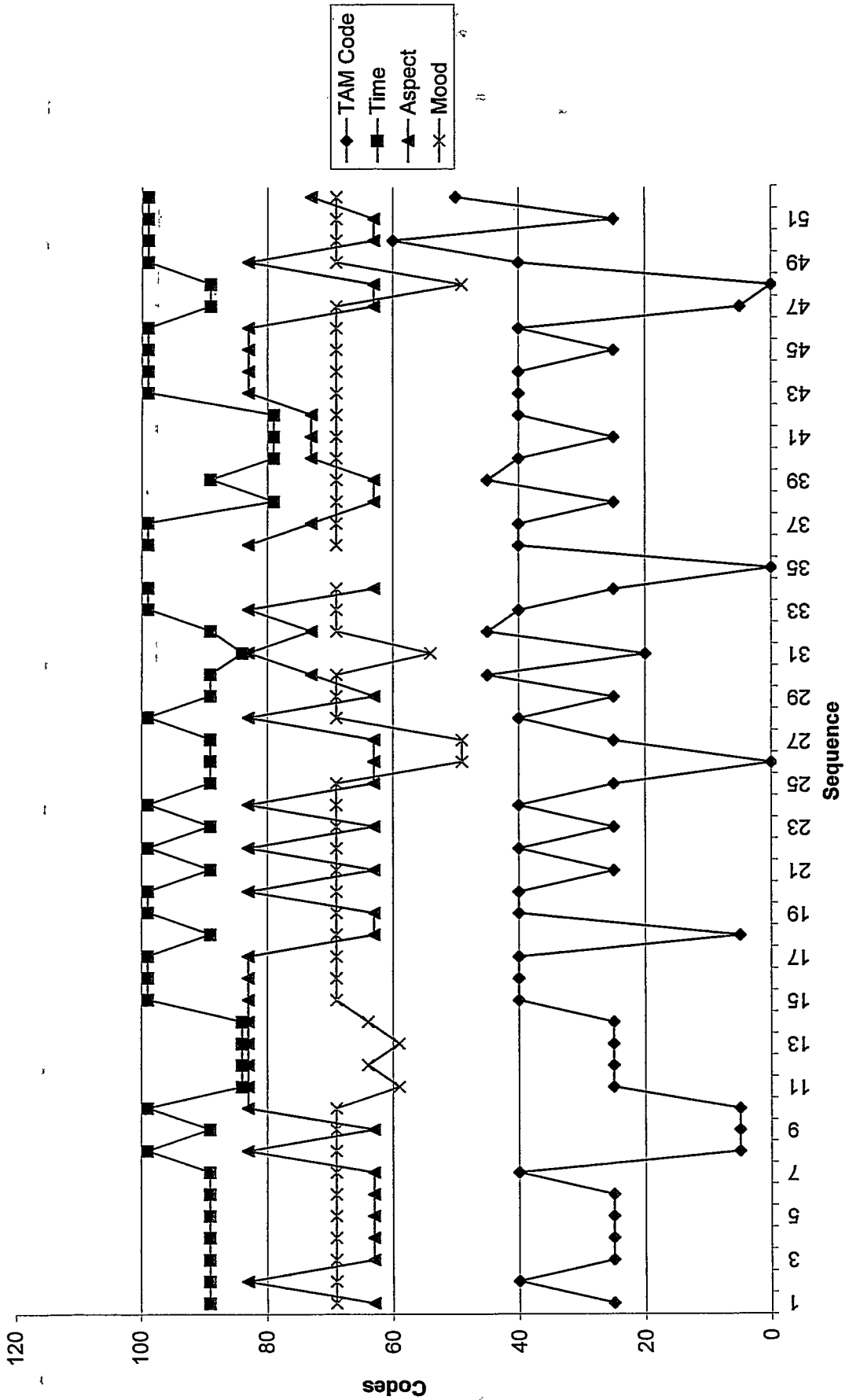
Verb forms & Interpretations in White Man #1



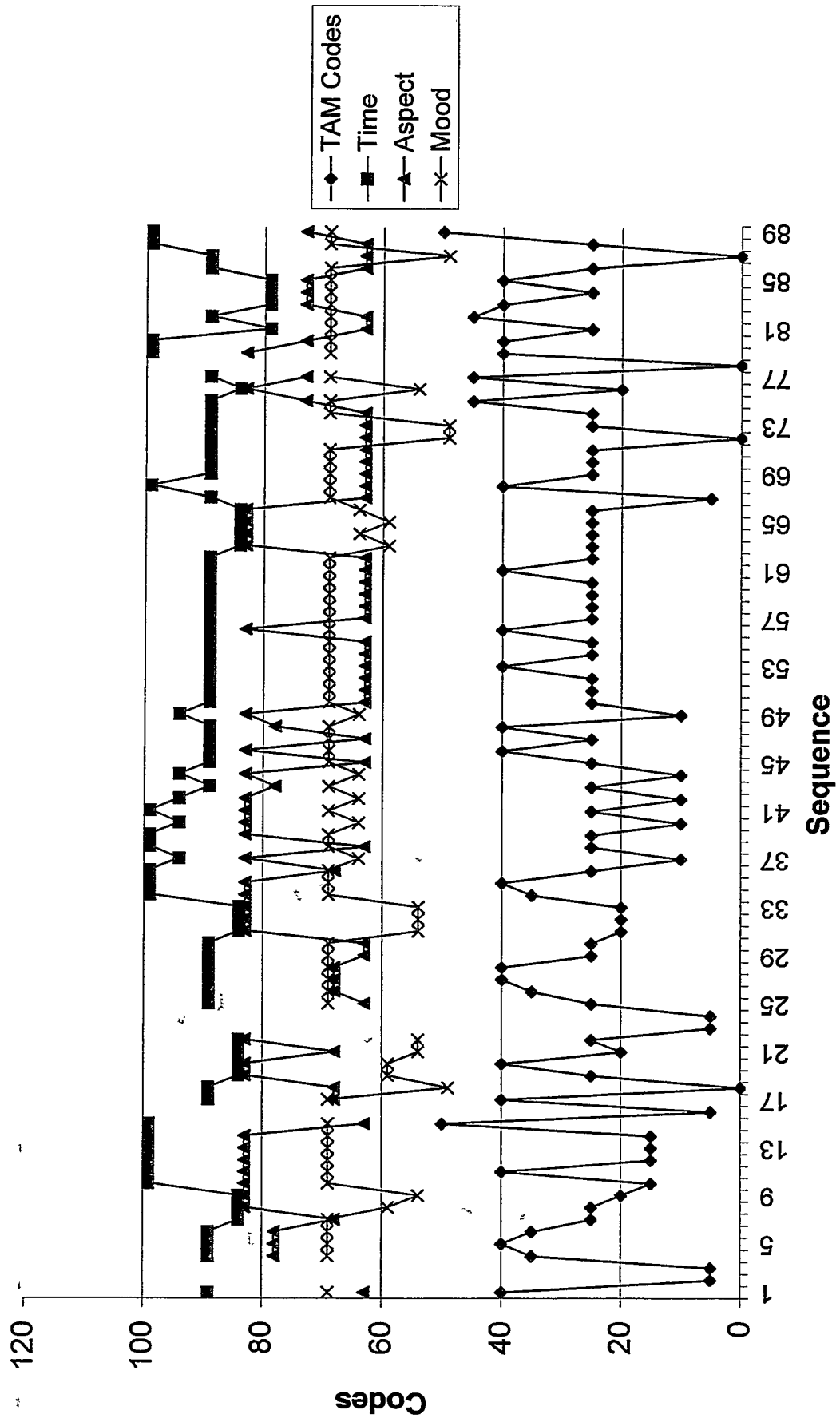
TAM & Interpretations in White Man #2

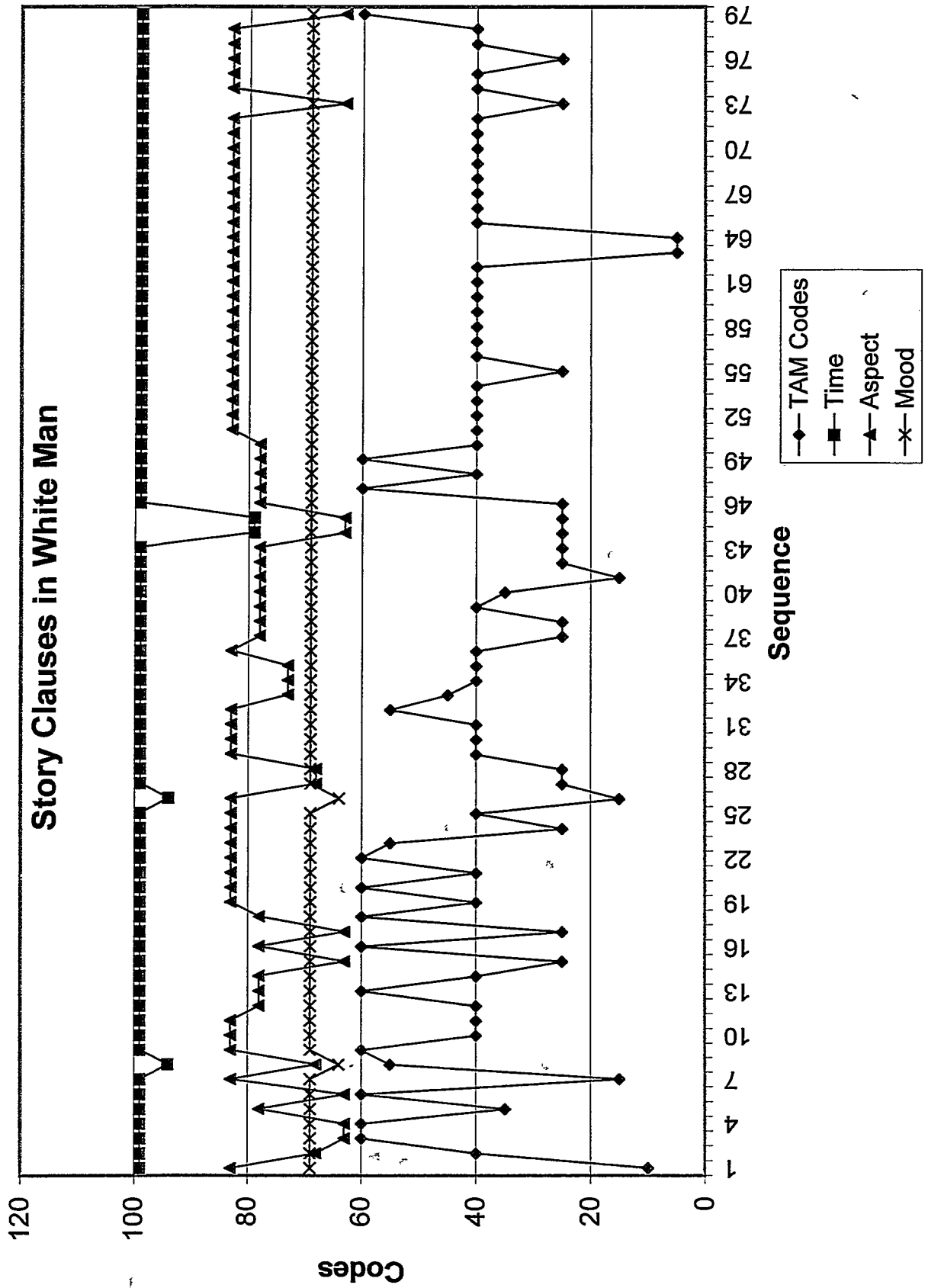


TAM & Interpretation in White Man #3

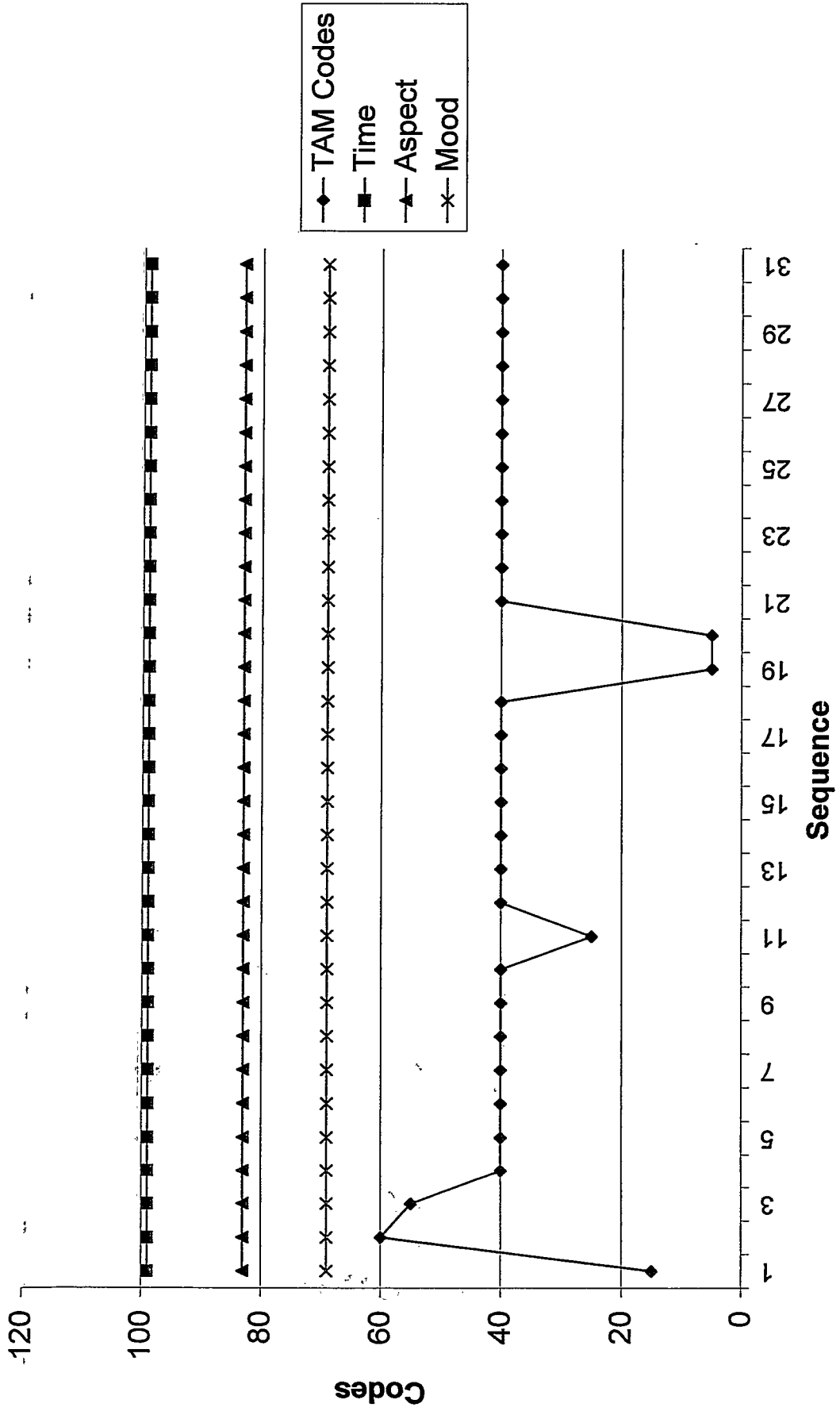


TAM in WM Conversation & Dialog

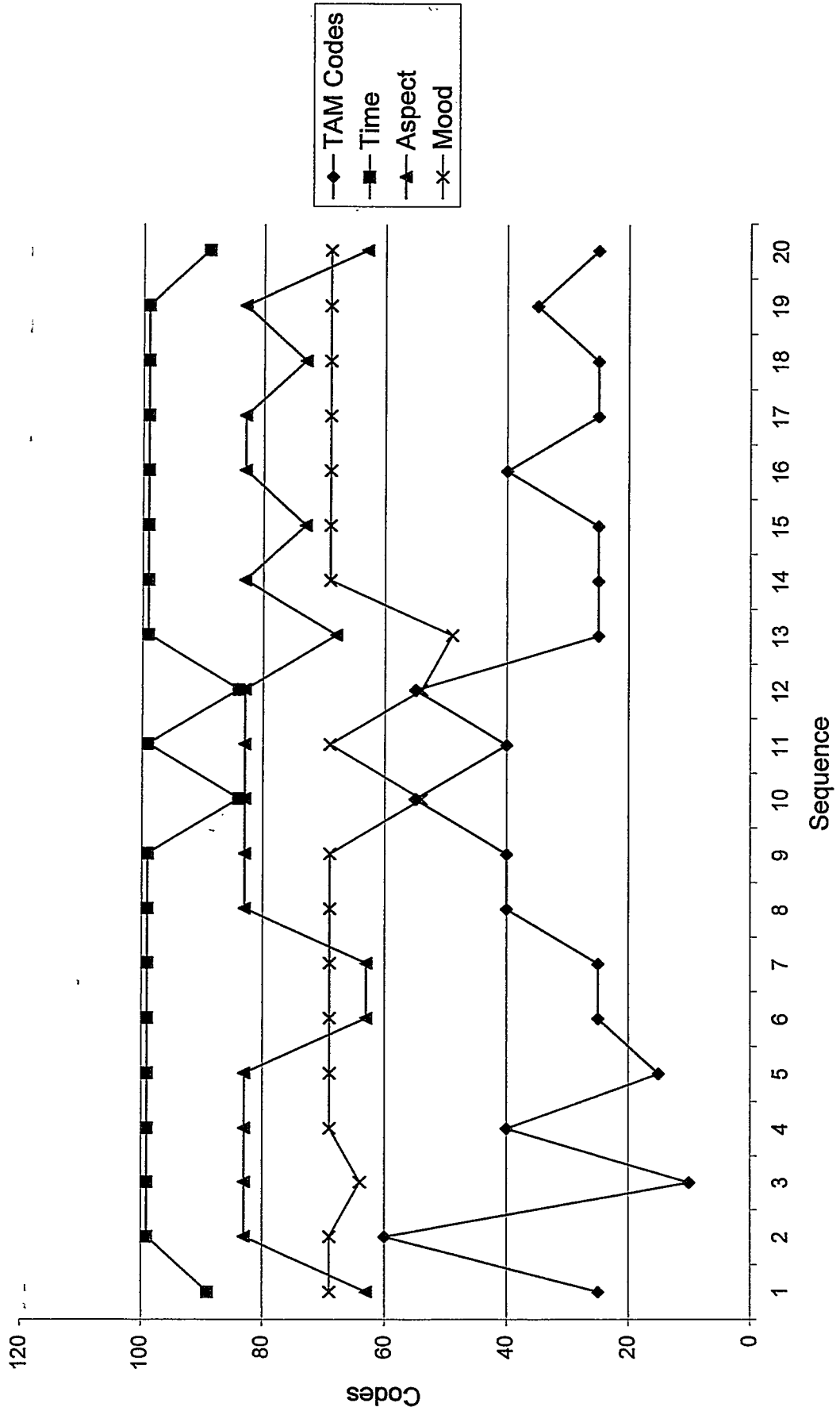




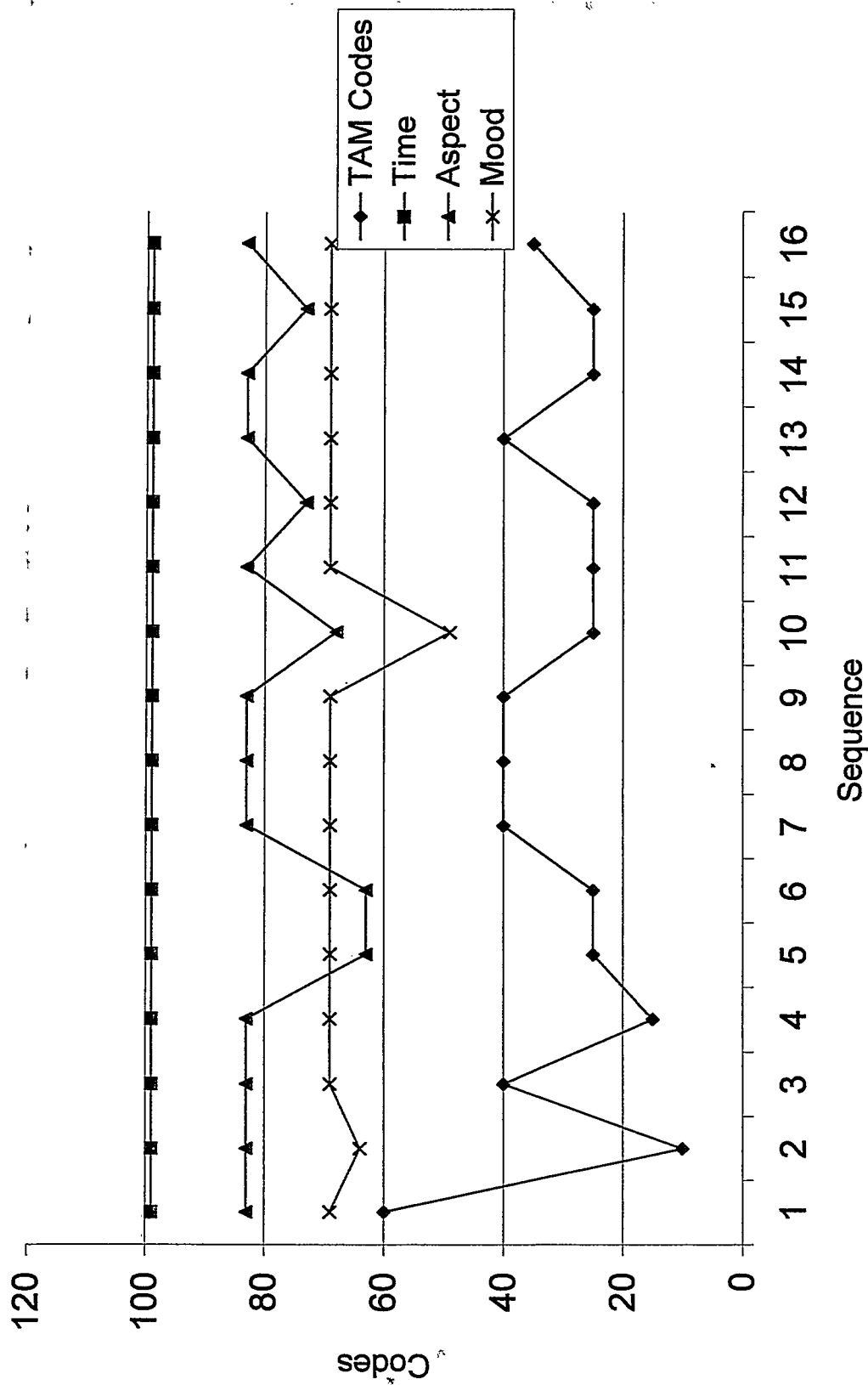
Storyline TAM in White Man



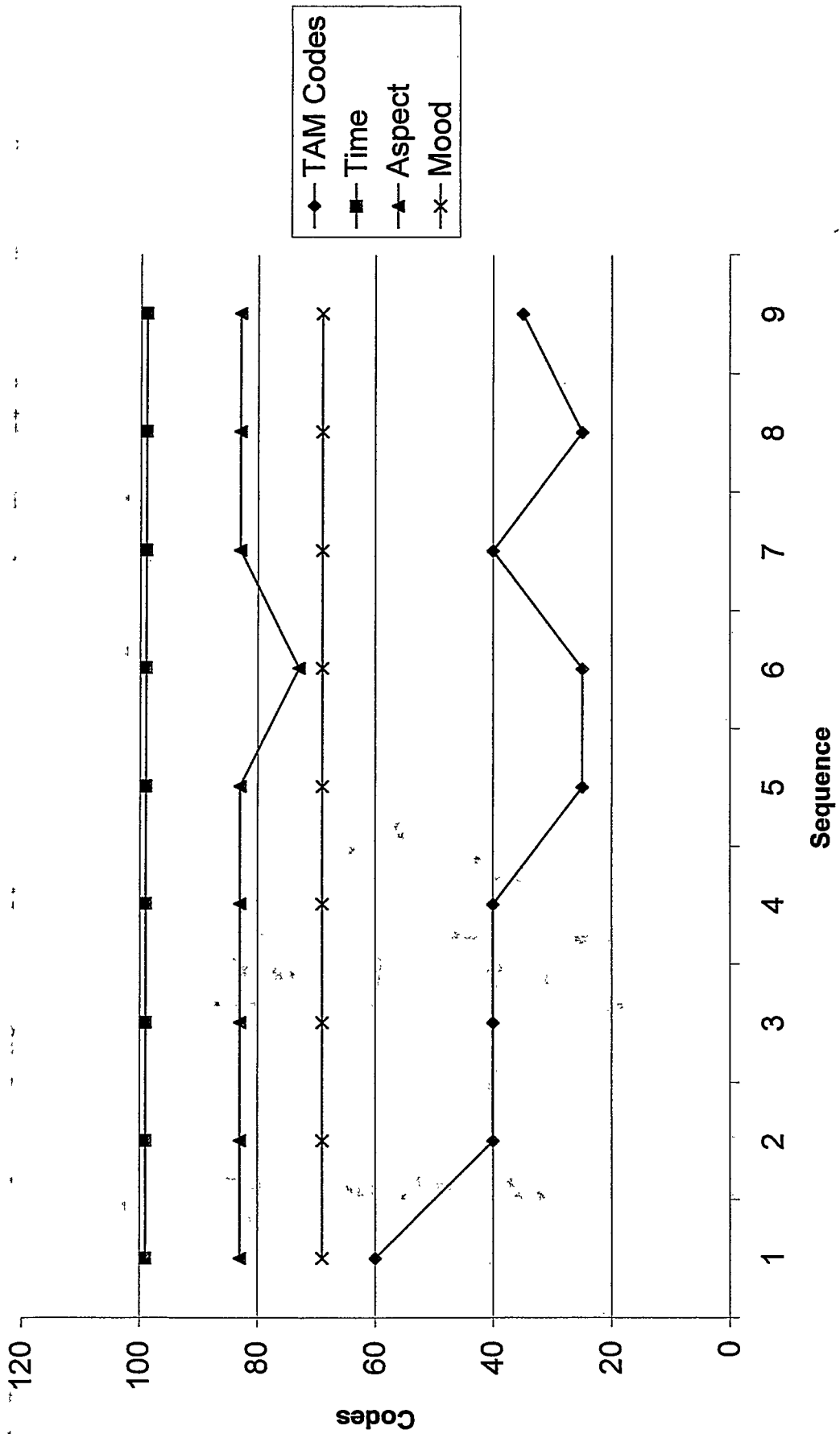
TAM forms & Interpretations in Frog & Fly



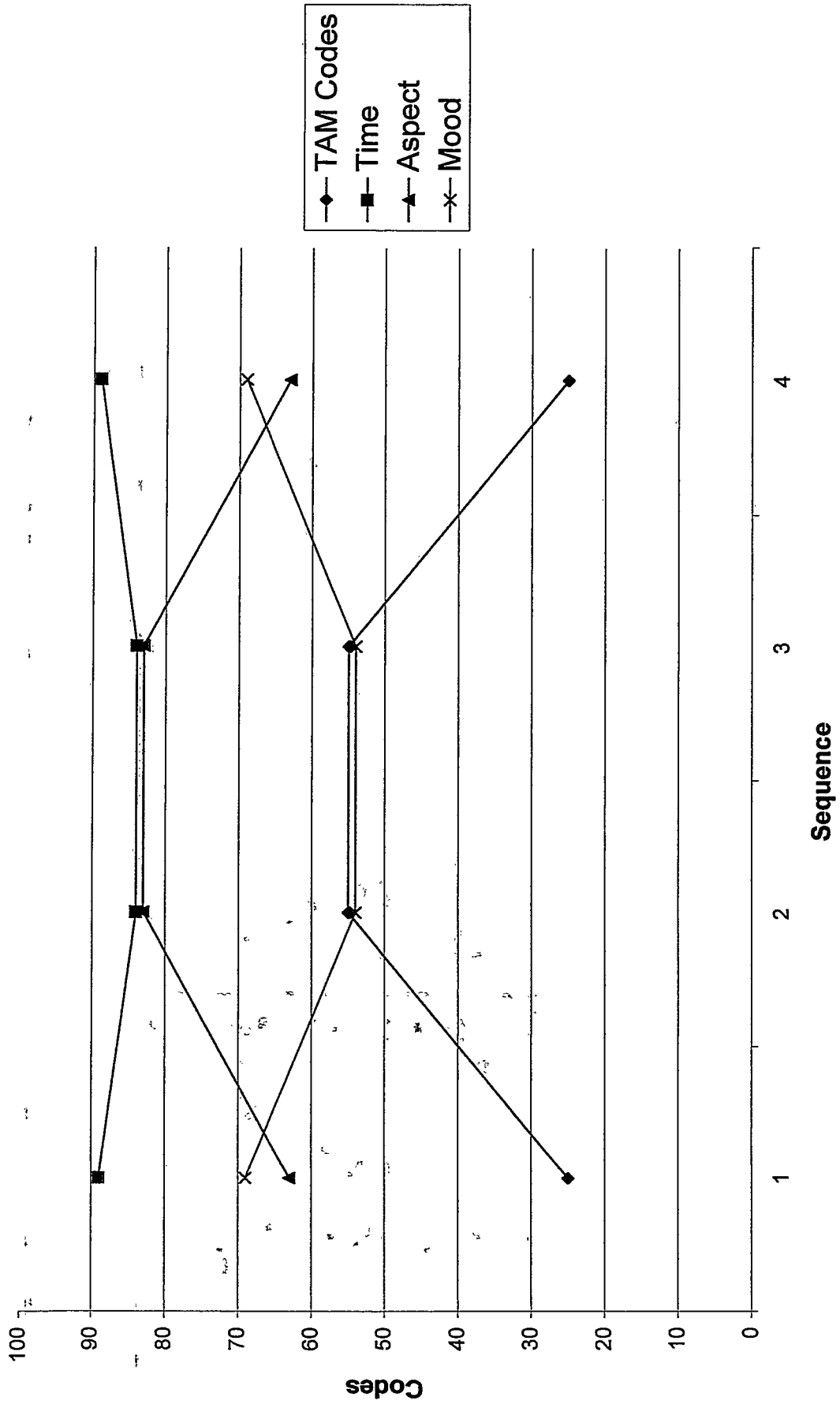
Frog & Fly, Minus Conversation



Storyline Frog & Fly



Conversation & Dialog in F&F



APPENDIX F

DISCOURSE TRACKS OF FOUR NARRATIVES

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|---------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| blank | | | | | | | | U,ST, 1st | 89,63,69 |
| blank | | | | | | | | p | 89,68,69 |
| blank | | | | | | | | U,ST | 89,63,69 |
| blank | | | | | | | | U,c | 89,63,69 |
| 0.0010 | | | | | | | | p | 89,68,69 |
| 0.0100 | | 0.0100 | | | | | | n,c, 3rd | 99,63,69 |
| 0.0110 | | | | | | | | U, 1st | 89,?,69 |
| 0.0120 | | | | | | | | U | 89,?,69 |
| 0.0130 | | | | | | | | n,t | 99,73,69 |
| 0.0140 | | | | | | | | s,ST | 89,63,69 |
| 0.0200 | | 0.0200 | | | | | | p,s,3rd | 99,68,69 |
| 0.0300 | | 0.0300 | | | | | | U | 99,83,69 |
| 0.0400 | | 0.0400 | | | | | | U | 99,83,69 |
| 0.0500 | | 0.0500 | | | | | | s,a | 99,83,69 |
| 0.0510 | | | | | | | | p, 1st | 89,68,69 |
| 0.0520 | | | | | | | | n | 99,83,69 |
| 0.0530 | | | | | | | | n | 99,83,69 |
| 1.0000 | | 1.0000 | 1.0000 | | | | | t, 3rd | 99,73,69 |
| 2.0000 | | 2.0000 | 2.0000 | | | | | U, Semantics | 99,83,69 |
| 3.0000 | | 3.0000 | 3.0000 | | | | | s,a | 99,83,69 |
| blank | | | | | | | | U, ST, 1st | 89,63,69 |
| blank | | | | | | | | p | 89,68,69 |
| blank | blank | | | | | | | o,u | 84,83,54 |
| blank | | | | | | | | o | 84,83,54 |
| blank | | | | | | | | x | ?,?,? |
| 3.1000 | | 3.1000 | 3.1000 | | | | | U,
3rd/Semantics | 99,83,69 |
| blank | blank | | | | | | | o,a | 84,83,54 |
| blank | | | | | | | | p | 89,68,69 |
| blank | blank | | | | | | | o,t | 84,73,54 |
| blank | | | | | | | | p | 89,68,69 |
| blank | | | | | | | | c,l | 89,63,69 |
| blank | | | | | | | | t,f | 89,73,69 |
| blank | | | | | | | | f | 89,?,69 |
| blank | | | | | | | | t,p | 89,68,69 |
| blank | | | | | | | | U | 89,?,69 |
| blank | | | | | | | | t | 89,73,69 |
| blank | | | | | | | | u | 84,?,64 |
| blank | | | | | | | | u,ST | 89,63,69 |

Discourse track of "Ados Kago" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|--------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| blank | | | | | | | | i | 84,7,64 |
| blank | | | | | | | | U | 89,7,69 |
| blank | | | | | | | | U | 89,7,69 |
| blank | | | | | | | | s | 89,7,69 |
| blank | | | | | | | | t | 89,73,69 |
| blank | | | | | | | | U | 89,7,69 |
| blank | | | | | | | | U | 89,7,69 |
| blank | | | | | | | | U | 89,7,69 |
| blank | | | | | | | | v | 0 |
| blank | | | | | | | | t | 89,73,69 |
| blank | | | | | | | | U | 89,7,69 |
| blank | | | | | | | | u | 89,7,69 |
| blank | | | | | | | | v | 0 |
| blank | | | | | | | | g,a | 89,7,49 |
| blank | | | | | | | | n | 99,83,69 |
| 3.2000 | | 3.2000 | | | | | | v,3rd/Semantics | 0 |
| 3.3000 | | 3.3000 | | | | | | U | 99,83,69 |
| 3.4000 | | 3.4000 | | | | | | U | 99,83,69 |
| 3.4010 | | 3.4010 | | | | | | U | 99,83,69 |
| 3.4020 | | 3.4020 | 3.4020 | | | | | n,t | 99,73,69 |
| 3.4030 | | 3.4030 | 3.4030 | | | | | v | 0 |
| 3.4040 | | 3.4040 | 3.4040 | | | | | t | 99,73,69 |
| 3.4100 | | 3.4100 | 3.4100 | | | | | t | 99,73,69 |
| 3.4200 | | 3.4200 | 3.4200 | 3.4200 | | | | S,ST | 99,63,59 |
| 3.4300 | | 3.4300 | 4.4300 | 4.4300 | | | | c,l, no 'then' | 99,63,59 |
| 3.4400 | | 3.4400 | 3.4400 | 3.4400 | | | | f, no 'then' | 99,73,59 |
| 3.4500 | | 3.4500 | 3.4500 | 3.4500 | | | | U, 'then' | 99,73,64 |
| 3.4600 | | 3.4600 | 3.4600 | 3.4600 | | | | U | 99,73,64 |
| 3.4700 | | 3.4700 | 3.4700 | 3.4700 | | | | s | 99,73,64 |
| 3.4800 | | 3.4800 | 3.4800 | 3.4800 | | | | U | 99,73,64 |
| 3.4900 | | 3.4900 | 3.4900 | 3.4900 | | | | U, end of sentence | 99,73,64 |
| 3.5100 | | 3.5100 | 3.5100 | | | | | v | 0 |
| 3.5200 | | 3.5200 | 3.5200 | | | | | a | 99,73,69 |
| 3.5300 | | 3.5300 | | | | | | U, Semantics | 99,83,69 |
| 3.5310 | | 3.5310 | | | | | | v | 99,83,69 |
| 3.5320 | | 3.5320 | | | | | | v | 0 |
| 3.5330 | | 3.5330 | | | | | | n,p,a | 99,68,69 |

Discourse track of "Ados Kago" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|---------------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 4.0000 | | 4.0000 | | | | | | n | 99,83,69 |
| 4.0010 | | 4.0010 | | | | | | n,g | 99,83,49 |
| 4.1000 | | 4.1000 | | | | | | n | 99,83,69 |
| blank | | blank | | | | | | v, Unfinished | 0 |
| 4.1010 | | | | | | | | U | 89,?,69 |
| 4.2000 | | 4.2000 | | | | | | n, 3rd | 99,83,69 |
| 4.2010 | | | 4.2010 | | | | | t,s,p,
3rd/Semantics | 89,68,69 |
| 4.2020 | | | 4.2020 | | | | | U, Semantics | 79,73,69 |
| 4.2030 | | | 4.2030 | | | | | U | 79,73,69 |
| 4.2040 | | | 4.2040 | | | | | c | 79,63,69 |
| 4.2050 | | | 4.2050 | | | | | c | 79,63,69 |
| 4.2060 | | | 4.2060 | | | | | c,l | 79,63,69 |
| 4.2070 | | | 4.2070 | | | | | U | 79,73,79 |
| 4.2080 | | 4.2080 | | | | | | c, Semantics | 99,63,69 |
| 4.2100 | | 4.2100 | | | | | | s,c | 99,63,69 |
| 4.2110 | | | | | | | | t, 2nd/
Semantics | 89,73,69 |
| 4.2120 | | | | | | | | U, 1st | 89,?,69 |
| 4.2130 | | | | | | | | n,c | 99,63,69 |
| 4.2140 | | | | | | | | n,c | 99,63,69 |
| 4.2150 | | | | | | | | * n,c * | 99,63,69 |
| 4.2160 | | | | | | | | n,c | 99,63,69 |
| 4.2170 | | | | | | | | n | 99,83,69 |
| 4.2180 | | | | | | | | v | 0 |
| 4.2190 | | | | | | | | s,c,g | 89,63,49 |
| 4.2210 | | | | | | | | v | 0 |
| 4.2220 | | | | | | | | S, 1st | 84,?,64 |
| 4.2230 | | | | | | | | u,s,p | 84,68,64 |
| blank | | | | | | | | o,u | 84,83,54 |
| 4.2240 | | 4.2240 | 4.2240 | | | | | n,t, 1st but
Semantics | 99,73,69 |

Discourse track of "Ude Aruku"

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|-------------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 0.0010 | | 0.0010 | 0.0010 | | | | | n,t 1st but Semantics | 99,73,69 |
| 0.0100 | | 0.0100 | 0.0100 | | | | | t,p | 99,68,699 |
| 0.0200 | | 0.0200 | 0.0200 | | | | | p | 99,68,69 |
| 0.0300 | | 0.0300 | 0.0300 | | | | | t | 99,73,69 |
| 0.0400 | | 0.0400 | 0.0400 | | | | | U | 99,73,69 |
| 0.0500 | | 0.0500 | 0.0500 | | | | | U | 99,63,69 |
| 0.0600 | | 0.0600 | 0.0600 | 0.0600 | | | | S | 99,73,59 |
| 0.0700 | | 0.0700 | 0.0700 | 0.0700 | | | | U, 'then' | 99,73,64 |
| 0.0800 | | 0.0800 | 0.0800 | 0.0800 | | | | b | 99,73,64 |
| 0.0900 | | 0.0900 | 0.0900 | 0.0900 | | | | s | 99,73,64 |
| 0.1100 | | 0.1100 | 0.1100 | 0.1100 | | | | p,? | 99,68,64 |
| 0.1200 | | 0.1200 | 0.1200 | 0.1200 | | | | n | 99,78,64 |
| 0.1300 | | 0.1300 | 0.1300 | 0.1300 | | | | U | 99,73,64 |
| 0.1400 | | 0.1400 | 0.1400 | 0.1400 | | | | ST,g | 99,63,49 |
| 0.1401 | r | 0.1401 | 0.1401 | 0.1401 | | | | U, end of sentence | 99,73,64 |
| 0.1500 | | 0.1500 | 0.1500 | | | | | c,l | 99,63,69 |
| 0.1600 | | 0.1600 | 0.1600 | | | | | U | 99,73,69 |
| 0.1601 | | 0.1601 | 0.1601 | | | | | U, no 1st or 2nd person | 99,73,69 |
| 0.1602 | | 0.1602 | 0.1602 | | | | | U | 99,73,69 |
| 0.1610 | | 0.1610 | 0.1610 | | | | | U, Semantics | 99,73,69 |
| 0.1620 | | 0.1620 | 0.1620 | | | | | U | 99,73,69 |
| 0.1700 | | 0.1700 | 0.1700 | 0.1700 | | | | S,ST | 99,63,59 |
| 0.1800 | | 0.1800 | 0.1800 | 0.1800 | | | | p,b | 99,68,59 |
| 0.1900 | | 0.1900 | 0.1900 | 0.1900 | | | | t | 99,73,59 |
| 0.2100 | | 0.2100 | 0.2100 | 0.2100 | | | | U, 'then' | 99,73,64 |
| 0.2200 | | 0.2200 | 0.2200 | 0.2200 | | | | U, 'then' | 99,73,64 |
| 0.2201 | | 0.2201 | 0.2201 | 0.2201 | | | | p, end of sentence | 99,68,64 |
| 0.2300 | | 0.2300 | 0.2300 | | | | | U | 99,73,69 |
| 0.2400 | | 0.2400 | 0.2400 | | | | | U | 99,73,69 |
| 0.2500 | | 0.2500 | 0.2500 | | | | | U | 99,73,69 |
| 0.2501 | | → | → | | 0.2501 | | | p, 2nd person in 0.2504 | 89,68,69 |
| 0.2502 | | → | → | | 0.2502 | | | c | 89,63,69 |

Discourse track of "Ude Aruku" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|--|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 0.2503 | | → | → | | 0.2503 | | | p | 89,68,69 |
| 0.2504 | | → | → | | 0.2504 | | | U,ST | 89,63,69 |
| 0.2600 | | 0.2600 | 0.2600 | | | | | U | 99,73,69 |
| 0.2700 | | 0.2700 | 0.2700 | | | | | U | 99,73,69 |
| 0.2900 | | 0.2900 | 0.2900 | | | | | ST,g | 99,63,49 |
| 0.3100 | | 0.3100 | 0.3100 | | | | | s | 99,73,69 |
| 0.3200 | | 0.3200 | 0.3200 | | | | | U | 99,73,69 |
| 0.3300 | | 0.3300 | 0.3300 | | | | | s,g | 99,73,49 |
| 0.3400 | | 0.3400 | 0.3400 | | | | | U,ST | 99,63,69 |
| 0.3401 | | 0.3401 | 0.3401 | | | | | p,
Semantics,
no 1st or
2nd
person | 99,68,69 |
| 0.3500 | | 0.3500 | 0.3500 | | | | | U | 99,73,69 |
| 0.3600 | | 0.3600 | 0.3600 | | | | | U | 99,73,69 |
| 0.3700 | | 0.3700 | 0.3700 | | | | | U | 99,73,69 |
| 0.3701 | | 0.3701 | 0.3701 | | | | | S,p,
Semantics,
end of
sentence | 99,68,59 |
| 0.3800 | | 0.3800 | 0.3800 | | | | | U | 99,73,69 |
| 0.3801 | | → | → | | 0.3801 | | | U,
Semantics | 89,?,69 |
| 0.3802 | | → | → | | 0.3802 | | | p | 89,68,69 |
| 0.3803 | | → | → | | 0.3803 | | | p | 89,68,69 |
| 0.3810 | | | | | | | | s, 1st | s,ST
89,63,69 |
| 0.3900 | | 0.3900 | 0.3900 | | | | | n | 99,83,69 |
| 0.4100 | | 0.4100 | 0.4100 | 0.4100 | | | | S,ST | 99,63,59 |
| 0.4200 | | 0.4200 | 0.4200 | 0.4200 | | | | p,s | 99,68,59 |
| 0.4400 | | 0.4400 | 0.4400 | 0.4400 | | | | U, 'then',
end of
sentence | 99,73,64 |
| 0.4500 | | 0.4500 | 0.4500 | 0.4500 | | | | S,ST | 99,63,59 |
| 0.4600 | | 0.4600 | 0.4600 | 0.4600 | | | | p | 99,68,59 |
| 0.4700 | | 0.4700 | 0.4700 | 0.4700 | | | | U, 'then',
end of
sentence | 99,73,64 |
| 0.4800 | | 0.4800 | 0.4800 | 0.4800 | | | | S,ST | 99,63,59 |
| 0.4900 | | 0.4900 | 0.4900 | 0.4900 | | | | p | 99,68,69 |

Discourse track of "Ude Aruku" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|------------------------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 0.5100 | | 0.5100 | 0.5100 | 0.5100 | | | | U, 'then', end of sentence | 99,73,64 |
| 0.5200 | | 0.5200 | 0.5200 | | | | | n,c | 99,63,69 |
| 0.5210 | | 0.5210 | 0.5210 | | | | | t, Semantics, no 1st or 2nd person | 99,73,69 |
| 0.5220 | | 0.5220 | 0.5220 | | | | | p | 99,68,69 |
| 0.5300 | | 0.5300 | 0.5300 | | | | | t | 99,73,69 |
| 0.5400 | | 0.5400 | 0.5400 | | | | | t | 99,73,69 |
| 0.5500 | | 0.5500 | 0.5500 | | | | | t | 99,73,69 |
| 0.5600 | | 0.5600 | 0.5600 | | | | | U | 99,73,69 |
| 0.5610 | | 0.5610 | 0.5610 | | | | | U | 99,73,69 |
| 0.5620 | | 0.5620 | 0.5620 | | | | | p | 99,68,69 |
| 0.5700 | | 0.5700 | 0.5700 | | | | | U | 99,73,69 |
| 0.5800 | | 0.5800 | 0.5800 | | | | | p | 99,68,69 |
| 0.5900 | | 0.5900 | 0.5900 | | | | | U | 99,73,69 |
| 0.5910 | | 0.5910 | 0.5910 | 0.5910 | | | | S | 99,73,59 |
| 0.5930 | | 0.5930 | 0.5930 | 0.5930 | | | | c | 99,63,64 |
| 0.5950 | | 0.5950 | 0.5950 | 0.5950 | | | | U, 'then', end of sentence | 99,73,64 |
| 0.6100 | | 0.6100 | 0.6100 | | | | | s | 99,73,69 |
| 0.6201 | | 0.6201 | 0.6201 | | | | | U, but no 1st or 2nd person | 99,73,69 |
| 0.6210 | | 0.6210 | 0.6210 | | | | | U, but no 1st or 2nd person | 99,73,69 |
| 0.6220 | | 0.6220 | 0.6220 | | | | | U | 99,73,69 |
| 0.6300 | | 0.6300 | 0.6300 | | | | | U | 99,73,69 |
| 0.6400 | | 0.6400 | 0.6400 | | | | | U | 99,73,69 |
| 0.6401 | | -----> | -----> | | 0.6401 | | | p | 89,68,69 |
| 0.6500 | | 0.6500 | 0.6500 | | | | | b,p | 99,68,69 |
| 0.6600 | | 0.6600 | 0.6600 | | | | | U | 99,73,69 |
| 0.6700 | | 0.6700 | 0.6700 | | | | | U | 99,73,69 |
| 0.6701 | | -----> | -----> | | 0.6701 | | | p | 89,68,69 |
| 0.6800 | | 0.6800 | 0.6800 | | | | | U | 99,73,69 |

Discourse track of "Ude Aruku" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|--|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 0.6900 | | 0.6900 | 0.6900 | | | | | U | 99,73,69 |
| 0.6901 | | -----> | ----> | | 0.6901 | | | p | 89,68,69 |
| 0.7100 | | 0.7100 | 0.7100 | | | | | U | 99,73,69 |
| 0.7200 | | 0.7200 | 0.7200 | | | | | U,ST | 99,63,69 |
| 0.7300 | | 0.7300 | 0.7300 | | | | | U | 99,73,69 |
| 0.7400 | | 0.7400 | 0.7400 | | | | | U,ST | 99,63,69 |
| 0.7500 | | 0.7500 | 0.7500 | | | | | c | 99,63,69 |
| 0.7600 | | 0.7600 | 0.7600 | | | | | c | 99,63,69 |
| 0.7700 | | 0.7700 | 0.7700 | | | | | c | |
| 0.7800 | | 0.7800 | 0.7800 | | | | | U,ST | 99,63,69 |
| 0.7801 | | 0.7801 | 0.7801 | | | | | U,
Semantics,
no 1st or
2nd
person | 99,73,69 |
| 0.7802 | | 0.7802 | 0.7802 | | | | | i | 94,73,64 |
| 0.7900 | | 0.7900 | 0.7900 | | | | | U | 99,73,69 |
| 0.7901 | | 0.7901 | 0.7901 | | | | | U,
Semantics,
no 1st or
2nd
person | 99,73,69 |
| 0.7902 | | 0.7902 | 0.7902 | | | | | i | 94,73,64 |
| 0.8100 | | 0.8100 | 0.8100 | | | | | n | 99,73,69 |
| 0.8110 | | | | | | | | U, 1st
person | 89,7,69 |
| 0.8120 | | | | | | | | v | 0 |
| 0.8130 | | | | | | | | v | 0 |
| 0.9000 | | 0.9000 | | | | | | n,s | 99,83,69 |
| 1.0000 | | 1.0000 | | | | | | x | 99,83,69 |
| 1.0010 | | 1.0010 | | | | | | v | 0 |
| 1.0020 | | 1.0020 | | | | | | x | 99,83,69 |
| 1.0100 | | 1.0100 | 1.0100 | | | | | n,t,s | 99,73,69 |
| 1.0101 | | 1.0101 | 1.0101 | | | | | i,s | 94,73,64 |

Discourse track of "Raids"

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|----------------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 1.0000 | | 1.0000 | | | | | | x | 99,83,69 |
| 1.0100 | | 1.0100 | 1.0100 | | | | | n,t,s | 99,73,69 |
| 1.0101 | | 1.0101 | 1.0101 | | | | | i,s | 94,73,64 |
| 1.0200 | | 1.0200 | 1.0200 | | | | | U | 99,73,69 |
| 1.0300 | | 1.0300 | 1.0300 | | | | | U | 99,73,69 |
| 1.0310 | | 1.0310 | 1.0310 | | | | | t | 99,73,69 |
| 1.0320 | | 1.0320 | 1.0320 | | | | | v | 0 |
| 1.0400 | | 1.0400 | 1.0400 | 1.0400 | | | | S,ST | 99,63,59 |
| 1.0401 | | 1.0401 | 1.0401 | 1.0401 | | | | i | 94,73,59 |
| 1.0500 | | 1.0500 | 1.0500 | 1.0500 | | | | then', end of sentence | a,s 99,73,64 |
| 1.0600 | | 1.0600 | 1.0600 | | | | | p | 99,68,69 |
| 1.0700 | | 1.0700 | 1.0700 | | | | | b | 99,73,69 |
| 1.0800 | | 1.0800 | 1.0800 | 1.0800 | | | | S,p | 99,68,59 |
| 1.0900 | | 1.0900 | 1.0900 | 1.0900 | | | | S,ST | 99,63,59 |
| 1.1100 | | 1.1100 | 1.1100 | 1.1100 | | | | p | 99,68,59 |
| 1.1200 | | 1.1200 | 1.1200 | 1.1200 | | | | S | 99,73,59 |
| 1.1300 | | 1.1300 | 1.1300 | 1.1300 | | | | S | 99,73,59 |
| 1.1400 | | 1.1400 | 1.1400 | 1.1400 | | | | U | 99,73,59 |
| 1.1500 | | 1.1500 | 1.1500 | 1.1500 | | | | i,s | 94,73,59 |
| 1.1600 | | 1.1600 | 1.1600 | 1.1600 | | | | U, 'then', end of sentence | 99,73,64 |
| 1.1700 | | 1.1700 | 1.1700 | | | | | s | 99,73,69 |
| 1.1800 | | 1.1800 | 1.1800 | | | | | U | 99,73,69 |
| 1.1900 | | 1.1900 | 1.1900 | | | | | p | 99,68,69 |
| 1.2100 | | 1.2100 | 1.2100 | | | | | i | 94,73,64 |
| 1.2200 | | 1.2200 | 1.2200 | | | | | U | 99,73,69 |
| 1.2300 | | 1.2300 | 1.2300 | | | | | s | 99,73,69 |
| 1.2400 | | 1.2400 | 1.2400 | | | | | U | 99,73,69 |
| 1.2500 | | 1.2500 | 1.2500 | | | | | U | 99,73,69 |
| 1.2600 | | 1.2600 | 1.2600 | | | | | U | 99,73,69 |
| 1.2700 | | 1.2700 | 1.2700 | | | | | U | 99,73,69 |
| 1.2800 | | 1.2800 | 1.2800 | | | | | c,l | 99,63,69 |
| 1.2900 | | 1.2900 | 1.2900 | | | | | p,t | 99,68,69 |
| 1.3100 | | 1.3100 | 1.3100 | | | | | g | 99,73,49 |

Discourse track of "Raids" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|-----------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 1.5420 | | | | | | | | v | 0 |
| 1.5430 | | | | | | | | v | 0 |
| 1.5440 | | | | | | | | v | 0 |
| 1.5450 | | | | | | | | v | 0 |
| 1.5500 | | 1.5500 | 1.5500 | | | | | U,ST | 99,63,69 |
| 1.5600 | | 1.5600 | 1.5600 | | | | | t,c | 99,63,69 |
| 1.5700 | | 1.5700 | 1.5700 | | | | | c | 99,63,69 |
| 1.5800 | | 1.5800 | 1.5800 | | | | | c | 99,63,69 |
| 1.5810 | | | | | | | | v | 0 |
| 1.5820 | | | | | | | | v | 0 |
| 1.5830 | | | | | | | | U | 89,?,69 |
| 1.5900 | | 1.5900 | | | | | | n,c | 99,63,69 |
| 1.6100 | | 1.6100 | | | | | | n,ST | 99,63,69 |
| blank | | blank | | | | | | U,ST | 99,63,69 |
| 1.6200 | | 1.6200 | 1.6200 | | | | | a,t | 99,73,69 |
| 1.6300 | | 1.6300 | 1.6300 | | | | | c | 99,63,69 |
| 1.6400 | | 1.6400 | 1.6400 | | | | | a | 99,73,69 |
| 1.6500 | | 1.6500 | 1.6500 | | | | | v | 0 |
| 1.6600 | | 1.6600 | 1.6600 | | | | | a | 99,73,69 |
| 1.6610 | | 1.6610 | 1.6610 | | | | | n,t | 99,73,69 |
| 1.6620 | | 1.6620 | 1.6620 | | | | | c,l, a]ε | 99,63,69 |
| 1.6630 | | 1.6630 | 1.6630 | | | | | n,t | 99,73,69 |
| 1.6650 | | | | | | | | s | 89,?,69 |
| 1.6660 | | | | | | | | a,s,g | 89,?,49 |
| 1.6670 | | | | | | | | s | 89,?,69 |
| 1.6680 | | | | | | | | a,s,g | 89,?,49 |
| 1.6690 | | | | | | | | a,s,g | 89,?,49 |
| 2.0000 | | 2.0000 | | | | | | n | 99,83,69 |
| 2.0100 | | 2.0100 | | | | | | U,ST | 99,63,69 |
| 2.0110 | | | | | | | | p | 89,68,69 |
| 2.0120 | | | | | | | | p | 89,68,69 |
| 2.0130 | | | | | | | | g,p,c | 89,68,49 |
| 2.0140 | | | | | | | | p | 89,68,69 |
| 2.0150 | | | | | | | | v | 0 |
| 2.0160 | | | | | | | | a,c,g | 89,63,49 |
| 2.0170 | | | | | | | | n | 99,83,69 |
| 2.0180 | | | | | | | | c | 89,63,69 |

Discourse track of "Raids" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|-----------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 2.0190 | | | | | | | | U,ST | 89,63,69 |
| 2.0210 | | | | | | | | s | 89,7,69 |

Discourse track of "White Man"

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|-----------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| blank | | blank | | | | | | ki- | 99,83,69 |
| 0.0100 | | 0.0100 | | | | | | U | 99,83,69 |
| 0.0200 | | 0.0200 | | | | | | n,ST | 99,63,69 |
| 0.0300 | | 0.0300 | | | | | | n,ST | 99,63,69 |
| 0.0400 | | 0.0400 | | | | | | f | 99,83,69 |
| 0.0500 | | 0.0500 | | | | | | n,ST | 99,63,69 |
| 1.0000 | | 1.0000 | | | | | | b,s | 99,83,69 |
| 1.0100 | | 1.0100 | | | | | | n,s,p | 94,68,64 |
| 1.0110 | | | | | | | | U,ST | 89,63,69 |
| 1.0120 | | | | | | | | v | 0 |
| 2.0000 | | 2.0000 | | | | | | n | 99,83,69 |
| 2.0001 | | → | | | 2.0001 | | | v | 0 |
| 2.1000 | | 2.1000 | | | | | | U | 99,83,69 |
| 2.1001 | | → | | | 2.1001 | | | f | 89,?,69 |
| 2.2000 | | 2.2000 | | | | | | U | 99,83,69 |
| 2.2001 | | → | | | 2.2001 | | | U | 89,?,69 |
| 2.3000 | | 2.3000 | | | | | | U | 99,83,69 |
| 2.4000 | | 2.4000 | | | | | | U | 99,83,69 |
| 2.5000 | | 2.5000 | | | | | | U | 99,83,69 |
| 2.5001 | | → | | | 2.5001 | | | f | 89,?,69 |
| 2.5002 | | → | | | 2.5002 | | | p | 89,68,69 |
| 2.5003 | | → | | | 2.5003 | | | S | 84,83,59 |
| 2.5004 | | → | | | 2.5004 | 2.5004 | | o,u,s | 84,83,54 |
| 2.5100 | | 2.5100 | | | | | | c,l | 99,63,69 |
| 2.6000 | | 2.6000 | | | | | | n | 99,78,69 |
| 2.6100 | | 2.6100 | | | | | | c,l | 99,63,69 |
| 2.7000 | | 2.7000 | | | | | | n | 99,78,69 |
| 2.8000 | | 2.8000 | | | | | | U | 99,83,69 |
| 2.9000 | | 2.9000 | | | | | | n | 99,78,69 |
| 3.1000 | | 3.1000 | | | | | | U | 99,83,69 |
| 3.2000 | | 3.2000 | | | | | | n | 99,78,69 |
| 4.0000 | | 4.0000 | | | | | | a,n,s | 99,83,69 |
| 4.1000 | | 4.1000 | | | | | | a | 99,83,69 |
| 5.0000 | | 5.0000 | | | | | | U | 99,83,69 |
| 5.1000 | | 5.1000 | | | | | | b | 99,83,69 |
| 5.1100 | | 5.1100 | | | | | | p | 99,68,69 |
| 5.1200 | | 5.1200 | | | | | | p | 99,68,69 |

Discourse track of "White Man" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|--------|------------|-----------|--------------------------------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 6.0000 | | 6.0000 | | | | | | U | 99,83,69 |
| 7.0000 | | 7.0000 | | | | | | U | 99,83,69 |
| 8.0000 | | 8.0000 | | | | | | U | 99,83,69 |
| 8.0010 | | 8.0010 | | | | | | b,s, no 1st or 2nd person, semantics | 99,83,69 |
| 8.0020 | | 8.0020 | | | | | | U | 99,83,69 |
| 8.0030 | | 8.0030 | | | | | | b | 99,83,69 |
| 8.0040 | | 8.0040 | | | | | | b | 99,83,69 |
| 8.0050 | | 8.0050 | | | | | | b | 99,83,69 |
| 8.0060 | | 8.0060 | | | | | | n,t,c | 99,63,69 |
| 8.0070 | | 8.0070 | | | | | | v | 0 |
| 8.1000 | | 8.1000 | | | | | | n,x | 99,83,69 |
| 8.1200 | | 8.1200 | 8.1200 | | | | | t | 99,73,69 |
| 8.1300 | | 8.1300 | 8.1300 | | | | | U | 99,73,69 |
| 8.1400 | | 8.1400 | 8.1400 | | | | | U | 99,73,69 |
| 8.1500 | | 8.1500 | | | | | | U | 99,83,69 |
| 8.1501 | | ----> | | | 8.1501 | | | U | 89,7,69 |
| 8.1502 | | ----> | | | 8.1502 | | | U | 89,7,69 |
| 8.2000 | | 8.2000 | | | | | | a | 99,78,69 |
| 8.3000 | | 8.3000 | | | | | | a | 99,78,69 |
| 8.4000 | | 8.4000 | | | | | | U | 99,83,69 |
| 8.4001 | | ----> | | | 8.4001 | | 8.4001 | S | 84,7,59 |
| 8.4002 | | ----> | | | 8.4002 | | 8.4002 | U | 84,7,59 |
| 8.4003 | | ----> | | | 8.4003 | 8.4003 | | o,u, 'then' | 84,83,54 |
| 8.4004 | | ----> | | | 8.4004 | 8.4004 | | s | 84,83,54 |
| 8.5000 | | 8.5000 | | | | | | f | 99,83,69 |
| 8.6000 | | 8.6000 | | | | | | b,s | 94,83,64 |
| 8.7000 | | 8.7000 | | | | | | a | 99,83,69 |
| 8.8000 | | 8.8000 | | | | | | a | 99,83,69 |
| 8.8010 | | | | | | | | v | 0 |
| 8.8100 | | 8.8100 | | | | | | c | 99,63,69 |
| 8.8200 | | 8.8200 | | | | | | c,l | 99,63,69 |
| 8.9000 | | 8.9000 | | | | | | s | 99,83,69 |
| 9.1000 | | 9.1000 | | | | | | n | 99,78,69 |
| 9.1010 | | | | | | | | v | 0 |
| 9.2000 | | 9.2000 | | | | | | U | 99,83,69 |
| 9.2100 | | 9.2100 | | | | | | n | 99,78,69 |
| 9.3100 | | 9.3100 | | | | | | U | 99,83,69 |

Discourse track of "White Man" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|---------|------------|-----------|-----------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 10.0000 | | 10.0000 | | | | | | U | 99,83,69 |
| 11.0000 | | 11.0000 | | | | | | U | 99,83,69 |
| 11.0001 | | → | | | 11.0001 | | | v,c | 89,63,69 |
| 11.0002 | | → | | | 11.0002 | | | f,t | 89,73,69 |
| 11.0003 | | → | | | 11.0003 | | | U | 89,7,69 |
| 11.0004 | | → | | | 11.0004 | | | U | 89,7,69 |
| 12.0000 | | 12.0000 | | | | | | U | 99,83,69 |
| 12.0001 | | → | | | 12.0001 | | | c,l | 89,63,69 |
| 12.1000 | | 12.1000 | | | | | | U | 99,83,69 |
| 12.1001 | | → | | | 12.1001 | | | c,l | 89,63,69 |
| 13.0000 | | 13.0000 | | | | | | s | 99,83,69 |
| 13.0001 | | → | | | 13.0001 | 13.0001 | | o | 84,83,54 |
| 13.0002 | | → | | | 13.0002 | 13.0002 | | o | 84,83,54 |
| 14.0000 | | 14.0000 | | | | | | U | 99,83,69 |
| 15.0000 | | 15.0000 | | | | | | U | 99,83,69 |
| 15.0001 | | → | | | 15.0001 | 15.0001 | | a,o | 84,83,54 |
| 16.0000 | | 16.0000 | | | | | | U | 99,83,69 |
| 16.0001 | | → | | | 16.0001 | | | f | 89,7,69 |
| 16.0002 | | → | | | 16.0002 | | | U | 89,7,69 |
| 16.0003 | | → | | | 16.0003 | | | p | 89,68,69 |
| 16.0004 | | → | | | 16.0004 | | | i | 84,7,64 |
| 16.0005 | | → | | | 16.0005 | | | c,l | 89,63,69 |
| 16.0006 | | → | | | 16.0006 | | | a,s | 89,7,69 |
| 16.0007 | | → | | | 16.0007 | | | i | 84,7,64 |
| 16.0008 | | → | | | 16.0008 | | | a | 89,7,69 |
| 16.0009 | | → | | | 16.0009 | | | i | 84,7,64 |
| 16.0011 | | → | | | 16.0011 | | | a | 89,7,69 |
| 16.0012 | | → | | | 16.0012 | | | i | 84,7,64 |
| 17.0000 | | 17.0000 | | | | | | U | 99,83,69 |
| 17.0001 | | → | | | 17.0001 | | | v,c | 89,63,69 |
| 18.0000 | | 18.0000 | | | | | | U | 99,83,69 |
| 18.0001 | | → | | | 18.0001 | | | U | 89,7,69 |
| 18.0002 | | → | | | 18.0002 | | | c,l | 89,63,69 |
| 18.0003 | | → | | | 18.0003 | | | U | 89,7,69 |
| 18.0004 | | → | | | 18.0004 | | | i | 84,7,64 |
| 19.0000 | | 19.0000 | | | | | | U | 99,83,69 |
| 19.0001 | | → | | | 19.0001 | | | v,c | 89,63,69 |
| 19.0002 | | → | | | 19.0002 | | | c | 89,63,69 |
| 19.0003 | | → | | | 19.0003 | | | c | 89,63,69 |
| 19.0004 | | → | | | 19.0004 | | | U | 89,7,69 |

Discourse track of "White Man" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|---------|------------|-----------|-----------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 20.0000 | | 20.0000 | | | | | | U | 99,83,69 |
| 20.0001 | | → | | | 20.0001 | | | c | 89,63,69 |
| 20.0002 | | → | | | 20.0002 | | | c | 89,63,69 |
| 20.0003 | | → | | | 20.0003 | | | U | 89,?,69 |
| 20.0004 | | → | | | 20.0004 | | | c | 89,63,69 |
| 20.0005 | | → | | | 20.0005 | | | s,ST | 89,63,69 |
| 20.0006 | | → | | | 20.0006 | | | c | 89,63,69 |
| 20.0007 | | → | | | 20.0007 | | | c | 89,63,69 |
| 20.0008 | | → | | | 20.0008 | | | U,ST | 89,63,69 |
| 21.0000 | | 21.0000 | | | | | | v | 99,83,69 |
| 21.0001 | | → | | | 21.0001 | | | v,c | 89,63,69 |
| 22.0000 | | 22.0000 | | | | | | v | 99,83,69 |
| 22.0001 | | → | | | 22.0001 | | | S | 84,?,59 |
| 22.0002 | | → | | | 22.0002 | | | u, 'then' | 84,83,64 |
| 22.0003 | | → | | | 22.0003 | | | S | 84,?,59 |
| 22.0004 | | → | | | 22.0004 | | | u, 'then' | 84,83,64 |
| 23.0000 | | 23.0000 | | | | | | U | 99,83,69 |
| 24.0000 | | 24.0000 | | | | | | U | 99,83,69 |
| 25.0000 | | 25.0000 | | | | | | U | 99,83,69 |
| 25.0001 | | → | | | 25.0001 | | | v | 89,63,69 |
| 25.0010 | | 25.0010 | | | | | | U,ST | 99,63,69 |
| 26.0000 | | 26.0000 | | | | | | U | 99,83,69 |
| 26.0001 | | → | | | 26.0001 | | | v,c | 89,63,69 |
| 27.0000 | | 27.0000 | | | | | | U | 99,83,69 |
| 27.0001 | | → | | | 27.0001 | | | v,c | 89,63,69 |
| 28.0000 | | 28.0000 | | | | | | U | 99,83,69 |
| 28.0001 | | → | | | 28.0001 | | | v,c | 89,63,69 |
| 28.0002 | | → | | | 28.0002 | | | c,g | 89,63,49 |
| 28.0003 | | → | | | 28.0003 | | | c | 89,63,69 |
| 29.0000 | | 29.0000 | | | | | | U | 99,83,69 |
| 29.0001 | | → | | | 29.0001 | | | c,l | 89,63,69 |
| 29.0002 | | → | | | 29.0002 | | | t | 89,73,69 |
| 29.0003 | | → | | | 29.0003 | 29.0003 | | o | 84,83,54 |
| 29.0004 | | → | | | 29.0004 | | | t | 89,73,69 |
| 30.0000 | | 30.0000 | | | | | | U | 99,83,69 |
| 30.0100 | | 30.0100 | | | | | | c | 99,63,69 |
| 30.0101 | | → | | | 30.0101 | | | ?,g,s | ?,?,49 |
| 30.0110 | | | | | | | | U | 89,?,69 |
| 30.0120 | | | | | | | | U | 89,?,69 |
| 30.0130 | | | | | | | | c | 89,63,69 |

Discourse track of "White Man" (Continued)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------|------------|------------|----------|-----------|---------|------------|-----------|-----------------|--------------------------|
| Conversation | Imperative | Perfective | Habitual | "If/then" | Dialog | Imperative | "If/then" | Surface Marking | Expected Interpretations |
| 30.0140 | | | | | | | | t,ST | 89,63,69 |
| 30.0150 | | | | | | | | U | 89,?,69 |
| 30.0160 | | | | | | | | a | 89,73,69 |
| 30.0170 | | | | | | | | U | 89,?,69 |
| 30.0200 | | 30.0200 | | | | | | U | 99,83,69 |
| 31.0000 | | 31.0000 | | | | | | U | 99,83,69 |
| 31.1000 | | 31.1000 | | | | | | a,s | 99,83,69 |
| 32.0000 | | 32.0000 | | | | | | U | 99,83,69 |
| 32.0001 | | → | | | 32.0001 | | | v,c | 89,63,69 |
| 32.0002 | | → | | | 32.0002 | | | c,g | 89,63,49 |
| 33.0000 | | 33.0000 | | | | | | U | 99,83,69 |
| 33.0200 | | 33.0200 | | | | | | n | 99,83,69 |
| 33.0230 | | | | | | | | n,t, 1st | 99,73,69 |
| 33.0240 | | | | | | | | c,l, Ijεε | 89,63,69 |

REFERENCES

- Asen Iba Kuru (Rukuba Hymns), Third Edition. 1978. Jos, Nigeria: Challenge Publications.
- Asukutuk, Gideon (translator). 1992. Iba Ilii aYesu nu Kuche (The Story of the Birth of Jesus in Kuche). Mimeographed copies. Jos, Plateau State, Nigeria.
- Battistella, Edwin L. 1990. *Markedness: the Evaluative Superstructure of Language*. New York: State University of New York Press.
- Bauman, Richard. 1986. *Story, Performance, Event: Contextual Studies of Oral Narrative*. Cambridge: Cambridge University Press.
- Bhat, D.N.S. 1999. *The Prominence of Tense, Aspect and Mood*. Amsterdam: John Benjamins.
- Binnick, Robert. 1991. *Time and the Verb: A guide to tense and aspect*. Oxford: Oxford University Press.
- Blench, Roger. 2001. The Ce [Rukuba] language of Central Nigeria and its affinities. A manuscript from Roger Blench, London, England: Overseas Development Institute.
- Blench, Roger and Barau Kato. 2001. *A Dictionary of Mada, A Plateau Language of Central Nigeria Based on the Rija Dialect: Mada-English with an English-Mada finderlist*. An electronic document from Roger Blench, London, England: Overseas Development Institute.
- Bolinger, Dwight. 1947. More on the Present Tense in English. *Language* 23:434-436.
- Bouquiaux, L. 1967. Le système des classes nominales dans quelques langues (Biom, Ganawuri, Anaguta, Iregwe, Kaje, Rukuba) appartenant au groupe "Plateau" (Nigeria Central) de la Sous-Famille Bénoué-Congo, in *Sciences humaines: La classification nominale dans les langues Négro-Africaines*.
- Burquest, Donald A. 1992. An Introduction to the use of aspect in Hausa narrative. In Shin Ja J. Hwang and William R. Merrifield (eds). *Language in Context: Essays for Robert E. Longacre*. The Summer Institute of Linguistics and the University of Texas at Arlington.

- Bybee, Joan. 1994a. The grammaticization of zero: asymmetries in tense and aspect systems. In Pagliuca, William (ed.). *Perspectives on Grammaticalization*. Amsterdam: John Benjamins. 235-254.
- Bybee, Joan, and Suzanne Fleischman (eds.). 1995. *Modality in Grammar and Discourse*. Amsterdam: John Benjamins.
- Bybee, Joan, and Suzanne Fleischman. 1995. *Modality in Grammar and Discourse: An Introductory Essay*. in Joan Bybee and Suzanne Fleischmann (eds.). *Modality in Grammar and Discourse*. Amsterdam: John Benjamins.
- Bybee, Joan, Revere Perkins, and William Pagliuca. 1994b. *The evolution of grammar: Tense, aspect, and modality in the languages of the world*. Chicago: The University of Chicago Press.
- Clements; George N., and John A. Goldsmith . 1984. *Autosegmental studies in Bantu tone*. Cinnaminson N.J., U.S.A: Foris Publication.
- Chung, Sandra and Alan Timberlake. 1985. Tense, aspect, and mood, in Timothy Shopen (ed.) *Language typology and syntactic description, vol III, Grammatical categories and the lexicon*. New York: Cambridge University Press. 204-258.
- Cole, D. T. 1955. *An introduction to Tswana Grammar*. London-New York: Longmans Green.
- Comrie, Bernard. 1985. *Tense*. Cambridge: Cambridge University Press.
- Comrie, Bernard. 1976. *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.
- Crozier, D.H., and R.M. Blench, eds. 1992 *An Index of Nigerian Languages*. Dallas, Texas: SIL.
- Cullen, Wendy Ruth. 1999. *Tense and aspect in Lubwisi narrative discourse*. PhD dissertation presented to the linguistics program at the University of Texas at Arlington.
- Dahl, Osten. 1985. *Tense and Aspect Systems*. Oxford: Basil Blackwell.
- Dowty, David. 1979. *Word Meaning and Montague Grammar*. Dordrecht: Reidel.
- Fleischman, Suzanne. 1982. *The future in thought and language: Diachronic evidence from Romance*. Cambridge: Cambridge University Press.

- Fleischman, Suzanne. 1990. *Tense and Narrativity: from Medieval Performance to Modern Fiction*. Austin: The University of Texas Press.
- Fleischman, Suzanne. 1991. *Toward a theory of tense/aspect in narrative discourse*. In Gvozdanovic, Jadranka, and Theo. A.J.M. Janssen, and Osten Dahl (eds.). *The function of tense in texts*. Amsterdam.
- Foley, W.A. & R.D. Van Valin. 1984. *Functional syntax and universal grammar*. Cambridge University Press.
- Gerhardt, Ludwig. 1982. *Beitrage zur Kenntnis der Sprachen des Nigerianischen Plateaus*. Gluckstadt: Verlag J.J. Augustin GmbH.
- Givón, T. 1984. *Syntax: A functional-typological introduction, volume I*. Philadelphia: John Benjamins.
- Givón, T. 1989. *Syntax: A functional-typological introduction, volume II*. Philadelphia: John Benjamins.
- Givón, T. 1995. *Functionalism and Grammar*. Amsterdam: John Benjamins.
- Goldsmith, John A. 1990. *Autosegmental & Metrical Phonology*. Oxford: Basil Blackwell.
- Gonda, J. 1956. *The character of the Indo-European Moods*. Wiesbaden: Harrassowitz.
- Goody, Jack, and Ian Watt. 1968. *The consequence of literacy*. In *Literacy in Traditional Societies*, edited by J.G., 27-68. Cambridge: Cambridge University Press.
- Greenberg, Joseph H. 1963. *The Languages of Africa*. *International Journal of American Linguistics*. Bloomington: Indian University Research Center in Anthropology, Folklore, and Linguistics.
- 1966. *Language Universals*. The Hague: Mouton.
- Grimes, Barbara, and Joseph Grimes. 1991. *Rukuba Word List*. Electronic document in Macintosh format.
- Grimes, Barbara, ed. 1992. *Ethnologue: Language of the world*. Dallas, Texas: SIL.

- Guthrie, Malcolm. 1967. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages, volume 1*. Westmead, England: Gregg Press Ltd.
- . 1970a. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages, volume 3*. Westmead, England: Gregg Press Ltd.
- . 1970b. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages, volume 4*. Westmead, England: Gregg Press Ltd.
- . 1971. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages, volume 2*. Westmead, England: Gregg Press Ltd.
- Herring, Susan C. 1985. *Narration and the Present Tense: The Tamil Narrative Present*. Berkeley, CA: MS.
- Higdon, Lee M. 1996. *Tense, aspect, and modality in Gangam narrative and hortatory discourse*. M.A. thesis presented to the linguistics program at the University of Texas at Arlington.
- Hoffmann, Carl. 1976. *Some aspects of the Che noun class System*. Mimeographed paper presented to the Department of Linguistics and Nigerian Languages, University of Ibadan, Nigeria. Along with excerpts from two student essays on the phonology of Kuche.
- Hopper, Paul J. 1979. *Aspect and foregrounding in discourse*. in T. Givón (ed). *Discourse and Syntax, (Syntax and Semantics, 12)*, 213-41. New York: Academic Press.
- Hopper, Paul J., ed. 1982a. *Tense-aspect: Between semantics and pragmatics*. Amsterdam: John Benjamins.
- Hopper, Paul J. 1982b. *Aspect between discourse and grammar: an introductory essay for the volume*, in Paul J. Hopper (ed.). *Tense-aspect: Between semantics and pragmatics*:3-18.
- Hopper, Paul J. and S.A. Thompson. 1980. *Transitivity in grammar and discourse*. *Language* (56), 251-99.
- Hummell, C.F. (translator). 1943. *Iba Icici Ni Iyu na Markus (The Gospel according to Mark), Iba Icici Ni Iyu na Yohanna (The Gospel according to John)*, Atakarda

Bulus Uni-Utitusu Na a Co Na Baroma (The Letter of Paul the Apostle to the Romans). Jos, Nigeria: The Niger Press.

Hwang, Shin Ja J. 1990. Foreground information in narrative. *Southwest Journal of Linguistics* 9.2.63-90.

Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. *Linguistic Inquiry*, volume 31, number 2, Spring 2000. 231-270.

Jakobson, Roman. 1971. *Selected Writings. Vol. 2, Word and Language*. The Hague: Mouton.

-----, 1984. *Russian and Slavic Grammar Studies 1931-1981*. Edited by Linda R. Waugh and Morris Halle. Berlin: Mouton.

Jespersen, Otto. 1931. *A modern English grammar on historical principles, part IV*. Copenhagen: Munksgaard.

Kenstowicz, Michael. 1994. *Phonology in Generative Grammar*. Cambridge: Blackwell.

Kiparsky, Paul. 1968. Tense and mood in Indo-European syntax. *Foundations of Language* 4:30-57.

Kuchili, Elisha. 1990. *The noun phrase in Rukuba and English*. Unpublished thesis presented to the University of Jos in partial fulfillment of requirements for M.Ed. Jos, Nigeria.

Kurylowicz, J. 1927. Injonctif et subjonctif dans les Gathas de l'Avesta. *Rocznik Orientalistyczny* 3, 164-79.

Labov, William. 1972. The transformation of experience in narrative syntax. In his *Language in the Inner City*, pp. 354-96. Philadelphia: University of Pennsylvania Press.

Lakoff, George, and Mark Johnson. 1980. *Metaphors we live by*. Chicago: The University of Chicago Press.

Leech, Geoffrey N. 1971. *Meaning and the English verb*. London: Longman.

Levinsohn, Stephen H. 1997. *Discourse Analysis Workshop. Lecture Notes and Handouts from a course in Discourse Analysis offered at SIL Cameroon*.

Levinsohn, Stephen H. and Robert A. Dooley. 1994. *Analyzing Discourse: Basic Concepts*. SIL & University of North Dakota.

- Longacre, Robert E, and Levinsohn, Stephen H. 1978. Field analysis of discourse. In *Current trends in textlinguistics*, ed. by W. Dressler. Berlin: Walter de Gruyter. 103-122.
- Longacre, Robert E. 1990. Storyline concerns and word order typology in East and West Africa. *Studies in African Linguistics*, supplement 10
- Longacre, Robert E. 1996. *The Grammar of Discourse*. New York: Plenum Press.
- Lyons, John. 1977. *Semantics*, vol 1. Cambridge: Cambridge University Press.
- Lyons, John. 1977. *Semantics*, vol 2. Cambridge: Cambridge University Press.
- Matthews, P.H. 1991. *Morphology*. Cambridge: University Press.
- McKinney, Carol. 1978. Plural verb roots in Kaje. In *Afrika und Ubersee*, Band LXII. 107-117.
- Meid, W. 1963. *Die indogermanischen Grundlagen der altirischen absoluten und konjunkten Verbalflexion*. Wiesbaden: Harrassowitz.
- Meinhof, C. 1948. *Grundzüge einer vergleichenden Grammatik der Bantusprachen*. Hamburg: Eckardt and Merstorff.
- Missen, Cliff (webmaster). 2000. www.widernet.org/josproject/josplateau.htm.
- Moravcsik, Edith, and Jessica Wirth. 1986. "Markedness—an Overview." In Fred R. Eckman, Edith Moravcsik, & Jessica Wirth (eds.) *Markedness*. New York: Plenum Press.
- Muller, Jean-Claude. 1972. Ritual marriage, symbolic fatherhood and initiation among the Rukuba, Plateau-Benue State, Nigeria. *Man*, volume 7, no. 2:283-296.
- 1973a. *Contes Rukuba (Benue-Plateau State, Nigeria)*. Kyoto University African Studies, ed. by T. Umesao. Volume VIII:247-262
- 1973b. *Irigwe and Rukuba Marriage: A comparison*. *The Canadian Journal of African Studies*, volume VII, no. 1:27-57
- 1975a. *Clan Headship and Political Change among the Rukuba (Benue-Plateau State, Nigeria)*. *Canadian Journal of African Studies*, volume IX, no. 2:3-16. ????? (look this up in a linguistics database)

- . 1975b. La royauté devine chez les Rukuba (Benue-Plateau State, Nigeria). *L'Homme*, janv.-mars 1975, XV (I):5-27.
- . 1976a. Replication, Scission, and Territory among the Ruikuba (Nigeria). *Anthropos*, volume 71:738-767.
- . 1976b. Of souls and bones: the living and the dead among the Rukuba (Benue-Plateau State, Nigeria). *Africa*, 46:255-276.
- . 1977. The roofing of ritual huts among the Rukuba, Nigeria. *Savanna*, volume 6 no. 2:119-128.
- . 1978a. On Bridewealth and meaning among the Rukuba, Plateau State, Nigeria. *Africa*, 48(2):161-175.
- . 1978b. Ritual Legitimacy and Demography among the Rukuba (Plateau State, Nigeria). *Canadian Journal of African Studies*, volume XII, no. 1:61-81.
- . 1980a. Comment s'appauvrir en se développant: impôts et changement social chez les Rekuba (Nigeria Central). *Canadian Journal of African Studies*, volume 14, no. 1: 83-96.
- . 1980b. Le roi bouc émissaire: pouvoir et rituel chez les Rukuba du Nigeria Central). Quebec: Serge Fleury.
- . 1982a. Intertribal hunting among the Rukuba. *Ethnology*, volume XXI, no. 3: 203-214.
- . 1982b. Du bon usage du sexe et du mariage: Structures matrimoniales du haut plateau nigerian.. Quebec: Serge Fleury.
- . 1984. Marriage rules on the Plateau: an exchange. *Africa* 54(4):22-30.
- . 1986. Echange de danses et symbolique rituelle chez les Rukuba (Nigeria Central). *L'Ethnographie*, volume LXXXII, no. 98-99:227-246.
- . 1989. La Calebasse sacrée: Initiations Rukuba. Editions la Pensée Sauvage.
- . 1994. Le quotidien des Rukuba. Neuchâtel, Switzerland: Musée D'Ethnographie.
- Myhill, John. 1988a. A quantitative study of future tense-marking in Spanish. In *Proceedings of the N-WAVE XVI Conference*, ed. by K Ferrara et al., pp. 263-72. Austin: University of Texas Press.

- Myhill, John. 1989a. The rise of *be* as an aspect marker in Black English Vernacular. *American Speech* 64, 34-25.
- Myhill, John. 1992. *Typological Discourse Analysis*. Cambridge, MA: Blackwell Publishers.
- Nettle, Daniel. 1998. *The Fyem language of Northern Nigeria*. München: LINCOM Europa.
- Olson, David R. 1977. From Utterance to text: The Bias of language in speech and writing. In *Harvard Educational Review* 47:257-281.
- Palmer, F.R. 1979. *Modality and the English modals*. New York: Longman.
- Palmer, Frank. 1965. *The English verb*. London: Longman.
- Perkins, Michael R. 1983. *Modal Expressions in English*. New Jersey: Ablex Publishing Corporation.
- Pike, Kenneth L. 1971. *Language in Relation to a Unified Theory of the Structure of Human Behavior*. The Hague: Mouton & Co.
- Renou, L. 1928. Les formes dites d'injonctif dans la Rgveda. In *Etudes de Linguistique offertes par quelques amis a Emile Benveniste*. Paris: P. Geuthner. pages 63-80.
- Ruhlen, Merritt. 1987. *A guide to the world's Languages, volume 1: Classification*. California: Stanford University Press.
- Schiffrin, Deborah. 1981. Tense variation in narrative. *Language* 57, 45-62.
- Thurneysen, R. 1883. Der indogermanische Imperative. *KZ* 27, 172-80. (1883).
- Thurneysen, R. 1961. *A Grammar of Old Irish*. Dublin: Stationery Office.
- Tucker, A. N. and J. Tompo Ole Mpaayei. 1955. *A Maasai Grammar*. London-New York: Longmans Green.
- Van Dyken, Julia R., and Constance Kutsch Lojenga. 1993. Word Boundaries; Key Factors in Orthography Development. in Rhonda L. Hartell (ed). *Alphabets of Africa*. Dakar: UNESCO-Dakar Regional Office, and Summer Institute of Linguistics.
- Welmers, William E. 1973. *African Language Structures*. Berkeley: University of California Press.

- Williamson, Kay, and Kiyoshi Shimizu (eds.). 1968. Benue-Congo Comparative Wordlist. Ibadan, Nigeria: West African Linguistic Society, University of Ibadan.
- Wilson, Janet. 1996a. Acoustic Properties of Vowels and Glides in Kuche. Unpublished paper presented at UTA Graduate Student Symposium 1996. University of Texas at Arlington.
- Wilson, Janet. 1996b. A Phonological Grammar of Kuche. Ann Arbor, Michigan: University Microfilms, Inc.
- Wilson, Janet. 1997. Noun Morphology in Kuche. Paper Presented at the Fifth Annual Student Conference in Linguistics at the University of Texas at Arlington.
- Wilson, Janet. 1998. Saliency and Foregrounding in Kuche. An unpublished paper at the University of Texas at Arlington.
- Wilson, Janet. 2000. Aspect and Modality in a Central Nigerian Language: Kuche. Paper presented at the Annual Conference in African Linguistics, March, 2000, in Berkeley, California.
- Wilson, Janet. 2002. From preposition to plural marker and more: Grammaticalization of Kuche *bānà*. In *Studies in African Linguistics*, Volume 31, Numbers 1/2.
- Wolff, John. 1977. *Beginning Indonesian, Part One*. Ithaca, NY: Cornell University, S.E. Asian Program.

BIOGRAPHICAL INFORMATION

Janet Wilson has been a missionary to African since 1983, along with her husband, Dr. Chuck Wilson. While living in Nigeria, she established Community Language Development, a program designed to train speakers of Nigerian languages how to develop their languages. The program enrolled up to fifteen students at a time, from five different language groups of Plateau State and Kaduna State in Northern Nigeria.

Besides the current research looking at the discourse structure of Kuche narrative, Wilson has completed several studies of the Kuche language, including: Acoustic Properties of Vowels and Glides in Kuche (1996), A phonological Grammar of Kuche (M.A. thesis, University of Texas, Arlington, 1996), Noun Morphology in Kuche (1997), Saliency and Foregrounding in Kuche, Aspect and Modality in a Central Nigerian Language (2000), and From Preposition to Plural Marker and More: Grammaticalization of Kuche *bānà* (published in *Studies in African Linguistics*, 2002, Volume 31, Numbers 1/2). She has written about discourse structure and verb morphology in Hausa, and noun phrase grammar in Chinese.

Next year, Wilson and her husband will be returning to Africa as missionaries to Botswana. They currently live in Salem, Oregon.