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THE UNIVERSITY OF CHICAGO

CADDO VERB MORPHOLOGY

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE DIVISION OF THE HUMANITIES

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

DEPARTMENT OF LINGUISTICS

BY

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CHICAGO, ILLINOIS

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For Bill and Betty Melnar

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ABSTRACT

This dissertation describes the polysynthetic verb morphology of the moribund North American Indian language Caddo. Caddo verb morphology is addressed in terms of the semantic composition of the verbal categories and the function of their constituent classes and morphemes. Caddo verb structure is shown to be templatic, consisting of twenty-six position classes indicating a number of categorial distinctions, including: person, case, reality, tense, aspect, mood, subordination, negation, number, animacy, distribution, voice, posture, manner of motion, location, and semantic patient type. The various combinations of these categories into single polysynthetic structures constitute words that typically have the scope of sentences.

Caddo verb morphology exhibits many features that make its analysis particularly challenging. These include discontinuous dependency and pervasive allomorphy, zero-marking, and affix homophony. In addition, some position classes in the verb template are further divided into locally ordered positions, while other classes span two or more positions. Finally, verb stems exhibit considerable lexicalization, resulting in hierarchical layering which intersects the basic templatic organization.

This description of the Caddo verb has two principal consequences. First, it makes available primary data of a terminal language on which little material is published. It thus responds to the urgency for linguists to procure as much primary information as possible, and to make the data generally available. Second, this analysis explores several topics of interest to current linguistic research, including polysynthesis, template morphology, noun and verb incorporation, realis-irrealis marking, and AGENT-PATIENT case patterning.

LIST OF ABBREVIATIONS

A	adjective/adverb
ABS	absolutive
AND	andative
AGT	grammatical agent
APP	dative applicative
CAUS	causative
CIS	cislocative
COND	conditional
CONT	continuative
CONTR	contrastive
COOR	coordinator
DAT	grammatical dative
DEFOC	defocusing
DESID	desiderative
DIM	diminutive
dir	directional
DIST	distributive
DU	dual
FUT	future
GEN	general, generic
HAB	habitual
HORT	hortative
IMP	imperative
IMPFV	imperfective
INDV	individuative
IND	indicative
INDISCR	indiscriminative
INFREQ	infrequentive
INST	instrumental
INTENT	intentive
INTER	interrogative
IRR	irrealis
ITER	iterative
LOC	locative
MAN	manner
MID	middle
MIR	mirative
N	nominal
NEG	negative
NOM	nominalizer
NUM	number
OBL	oblique
OBLIG	obligative
PART	participle
PARTIC	particular
PAT	grammatical patient
PERF	perfect
PL	plural, animate plural
pos	positional
POSS	possibility
POST	postural
POTENT	potential
PROHIB	prohibitive
PRIOR	prioritive
REL	relativizer
RESULT	resultative

SG	singular	VAR	varietive
SIM	simulative	#	clitic boundary
SUB	subordinator	-	morpheme boundary
T/A	tense/aspect	=	position of animate plural
TAM	tense/aspect/mood	1	1st person
TEMP	temporal	2	2nd person
TRAN	transitivizer	3	3rd person
TRANSLOC	translocative		

CHAPTER I

THE CADDO VERB: ORIENTATION AND OVERVIEW

0. INTRODUCTION

The principal task of this thesis is to describe the polysynthetic verb morphology of the moribund North American Indian language Caddo. Verb structure is derived by position-class analysis and is shown to be templatic with intersecting hierarchical layering. Caddo verb morphology is addressed in terms of the semantic composition of the verbal categories and the function of their constituent morphological classes and morphemes.

This enterprise has two principal consequences. First, it makes available primary data of a terminal language on which little material is published. It thus responds to the urgency for linguists to procure as much primary information as possible, and to make the data generally available. Second, this analysis of the Caddo verb addresses several topics that are of considerable interest to current linguistic research, including the nature of polysynthesis, template morphology, noun incorporation, and AGENT-PATIENT case marking.

The organization of this chapter is as follows: In the first section, I provide a few background remarks on the Caddo people and language. I focus on the current state of the language, detailing some of its characteristics as a language in advanced obsolescence. I then provide a summary of the research that has been published to date on the Caddo verb.

Section 2 begins with a general discussion of polysynthesis and template morphology. Here, I provide a summary of Caddo position classes. Each position class is identified and includes a reference to the particular chapter contained in this thesis where the constituent categories are discussed in full. Then, using the Caddo verb as an example, I distinguish some of the characteristic features of template morphology, including lexicalization and layering, discontinuous dependency, spanned ordering, and affix homophony. In the last section, I provide an outline of the chapters contained in this thesis.

1.0. Background

The Caddo people today comprise approximately thirty-five hundred registered tribal members, most of whom live in southwestern and south-central Oklahoma, predominantly in or near the towns of Binger, Gracemont, Ft. Cobb and Anadarko. They collectively refer to themselves and to their language as Hasinai (*hasí·nay*). At the time of European contact, the Caddos are reported to have been living in the region that includes current northeastern Texas, northwestern Louisiana, southwestern Arkansas and southeastern Oklahoma. They were largely concentrated in two major clusters of towns, the southern, Hasinai group, principally distributed along the Neches

and Angelina Rivers of northeastern Texas, and the northern, Kadohadacho (*kaduhdá·ču?*) group, centered along the stretch of the Red River that constitutes the Texas-Arkansas border (Bolton 1987:25-28; Carter 1995:5; Swanton 1942:8, fig. 1; Chafe in press).

The Caddo language is the most divergent member of the Caddoan language family which also includes Pawnee, Arikara, Wichita, and Kitsai.[1] See Chafe (1976:11-16, 1979), Parks (1977), and Taylor (1963a) for research that includes evidence of inter-Caddoan relationship. See Lesser and Weltfish (1934) for a general statement of Caddoan relationship and Taylor (1963b) for a discussion (including comprehensive bibliography) of the history of Caddoan research.

1.1. Present-day Caddo

Except for a diminishing number of elders who are all bilingual in English, the Caddo language is no longer spoken.[2] While no systematic study of fluency has been undertaken, it is my impression, based on fieldwork and the estimation of speakers with whom I have studied, that the most competent speakers (see below) are all above seventy years of age. However, there is considerable variation in proficiency among this group. At the upper end are individuals who grew up speaking Caddo as their first language and maintained their fluency through home use and regular social interaction

[1] Kitsai is no longer spoken (see Bucca and Lesser 1969:7). Pawnee, Arikara, and Wichita are all in an advanced stage of obsolescence (Parks 1976:2; Rood 1976:vii).

[2] Caddo speakers themselves estimate that their number ranges from less than ten to thirty. The lower end of the continuum is equated with people who can speak Caddo very well, specifically with a broad vocabulary and using little English. The standards corresponding to the higher end are proportionately looser.

with other fluent speakers. This group most closely corresponds to Dorian's (e.g. 1973, 1978) *older fluent speakers*. Yet unlike Dorian's fluent population who habitually uses the native language, this group of Caddo speakers has not spoken Caddo regularly in probably twenty-five years.[3] While their recollection of the (formerly) low-frequency vocabulary items is increasingly limited, their speech is more grammatically consistent than any other group, and they can produce complex grammatical constructions, notwithstanding some uncertainty of pronunciation. Furthermore, this group recognizes morphologically complex words that were recorded when the language was much more active.[4]

The middle range of speakers (age sixty-five and up) are *semi-speakers* in Dorian's sense; this group learned Caddo at home, but as adults lacked the regular social interaction in Caddo of the fluent speakers. In general, semi-speakers understand the speech of the more fluent individuals, but are able to produce only high frequency lexical items and construct simple sentences. They fail to recognize the morphologically complex words of the previous generation.

The last group of 'speakers' constitutes the lowest end of proficiency and range from fifty years of age on up. These are who Dorian terms *passive bilinguals*. The individuals in this group grew up hearing some Caddo in their homes but never

---

[3] Today, Caddo is rarely spoken outside of the highly circumscribed contexts of greetings, songs and prayers. It is difficult to measure the extent to which Caddo is used outside of this ceremonial, formulaic sphere. The Caddo speakers with whom I have studied, however, agree that for many years Caddo has not, to their knowledge, been habitually spoken in private homes.

[4] Recordings of Caddo texts collected by Wallace Chafe in the 1960s were played to a number of Caddo speakers who were asked to gloss individual lexical items in context.

mastered speaking it. They have difficulty constructing, or are unable to construct, a simple, coherent sentence.

Caddo is thus at a very advanced stage of language death. Perhaps the most obvious symptom of morbundity is lexical loss,[5] but other types of simplification processes are also noted.[6] Two of the most salient features of obsolescence in Caddo include the lack of active phonological changes in the language and morphological simplification.

Caddo once consistently distinguished between two forms of speech, fast speech and slow speech. This distinction was based on phonological changes in progress in the language; slow speech preserved earlier phonological formations while innovative forms were found in fast speech (Chafe in press). The difference between these two speech forms thus reflected the regular processes of sound change operative in the language. Knowledge of slow speech formation by the older, more linguistically experienced generation of speakers separated them from the younger generations; whether the speech forms themselves were directly linked to any particular ethnolinguistic register, style, or genre is unknown.

As a general characterization, fast speech was the unmarked, everyday form of the language used in connected discourse. Slow speech, in contrast, was employed when disambiguation and comprehension were maximally required. Example (1) illustrates the distinction between these two speech forms in an excerpt from a text provided by an elderly Caddo speaker in 1967 (Chafe in press: line 10):

---

[5] See, for example, Bloomfield (1927) and Miller (1971).

[6] See Dorian (1978) and references cited therein.

(1)	fast	*ʔínnia*	*túkkuašʔnáwwáhdiʔnA*
	slow	*ʔínniyah*	*túkkuhašʔnáwyáhdiʔnaʔ*
		somewhere	maybe she will feed me.

Chafe observes that fast speech and slow speech are principally contrasted word internally by the loss of intervocalic resonants and *h* in fast speech. At word boundaries *h* and *ʔ* are subject to loss, and at the end of sentences syllables otherwise ending in *ʔ* are often devoiced (Chafe: in press). We see all of these traits exemplified in (1), where those segments that are lost or altered in the fast speech form are underlined in the slow speech representation. So in the first word, intervocalic *y* and word final *h* are dropped; in the second word, which completes a sentence unit, intervocalic *h* and word-final *ʔ* are lost. The loss of *ʔ* triggers the devoicing of final unstressed *a*, represented by voiceless *A* in the fast speech form. The deletion of *y* with lengthening of the preceding *w* in the second word reflects the regular phonological simplification process of forward assimilation of resonants.

In contrast to the above exemplified situation, present-day Caddo speakers do not consistently distinguish between slow and fast speech forms. For many, the fast speech forms of the previous generation are the only known speech forms. Thus, normal sound change has almost completely run its course in Caddo.

Finally, the ability to formulate complex morphological constructions is diminishing. Periphrastic constructions are replacing the former morphological ones and productive verb-stem morphology is limited to very few elements. For example, based on fieldwork predominantly undertaken in the 1960s, Chafe (1976:74) reports that verbal events that are conceived as occurring or existing while the patient

involved in them is in a sitting, standing, or lying posture are often expressible by single, morphologically complex words. He gives the following examples:[7]

(2) *háh ʔawis ʔnássa ʔ*
hák# ʔawis- ʔa=nát -sa ʔ
IND sitting be.cold IMPFV
(He) is cold while sitting.

(3) *háh ʔánkis ʔnássa ʔ*
hák# ʔanikis- ʔa=nát -sa ʔ
IND standing be.cold IMPFV
(He) is cold while standing.

(4) *háh ʔini·nássa ʔ*
hák# ʔini- ʔa=nát -sa ʔ
IND lying be.cold IMPFV
(He) is cold while lying.

The postural class of elements, consisting of *ʔawis-* 'sitting', *ʔanikis-* 'standing' and *ʔini-* 'lying', is no longer productive for a number of present-day speakers. These speakers are only able to produce the periphrastic counterparts to the above constructions, where the postural element is combined with a following copula, constituting a separate word:

(5) *háh ʔánássa ʔ* *háh ʔáwsa ʔ*
hák# ʔa=nát -sa ʔ *hák# ʔawis- ʔa ʔ*
IND be.cold IMPFV IND sitting be
(He) is cold while sitting.

[7] From this point forward, all examples are given in their slow speech forms. The overwhelming majority of examples derive from Chafe's unpublished corpus of data and are referenced by a letter-number sequence that corresponds to his original notations (see section 1.2 for further comment). Examples derived from my own notes are left unmarked. Following Chafe (1976, 1977, 1979, 1983, 1990, 1995), individual morphemes are internally reconstructed, underlying forms; their shape and identification are based on Chafe's dictionary in progress. Chafe's original presentation of Caddo forms are modified in the following two ways: i) the boundary between verbal proclitics and the rest of the verb complex is indicated by '#'; ii) the position of the animate plural infix in complex verb roots is indicated by the symbol '=' (see Chapter V, section 1.2).

(6) *háh ʔánássa ʔ* *háh ʔánkisa ʔ*
hák# ʔa=nát -sa ʔ *hák# ʔanikis- ʔa ʔ*
IND be.cold IMPFV IND standing be
(He) is cold while standing.

(7) *háh ʔánássa ʔ* *háh ʔín ʔa ʔ*
hák# ʔa=nát -sa ʔ *hák# ʔini- ʔa ʔ*
IND be.cold IMPFV IND lying be
(He) is cold while lying.

1.2. THE STATE OF RESEARCH

There is, to date, little published material available on the Caddo language, and no full treatment of any part of Caddo grammar has been published.[8] Among the existing studies generally available, the following works offer analyses specifically on aspects of Caddo verb morphology.

Chafe (1968) proposes a methodology for phonological rule ordering, exemplifying his procedure by deriving morphologically complex Caddo verbal formations from their constituent, internally-reconstructed morphemes. Several of the phonological rules posited in Chafe's work are discussed in Chapter II, section 2 of this thesis.

Chafe (1976:44-52, 64-82) offers the first, brief synchronic description of the Caddo verb, providing an introductory sample of the kinds of morphological processes identified in the Caddo verb complex. Also, by comparing Caddo forms with similar elements in Siouan and Iroquoian languages, Chafe suggests several hypotheses about the possible remote origins of particular Caddo verbal elements.

[8] There is, however, a substantial amount of non-published information on the Caddo verb stem. Chafe has begun preparations for a Caddo dictionary and grammar, based on his extensive field work with the language since the late 1950s to the present day.

The functions of the Defocusing prefixes, a special class of Caddo third person pronominal markers, are examined in Chafe (1990). This work is reviewed in detail in Chapter III, section 2.3. Chafe (1995) discusses the encoding of reality and irreality in the Caddo pronominal prefixes. Chapter III, section 4 is largely an expansion of Chafe's efforts in this area. Finally, Chafe (in press) provides a very useful description of Caddo verb morphology, phonology and discourse structure, illustrated in a short, exemplary text.

Mithun (1984:864-866) offers a brief analysis of noun incorporation in Caddo as part of a larger effort to distinguish both noun incorporation types and the distinct stages of incorporation through which incorporating languages may pass.

Mithun (1991) presents a crosslinguistic investigation of agentive case marking in which the semantic basis of the Caddo case system is specifically treated. I review and expand her analysis in my discussion of case in Chapter III, section 3.

Elaborating predominantly on Chafe's studies, Melnar (1993) proposes a preliminary analysis of Caddo verb-stem classes. This investigation includes an analysis of the Caddo preverb, a largely opaque class of elements in the Caddo verb stem, hypothesizing its probable diachronic sources. Melnar (1995) presents a semantic analysis of the basic Caddo motion-verb roots along with a description and positional analysis of the verb-stem morphological categories associated with these basic forms. Melnar (1996) identifies some of the members of the locative class in the Caddo verb stem, using both Caddo-internal data and comparative data based on Wichita and Pawnee. Some hypotheses relating to the structure and function of specific classes of the Proto-Caddoan verb stem are also given, based on her findings.

The present work purports to describe Caddo as an active, vital language; thus, the analysis of the Caddo verb which follows is principally based on Chafe's published works, unpublished notes, dictionary in progress, and corpus of data. Chafe collected the majority of his data at a time when Caddo was in regular use and the verb morphology was still largely productive. My own notes and data, stemming from field work beginning in 1990, supplement Chafe's more complete language base. All analyses and conclusions are my own.

2.0. The Caddo verb

The Caddo verb is a polysynthetic complex, exhibiting both hierarchical and templatic morphology. Polysynthesis is introduced in the next subsection as the defining characteristic of the Caddo verb. Templatic structure is addressed in section 2.2.

2.1. Polysynthesis

Robins (1967:177) summarizes Wilhelm von Humboldt's definition of 'polysynthesis' as "the essential structure of the sentence is incorporated into a single word" (quoted in Denny 1989:230-231). Traditionally, 'polysynthetic' has been used as a typological term to designate the morphological structure of many Native American languages where semantically important elements, such as the patients of verbs, are expressed by bound forms, which often formally resemble free forms, minus any syntactically relevant inflections (Bloomfield 1933:208; Comrie 1989:45; Sapir 1921:123; Spencer 1991:38). Sapir (1921:ch. VI), in revising morphological typology,

delimits the meaning of 'polysynthetic'. He divides the traditional typological scheme into two parameters, each arranged in terms of relative degree. One parameter reflects the degree of alteration of morphemes; the other reflects the number of morphemes per word. Morphological constructions exhibiting the highest number of morphemes, particularly multiple roots, are termed 'polysynthetic'.

Currently, 'polysynthetic' is generally understood as Sapir defines it, that is, as the upper end of a continuum of morphological synthesis. 'Polysynthesis' then is the combination into one word of potentially many morphemes, whether grammatical or lexical, reflecting a variety of semantic categories. These morphological constructions can be impressively long and typically have the scope of sentences in their propositional content.

Polysynthetic structure is easily exemplified by Caddo verbs. Consider the verb from example 1, repeated below:

(1) *túkkuhaš'náwyáhdi'na'* (Chafe in press: line 10)

túk#	*ku-*	*haš'náw-*	*yáh*	*-di'n*	*-'a'*
POTENT	1PAT	meal	eat	CAUS	FUT

maybe someone will feed me

The verb *túkkuhaš'náwyáhdi'na'* 'maybe someone will feed me' consists of six, categorically distinct morphemes. *túk#* 'potential' is an evidential proclitic that denotes a probable situation, as judged by the speaker. *ku-* is the 1st person, PATIENT-case pronominal prefix. The third morpheme, *haš'náw-* is an incorporated noun root meaning 'meal'. The verb root in the construction is *yáh* 'eat'. This morpheme is followed by *-di'n*, a causative suffix and *-'a'*, the future tense morpheme. A literal gloss of this verb in English that overtly reflects all of these six categories might be

'maybe someone will cause me to eat a meal'.[9] As this gloss indicates, the Caddo verbal construction is a complete proposition.

An interesting organizational feature of many polysynthetic constructions, including the Caddo verb, is its templatic structure. In the following subsection, the basic characteristics of template morphology are reviewed.

2.2.0. TEMPLATE MORPHOLOGY

Morphological systems are often characterized as either hierarchical or templatic. Hierarchical word-formation is described as the one-by-one addition of affixal and other morphemes to the word base. Such morphologies have a transparent structure, where the meanings of words are determined compositionally from the meanings of the component morphemes. In templatic morphological systems, on the other hand, the morphemes of a word are arranged into classes which are assigned to fixed positions in a template. In templatic morphology, there is typically no clear sense that word-formation is the one-by-one addition of morphemes (Spencer 1991:208).

In verbs exhibiting templatic morphology, the stem, its obligatory and optional affixes and compounded roots are organized into paradigmatic sets or *position classes* of often, but not necessarily, similar function which occupy their own particular slot in the verb complex. The members of each position class are in a disjunctive relation to each other; that is, the occurrence of one morpheme of a given set excludes the presence of any other constituent morpheme of that same set in any single layer of

[9] The 3rd person, here glossed 'someone', is unmarked.

stem derivation (see below). Position classes are relatively ordered independent of any discernible, compositionally-relevant constituent structure. Now, position classes may subsume a smaller local order of classes. These constituent classes require a relative, adjacent ordering among them and are usually, but not always, functionally coherent (see section 2.2.1, below).

2.2.1. Position Class Analysis of the Caddo Verb

In this section I describe the basic structure of the Caddo verb complex, followed by a position-class analysis of the verb template. After reviewing some of the mechanics of the position-class approach, I address particular problems regarding template morphology in general and the Caddo verb in particular.

The structure of the Caddo verb word is morphologically complex. The core of each verb is the stem, which can be simple or derived. The stem includes the verb root and derivational affixes and compounded roots, if any (see below). To the verb stem inflectional affixes and clitics are attached. Inflectional categories occur before, after, and inside the stem. Positioned at the left edge of the verb are the tense/aspect/mood (TAM) proclitics. Immediately following the TAM proclitic class is the person class; the person category subsumes person, case, and reality distinctions. At the right edge of the verb are tense and aspect T/A suffixes. All Caddo verbs are inflected for person, case, reality, and, with exceptions, TAM.[10] This minimal verb structure is presented in Table I-I.

[10] 3rd person is unmarked and direct commands are not inflected for TAM.

TABLE I-I: Minimal verb structure

TAM# PER- STEM -T/A

The template of the entire verb complex is presented in Table I-II. This table shows that the Caddo verb template consists of twenty-six identified positions. Each position is formally represented by a column in the template. Included among these twenty-six positions are three positions which span two or more other positions (see section 2.3.3).

Each position is associated with a morphological class, and each position class is labeled in the uppermost row by its general semantic-functional role. This row also includes a reference to the chapter where each class is specifically addressed. The chapter number is given in parentheses. Each position is assigned a number in the second row. Following Kari (1989:424-454), numbering is relative to the verb root at zero; prefixes are numbered positively from right to left while suffixes are numbered negatively from left to right.

Spanning positions are numbered with Roman numerals. Thus, position Roman numeral I is associated with the manner class, position Roman numeral -I is associated with the inchoative class, and position Roman numeral -II, the Diminutive class.

Note that two positions, 8 and 4, are further divided into local constituent orders which are indexed from right to left alphabetically in the third row. The functional specifications for the local orders are given in row (4).

Each position class includes at least one constituent member. So for example, position 2 is the continuative position and includes the single morpheme *hana-*.

TABLE I-II: Caddo verb template

1	TAM	PER	INTER	DU	DUR	DIST	APP	PAT		MAN	ABS NUM	DIST	LOC		POST	CONT	TRAN
	(IV)	(III)	(IV)	(V)	(IV)	(V)	(VI)	(VII)		(VII)	(V)	(V)	(VII)		(VII)	(IV)	(VI)
2	15	14	13	12	11	10	9	8		7	6	5	4		3	2	1
3								B	A				B	A			
4								pat	pat/ inst/loc				loc/ pos/dir	pos/dir			
1												MAN (VII)					
2												1					

1	ROOT/ STEM	CAUS	AND	MID	CIS	ITER	INTENT	T/A
	(VII)	(VI)	(IV)	(VI)	(IV)	(IV)	(IV)	(IV)
2	0	-1	-2	-3	-4	-5	-6	-7
3								
4								
1	ANIM PL	INCH				DIM		
	(V)	(IV)				(IV)		
2	(infix)	-I				-II		

(1) General functional role of position class, chapter in parentheses where addressed
(2) Position class template number
(3) Local constituent order
(4) Local order functional specification

Position 1 is a transitivizer position; it consists of two morphemes, the portative *ni-* and the causative *yán-*. These two morphemes, in belonging to the same positional class, are mutually exclusive in any Caddo stem.

As noted, position classes may subsume locally ordered constituent positions. The patientive class of position 8 consists of two subpositions: 8A and 8B. Subposition 8A consists largely of incorporated noun roots denoting body parts that designate verbal patients, instruments, and locations; 8B comprehends the entire patientive class (including body parts), and generally has a patientive function. When both local orders of position 8 cooccur in a single layer of derivation, the prefix of 8B functions to delimit the type or kind of element designated in 8A. (8) through (10) provide examples:

(8) *haka?aw?* *kínkammač'ah* (Chafe 1977:31)
ha- *ka?aw?* *kín-* *kan-* *wak-* *ya?ah*
A deep PAST.QUOT liquid mouth be
something deep, they say it was a waterhole

(9) *dah?i·dakáywa?ut* (Chafe 1977:41)
yah?- *wiht-* *ya?k-* *háy=wa?ud*
2AGT DU wood look
you two look for a tree

(ii) *ha?ímáy* *kahdahsukah?i?*
ha- *?imay* *kak#* *ya?k-* *sukah-* *?i?*
A big SUB wood ear have
that has a big hollow

(10) *háhutcu?náh?náw?uhsa?* (Chafe d670)
hák# *nu-* *t-* *cut-* *nahk-* *náw=?uh* *-sa?*
IND 3DAT APP tail bone have.an.ache IMPFV
his back is sore

In example (8), *kan-* 'liquid' modifies *wak-* 'mouth', to yield a particular type of aperture in the earth's surface, a water hole. In (9) *ya?k-* 'wood' modifies *sukah-* 'ear', designating a tree hollow. Finally in (10), *cut-* 'tail' specifies the type of bone (*nahk-*) that is hurting, i.e. the *spine* (more generally, the back).

The other instance of local ordering in the template is represented by locative position 4. The locative position subsumes elements that include the semantic features of location, direction, and position. When two locative elements occur in a single stem, the rightmost element of 4A generally refers to a position or direction; the element of 4B may designate a direction, position, or location.[11] Thus:

(11) *hítci·wida?bin?* *nidun* (Chafe a533)
hít# *ci-* *?awi-* *da-* *(?i)bi?n* *nidun*
PAST 1AGT above hanging hit ball
I hit the ball in the air

(12) *hawatnukahíhšiyah* (Chafe b123)
hawat- *nukah-* *hík* *-šiyah*
liquid under be.stuck TRANSLOC.PERF
he's stuck under water over there

2.3.0. COMMON FEATURES OF TEMPLATE MORPHOLOGY

There are several characteristics of templatic organization that conspire to make its analysis particularly challenging. These include layering, discontinuous dependency, spanned ordering, and affix homophony, among others. Each of these topics is taken up below. Their discussion is based on Grimes (1967:437-440, 1983:5) and Spencer (1991:208-214).

[11] Melnar (1996:600) analyzes composite locatives as occupying one postion in the verb stem template. An analysis allowing for local ordering is preferable in that it disambiguates these complex locatives into their functionally specified component parts.

2.3.1. LAYERING

A common feature of templatic systems is layering, where one basic, lexicalized stem is used as the core for another stem derivation (Grimes 1983:5). Layering is a hierarchical word-formation process that, in Caddo, intersects the basic templatic morphological organization. As an example, consider the following forms, where the class function, position class number, and gloss of each constituent morpheme is given:

(13) *kahbinnahní·ʔah* (Chafe x733)

	kak#	*binʔn-*	*na-*	*hani-*	*yaʔah*
func	TAM	PAT	DIST	ABS.NUM	ROOT
num	15	8	5	6	0
gloss	SUB	belly	DIST	ABS.PL	be

(that which are) stoves, stomachs

(ii) *kahyabíwcudahní·ʔah* (Chafe g646)

	kak#	*yabíw-*	*cu-*	*dak-*	*hani-*	*yaʔah*
func	TAM	PAT	LOC	LOC	ABS.NUM	ROOT
num	15	8	4B	4A	6	0
gloss	SUB	stump	pile.form	sticking.up	ABS.PL	be

(that which are) stumps (e.g. in the yard)

Notice that in both examples, relative position class order appears to be violated. Specifically, in (13i) a position-class 5 morpheme (*na-* 'distributive') occurs to the left of a position-class 6 morpheme (*hani-* 'absolutive plural'). In (13ii), two position-class 4 locatives occur to the left of the position-class 6 absolutive plural.

In these examples, however, *hani-yaʔah* is a lexicalized stem meaning 'be several'. This stem commonly cooccurs, as it does here, with position-class 8 patientives. As a lexicalized stem, *haniyaʔah* constitutes one layer of derivation and

formally occupies one position in the verb template, i.e. 0, the root/stem position. This is illustrated in example set (14), where the forms from (13) are reanalyzed.

(14) *kahbinnahní?ah* (Chafe x733)

	kak#	*bin?n-*	*na-*	*haniya?ah*
func	TAM	PAT	DIST	STEM
num	15	8	5	0
gloss	SUB	belly	DIST	be.PL

stoves, stomachs

(ii) *kahyabíwcudahní·?ah* (Chafe g646)

	kak#	*yabíw-*	*cu-*	*dak-*	*haniya?ah*
func	TAM	PAT	LOC	LOC	STEM
num	15	8	4B	4A	0
gloss	SUB	stump	pile.form	sticking.up	be.PL

stumps (in the yard)

Obviously, failure to recognize layered verb-stem constructions can greatly obfuscate a position class analysis, where a principal objective is determining the relative order of position classes. [12] As a final example of layering, consider the verb below, where the same morpheme occurs twice.

(15) *?anàn·naší·yah* (Chafe c505)

?anas-	*na-*	*na-*	*šíy*	*-ah*
foot	DIST	DIST	swell	PERF

his feet were swollen

As in the former examples, the verb in (15) consists of two layers of derivation. The distributive morpheme, *na-*, that is prefixed directly to the root *šíy* 'swell', is actually part of the primary stem. In fact, all occurrences of *šíy* in the Caddo database are accompanied by this distributive marker. Thus *našíy* is the lexicalized stem meaning

[12] Unless otherwise noted, in examples of verb stems which exhibit secondary derivation, the innermost stems are presented as single units, occupying the ROOT/STEM (0) position.

'swell'. The second distributive marker in the construction functions to indicate the spreading-out of swelling over an area, i.e. a person's *feet*. This distributive marker is optional; thus, it is equally possible to indicate 'foot swelling', without specifying the distribution of the swelling event:[13]

(16) *hákku·náy·šíˑsa?* (Chafe g778)
hák# ku- ?anas- našíy -sa?
IND 1PAT foot swell IMPFV
my foot is swelling

2.3.2. DISCONTINUOUS DEPENDENCY

Discontinuous dependency in templatic systems refers to non-local dependency between positions. This feature of templatic morphology thus results in interrupted constituency. A typical discontinuous stem in Caddo is formed with a position 14 DATIVE prefix and a position 9 dative-applicative prefix. Except in particular contexts (see Chapter III, sections 2.0-2.2), the occurrence of one of these prefixes always conditions the occurrence of the other. [14]

(17) *háhnu ?átwatti ?a?* (Chafe b147)
hák# nu- ?iyá- t- hawat- ?ini- ?a?
IND 3DAT DUR APP liquid lying be
hers is soaking

(18) *kah ?ukakín ?nah* (Chafe c392)
kak# ?u- kaki- ˊn- n- ?ah
SUB DEFOC.DAT VAR APP song be
someone's various songs

[13] See Chapter V, section 2.0 for a discussion of Caddo distributive markers.

[14] See Chapter III, section 3.3 for the different functions of DATIVE-case morphology, and see Chapter VI, section 1.4 for the functions and different forms of the dative-applicative prefix.

(19) *kúyttu ʔítcah* (Chafe d995)
kúyt# *nu-* *wiht-* *t-* *yah*
WHERE.INTER 3DAT DU APP be
where is theirs?

2.3.3. SPANNED ORDERING

Another characteristic of template morphologies is spanned ordering. Within the Caddo verb stem, for example, there is a class of elements that specify the manner in which an absolutive referent of the verb is moving. This class obligatorily occurs with motion verb roots and absolutive number markers of position 6. It spans positions 1 through 5 in the template; that is, it occurs between positions 0 and 6 and does not cooccur with positions 1-5. Spanning positions are indicated by Roman numerals in the verb template. The manner class occupies position I. Two members of this spanning class include *dakán-* 'loping motion' and *yas-* 'running motion'. See examples (20) and (21).

(20) *kíh ʔáwdakán· ʔat* (Chafe i951)
kík# *ʔawi-* *dakán-* *ʔa=d*
PAST.SUB ABS.SG loping go
the one that loped off

(21) *ʔáwyáhdah* (Chafe d943)
ʔawi- *yas-* *kid* *-ah*
ABS.SG running pass.by PERF
he ran by

2.3.4. AFFIX HOMOPHONY

A final characteristic of template morphologies to be discussed is affix homophony, of which there are two types (see Spencer 1991:211-212). In the first type, a single morpheme is a constituent of two or more position classes, and its

specific meaning depends on the particular position in which it occurs. The position, then, contributes to the total meaning of the formative. For example, the form *ʔini-* in Caddo occurs in the postural class of position 3 where it means '(while) in a lying posture' (see examples 4, 7, 22 and 23). It also occurs in the position 4 locative class, in which case it means 'horizontal surface'. See examples (24) through (26).

(22) *kakinihay* (Chafe f505)

kak#	*yi-*	*ʔini-*	*háy*
15	14	3	0
SUB	DEFOC.AGT	lying	rise

for one to get up from a lying position

(23) *dáškat dà·niká·wani ʔ* (Chafe f520)

dáškat	*yahʔ-*	*ʔini-*	*káʔ=wanini*	*-ʼiʔn(i)*
	14	3	0	-1
bread	2AGT	lying	turn.over	CAUS

turn the bread over

(24) *hítʔiniwʔsah* (Chafe f453)

hít#	*ʔini-*	*biʔ=sak*
15	4	0
PAST	horizontal.surface	step.on.forcefully

he trampled it, stomped it

(25) *hítʔini·yahdanʔ* (Chafe g425)

hít#	*ʔini-*	*ʔayah=dáʔn*
15	4	0
PAST	horizontal.surface	pull

he dragged it

(26) *ʔínkaʔahniʔwaʔ* (Chafe g091)

ʔini-	*kaʔah-*	*niʔ*	*-ʔaʔ*
4B	4A	0	-7
horizontal.surface	under	stay	FUT

he will stay under

In the second type of affix homophony, two or more phonologically identical elements have unrelated meanings and are distinct morphemes. *ʔawi*, for example, is the phonological shape for several distinct verb-stem elements. As a verb root it signifies 'sit' (27). There are three position-class 4 locatives of this shape: one denotes oblique position or 'projecting out horizontally' (28, 29); another means 'goal, limit' (30, 31); the third *ʔawi-* of the locative class signifies 'above, up' (32, 33). As a number marker of position 6, it marks 'singular absolutive' (compare 34 and 35).

(27) *háhʔakaá·wisaʔ* (Chafe c096)

hák#	*ʔakayá-*	*ʔawi*	*-saʔ*
15	4	0	-7
IND	fire	sit	IMPFV

he's sitting by the fire

(28) *kúhʔáwdatčah* (Chafe a678)

kúk#	*ʔawi-*	*datčah*
15	4	0
LOC.SUB	projecting.out.horizontally	stand

porch, where it sticks out horizontally

(29) *ʔáwyawaháhʔnah* (Chafe f128)

ʔawi-	*yah-*	*wa=tak*	*-ʔiʔn*	*-ah*
4B	4A	0	-1	-7
oblique	by	stand.PL	CAUS	PERF

they leaned it

(30) *katʔíddan* (Chafe f031)

kan-	*ʔawi-*	*dda=n*
8	4	0
liquid	limit	fill

the water bucket is full

(31) *háhʔáwkatá·disaʔ* (Chafe b980)

hak#	*ʔawi-*	*kát-*	*hákid(i)*	*-saʔ*
15	4B	4A	0	-7
IND	goal	behind	pass.by	IMPFV

he falls short, doesn't reach it

(32) *ci·wičahkah* (Chafe g364)

ci-	*ʔawi-*	*`čahk*	*-ah*
14	4	0	-7
1AGT	above	shoot	PERF

I shot it in the air, on the fly

(33) *kaki·wiʔá·nih* (Chafe j025)

kak#	*yi-*	*ʔawi-*	*ʔánih*
15	14	4	0
SUB	DEFOC.AGT	above	hold

for one to hold up in the air

(34) *háhʔáwnánní·yah* (Chafe j010)

hák#	*ʔawi-*	*nányi=yah*
15	6	0
IND	ABS.SG	trot

he is trotting along

(35) *háhánánní·wá·yah* (Chafe j011)

hák#	*hani-*	*nányi=wa=yah*
15	6	0
IND	ABS.PL	trot.PL

they are trotting along

ʔawi(-) has several historical sources to which these separate meanings may be traced. See Melnar (1996) for a comparison of locative class *ʔawi-* with related forms in the other Caddoan languages.

3. OUTLINE OF CHAPTERS

Chapter II constitutes a basic introduction to Caddo phonology. In addition to describing the Caddo phoneme inventory, I review the major phonological process types observed in the Caddo verb. This review is designed particularly to assist the reader in understanding the Caddo examples used throughout this work.

Chapter III investigates the Caddo pronominal prefix system, which includes 24 distinct pronominal forms marking 32 different combinations of person, case, and reality. There are four persons (1st, 2nd, 3rd, and Defocusing), three cases (AGENT, PATIENT, and DATIVE) and two reality distinctions (realis and irrealis). The semantics of person, case, and reality are described and the particular functions of the different pronominal markers are reviewed.

The fourth chapter is concerned with a broad range of inflectional, derivational, and adverbial categories, including tense, aspect, mood, negation, subordination, and other adverbial distinctions. These categories are manifested in eleven position classes and include a total of some 200 constituent morphemes. However, most categories and most of the 200 morphemes are realized at the peripheries of the verb, i.e. at the left edge (position 15) and/or at the right edge (position -7).

Caddo number and distribution are discussed in Chapter V. There are three number categories (dual, animate plural, and absolutive number) and two distributive categories marking three types of distribution ('general' distributive, individuative, and varietive) in the Caddo verb template. Except for inclusive and exclusive dual constructions and some stems that obligatorily mark absolutive number, all number and distribution categories are optionally realized in any given verb; furthermore, as long as semantic integrity remains unviolated, two or more markers from distinct number and/or distribution categories may be associated with the same verbal argument.

The sixth chapter explores voice and valency alterations in the Caddo verb. I discuss both the four valency-increasing constructions in Caddo, including the general

causative, portative, mild causative, and dative applicative constructions, and the one valency-reducing construction, the middle voice construction.

In Chapter VII, the postural, manner, locative, and patientive classes are described, along with verb-stem compounding. Each of the four classes functions to provide information about the absolutive argument of the verb. Compounding, which most often involves the nominalization of the secondary stem, also involves the absolutive argument. The nominalized stem functions to designate the type or kind of absolutive referent.

In Chapter VIII, I provide a brief summary of the Caddo verb and review the most salient patterns of Caddo verb morphology. These include the pervasive marking of animates (especially humans) and arguments bearing an absolutive relation to the verb.

CHAPTER II
PRELIMINARIES: CADDO PHONOLOGY

0. INTRODUCTION

This chapter provides a discussion of the major phonological patterns evidenced by the Caddo verb. Following the conventions established in Chafe (1968, 1976), Caddo morphemes are internally reconstructed forms that relate to actually pronounced forms by phonological rules reflecting inferred historical changes. As Chafe (1968) demonstrates, the Caddo verb has undergone numerous, complex sound changes over time, the result of which is a blurring of morphological boundaries and often extreme, unpredictable allomorphy. Because of these and other factors, Chafe argues that it is advantageous to represent Caddo morphemes as internally-reconstructed symbolizations from which actually pronounced forms are derived by a series of phonological processes reflecting historical changes.

This strategy of morpheme presentation is followed throughout the present work. All examples, except those included in sections 2 and 3 of this chapter (see section 2.0 below), are cited in an interlinear format where the first line provides the phonetic or pronunciation form of a Caddo word, and the second line provides the

reconstructed forms of the word's constituent morphemes. This convention ensures that the boundaries between morphemes are apparent.

The following phonological description is not exhaustive, rather, it is intended as a practical guide to understanding the relation between Caddo morphemes and their realizations as morphs in actually pronounced Caddo words. Section 1 describes the phoneme inventory and orthographic conventions followed throughout this thesis. Section 2 reviews the major phonological processes that relate underlying structure to phonetic form. In section 3, certain phonological processes that are triggered by particular morphemes, including epenthesis and high tone assignment, are described. These latter type of processes are reflected in the representation of the triggering morphemes.

1.0. PHONEME INVENTORY AND ORTHOGRAPHIC CONVENTIONS

This section presents the surface phoneme inventory of Caddo and discusses the orthographic conventions used throughout the work. Section 1.1 describes the Caddo consonant inventory, section 1.2, the vowel inventory, and 1.3, the orthographic conventions that pertain to length and tone. This presentation is based on Chafe (1976:56, in press).

1.1. CONSONANTS

The Caddo surface consonantal inventory consists of the nineteen segments shown in Table II-I. The consonants are divided into three major classes: obstruents, resonants, and laryngeals.

TABLE II-I: Caddo consonants

	OBSTRUENTS						RESONANTS		LARYNGEALS	
LABIAL	*p*	*b*					*m*	*w*		
DENTAL	*t*	*d*	*t'*	*s*	*c*	*c'*	*n*			
PALATAL				*š*	*č*	*č'*		*y*		
VELAR	*k*		*k'*							
GLOTTAL									*ʔ*	*h*

The obstruent class includes labial, dental, palatal, velar, and glottal segments. The first column of obstruents consists of voiceless stops; the second column includes those stops that are voiced. Column 3 shows the ejective stops. The fourth column contains the sibilants, the fifth, the affricates, and the sixth, the ejective affricates. There are four resonants, the two nasals of column 7 and the two semivowels of column 8. There are two laryngeals, the glottal stop in column 9 and the glottal continuant in column 10.

1.2. VOWELS

There are three distinctive vowels in Caddo. These are shown in Table II-II:

TABLE II-II: Caddo vowels

VOWELS		
i	*a*	*u*

The high vowels, *i* and *u*, are consistently pronounced low, [ɪ] and [ʊ], respectively. The pronunciation of *a* ranges from low central in open syllables and syllables closed

by laryngeal consonants (*ʔ* or *h*) to [ʌ] when in a syllable closed by any other consonant except the semivowels (*y* or *w*) to [ə] when in a syllable closed by a semivowel (Chafe 1976:56, in press).

1.3. LENGTH AND TONE

Syllable nuclei occur both long and short and are associated with one of three possible tones: low, high, or falling. A short syllable nucleus consists of a single, short vowel: *ʔibat* 'grandfather'. A long syllable nucleus consists of a long vowel or long vowel-resonant sequence and is expressed by a raised dot in the orthography: *hak'u·šuʔ* 'bitter', *kibín·t'uh* 'ribbon'. Length is a property of the entire nucleus, but in vowel-resonant sequences it is the resonant that is lengthened. Obstruents and non-nuclear resonants can also appear long; in this case, they always straddle two syllables. This type of length is expressed orthographically as gemination; thus, *kakikátti ʔ* 'to twist, wring', from underlying *kak#yi-ka=tti ʔ* (Chafe b505); *kahbánna ʔah* 'gravy', from *kak#bánn-ya ʔah* (Chafe a206).

A syllable with a high tone nucleus is expressed by an acute accent over the vowel (*í, á, ú*); a falling tone nucleus, which is always long, is expressed by a grave accent over the vowel (*ì·, à·, ù·*). Low tone is unmarked (*i, a, u*). High and low tone is determined both lexically and by reconstructable changes. For example, past tense is lexically associated with high tone. The general past tense marker, *hít#*, occurs as *híp#* in the construction *hípbasisí·hin ʔ* 'she boiled it'; the past irrealis marker *hís#* occurs in *hísáybah* 'did he see him?'.[1]

[1] See Chapter IV, section 1.1 for a discussion of past tense marking.

2.0. PHONOLOGICAL PROCESSES

Phonological processes are divided into eight major types. Word and clitic-boundary processes are discussed in section 2.1. Section 2.2. examines glottalization processes. Section 2.3 reviews syncope processes, section 2.4, palatalization processes, section 2.5, consonant-cluster simplification rules, section 2.6, syllable-coda simplification rules, section 2.7, lengthening processes, and 2.8, tonal processes.

As mentioned above, Caddo phonology is extremely complex. Since it is not my intention to give a full account here, I have taken two principal shortcuts in the following description. First, I present only a small subset of the total rule inventory. The rules that are included, however, represent the major rule types, and it is these general types with which I wish to acquaint the reader. Second, I do not discuss rule-ordering, which is also quite complicated, except in the most general way. Instead, any given example illustrating a particular phonological change will highlight the change in question and merely imply any other changes. This is done by associating each example word with three levels of derivation. The first level (i) represents the word's reconstructed, most underlying form, with morpheme boundaries indicated. The second level (ii) consists of an intermediate reconstructed form that has undergone all the necessary phonological changes, except the particular target process that is being exemplified.[2] Finally the third level (iii) includes the phonetic form of the word. This section largely follows Chafe (1976:58-64).

[2] An obvious result of this type of representation is that sometimes rule ordering is violated. For an in depth look an rule ordering in Caddo, see Chafe (1968).

2.1. WORD AND CLITIC-BOUNDARY PROCESSES

At the beginning of a verb word or after a verbal proclitic, the following changes given in Table II-III occur:

TABLE II-III: Word and clitic-boundary processes (verbs only)

I(a)	$n \rightarrow t / \#\_$
(b)	$w \rightarrow p / \#\_$
(c)	$y \rightarrow d / \#\_$

As an example of the first process, consider example (1):

(1) (i) *nu-ʹnt-ʔáh-nah* (Chafe e933)
(ii) *núntʹáhnah*
(iii) *túntʹáhnah*
he ate it up on him

In this example the DATIVE marker *nu-* occurs word-initially. After it undergoes rule I(a), the *n* changes to *t*.

Rule I(b) indicates that *w* changes to *p* before a word or clitic boundary. Example set (2) includes two constructions. In the first one, the *w* of *wa-* 'animate plural' undergoes this process. In the second construction, the *w* of *wiht-* 'dual' is converted to *p*.

(2) (i) *wa-ʔáh-nah* (Chafe g149)
(ii) *waʔáhnah*
(iii) *paʔáhnah*
they ate

(ii) (i) *wiht-hah=yún-hah* (Chafe a902)
(ii) *wihtahyún·hah*
(iii) *pihtahyún·hah*
they 2 are going home

The third rule is exemplified by (3).

(3) (i) *yah ʔ-wiht-ka = hin ʔ* (Chafe b483)
(ii) *yah ʔwihčahin ʔ*
(iii) *dah ʔwihčahin ʔ*
you 2 rinse it

Here, the morpheme-initial *y* of the 2nd person AGENT marker changes to *d*.

2.2. GLOTTALIZATION PROCESSES

Any stop or affricate (besides *p*) is glottalized before a glottal stop. This process in formalized in Table II-IV.

TABLE II-IV: Glottalization

II(a)	$t^{ʔ} \rightarrow t'$
(b)	$k^{ʔ} \rightarrow k'$
(c)	$c^{ʔ} \rightarrow c'$
(d)	$\check{c}^{ʔ} \rightarrow \check{c}'$

Rule II(a) is illustrated in example (4). II(b) in (5). II(c). in (6). and II(d). in (7)

(4) (i) *nu- ´nt- ʔáh-nah* (Chafe e933)
(ii) *túnt ʔáhnah*
(iii) *túnt 'áhnah*
he ate it up on him

(5) (i) *sik- ʔuh* (from Chafe b985)
(ii) *sik ʔuh*
(iii) *sik 'uh*
rock

(6) (i) *hákah#wiht-yi=ʔasuh* (Chafe e592)
(ii) *hákahwiç̲ʔasuh*
(iii) *hákahwiç̲'asuh*
they 2 were coming

(7) (i) *niswak̲-va̲ʔah* (from Chafe h154)
(ii) *tiswač̲ʔah*
(iii) *tiswač̲'ah*
be a door

In examples (6) and (7), the segments that undergo glottalization are derived from a prior palatalization process that converts *ty* and *ky* sequences to *c* and *č*, respectively (see section 2.4, rules IV(a) and IV(b)).

2.3. SYNCOPE

Syncope is the loss of a vowel within a word. There are two syncope processes in Caddo; these are formalized below in Table II-V.[3]

TABLE II-V: Syncope

III(a)	$VRV^{[L]}C \rightarrow V^{[H]}RC$
(b)	$VCV^{[L]}CV \rightarrow VCCV$

Rule III(a) indicates that a short, low tone nucleus with a resonant onset, preceded by a short, open syllable, loses its vowel, which triggers high tone on the preceding syllable. An example of this process is given in (8). The second syncope process involves the loss of any low tone vowel preceded by any vowel and consonant

[3] V indicates any vowel, $V^{[H]}$ indicates a vowel with high tone, $V^{[F]}$, a vowel with falling tone, $V^{[L]}$, a vowel associated with low tone, R, any resonant, C, any consonant, and #, a word or clitic boundary.

sequence and followed by any consonant and vowel sequence. This is illustrated in (9).

(8) (i) *ʔawi-yah-tčahk-id-ah* (Chafe i852)
(ii) *ʔawiyatčahdah*
(iii) *ʔáwyatčahdah*
he stood by

(9) (i) *kak#(ʔi)t'us-yaʔah* (Chafe g733)[4]
(ii) *kahʔit'ušaʔah*
(iii) *kahʔit'ušʔah*
foam, suds

As the second example shows, rule III(b) follows the palatalization of *s* when followed by *y* (section 2.4, rule IV(c)). Palatalization processes are considered next.

2.4. PALATALIZATION

Certain consonants that are followed by *y* become palatalized. These include *t*, *k*, and *s*. See Table II-VI.

TABLE II-VI: Palatalization processes

IV(a)	$ty \rightarrow c$
(b)	$ky \rightarrow \check{c}$
(c)	$sy \rightarrow \check{s}$

Although these rules have already been exemplified above (IV(a) in (6), IV(b) in (7), and IV(c) in (9)), further illustration is given in (10) through (12).

[4] For an explanation of parenthetical material in the morpheme row, see section 3 below.

(10) (i) *hák# ku-t-ya ʔk-da-ʔa ʔ* (Chafe a561)
(ii) *hákkutyada ʔa ʔ*
(iii) *hákkuca·da ʔa ʔ*
my wooden box is hanging

(11) (i) *káw ʔk-yúk-čah* (Chafe c046)
(ii) *káw·kyúhčah*
(iii) *káw·čúhčah*
he's going across

(12) (i) *kak# ʔa-k'as-ya ʔah* (Chafe c373)
(ii) *kah ʔak'asy ʔah*
(iii) *kah ʔak'aš ʔah*
one's leg

2.5. CONSONANT CLUSTER SIMPLIFICATION

Largely as the result of the two syncope processes discussed above in section 2.3. various consonant clusters arise. These are simplified by the rules presented in Table II-VII.

TABLE II-VII: Consonant cluster simplification

V(a)	*nw* → *mm*
(b)	*tw* → *pp*
(c)	*tk* → *kk*
(d)	*n* → *m*/_any labial
(e)	*ʔʔ* → *ʔ*
(f)	*hh* → *h*
(g)	*ʔ*R→R*ʔ*/ when syllable final

Each of these rules are exemplified, in order, below.

(13) (i) *náw-yán-wa-hi ʔ-nah* (Chafe c681)
(ii) *táwyánwáh ʔnah*
(iii) *táwyámmáh ʔnah*
they fell

(14) (i) *hít#wa-k-ʔu-nah* (Chafe d019)
(ii) *hítwak'unah*
(iii) *híppak'unah*
it barked

(15) (i) *kúk#niyat-kač'uh-saʔ* (Chafe h178)
(ii) *kúhniyatkač'uhsaʔ*
(iii) *kúhniyakkač'uhsaʔ*
at the fork of the road

(16) (i) *kík#kan-bašúk* (Chafe a384)
(ii) *kíkkanbašuh*
(iii) *kíkkambašuh*
the water is dried up

(17) (i) *hús#sa-yakʔ-ʔini-ʔaʔ* (Chafe d003)
(ii) *hússayahʔʔniʔaʔ*
(iii) *hússayahʔniʔaʔ*
there was a log lying

(18) (i) *nisah-háy-ʔáhy-ʔ-ah* (Chafe g909)
(ii) *tisahháyʔáhʔyah*
(iii) *tisaháyʔáhʔyah*
he demolished the house

(19) (i) *yahʔ-ni-wáhd* (Chafe c766)
(ii) *dáʔmmah*
(iii) *dámʔmah*
bring it!

Note that the last consonant-cluster simplification technique is metathesis. Any syllable-final glottal stop-resonant sequence is metathesized.

2.6. SYLLABLE-CODA SIMPLIFICATION

Certain syllable coda segments are simplified; these processes are given in Table II-VIII.

TABLE II-VIII: Syllable coda simplification

VI(a)	*b* → *w*/ when syllable final
(b)	*č* → *š* / when syllable final
(c)	*d* → *t* / when syllable final
(d)	*k* → *h*/ when syllable final (not before k)

These four rules are exemplified in (20) through (23) below.

(20) (i) *ci-ba=sisih-i ʔn(i)-čah* (Chafe a002)
(ii) *cibsisih ʔničah*
(iii) *ciwsisih ʔničah*
I'm going to boil it

(21) (i) *nat#bak-yi-bahw-nah* (Chafe a364)
(ii) *napbačbáw·nah*
(iii) *napbašbáw·nah*
after he heard it

(22) (i) *hít#ci-háy-ni-ʔa=d* (Chafe b177)
(ii) *hítcihá yni ʔad*
(iii) *hítcihá yni ʔat*
I followed

(23) (i) *kak#háy-wa ʔud* (Chafe b218)
(ii) *kakháywa ʔut*
(iii) *kaháywa ʔut*
to hunt

Note that in example (23), the syllable-final *k* of the syllable *kak* first converts to *h*, as per rule VI(d). This results in an *hh* sequence which is simplified to single *h* via rule V(f), given above. As rule VI(d) indicates, syllable-final *k* does not convert to *h* before another *k*. See example (10) and (16) above.

2.7. LENGTH

There are four contexts in which syllable nuclei are lengthened. Lengthening rules are given in Table II-IX.

TABLE II-IX: Lengthening of syllable nuclei

VII(a)	$V^{[H]}(R)CVC\# \rightarrow V^{[H]}(R)\cdot CVC\#$
(b)	$V(R)\,{}^{?} \rightarrow V(R)\cdot$/in any prepenultimate syllable
(c)	$iy \rightarrow i\cdot$
(d)	$uw \rightarrow u\cdot$

The first rule indicates the lengthening of a high tone penultimate syllable nucleus, where the final syllable conforms to the shape CVC. This process is illustrated in (24).

(24) (i) *bak-ʼʔawáwaʔ* (Chafe a035)
(ii) *bahʔwáwaʔ*
(iii) *bahʔwá·waʔ*
they said

In the second rule, a glottal stop coda of any syllable before the penult is deleted, triggering the lengthening of that syllable's nucleus. This process is exemplified in (25).

(25) (i) *hák#ci-(ʔi)bíhn-saʔ* (Chafe a425)
(ii) *háhciʔbísaʔ*
(iii) *háhci·bí·saʔ*
I have it on my back

Rules VI(c) and (d) indicate that any syllable nucleus consisting of *iy* or *uw* must convert to a long vowel, *i·*, *u·*. These changes are illustrated in the following two examples.

(26) (i) *hák#ku-bak-yi=bahw-sa?* (Chafe a228)
(ii) *hákkuwčibáwsa?*
(iii) *hákku·čibáw·sa?*
he's hearing me

(27) (i) *hít#ci-?awi-dana-wani-'y* (Chafe g130)
(ii) *hítcí·wittáwníy*
(iii) *hítci·wittáw·ni·*
I came around the bend

2.8. TONE

Non-lexical high tone associated with a syllable nucleus is usually the result of one of three processes: i) the loss of a following *h* which is followed by two consonants, ii) the loss of a low tone vowel in the following syllable with a resonant onset, or iii) the backward spread of high tone over resonants. These processes are formalized in Table II-X:

TABLE II-X: Tonal processes

VIII(a)	$VhCC \rightarrow V^{[H]}CC$
(b) [III(a)]	$VRV^{[L]}C \rightarrow V^{[H]}RC$
(c)	$VRV^{[H]} \rightarrow V^{[H]}RV^{[H]}$

Note that rule VIII(b) is the same rule as III(a), given above in section 2.3. As an example of rule VIII(a), compare the forms in (28). (29) exemplifies rule VIII(b), and (30), rule VIII (c).

(28) (i) *kišwahn-t-?uh* (Chafe j067)
(ii) *kišwahnt'uh*
(iii) *kišwán·t'uh*
parched corn

(29) (i) *sa-baka-na-hah* (Chafe g884)
(ii) *sawkanahah*
(iii) *sawkán·hah*
does he mean it?

(30) (i) *naná* (from Chafe g071)
(ii) *naná*
(iii) *náná·*
that, that one

3. MORPHOLOGICALLY TRIGGERED EPENTHESIS AND HIGH TONE ASSIGNMENT

As noted above, the cited forms of Caddo morphemes are internally reconstructed, abstract symbolizations. It is often the case that the juxtaposition of one morpheme or allomorphic variant with another morpheme, or with a particular class of morphemes, or with a word or clitic boundary, triggers a phonological process. Furthermore, the realization of a morpheme in a particular syllable position in a word (ultimate, penultimate, etc.) may also set off a phonological process.

In order to capture these types of changes, the Caddo morphemes that trigger the phonological change are marked to indicate the particular process. There are four such types of processes in Caddo. In the first type, a given morpheme or allomorphic variant assigns a high tone to a preceding syllable nucleus. This assignment is indicated by a high tone mark, ´, in the initial position of the morpheme. Consider examples (31) and (32).

(31) *túnt'áhnah* (Chafe e933)
nu- ´nt- ʔáh -nah
3DAT APP eat PERF
he ate it up on him

(32) *cikambasisíh ʔničah* (Chafe a003)

ci-	*kan-*	*ba=sisih*	*-ʹiʔn(i)*	*-čah*
1AGENT	liquid	boil	CAUS	INTENT

I'm going to boil water

Example (31) shows that the dative-applicative allomorph *ʹnt-* always assigns a high tone to the preceding syllable. In the second example, the causative allomorph *-ʹiʔn(i)* is illustrated.

Some morphemes or their particular allomorphic variants in the Caddo verb phonologically protect their right flank from coming into contact with following consonants by inserting the segment *i* between that morpheme and consonant. This is, in fact, exemplified above in example (32), where the causative allomorph *-ʹiʔn(i)* triggers anaptyxis. Whenever this *i* emerges in the pronunciation form of a word, an *(i)* is attached to the right of the triggering morpheme in the morphological representation row of the example. Compare the forms in (33).

(33) *hákkidáwsánná·saʔ* (Chafe c282)

hák#	*kid-*	*ʔawis-*	*hana-*	*yás*	*-saʔ*
IND	elevated.surface	sitting	CONT	roam	IMPFV

he's riding around

(ii) *kahnašdit'awʔ* (Chafe c285)

kak#	*na-*	*kid(i)-*	*t'aw*
SUB	DIST	elevated.surface	sit

the riders

In the form of (33ii), *kahnašdit'awʔ*, the right flank of the morpheme *kid-* 'elevated surface' comes into contact with a morph beginning with *t'*. To break up the consonant cluster *dt'*, and thus preserve the right flank of the morpheme *kid-*, an *i* is epenthesized between the two consonants.

A third process has to do with a morph's syllable position in a word. Certain verb roots ending with consonants occur with an immediately following *ih* whenever they would otherwise occur before an ultimate syllable consonant onset. These roots are written with the appendage *(ih)* whenever this environment is met. Otherwise, these roots are not marked for the phonological change. Consider the following example pair.

(34) *hítcihá́yni ʔat* (Chafe b177)

hít#	*ci-*	*haya-*	*ni-*	*ʔa=d*
PAST	1AGT	animate.patient	PORT	go

I followed

(ii) *ci·dih ʔa ʔ* (from Chafe b318)

ci-	*ʔa=d(ih)*	*-ʔa ʔ*
1AGT	go	FUT

I'll go

In the first example, the triggering root occurs in word-final position; thus, the condition is not met for the epenthesis of *(ih)*. In the second form, the root *ʔa=d* occurs in penultimate position before a final syllable beginning with *ʔ*. This environment conditions the occurrence of *ih*.

Finally, before certain noun and verb roots, and usually before word or clitic boundaries or before the pronominal prefixes, a prothetic *ʔi* occurs[5]. As in the cases above, the noun or verb root is marked for this change only when one of these conditions is met; otherwise, the morpheme is unaltered. (35) exemplifies a triggering verb root, and (36), a triggering noun root, in each of the different environments.

[5] Rarely, the prothetic element is *yi*.

(35) *ʔikáhčah* (Chafe b845)
(ʔi)káh -čah
shout INTENT
he's going to holler

(ii) *háh ʔikáhsaʔ* (Chafe b837)
hák# (ʔi)káh -saʔ
IND shout IMPFV
he's hollering

(iii) *háhci·káhsaʔ* (Chafe b838)
hák# ci- (ʔi)káh -saʔ
IND 1AGT shout IMPFV
I'm hollering

(iv) *háhwihčáhsaʔ* (Chafe b839)
hák# wiht- káh -saʔ
IND DU shout IMPFV
they 2 are hollering

(36) *ʔiskahdakihčah* (Chafe d428)
(ʔi)sikah- dak(ih) -čah
ear stand.up
he's going to listen

(ii) *kah ʔiskáy· ʔah* (Chafe d425)
kak# (ʔi)sikah- yaʔah
SUB ear be
ear

(iii) *kakku·sikáy· ʔah* (Chafe d426)
kak# ku- (ʔi)sikah- yaʔah
SUB 1PAT ear be
my ear

(iv) *kah ʔánáhsikahbíščah* (Chafe h316)
kak# ʔa- nahk- sikah- bíšt- yaʔah
SUB DEFOCUS.PAT bone ear ear, hat be
hip, hip bone

In (35i) and (36i), the target verb and noun roots, *káh* 'shout' and *sikah-* 'ear', respectively, occur word-initially. In (35ii) and (36ii), these roots occur immediately

before a clitic boundary, and in (35iii) and (36iii), they occur before a pronominal prefix. In each of these cases, *ʔi* is inserted to protect the root's left flank from coming into contact with an illegal boundary type or position class. In the final form of each example set, the roots occur outside of the triggering environments and therefore, do not occur with the prothetic syllable.

CHAPTER III

PERSON, CASE, AND REALITY

0. INTRODUCTION

Person, case, and reality distinctions in Caddo are indicated in the pronominal prefix system. There are two sets of pronominal prefixes, the realis set and the irrealis set. Each set distinguishes among four persons: 1st, 2nd, 3rd, and Defocusing; each prefix of these sets obligatorily indicates one of three cases in an agentive case system: AGENT, PATIENT, and DATIVE. [1]

Person and case are properties of the referent; the marking of these distinctions helps Caddo speakers identify and differentiate speech participants. We'll see in Chapter V that the categories of number and distribution also include semantic mechanisms for participant identification, namely ergative case-marking in both the number and distribution systems and animate gender marking in the number system.

[1] Except for the use of the term DATIVE, I use semantic labels to refer to grammatical case. Although the use of semantic terms in a semantically-based grammatical description can be confusing, there are two principal reasons for doing so. First, grammatical case is semantically based in Caddo. In a semantically-based system, semantic criteria, and not syntactic or discourse criteria, determine case marking. This is demonstrated in section 3. Second, there is precedence of such a practice in Caddo language studies (see, especially, Chafe 1976, 1990, 1995, in press). I regret any ambiguity in my discussion of grammatical case and semantic role. Wherever I explicitly refer to grammatical case marked by the pronominal prefixes, I indicate the case name in small capital letters: AGENT, PATIENT, DATIVE. Semantic role is always indicated by lower case letters: agent, patient, etc.

Unlike person and case, reality is a semantic property of the event or state expressed by the clause. Reality distinctions are motivated by several, interrelating factors, the functional basis being the degree to which speakers' judgments of particular situations correspond with their notion of objective reality (Chafe 1995:364).

In the first section, I present an overview of the pronominal morphology. This is followed by a discussion of person in section 2. Among the more interesting characteristics of person semantics is that exhibited by the defocusing prefixes. The explication of their role is based on Chafe (1990). The third section describes agentive case in the pronominal system and follows Mithun (1991). Here, the properties of the three grammatical cases, AGENT, PATIENT, and DATIVE, are explored, principally through the analysis of their finer semantic roles. In section 4, an overview of the realis-irrealis distinction in Caddo is provided. Based on Chafe (1995), I review the different contexts that motivate realis and irrealis pronominal marking. Finally, in the last section, I present a summary of the pronominal system.

1.0. PRONOMINAL MORPHOLOGY

There are 24 distinct pronominal forms in Caddo, including Ø (zero). These 24 forms mark 32 different combinations of person, case, and reality, there being seven homophonous pronominal prefixes. All pronominal morphology occurs in position 14 of the verb template, and only one overt pronominal prefix per verb is allowed.

The morphemes of the pronominal system are formally divided into two sets based on the binary reality distinction of realis-irrealis. In addition, it is convenient to differentiate between single and combining-person forms in the pronominal system. Single-person pronominal prefixes mark one person while combining forms mark different first and second person combinations.[2] Table III-I presents the single-person pronominal prefixes, while the combining-person forms are given in Table III-II:

TABLE III-I: Single-person pronominal prefixes

REALIS	AGT	PAT	DAT[a]
1ST	*ci-*	*ku-*	*ku-*
2ND	*yah?-*	*si-*	*si-*
3RD			*nu-/u-*
DEFOC	*yi-/?i-*	*ya-*	*yu-*
IRREALIS			
1ST	*t'a-/t'i-*	*ba-*	*ba-*
2ND	*sah?-*	*sa?a-*	*sa?u-*
3RD	*(sa-/ya-/a-)*[b]	*(sa-/ya-/a-)*	*?u-*
DEFOC	*?a-*	*?a?a-*	*?a?u-*

[a] Dative-case pronominals must occur with the position 9 dative-applicative prefix. See section 3.3.
[b] See section 2.2.

[2] As we'll see in section 2.0, the third person is never marked when it combines with first or second person. In these cases, the first or second single-person marker is the sole referent indicator of the transitive clause.

TABLE III-II: Combining-person pronominal prefixes

REALIS	1ST PAT	1ST DAT	2ND PAT	2ND DAT
1ST AGT			*t'a-*	*t'u-*
2ND AGT	*yahku-*	*yahku-*		
IRREALIS				
1ST AGT			*t'a?a-*	*t'a?u-*
2ND AGT	*sahku-*	*sahku-*		

2.0. PERSON

As indicated in Tables III-I and III-II, four persons are formally distinguished in the Caddo pronominal system: 1st, 2nd, 3rd, and Defocusing. The Defocusing person is a special type of 3rd person that marks only human (or anthropomorphized) 3rd persons that are currently peripheral or out of focus within the context of the discourse or construction type (see section 2.3 below).

1st and 2nd persons are always overtly marked and have equal priority of occurrence over 3rd and Defocusing person in the pronominal prefix position of the verb template; thus in any polyvalent verb with a 3rd or Defocusing person referent and a 1st and/or 2nd person referent, the 1st and/or 2nd person must be overtly marked and the third or Defocusing person can not be overtly indicated. The Defocusing person, in turn, outranks the 3rd person in privilege of occurrence. Based on overt morphological marking, then, the person hierarchy is as follows:

FIGURE III-I: Person hierarchy

$1^{st}, 2^{nd} > \text{Defocusing} > 3^{rd}$

This hierarchy reflects three principal markedness relations in the Caddo pronominal prefix system. One markedness relation is based on person *per se*: 1^{st} and 2^{nd} persons outrank 3^{rd} persons. This local relation follows the expected verbal indexation pattern as given by Greenberg 1966 (42-44). The person hierarchy is related to the NP-type hierarchy which states that pronominals outrank nouns (Greenberg 1966:51). 1^{st} and 2^{nd} persons can only be expressed as pronominal prefixes in Caddo; their marking is thus obligatory in the verb. Conversely, there are several mechanisms outside of the pronominal prefix system for indicating 3^{rd} persons. Thus, the lack of overt marking of 3^{rd} person in the pronominal prefix position does not necessarily entail lack of overt designation.[3] The final markedness relation is based on animacy. In the animacy hierarchy, humans outrank non-human animates and inaminates. The 1^{st}, 2^{nd}, and Defocusing persons only mark human referents, and are therefore higher ranked in animacy then the 3^{rd} person, a category which includes both humans and non-humans.[4]

2.1. 1^{ST} AND 2^{ND} PERSON

As mentioned, 1^{st} and 2^{nd} person participants are always overtly marked in Caddo. In a transitive or ditransitive verb where both a 1^{st} person and 2^{nd} person are referenced, the pronominal combining forms presented above in Table III-II are used. If a 1^{st} and/or 2^{nd} person is combined with a 3^{rd} person referent, the appropriate 1^{st} or

[3] See section 2.2 for a summary of other methods of indicating 3^{rd} persons.

[4] See Croft (1990:112-113) and Silverstein (1976) for a discussion of the animacy hierarchy.

2nd person pronominal prefix from the single-person set or the appropriate 1st and 2nd combining-person prefix is employed in the verb and the 3rd person is left unmarked in the pronominal system, regardless of case. Examples including 1st and 2nd single-person pronominal prefixes are given in (1) through (6); examples (7) through (11) include combining forms.

(1) *háhcí·báw·sa?* (Chafe e388)
hák# *ci-* *yi=bahw* *-sa?*
IND 1AGT perceive IMPFV
I see (it/him/her)

(2) *hákkúybáwnun?sa?* (Chafe e390)
hák# *ku-* *yi=bahw* *-nun?* *-sa?*
IND 1PAT perceive ITER IMPFV
s/he sees me often

(3) *híssímbakayánná·?ah* (Chafe a181)
hít# *si-* *'n-* *baka-* *yán-* *yá?ah*
PAST 2DAT APP sound CAUS roam
s/he talked to you

(4) *híbatáyyúhnah* (Chafe b326)
hí# *ba-* *t-* *háy=yúh* *-nah*
PARTIC.COND 1DAT.IRR APP tell PERF
if s/he had told (it) to me

(5) *sàw·čibah* (Chafe a224)
sah?- *bak-* *yi=bahw*
2AGT.IRR sound perceive
do you hear (it/him/her)

(6) *kúsa?awčibáw·nah* (Chafe a243)
kú# *sa?a-* *bak-* *yi=bahw* *-nah*
NEG 2PAT.IRR sound perceive PERF
s/he didn't hear you

(7) *háht'awčibáw·sa?* (Chafe a231)
hák# *t'a-* *bak-* *yi=bahw* *-sa?*
IND 1AGT/2PAT sound perceive IMPFV
I hear you

(8) *t'a?awčibah* (Chafe a236)
t'a?a- *bak-* *yi=bahw*
1AGT.IRR/2PAT.IRR sound perceive
do I hear you?

(9) *hákahku·čibáw·sa?* (Chafe a232)
hák# *yahku-* *bak-* *yi=bahw* *-sa?*
IND 2AGT/1PAT sound perceive IMPFV
you hear me

(10) *kúsahku·čibáw·nah* (Chafe a246)
kú# *sahku-* *bak-* *yi=bahw* *-nah*
NEG 2AGT.IRR/1PAT.IRR sound perceive PERF
you didn't hear me

(11) *dahkučá?huy?* (Chafe b563)
yahku- *t-* *ká=?hú?*
2AGT/1DAT APP stir
stir (it) for me

Examples (1) and (5) illustrate that the single 1st and 2nd person AGENT forms may participate in both intransitive and transitive clauses. The transitivity status of the verbs in such examples is derived from the speech context. Thus in (1), *háhcí·báw·sa?* may be interpreted as 'I see', 'I see it', 'I see him', or 'I see her'. Likewise, *sah?sì·čibah* of example (5) may be interpreted as 'do you hear', 'do you hear it?', 'do you hear him?', or 'do you hear her?'. In examples (2) and (6) , single 1st and 2nd person PATIENT forms participate in transitive clauses; we'll see in section 3.2 and 3.3 below, that both the PATIENT and DATIVE subset of pronominal prefixes may also participate as the sole arguments of intransitive clauses.

Examples (3), (4), and (11) include a 1st or 2nd person DATIVE. Note that in each of these verbs, the dative-applicative prefix *t-/n-/'n-/'nt-* is present. This morpheme functions to add a DATIVE-case argument to the verb.[5] In (3), the verb stem *'n-baka-yán-yá'ah* means 'talk', literally, 'cause words to roam toward'. The 2nd person DATIVE of this verb is semantically a recipient. The 1st person beneficiary in example (11) *dahkučá'huy'* 'stir it for me', is a grammatical DATIVE (see section 3.3 below).

1st person exclusive and inclusive are marked by the combination of person and number morphology. A prefix which marks the 1st person is combined with either the dual or animate plural marker to indicate exclusive dual or exclusive plural respectively.[6] For the inclusive dual and plural, a Defocusing prefix is combined with the dual and animate plural marker, respectively. These combinations are exemplified in Chapter V, sections 1.1 and 1.2.

2.2. 3RD PERSON

The 3rd person pronominal forms are used to reference all 3rd persons that are not specifically defocused (see below). Tables III-I and III-II indicate that the 3rd person is given overt expression in the pronominal system only when it is combined with irreality or DATIVE case. However, as we saw above in examples (1) through (6) and (11), the 3rd person is never marked when a 1st and/or 2nd person is referenced in the same verb. Furthermore, when the 3rd person and Defocusing person are combined

[5] The functions of the dative-applicative prefix are discussed in Chapter VI, section 1.4.

[6] This includes both the single and combining 1st person pronominal prefixes.

in the same verb, the Defocusing person is marked to the exclusion of the 3rd person, regardless of case or reality. Finally, as is explained in detail below, even 3rd person irrealis AGENTS and PATIENTS are not directly indexed in the pronominal system, even though the marker *sa-* does participate in the pronominal prefix complex and indirectly indicates a 3rd person non-DATIVE referent. The following examples illustrate these 3rd person uses and cooccurrence restrictions.

(12) *kakúc'itdibah* (Chafe i518)
kakúc'it# *yi=bahw*
PRIOR.SUB perceive
before he saw him

(13) *kúyawčibáw·nah* (Chafe a238)
kúy# *a-* *bak-* *yi=bahw* *-nah*
NEG IRR sound perceive PERF
he didn't hear it

(14) *cišdáwá·ʔah* (Chafe c269)
ci- *t-* *kid-* *ʔa=wáʔ* *-ah*
1AGT APP elevated.surface put PERF
I put it up for him

(15) *tutʔímbiʔnah* (Chafe i124)
nu- *t-* *ʔawi-* *na-* *biʔn* *-ah*
3DAT APP circular.motion DIST hit PERF
he whipped it, beat it up for him

(16) *hákiwčibáw·saʔ* (Chafe a218)
hák# *yi-* *bak-* *yi=bahw* *-saʔ*
IND DEFOC.AGT sound perceive IMPFV
someone hears him, he is heard

(17) *dicahʔáwʔičah* (Chafe e147)
yi- *t-* *yah-* *ʔa=waʔ(i)* *-čah*
DEFOC.AGT APP away throw INTENT
someone is going to throw it out to him

The verb in the first example is realis and references two 3rd persons, an AGENT and a PATIENT.[7] Since irreality is not associated with this verbal event and DATIVE case is not associated with either of the 3rd person referents, no overt pronominal morphemes are present in the verb structure. The verbal event in (13) *kúyawčibáw·nah* 'he didn't hear it' is irrealis (as are all negative expressions), and includes a 3rd person AGENT and 3rd person PATIENT. Table III-I indicates that the single morpheme *sa-/ya-/a-* is used to index both the 3rd person irrealis AGENT and PATIENT. While this identification is convenient, a more correct description of this morpheme is that it marks irreality in the pronominal system when no other overt pronominal morphology is available. As we'll see in section 4 below, irreality must always be overtly marked in the pronominal system. *sa-/ya-/a-*, then, only indirectly indexes the 3rd person; because no 1st or 2nd person is referenced by the verb in (13) and neither of the 3rd persons are DATIVES, *sa-/ya-/a-* is included to indicate the irreality status of the verbal event. It follows that 3rd person AGENTS and PATIENTS are never, in fact, indexed by pronominal prefixes.

The verb in example (14) includes a 1st person AGENT and 3rd person DATIVE. Even though there is overt 3rd person DATIVE morphology, only one pronominal morpheme per verb is permitted, and the 1st person outranks the 3rd person in privilege of occurrence. The event in example (15) *tut ʔímbi ʔnah* 'he whipped it, beat it up for him' includes a 3rd person AGENT, PATIENT and DATIVE. As there are no 1st or 2nd persons referenced, the 3rd person DATIVE marker *nu-* is present. The last two examples consist of a Defocusing person and one or two 3rd person referents. In each case, the Defocusing person is overtly realized and any 3rd person is unmarked. In

[7] See section 4 for a full discussion of realis and irrealis morphology in the pronominal system.

(16), *hákiwčibáw·sa?* 'he is heard, someone hears him', the sole 3rd person is a PATIENT and in (17), *dicah?áw?ičah* 'someone is going to throw it to him', one 3rd person is a PATIENT and the other is a DATIVE. These examples illustrate that the Defocusing person outranks the 3rd person and thus always occupies the single pronominal marker position of the verb template when combined with the 3rd person.

Of course, there are several other ways of specifying the 3rd person outside of pronominal morphology. First, 3rd persons may be given overt nominal expression. Caddo nouns, however, do not indicate number or case,[8] and these distinctions must be specified in the verb. Second, as is discussed in Chapter V, certain number and all distribution categories indirectly specify case along an ergative pattern and animate gender is specifically marked in the number system. Thus, the number and distribution categories participate in specifying 3rd person referents. Furthermore, many 3rd person patients, instruments, and locations can be incorporated into the verb at position 8 (See Chapter VII, section 4). As an integrated system then, 3rd person pronominal prefixes, incorporated nouns, freely occurring nouns, and the number and distributive markers all assist in identifying 3rd person referents.

2.3. DEFOCUSING PERSON

The Defocusing person's basic use is to obscure the identity of a 3rd person human or anthropomorphized referent that is obligatorily required by the valence of the verb. Chafe (1990) identifies four particular contexts in Caddo that call for a defocusing prefix. These include: 1) referencing non-protagonists, 2) naming objects,

[8] Some nouns, however, can be marked for locative case (by the suffix *-yih*); other oblique nouns are marked by the proclitic *na#* 'oblique'.

professions, places, and actions, 3) referencing and addressing in-laws, and 4) inclusive 1st person.

The first context is actually broader than that suggested. The defocusing prefixes are used to reference non-protagonists, but, more generally, they are used in discourse to render a 3rd person participant out of current focus, and sometimes that 3rd person is the protagonist.[9] Thus, Chafe's first context is better expressed as 'referencing peripheral 3rd persons'. Each of the four contexts are examined below, except for the fourth, 'inclusive 1st person' which is treated in Chapter V, sections 1.1 and 1.2.

2.3.1. REFERENCING PERIPHERAL 3RD PERSON

As an example of this first type of use, consider the following story excerpt where turtle and several other creatures are looking for water during a drought. In the course of his search, turtle gets stuck in a log:[10]

(18) *kúsidí·, ha?ímáy hússayah?ni?a?*
kú# si# dí· ha# ?imay hús# sa- ya?k- ?ini- ?a?
JUST TIME this A big MIR IRR wood lying be
After a while, there was a big log lying![11]

[9] Chafe (1990:58-59) handles this fact by saying that the protagonist role may shift throughout the discourse. In this case, *protagonist* would have to be defined narrowly as 'the currently focused participant' instead of its more usual interpretation as 'the principal character in a story' (Webster's 1984:946).

[10] A slightly different version of this story is published in Chafe 1977:27-28.

[11] As is pointed out in section 4, surprising or unexpected events are categorized as irrealis.

(ii) *nátti?* *dikahí·yah*
nátti? *yika=hihy* *-ah*
there get.stuck PERF
There he got stuck;

(iii) *kúyatáyánnáhdu?*
kú# *ya-* *t-* *ha-* *yán-* *yákid* *-u?*
NEG IRR APP space CAUS go.by MID
he couldn't get by it

(iv) *natdah?ní·way*
nat# *ya?k-* *ni-* *wáy*
TEMP.SUB wood PORT go.up
when he climbed up the log.

(v) *kúhaišuh* *nat?ikáhnah.*
kú# *ha#* *išuh* *nat#* *(?i)káh* *-nah*
JUST A suddenly TEMP.SUB shout PERF
Suddenly he called out.

(vi) *nátti?* *di·niwsakáh*
nátti? *yi-* *?ini-* *bi?=sak* *-ah*
then DEFOC.AGT horizontal.surface step.on.forcefully PERF
Then they trampled on him;

(vii) *ná·* *nabít* *kahánná·bah* (Chafe u342-u346)
ná· *na#* *bít* *kak#* *hán-* *yábah*
those THAT two SUB animate.patient be.PL
it was those other creatures.

In this story, the turtle is the protagonist; as such, the speaker's attention is predominantly focused on him and his actions. Note that the first verb *hússayah?ni?a?* 'there was a log lying' (18i), does not reference the turtle, but rather designates another 3rd person entity, i.e. a 'log'. Here, a defocusing prefix is not used because the designated patient is inanimate and inanimate objects can not be indexed by the Defocusing person.[12] Now, in the first verb referencing the turtle, *dikahí·yah*

[12] The use of the Defocusing person in Caddo can be compared to the obviative distinction in Algonquian languages. However, whereas the Defocusing person can only reference humans or

'he got stuck' (18ii), the lack of overt pronominal morphology indicates that the referent is a 3rd person, in this case, a 3rd person PATIENT, and that this 3rd person is currently the focus of the speaker's attention. Turtle remains the focused participant for the next four clauses (18iii-vi). Note that in (18vi), the stuck turtle gets trampled on; here, the tramplers are referenced by the defocusing AGENT prefix *yi-*. The speaker maintains focus on the turtle here, perhaps to express sympathy with his bad luck. Finally in (18vii), the speaker identifies the tramplers as the other creatures (that are out looking for water), and it is now they who are at center stage; hence there is no overt pronominal morphology.

2.3.2. NAMING

To name objects, professions, places, and actions in Caddo, a particular construction typically consisting of three parts is used. These parts inlude: i) a nominalizing proclitic, ii) a defocusing prefix, and iii) a verb stem. In addition, an imperfective marker is often suffixed to the verb stem. The referent named by this construction may be the typical instrument, location, patient, or agent of a particular action. When this construction type is used to name actions, it is often most conveniently translated as an infinitive. The following examples are from Chafe (1990:61-64).

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anthropomorphized animals, the Algonquian obviation system differentiates between inanimate and animate obviative arguments. Thus, the equivalent expression of 'there was a log lying' within the present narrative context in Algonquian languages would include an inanimate obviative subject marker (Dahlstrom 1991:100).

Referencing instruments:

(19) *nakiyančadis*

nak#	*yi-*	*ya-*	*na-*	*ka=dís*
INST.SUB	DEFOC.AGT	wood	DIST	wash

mop, scrub brush (lit. that with which one washes the boards)

(20) *nakihsáw'unah*

nak#	*yi-*	*ki=sáw'*	*-'unah*
INST.SUB	DEFOC.AGT	scrape	MID

razor (lit. that with which one scrapes oneself)

Referencing locations:

(21) *kúkí·'íh'isa'* *nušt'uh*

kúk#	*yi-*	*yi='ík*	*-'í'n(i)*	*-sa'*	*nušt*	*-'uh*
LOC.SUB	DEFOC.AGT	go.in	CAUS	IMPFV	paper	N

pigeon hole (lit. where one causes paper to go in)

(22) *bak'a'nuh kúkíyánná·sa'*

bak'a'nuh	*kúk#*	*yi-*	*yán-*	*yási'*	*-sa'*
word	LOC.SUB	DEFOC.AGT	CAUS	roam	IMPFV

courthouse (lit. where one causes words to roam)

Referencing patients:

(23) *nídikač'án'íš'nah*

nít#	*yi-*	*kač'án-*	*'íš*	*-'í'n(i)*	*-ah*
PAST.GEN.PART	DEFOC.AGT	liquid	move	CAUS	PERF

riled up water (lit. liquid that one has caused to move)

(24) *nídikáttabí·nih*

nít#	*yi-*	*kátta-*	*bínik*
PAST.GEN.PART	DEFOC.AGT	liquid	move.circularly

fried corn mush (lit. liquid that one has moved circularly, stirred)

Referencing agents:

(25) *naytda·yán·hah*
nayt# *ya-* *ʔi=yán* *-hah*
GEN.PART DEFOC.PAT catch HAB
policeman (lit. one who catches people)

(26) *naytda·sikánnibáw·hah*
nayt# *ya-* *(ʔi)sikán-* *yi=bahw* *-hah*
GEN.PART DEFOC.PAT palm perceive HAB
palm reader (lit. one who looks at one's palm)

Referencing actions:

(27) *kakikadis*
kak# *yi-* *ka=dís*
SUB DEFOC.AGT wash
(for one) to wash

(28) *kakitticuʔ*
kak# *yi-* *dani=cuʔ*
SUB DEFOC.AGT point
(for one) to point

When the referent of an indefinite construction is an instrument, as in examples (19) and (20), the instrumental subordinator proclitic *nak#* is used and the defocusing person is the semantic agent of the action. This construction is typically used to name objects. To name a location, the locative proclitic *kúk#* combines with the defocusing AGENT and an imperfective suffix *-saʔ*, as in (21) and (22). In this case the particular imperfective distinction is habitual aspect.[13] This indefinite construction is used to name both places and objects. When the named entity is a patient, as in (23) and (24), the past general participle *nít#* combines with the defocusing AGENT. These words

[13] For the different uses of *-saʔ* see Chapter V, section 2.2.1.

denote mass nouns. In examples (25) and (26), the general participle *nayt#* combines with the defocusing PATIENT to reference typical agents, i.e. professions. Finally, (27) and (28) exemplify the naming of actions, in which the subordinator *kak#*, here functioning as a nominalizer, combines with the defocusing AGENT and verb stem.[14]

2.3.3. REFERENCING AND ADDRESSING IN-LAWS

Until recently, when Caddo speakers referenced or addressed their in-laws, it was obligatory for them to use a defocusing prefix. This practice was thus a special type of in-law avoidance. The following examples are from Chafe 1990:64-65).

(29) *dikadi·nihah*
dikat# *yi-* *ʔa = ʔn(ih)* *-hah*
WHAT.INTER DEFOC.AGT do HAB
what are you (in-law) doing?; what is s/he (in-law) doing?

(30) *kwídi·dihah*
kúyt# *yi-* *ʔa = d(ih)* *-hah*
WHERE.INTER DEFOC.AGT go HAB
where are you (in-law) going?; where is s/he (in-law) going?

The use of the defocusing prefix in this context functions both to formally deflect the overt indication of one's in-law and to unambiguously mark the referenced person as a human. See Chapter VII, section 4, for another means of overtly specifying in-laws as humans.

[14] See Chapter V, section 4.2 for the different functions of *kak#*.

3.0. CASE

Grammatical case in the Caddo pronominal system is semantically based and exhibits a three-way distinction: AGENT, PATIENT, and DATIVE. Following Mithun (1991), I refer to the Caddo case system as *agentive*. Agentive patterning is based on the features of *control* and *affectedness*. A grammatical AGENT references a participant who is in control of the verbal situation and who is not significantly affected by that situation. A grammatical PATIENT is *directly* affected by the event or state and exercises no control; a grammatical DATIVE also lacks control and is *indirectly* affected by the event or state.

One implication of an agentive system is that the sole participant of an intransitive clause can be indexed by either AGENT or PATIENT case, depending on that participant's particular semantic role in the verbal situation. A transitive clause consists of an AGENT and PATIENT, AGENT and DATIVE, or PATIENT and DATIVE. A ditransitive verb consists of either an AGENT and two PATIENTS or an AGENT, PATIENT, and DATIVE.[15]

In the following subsections, I explicitly discuss the semantic roles associated with each of the three grammatical cases.

All of the examples in sections 3.1 (AGENT case) and 3.2 (PATIENT case) illustrate their respective case properties with first person forms only. AGENT and PATIENT case is neutralized in the 3rd person in both the realis and irrealis sets of pronominal prefixes, so there is no overt contrast in the 3rd person. 2nd person is

[15] See Chapter VI for a discussion of grammatical case and valency.

inconsistent in regard to PATIENT case.[16] In section 3.3 (DATIVE case), the 1st and 3rd person are used for exemplification. Again, the 2nd person is inconsistently marked.[17]

3.1. AGENT CASE

AGENT case is used in Caddo to mark those participants in a verbal event or state that exercise control. Semantically, such participants are either agents or perceivers.[18] Blake (1994:69) defines *agent* as "an entity that performs an activity or brings about a change in state". A *perceiver* is an entity that attains awareness or understanding through the senses. Mithun (1991:526) correctly characterizes Caddo grammatical AGENTS as those participants who "perform, effect, instigate and control". She further points out that when these different features of agency do not coincide, case marking reflects control (Mithun 1991:526-7).

Grammatical AGENTS are also used in intransitive constructions that denote inherent or relatively stable conditions, such as being tall, fat, strong, ornery, or greedy. As in explained below in section 3.2, the PATIENT case is used in stative constructions that denote temporary or unstable states, such as being angry, embarrassed, scared, or dizzy. This division is perhaps motivated by the fact that

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[16] 2nd person PATIENTS are often expressed by the AGENT forms *yah?-* and *sah?-* in realis and irrealis contexts, respectively.

[17] In realis contexts, the 2nd person AGENT form *yah?-* is often used to mark DATIVES; in irrealis contexts, the 2nd person PATIENT prefix *sa?a-* is frequently employed.

[18] As Blake (1994:69) notes, perceivers and agents are typically aligned grammatically.

many stable conditions are not viewed directly affecting the participant, while temporary states, in contrast, do directly affect the participant and are uncontrollable.[19]

Examples (31) through (44) illustrate AGENT-case marking using the 1st person AGENT forms *ci-* (realis) and *t'a-* (irrealis). The first four examples include verbs denoting events where the 1st person form marks a semantic agent. In the first two examples the verbs are intransitive; in the second two, the verbs are transitive. The verbs in (35) through (37) denote events where the 1st person prefix references a semantic perceiver. Finally, examples (38) through (44) include verbs that denote stable states, which take AGENT-case marking.

Events with semantic agents:

(31) *ci·yáhdi?a?* (Chafe a930)
ci- *(?i)yákid(i)* *-?a?*
1AGT go.by FUT
I'll go by

(32) *háhcitáyní?asuh* (Chafe b205)
hák# *ci-* *t-* *haya-* *ni-* *?asuh*
IND 1AGT APP animate.patient PORT come
I'm going after him, following him.

(33) *wít* *cihnáh?yah* (Chafe c164)
wit *ci-* *ki=náh?y* *-ah*
self 1AGT cut PERF
I cut myself (intentionally)

[19] Some languages are partially agentive and partially active-stative. In an active-stative language, it is lexical aspect, or *Aktionsart*, that determines case. Lakhota exhibits such a split system. In this language, lexical aspect is the predominant determiner of case. Thus, the sole argument of stative intransitive constructions is usually a grammatical PATIENT, while a grammatical AGENT is usually the single argument of active intransitive constructions. However, a substantial number of stems fall outside of this case-marking system. For these stems, it is agentivity that determines case. See Mithun (1991:510-518) for discussion.

(34) *hítcihá·ht'u?* (Chafe y190)
hít# *ci-* *ha=yáh* *-t-* *?ú?*
PAST 1AGT waft.odor NOM smell
I smelled it, sniffed it (intentionally)

Events with semantic perceivers:

(35) *háhcihábáw·sa?* (Chafe a867)
hák# *ci-* *ha-* *yi=bahw* *-sa?*
IND 1AGT custom perceive IMPFV
I can see, I see it's a custom, I see it again

(36) *hítciwčibah* (Chafe a247)
hít# *ci-* *bak-* *yi=bahw*
PAST 1AGT word perceive
I heard it

(37) *cikašibáw·čah* (Chafe b977)
ci- *kas-* *yi=bahw* *-čah*
1AGT liquid perceive INTENT
I'm going to taste it

Stable states:

(38) *kú?nít'ih?ya?* (Chafe f305)
kú?ní# *t'a-* *?a?*
NEG.CONT 1AGT.IRR be
I don't live there any more

(39) *háhci·dín·?a?* (Chafe c316)
hák# *ci-* *kid(i)-* *?ini-* *?a?*
IND 1AGT elevated.surface lying be
I'm lying on top of something

(40) *háhciká·wisa?* (Chafe b553)
hák# *ci-* *kah-* *?awis* *-sa?*
IND 1AGT inside sit IMPFV
I'm sitting inside

(41) *háhcíwčahwáy?sa?* (Chafe d207)
hák# ci- wičah- wa?(i) -sa?
IND 1AGT mind throw IMPFV
I have time

(42) *náná· kúyt'áy·?ah* (Chafe g568)
na# ná· kúy# t'a- ya?ah
THAT that NEG 1AGT.IRR be
I'm not the kind

(43) *hasá·yu?* *cí·?ah* (Mithun 1991:527)
ha# sáyu? ci- ya?ah
A fat 1AGT be
I'm fat

(44) *ha?ikáy* *cí·?ah* (Mithun 1991:527)
ha# ?ikáy ci- ya?ah
A strong 1AGT be
I'm strong

In the fist four examples, the 1st person referent is a semantic agent that performs an activity: 'going', 'going after', 'cutting', and 'smelling'. The first construction is intransitive; the next three are transitive. The construction in (32) consists of a grammatical AGENT and DATIVE; in (33) and (34), the verbs each include one AGENT and one PATIENT. In each of these verbal events, the 1st person participant exerts control. So, in (33), *wít cihnáh?yah* 'I cut myself' and (34) *hítcihá·ht'u?* 'I smelled/sniffed it', the actions of 'cutting' and 'smelling' are intentional. Had these actions been unintentional or out of the 1st person referent's control, the PATIENT-case or DATIVE -case prefix would have been employed (compare these forms with examples (46) and (64) below).

In (35) through (37), the referent is a semantic perceiver engaged in sensory events: 'seeing', 'hearing', and 'tasting (liquid)'. As in the former examples, the 1st person referent exerts control in these events; that is, the referent can control whether or

not she or he looks at or listens to or tastes something. Note that in each example, the verb stem consists of the complex verb root *yi=bahw* 'perceive'. This stem denotes the least marked or default type of perception, i.e. 'seeing', as (35) indicates. From this stem, the stems for 'hearing' and 'tasting" are derived, as in (36) and (37) respectively. In sensory events, the referent is becoming aware of something, such as an abstract idea, as in (35), words and their meanings, as in (36), and flavors, as in (37).

In the last seven examples of this section, the referent is a grammatical AGENT that is participating in some relatively permanent or stable state. In (38) through (40), all of the stative constructions have to do with location, 'being (somewhere)' (38), 'lying on top' (39), and 'sitting inside' (40). In each of these situations, it is understood that the referent is voluntarily or intentionally involved; that is, that s/he exerts control. Thus, compare (40) *háhciká·wisa* 'I'm sitting inside' with (47) below, *ku·wiškahí·yah* 'I'm stuck sitting down'. In the former, an AGENT prefix is used; in the latter construction, where the referent exerts no control in his/her state, a PATIENT prefix is used. The primary agentive feature of the next example is also control. 'Having time' (41) is a state in which the referent is in control. Examples (42) through (44) illustrate that participants of stative constructions dealing with relatively stable qualities of people are indicated with AGENT case. To be a certain kind of individual, or be a strong or fat individual are viewed as inherent or stable conditions. As the normal state, they do not interfere with the usual control exerted by the individual. We'll see in the following section that PATIENT case is employed to mark referents affected by temporary states.

3.2. PATIENT CASE

Referents marked by PATIENT-case morphology exert no control over situations; instead, they are directly and significantly affected by the event or state in which they participate . Indeed, as Mithun (1991:527) asserts, it is precisely affectedness and lack of control that are the primary attributes of PATIENT case in Caddo. PATIENT case subsumes the semantic roles of patient and experiencer. A semantic *patient* is characterized first narrowly as "an entity viewed as affected or effected by an entity" (Blake 1994:68) and, more generally, as "the entity undergoing an action" (Trask 1993:202). An *experiencer* is "the passive recipient of a sensation or a mental experience" (Trask 1993:97).

Examples (45) through (56) illustrate the different semantic properties of grammatical PATIENT case using the 1st person PATIENT forms *ku-* (realis) and *ba-* (irrealis). In the first seven examples the 1st person form refers to a semantic patient participating in an event. In (52) through (56), the 1st person is an experiencer of a state.

Events with semantic patients:

(45) *ba·bin ʔna ʔ* (Chafe a548)
ba- *(ʔi)bi ʔn* *-ʔa ʔ*
1PAT.IRR hit FUT
are they going to hit me?

(46) *kuhnáh ʔyah* (Chafe c153)
ku- *ki=náh ʔy* *-ah*
1PAT cut PERF
s/he, it cut me, I cut myself (unintentionally)

(47) *ku·wiškahí·yah* (Chafe e642)
ku- *ʔawis-* *yika=híy* *-ah*
1PAT sitting be.stuck PERF
I'm stuck sitting down

(48) *hákkukasčúhsaʔ* (Chafe b972)
hák# *ku-* *kas-* *yúk* *-saʔ*
IND 1PAT liquid use.up IMPFV
I'm bleeding

(49) *kuk'asniʔihwah* (Chafe x261)
ku- *k'as-* *ʔini=ʔiʔw* *-ah*
1PAT leg break PERF
my leg broke, I broke my leg (unintentionally)

(50) *kúnnaškudah* (Chafe h919)
ku- *ʼnnaš-* *kud* *-ah*
1PAT breath sever PERF
it cut off my breath, strangled me

(51) *k'apáhciʔ* *hákkuhkáwáyúhsaʔ* (Chafe h628)
k'apáhciʔ *hák#* *ku-* *haka-* *wa-* *yúk* *-saʔ*
chicken IND 1PAT INDV PL vanish IMPFV
my chickens are vanishing

States with semantic experiencers:

(52) *hákku·nasnínihsaʔ* (Chafe d434)
hák# *ku-* *nas-* *sininih* *-saʔ*
IND 1PAT foot tingle IMPFV
my foot is asleep

(53) *hákkuhbímʔit'ihsaʔ* (Chafe j381)
hák# *ku-* *kibínt-* *wit-* *ʔaʔ(ih)* *-saʔ*
IND 1PAT ribbon mind have IMPFV
I want a ribbon

(54) *kúbáwcaʔnáʔnit* (Chafe d173)
kú# *ba-* *wicaʔ-* *na-* *ʔáʔ* *-nid*
NEG 1PAT.IRR mind DIST come CIS
I don't understand (him/her/it)

(55) *hákkúnča ʔsuh* (Chafe c551)
hák# ku- nak- ya=ʔasuh
IND 1PAT fire come
I'm awful hot, warm, overcome with heat

(56) *c'ítkutánnáw·sit* (Chafe y226)
ku- ʔa=hiʔin -hah
1PAT be.afraid HAB
I'm afraid

The first seven examples all involve constructions which denote events or states with 1st person semantic patient referents. The 1st person participant suffers from situations which include 'hitting' (45), 'cutting' (46), 'being stuck in a sitting posture' (47), 'bleeding' (48), 'leg-breaking' (49), 'breath-severing' (50), and 'chicken-vanishing' (51). In each of these cases, the 1st person referent finds her/himself powerless in the situation that is affecting her/him; s/he is overcome by these circumstances.

Examples (49) through (51) appear to be constructions which include a 1st person possessor. However, the PATIENT case in Caddo does not mark possessors. Instead, PATIENTS mark the most affected argument of an event or state, which can correspond to either semantic patients or experiencers. The situations indexed by the constructions in these examples all include two semantic patient entities. In (49), the two patient entities are the speaker and his/her leg, in (50), they are the speaker and his/her breath, and in (51), the speaker and her chickens. Consider (52), *k'apáhciʔ hákkuhkáwáyúhsaʔ* 'my chickens are vanishing'. This example refers to an event where there was a snake that was killing chickens that the speaker relied on for food (Chafe, personal communication). Thus, in this construction, the two semantic patient entities are the chickens and the speaker. The chickens are patients because they both

undergo and are directly affected by the 'vanishing' event. It is the chickens that are vanishing. The speaker is also a patient because she is directly affected by the event, since the snake is killing her food source. Because *haka-wa-yúk* 'for several animate entities to be vanishing' is an intransitive stem, only one semantic patient can serve as the grammatical PATIENT; because the 1st person outranks the 3rd person in this construction, both in terms of person and animacy, it is the 1st person that is marked on the verb. Thus, the events or states indexed by the constructions in examples (49) through (51) only *infer* possession.

In the final five examples, the 1st person referent is a semantic experiencer of a state. 'Foot-tingling' (52), 'wanting a ribbon' (53), 'feeling sleepy' (54), 'feeling hot' (55), and 'being afraid' (56) are all sensations or mental happenings that the referent experiences uncontrollably. As in examples (45) through (51), the 1st person participant is affected by these occurrences and exerts no control.

3.3. DATIVE CASE

DATIVE case marks participants that are indirectly affected by a verbal situation and comprehends the semantic roles of beneficiary, goal/recipient, and possessor. A *beneficiary* is defined as "the animate entity on whose behalf an activity is carried out" (Blake 1994:70); *goal* is "the end point of motion" (Trask 1993:119), and includes the notion of *recipient*, "a sentient destination" (Blake 1994:70). A *possessor* is "the entity that possesses another entity" (Blake 1994:71).

A DATIVE differs from a PATIENT in that a DATIVE is less directly, or less physically affected by the event or state in which s/he participates than a PATIENT.

That is, a beneficiary, goal/recipient, and possessor are less affected by an event or state than a semantic patient or experiencer.[20]

Note that while each of the three semantic roles that the DATIVE case encompasses usually index an animate referent, a DATIVE-case beneficiary and recipient must do so. Furthermore, the referents in such situations are typically human. Within the context of the Caddo animacy hierarchy detailed above in section 2.0, it is unsurprising that 3rd person DATIVES are overtly marked in the pronominal system, even while 3rd person AGENTS and PATIENTS are not; as a grammatical category that usually references animates and humans, the DATIVE case is inherently high in animacy.

Finally, even though grammatical PATIENT and DATIVE-case morphology are often neutralized in the pronominal prefix system, the correct case role of any given PATIENT or DATIVE participant is not ambiguous as the DATIVE case requires the presence of the dative-applicative prefix *t-/n-/ˊn-/ˊnt-* of position 9 of the verb template.

Examples (57) through (61) include referents marked by the DATIVE case functioning as semantic beneficiaries; in (62) through (66) they function as semantic goal/recipients, in (67) through (70), semantic possessors.

Semantic beneficiaries:

(57) *cišdawá·ʔah* (Chafe c269)

ci-	*t-*	*kid-*	*ʔa-*	*wáʔ*	*-ah*
1AGT	APP	elevated.surface	up	put	PERF

I put it up for him

[20] Mithun (1998) looks at three North American languages, Lakhota, Kathlamet, and Mohawk, and describes similar systems in respect to the DATIVE.

(58) *túncúnki?a?* (Chafe e705)
nu- ´nt- yúnik- -?a?
3DAT APP miss FUT
she'll miss it for him (e.g. if shooting in his place)

(59) *kundán?ú?čah* Chafe a713
ku- n- dana -´i?n -u? -čah
1DAT APP blow CAUS MID INTENT
he's going to blow it for me

(60) *kut?ikahyún·čah* (Chafe b758)
ku- t- ?awi- kah=yuhn -čah
1DAT APP ABS.SG take.part INTENT
he's going take part for me, help me

(61) *sattih?á?* *dáškát* (Chafe f680)
sa- t- ?nih -?a? daškat
IRR APP make FUT bread
will he make the bread for him?

Semantic goal/recipients:

(62) *kúm?á?ni?a?* Chafe d905
ku- ´n- wáy?n(i) -?a?
1DAT APP give.back FUT
she'll give it back to me

(63) *híkkutáy·yuh* (Chafe b339)
hít# ku- t- háy=yúh
PAST 1DAT APP tell
he told me

(64) *híkkutayah* (Chafe y188)
hít# ku- t- ha=yáh
PAST 1DAT APP waft.odor
I smelled it (unintentionally), it wafted odor to/toward me

(65) *?ina? níkkúm?á·kah* (Chafe b864)
?ina?ník# ku- ´n- wa- kah
mother PAST.TEMP.SUB 1DAT APP PL shout
when mother called us

(66) *nidún háhutáywanihsa?* (Chafe h723)
nidun hák# nu- t- háy- wan(ih) -sa?
ball IND 3DAT APP activity engage.in IMPFV
he's playing (at) ball

Semantic possessors:

(67) *wísc'i? kahunnaš?ah* (Chafe h005)
wísc'i? kak# nu- n- nas- ya?ah
one SUB 3DAT APP foot be
once, one footprint, step

(68) *ha?ahat kúbač'aš?ah* (Chafe x684)
ha# ?ahat kú# ba- t- k'as- ya?ah
A good NEG 1DAT.IRR APP leg be
my wheel isn't any good

(69) *kunní·nikah* (Chafe i104)
ku- n- na- ni- yunik -ah
1DAT APP DIST PORT run.off PERF
he took them away from me

(70) *kakita·h?áw?i?a?* (Chafe y252)
kak# yi- t- hayah- ?a- wa?(i)
SUB DEFOC.AGT APP animate.patient out throw
to exorcise him, for one to expel his evil

In the first five examples, a grammatical AGENT performs an activity on behalf of another entity, a DATIVE beneficiary. As a beneficiary, the DATIVE referent is necessarily human. In (58) *túncúnki?a?* 'she'll miss it for him', the 3rd person AGENT acts in place of the 3rd person human beneficiary (marked *nu-*). In (59) *kundán?ú?čah* 'he's going to blow it for me', the 3rd person AGENT acts on behalf of the 1st person beneficiary (*ku-*).

The next five examples each include a DATIVE participant functioning as a semantic goal or recipient. The 1st person DATIVE-case participants in (62)

kúm ʔá ʔni ʔa ʔ 'she'll give it back to me' and (63) *hĭkkutáyyuh* 'he told me' are recipients. The DATIVE-case arguments in (64) through (66) are goals. In (64), *hĭkkutayah* 'I smelled it', an odor is moving toward the 1st person. A literal gloss of this construction is 'it wafted odor to/toward me'. As a semantic goal, the 1st person is only indirectly affected by the odor-wafting event. The entity undergoing the process of emitting odor is a semantic and grammatical PATIENT. The DATIVE-case argument in (66) is *nidún* 'ball'. As a 3rd person goal, it is indexed by the 3rd person DATIVE prefix *nu-*. Note that 'ball' in this construction is not directly affected by the action of the verb. The verb denotes an event where a person *engages in an activity* that *involves* a ball. The activity, designated by the prefix *háy-*, is the semantic patient.[21]

In the final four examples, the DATIVE acts as a semantic possessor. Like beneficiaries, goals and recipients, a possessor is affected by the situation in which s/he participates, but not directly. In these constructions, it is the possessum, which is always a semantic patient, that is directly affected. Thus, it is one's *footprint* or *step* that occurs twice in (67) and the speaker's *wheel* that is not any good in (68).

Note that the semantic patients in (67) and (68) are designated by the incorporated noun roots *nas-* 'foot' and *k'as-* 'leg', respectively. As in explained in Chapter VII, section 4, incorporated noun roots and other patientive prefixes function to specify the type or kind of semantic patient involved in an event or state. Thus, *k'as-* designates any semantic patient that resembles a leg, including wheels; *nas-* designates any semantic patient that resembles a foot, including a footprint or step;

[21] Wichita also has a prefix that specifies that the semantic patient of an event is an activity. See Rood (1976:21).

their precise interpretation is determined by the contexts of the speech events. However, when incorporated noun roots indicating body parts or body products cooccur with a grammatical PATIENT, such as in examples (49) *kuk'asni?ihwah* 'I broke my leg', (50) *kúnnaškudah* 'it cut off my breath', and (52) *kúnnaškudah* 'my foot is asleep', above, the incorporated noun root is almost always interpreted as the actual body part or body product, and not some metaphorical extension. A participant is usually directly affected by an event or state that involves his or her own body part (e.g. 'foot', 'leg') or product (e.g. 'breath').[22]

4.0. REALITY

As already noted, every verb is obligatorily specified for reality through pronominal prefix selection. Realis events and states are encoded in the realis set of pronominal prefixes while irrealis events and states are encoded in the irrealis set. Trask (1993:228) defines *realis* as a "label occasionally employed to label a verb form typically used to refer to an event or state perceived as actually occurring or having occurred, and contrasting with irrealis." As Chafe (1995:350) observes, Trask's characterization of *irrealis* expresses a slightly more incredulous stance with regards to the coherence of the term's content. Trask writes that *irrealis* is "a label often applied in a somewhat *ad hoc* manner to some distinctive grammatical form, most often a verbal inflection, occurring in some particular language and having some kind of connection with unreality". Peck (1995:159) offers a more specific and useful description of the term when he states that *irrealis* is "...used in clauses that express

[22] For an explanation of *body part* and *body product*, see Chapter VII, section 4.

hypothetical activities, such as future events, conditional events, events that have not yet happened, events that we are unsure of or things about which we want to be polite or noncommittal.". Chafe (1995:363) states that "the realis-irrealis distinction reflects judgments that certain ideas stem from direct perception, memory, or expectations of what is normal, while others have their source in imagining".

Any sort of negative reality is, by definition, not real, or irrealis. What constitutes a negative reality in Caddo are those events and states that have not occurred, are not known for certain to occur, and are not expected to occur; that is, these are the unknown, unexpected, and the out of the ordinary. On the other hand, "real" events and states have occurred, are known to occur, or are expected to occur; they are the known, expected or predictable, and normal state of affairs. The grammaticization of Caddo reality, then, is based on the cycle of experience and projects through time. If a future activity or state falls within the pattern of past and current reality, it is encoded as a real happening, even though it has not happened yet. Conversely, if something unexpected occurs, it is encoded as irrealis, although it actually takes place.

The first twelve examples below illustrate some of the contexts in which realis pronominal morphology occurs. These include real or positive (as opposed to negated) past, ongoing, and future events, expectations and beliefs, and question-word expressions. The remaining examples provide a sampling of contexts in which irrealis pronominal morphology occurs and includes negations, conditionals and hypotheticals, expressions of astonishment, and yes-no questions. These various context types are grammatically realized by an array of tense/aspect/mood (TAM) proclitics and affixes;

the proclitics, in particular, obligatorily condition the cooccurrence of either realis or irrealis pronominal morphology. The TAM system is complex and is not taken up here in any detail. Instead, this topic is discussed explicitly in the following chapter.

Real past events:

(71) *hítcíwtahsaʔ* (Chafe a460)
hít# *ci-* *binah* *-saʔ*
PAST 1AGT fight IMPFV
I fought

(72) *níkkambašuh* (Chafe a386)
ník# *kan-* *bašúk*
PAST.TEMP.SUB liquid dry.up
when the water dried up

Real present events:

(73) *háhʔikáhnunʔsaʔ* (Chafe b859)
hák# *(ʔi)káh* *-nunʔ* *-saʔ*
IND yell ITER IMPFV
he's hollering every so often

(74) *cimbahsáwʔhah* (Chafe a024)
ci- *n-* *ba-* *ki=sáwʔ* *-hah*
1AGT APP food scrape HAB
I'm cutting (corn kernels) off (of cob)

Real future events:

(75) *kuʔihʔaʔ* (Chafe f408)
ku- *ʔih* *-ʔaʔ*
1PAT give FUT
he will give it to me

(76) *ʔasáy·saʔ* (Chafe d385)
ʔa=sáy *-saʔ*
emerge IMPFV
he'll appear

Expected events:

(77) *c'idáw·čahsan* (Chafe d196)
c'i# *yah?-* *wičah-* *san(ih)*
IMP 2AGT mind stay
be on the lookout

(78) *hísiwčibah* (Chafe a260)
hí# *si-* *bak-* *yi=bahw*
HORT 2PAT sound perceive
let him hear you

(79) *sihdawán?u?a?* (Chafe a750)
sik# *dawáh* *-n?u* *-?a?*
BELIEF gather MID FUT
I think it's going to clear (e.g. the weather)

(80) *kánnahwaswí·čah* (Chafe e093)
kán# *yah=wa=kis* *-čah*
QUOT bathe.PL INTENT
reportedly they are going swimming, going to take a bath

Question-word questions:

(81) *nušt'uh* *dikadáy·báw·hah* (Chafe e393)
nušt *-?uh* *dikat#* *yah?-* *yi=bahw* *-hah*
hide N WHAT.INTER 2AGT perceive HAB
what grade are you in? (what paper do you see?)

(82) *wíttún·t'a?* (Chafe f317)
wít# *nu-* *'nt-* *?a?*
WHO.INTER 3DAT APP is
who has it?

Negations:

(83) *kút'awk'sáy?nah* (Chafe a083)
kú# *t'a-* *bak-* *?a=sáy* *-?u* *-nah*
NEG 1AGT.IRR sound emerge MID PERF
I didn't make any noise

(84) *kúy'ít'awčibah* (Chafe a371)
kúy'í# *t'a-* *bak-* *yi=bahw*
NEG.PAST 1AGT.IRR sound perceive
I didn't ask him

(85) *dúsá·dihčah* (Chafe i680)
dú# *sah'-* *'a=d(ih)* *-čah*
NEG.SIM 2AGT.IRR go INTENT
I know you aren't going to go

(86) *dúst'áy·bah* (Chafe e493)
dús# *t'a-* *yi=bahw*
NEG.COND 1AGT.IRR perceive
when I don't see

Conditions:

(87) *nasawsisihnah* (Chafe a011)
nas# *sa-* *ba=sisih* *-nah*
GEN.COND IRR boil PERF
after it boils

(88) *hít'awčibáw·'a'* (Chafe a295)
hí# *t'a-* *bak-* *yi=bahw* *-'a'*
PARTIC.COND 1AGT.IRR sound perceive FUT
if I happen to hear it

Unexpected events:

(89) *húsba·sáyk'awihsa'* (Chafe d334)
hús# *ba-* *'asay-* *k'aw* *-sa'*
MIR 1PAT.IRR name know IMPFV
he does know my name! (I didn't know that he knew my name!)

(90) *wásánáy·'aw* (Chafe i375)
wás# *sa-* *náy='áw*
INFREQ IRR sing
he doesn't sing, he's not one to sing

Yes-no questions:

(91) *sa?a·wiyasnat* (Chafe e859)
sa?a- *?awi-* *yas-* *?a=nát*
2PAT.IRR ABS.SG running be.cold
are you cold while running?

It is clear from the first six examples that realis contexts include events that occur in the past, present, and future. (71) and (72) refer to events that are known by the speaker to have already taken place. The proclitics in each case index the past tense: *hít#* of (71) is the simple past tense marker, and *nik#* of (72) is a past non-durative temporal subordinator. Both of these proclitics condition the cooccurrence of realis pronominal morphology. The verbs in the next two examples are unmarked for tense, and the events are interpreted as currently taking place. The speaker accepts the truthfulness of the propositions, perhaps through direct perception of the events in question or perhaps because the events follow a normal, and thus expected pattern or routine. The indicative proclitic *hák#* combines with the imperfective suffix *-sa?* in (73) to discontinuously mark progressive aspect and to condition the use of realis pronominal morphemes. Verbs that do not include proclitics and are not yes-no questions (see below) obligatorily occur with pronominal prefixes from the realis set. Thus, the 1st person AGENT in (74) *cimbahsáw?hah* 'I'm cutting (corn kernels) off (of cob)' is marked with realis *ci-*. (75) and (76) index future events. In (75), tense is marked by *-?a?*, the future tense morpheme, while *-sa?* of (76) is an imperfective that, when unaccompanied by other tense or aspect markers, indicates the future and cislocation. Even though these events have not yet taken place, the speaker expects

them to occur and the lack of a proclitic in each instance entails the inclusion of realis pronominal morphology.

(77) through (80) include imperatives and evidentials. The verbs in (77) and (78) are both imperatives and thus index events that have not yet occurred. However, the expectation concomitant to the command is that the event will take place. Indeed, all imperatives in Caddo, including *c'i#* '(simple) imperative' (77) and *hí#* 'hortative' (78) cooccur with realis pronominal morphology. (79) and (80) both include verbs that contain evidential proclitics. Evidentials indicate the source of the speaker's evidence for the information in his/her utterance (Trask 1993:95). In the first one, *sihdawán ʔu ʔa ʔ* 'I think it's going to clear', *sik#* 'belief' is an evidential specifying that it is the speaker who is the source of the information. The quotative *kán#*, glossed 'reportedly', 'allegedly' or 'it is said' is used in (80). Here, the source for the speaker's knowledge is some unspecified other. In either case the speaker is providing information about events that are expected to occur.

The next two examples, (81) and (82) include question-word expressions. As Chafe (1995:354) observes, although questions in general imply a lack a knowledge on the part of the speaker, "...a question-word question presupposes the event and asks only about the identity of a participant." Thus, *nušt'uh dikadáy·báw·hah* 'what grade are you in?' (81) presupposes that the 2nd person participant is in school; the speaker only inquires about the *level* of schooling. In (82), *wíttúnt'a ʔ* 'who has it?', the speaker knows that someone has a specific object. He or she only wants to know *who*.

Examples (83) through (91) all comprise irrealis events and states. (83) through (86) specifically include negated clauses. In the first sentence, *kú#* is the

simple negative; it conditions the cooccurrence of the irrealis 1st person AGENT prefix *t'a. kúy'ʔí#*, in (84), is the past negative marker; it combines with irrealis set prefixes to specify that a past event or state did not take place. The irrealis event in (85) involves the evidential *dú#*, which provides the source of the information of the utterance as the speaker and negates the event or state. The proclitic in (86), *dús#*, is a negative conditional. It negates a hypothetical event or state. Both (83) and (84) include past or completed events that did not occur; the events in (85) and (86) are not expected to occur by the speaker. The irreality of these non-events is encoded explicitly in the pronominal prefixes.

The next two examples (87) and (88), consist of hypothetical or conditional events. In conditional expressions, the speaker imagines the occurrence of an event or state; these imagined ideas necessarily lie outside of known reality and thus constitute part of the unreal universe, or irreality. The verb in (87) *nasawsisihnah* 'after it boils' includes the generic conditional *nas#*. This proclitic is used with generic, and not particular events. The proclitic in (88) *hí#* is the particular conditional which indicates the possibility of a particular event (Chafe 1995:356).

The verbs in (89) and (90) specifically express unexpectedness. The mirative *hús#* of *húsba·sáyk'awihsaʔ* 'he does know my name!' signifies both unexpectedness and astonishment. The speaker did not expect, and is surprised to find out, that the 3rd person AGENT participant knows the speaker's name. The verb in (90) includes the infrequentive proclitic *wás#* which indicates that an event so seldomly occurs that it is unexpected.

The final example comprises the unmarked use of the irrealis pronominal prefixes: yes-no questions. With yes-no questions, the speaker does not know whether an event or state takes place (Chafe 1995:354). Since the occurrence of the event or state is unknown, and therefore can only be imagined by the speaker, all yes-no questions fall within the scope of irreality. As alluded to above, an irrealis pronominal prefix occurring without a proclitic constitutes the structure of the yes-no question.

5. CONCLUSION

In this chapter, the pronominal prefix system was described in respect to its three principal functions: expressing the grammatical person and case of the referents of a verb and the reality status of the event or state indexed by a clause. In particular, we saw that the pronominal system has grammaticized the marking of humans wherever possible. Thus, 1st, 2nd, and Defocusing person always reference human participants and have overt morphological forms in each of the three grammatical cases. Furthermore, 3rd person DATIVES, which are usually human, are overtly marked in the pronominal system.

It was also shown that the case system was based on the semantic notions of control and affectedness. Thus, the case assignment of the sole referent of an intransitive clause is determined by the referent's relative control and affectedness in the verbal situation. If the referent exerts control and is not significantly affected by the event or state, then s/he is marked as a grammatical AGENT; if s/he is significantly affected by the event or state and exerts no control, then s/he is marked as a grammatical PATIENT.

The reality status of an event or state is encoded by the pronominal prefix class in conjunction with the TAM proclitic class. Each proclitic conditions the cooccurrence of a particular set, either realis or irrealis, of the pronominal category. We saw that reality in Caddo is defined by the human cycle of experience. A realis event or state actually occurs and falls within the pattern of normal or everyday life; these situations constitute the known universe. In contrast, irrealis events and states do not occur, or only hypothetically or surprisingly occur; they are unexpected and imaginary.

CHAPTER IV

TENSE, ASPECT, AND MOOD

0. INTRODUCTION

Tense/aspect/mood (TAM) is a cover term that here encompasses a broad range of category types including tense, aspect, and mood, as well as the related concepts of negation, subordination and other adverbial distinctions. In addition to semantic and functional coherence, these categories are generally united by position class and morphological type. Most TAM morphemes are inflectional and are encoded in the verb-initial proclitic class of template position 15 and verb-final suffix class of position -7. However, five affixes that include aspect as part of their semantic composition function derivationally.[1]

There are some 200 identified TAM markers, the majority of which occur as proclitics in verb-template position 15. These proclitics may be simple or complex; a complex proclitic consists of two or more fused proclitic elements. Largely because of

[1] These morphemes are included in their respective semantic group, along with inflectional TAM markers. Their morphological process type is overtly indicated in each case. For ease of reference, these five morphemes are: the inchoative suffix *-'/-'n(i)*, the durative prefix *ʔiyá-*, the continuative prefix *hana-*, the diminutive suffix *-čitiʔ*, and the cislocative suffix *-nid/-id*. See sections 2.2.2, 2.2.7, 2.2.8, 2.2.11, and 4.3.1, respectively.

fusion, a single TAM morpheme typically encodes meanings from two or more distinct grammatical categories. For example, *náyt#* is a proclitic that encodes both past tense and translocation (an adverbial distinction); it is glossed 'past translocative'. *kac'ikín#* includes three TAM distinctions: 'quotative' (an evidential mood), 'past tense', and 'prioritive' (an aspectual category). It is glossed as 'past prioritive quotative'. Furthermore, particular grammatical meanings may be constructed from the combination of two or more TAM markers. Progressive aspect, for example, is marked discontinuously by the proclitic *hák#* 'indicative' and the suffix *-sa'* 'imperfective'.

The TAM categories are divided into four groups, each corresponding to a section of this chapter: tense (section 1), aspect (section 2), mood (section 3), and other TAM distinctions (section 4). In each section, I define the TAM category in question and identify and discuss its various subcategories. Throughout, cooccurrences and restrictions are given. In the final section, a position-class survey of the overall TAM system is presented.[2]

1.0. TENSE

Comrie (1976:1-2) writes that "tense relates the time of the situation referred to to some other time, usually to the moment of speaking". Caddo overtly marks two tenses, past and future. A verbal construction unmarked for tense is interpreted as

[2] While it would be desirable to include a discussion with relevant examples of each TAM morpheme, space considerations dictate otherwise. However, three complete TAM charts are presented within this chapter. In these charts, those tense, aspect and mood morphemes that are *not* exemplified in the section under discussion in this chapter, but *are* exemplified elsewhere in the thesis are followed by an indication of one chapter and example number where they are illustrated. Thus, *hís#* 'past' (V(15)) specifies that one occurrence of *hís#* is in example (15) of Chapter V.

occurring in the present tense. Past tense is encoded in verbal proclitics; the future tense is marked by one final-position suffix and one position 15 proclitic.

1.1. PAST

Past tense indicates that the time of the referred to situation occurred prior to the moment of speaking. In Caddo there is one form that marks the simple past tense, *hít#*, and some twenty-six other morphemes that include past tense as part of their semantic composition. Example pair (1) illustrates the use of the simple past-tense morpheme and contrasts this marked tense with the unmarked present tense.

(1) *hípbasisí·hin?* (Chafe a004)
hít# *ba=sisih* *-'i?n*
PAST boil CAUS
she boiled it

(ii) *ciwsisíh?ničah* (Chafe a002)
ci- *ba=sisih* *-'i?n(i)* *-čah*
1AGT boil CAUS INTENT
I'm going to boil it

In (1i) the 'boiling' event occurs in the past; this contrasts with the second construction where the event is unmarked for tense, though marked for aspect. In (1ii), the verb is marked for intentive aspect; the event of boiling has not yet occurred, though 'going to boil' is an activity that takes place in the present. Intentive aspect is discussed in section 2.2.3.

hít# differs from the other morphemes that include a past tense meaning, in that these other forms also include at least one other TAM significance. All past-tense morphemes are listed in Table IV-I, along with the reality status they condition.[3]

[3] Realis is unmarked. See Chapter III, section 4.0.

TABLE IV-I: Past-tense markers

ah-/-nah/-dah		perfect[a]
c'ít#		past prioritive (VI(41))
dayt#		past locative indicative
dikát#/díkát#		past WHAT interrogative
hikat#/hikát#/híkát#		past WHATEVER interrogative
hít#		past
hís#	(IRR)	past (V(15))
kac'ikán#/kac'ín#		past prioritive quotative
kák#		past subordinator (VII(14))
kán#		past quotative
kánút#		negative past quotative (IV(87))
ku?í#/kú?í#/kúy?i#/kúy?í#	(IRR)	negative past
kúyk#		past locative subordinator (IV(39))
kúy?ít#/ku?ít#		past WHERE interrogative (IV(9))
náyt#		past translocative
nic'ít#		past prioritive general participle
nikát#		negative past desiderative (IV(79))
nák#		past temporal subordinator (III(72))
nákák#		past subordinator
nít#		past general participle (III(23))
núdák#		past continuative
si?ík#		past belief (IV(83))
sákák#		past simulative
sí?ít#/si?ít#		past WH- interrogative
t'ín#		past partial negative
wí?ít#		past WHO interrogative

[a] See section 2.1.

kín# 'past quotative', *t'ín#* 'past partial negative'[4], *wí?ít#* 'past WHO interrogative', and *kúy?í#* 'negative past' are exemplified in (2) through (5), respectively.

(2) *kínciwčibah* (Chafe a362)

kín#	*ci-*	*bak-*	*yi=bahw*
PAST.QUOT	1AGT	sound	perceive

they say I heard it

(3) *t'ínciwčibah* (Chafe a369)

t'ín#	*ci-*	*bak-*	*yi=bahw*
PAST.PARTIAL.NEG	1AGT	sound	perceive

I didn't hear it

[4] Partial negatives are discussed in section 4.1.

(4) *wí?ídàwwčibah* (Chafe a345)

wí?ít#	*yah?-*	*bak-*	*yi=bahw*
PAST.WHO.INTER	2AGT	sound	perceive

who did you hear?

(5) *kúy?íbakahwa?* (Chafe b718)

kúy?í#	*ba-*	*kah-*	*wa?*
NEG.PAST	1PAT.IRR	inside	put.together

I didn't know it

Note that the majority of the past tense morphemes listed in Table IV-I includes the element *-(?)í-*. There appear to be two related morphological processes for past-tense inflection; both are of uncertain productivity. For example, the proclitic elements in examples (2) and (3) are representative of a whole class of past-tense proclitics that corresponds to non-past proclitics that, in place of the high front vowel '*í*', have the low vowel '*á*' or '*a*'. It appears that these non-past forms are inflected for the past tense by ablaut, whereby the '*a*' vowel of a non-past form alternates with a past tense marker *-í-* in the corresponding past form. So, *kán#* 'quotative' and *t'án#* 'partial negative' are the non-past variants of *kín#* 'past quotative' and *t'ín#* 'past partial negative', respectively. A similar process is observed with several non-past proclitics that have a high vowel in the last syllable, *-i(C)*, *-í(C)*, *-u(y)(C)*, *-ú(y)(C)*. In the corresponding past-tense forms of these proclitics, *-?í-* 'past tense' is positioned after the high vowel and before the final consonant or morpheme boundary. Thus, the proclitics in (4) and (5), *wí?ít#* 'past WHO interrogative' and *kúy?í#* 'negative past', are paired with the non-past forms *wít#* 'WHO interrogative' and *kúy#* 'negative', respectively.

1.2. FUTURE

There are two morphemes that index future time, the simple future marker *-ʔaʔ/-waʔ* and the future resultative *kayt#*. *kayt#* is examined in section 2.2.10 below and will not be treated here. *-ʔaʔ/-waʔ* occurs in position -7 of the verb template and indicates that the time of the referred to situation will take place subsequent to the time of speaking. The *-waʔ* variant is phonologically conditioned, occurring only after the glottal stop.

(6) *basisʔaʔ* (Chafe a018)
ba=sis *-ʔaʔ*
boil FUT
it will boil

(7) *dikattumbakáiʔwaʔ* (Chafe a100)
dikat# *nu-* *n-* *baká=hiʔ* *-waʔ*
WHAT.INTER 3DAT APP have.to.say FUT
what will he have to say (to someone)?

1.3. PAST AND FUTURE COMBINED

Past and future tense combine freely to mark past conditional events and states. For example, *hít#...-ʔaʔ* is the simple past conditional (8), *kúyʔít#...-ʔaʔ* is 'past WHERE conditional interrogative' (9), and *kín#...-ʔaʔ* is 'past quotative conditional' (10).

(8) *hítcitáyyúhʔaʔ* (Chafe b316)
hít# *ci-* *t-* *háy=yúh* *-ʔaʔ*
PAST 1AGT APP tell FUT
I would have told him (but I didn't)

(9) *kúy ʔítcí·báw ʔa ʔ* (Chafe e444)
kúy ʔít# *ci-* *yi=bahw* *-ʔa ʔ*
PAST.WHERE.INTER 1AGT perceive FUT
where would I have seen it?

(10) *kínsí·báw ʔa ʔ* (Chafe e448)
kín# *si-* *yi=bahw* *-ʔa ʔ*
PAST.QUOT 2PAT perceive FUT
they say he would have seen you

2.0. ASPECT

Comrie (1976:3) gives a general characterization of aspect based on Holt (1943:6): "aspects are different ways of viewing the internal temporal consistency of a situation". Aspect is much more diversified than tense in Caddo; most verbs are marked for aspect and there are twelve aspectual categories indicated by thirty-eight distinct TAM markers occurring as proclitics, prefixes, and suffixes in the verb.

Aspect is divided into two superordinate, contrasting categories: perfective and imperfective (but see below). According to Comrie (1976:21), "perfectivity involves lack of explicit reference to the internal temporal constituency of a situation, rather than explicitly implying the lack of such internal temporal constituency." He asserts that a perfective reduces a situation to a "blob", and "a blob is a three-dimensional object, and can therefore have internal complexity, although it is nonetheless a single object with clearly circumscribed limits" (Comrie 1976:17-18). Imperfectivity, on the other hand, gives "explicit reference to the internal structure of a situation, viewing a situation from within" (Comrie 1976:24). In general, a perfective situation is one which is, or is imagined to be, completed. An imperfective situation is ongoing or incomplete.

Lying outside of these contrasting perfective and imperfective categories is perfect aspect. Unlike the perfective and imperfective categories, perfect aspect has nothing to say about a verbal situation in itself. Instead, the perfect "indicates the continuing present relevance of a past situation" (Comrie 1976:52).

Caddo has two perfect markers. These morphemes are illustrated in section 2.1. Imperfective aspect in Caddo is divided into eleven broad categories, several of which encompass finer aspectual distinctions. These imperfective categories are examined in section 2.2. Perfective aspect in Caddo is simply the lack of imperfective aspect; it is not marked and does not necessarily imply that a situation is complete. It is the normal state of affairs and is not specifically treated here.

All TAM morphemes that include aspect as part of their semantic composition are listed in Table IV-II.

2.1. PERFECT

There are two overt morphemes in Caddo that include the meaning 'perfect': the (simple) perfect *-ah/-nah/-dah*, and the translocative perfect *-šiyah*. Both *-šiyah* and *-ah/-nah/-dah* occur as position -7 tense/aspect (T/A) suffixes and are thus mutually exclusive in any given verb. The perfect allomorph *-ah* occurs consistently after oral obstruents; after other consonants, there is little phonological predictably, the particular allomorph varying according to the preceding morpheme (Chafe 1976:75). *-dah*, however, is rare and only occurs after stems ending in *n(ih)*.

Besides indicating the current relevance of a past situation, the perfect morphemes in Caddo also have a simple past meaning, equivalent to the compound

TABLE IV-II: Aspect markers

-'/-'n(i)		inchoative	*kayt#*		future resultative
-ah/-nah/-dah		perfect	*káyn#*		resultative
c'ik#/ c'it#		prioritive	*kúc'i#*	(IRR)	negative prioritive (IV(88))
c'is#	(IRR)	prioritive	*kú$^{?}$ní#/kúy$^{?}$ní#*	(IRR)	negative continuative (III(38))
c'ít#		past prioritive (VI(41))	*kú$^{?}$níkáy#*	(IRR)	negative continuative indiscriminative
-čah		intentive	*nac'it#*	(IRR)	prioritive temporal subordinator
-čiti$^{?}$		diminutive	*nadú$^{?}$us#*	(IRR)	negative continuative general conditional
-hah/-šah		habitual	*-nid/-id*		cislocative
hana-		continuative	*-nih/-hih/-ih*		andative
hác'ik#		prioritive indicative	*-nun$^{?}$*		iterative
háh-/yah-		durative	*nus#/$^{?}$us#*	(IRR)	negative continuative
háh$^{?}$uk#/há$^{?}$ukík/há$^{?}$uk#		continuative indicative	*núdík#*		past continuative
húk#		durative subordinator	*-sat*		intentive andative
húk#		habitual	*-sa$^{?}$*		imperfective
hú$^{?}$uk#		continuative durative subordinator	*-šiyah*		translocative perfect
kac'ik#		prioritive subordinator	*t'a$^{?}$uník#*		negative continuative
kac'ín#		prioritive quotative	*wás#*	(IRR)	infrequentive
ka$^{?}$ukík#/kah$^{?}$uk#		continuative subordinator	*$^{?}$iyá-*		durative
kac'ikín#/kic'ín#		past prioritive quotative	*$^{?}$udík#/$^{?}$út#*		continuative

past forms in German and French. Thus, both *er hat gegessen* and *il a mangé* mean either 'he has eaten' or 'he ate'.[5]

The perfect *-ah/-nah/-dah* is illustrated in (11) through (14).

(11) *bawasisíh$^{?}$nah* (Chafe a007)
ba=wa=sisih *-'i$^{?}$n* *-ah*
boil.PL CAUS PERF
they (have) boiled it

(12) *hítcidaw$^{?}$nah* (Chafe a531)
hít# *ci-* *da-* *bi$^{?}$n* *-ah*
PAST 1AGT suspended hit PERF
I (have) hit something hanging, suspended

(13) *citáyyúhnah* (Chafe b289)
ci- *t-* *háy=yúh* *-nah*
1AGT APP tell PERF
I (have) told him

(14) *táhbah$^{?}$wanihdah* (Chafe a055)
ták# *bak-* *$^{?}$a=wa=n(ih)* *-dah*
TRANSLOC sound make.PL PERF
then they three said

The translocative perfect *-šiyah* indicates that an activity is completed and either occurred away from the speaker or involved motion away from the speaker. Its use is illustrated in (15) and (16).

(15) *ci·wayuhšiyah* (Chafe d891)
ci- *($^{?}$i)wayuh* *-šiyah*
1AGT climb.out TRANSLOC.PERF
I (have) climbed out (elsewhere, over there)

[5] I thank Wallace Chafe for pointing this out to me and providing the German and French examples.

(16) *hahní·šiyah* (Chafe a888)
hah=nín *-šiyah*
stop TRANSLOC.PERF
he (has) stopped over there

2.2.0. IMPERFECTIVE

As noted, the Caddo verb is analyzed to formally mark eleven overarching imperfective categories. These include the (general) imperfective, inchoative, intentive, andative, habitual, iterative, durative, continuative, prioritive, resultative, and diminutive. These categories, and their respective constituent subcategories, actually overlap to a considerable degree in the Caddo TAM system and particular morphemes may exhibit two or more imperfective aspectual distinctions in their range of contexts. The specific label assigned to any given imperfective morpheme indicates that morpheme's most general or usual interpretation.

2.2.1. IMPERFECTIVE

The general imperfective marker *-sa'* occurs in position -7 of the verb template and expresses a variety of imperfective notions, depending on what other TAM markers it occurs with, if any. In general, there are two major distribution patterns of *-sa'* that correlate with particular imperfective meanings. When *-sa'* occurs without any other TAM markers or with negative proclitics, it indicates that an action is in progress or is expected to take place. In this context, *-sa'* also has a cislocative or cislocative-related meaning, specifying that the event in question (i) is

the opinion of the speaker, or (ii) will occur prior to the coming of the agentive participant.[6] Examples (17) through (20) illustrate this use of *-saʔ*.

(17) *ʔasáysaʔ* (Chafe d385)
ʔa=sáy -saʔ
appear IMPFV
he'll appear

(18) *nusbí·báw·saʔ* (Chafe h363)
nus# ba- yi=bahw -saʔ
NEG.CONT 1PAT.IRR perceive IMPFV
(they) won't see me for a long period

(19) *háyniwa·suhsaʔ* (Chafe b207)
haya- ni- wa- ʔasuh -saʔ
animate.patient PORT PL come IMPFV
I bet they are following (e.g. children in the distance)

(20) *kút'áybáwsaʔ* (Chafe i368)
kú# t'a- yi=bahw -saʔ
NEG 1AGT.IRR perceive IMPFV
I'm not going to see him before I come

In the first example, *-saʔ* occurs as the sole TAM marker and specifies that the 'appearing' event is expected to take place. Compare this form with example (33) below, *ʔasáy·sat* 'he's going to go appear over there', where *-sat* 'intentive andative' adds a translocative implication to the same stem. In (18), *-saʔ* combines with *nus#* 'negative continuative', glossed 'not anymore for a long time' to index an event that will take place only after a long duration. The evidential connotation of the cislocative meaning is exemplified in (19). Here, it is the opinion of the speaker that s/he is being followed. Finally, the idea of 'coming before' a specified event is illustrated in (20).

[6] See section 4.3.1 below for the different meanings of the cislocative.

In the other major distribution pattern of *-sa?*, *-sa?* combines with subordinators, indicative mood markers, and other imperfective markers to convey progressive or habitual aspect:

(21) *háh?ikáhnitnun?sa?* (Chafe b854)
hák# *(?i)káh* *-nid* *-nun?* *-sa?*
IND shout CIS ITER IMPFV
he's hollering from a distance intermittently

(22) *kúhbasisihsa?* (Chafe a012)
kúk# *ba=sisih* *-sa?*
LOC.SUB boil IMPFV
when it's boiling

(23) *kúh?abihdímbí·sa?* (Chafe g269)
kúk# *?a-* *bihdah-* *?ini=bíhn* *-sa?*
LOC.SUB DEFOC.PAT shoulder lay IMPFV
where it lays on one's shoulder

(24) *náhnáy?áw·sa?* (Chafe i231)
nák# *náy=?áw* *-sa?*
TRANSLOC.IND sing IMPFV
he's singing that

(25) *húkkukáywáhdisa?* (Chafe c086)
húk# *ku-* *káy=wáhdi* *-sa?*
HAB 1PAT forget IMPFV
I always forget

(26) *háhciwk'anihčahsa?* (Chafe a162)
hák# *ci-* *baka-* *?a=nih* *-čah* *-sa?*
IND 1AGT sound start INTENT IMPFV
I am going to be saying

According to Trask (1993:219) a 'progressive' event is one "which is in progress at the moment of time serving as the reference point for the utterance." This use of *-sa?* is

illustrated by (21), (22), (24), and (26).[7] Example (21) illustrates the most common construction type in which *-sa ʔ* appears, namely, in conjunction with the indicative proclitic *hák#* to form progressive aspect. In (22), *-sa ʔ* combines with the locative subordinator *kúk#*, here glossed 'when', to specify progressive aspect in a temporally subordinated clause.[8] This aspectual meaning contrasts with that in (23) where *-sa ʔ* appears with the same subordinator to indicate habitual aspect. Habitual aspect "expresses an action which is regularly or consistently performed by some entity" (Trask 1993:125). Both (23) and (25) exemplify this idea. In (23), *kúk#* is functioning as a 'true' locative subordinator, specifying 'where' the 'applying' event normally occurs.

2.2.2. INCHOATIVE

Inchoative aspect is marked by the position -I morpheme *- ˊ/- ˊn(i)* which functions derivationally to mark the inception of a situation. The inchoative only occurs with the following inflectional aspect markers: the perfect markers, *-nah*, *-ah* and zero, the imperfective *-sa ʔ* and intentive *-čah*. Example sets (27) through (29) illustrate its use.

(27) *háh ʔikkihsa ʔ* (Chafe a796)
hák# *(ʔi)dikih* *-sa ʔ*
IND sleep IMPFV
he's asleep

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[7] In serial verb constructions, the copula *ʔa ʔ* functions as a progressive. See Chapter VII, section 5.1.

[8] All TAM locatives function to locate a situation in either time or space, depending on the context. See section 4.2 of this chapter.

(ii) *háh²ikkí·sa²* (Chafe a805)
hák# *(²i)dikih* *-´* *-sa²*
IND sleep INCH IMPFV
he's going to sleep

(iii) *²ikkí·nah* (Chafe a798)
(²i)dikih *-´n* *-ah*
sleep INCH PERF
he fell asleep

(28) *hítdik'awihah* (Chafe e536)
hít# *yi=k'aw* *-hah*
PAST know HAB
he knew him

(ii) *háhik'áwnisa²* (Chafe e532)
hák# *yi=k'aw* *-´n(i)* *-sa²*
IND know INCH IMPFV
he's learning, getting acquainted

(29) *hípbinahsa²* (Chafe a459)
hít# *binah=sa²*
PAST fight
he fought, they fought

(ii) *bínás²ánčah* (Chafe a453)
binah=sa² *-´n(i)* *-čah*
fight INCH INTENT
he's going to start fighting, they're going to start fighting

2.2.3. INTENTIVE

Intentive aspect denotes an event that is intended to occur; it is glossed as 'be going to'. There are two morphemes that semantically include this aspectual distinction, *-čah* 'intentive' and *-sat* 'intentive andative'. *-sat* is specifically treated in section 2.2.4 below and will not be considered here. *-čah* occurs as the only position -6 morpheme and is illustrated in (29) above and (30) below.

(30) *ci·sáy·čah* (Chafe d336)
ci- *ʔa=sáy* *-čah*
1AGT appear INTENT
I'm going to appear

2.2.4. ANDATIVE

Andative aspect denotes the idea of 'going off' to do something. Thus, 'he's hunting', a progressive event, contrasts in andative aspect with 'he's going hunting'. There are two morphemes which semantically include andative aspect, *-nih/-hih/-ih* 'andative' (position -2) and *-sat* 'intentive andative' (position -7). In addition to the primary andative significance, each morpheme also includes a translocative implication. (31) and (32) exemplify the use of *-nih/-hih/-ih*, and (33) and (34) demonstrate that of

-sat.

(31) *hící·báw·nih* (Chafe e405)
hí# *ci-* *yi=bahw* *-nih*
HORT 1AGT perceive AND
let me go see it

(32) *híháywaʔdih* (Chafe b226)
hí# *haya-* *waʔud* *-ih*
HORT animate.patient hunt AND
let him go hunt

(33) *ʔasáy·sat* (Chafe d357)
ʔa=sáy *-sat*
appear INTENT.AND
he's going to go appear over there

(34) *citáyyúhsat* (Chafe b292)
ci- *t-* *háy=yúh* *-sat*
1AGT APP tell INTENT.AND
I'm going to go tell him

2.2.5. HABITUAL

According to Comrie (1976:27-28), the common feature of all habituals is that "they describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment, but, precisely, as a characteristic feature of a whole period". Put another way, an habitual marks the reoccurrence of an event over time; thus, a verb marked for habitual aspect indexes several, similar events instead of one particular event.

The two morphemes that generally mark habitual aspect in Caddo are the TAM proclitic *húk#* and the T/A suffix *-hah/-šah*. There are few recorded examples of *húk#* and the *-hah/-šah* alternate *-šah*. In all but one instance, the *-šah* allomorph is restricted to occurring only after laryngeal consonants (*h* or ʔ).[9]

There are three recorded examples of *húk#*; in each case, it only denotes habitual aspect. Consider (35) where *húk#* combines with the imperfective *-saʔ*.

(35) *húkkukáywáhdisaʔ* (Chafe c086)
húk# *ku-* *káy=wáhdi* *-saʔ*
HAB 1PAT forget IMPFV
I always forget

húk# differs from *-hah/-šah* in that the latter has a much more extensive range of imperfective meanings in addition to habitual. In non-past contexts, *-hah/-šah* denotes general imperfective aspect, subsuming habitual, iterative, progressive,

[9] Below is the one recorded example where *-šah* fails to occur after a laryngeal. Here it follows the cislocative *-nid*.

kúbáwʔnaʔà·nišša (Chafe g607)
kaí# *ba-* *wit-* *na-* *ʔáʔ* *-nid* *-šah*
NEG 1PAT.IRR mind DIST have CIS HAB
I don't have my right sense

generic, and durative distinctions. In past-tense contexts, it denotes progressive or habitual aspect.

(36) *cimbahsáw?hah* (Chafe a024)
ci- *n-* *ba-* *ki=sáw* *-hah*
1AGT APP food scrape HAB
I'm scraping corn kernels off of cob

(37) *dí* *?áwnabínku?hah* (Chafe a472)
dí· *?awi-* *na-* *bínik* *-u?* *-hah*
this ABS.SG DIST move.circularly MID HAB
this rotates

(38) *hítdahnuhah* (Chafe a637)
hít# *dah=nuh* *-hah*
PAST wear.a.shawl HAB
she had on a shawl

(39) *kúyh?a?nihšah* (Chafe g222)
kúyk# *?a=?nih* *-šah*
PAST.LOC.SUB make HAB
where she used to make

In (36) *-hah* denotes both progressive and iterative action. The referent is in the process of scraping corn kernels from a cob. The activity of 'scraping' here is not a singular event; rather, it occurs repeatedly and is therefore an iterative event. The activity in (37) involves 'rotating'; here *-hah* functions to mark the activity as habitual or generic. A generic event is one which expresses a general truth or condition. *-hah* combines with *hít#* 'past' in (38) to denote the past durative event of 'wearing a shawl'. A durative situation lasts for a delimited period; it does not extend indefinitely as does the generic (or the habitual to a degree). In (39) *-šah* combines with the past locative subordinator *kúyk#* to index a past habitual action, a tense-aspect combination that is glossed by the English collocation 'used to'.

2.2.6. ITERATIVE

Iterative aspect denotes repeated activity or activity that occurs now and then or intermittently. There are two TAM markers that denote iterativity: *-nun?* 'iterative' (position -5) and *wás#* 'infrequentive' (position 15). In addition, the cislocative marker *-nid/-id* of position -4 also often has an iterative significance. [10]

-nun? is the simple iterative; its function is illustrated in (40), where it combines with *-?a?* 'future' and (41), where it occurs with *-hah* 'habitual'.

(40) *?ikáhnun?na?* (Chafe b857)
(?i)káh -nun? -?a?
shout ITER FUT
he will holler at intervals

(41) *tíwditnun?hah* (Chafe c785)
ni- widit -nun? -hah
PORT arrive ITER HAB
he always brings it

wás# 'infrequentive' indicates a seldomly occurring event. Such an event is repeated, though only after long durations.

(42) *ná wást'áybah* (Chafe i374)
ná· wás# t'a- yi=bahw
that.one INFREQ 1AGT.IRR perceive
I seldom see him

2.2.7. DURATIVE

Trask (1993:87) defines 'durative' as "an aspect form which expresses an action or state which is perceived as lasting for a certain length of time". A usual

[10] The distributive *na-*, discussed in Chapter V, section 2.2, also indicates iteration in some contexts.

English gloss of this aspect is 'for a while'. There are three morphemes that primarily denote durative aspect. They are *ʔiyá-* 'durative', *húk#* 'durative subordinator', and *húʔuk#* 'continuative durative subordinator. Of the three, *ʔiyá-* is a derivational element in the verb stem; it derives durative stems from inherently punctual ones.

ʔiyá- occurs in template position 11. Compare example pairs (43) and (44).

(43) *cihahní·sat* (Chafe a877)
ci- *hah=nín* *-sat*
1AGT stop INTENT.AND
I'm going to go stop over there

(ii) *nátti ʔ* *ci ʔáhahnín·čah* (Chafe a893)
nátti ʔ *ci-* *ʔiyá-* *hah=nín* *-čah*
there 1AGT DUR stop INTENT
I'm going to stop there a while

(44) *hítci·dikih* (Chafe a808)
hít# *ci-* *(ʔi)dikih*
PAST 1AGT sleep
I slept

(ii) *háh ʔiyádikihsa ʔ* (Chafe a809)
hák# *ʔiyá-* *dikih* *-sa ʔ*
IND DUR sleep IMPFV
he's napping

The stems in (43i) and (43ii) both denote a 'stopping' event. In the first clause which lacks durative marking, 'stopping' is interpreted as a single, punctual event.[11] In the second clause, *ʔiyá-* specifies that the 'stopping' event will last for a length of time, or 'for a while'. In (43ii) then, the referent intends to *stay* and not just stop. In example pair (44), both stems reference a 'sleeping' event. In the first construction, the event is

[11] As Comrie (1976:41-42) notes, the opposite of durativity is punctuality.

punctual; in the second, it is durative. Here, *ʔiyá-* combines with the stem *dikih* 'sleep' to yield the stem *ʔiyá-dikih* 'sleep for a while', 'nap'.

húk# is a durative subordinator; it is exemplified in (45).

(45) *húhcí·ʔasuh* (Chafe e593)
húk# *ci-* *yi=ʔasuh*
DUR.SUB 1AGT come
while I was coming

The continuative durative subordinator *húʔuk#* is illustrated in (46). See section 2.2.8 below, for a characterization of continuative aspect.

(46) *húʔukí·báw·saʔ* (Chafe i515)
húʔuk# *yi-* *yi=bahw* *-saʔ*
CONT.DUR.SUB DEFOC.AGT perceive IMPFV
while he was still looking

2.2.8. CONTINUATIVE

Continuative aspect in Caddo generally denotes an activity or state that begins at some point in the past and continues, interrupted or not, to the time-frame referenced by the verb. Continuative aspect, then, encompasses both habitual and non-habitual continuous situations. In a positive construction it may be glossed 'still' or 'continues to'; in a negative expression, it is glossed 'not...anymore' or 'no longer'.

There are ten proclitics that mark continuative aspect. These are *háhʔuk#/ háʔukík#* 'continuative indicative', *húʔuk#* 'continuative durative subordinator', *kaʔukík#/kahʔuk#* 'continuative subordinator', *kúʔní#/kúyʔní#* 'negative continuative', *kúʔníkáy#* 'negative continuative indiscriminative'[12], *nadúʔus#*

[12] Indiscriminatives are discussed in section 4.3.2.

'negative continuative general conditional', *nus#/ʔus#* 'negative continuative', *núdík#* 'past continuative', *t'aʔuník#* 'negative continuative', and *ʔudík#/ʔút#*, 'continuative'.

Three of these ten proclitics are exemplified here: *háhʔuk#* 'continuative indicative' (47), *t'aʔuník#* 'negative continuative' (48), and *kaʔukík#* 'continuative subordinator' (49).

(47) *háʔukíhnáyʔáw·saʔ* (Chafe i409)
háʔukík# *náy=ʔáw* *-saʔ*
CONT.IND sing IMPFV
he's still singing

(48) *t'aʔúníhnáy·ʔaw* (Chafe i895)
t'aʔuník# *náy=ʔáw*
NEG.CONT sing
he doesn't sing anymore

(49) *kaʔukíhnáy·ʔaw* (Chafe i411)
káʔukík# *náy=ʔáw*
CONT.SUB sing
one that still sings, is still able to sing

As (48) illustrates, a negative continuative situation is one which had been going on regularly or continuously in the past, but has now ceased (in this case completely). *t'aʔuník#* contrasts with *nus#/ʔus#*, also labeled 'negative continuative', in that *nus#/ʔus#* marks the *temporary* cessation of a continuous activity or state and is glossed 'not anymore for a long time'. *nus#* was illustrated in (18) and is here repeated:

(50) *nusbíybáw·saʔ* (Chafe h363)
nus# *ba-* *yi=bahw* *-saʔ*
NEG.CONT 1PAT.IRR perceive IMPFV
I won't be seen for a long period

In addition to the ten continuative aspect proclitics, the position 2 prefix *hana-* derives continuous motion stems from motion stems whenever the postural orientation of the moving entity is specified.[13] In this type of construction, the moving entity *maintains* a particular posture throughout motion. Consider example set (51):

(51) *ci·yúnkihah* (Chafe g079)
ci- *(ʔ)yunik(i)* *-hah*
1AGT run.off HAB
I'm running off

(ii) *ʔinánnúnkah* (Chafe h091)
ʔini- *hana-* *yunik* *-ah*
lying CONT run.off PERF
he slid lying, rolled

(iii) *ʔáwsánnúnkuʔnah* (Chafe h090)
ʔawis- *hana-* *yunik* *-uʔ* *-nah*
sitting CONT run.off MID PERF
he slid sitting (slid on his buttocks)

The basic motion verb root of this set is *(ʔ)yunik(i)* 'run off'. To 'run off while maintaining a lying posture' is to 'roll' (51ii), and to 'run off while maintaining a sitting posture' is to 'slide on one's buttocks' (51iii).

2.2.9. PRIORITIVE

Prioritive aspect denotes a situation that occurs prior to a specified or implied time. It is glossed as 'already', 'yet', and 'beforehand'. Ten TAM morphemes semantically include this aspectual notion. These are: *c'ik#/c'it#* 'prioritive', *c'is#* 'prioritive' (irrealis), *c'ít#* 'past prioritive', *hác'ik#* 'prioritive indicative', *kac'ik#* 'prioritive subordinator', *kac'ín#* 'prioritive quotative', *kac'ikín#/kic'ín#* 'past

[13] The postural category is taken up in Chapter VII, section 1.

prioritive quotative', *kúc'i#* 'negative prioritive', *nac'it#* 'prioritive temporal subordinator', and *-nid/-id* 'cislocative'. Three of these morphemes are illustrated below: *c'ik#/c'it#* 'prioritive' (52), *c'is#* 'prioritive irrealis' (53), and *kac'ik#* 'prioritive subordinator' (54).

(52) *c'ikku ʔkišwánt'aʔihah* (Chafe e826)
c'ik# *ku-* *ʔakiš-* *wan* *-t-* *ʔaʔ(ih)* *-hah*
PRIOR 1PAT kernels cook.with.dry.heat NOM is HAB
I already have roasted corn

(53) *haʔkunʔ* *c'ist'áy·bah* (Chafe i350)
haʔkunʔ *c'is#* *t'a-* *yi=bahw*
not.yet PRIOR.IRR 1AGT.IRR perceive
I haven't seen him yet

(54) *ʔadihʔáʔ* *kac'ihibah* (Chafe i512)
ʔa=d(ih) *-ʔaʔ* *kac'ik#* *yi=bahw*
go FUT PRIOR.SUB perceive
he'll go see him beforehand

2.2.10. RESULTATIVE

Resultative aspect denotes a state resulting from a prior situation. There are two resultative markers, the proclitics *káyn#* 'resultative' and *kayt#* 'future resultative'. These are exemplified respectively in (55) and (56) below.

(55) *káynkutnínku·tah* (Chafe c947)
káyn# *ku-* *t-* *hani-* *ʔinikuh-* *tak(i)*
RESULT 1DAT APP ABS.PL back emerge
I gave up, deserted it as a result

(56) *kaytannikú·tah* (Chafe c945)
kayt# *hani-* *ʔinikuh-* *tak(i)*
FUT.RESULT ABS.PL back emerge
it will be deserted as a result

2.2.11. DIMINUTIVE

Peck (1995:76) refers to the diminutive aspect as an aspect of manner. He glosses diminutive as 'a little bit' or 'unimportantly'. The diminutive morpheme in Caddo is the position -II derivational suffix *-čiti?*. In verbs, it is recorded to always occur with the cislocative *-nid/-id* to mean 'a little bit', 'slightly'.[14] Compare the forms in (57):

(57) *kahbasis* (Chafe a000)
kak# *ba=sis*
SUB boil
to boil

(ii) *kakibasísnitčiti?* (Chafe i722)

kak#	*yi-*	*ba=sis*	*-nid*	*-čiti?*
SUB	DEFOC.AGT	boil	CIS	DIM

to parboil, boil just a little bit

3.0. MOOD

According to Pike (1995:159):

> Mood describes how a hearer or reader is to take the clause or sentence. Is it information that I should remember? Is it information that I need just for this discourse? Is it something I should do? Is it something I should answer? Is it something with an unspoken meaning?

Trask (1993:174) comes from the opposite perspective, that of the speaker, when he defines 'mood' as "a grammatical category which expresses the degree or kind of reality of a proposition, as perceived by the speaker." Both characterizations are helpful in understanding mood in Caddo.

[14] This suffix also attaches to nouns.

Mood in the TAM system is divided into two superordinate categories, realis and irrealis.[15] TAM markers which index a realis situation obligatorily occur with the realis set of pronominal prefixes. Conversely, those which index an irrealis situation obligatorily combine with irrealis pronominal markers. Thus all TAM morphemes include a semantic feature of either 'realis' or 'irrealis'. These two general reality distinctions intercross thirteen particular modal categories indexed by sixty TAM morphemes. All but one of these markers are proclitics from template position 15. They are presented in Table IV-III.

These morphemes are divided into the following modal categories: indicative, interrogative, imperative, conditional, contrastive, veritive, simulative, mirative, desiderative, possibility, potential, belief, and quotative. Each category is described and exemplified below.

3.1. INDICATIVE

The indicative mood is used to make statements that the speaker considers to be factual. It is also the most commonly used mood in elicitation. There are eight indicative markers including *dayt#* 'past locative indicative', *dákak#* 'locative indicative subordinator', *dák#* 'locative indicative', *hác'ik#* 'prioritive indicative', *háh ʔuk#/há ʔukīk/há ʔuk#* 'continuative indicative', *hák#* 'indicative', *hákak#* 'indicative subordinator', and *ták/nák/nak#* 'translocative indicative'. *hák#* 'indicative' and *nák#* 'translocative indicative' are illustrated in (58) and (59).

[15] See Chapter III, section 4 for an explanation of the Caddo realis-irrealis distinction.

TABLE IV-III: Mood markers

c'i#		imperative (III(77))	*nadús#*	(IRR)	negative generic conditional
c'ik#/c'it#/c'i#	(IRR)	contrastive	*nadú?us#*	(IRR)	negative continutive generic conditional
c'ik#/c'it#/c'i#		veritive	*nas#*	(IRR)	generic conditional
dayt#		past locative indicative	*nawi#*	(IRR)	indiscriminative conditional (IV(100))
dákak#		locative indicative subordinator	*nikít#*		negative past desiderative
dák#		locative indicative	*ni?ít#*		WHICH ONE interrogative
díkat#		WHAT interrogative (III(29))	*sidat#*		simulative
díkít#/dikít#		past WHAT interrogative	*sik#*		belief
dús#	(IRR)	negative conditional (III(86))	*sikak#*		simulative subordinator
dúy#/dú#	(IRR)	negative simulative	*si?ík#*		past belief
hác'ik#		prioritive indicative	*síkáy#*		indiscriminative WH- interrogative
háh?uk#/há?ukík#/há?uk#		continutive indicative	*síkík#*		past simulative
hák#		indicative	*sít#/sit#/sí#*		WH- interrogative
hákak#		indicative subordinator (VI(28ii))	*sí?ít#/si?ít#*		past WH- interrogative
hikat#		WHATEVER interrogative	*ták#*		possibility
hí#		hortitive	*ták/nák#/nak#*		translocative indicative
hí#	(IRR)	particular conditional	*tú#*		NOW imperative
híkít#/hikít#/hikit#		past WHATEVER interrogative	*túk#*		potential
hús#	(IRR)	mirative	*t'akámma#*		indiscriminative interrogative
kac'ikán#		prioritive quotative	*t'akán#/t'ukán#/t'ukáy#*		indiscriminative interrogative
kac'ikín#/kic'ín#		past prioritive quotative	*t'ámmak#*		interrogative
kas#	(IRR)	obligative	*t'uwí#*	(IRR)	indiscriminative WHO interrogative
kaš#	(IRR)	prohibitive	*t'ú#*	(IRR)	partial negative interrogative
kán#		quotative (III(80))	*t'úykáy#*	(IRR)	indiscriminative interrogative
kín#		past quotative	*wah-/?ah-*		interrogative
kínút#		negative past quotative (IV(87))	*wát#*		simulative
kúsikik#		past simulative	*wít#*		WHO interrogative (III(82))
kúsíkak#		simulative	*wí?ít#*		past WHO interrogative (IV(4))
kúyt#		WHERE interrogative	*yút#*		prohibitive hortative
kúy?ít#/ku?ít#		past WHERE interrogative (IV(9))			

(58) *háhwí·datčah* (Chafe d092)
hák# *wí·k-* *datčah*
IND material stand
the flag is hoisted, up

(59) *náhci ʔya ʔ* (Chafe i230)
nák# *ci-* *(ʔi) ʔa ʔ*
TRANSLOC.IND 1AGT be
I live there, am there

3.2. INTERROGATIVE

The interrogative mood denotes questions. Two broad types of interrogatives are distinguished in the TAM system. These are question-word interrogatives ('WH-' questions) and yes-no interrogatives. There are thirteen WH- interrogative mood markers; all of these are position 15 proclitics: *dikat#* 'WHAT interrogative', *díkít#/dikít#* 'past WHAT interrogative', *hikat#* 'WHATEVER interrogative', *híkít#/hikít#/hikit#* 'past WHATEVER interrogative', *kúyt#* 'WHERE interrogative', *kúy ʔít#/ku ʔít#* 'past WHERE interrogative', *ni ʔít#* 'WHICH ONE interrogative', *síkáy#* 'indiscriminative WH- interrogative', *sít#/sit#/sí#* 'WH- interrogative', *sí ʔít#/si ʔít#* 'past WH- interrogative', *t'uwí#* 'indiscriminative WHO interrogative', *wít#* 'WHO interrogative', and *wí ʔít#* 'past WHO interrogative'. The two proclitics that include the label 'WH- interrogative' (*sít#/sit#/sí#* 'WH- interrogative' and *sí ʔít#/si ʔít#* 'past WH- interrogative') encompass the notions conveyed by the two specific WH- terms 'what?' and 'when?'. Which of these particular meanings is determined by context.

There are six yes-no interrogatives; five of these are template-initial proclitics, while one is a position 13 prefix. These yes-no interrogatives are: *t'akámma#* 'indiscriminative interrogative', *t'akán#/t'ukán#/t'ukáy#* 'indiscriminative

interrogative', *t'ámmak#* 'interrogative', *t'ú#* 'partial negative interrogative', *t'úykáy#* 'indiscriminative interrogative', and *wah-/ʔah-* 'interrogative'.

In addition to these six overt yes-no interrogative markers, a verb that lacks a TAM proclitic but includes a tense or aspect suffix and irrealis pronominal morphology is interpreted as a yes-no interrogative clause.

Two morphemes from the interrogative types are exemplified here; these include *sít#/sit#/sí#* 'WH- interrogative' (60i-ii), *kúyt#* 'WHERE interrogative' (61), *t'ú#* 'partial negative interrogative' (62), and *wah-* 'interrogative' (63). (64) exemplifies the unmarked yes-no interrogative clause.

(60) *sítdakahsáwʔnačá·wihut* (Chafe c027)

sít#	*yakahsáwt-*	*na-*	*ká·wihu-*	*it*
WH.INTER	board	DIST	width	be.a.certain.measurement

how wide are the boards? what is the board width?

(ii) *sídàw·čibáw·čah* (Chafe a335)

sít#	*yahʔ-*	*bak-*	*yi=bahw*	*-čah*
WH-.INTER	2AGT	sound	percieve	INTENT

when are you going to ask him?

(61) *kúydàw·čibáw·čah* (Chafe a317)

kúyt#	*yahʔ-*	*bak-*	*yi=bahw*	*-čah*
WHERE.INTER	2AGT	sound	perceive	INTENT

where are you going to hear it?

(62) *t'úšahʔyáhdah* (Chafe g115)

t'ú#	*sahʔ-*	*yákid*	*-ah*
PARTIAL.NEG.INTER	2AGT.IRR	go.by	PERF

didn't you go by?

(63) *t'ánšiwaʔaʔíwdiʔaʔ* (Chafe i623)

t'án#	*si-*	*wah-*	*ʔawi-*	*wid(i)*	*-ʔaʔ*
PARTIAL.NEG	2PAT	INTER	ABS.SG	arrive	FUT

won't you come?

(64) *t'atáyyúh$^{?}$a$^{?}$* (Chafe b278)
t'a- *t-* *háy=yúh* *-$^{?}$a$^{?}$*
1AGT.IRR APP tell FUT
shall I tell him?

Note that the interrogative *wah-* in (63) occurs with the partial negative marker *t'án#*. *wah-* always appears in combination with a partial negative marker (either *t'án#* 'partial negative' or *t'ín#* 'past partial negative') or the indiscriminative interrogative morpheme *t'akán#/t'ukán#/t'ukáy#*. See section 4.1 for a discussion of the partial negative.

3.3. IMPERATIVE

The imperative mood denotes a command. There are six overt imperative morphemes; all of them signify commands directed to the addressee: *c'i#* 'imperative', *tú#* 'NOW imperative', *hí#* 'hortative', *kas#* 'obligative', *kaš#* 'prohibitive', and *yút#* 'prohibitive hortative'. *c'i#* is a command to be in a certain state (65); *tú#* is a command that is to be followed immediately (66). *hí#* 'hortative' expresses an exhortation (e.g. "lets' eat!") (67). *kas#* 'obligative' denotes an obligation (68). *kaš#* 'prohibitive' is a negative command (69) and *yút#* 'prohibitive hortative' is a negative hortative (70). In addition, a realis verb construction that lacks both a position 15 TAM proclitic and an overt tense or aspect suffix (except those derivational aspect categories), but incudes a 2nd person AGENT, is interpreted as a command (71i-ii).

(65) *c'idàwwčahsan* (Chafe d196)
c'i# *yah$^{?}$-* *wičah-* *san*
IMP 2AGT mind stay
be on the lookout

(66) *tú·dah ʔyat* (Chafe j085)
tú# *yah ʔ-* *ʔa=d*
NOW.IMP 2AGT go
now you go

(67) *híci ʔbin ʔ* (Chafe a493)
hí# *ci-* *(ʔi)bín ʔ*
HORT 1AGT wipe
let me wipe it

(68) *kassah ʔnáy· ʔáw* (Chafe i401)
kas# *sah ʔ-* *náy= ʔáw*
OBLIG 2AGT.IRR sing
you're requested to sing

(69) *kaššahku·čibah* (Chafe a266)
kaš# *sahku-* *bak-* *yi=bahw*
PROHIB 2AGT.IRR/1PAT.IRR sound perceive
don't ask me

(70) *yúttáy ʔaw* (Chafe j467)
yút# *náy= ʔáw*
PROHIB.HORT sing
don't let him sing

(71) *dahká·nit* (Chafe u341)
yah ʔ- *káh* *-nid*
2AGT call.out CIS
call out (to us, over here)!

(ii) *dah ʔyahkis* (Chafe e098)
yah ʔ- *yah=kis*
2AGT bathe
bathe!

Note that all of these imperative construction require a 2nd person prefix except *yút#* 'prohibitive hortative'. This morpheme includes the addressee as part of its semantic composition and can be glossed 'you don't allow that'.

3.4. CONDITIONAL

The conditional mood expresses an imaginary or implied condition. There are six conditional morphemes and each marks a clause as dependent: *dús#* 'negative conditional', *hí#* 'particular conditional', *nadús#* 'negative generic conditional', *nadú?us#* 'negative continuative generic conditional', *nas#* 'generic conditional', and *nawi#* 'indiscriminative conditional'. The generic conditional is used with general events and is exemplified in (72); the particular conditional is used with specific events (73).

(72) *nasakambašú·kah* (Chafe a388)

nas#	*sa-*	*kan-*	*ba=šúk*	*-ah*
GEN.COND	IRR	liquid	dry.up	PERF

when the water dries up

(73) *hít'awčibáw·?a?* (Chafe a295)

hí#	*t'a-*	*bak-*	*yi=bahw*	*-?a?*
PARTIC.COND	1.AGT.IRR	sound	perceive	FUT

if I happen to hear it

3.5. CONTRASTIVE

The contrastive mood denotes a situation that contrasts with the one indexed by the utterance. There is one contrastive marker: *c'ik#/c'it#/c'i#*.

(74) *c'issa?attihcah* (Chafe i655)

c'it#	*sa?a-*	*t-*	*?a=?nih*	*-t-*	*yah*
CONTR	2PAT.IRR	APP	make	NOM	be

you have a (different) way

3.6. VERITIVE

The veritive mood indicates that an event or state is true, real, genuine or prototypical. The veritive morpheme is *c'ik#/c'it#/c'i#*.

(75) *ná c'idíwkáy·ʔah* (Chafe a114)
ná· c'i# (yi)baka- yaʔah
that VER word be
that's the very fact

3.7. SIMULATIVE

The simulative mood expresses a situation that is simulated; it is 'like' something. There are seven simulative morphemes including: *dúy#/dú#* 'negative simulative', *kúsikik#* 'past simulative subordinator', *kúsíkak#* 'simulative subordinator', *sidat#* 'simulative', *sikak#* 'simulative subordinator', *síkík#* 'past simulative subordinator', and *wát#* 'simulative'. These first and last of these are illustrated in (76) and (77).

(76) *dúyaʔú·dičah* (Chafe i678)
dú# ya- ʔawi wid(i) -čah
NEG.SIM IRR goal arrive INTENT
just as if he would come (know he won't)

(77) *wátcí·báw·hah* (Chafe e421)
wát# ci- yi=bahw -hah
SIM 1AGT perceive HAB
just like I'm looking at it

As (76) indicates, the negative simulative denotes a simulated event that the speaker knows has not occurred, does not occur, or will not occur.

3.8. MIRATIVE

The mirative mood denotes a situation that is unexpected or surprising to the speaker. It is marked by the proclitic *hús#*:

(78) *hússaháyniwa'suh* (Chafe b206)

hús#	*sa-*	*haya-*	*ni-*	*wa-*	*'asuh*
MIR	IRR	animate.patient	PORT	PL	come

(I didn't know that) they were following

3.9. DESIDERATIVE

Desiderative mood denotes a situation that the speaker wishes would happen. Caddo has a negative past desiderative marker, *nikít#*.

(79) *nikítciwk'asáy'nah* (Chafe a084)

nikít#	*ci-*	*bak-*	*'a=sáy*	*-'*	*-nah*
NEG.PAST.DESID	1AGT	sound	emerge	CAUS	PERF

I wish I hadn't said anything, made noise

3.10. POSSIBILITY

Possibility mood expresses a possible event or state, as judged by the speaker. Such a situation 'may have' occurred or 'might possibly' occur. This modal distinction is indicated by *ták#* 'possibility'.

(80) *táhci·yúnki'a'* (Chafe e687)

ták#	*ci-*	*('i)yunik(i)*	*-'a'*
POSS	1AGT	run.off	FUT

I might run off

3.11. POTENTIAL

Potential mood denotes a probable situation, as judged by the speaker. The potential morpheme *túk#* is glossed 'probably', 'I guess/suppose', 'may/might', and 'maybe'.

(81) *túh ʔadih ʔaʔ* (Chafe i256)
túk# *ʔa=d(ih)* *-ʔaʔ*
POTENT go FUT
I suppose he'll go

3.12. BELIEF

The belief mood signifies that the indexed situation is the belief of the speaker. Like the possibility and potential moods, this evidential functions to make a statement less assertive. There is a non-past belief morpheme *sik#* (82) and a past belief morpheme *siʔík#* (83).

(82) *sihnáyʔáw·nah* (Chafe i324)
sik# *náy=ʔáw* *-ah*
BELIEF sing PERF
I believe he sang

(83) *siʔíhnáy·ʔaw* (Chafe i325)
siʔík# *náy=ʔáw*
PAST.BELIEF sing
I believe he sang

3.13. QUOTATIVE

The final modal category to be considered is the quotative evidential. Quotatives signify that the source for the information uttered by the speaker is some third party. The speaker, then, is repeating knowledge that he or she has heard (or

read), but did not directly perceive. There are five quotative morphemes: *kac'ikán#* 'prioritive quotative', *kac'ikín#/kic'ín#* 'past prioritive quotative', *kán#* 'quotative', *kín#* 'past quotative', and *kínút#* 'negative past quotative'. *kac'ikán#* 'prioritive quotative' and *kín#* 'past quotative' are exemplified below.

(84) *kac'ikámmáw·dah* (Chafe i525)
kac'ikán# *wa-* *wid* *-ah*
PRIOR.QUOT PL arrive PERF
they say they have already arrived

(85) *kímbašuh* (Chafe a382)
kín# *ba=šúk*
PAST.QUOT dry.up
It reportedly dried up

4.0. OTHER TAM DISTINCTIONS

In addition to tense, aspect, and mood, other types of elements are distinguished in the TAM system. These principally include negatives, subordinators, and other adverbials. This section reviews their uses.

4.1. NEGATIVE

A negative reverses the truth value of a proposition or that part of a proposition over which it has scope. In general, there are two types of negatives in Caddo: (i) those which completely reverse the truth value of their associated phrase or clause and (ii) those which partially reverse the truth value of their associated phrase or clause. Most negatives are of the first variety. The following three examples illustrate this

first use with the negative markers *kúy#* or *kú#* 'negative' (86), *kínút#* 'negative past quotative' (87), and *kúc'i#* 'negative prioritive' (88).[16]

(86) *kút'awčibáw·nah* (Chafe a237)
kú# *t'a-* *bak-* *yi=bahw* *-nah*
NEG 1AGT.IRR sound perceive PERF
I didn't hear it

(87) *kínútdibah* (Chafe i467)
kínút# *yi=bahw*
NEG.PAST.QUOT perceive
they say he didn't see

(88) *kúc'iyakahwáw?áhah* (Chafe b659)
kúc'i# *sa-* *kahwa=wa=?ahák(i)*
NEG.PRIOR IRR become.conscious.of.PL
they haven't yet awakened, been informed

Partial negatives denote possible negation.; they can often be glossed as 'maybe' or 'not really'. A partial negative can also function to negate just a part of the proposition, in which case it is comfortably glossed as 'except'. There are three partial negatives: *t'án#* 'partial negative', *t'ín#* 'past partial negative', and *t'ú#* 'partial negative interrogative'. They are illustrated in (89) through (91), respectively.

(89) *t'ánnahdah* (Chafe e020)
t'án# *ya=had(i)* *-ah*
PARTIAL.NEG die PERF
maybe it died (e.g. if looking for dog)

(90) *ná* *t'íncí·báw·nah* (Chafe e477)
ná· *t'ín#* *ci-* *yi=bahw* *-nah*
that.one PAST.PARTIAL.NEG 1AGT perceive PERF
that part I didn't see, I saw (everything) except that

[16] *kú-* vs. *kúy-* is a dialect alternation.

(91) *t'úsa?a?áwdi?a?* (Chafe i622)
t'ú# *sa?a-* *?awi-* *wid(i)* *-?a?*
PARTIAL.NEG.INTER 2PAT.IRR goal arrive FUT
won't you come?, maybe you'll come?

4.2. SUBORDINATOR

Subordinator is here used to refer to any element that introduces any type of subordinate clause, including adverbial clauses, complement clauses, and nominalized clauses. There are some forty different subordinators in Caddo; all of them occur in the TAM proclitic position of the verb template. Six of these are illustrated here, including *nat#* 'temporal subordinator' (92i), *kúyk#* 'past locative subordinator' (92ii), *kúk#* 'locative subordinator' (92iii), *kak#* 'subordinator' (92iv), *kakúc'it#* 'prioritive subordinator' (93ii), and *nayt#* 'general participle' (94i).

(92) *nappáwdihšiyah* (Chafe t006-t007)
nat# *wa-* *wid(i)* *-ih* *-šiyah*
TEMP.SUB PL arrive AND TRANSLOC.PERF
when they arrived there,

(ii) *kúyhándáw·?ah*
kúyk# *ha-* *nida=wa=?ak(i)*
PAST.LOC.SUB space find.PL
where they located a camp site,

(iii) *kúh?áw?ih?á?*
kúk# *'?awáwa?(ih)* *-?a?*
LOC.SUB be.PL FUT
where they would stay

(iv) *kahnah?wa?nih?á?,* *nuka?*
kak# *nak-* *?a=wa=?n(ih)* *-?a?* *nuka?*
SUB fire make.PL FUT perhaps
to make a fire perhaps,

(v) *nahaš ʔnáwwá·yáh* *dika ʔháy*
nak# *hašnáw-* *wa-* *yáh* *dika ʔháy*
TRANSLOC.IND meal PL eat something
they would eat something there

(93) *hašuwah* *dáhkačánčidú·ni ʔ* (Chafe t032)
hašuwah *yah-* *kačán-* *ki=dú·ni ʔ*
hurry 2AGT possession gather
hurry up and gather your things

(ii) *hatidu ʔ* *kakúc'itdisk'anah*
ha# *tidu ʔ* *kakúc'it#* *disk-* *ʔa=nahy*
A hot PRIOR.SUB day become
before the day gets hot

(94) *naytda·yá·hah* *bah ʔnah* (Chafe t025)
nayt# *yah ʔ-* *(ʔi)yáh* *-hah* *bah ʔnah*
GEN.PART 2PAT[17] eat HAB QUOT
they say the ones that eat you

(ii) *háhutámmabín ʔusa ʔ*
hák# *nu-* *t-* *hana-* *wa-* *bín* *-ʔu* *-sa ʔ*
IND 3DAT APP CONT PL go.down MID IMPFV
were wrestling

These examples are all excerpts from a text, a slightly different version of which is published in Chafe (1977:37-43) under the title "The transformed husband and the elf". In the first excerpt, example (92), four consecutive subordinate clauses (92i-iv) precede the main clause in (92v). The first subordinator is the temporal subordinator *nat#*; this morpheme functions to subordinate a clause in time relative to the main clause. Thus, the 'arriving' event of (92i) occurs before the 'eating' event of (92v).

The next two subordinators are locative subordinators; they function to introduce locative clauses. In Caddo, many morphemes that index space, also equally

[17] 2nd person PATIENTS (and DATIVES) are frequently marked by the otherwise AGENT-case prefix *yah ʔ-*. See Chapter III, section 3.0 for discussion.

index time. *kúk#* and *kúyk#* are such locatives; they can mean both 'where' and 'when', depending on the context. For example, the clause in (92ii) *kúyhándáw·ʔah.* can be glossed both as 'where they located a camp site' and 'when they located a camp site'.[18]

The general subordinator *kak#* is exemplified in (92iv). This morpheme has two subordinating functions, nominalization and complementation. Here it is functioning as a complementizer. In this case, the clause *kahnahʔwaʔnihʔáʔ* 'to make a fire' is the complement of the previous verb *kúhʔáwʔihʔáʔ* 'where they would stay'.

The prioritive subordinator *kakúc'it#* is exemplified in (93). This morpheme indicates that the situation indicated in the matrix clause occurs prior to the situation indexed in the subordinate clause which it introduces. Thus, 'gathering your things' is to occur before the day becomes hot.

Finally, the general participle *nayt#* is illustrated in (94). The general participle functions to nominalize a clause. It is conveniently glossed as 'the one who/that'.

4.3.0. ADVERBIAL

The term 'adverbial' is a functional one; it subsumes a range of elements that function as lexical adverbs or serve to introduce adverbial clauses. There are numerous adverbial elements that occur as TAM proclitics and suffixes. We just

[18] Other morphemes that equally refer to space and time include *na-* 'distributive' (see Chapter V, section 2.2) and the deictics in section 4.3.1 below.

looked at adverbial subordinators above; here, two other adverbial categories are reviewed: deictic position and indiscriminative.

4.3.1. DEICTIC POSITION

Deictic position is a grammatical category that expresses locative distinctions of reference where the speaker serves as the basic orientation. There are two types of deictics formally recognized in Caddo: cislocative and translocative. A cislocative indicates that the indexed situation occurs near the speaker or 'here'. A translocative marks the situation as occurring away from the speaker or 'there'. In addition to these spatial orientations, the deictics also are used temporally, and thus aspectually. The cislocative can signify that a situation is occurring 'right now', 'suddenly', or 'before' something else. A translocative may denote that a situation is to occur later or after another situation, in which case it is glossed 'then'.

There are four translocatives and one cislocative: *-šiyah* 'translocative perfect', *ták#/nák#/nak#* 'translocative indicative', *tákak#* 'translocative', *náyt#* 'past translocative', and *-nid/-id* 'cislocative'. The cislocative is a derivational suffix; it always appears in conjunction with other aspect markers (including the unmarked perfective) and is permissible in unmarked imperative constructions, constructions which are defined by a lack of inflectional TAM marking (see section 3.3). Furthermore, the cislocative occurs in secondary verb stems of verb stem plus verb stem compounds; in such constructions, only uninflected verb stems may form compounds with primary stems.[19]

[19] See Chapter VII, section 5 for a discussion of verb stem plus verb stem compounds.

The translocative indicative *ták#/nák#/nak#* is illustrated in (95) and (96), while sets (97) through (99) exemplify the use of the cislocative *-nid/-id*.

(95) *táhnáy'áw·sa'* (Chafe i448)
ták# *náy=' áw* *-sa'*
TRANSLOC.IND sing IMPFV
he's singing over there

(96) *táhbah'nihdah* (Chafe j485)
ták# *bak-* *'nih* *-dah*
TRANSLOC.IND sound make PERF
then he said

(97) *hahní·nah* (Chafe a873)
hah=nín *-ah*
stop PERF
he stopped, camped

(ii) *hahwanín·dah* (Chafe a883)
hah=wa=nín *-id* *-ah*
stop.PL CIS PERF
they stopped at a location nearby

(98) *tabahnah* (Chafe c423)
na=bahn *-ah*
catch.fire PERF
the fire is lit, the light is on

(ii) *híttabahnit* (Chafe c431)
hít# *na=bahn* *-id*
PAST catch.fire CIS
it lighted suddenly, a flame shot out suddenly

(99) *dàw·sis* (Chafe a016)
yah'- *ba=sis*
2AGT boil
boil it!

(ii) *kakibasísnit* (Chafe i721)
kak# *yi-* *ba=sis* *-nid*
SUB DEFOC.AGT boil CIS
to boil before taking it somewhere

4.3.2. INDISCRIMINATIVE

Indiscriminatives are elements that denote *one* or *some* indiscriminately of whatever kind or type. In English, for example, *any* is an indiscriminative. It formally combines with *body* (*anybody*), *one* (*anyone*), and *thing* (*anything*), to signify a random person or thing. There are some twenty indiscriminative morphemes in Caddo; they all occur as verb-initial proclitics. Four of them are illustrated here: *nawi#* 'indiscriminative conditional', glossed 'if anyone' or 'if anybody' (100); *ni?ikáy#* 'indiscriminative subordinator', glossed 'whoever', 'whatever', and 'whenever' (101); *t'akán#* 'indiscriminative interrogative', glossed 'anything' (102); and *kúkáy#/ kúka#* 'negative indiscriminative', glossed 'anything' (103).

(100) *nawisáybáw·?a?* (Chafe i601)
nawi# *sa-* *yi=bahw* *?a?*
INDISCR.COND IRR perceive FUT
if anyone sees it

(101) *ni?ikáyháy·bah* (Chafe i593)
ni?ikáy# *ha-* *yi=bahw*
INDISCR.SUB way perceive
whatever/whenever/whoever he sees

(102) *t'akánku?ahkahwa?* (Chafe i631)
t'akán# *ku-* *?ah-* *kah=wa?uh*
INDISCR.INTER 1PAT INTER know
do I know anything?

(103) *kúkaya?na?* (Chafe g950)
kúka# *ya-* *?na?*
NEG.INDISCR IRR do
he doesn't do anything

5. TAM POSITION-CLASS SURVEY

The TAM system occupies eleven position classes of the verb template. These classes, along with their constituent morphemes (except position class 15, which is too large) are presented in Table IV-IV. Most TAM inflectional morphemes occur as either first or last position elements. For example, tense is distributed over these two position classes. Past tense is always indicated by a position 15 proclitic, while future tense is encoded in one position 15 proclitic and one position -7 suffix. Mood is always indicated by a first position morpheme, except in one case. The interrogative marker *wah-*, which is of limited distribution, occurs in position 13, immediately following the person position. Aspect is associated with ten positions in the verb, including the derivational affixes. Here too, however, the majority of aspectual morphemes occur in position classes 15 and -7.

TABLE IV-IV: Caddo verb template with TAM categories specified

TAM	PER	INTER	DU	DUR	DIST	BEN	PAT	MAN	ABS NUM	DIST	LOC	POST	CONT	TRAN
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
_#		*wah-*		*ʔiyá-*									*hana-*	
												MAN 1		

ROOT/ STEM	CAUS	AND	MID	CIS	ITER	INTENT	T/A
0	-1	-2	-3	-4	-5	-6	-7
		-nih/ -hih/ -ih		*-nid/ -id*	*-nunʔ*	*-čah*	*-šiyah* (TRANSLOC.PERF) *-hah/-šah* (HAB) *-saʔ* (IMPFV) *-sat* (AND.INT) *-nah/-ah/-dah* (PERF) *-ʔaʔ/-waʔ* (FUT)
ANIM PL (infix)	INCH -I *´/-y/- ´n(i)*				DIM -II *-čitiʔ*		

CHAPTER V
NUMBER AND DISTRIBUTION[1]

0. INTRODUCTION

In Chapter III (section 2.2) it was shown that Caddo indicates case along an AGENT-PATIENT pattern. In particular, we looked at the pronominal prefix system and examined the way in which it marks the different grammatical case roles associated with verbal arguments. The fact that nouns are not generally marked for case underscores the importance of the case-marking function of the pronominal prefixes. Now, pronominal case marking is just one method that Caddo speakers employ to identify or differentiate participants in discourse; other methods include specification of gender, number, and absolutive case. In this chapter, we will consider the various number and distribution categories included in the Caddo verb; each of these categories contributes to identifying or keeping track of participants, either by indicating absolutive case, animate gender, or number, or by a combination of the three. Besides their mutual function in participant identification, these categories are semantically congruent in that they all include, either directly or by implication, the feature of plurality, which here involves 'two or more'.

[1] This chapter is based on Melnar (1997).

The Caddo verb includes three number categories and two distributive categories. The constituent morphemes of two of the three number classes function inflectionally; their presence is obligatory for all verbs in particular contexts. One number category and the two distributive categories, in contrast, function derivationally. The morphemes in these categories are associated with, but do not directly mark, the absolutive argument of the verb.[2] Now, as long as semantic integrity remains unviolated, two or more markers from distinct number and/or distribution categories may be associated with the same argument.[3]

The five categories are examined individually in the first two sections of this chapter. The first section treats the number categories, and the second the distributive categories. In each of these sections I begin by localizing the various distributive or number categories in the verb template. I then provide a semantic description of these categories, followed by a statement regarding the patterning of their constituent morphemes. After this preliminary description, the individual morphemes are exemplified in their different functions.

In the third section, cooccurrence possibilities and restrictions are given. In addition, I exemplify and analyze various stems where multiple marking occurs to qualify discrete arguments or perform unrelated functions. Finally, in the fourth section I present a summary of the different number and distributive affixes'

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[2] The absolutive argument is defined in section 1.3 as the "most immediately involved" participant in an event or state.

[3] So for example, a singular morpheme and a plural morpheme cannot cooccur to apply to the same argument, but a dual, animate plural, and absolutive plural can do so.

participation in the three represented participant-identification systems: case, gender, and number.

1.0. NUMBER

The three number categories in Caddo are dual, absolutive number, and animate plural. The dual and absolutive number categories occur as prefixes in the verb stem. The dual marker occupies position 12 in the verb template; it occurs immediately after the interrogative category and before the position 11 durative category. Absolutive number occupies position 6; it is situated between the manner category and the position 5 distributive category. The animate plural marker occurs most generally as a prefix or infix to the verb root of position 0.[4]

The dual and animate plural markers indicate duality and plurality, respectively, for all of the three argument types: AGENT, PATIENT, and DATIVE. They do not mark number for oblique arguments. The dual is obligatorily realized with all persons except the 3rd person, where it is optional. The animate plural is required to mark all 1st and 2nd persons whose number is not indicated or inferred by an absolutive number or distributive marker. It is optionally used to mark any plural 3rd person and any plural absolutive 1st and 2nd person. As optional categories, the dual and animate plural are used to emphasize or clarify the number of participants involved in an event or state. The dual specifies that the referent is comprised of precisely two entities. Thus, the property of being a pair or couple is specifically highlighted. The animate plural indicates that the plural participants in question are animate; that is, they are

[4] Rarely, the animate plural is suffixed to the verb root.

either people or animals, and not things. Hence, the dual uses number marking and the animate plural, number marking and gender marking, to differentiate participants in discourse.

The lack of dual or animate plural marking in a verb that does not include 1st and/or 2nd person morphology does not imply a lack of duality or animate plurality on the part of the participants involved in the event or state; in this case, the verb is simply unspecified for these features. Because these morphemes may qualify any core argument of a given verb, ambiguity can result. Thus, for example, 'they saw him', 'he saw them' and 'they saw them' can all be represented by the form *hakáywabáw·nah*, which includes the animate plural marker *-wa-* (Chafe 1976:69). In cases such as this, context must provide the cues for the appropriate interpretation.[5]

Consider the following text excerpt that involves a woman and her husband:

(1) *...háhwíswá·yah* (Chafe 1976:37, lines 3 and 4)
hák# *wiht-* *yi=wa='yah*
IND DU go.along.PL
they left

(ii) *ná·* *šú·wi?* *kah?íyáh?ah*
ná· *šúwi?* *kak#* *?iyási?* *-ah*
that man SUB roam.SG PERF
for the man to hunt

(iii) *síttutcanna?ahnah* *nuka?*
sít# *nu-* *t-* *cak-* *na-* *ya?ah* *-nah* *nuka?*
WH-.INTER 3DAT APP day DIST be PERF perhaps
How many days, perhaps, was it for them (that)

[5] In the majority of examples that follow, only one gloss (and thus, one interpretation) per verb form is provided.

(iv) *háhíwá·yah*
hák# yi=wa='yah
IND go.along.PL
they journeyed

The referent in the first example *háhwíswá·yah* 'they left' consists of both the husband and wife, and both the dual and the animate plural are employed. *wiht-* specifies the precise number of participants involved in the event, while *-wa-* qualifies these plural participants as animate. In (1iii) and (1iv), the narrator of the story is wondering how many days the couple traveled. In the first verb, *síttutcanna'ahnah* 'how many days for 3rd person', no marker of plurality is used to qualify the two participants. The context, however, leaves little doubt as to the number of the DATIVE argument. In the second case, *háhíwá·yah* 'they journeyed', the animate plural *-wa-* reappears to index the husband and wife participants, but not the dual. This textual excerpt illustrates the way the pronominal and number systems work together to mark referents. Observe that in (1i) and (1iv), no pronominal morpheme is present in the verb complex and number morphology serves as the sole mechanism for identifying the event's participants. In (1iii), the 3rd person DATIVE morpheme references the two participants and no number morphology appears.

The absolutive number category consists of two morphemes that contrast singularity and plurality and is obligatorily realized in lexically restricted stems.[6] This category follows an ergative pattern, indicating number for absolutive arguments only, and *not* for ergative arguments.

[6] In other stems, the marking of absolutive number appears to be optional.

1.1. DUAL

The underlying shape of the dual prefix is *wiht-*.[7] Examples (2) through (11) illustrate its application to the various argument types. In the first two examples, *wiht-* marks dual AGENT and dual PATIENT, respectively, of intransitive stems; in examples (4) through (6), it marks dual AGENT of transitive stems. In (7) and (8), *wiht-* indicates dual PATIENT of transitive stems. In (9) through (11) it marks dual DATIVE.

(2) *háhwíswá·yah* (Chafe t003)
hák# *wiht-* *yi=wa='yah*
IND DU go.on.PL
they two went

(3) *pítniyaší·bah* (Chafe i172)
wiht- *hani-* *yas-* *yábah*
DU ABS.PL CONT be.PL[8]
they two are partners

(4) *pihca'čah* (Chafe d368)
wiht- *sa'* *-čah*
DU lie.on INTENT
they two are going to lie (on something)

(5) *háhwù·čibáw·sa'* (Chafe a221)
hák# *wiht-* *bak-* *yi=bahw* *-sa'*
IND DU sound perceive IMPFV
they two hear it

[7] This morpheme is subject to many of the phonological processes described in Chapter II. Word-initially, /w/ is realized as [p] (section 2.1, rule I(b)); /h/ before two consonants is converted to high tone on the preceding vowel (section 2.8, rule VIII(a)). Syllable final /t/ undergoes various phonological changes depending on the following syllable onset consonant (section 2.5, rules V(b) and V(c)). Also, for reasons not entirely clear, the /w/ of this morpheme sometimes appears as ['].

[8] *yábah* is the irregularly formed plural of *ya'ah* 'be'

(6) *kút'a ʔín·táyyúhnah* (Chafe b355)

kú#	*t'a-*	*wiht-*	*t-*	*háy=yúh*	*-nah*
NEG	1AGT.IRR	DU	APP	tell	PERF

we two didn't tell him

(7) *dah ʔwíswá·hat* (Chafe j372)

yah ʔ-	*wiht-*	*yi=wa=ʹhadi*
2AGT	DU	kill.PL

kill them two

(8) *ciwihčáníʔnah* (Chafe a896)

ci-	*wiht-*	*hah=nín*	*-ʹiʔn*	*-ah*
1AGT	DU	stop	CAUS	PERF

I stopped them two

(9) *hít'u ʔín·táy·yuh* (Chafe b329)

hí#	*t'u-*	*wiht-*	*ʹnt-*	*háy=yúh*
HORT	1AGT/2DAT	DU	APP	tell

let me tell you two

(10) *kúyttu ʔítcah* (Chafe d995)

kúyt#	*nu-*	*wiht-*	*t-*	*yah*
WHERE.INTER	3DAT	DU	APP	be

where is theirs?

(11) *ʔa ʔín·ta·s ʔnihah* (Chafe b416)

ʔa-	*wiht-*	*ʹnt-*	*hayas-*	*ʔnih*	*-ah*
DEFOCUS.AGT.IRR	DU	APP	money	make	PERF

did they pay them two?

In the first example, the dual applies to the AGENT of *yi=wa=ʹyah* 'several go on'; in the second example, it marks the dual PATIENT *hani-yas-yábah* 'be several together'. The dual in examples (9) through (11) qualifies the DATIVE-case argument which is made obligatory by the presence of the dative applicative *t-/ʹnt-*.[9]

[9] The shape of the dative-applicative prefix varies unpredictably from stem to stem; see Chapter VI for a description of the dative applicative and other valence-changing mechanisms.

The dual combines with first person pronominal prefixes to mark exclusive dual. To mark inclusive dual, it combines with the defocusing prefixes. The pronominal prefixes were presented in Chapter III; the first person and defocusing forms are repeated here in Table V-I:

TABLE V-I: 1st and Defocusing person

REALIS	AGT	PAT	DAT
1ST	*ci-*	*ku-*	*ku-*
DEFOC	*yi-/ʔi*	*ya-*	*yu-*
IRREALIS			
1ST	*t'a-/t'i-*	*ba-*	*ba-*
DEFOC	*ʔa-*	*ʔaʔa-*	*ʔaʔu-*

In the examples below, (12) through (14) are realis exclusive formations; (15) through (17) are irrealis exclusive constructions. (18) through (20) and (21) through (23) are realis and irrealis inclusive formations, respectively.

(12) *hícíwítnikahyuh* (Chafe b775)
hí# *ci-* *wiht-* *hani-* *kah=yuh*
HORT 1AGT DU ABS.PL take.part
let us two (exclusive) help

(13) *kúwù·čibáw·ʔaʔ* (Chafe a278)
ku- *wiht-* *bak-* *yi=bahw* *-ʔaʔ*
1PAT DU sound perceive FUT
he will hear us two (exclusive)

(14) *hákku ʔíssín ʔna ʔ...* (Chafe d466)
hák# ku- wiht- t- sín ʔ- na- ʔa ʔ
IND 1DAT DU APP feeling DIST be
we two (exclusive) feel, our feeling is

(15) *híst'áwìn·čah ʔahah* (Chafe b812)
hís# t'a- wiht- ´nt- kah = ʔáh -hah
PAST 1AGT.IRR DU APP eat.with HAB
did we two (exclusive) eat with it?

(16) *kúbaihčánda ʔkah* (Chafe c900)
kú# ba- wiht- haka- nida = ʔaki -ah
NEG 1PAT.IRR DU INDV find PERF
he didn't find us two (exclusive)

(17) *kú ʔníbí ʔínt'a ʔ* (Chafe f314)
kú ʔní# ba- wiht- ´nt- ʔa ʔ
NEG.CONT 1DAT.IRR DU APP is
we two (exclusive) don't have any more

(18) *díwú· ʔk'anih ʔa ʔ* (Chafe a048)
yi- wiht- bak- ʔa = ʔnih - ʔa ʔ
DEFOC.AGT DU sound make FUT
we two (inclusive) will say

(19) *háh ʔáwù·čibáw·sa ʔ* (Chafe a229)
hák# ya- wiht- bak- yi = bahw -sa ʔ
IND DEFOC.PAT DU sound perceive IMPFV
he hears us two (inclusive)

(20) *kúytdu ʔítcah* (Chafe d997)
kúyt# yu- wiht- t- ya ʔah
WHERE.INTER DEFOC.DAT DU APP be
where is our two (inclusive)?

(21) *kú ʔáìn·da ʔkah* (Chafe c892)
kú# ʔa- wiht nida = ʔak -ah
NEG DEFOC.AGT.IRR DU find PERF
we two (inclusive) didn't find him

(22) *kú?a?awihčahwa?* (Chafe b710)
kú# *?a?a-* *wiht-* *kah=wa?*
NEG DEFOC.PAT.IRR DU know
we two (inclusive) don't know

(23) *kú?a?ín·táy·k'aw* (Chafe y152)
kú# *?a?u-* *wiht-* *'nt-* *hayak=?aw*
NEG DEFOC.DAT.IRR DU APP know.how
we two (inclusive) don't know how

In examples (12), (15), (18), and (21), the dual combines with pronominal AGENT prefixes. PATIENT prefixes are combined with the dual in (13), (16), (19), and (22). Finally, *wiht-* cooccurs with the DATIVE markers in (14), (17), (20), and (23). This exhaustively represents the combination of the dual with pronominal prefixes to indicate dual exclusivity and inclusivity.

1.2. ANIMATE PLURAL (PLURAL)

The basic form of the animate plural is *-wa-*.[10] As mentioned, this morpheme specifies both animacy and plurality.[11] Plurality includes any number greater than one; thus it encompasses duality. In several lexicalized verb stems, *-wa-* has a distributive function.

Examples (24) and (25) illustrate *-wa-* marking an animate plural AGENT and animate plural PATIENT, respectively, in intransitive constructions. In (26) and (27), it marks animate plural AGENTS in transitive constructions, (28) and (29), animate plural PATIENTS in transitive constructions, and (30) and (31), animate plural DATIVES. Its distributive function is exemplified in (32) through (35)

[10] In a few stems, this morpheme occurs as *wá* or *pa*.

[11] In rare cases, the animacy feature is suppressed, and *wa* simply functions as a general plural marker.

(24) *níhahwá·yuh* (Chafe a905)
níʔ# *hah=wa=yúhn*
PAST.TEMP.SUB go.home.PL
when they went home

(25) *pičahwaháhdah* (Chafe d184)
wičah- *wa-* *hákid* *-ah*
mind, spirit PL go.by PERF
they were satisfied

(26) *hípbawasisí·hinʔ* (Chafe a006)
hít# *ba=wa=sisih* *-íʔn*
PAST boil.PL CAUS
they boiled it

(27) *ʔisdawaháhʔnah* (Chafe d646)
(ʔi)cuda- *wa-* *hak* *-íʔn* *-ah*
in.a.pile PL stand CAUS PERF
they piled it

(28) *dáhciwčiwabáwsaʔ* (Chafe a262)
dák# *ci-* *bak-* *yi=wa=bahw* *-saʔ*
LOC.IND 1AGT sound perceive.PL IMPFV
I hear them there

(29) *cihkámmáwín·čah* (Chafe d619)
ci- *haka-* *ni-* *wa-* *wín* *-čah*
1AGT INDV PORT PL go.down INTENT
I'm going to take (live) things down

(30) *hídímʔá·kah* (Chafe b884)
hít# *yi-* *n-* *wa-* *káh*
PAST DEFOC.AGT APP PL call
somebody called them

(31) *ʔinaʔ* *níkkúmʔá·kah* (Chafe b864)
ʔinaʔ *níʔk#* *ku-* *n-* *wa-* *káh*
mother PAST.TEMP.SUB 1DAT APP PL call
when mother called us

(32) *kakissidahwahá·kit* (Chafe i145)
kak# *yi-* *t-* *si-* *dak-* *wa-* *hákidi*
NOM DEFOC.AGT APP hand in.a.line DIST go.by
to stroke, pet, go over with the hand

(33) *háhyahwá·wíhsa?* (Chafe x131)
hák# *ya-* *ki= wa= wa=wík* *-sa?*
IND wood chop.DIST.PL IMPFV
they're chopping wood

(34) *tawašún?hah* (Chafe h212)
na- *wa-* *šún?* *-hah*
DIST DIST be.lined.and.gathered HAB
it's wrinkled, gathered (of tiered skirt)

Note that in (24) through (31), *-wa-* consistently applies to arguments that are both animate and plural. Thus, in (29) *cihkámmawín·čah* 'I'm going to take (live) things down', *-wa-* specifies that the PATIENT of *ni-wín* 'take' includes several living entities.

In (32) and (33), *-wa-* functions as an iterative; that is, it marks the distribution of verbal events through time. This iterative *-wa-* is derivational; it derives single verbal events into multiple ones. So, in (32), *-wa-* attaches to the verb stem *sik-dah-hákidi* 'to pass something over with the hand, stroke' to derive *sik-dah-wa-hákidi* 'to pass something over with the hand several times'. In (33), two instances of *-wa-* occur. The distributive *-wa-* is part of the verb stem *ya-ki=wa=wík* 'to chop wood' (as in one piece of wood after the other); the second *-wa-* indicates animate plurality of the AGENT. Example (34) includes *-wa-* specifying the distribution of a verbal quality over space. The quality of being 'lined and gathered' is distributed over the material that comprises a tiered skirt (see section 2 for a more complete characterization of distribution).

The use of *-wa-* in exclusive and inclusive plural constructions patterns exactly like *wiht-* in dual exclusive and inclusive constructions, as described above. Thus exclusive plural is marked concurrently by a first person pronominal prefix and the animate plural. For realis exclusive examples see (35) through (37); for irrealis exclusive, see (38) through (40). The defocusing prefixes combine with the animate plural to indicate inclusive plural. Examples of realis inclusive formations are given in (41) through (43); irrealis inclusive formations are presented in (44) through (46). As with the dual inclusive and exclusive data set presented above, all possible pronominal prefix plus animate plural combinations are illustrated.

(35) *hícihnikahwá·yuh* (Chafe b774)
hí# *ci-* *hani-* *kah=wa=yuhn*
HORT 1AGT ABS.PL take.part.PL
let us (exclusive) help

(36) *ku·čiwabáw·ʔaʔ* (Chafe a279)
ku- *bak-* *yi=wa=bahw* *-ʔaʔ*
1PAT sound perceive.PL FUT
he will hear us (exclusive)

(37) *híkkutáywá·yuh* (Chafe b337)
hít# *ku-* *t-* *háy=wa=yúh*
PAST 1DAT APP tell.PL
he told us (exclusive)

(38) *kúʔít'atáywá(y)úhnah* (Chafe b357)
kúʔí# *t'a-* *t-* *háy=wa=yúh* *-nah*
NEG.PAST 1AGT.IRR APP tell.PL PERF
we (exclusive) didn't tell him

(39) *kúbahkándáwʔakah* (Chafe c901)
kú# *ba-* *haka-* *nida=wa=ʔaki* *-ah*
NEG 1PAT.IRR INDV find.PL PERF
he, they didn't find us (exclusive)

(40) *kú?níbítwá·wa?* (Chafe f354)
kú?ní# *ba-* *t-* *wa-* *?a?*
NEG.CONT 1DAT.IRR APP PL is
we (exclusive) don't have it any more

(41) *di·kíppak'as?a?* (Chafe b610)
yi- *?akík=wa=k'as* *-?a?*
DEFOC.AGT shell.corn.PL FUT
we (inclusive) will shell the corn

(42) *híddawčíwá·bah* (Chafe a270)
hít# *ya-* *bak-* *yi=wa=bahw*
PAST DEFOC.PAT sound perceive.PL
he heard us (inclusive)

(43) *kú?unnáwá·wa?* (Chafe f361)
kú# *yu-* *n-* *na-* *wa-* *?a?*
LOC.SUB DEFOC.DAT APP DIST PL is
where we (inclusive) have it

(44) *kú?ándáw?akah* (Chafe c896)
ku# *?a-* *nida=wa=* *?aki* *-ah*
NEG DEFOC.AGT.IRR find.PL PERF
we (inclusive) didn't find him

(45) *?a?áw?wanuthah* (Chafe d268)
?a?a- *wi?=wa=* *nut* *-hah*
DEFOC.PAT.IRR like.PL HAB
do we (inclusive) like?

(46) *kú?a?unnáwá·wa?* (Chafe f362)
kú# *?a?u-* *n-* *na-* *wa-* *?a?*
NEG DEFOC.DAT.IRR APP DIST PL be
we (inclusive) don't have (anything)

Note that in (35), (39), (43), and (46), *-wa-* cooccurs with distributive or absolutive plural markers to indicate either animacy and plurality (35) or animacy, plurality, and distribution (39, 43, 46) of absolutive referents.

1.3. ABSOLUTIVE NUMBER

There are two absolutive numbers: singular and plural. Absolutive singular is indicated by the morpheme *ʔawi-/ʔa-*; the absolutive plural marker is *hani-/na-*. As noted above, the absolutive number category is lexically restricted; within the lexically restricted stems it is obligatory. It is not clear whether these stems form a semantic class, though most motion verb stems and most stems that specify manner of motion require the marking of absolutive number.[12]

Following Mithun and Chafe (in press), the absolutive referent is defined as that referent which is most immediately involved in an event or state. Thus, the term *absolutive* is defined independently of morphosyntactic patterning and need not refer to inflectional case. Mithun and Chafe observe that several scholars view ergative patterning as dominated by the absolutive relation. They summarize these perspectives and conclude that ergative systems are based on the feature of *most immediate involvement*:

> Kibrik (1979:66) characterizes this absolutive referent (which he terms the 'factitive') as the 'closest participant in the situation...an actant [core argument] who directly takes part in it'. Keenan (1984:200-205) characterizes it in terms of 'bondedness to the verb'. Mithun (1994:255) similarly defines it as the 'participant most immediately or directly involved in the event or state'. (Mithun and Chafe in press)

It is the absolutive referent that is most affected by, and most intimately tied to, the verbal action, process, or state. In intransitive constructions the most immediately involved argument in the event or state is the only argument; we know from Chapter

[12] Manner of motion is specified by a position I or 7 manner element. See Chapter VII, section 2.

III, sections 3.1 and 3.2 that this argument can be either a grammatical AGENT or PATIENT. In transitive constructions, the most immediately involved participant corresponds to that participant which is most affected by the situation; that is, either a grammatical PATIENT (as the directly affected participant), or a grammatical DATIVE (as the indirectly affected participant).

We'll see later in this chapter that the two distributive categories are likewise associated with the absolutive argument. Furthermore, as described in Chapter VII, the postural, locative, manner, and patientive categories are indirectly associated with the absolutive argument.

In examples (47) and (48), the absolutive numbers apply to intransitive AGENTS; in (49) and (50), they apply to intransitive PATIENTS. The absolutive numbers qualify transitive PATIENTS in (51) through (54) and transitive DATIVES in (55) and (56).

(47) *háh ʔáwnánní·yah* (Chafe j010)
hák# *ʔawi-* *nán-* *yi=yah*
IND ABS.SG by foot go.along
he is trotting along

(48) *háhánnánníwá·yah* (Chafe j011)
hák# *hani-* *nán-* *yi=wa=yah*
IND ABS.PL by.foot go.along.PL
they are trotting along

(49) *ʔáwnačáy·ʔah* (Chafe b737)
ʔawi- *na-* *kah-* *yaʔah*
ABS.SG DIST in.an.enclosure be
he's in the habit of, has a certain method

(50) *hánínčahyá·bah* (Chafe b738)
hani- *na-* *kah-* *yábah*
ABS.PL DIST in.an.enclosure be.PL
they're in the habit of, they have certain methods

(51) *tunnawa?nihčah* (Chafe d690)
tunn- *?a-* *wa-* *?nih* *-čah*
song ABS.SG PL make INTENT
they are going to make a song

(52) *tunnahni·wa?nihčah* (Chafe d692)
tunn- *na-* *hani-* *?a=wa=?nih* *-čah*
song DIST ABS.PL make.PL INTENT
they are going to make songs

(53) *hánínáˑmmáw?nah* (Chafe d915)
hani- *na-* *wa?-* *na-* *wa-* *bi?n* *-ah*
ABS.PL DIST throw DIST PL hit PERF
he threw them around

(54) *ku·wínáwáwbi?nah* (Chafe d916)
ku- *?awi-* *na-* *wa?-* *wa-* *bi?n* *-ah*
1PAT ABS.SG DIST throw DIST hit PERF
he threw me around

(55) *t'ut?ikahyún·?a?* (Chafe b761)
t'u- *t-* *?awi-* *kah=yuhn* *-?a?*
1AGT/2DAT APP ABS.SG take.part FUT
I'll help you

(56) *t'utánkahyún·?a?* (Chafe b768)
t'u- *t-* *hani-* *kah=yuhn* *-?a?*
1AGT/2DAT APP ABS.PL take.part FUT
I'll help you (several)

Both (47) and (48) include the verb stem *nán-yi=yah*, meaning 'to go along by foot', 'trot'. *?awi-* in (47) informs us that there is just one trotting entity; in (48) *hani-* indicates that there are several, or at least more than one. The animate plural in this same example marks the AGENT as plural and animate.

2.0. DISTRIBUTION

There are two distributive categories in the Caddo verb stem. One category occurs in position 10, immediately after the durative and before the dative applicative; the other is realized in position 5, after the absolutive number category and before the locative category.

The distributive is optionally used to express one or a combination of the following three notions: distribution of an event or state over several locations, distribution of an event or state over time (iteration), and distribution of an event or quality over entities. The entities qualified by this last distributive function are *individuated* and bear an absolutive relation to the verb. A group that is individuated consists of individuals acting or existing autonomously.

The distributive markers imply plurality, though they do not directly mark plural participants. Distribution implies multiplicity; the spreading out of an event or state implies several locations, moments in time, or entities. But the function of the distributive is to qualify the verbal event to indicate distribution, i.e., a spreading out.[13]

Distributives modify the verb stem by specifying how the verbal event or state is realized. Because the absolutive argument is most affected by this realization, it is not surprising that the distributive is associated with this argument.

Finally, as is the case with dual and animate plural, the lack of a distributive derivative in the verb stem does not imply a lack of distribution; the verbal event or state is merely unspecified for these features.

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[13] See Mithun and Corbett (1995) for a discussion of distributives cross-linguistically.

2.1. POSITION 10 DISTRIBUTIVE

The first distributive category includes two members. the individuative *haka-* and the varietive *kaki-*. Both these morphemes mark the distribution of events or qualities over entities, though with a subtle difference. The individuative serves to express the independence of entities that comprise the absolutive argument; the varietive extends this notion of distribution, indicating that the absolutive referent is varied in type. A varied participant consists of distinct kinds of entities. Varietivity in Caddo is of limited use and is incompatible with singularity and plurality; hence. the varietive does not cooccur with singular, dual, or plural markers to qualify the same argument.

Examples (57) through (61) illustrate *haka-* marking individuative absolutive arguments. (62) and (63) exemplifies the varietive *kaki-*. Note that *kaki-* is restricted to nominalized constructions.

(57) *hítakámmá·wit* (Chafe c795)

hít#	*haka-*	*ni-*	*wa-*	*wid(i)*
PAST	INDV	PORT	PL	arrive

he brought them

(58) *pihčánkáhčah* (Chafe c539)

wiht-	*haka-*	*nak-*	*háh*	*-čah*
DU	INDV	fire	go	INTENT

they two are going to burn

(59) *háhwíkkahníš'usa'* (Chafe f603)

hák#	*wiht-*	*haka-*	*hani-*	*'iš*	*-'u*	*-sa'*
IND	DU	INDV	ABS.PL	move	MID	IMPFV

they two are moving, in motion

(60) *dah?íkkašdawa?* (Chafe c246)
yah?- *wiht-* *haka-* *kid-* *?a=wá?*
2AGT DU INDV on.elevated.surface put
put two (different) things on the table

(61) *nítakáw?á·nah* (Chafe i802)
nít# *haka-* *wa-* *?án* *-ah*
PAST.GEN.PART INDV PL choose PERF
he chose them, caught them (e.g. fish)

(62) *kah?ukakí·?ah* (Chafe b932)
kak# *yu-* *kaki-* *ya?ah*
SUB DEFOC.DAT VAR be
all kinds

(63) *kah?ukakít?í·?ah* (Chafe x212)
kak# *yu-* *kaki-* *t-* *?i-* *ya?ah*
SUB DEFOC.DAT VAR APP dance be
all kinds of dances

As these examples illustrate, the three distributive notions outlined above are not at all mutually exclusive, and the semantics of each particular verb dictates the correct distributive interpretation. So in example (57), *haka-* attaches to the stem *kid(i)-* *?a=wá?* 'put on elevated surface', a singular event, to derive *haka-kid(i)-?a=wá?* 'put several different things on elevated surface', a multiple event; the act of 'placing something' is to occur more than once. *wiht-* informs us that there are precisely two entities to be affected by this event, so the act of placing will happen twice. Both instances of the event directly affect an absolutive argument; *haka-* indicates that the two entities comprising this argument must be distinct from one another.

(63) exemplifies the use of the varietive, where it is modifying the verb stem

t-ʔi-yaʔah 'be a dance'. *kaki-t-ʔi-yaʔah* means 'be different kinds of dances'; hence, the state of 'being a dance' is distributed over several distinct types to yield 'a *variety* of dances'.

2.2. POSITION 5 DISTRIBUTIVE

The second distributive category includes the morpheme *na-* which functions as a general distributive, variously expressing all the distributive notions defined above. When it indicates distribution over entities, it does not specify a particular distributive interpretation (i.e. individuative or varietive) and is associated with the absolutive argument only. In (64) and (65) it primarily indicates distribution over different locations; (66) through (68) exemplify its iterative function, and in (69) and (70), *na-* specifies distribution over entities.

(64) *kammahníʔah* (Chafe: x087)
kan- *wak-* *ni-* *yaʔah*
water hole DIST be
puddles in dried up river

(65) *ʔičʔuhʔnáyšúnʔhah* (Chafe h210)
(ʔi)čʔuht- *na-* *na-* *šúnʔ* *-hah*
hair DIST DIST be.lined.and.gathered HAB
he has curly hair

(66) *hánnawkátdikahíhah* (Chafe a846)
hani- *na-* *bakaʔ* *-t-* *yika=hí* *-hah*
ABS.PL DIST say NOM get.stuck HAB
they stutter

(67) *hákkúnsininihsaʔ* (Chafe d442)
hák# *ku-* *na-* *sininih* *-saʔ*
IND 1PAT DIST quiver IMPFV
I'm tingling (as when toes go to sleep)

(68) *kakinuš?nánní·nih* (Chafe j420)

kak#	*yi-*	*nušt-*	*na-*	*yínik*
SUB	DEFOC.AGT	paper	DIST	move

to shuffle, deal

(69) *kah?áwás?náy?ah* (Chafe x182)

kak#	*ya-*	*wást-*	*na-*	*ya?ah*
SUB	DEFOC.PAT	seed	DIST	be

seeds

(70) *tánnáwtahčah* (Chafe e314)

na-	*ni-*	*ya-*	*wa=taki*	*-čah*
DIST	PORT	out.of.an.enclosure	emerge	INTENT

he's going to carry, haul out several

In example (65) we have *na-* modifying the same verb root *šún?* 'be lined and gathered', that we saw in (34) cooccurring with distributive *wa-*. The function is the same here: to specify distribution over space. In this case, the state of being 'lined and gathered' is distributed over a mass of hair. The distributive in (66) functions to multiply the verbal event in time. *baka-t-yika=hík* means 'for a sound to get stuck'; when this happens repeatedly, the result is stuttering. Example (69) and (70) illustrate distribution over entities. Thus, the absolutive argument that is most affected by the verbal event of 'carrying' in (70) consists of several items.

3.0. Cooccurrence

A summary of the cooccurrence patterns and restrictions follows. As has been noted throughout the previous sections, the different number and distributive categories may cooccur in various combinations in a stem to qualify the same argument or make the same type of verbal modification. In the data presented above, all such permissible

cooccurrence patterns are recorded. These are summarized in Table V-II. I will examine a few of these examples for clarification:

(3) *pítniyaší·bah* (Chafe i172)
wiht- hani- yas- yábah
DU ABS.PL CONT be.PL
they two are partners

(52) *tunnahni·wa?nihčah* (Chafe d692)
tunn- na- hani- ?a=wa=?nih -čah
song DIST ABS.PL make.PL INTENT
they are going to make songs

(59) *háhwíkkahníš?usa?* (Chafe f603)
hák# wiht- haka- hani- ?ísu? -sa?
IND DU INDV ABS.PL move IMPFV
they two are moving, in motion

(61) *nítakáw?á·nah* (Chafe i802)
nít# haka- wa- ?án -ah
PAST.GEN.PART INDV PL choose PERF
he chose them, caught them (e.g. fish)

In example (3), three markers apply to the same argument. The dual, absolutive plural, and animate plural combine to specify that the absolutive referent includes two animate entities. It is clear from this construction that it is people or animals that are paired together, and not, for example, shoes or gloves. In (52), the distributive and absolutive plural apply to the same argument, the PATIENT, designated by the incorporated noun *tunn-* 'song'. The animate plural marker qualifies the AGENT. The dual, individuative, and absolutive plural cooccur in (59) to indicate that the absolutive argument consists of precisely two entities that are acting (moving) independently. The movements are not concerted and there is no solidarity between the individual participants. It is likely that the referent is animate, but no overt indication occurs. In example (61), the

1.	**Dual+Animate Plural**		
	háhwíswá·yah	they two went	(2)
	pít ʔniyašá·bah	they two are partners	(3)
	dah ʔwíswá·hat	kill them two	(7)
2.	**Dual+Plural Abs.**		
	pít ʔniyašá·bah	they two are partners	(3)
	hícíwítnikahyuh	let us two (exclusive) help	(12)
	háhwítkahníš ʔusa ʔ	they two are moving, in motion	(59)
3.	**Dual+Individuative**		
	kúbaihčánda ʔkah	he didn't find us two (exclusive)	(16)
	pihčánkáhčah	they two are going to burn	(58)
	háhwítkahníš ʔusa ʔ	they two are moving, in motion	(59)
	dah ʔíkkašdawa ʔ	put two (different things) on the table	(60)
4.	**Animate Plural+Plural Abs.**		
	pít ʔniyašá·bah	they two are partners	(3)
	hícihnikahwá·yuh	let us (exclusive) help	(35)
	háhánánní·wá·yah	they are trotting along	(48)
	haníncahyá·bah	they're in the habit of	(50)
	haninaámmáw ʔnah	he threw them around	(53)
5.	**Animate Plural+Individuative**		
	cihkámmáwín·čah	I'm going to take (live) things down	(29)
	kúbahkándáw ʔakah	he, they didn't find us (exclusive)	(39)
	hítakámmá·wit	he brought them	(57)
	nítakáw ʔá·nah	he chose them, caught them	(61)
6.	**Plural Abs.+Individuative**		
	háhwítkahníš ʔusa ʔ	they two are moving, in motion	(59)
7.	**Plural Abs.+Distributive**		
	tunnahni·wa ʔnihčah	they are going to make songs	(52)
8.	**Distributive+Distributive**		
	tawašún ʔhah	it's wrinkled, gathered (of tiered skirt)	(34)

TABLE V-II: Number and distribution cooccurrence

individuative and animate plural unite to specify that the PATIENT of the verb 'choose' (*ʔán*) includes several autonomous, animate entities, such as fish. Thus, each fish is individually chosen, i.e. 'caught', while still alive and existing independently.

3.1. COOCURRENCE RESTRICTIONS

Table V-III provides a summary of incompatibilities for the multiple qualification of a single argument. The following combinations do not occur:

TABLE V-III: Number and distribution cooccurrence restrictions

1.	Abs. Singular+Dual
2.	Abs. Singular+Animate Plural
3.	Abs. Singular+Individuative
4.	Varietive+Dual
5.	Varietive+Animate Plural
6.	Varietive+Abs. Singular
7.	Varietive+Abs. Plural

Of course, singularity and plurality are incompatible. Thus, the absolutive singular marker *ʔawi-* never appears with any of the other number or distributive morphemes to qualify the same argument. And as already stated, varietivity is incompatible with both singularity and plurality and thus does not cooccur with any other number or distributive markers to apply to the same argument.

3.2. DISCRETE COOCCURRENCE

Of course, the number and distributive categories may cooccur in a single stem to apply to different arguments or have unrelated functions. This has been amply illustrated throughout. Examples (51) and (53) are reproduced here for further comment.

(51) *tunnawa?nihčah* (Chafe d690)
tunn- *?a-* *wa-* *?nih* *-čah*
song ABS.SG PL make INTENT
they are going to make a song

(53) *hánínáˑmmáw?nah* (Chafe d915)
hani- *na-* *wa?-* *na-* *wa-* *bi?n* *-ah*
ABS.PL DIST throw DIST PL hit PERF
he threw them around

There are two number markers in example (51). The absolutive singular marker specifies that the argument designated by *tunn-* 'song' is singular and bears an absolutive relation to the event. The animate plural marker applies to the AGENTS who are going to create a song. There are four instances of number and distribution represented in (53). The two distributives each modify discrete, compounded stems.[14] The rightmost *na-* attaches to the stem *bi?* 'hit' or 'make forceful contact' to yield *na-bi?n* 'make repeated forceful contact in various locations'. The other *na-* combines with the stem *wa?* 'throw', to signify 'throw repeatedly here and there'. The absolutive plural and animate plural markers indicate that the absolutive argument includes several animate entities. Thus, the verbal event consists of an unspecified argument repeatedly grabbing several animate participants and throwing them around.

[14] See Chapter VII, section 5 for a discussion of word-formation by compounding.

4.0. CONCLUSION

In this final section, I present a summary of the interaction between the different marking patterns (case, number, and gender) and the number and distributive morphemes.

4.1. MARKING PATTERNS OF NUMBER AND DISTRIBUTION MARKERS

The following table illustrates the various number and distributive markers' participation, whether it be direct or by implication, in the absolutive case, gender, and number marking systems.

TABLE V-IV: Marking patterns of number and distribution markers

	DUAL *wiht-*	PL *-wa-*	SG ABS *ʔawi-*	PL ABS *hani-*	INDV *haka-*	VAR *kaki-*	DIST *na-*
ABSOLUTIVE			X	X	X	X	X
GENDER		X					
NUMBER	X	X	X	X	X	X	X

All the markers discussed in this chapter are associated with number, either by direct indication (*wiht-*, *-wa-*, *ʔawi-*, *hani-*) or by implication (*haka-*, *kaki-*, *na-*). Besides the dual, all the markers participate in at least two of the three marking patterns. In addition, except for the dual and animate plural, all markers are associated with the absolutive case. The animate plural is the only marker to participate in the gender system.

We know that the pronominal prefixes mark case following an AGENT-PATIENT pattern and that person marking is obligatory. From Chapter III, however, we learned

that except for defocused 3rd persons and DATIVES, realis third person is unmarked. This gap is filled by the number and distributive prefixes. For example, an absolutive singular marker unaccompanied by a pronominal prefix indicates 3rd person absolutive singular. An absolutive plural morpheme that appears without pronominal morphology is interpreted as 3rd person absolutive plural. When the animate plural or dual occur without an accompanying pronominal prefix, the indication is third person plural or dual, respectively. And so on with the distributive categories.

Thus, the number and distributive categories function to supplement the person category in differentiating participants. This integration of three marking patterns to identify participants is not only complex , but it is also a highly effective system, as I hope to have demonstrated.

TABLE V-V: Caddo verb prefix template with number and distribution categories specified

TAM	PER	INTER	**DU**	DUR	**DIST**	APP	PAT	MAN	**ABS NUM**	**DIST**	LOC	POST	CONT	TRAN	ROOT/ STEM
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
			wiht-		*haka-* *kaki-*				*ʔawi-* *hani-*	*na-/* *ni-*					**ANIM PL**
										MAN 1					*-wa-*

CHAPTER VI
VOICE AND VALENCY

0. INTRODUCTION

This chapter examines those morphological categories that function to alter the argument structure of verbs. The two principal concepts to be considered here are *voice* and *valency*. Voice refers to a grammatical category that expresses a way in which a predicate may alter the relationship between its arguments (Crystal 1991:375; Spencer 1991:236). Familiar voice categories include the active and the passive voice; others include the antipassive, applicative, causative, inverse, and middle voice, among others (Klaiman 1991, Palmer 1994, Spencer 1991:237-54). Valency concerns the number or role of arguments for which a verb stem subcategorizes" (Bybee 1985:28, Trask 1993:296). Thus, an intransitive or monovalent verb subcategorizes for precisely one argument; a transitive or bivalent verb subcategorizes for two arguments, and a ditransitive or trivalent verb subcategorizes for three arguments.

A change in voice often entails a change in valence. For example, the passivization of an English active transitive clause both changes the grammatical roles of the core participants and reduces the valency of the verb. Compare the active

construction *he hit the boy* with its passivized counterpart *the boy was hit (by him)*. In this case, the grammatical object of the active clause (*the boy*) becomes the grammatical subject of the passive construction. The subject of the active clause optionally becomes an oblique argument (*him*). Since verbs do not subcategorize for oblique arguments, this change from subject role to oblique role constitutes a reduction in valence by one.

In general, there are two broad construction types in Caddo which alter a verb's argument structure: i) those constructions which increase a verb's valency and ii) those constructions in which a verb's valency is (or can be) reduced. In Caddo, there are four construction types that belong in the valency-increasing category; these include two causative constructions, a portative construction, and a dative-applicative construction. Each of these constructions is associated with a particular morpheme whose presence in the verb triggers the voice/valence alteration. For the causative constructions, these are the position -1 general causative morpheme and the position 1 "mild" causative morpheme. The portative marker also occurs in position 1. The dative-applicative marker occurs in position 9 of the verb template. These construction types and their markers are examined in section 1.

There is one construction type that (may) reduce the valency of a verb, the middle construction.[1] The middle marker occurs as a suffix in template position -3. This construction type is explored in section 2.

[1] There is no passive construction in Caddo. However, some Caddo verbs are more comfortably glossed by an English passive construction, such as verb forms which include the Defocusing AGENT prefix (see Chapter III, section 2.3) and verb stem plus verb stem compounds (see Chapter VII, section 5.2).

The final section provides the Caddo verb template which highlights the relevant valency-affecting categories and their constituent morphemes.

Recall from Chapter III, section 3.0 that the three different clause types, intransitive, transitive, and ditransitive, are each associated with different grammatical case patterns. These are summarized below in Table VI-I.

TABLE VI-I: Grammatical case patterns

INTRANSITIVE	TRANSITIVE	DITRANSITIVE
AGT PAT	AGT + PAT PAT + DAT AGT + DAT	AGT + PAT + PAT AGT + PAT + DAT

Also, recall from Chapter 3 (sections 1 and 2) that these case labels are used to refer to the arguments of a verb even when one or more of those arguments are not morphologically expressed. Thus, 3rd person AGENTS and PATIENTS are never overtly marked, and any verb that includes a 1st person or 2nd person argument, does not overtly mark the 3rd person DATIVE.

1.0. VALENCY-INCREASING CONSTRUCTIONS

This section explores those construction types in which a verb's valency is increased. Subsection 1.1 describes the general causative construction, 1.2, the portative construction, 1.3, the mild causative construction, and 1.4, the dative-applicative construction.

1.1. GENERAL CAUSATIVE

The general causative construction consists of an intransitive or transitive verb base and the position -1 general causative suffix *-(ˊ)i ʔn(i)/-di ʔn/- ʔ(i)*. *-di ʔn* occurs after some morphemes ending in laryngeal consonants and after the copula *ʔit/hit/it*.[2] - *ʔ(i)* occurs after some morphemes ending in *y* or *i* and unpredicatably elsewhere; *-(ˊ)i ʔn(i)* occurs most generally. The general causative morpheme functions to change a verb's argument structure by adding a new argument that represents the notional causer (one who causes something). This new argument is the grammatical AGENT of the causativized construction. Thus, an intransitive verb is subcategorized for one argument (either a grammatical AGENT or a grammatical PATIENT); its causativized form is subcategorized for two arguments, a causal grammatical AGENT and a grammatical PATIENT. The grammatical PATIENT of the causativized form corresponds to the single argument of the intransitive base. This is schematized in Figure VI-I.

FIGURE VI-I: Causativization of intransitive verbs

$$V\ [\{AGT,\ PAT\}_x] + CAUS \rightarrow V\ [AGT_{[CAUSER]}\ PAT_x]$$

In example pairs (1) through (3), intransitive verb forms with grammatical PATIENTS are compared to their causativized forms. (4) through (6) compare intransitive verbs with grammatical AGENTS to their causativized counterparts.

[2] This copula is only used in serial verb-stem constructions. See Chapter VII, section 5.1 for further discussion.

(1) *háhbasisihsa?* (Chafe a008)
hák# *ba=sisih* *-sa?*
IND boil IMPFV
it's boiling

(ii) *ciwsisih?ničah* (Chafe a002)
ci- *ba=sisih* *-i?n(i)* *-čah*
1AGT boil CAUS INTENT
I'm going to boil it

(2) *hákkuká·wisáy?áy·sa?* (Chafe b532)
hák# *ku-* *kah-* *?awi-* *sáy=?áy* *-sa?*
IND 1PAT head ABS.SG spoil IMPFV
I'm angry

(ii) *kaššahká·wisáy?ay?* (Chafe b535)
kaš# *sah?-* *kah-* *?awi-* *sáy=?áy* *-?*
PROHIB 2AGT.IRR head ABS.SG spoil CAUS
don't make him angry

(3) *kukáw?áhki?a?* (Chafe b647)
ku- *kahwa=?ahaki* *?a?*
1PAT become.conscious.of FUT
I will find out, wake up

(ii) *hítcikáw?ahá·kin?* (Chafe b640)
hít# *ci-* *kahwa=?ahaki* *-'i?n*
PAST 1AGT become.conscious.of CAUS
I woke him up, informed him

(4) *ci·sáy·čah* (Chafe d336)
ci- *?a=sáy* *-čah*
1AGT appear INTENT
I'm going to peep, appear

(ii) *?asá?yah* (Chafe g583)
?a=sáy *-?* *-ah*
appear CAUS PERF
he brought the point, matter up

(5) *hítciha·s ʔna ʔ* (Chafe b407)
hít# *ci-* *hayas-* *ʔna ʔ*
PAST 1AGT money make
I paid

(ii) *híkkuha·s ʔnihdin ʔ* (Chafe b409)
hít# *ku-* *hayas-* *ʔn(ih)* *-di ʔn*
PAST 1PAT money make CAUS
he made me pay

(6) *háhci·káhsa ʔ* (Chafe b838)
hák# *ci-* *(ʔi)káh* *-sa ʔ*
IND 1AGT shout IMPFV
I'm calling, shouting

(ii) *ci·káhdin ʔnah* (Chafe b869)
ci- *(ʔi)káh* *-di ʔn* *-nah*
1AGT shout CAUS PERF
I made him holler, I blew the whistle

Each of the first three intransitive verbs denotes states and processes. To 'boil' (1i) and to 'become conscious of' (3i) are both processes that a referent undergoes. As an undergoer, the referent is a grammatical PATIENT. To 'be angry' (2i) is a temporary state; as such, the referent is again indicated by PATIENT-case morphology.[3] The causativization of these constructions adds a grammatical AGENT. It is this referent who causes (the liquid) to boil in (1ii), makes someone angry in (2ii), and makes someone wake up in (3ii).

The next three intransitive verbs denote actions: 'peep' (4i), 'pay' (5i) and 'shout' (6i). The participants involved in these actions are indicated by the AGENT case.[4] The causativization of these stems adds a new grammatical AGENT who acts

[3] See Chapter III, section 3.2 for a discussion of PATIENT-case semantics.

[4] For a description of AGENT-case semantics, see Chapter III, section 3.1.

upon the uncausativized form's AGENT; as an entity who now lacks control in the causativized form, this argument is marked as a grammatical PATIENT.

A transitive verb that may be causativized by the general causative morpheme is subcategorized for two arguments, a grammatical AGENT and a grammatical PATIENT. The causativized form of a transitive verb includes three arguments: a causal grammatical AGENT and two grammatical PATIENTS. One PATIENT corresponds to the AGENT of the transitive verb and the other corresponds to the PATIENT. Figure VI-II illustrates these relations.

FIGURE VI-II: Causativization of transitive verbs

$$V\ [AGT_x\ PAT_y] + CAUS \rightarrow V\ [AGT_{[CAUSER]}\ PAT_x\ PAT_y]$$

Clearly, in respect to grammatical roles, the causativization of transitive constructions is analogous to the causativization of agentive intransitive constructions. The only difference is the inclusion of PAT_y. Examples of transitive constructions contrasted with their respective causativized forms are presented in (7) through (9).

(7) *dika ʔháy* *háh ʔa ʔnihsa ʔ* (Chafe e925)
dika ʔhay *hák#* *ʔa = ʔn(ih)* *-sa ʔ*
something IND make IMPFV
he's working, making something

(ii) *hík̓ku·nihdin ʔ* (Chafe e920)
hít# *ku-* *ʔa = ʔn(ih)* *-di ʔn*
PAST 1PAT do CAUS
he made me do it

(8) *ʔímmá·šiyah* (Chafe g824)
ʔini- wáʔ -šiyah
lying leave TRANSLOC.PERF
he left it lying there

(ii) *ku·níwá·diʔnah* (Chafe j053)
ku- ʔini- wáʔ -diʔn -ah
1PAT lying leave CAUS PERF
he made me abandon it, leave it lying

(9) *ná ʔáwbín·hah* (Chafe a445)
ná· ʔawi- bíhn -hah
that ABS.SG carry.on.shoulders HAB
she's carrying it on her back

(ii) *tabíhʔnidah* (Chafe a447)
na- bíhn -ʔ(i) -dah
ABS.PL carry.on.shoulders CAUS PERF
he packed them on the back of something

Each of the transitive verbs in this example set denote actions; in (7i) *ʔa= ʔn(ih)* is 'make, do', *ʔini-wáʔ* of (8i) is 'leave in a lying position', and *ʔawi/na-bíhn* of (9i) is 'carry one/several on one's back or shoulders'.[5] The causativization of these transitive stems adds a new AGENT who causes the particular action to occur. The derived, causative construction is then trivalent. Thus, *ʔa= ʔn(ih)-diʔn* is 'cause (someone) to make, do (something)' (7ii), *ʔini-wáʔ-diʔn* is 'cause (someone) to leave (something) in a lying position' (8ii), and *ʔawi/hani-bíhn-ʔ(i)* is 'cause (someone) to carry (something) on one's back or shoulders'.

[5] Recall from Chapter V, section 1.3 that *na-* is a variant of *hani-* 'absolutive plural'.

1.2. PORTATIVE

The most usual portative construction consists of a motion verb stem and the portative prefix *ni-* of template position 1. A motion verb is a verb which has motion as a primary semantic feature. English examples include 'come', 'go', 'rise' and 'descend'. There are a number of motion verb roots in Caddo; all of them are inherently intransitive, subcategorize for a grammatical AGENT, and serve as a verb base for further derivation of motion verbs (and their metaphorical extensions).[6] The usual meaning of the portative morpheme involves 'carrying';[7] it functions to transitivize a motion verb by adding a grammatical PATIENT that references the carried entity. See Figure VI-III.

FIGURE VI-III: Portative transitivization of motion verbs

$$V\ [AGT_x] + PORT \rightarrow V\ [AGT_x\ PAT_{[THING\ CARRIED]}]$$

Consider the verb stems in Table VI-II where several motion verb roots are compared to their portative-derived counterparts:

[6] See Melnar 1995 for an analysis of motion verb morphology in Caddo.

[7] In a few stems the portative contributes a comitative sense. In such cases the stem is usually translated as 'accompany'. The mild causative, which occurs in the same position class as the portative, also frequently has a comitative interpretation. See section 1.3.

TABLE VI-II: Portative *ni-/na-/náh-*

wáhd	'come'	*ni-wáhd*	'bring'
wid(i)	'arrive'	*ni-wid(i)*	'bring'
hákid(i)	'go by'	*ni-hákid(i)*	'take by'
ʔa=d(ih)	'go'	*ni-ʔa=d(ih)*	'take'
yi=yah	'go along'	*ni-yi=yah*	'take'
hah=yún	'go home'	*ni-hah=yún*	'take home'
(ʔi)=wayuh	'go up'	*ni-wayuh*	'take up', 'lift', 'raise'
wín	'go down'	*ni-wín*	'take down'
ʔa=huhn	'go back'	*ni-ʔa=huhn*	'take back', 'overtake', 'catch up'

The stem pairs involving *wid(i)* 'arrive', *ʔa=d(ih)* 'go', and *(ʔi)=wayuh* 'go up' are illustrated below.

(10) *kac'ikán ʔáwwidah* (Chafe i526)
kac'ikán# *ʔawi-* *wid* *-ah*
PRIOR.QUOT ABS.SG arrive PERF
they say he's (already) here

(ii) *tíw·dah* (Chafe c782)
ni- *wid* *-ah*
PORT arrive PERF
he brought it

(11) *ci·dih ʔa ʔ* (Chafe e761)
ci- *ʔa=d(ih)* *-ʔa ʔ*
1AGT go FUT
I will go

(ii) *cín ʔadih ʔa ʔ* (Chafe c809)
ci- *ni-* *ʔa=d(ih)* *-ʔa ʔ*
1AGT PORT go FUT
I will take it

(12) *ci·wayuhčah* (Chafe d879)
ci- *(ʔi)=wayuh* *-čah*
1AGT go.up INTENT
I'm going to climb, go up

(ii) *címmáy·hah* (Chafe c779)
ci- *ni-* *wayuh* *-ah*
1AGT PORT go.up PERF
I took it up

As the first example illustrates, the verb root *wid* 'arrive' cooccurs with the absolutive singular prefix *ʔawi-* when no further derivation takes place and the sole argument is singular.[8] When the portative prefix cooccurs with the root *wid*, as in (10ii), *ʔawi-* does not occur and the derived stem *ni-wid* means 'arrive carrying', or 'bring'. In (11ii), *ʔa=d(ih)* 'go' is combined with the portative to denote 'go carrying' or 'take', while in (12ii), the portative occurs with the root *wayuh* 'go up' to mean 'go up carrying', 'take up', or 'climb up carrying'.

When this basic portative construction is further derived by the position 8 prefix *haya-* 'animate patient', the portative element no longer indicates 'carrying'; instead, it simply means 'transitive', and the verb stem denotes 'following' or a related meaning.[9] In this case, the portative marker may have the shape *na-* or *náh-*. Examples (13) through (15) illustrate the combination of *haya-* with the portative.

(13) *háyníwdiʔaʔ* (Chafe b193)
haya- *ni-* *wid(i)* *-ʔaʔ*
animate.patient PORT arrive FUT
he will follow, catch up (something animate)

---

[8] In the plural, *wid* occurs with the plural absolutive *hani-*; see Chapter V, section 1.3.

[9] In Wichita we find precisely the same set of facts. Rood (1976:72) in his Wichita grammar writes:

> The [follow] verb may be intransitive (and then translated 'going along behind' or 'coming behind', etc.) or, like other 'motion' verbs, it may contain [the] portative (*ri/ra*) which in this case means 'transitive', not 'carrying'. If the object is animate (as it probably always is), *hirʔi* 'patient is animate' also occurs. (Bracketed material is my own addition.)

Wichita *ri/ra* and *hirʔi* are thus cognate to Caddo *ni* and *haya*, respectively, in form, function, and pattern of occurrence.

(14) *hítcihá́yni?at* (Chafe b177)

hít#	*ci-*	*haya-*	*ni-*	*?a=d*
PAST	1AGT	animate.patient	PORT	go

I followed (something animate)

(15) *hahá́yní?asuh* (Chafe b209)

hák#	*haya-*	*ni-*	*?asuh*
IND	animate.patient	PORT	come

he's following (something animate)

In these examples, *ni-* transitivizes the motion verb root, adding a grammatical PATIENT which is designated by the morpheme *haya-* 'animate patient'. Thus, *haya-ni-wid(i)* of (13) may be literally glossed as 'arrive up to an animate entity', *haya-ni-?a=d* of (14) is literally 'go after an animate entity' and *haya-ni-?asuh* of (15) is 'come after an animate entity'.[10]

With derivational elements other than *haya-*, the portative maintains its primary significance of 'carrying', as is exemplified in (16) through (18).

(16) *č'ahka?ay?* *di?čánníwáhdah* (Chafe 1977:32, line 18)

č'ahka?ay?	*yi-*	*(?i)č'ah-*	*na-*	*ni-*	*wáhd*	*-ah*
bone nettle	DEFOC.AGT	eye	DIST	PORT	come	PERF

they brought bone nettles

---

[10] The 'follow' stems in examples (13) through (15) are intransitive. The linguistic expression of events and states which become institutionalized and name-worthy in their own right often become lexicalized. As this happens, the absolutive argument, as the relation which is most immediately involved in the verbal situation (see Chapter V, section 1.3), becomes such an integral part of the event or state that it is no longer interpreted as separate from that event or state. When this occurs, transitive stems become intransitive (see, for example, Mithun 1984:848-856). As Chapter VII, section 4 points out, the patientive class of elements in Caddo is always associated with the absolutive, patientive referent in non-lexicalized constructions. To transitivize the 'follow' stems, the dative applicative is used:

háhcitáyní?asuh (Chafe b205)

hák#	*ci-*	*t-*	*haya-*	*ni-*	*?asuh*
IND	1AGT	APP	animate.patient	PORT	come

I'm following him

(17) *cihkámmáwín·čah* (Chafe d619)
ci- haka- ni- wa- wín -čah
1AGT INDV PORT PL go.down INTENT
I'm going to take (live) things down

(18) *sik'uh kummitčah* (Chafe g259)
sik- -ʔuh ku- n- ni- wid -čah
rock N 1DAT APP PORT arrive INTENT
they're going to bring me the rock

In the first example, the basic portative stem *ni-wáhd* 'come carrying' is combined with the distributive *na-* and the incorporated noun root *(ʔi)č'ah-* 'eye' for a derived meaning of 'come carrying several round objects'. The stem in (17) includes the individuative *haka-*, the animate plural *wa-*, and the basic portative stem *ni-wín* 'go down carrying' for a combined meaning of 'go down carrying several live entities'. Finally, the stem in (18) includes the dative-applicative *n-* in addition to the basic portative construction *ni-wid* for the meaning 'arrive carrying (something) to'.

1.3. MILD CAUSATIVE

Like the portative *ni-/na-/náh-* above, the mild causative *yán-* also occurs in template position 1 and combines with motion verb stems. *ni-/na-/náh-* and *yán-* are thus mutually exclusive in any given stem. *yán-* is a less forceful causative than the general causative *-iʔn(i)/-diʔn/-ʔ* due to its semantic association with motion which often gives it a partial comitative interpretation.[11] *yán-* functions to transitivize motion verb stems by adding a notional causer. Figure VI-IV illustrates this function.

[11] Thus, in some contexts, the combination of *yán-* and a motion verb implies accompaniment.

FIGURE VI-IV: Causativization of motion verbs

$$V\ [AGT_x] + CAUS \rightarrow V\ [AGT_{[CAUSER]}\ PAT_x]$$

Table VI-III shows several motion verb roots and their *yán*--derived counterparts.

TABLE VI-III: Causative *yán-*

wáh	'come'	*yán-wáh*	'send this way'
wid(i)	'arrive'	*yán-wid(i)*	'drive (cattle) in here'
hákid(i)	'go by'	*yán-hákid(i)*	'drive by (cattle)'
ʔa=d(ih)	'go'	*yán-ʔa=d(ih)*	'send, chase away'
yi=yah	'go along'	*yán-yi=yah*	'chase, drive off'
yásiʔ[12]	'roam'	*yán-yásiʔa*	'chase around'
watak(i)	'emerge'	*yán-watak(i)*	'drive out'
ʔa=huhn	'go back'	*yán-ʔa=huhn*	'cause to go back'

The following three example pairs illustrate the function of *yán-*.

(19) *háhcí·yah* (Chafe e568)
hák# *ci-* *yi=yah*
IND 1AGT go.along
I went along

(ii) *háhyánniyah* (Chafe e178)
hák# *yán-* *yi=yah*
IND CAUS go.along
he drove it away, chased it off

[12] *yásiʔ* is an irregular verb root. Word-finally, this morpheme occurs as *yá·ʔah/yáhʔah*. The variant *yás* occurs before the copula *ʔaʔ*, and *yásiʔ* occurs in all other environments. With a singular grammatical AGENT, this root is obligatorily preceded by *ʔi-*, but only when there is no secondary derivation. With a plural grammatical AGENT, this root occurs as *hinuʔ* in some stems, though never in cooccurrence with the imperfective *-saʔ*.

(20) *háh?íyá·sa?* (Chafe g157)
hák# *?i=yási?* *-sa?*
IND roam.SG IMPFV
he's roaming, going about, somewhere nearby

(ii) *háhyánná·sa?* (Chafe i010)
hák# *yán-* *yási?* *-sa?*
IND CAUS roam IMPFV
he's chasing it around

(21) *hítci?ú·tah* (Chafe d862)
hít# *ci-* *?awi-* *watak*
PAST 1AGT ABS.SG emerge
I ran out

(ii) *sikíhbáyámmakkah* (Chafe j178)
sikík# *ba-* *yán-* *watak* *-ah*
PAST.TEMP.SUB 1PAT.IRR CAUS emerge PERF
since I was driven out

In the first example pair, the intransitive stem *yi=yah* 'go along', is compared with the transitive stem *yán-yi=yah* 'drive away', 'chase off'. To 'drive (someone) away' is to 'cause (someone) to go along'. Likewise in (20), to 'chase (someone) around is to 'cause (someone) to roam around', and in (21), to 'drive (someone) out' is to 'cause (someone) to emerge'.

Now, like the portative in the 'follow' verbs in examples (13) through (15) above, *yán-* means 'transitive' and not 'causative' when further derived by one particular noun root, in this case *nat-* '(animal) track'. In all recorded instances of this collocation, the dative-applicative *n-* is included in the constructions.

(22) *háhnunnacánniyah* (Chafe c607)
hák# *nu-* *n-* *nat-* *yán-* *yi=yah*
IND 3DAT APP track CAUS go.along
he's tracking it

(23) *hítcinnacán·ʔat* (Chafe c610)
hít# *ci-* *n-* *nat-* *yán-* *ʔa=d*
PAST 1AGT APP track CAUS go
I tracked it

So, to 'track something' is literally to 'follow tracks', or, to 'go along after tracks' (22) or 'go after tracks' (23).[13] The dative applicative adds a DATIVE argument that references the particular entity whose tracks are being followed (see section 1.4 below).

Just as the portative retains its primary meaning of 'carrying' in combination with all other derivational morphemes besides *haya-* 'animate patient', when *yán-* is combined with any other derivational morpheme beside *nat-*, it preserves its causative function.

(24) *háhʔáwyánná·saʔ* (Chafe h226)
hák# *ʔawi-* *yán-* *yásiʔ* *-saʔ*
IND in.air CAUS roam IMPFV
it's bucking

(25) *kúmbaka·nnsiʔnah* (Chafe a179)
ku- *'n-* *baka-* *yán-* *yásiʔ* *-nah*
1DAT APP word CAUS roam PERF
he talked to me

(26) *kakikannámmatah* (Chafe x345)
kak# *yi-* *kan-* *yán-* *watak*
SUB DEFOC.AGT liquid CAUS emerge
to push out, sweep out water

[13] As in the 'follow' verbs in the previous section, the 'track' stems have been lexicalized and detransitivized. To (re)transitivize such stems, the dative-applicative prefix is used.

In (24), 'buck' is literally 'cause (something) to roam in the air'. 'Talking to me' is 'causing words to roam toward me' (25), and to 'push or sweep out water' is to 'cause liquid to emerge' (26).

1.4. DATIVE APPLICATIVE

The dative applicative has several variants, though most commonly it is *t-*, *'n-*, *'nt*, and *n-*.[14] The valence of an intransitive or transitive verb may be increased by one by the addition of the dative applicative which conditions the cooccurrence of a DATIVE-case pronominal marker.[15] A transitivized or ditransitivized dative-applicative construction includes a grammatical DATIVE that is a semantic beneficiary, goal/recipient, or possessor.[16]

Figure VI-V illustrates the dative-applicative transitivization of an intransitive stem; Figure VI-VI shows the ditransitivation of a transitive stem.

FIGURE VI-V: Dative-applicative transitivization of intransitive stems

$$V\ [\{AGT,\ PAT\}_x] + APP \rightarrow V\ [\{AGT,\ PAT\}_x\ DAT]$$

FIGURE VI-VI: Dative-applicative ditransitivization of transitive stems

$$V\ [AGT_x\ PAT_y] + APP \rightarrow V\ [AGT_x\ PAT_y\ DAT]$$

[14] These forms appear to be derived from a more abstract *nVt-* (Chafe, personal communication).

[15] See Chapter III, section 2 for a discussion of person marking.

[16] For a discussion of DATIVE-case semantics, see Chapter III, section 3.3.

Example sets (27) through (30) include intransitive forms and their dative-applicative derived counterparts.

(27) *húháyáhsa?* (Chafe j579)
húk# *ha=yáh* *-sa?*
DUR.SUB waft.odor IMPFV
it still smells

(ii) *hákkutá(y)áhsa?* (Chafe y187)
hák# *ku-* *t-* *ha=yáh* *-sa?*
IND 1DAT APP waft.odor IMPFV
I smell it (it wafts odor to/toward me)

(28) *káynci·yáh?ah* (Chafe i206)
káyn# *ci-* *?i=yáh?ah*
RESULT 1AGT roam.SG
I'm going about

(ii) *?ukkih hákahut'áyá·sa?* (Chafe u348)
?ukkih *hákak#* *nu-* *t-* *?a=yási?* *-sa?*
really IND.SUB 3DAT APP roam IMPFV
it is really moving about for her

(29) *háhci·káhsa?* (Chafe b838)
hák# *ci-* *(?i)káh* *-sa?*
IND 1AGT shout IMPFV
I'm calling out

(ii) *cínčáh?a?* (Chafe b868)
ci- *'n-* *(?i)káh* *-?a?*
1AGT APP shout FUT
I will call him

In the first example set, the intransitive verb stem is *ha=yáh* 'waft odor'. The intransitive argument is a 3rd person grammatical PATIENT, and is therefore unmarked. The dative applicative derives this stem to include a DATIVE argument, in this case a 1st person semantic goal. Thus, the transitive stem, *t-ha=yáh* is 'waft odor to/toward'. In the 2nd example set, the motion verb root *yási?* 'roam', or more precisely 'move

randomly', is transitivized by the dative applicative for the derived meaning 'move about randomly for'. In this example pair, the intransitive argument is an AGENT. The transitive construction includes an AGENT and DATIVE argument; the DATIVE is a semantic beneficiary. In the last example set, the dative applicative combines with the intransitive verb root *(ʔi)káh* 'shout', 'call out' to add a semantic goal. The gloss of the derived stem *ʹn-(ʔi)káh* is 'call out to (someone)'.

The next three example sets illustrate the derivation of transitive stems by the dative applicative.

(30) *páwáyʔnisaʔ* (Chafe d906)
wa- wáyʔn(i) -saʔ
PL give.back IMPFV
they'll give it back

(ii) *kúmʔáyʔniʔaʔ* (Chafe d905)
ku- ʹn- wáyʔn(i) -ʔaʔ
1DAT APP give.back FUT
she'll give it back to me

(31) *ʔasáʔyah* (Chafe g583)
ʔa=sáy -ʔ -ah
emerge CAUS PERF
he brought it up

(ii) *hákkussáyʔisaʔ* (Chafe g581)
hák# ku- t- ʔa=sáy(i) -ʔ -saʔ
IND 1DAT APP emerge CAUS IMPFV
he's bringing the point out for me

(32) *tánnún·kah* (Chafe i103)
na ni- yúnik -ah
DIST PORT run.off PERF
he took them away

(ii) *kunní·nikah* (Chafe i104)
ku- *n-* *na-* *ni-* *yúnik* *-ah*
1PAT APP DIST PORT run.off PERF
he took them away from me, he took mine away

In example set (30), the transitive root *wáy$^{?}$n(i)* 'give back' is derived by the dative applicative to include a semantic goal, *'n-wáy$^{?}$n(i)* 'give back to'. In the following example pair, the dative applicative combines with the stem *$^{?}$a=sáy-$^{?}$* 'bring up' to derive *t-$^{?}$a=sáy-$^{?}$* 'bring up for'. In this construction the DATIVE references a semantic beneficiary. Finally in (32), the dative applicative attaches to the stem *na-ni-yúnik* 'run off with several' to provide a semantic possessor. So *n-na-ni-yúnik* is 'run off with several of (possessor)'.

2. VALENCY-REDUCING CONSTRUCTION: MIDDLE VOICE

There is one valency-reducing construction type, the middle voice construction. This construction is marked by the morpheme *-u$^{?}$/-$^{?}$u/-n$^{?}$u/-$^{?}$unah* which occurs in template position -3. The variant *-$^{?}$unah* occurs word-finally in subordinating constructions and in unmarked commands.[17] *-n$^{?}$u* occurs after some morphemes that end with the laryngeal *$^{?}$* or *h*, and *-u$^{?}$* and *-$^{?}$u* occur in the above environments and elsewhere. In general, the middle voice construction indicates that a verbal event or state principally affects the intransitive PATIENT-case or AGENT-case argument (see Kemmer 1993; Klaiman 1991:92; Lyons 1968:363; Palmer 1994:150).

There are two basic classes of verbs that occur with the middle: i) the exclusively middle verbs and ii) the alternating middle verbs.[18] Exclusively middle

[17] For these construction types, see Chapter V, sections 4.2 and 3.3, respectively

[18] This division is based on Klaiman (1991:44-109).

verbs are verbs that can only occur in the middle voice form; there are no contrasting voice counterparts. Alternating middle verbs include middle verb forms that contrast with active voice forms. In Caddo, exclusively middle verbs are intransitive and tend to denote spontaneous bodily actions or states over which the affected referent exerts little or no control. In these exclusively middle constructions, the sole argument is always a grammatical PATIENT. See examples (33) through (39).

(33) *hákkúyhán ʔusaʔ* (Chafe e527)
hák# *ku-* *yi=hán* *-ʔu* *saʔ*
IND 1PAT breathe MID IMPFV
I'm breathing

(34) *kah ʔikáw ʔunah* (Chafe g541)
kak# *ʔikáw* *-ʔunah*
SUB snort MID
to snort

(35) *hákku·wasá·k'usaʔ* (Chafe e882)
hák# *ku-* *ʔa=wasá·k* *-ʔu* *-saʔ*
IND 1PAT yawn MID IMPFV
I'm yawning

(36) *hákku·wišnuʔsaʔ* (Chafe e749)
hák# *ku-* *ʔawi-* *šan* *-uʔ* *-saʔ*
IND 1PAT ABS.SG cough MID IMPFV
I'm coughing

(37) *hákká·suʔsaʔ* (Chafe g532)
hák# *ka=ˊʔs* *-uʔ* *-saʔ*
IND sniff MID IMPFV
he's sniffing

(38) *kubahčúšʔunah* (Chafe h593)
ku- *bak-* *kúš* *-ʔu* *-nah*
1PAT sound cut.off MID PERF
I became hoarse

(39) *hákkuyahk'án ʔusaʔ* (Chafe a621)
hák# ku- yah=k'ah -nʔu -saʔ
IND 1PAT be.thirsty MID IMPFV
I'm thirsty

Each of the above verb stems lack an active voice counterpart. Thus, the stems **yi=hán*, **ʔikáw*, **ʔa=wasá·k*, **{ʔawi-/hani-}-šan*, **ka=ʔ́s*, **há·wdín*, **bak-kúš*, and **yah=k'ah* do not independently exist.[19] These middle stems all denote spontaneous activities of the body. 'Breathing', 'snorting', 'yawning', 'coughing', 'sniffing', 'being hoarse', and 'being thirsty' are all events or states that usually occur unpremeditated. Furthermore, these situations significantly affect the involved participant who normally exercises no conscious control of the occurrence. This combination of affectedness and lack of control is reflected by PATIENT-case person morphology.

Alternating middle verbs include active intransitive or transitive verbs which may take middle voice morphology. When the middle attaches to an intransitive verb form, it functions to convey that the intransitive referent is significantly affected by the situation. If the affected referent exerts no control, that referent is indexed by PATIENT-case morphology; however, if the affected referent is in control of the event or state, AGENT case is used.

When the middle voice morpheme is suffixed to transitive stems, it functions to reduce the valency of the derived stem by providing a reflexive or reciprocal interpretation. In the detransitivized stem, the sole argument is a grammatical AGENT. This is schematized in Figure VI-VII.

[19] *yi=hán* does appear as a nominalized stem in *yi=hán-t-hah=nín* 'stop breathing'. For this construction type and its properties, see Chapter VII, section 5 and 5.1.

FIGURE VI-VII: Middle detransitivization of transitive verbs

$$V\ [AGT_x\ PAT_y] + MID \rightarrow V\ [AGT_{x,y}]$$

As Klaiman (1991:44-45) notes, there is a general tendency for middle forms of alternating middle verbs to be intransitive. She points out that "any morpheme which expresses reflexivity automatically marks the verb as having one less referentially distinct argument than the number of arguments it is lexically assigned" (Klaiman 1991:46). Because the referent in these middle constructions typically exerts control in the situation, s/he is indexed by AGENT-case morphology. Alternating middle verbs are presented in example pairs (40) through (45).

(40) *ci·dikín·čah* (Chafe a799)
ci- *(ʔi)dikih* *-ˊn* *-čah*
1AGT sleep INCH INTENT
I'm going to go to sleep

(ii) *hákkudikínʔusaʔ* (Chafe a801)
hák# *ku-* *dikih* *-ˊn* *-ʔu* *-saʔ*
IND 1PAT sleep INCH MID IMPFV
I'm sleepy

(41) *ʔahyaʔ* *cˊítcíyá·sih* (Chafe j376)
ʔahyaʔ *cˊít#* *ci-* *ya= ˊhas* *-ih*
already PAST.PRIOR 1AGT urinate/defecate AND
I already went to the toilet

(ii) *hákkúyáasínʔusaʔ* (Chafe h597)
hák# *ku-* *ya= ˊhas* *-ih* *-nʔu* *-saʔ*
IND 1PAT urinate/defecate AND MID IMPFV
I have to go to the toilet

(42) *náhciʔyaʔ* (Chafe i230)
nák# *ci-* *(ʔi)ʔaʔ*
TRANSLOC.IND 1AGT be
I live there, am there

(ii) *kút'a·ya$^{?}$ihnu$^{?}$hah* (Chafe j200)
kú# *t'a-* *(?i)?a?(ih)* *-n?u* *-hah*
NEG 1AGT.IRR be MID HAB
I won't be (established) here

(43) *háhcikadíssa$^{?}$* (Chafe b472)
hák# *ci-* *ka=dís* *-sa?*
IND 1AGT wash IMPFV
I'm washing (something)

(ii) *dakkadís$^{?}$unah* (Chafe b473)
yah?- *ka=dís* *-?unah*
2AGT wash MID
wash up!

(44) *cínhúnki$^{?}$a$^{?}$* (Chafe d516)
ci- *na-* *húnik(i)* *-?a?*
1AGT DIST move FUT
I'll move it

(ii) *háhcínhúnku$^{?}$sa$^{?}$* (Chafe d526)
hák# *ci-* *na-* *húnik* *-u?* *-sa?*
IND 1AGT DIST move MID IMPFV
I'm moving

(45) *diwahdičah* (Chafe j370)
yi=wa=had(i) *-čah*
kill.PL INTENT
he's going to kill them

(ii) *píswahdu$^{?}$nah* (Chafe j369)
wiht- *yi=wa=had* *-u?* *-nah*
DU kill.PL MID PERF
they killed each other

In the first two example pairs, the active stems *(?i)dikih-ˊn* 'go to sleep' and *ya=ˊhas* 'urinate/defecate' are compared with their middle counterparts, *(?i)dikih-ˊn-?u* 'be sleepy' and *ya=ˊhas-?u* 'need to urinate/defecate', respectively. In the active forms, the referents are indexed with AGENT-case morphology; here, the referents are

asserting control in their actions. In the middle form of the verbs, however, the referents are indexed by PATIENT-case morphology. The states of 'being sleepy' and 'needing to urinate/defecate' are ones over which the participants have no control.

The third set of alternating verbs compares *(ʔi)ʔaʔ* 'be (at a location)' (42i) and *(ʔi)ʔaʔ(ih)-nʔu* 'be established (at a location)' (42ii). In both cases, the referent is a grammatical AGENT. Again, the notion of control determines case marking. Even though 'being established' affects the participant, the participant maintains control and is thus referred to with AGENT case marking.

The next three pairs of verbs all include an active transitive form which contrasts in voice with a middle intransitive form. The middle form always has a reflexive/reciprocal meaning in these cases. Thus, *ka=dís* 'to wash (something/someone)' (43i) contrasts with *ka=dís-ʔunah* 'to wash (oneself)', 'wash up' (43ii); *na-húnik(i)* 'to move (something)' (44i) contrasts with *na-húnik-uʔ* 'to move (oneself)' (44ii); and, *yi=wa=had(i)* 'to kill (someone) PL' (45i) contrasts with *yi=wa=had-uʔ* 'to kill (each other)' (45ii). The sole referent in the middle constructions is both a semantic agent and patient; s/he is both in control of, and affected by, the situation. Because the referent does exert control, s/he is indexed with AGENT-case morphology.

3. CONCLUSION

Each of the voice construction types considered in this chapter either increase or reduce a verb's valency. The general causative of position -1 functions to increase the valence of an intransitive or transitive verb base by one. The new argument added

by the general causative marker is a causal AGENT. The portative construction includes the portative marker of position 1 and functions to add a new argument to an intransitive motion verb. The derived, bivalent verb includes a grammatical PATIENT that references a carried object. The mild causative marker of position 1 contributes a causal AGENT to an intransitive motion verb base. The dative applicative of position 9 may increase the valence of an intransitive or transitive verb base by one. The new argument is marked by the DATIVE case. Finally, the middle voice construction reduces a transitive verb's valency by providing a reflexive or reciprocal interpretation. In the derived, monovalent stem, the sole argument is a grammatical AGENT.

The valency-affecting morphemes and their positions are highlighted in Table VI-IV. In each position column, the increase or reduction in valency that the constituent morpheme(s) condition(s) is indicated in square brackets.

TABLE VI-IV: Caddo verb template with valency-affecting categories specified

TAM	PER	INTER	DU	DUR	DIST	APP	PAT	MAN	ABS NUM	DIST	LOC	POST	CONT	TRAN
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
						t-/ *ˊn-/* *ˊnt-/* *n-* [+1]								*ni-/* *na-/* *náh-* *yán-* [+1]
										MAN I				

ROOT/ STEM	CAUS	AND	MID	CIS	ITER	INTENT	T/A
0	-1	-2	-3	-4	-5	-6	-7
	-(ˊ)i$^{?}$n(i)/ *-di$^{?}$n/* *-$^{?}$(i)* [+1]		*-u$^{?}$/* *-$^{?}$u/* *-n$^{?}$u/* *-$^{?}$unah* [-1]				
ANIM PL	INCH -I				DIM -II		

CHAPTER VII
FURTHER VERB-STEM MODIFICATION

0. INTRODUCTION

In Chapter V, sections 1.3 and 2, I pointed out that absolutive number and distributives function to qualify entities that must bear an absolutive relation to the verb. I suggested then that Mithun and Chafe's (in press) notion of *most immediate involvement* offers an explanation of this exclusive association. The absolutive referent is most immediately involved in, most affected by, and most intimately tied to, the verbal action, process, or state. It is the absolutive referent's bondedness to the verb that explains why verb-stem elements or features tend to qualify precisely the absolutive referent. Thus the English word *massacre* includes the meaning of plurality associated with the absolutive referent; i.e. one can massacre people, but not a single person. *Babysit* specifies the type or kind of absolutive entity. Thus, one can babysit a baby or small child, but not, typically, an adult or animal. Finally, the verb *input* specifies the location of an absolutive referent. To input data is to put data *in* something.

In Caddo, the posture, manner of motion, location, and patientive type of an absolutive argument may be optionally specified by the postural, manner, locative, and

patientive classes, respectively.[1] Each of these classes contributes information as to how the absolutive argument is perceived by the speaker. Postural specification answers the question "how is an entity *placed* in its environment?" Indication of manner of motion answers the question "how is an entity *moving* in its environment?". Locative markers designate *where* or *in what position* or *in which direction* an entity is situated or moving. The patientive class of elements functions to classify the type or kind of absolutive referent.

In addition to the various position classes that provide information about the absolutive referent, compounded verb stems in Caddo (which do not occupy a particular position) are exclusively associated with the absolutive referent when nominalized.

The postural elements are discussed in section 1. Section 2 describes the manner morphemes, section 3, the locative class elements, and section 4, patientives. Verb-stem compounding is taken up in section 5.

1. POSTURAL

The posture of an absolutive argument may be indicated by one of three elements from the position 3 postural class. These items include *ʔawis-/ʔawi-* 'sitting', *ʔanikis-* 'standing', and *ʔini-* 'lying'. The entity whose posture is specified by these morphemes may be either animate or inanimate. An inanimate object associated with *ʔawis-/ʔawi-* is in an *upright* position; an inanimate object associated

[1] The term *patientive* in this thesis refers to the template position 8 patientive class or any of its constituent members. The term derives from the semantic role that the entities associated with the patientive elements have; that is, such entities are semantic patients.

with *ʔanikis-* 'standing' is in a *vertical* position, a 'lying' inanimate entity is situated *horizontally*.

Example pairs (1) through (3) illustrate the use of *ʔawis-/ʔawi-* 'sitting'.

(1) *nakútciʔyaʔ* (Chafe f286)
nakút# *ci-* *(ʔi)ʔaʔ*
NEG.INST.SUB 1AGT be
because I wasn't there

(ii) *háhci·wisaʔ* (Chafe f211)
hák# *ci-* *ʔawis-* *ʔaʔ*
IND 1AGT sitting be
I'm sitting

(2) *ci·čahkah* (Chafe d708)
ci- *(ʔi)čahk* *-ah*
1AGT pierce PERF
I shot, stuck, stabbed it

(ii) *ci·wihčahkah* (Chafe g190)
ci- *ʔawis-* *čahk* *-ah*
1AGT sitting pierce PERF
I shot something sitting, upright

(3) *hákku·nássaʔ* (Chafe e831)
hák# *ku-* *ʔa=nátd* *-saʔ*
IND 1PAT be.cold IMPFV
I'm cold

(ii) *hákku·wisnássaʔ* (Chafe e845)
hák# *ku-* *ʔawis-* *ʔa=nátd* *-saʔ*
IND 1PAT sitting be.cold IMPFV
I'm cold sitting

In the first example pair, the primary stem consists of the copular root *(ʔi)ʔaʔ* 'be' or, more precisely, 'be present'. When this root combines with a postural element, the resulting stem denotes both a postural and general locative state. Thus, *ʔawis-ʔaʔ* is

'be (somewhere) in a sitting posture'. In the second example set, *ʔawis-* combines with the stem *čahk* 'pierce' to derive the stem *ʔawis-čahk* 'pierce someone sitting or something in an upright position'. The last construction includes a primary stem denoting a state, *ʔa=nátd* 'be cold'. When this stem combines with *ʔawis-*, the meaning is 'be cold while sitting'.

In the next three example sets, *ʔanikis-* 'standing' is illustrated.

(4) *kakitduʔ* (Chafe a608)
kak# *yi-* *da=yuʔ*
SUB DEFOC.AGT hang
to hang

(ii) *di·nikítduʔčah* (Chafe a609)
yi- *ʔanikis-* *da=yuʔ* *-čah*
DEFOC.AGT standing hang INTENT
he's going to be hanged; they're going to hang him

(5) *hákku·nássaʔ* (Chafe e831)
hák# *ku-* *ʔa=nátd* *-saʔ*
IND 1PAT be.cold IMPFV
I'm cold

(ii) *hákku·nikisnássaʔ* (Chafe e850)
hák# *ku-* *ʔanikis-* *ʔa=nátd* *-saʔ*
IND 1PAT standing be.cold IMPFV
I'm cold standing

(6) *kúsaʔándaʔkaɬ* (Chafe c902)
kú# *saʔa-* *nida=ʔak* *-ah*
NEG 2PAT.IRR find PERF
he didn't find you

(ii) *hítʔánkínʔdah* (Chafe j448)
hít# *ʔanikis-* *nida=ʔak*
PAST standing find
he found it standing, in a vertical position

In (4), the stem *da=yu?* 'hang' is combined with *?anikis-* to form the stem *?anikis-da=yu?* 'hang someone standing, something in a vertical position'. The stem in (5ii) *?anikis-?a=nátd* 'be cold while standing' contrasts in posture with that of (3ii) *?awis-?a=nátd* 'be cold while sitting'. In (6), *?anikis-* derives the stem *nida=?ak* 'find' to form the stem *?anikis-nida=?ak* 'find someone standing, something in a vertical position'.

In (7) through (9), derivation by *?ini-* 'lying' is exemplified.

(7) *hákihduhsa?* (Chafe c136)
hák# *yi-* *ki=duk* *-sa?*
IND DEFOC.AGT bite IMPFV
it's biting

(ii) *ci·nihduhčah* (Chafe c138)
ci- *?ini-* *ki=duk* *-čah*
1AGT lying bite INTENT
I'm going to bite it while it's lying down

(8) *híkkiwá·nuš* (Chafe c168)
hít# *ki=wa=núš*
PAST tie.PL
they tied it

(ii) *háh?ínkinúšsa?* (Chafe c174)
hák# *?ini-* *ki=núš* *-sa?*
IND lying tie IMPFV
he's tying it up while it's lying

(9) *húhnáy?áw·sa?* (Chafe i221)
húk# *náy=?áw* *-sa?*
DUR.SUB sing IMPFV
he's singing right now

(ii) *háh?ínnáy?áw·sa?* (Chafe h611)
hák# *?ini-* *náy=?áw* *-sa?*
IND lying sing IMPFV
he's singing while lying

In (7) and (8) *ʔini-* specifies the posture of absolutive arguments of transitive constructions. In (7ii), the stem is *ʔini-ki=duk* 'bite someone or something in a lying posture'; in (8ii) *ʔini-ki=núš* means 'tie someone or something in a lying posture'. The last example specifies the posture of the intransitive argument of *náy=ʔáw* 'sing' for the meaning 'sing while in a lying posture'.

2. MANNER

The manner in which an absolutive argument is moving may be indicated by the following six morphemes from template positions I and 7: *dahán-* 'swaying motion', *dakán-* 'loping motion', *(ʔi)č'áhda-* 'floating motion', *yas-* 'walking motion', *yas-* 'running, fast motion', and *yán-* 'jumping motion'. All manner elements occur in position I except *yas-* 'walking motion', which occurs in position 7. Each manner element except *(ʔi)č'áhda-* 'floating motion' obligatorily occurs with an absolutive number marker of position 6 and most commonly occurs with motion verb stems (many of which usually condition absolutive number marking, anyway). *(ʔi)č'áhda-* never occurs with absolutive number marking.

The first three example sets illustrate the derivation of motion stems by *dahán-* 'swaying motion'.

(10) *kúydáyʔyah* (Chafe e569)
kúyt# *yahʔ-* *yi=ʼyah*
WHERE.INTER 2AGT go.along
where are you (going along)?

(ii) *háhʔáwdahánniyah* (Chafe h104)
hák# *ʔawi-* *dahán-* *yi=ʼyah*
IND ABS.SG swaying go.along
it's wobbling, he's hobbling, swaying

(11) *nátti?* *hítci?yat* (Chafe e566)
nátti? *hít#* *ci-* *(?i)?a=d*
there PAST 1AGT go
there's where I went

(ii) *hít?áwdahán·?at* (Chafe j078)
hít# *?awi-* *dahán-* *?a=d*
PAST ABS.SG swaying go
he went swaying

(12) *?iyaš?ahah* (Chafe j084)
(?i)yási?a *-hah*
roam HAB
he's going around

(ii) *háh?áwdahánná·sa?* (Chafe j076)
hák# *?awi-* *dahán-* *yási?a* *-sa?*
IND ABS.SG swaying roam IMPFV
he's swaying about, hanging around

In these examples *dahán-* combines with the motion verb stems *yi= ʼyah* 'go along' (10), *?a=d* 'go' (11), and *yási?a* 'roam' (12) to derive the stems *dahán- yi= ʼyah* 'go along swaying' or 'wobble or hobble along', *dahán-?a=d* 'go swaying', and *dahán-yási?a* 'roam around swaying' or 'hang around', respectively.

dakán- 'loping motion' is exemplified in (13) through (15).

(13) *paháhdah* (Chafe a914)
wa- *hákid* *-ah*
PL pass.by PERF
they went by

(ii) *háhanidakámmaháhdisa?* (Chafe i917)
hák# *hani-* *dakán-* *wa-* *hákid(i)* *-sa?*
IND ABS.PL loping PL pass.by IMPFV
they are loping by

(14) *kīh ʔáwdakán· ʔat* (Chafe i951)
kīk# *ʔawi-* *dakán-* *ʔa=d*
PAST.SUB ABS.SG loping go
the one that loped off

(15) *háh ʔáwdakánna ʔsuh* (Chafe i952)
hák# *ʔawi-* *dakán-* *ya= ʔasuh*
IND ABS.SG loping come
he's loping this way

In (13) *dakán-* combines with the motion root *hákid* 'pass by' to form the stem *dakán-hákid* 'pass by loping'. The stem in (14) *dakán-ʔa=d* 'go loping' contrasts with the stem in (11) above, *dahán-ʔa=d* 'go swaying'. The motion stem in (15) *ya= ʔasuh* 'come', always occurs with other derivational elements. This stem *dakán-ya= ʔasuh*, 'come loping' contrasts with the stems in (17 ii) and (19ii) below. In (17ii) *ya= ʔasuh* combines with *(ʔi)č'áhda-* 'floating motion' for the meaning 'come floating', while in (19ii) *ya= ʔasuh* cooccurs with *yas-* 'walking motion' for the meaning 'come walking'.

The next three constructions exemplify *(ʔi)č'áhda-* 'floating motion'.

(16) *ʔič'áhdayaš ʔahah* (Chafe d773)
(ʔi)č'áhda- *yási ʔ* *-hah*
floating roam HAB
it floats around

(17) *háh ʔič'áhd ʔasuh* (Chafe d778)
hák# *(ʔi)č'áhda-* *ya= ʔasuh*
IND floating come
I went floating

(18) *háh ʔič'áhdáy·yah* (Chafe d775)
hák# *(ʔi)č'áhda-* *yi= 'yah*
IND floating go.along
it's floating away

In (19) through (21), *yas-* 'walking' motion is illustrated.

(19) *háhyaswí·ʔasuh* (Chafe e254)
hák# *yas-* *ʔawi-* *ya=ʔasuh*
IND walking ABS.SG come
he's walking toward me

(20) *hítciyasniʔwat* (Chafe e259)
hít# *ci-* *yas-* *hani-* *ʔa=wa=d*
PAST 1AGT walking ABS.PL go.PL
we walked

(21) *háhyasʔní·yah* (Chafe g657)
hák# *yas-* *hani-* *yi='yah*
IND walking ABS.PL go.along
they are walking as in a parade, going by

Note that unlike the other manner elements, *yas-* 'walking' always precedes the absolutive number position. In contrast, the phonologically identical morpheme *yas-* 'running' always follows absolutive number.

Position I *yas-* generally means 'running motion'; however, this morpheme functions to designate any fast motion (for example, motion by horse, car, train, etc.). See examples (22) through (24).

(22) *ʔáwyáhdah* (Chafe d943)
ʔawi- *yas-* *kid* *-ah*
ABS.SG running pass.by PERF
he ran by

(23) *hákku·wiyasnássaʔ* (Chafe e863)
hák# *ku-* *ʔawi-* *yas-* *ʔa=nátd* *-saʔ*
IND 1PAT ABS.SG running be.cold IMPFV
I'm cold running

(24) *kúh ʔáwyáw·disaʔ* (Chafe h960)
kúk# *ʔawi-* *yas-* *wid(i)* *-saʔ*
LOC.SUB ABS.SG running arrive IMPFV
railroad station, where (the train) arrives running

Notice that in (23), *yas-* combines with the stem *ʔa=nátd* 'be cold'. Even though the sole argument of this stem is involved in an action, namely 'running', the primary stem denotes an involuntary temporary state, 'being cold'. A PATIENT-case pronominal prefix reflects this principal meaning.

The last manner element to be considered is *yán-* 'jumping motion'. Its use is exemplified in (25) through (27).

(25) *cihahnísat* (Chafe a877)
ci- *hah=nín* *-sat*
1AGT stop.suddenly INTENT.AND
I'm going to stop over there

(ii) *kahʔa·wiyánnínʔunah* (Chafe c686)
kak# *ʔa-* *ʔawi-* *yán-* *nín* *ʔunah*
SUB DEFOC.PAT ABS.SG jumping stop.suddenly MID
to stumble (always), be falling

(26) *ci·nihsaháy·ʔaʔ* (Chafe f008)
ci- *ʔanikis-* *ʔa=háy* *-ʔaʔ*
1AGT standing rise FUT
I'll stand up

(ii) *ʔáwyánʔánkisá·yah* (Chafe g879)
ʔawi- *yán-* *ʔanikisháy* *-ah*
ABS.SG jumping rise.to.a.standing.posture PERF
she jumped up

(27) *háhʔáwyánná·saʔ* (Chafe x091)
hák# *ʔawi-* *yán-* *yási ʔ* *-saʔ*
IND ABS.SG jumping roam IMPFV
he's going around jumping, frolicking

In (25ii), *yán-* and *nín-ʔunah* 'stop oneself suddenly' combine for the meaning 'stumble', 'be falling'. In (26) *ʔanikis-ʔa=háy* 'rise to a standing posture' or 'stand up' contrasts with *yán-ʔanikisháy* 'jump up'. This latter example is the only occurrence of a postural element following a manner element in the entire Caddo corpus.[2]

Finally, *yán-* 'jumping' and *yas-* 'running' have been noted to occur together in the same stem, *ʔa=nát* 'be cold'. This is exemplified in (28) below.

(28) *hákku·wiyánnasʔnássaʔ* (Chafe e865)

hák#	*ku-*	*ʔawi-*	*yán-*	*yas-*	*ʔa=nát*	*-saʔ*
IND	1PAT	ABS.SG	jumping	running	be.cold	IMPFV

I'm cold while running and jumping

Because this is the only example of what might constitute local ordering within the manner class, no further comment is warranted.

3. Locative

The position 4 locative class consists of some 26 identified elements that specify how or where an absolutive referent is situated in its environment. Semantically, the locative class includes elements that indicate locations (e.g. *(ʔa)ka-* 'fire', *hawat-* 'liquid', *kid(i)-* 'elevated surface') , directions (e.g. *ʔawi-/ʔa-* 'up', *náw-* 'down'), or positions (e.g. *da-* 'hanging', *ʔawi-* 'oblique', *dak-* 'sticking up').

Now, locations are often expressed by incorporated noun roots in polysynthetic morphologies. Indeed, Mithun (1984:848) observes that noun roots incorporated into

[2] Because *ʔanikis-ʔa=háy* is a frequently occurring stem, and because it occurs without further derivation (as in 26i), I analyze its occurrence in (26ii) as a lexicalized stem, occupying position 0 in the verb template. It is to this primary stem that the manner prefix attaches.

verb stems typically designate semantic patients, instruments, and locations. Strictly speaking, for a noun root to be considered incorporated, it must be phonologically identical and semantically similar to noun roots occurring freely as nominals (Spencer 1991:15, Trask 1993:137-138). In practice, however, many constituents of what are described as incorporating classes do not have such cognates (see Bybee 1985:106-107). The rule of thumb seems to be that a significant portion of the incorporating class should have "unincorporated" cognates.

None of the Caddo locative class members except possibly one, *ya ʔk-* 'dense growth', 'dense vegetation', is recorded to have a cognate occurring as a noun root outside of the verb-stem construction;[3] thus, as a whole, this class is not considered incorporating. As we'll see in the next section, this characterization contrasts with that of the patientive class, where many of the class constituents do have noun root cognates which occur outside of the verb stem as nominals.

The locative class constituents are given in Table VII-I. The glosses provided for each element are meant to represent the most general meaning; see the individual locative entries associated with the examples below for more complete glosses.

[3] This other *ya ʔk-* means 'wood'.

TABLE VII-I: Locatives

da-	suspended	*yah-/yá-*	by, next to
daht-	behind, attached	*ya?k-*	dense growth
dak-	sticking up	*(?a)ka-*	fire
daka?ah-	middle	*?akah/kah-*	enclosed space
hanikah-/	bottom, underneath	*?awi-/?a-*	up, above
(?i)nikah-		*?awi-*	oblique, projecting out
hawat-	liquid	*?awi-*	goal, limit
kahd-	under	*?ayah-/yah-*	out of sight, invisible
kahd-/ká-	in	*?ičа-*	over
kahd-	spread out, side	*(?i)cu(da)-*	pile form
ka?ah-	under	*?ihá·d-*	together
kid(i)-	elevated surface	*?ini-*	horizontal surface
náw-	down(ward)	*(?i)t'ad-*	together, next to
nukah-	under		

Many locative elements are recorded to occur together in a single stem. A few of these may only occur in composition with other locative elements.[4] Although there are exceptions, generally no more than two locative items cooccur in the same stem and there is a strong tendency for elements designating locations to occur (in local order B of the locative position) before elements indicating positions or directions (in local order A of the locative position). This local ordering tendency is given in Figure VII-I.

FIGURE VII-I: Local order of the locative position (tendency)

LOC	
B loc/pos/dir	A pos/dir

[4] For a similar situation in Pawnee, see Parks (1976:291-307).

In (29) through (58) each of the 26 locative morphemes is exemplified at least once. Those elements that must appear in composition with other locative items are so noted. (59) through (62) exemplify multiple position 4 locatives.

da- 'suspended'

(29) *hítcidaw$^{?}$nah* (Chafe a531)

hít#	*ci-*	*da-*	*bi$^{?}$n*	*-ah*
PAST	1AGT	suspended	hit	PERF

I hit something hanging, suspended

daht- 'behind', 'attached'

(30) *háhdaht'a$^{?}$* (Chafe g289)

hák#	*daht-*	*$^{?}$a$^{?}$*
IND	attached	be

it's hooked on, attached

dak- 'sticking up', 'straight', 'in a line', 'standing'

(31) *dihaysudattáwni$^{?}$wa$^{?}$* (Chafe g054)

yi-	*haysu-*	*dak-*	*dana=wan(i)*	*-$^{?}$a$^{?}$*
DEFOC.AGT	bluff	sticking.up	bend	FUT

one has to go around the bend of the bluff

daka$^{?}$ah- 'middle', 'between', 'among'

(32) *tačak'ahni$^{?}$wa$^{?}$* (Chafe a699)

na-	*daka$^{?}$ah-*	*ni$^{?}$*	*-$^{?}$a$^{?}$*
DIST	among	stay	FUT

they will be in the crowd

hanikah- 'bottom', 'underneath'

(33) *kah$^{?}$anasánkáy·$^{?}$ah* (Chafe g762)

kak#	*($^{?}$a)nas-*	*hanikah-*	*ya$^{?}$ah*
SUB	foot	bottom	be

sole (of foot, shoe)

hawat- 'liquid'

(34) *háhnikahyúnnáywatti?a?* (Chafe x318)
hák# nikahyút- na- hawat- ?ini- ?a?
IND buckskin DIST liquid lying be
(there are) buckskins in water, naked kids swimming

kahd- 'under', 'underneath'

(35) *nah?ánán·čàtdahan* (Chafe g711)
nak# (?a)nas- na- kahd- ya= 'han
INST foot DIST under spread.out
stockings, what you wear under your shoes

kahd-/ká- 'in'

(36) *kúki·sakáhda?* (Chafe j505)
kúk# yi- (?i)sik- kahd- '?a?
LOC.SUB DEFOC.AGT hand in be
welfare service, where you are held in the hand

(37) *káhundatčá·nihsa?* (Chafe x594)
hák# nu- n- dat ká- ?a= ?n(ih) -sa?
IND 3DAT APP thorn in do IMPFV
he has a thorn stuck in him

kahd- 'spread out (on a surface)', 'side'

(38) *nídikátdu?* (Chafe j454)
nít# yi- kahd- yu?
PAST.GEN.PART DEFOC.AGT spread.out put
skillet bread, what's been spread out

ka?ah- 'under' (only appears in composition with *?ini-* 'horizontal surface')

(39) *?ínka?ahni?wa?* (Chafe g091)
?ini- ka?ah- ni? -wa?
horizontal.surface under stay FUT
he will stay under

kid(i)- 'elevated surface'

(40) *hákkidínkinúšsa?* (Chafe c175)
hák# *kid-* *?ini-* *ki=nús* *-sa?*
IND elevated.surface lying tie IMPFV
he's tying something lying on a scaffold

náw- 'downward'

(41) *háhwih?náwyawnisa?* (Chafe c674)
hák# *wiht-* *náw-* *ya=bi?n* *-sa?*
IND DU down hit IMPFV
they two are throwing, knocking it down

nukah- 'under'

(42) *háhbahnuká·ni?a?* (Chafe h482)
hák# *bak-* *nukah-* *?ini-* *?a?*
IND sound under lying be
it's echoing

(43) *hítcihwatnukahyuh* (Chafe b133)
hít# *ci-* *hawat-* *nukah-* *yuk*
PAST 1AGT liquid under go.in
I dove in

yah-/yá- 'by', 'next to' (only appears in composition with *(?a)ka-* 'fire')

(44) *háhnaykaá·nihsa?* (Chafe e960)
hák# *na-* *(?a)ka-* *yah-* *?anikis-* *?a?*
IND DIST fire by standing be
they are standing by the fire

ya?k- 'dense growth'

(45) *táhna·hyá·sa?* (Chafe j041)
ták# *na-* *ya?k-* *yási?* *-sa?*
TRANSLOC DIST dense.growth roam IMPFV
they are wandering around in the timber

(ʔa)ka- 'fire'

(46) *hítci·kasniʔ* (Chafe e943)
hít# *ci-* *(ʔa)ka-* *sniʔ*
PAST 1AGT fire cook
I cooked it, boiled it

ʔakah-/kah- 'enclosed space'

(47) *háhnaʔakahyá·saʔ* (Chafe j252)
hák# *na-* *ʔakah-* *yásiʔ* *-saʔ*
IND DIST enclosed.space roam IMPFV
they are moving around in an enclosure

(48) *síkkahyakáyyakíhsaʔ* (Chafe j274)
sít# *kahyat-* *kah-* *yi=yàkíh* *-saʔ*
WH-.INTER land.depression enclosed.space be.a. measurement IMPFV
what is the depth of the canyon, ravine, ditch?

ʔawi-/ʔa- 'up', 'above'

(49) *kaki·wiʔá·nih* (Chafe j025)
kak# *yi-* *ʔawi-* *ʔán(ih)*
SUB DEFOC.AGT up hold
to hold up in the air (e.g. a ball)

ʔawi- 'oblique', 'projecting out horizontally'

(50) *kúhʔáwdatčah* (Chafe a678)
kúk# *ʔawi-* *datčah*
LOC.SUB projecting.out.horizontally stand
porch, its edge is sticking out

(51) *ʔáwyawatáhʔnah* (Chafe f128)
ʔawi- *yah-* *wa-* *tak* *-ʔiʔn* *-ah*
oblique by PL stand CAUS PERF
they leaned it

ʔawi- 'goal', 'limit'

(52) *katʔíddan* (Chafe f031)
kan- ʔawi- dda=n
liquid limit fill
the water bucket is full

ʔayah- 'out of sight', 'invisible', 'away'

(53) *kúhʔasásyayuhsaʔ* (Chafe f266)
kúk# (ʔa)sás- ʔayah- yuk -saʔ
LOC.SUB wire out.of.sight go.in IMPFV
where the wire goes in

ʔiča- 'over'

(54) *tiká·ča·wáyʔnah* (Chafe g119)
nika- ʔiča- ʔa=waʔ -nah
fire over jump PERF
he jumped over the fire

(ʔi)cu(da)- 'pile form'

(55) *cik'útcutáhʔničah* (Chafe x219)
ci- k'uhut- cu(da)- hak -'iʔn(i) -čah
1AGT grass pile.form stand CAUS INTENT
I'm going to pile the grass

ʔihá·d- 'together'

(56) *háhutʔihá·ppáyʔusaʔ* (Chafe h009)
hák# nu- t- ʔihá·d- wa- yuʔ(u) -saʔ
IND 3DAT APP together PL put IMPFV
they're putting it together, combining (for donation, contribution)

ʔini- 'horizontal surface'

(57) *híppíttíwʔsah* (Chafe f455)

hít#	*wiht-*	*ʔini-*	*biʔ=sak*
PAST	DU	horizontal.surface	step.on.forcefully

they 2 trampled it

(ʔi)t'ad- 'together', 'next to'

(58) *kakiʔt'atduʔ* (Chafe h145)

kak#	*yi-*	*(ʔi)t'ad-*	*yuʔ*
SUB	DEFOC.AGT	together	put

to glue, paste

Composite forms:

ʔawi- 'oblique' + *cu-* 'pile form' + *dak-* 'sticking up'

(59) *háhwítni·cudakánnásaʔ* (Chafe f098)

hák#	*wiht-*	*na-*	*ʔawi-*	*cu-*	*dak-*	*yásiʔ*	*-saʔ*
IND	DU	DIST	oblique	pile.form	sticking.up	roam	IMPFV

they two are hunched, stooped over moving about

ʔawi- 'oblique' + *yah-* 'by', 'next to'

(60) *háhyaʔnáwyahdatčah* (Chafe i980)

hák#	*yaʔk-*	*na-*	*ʔawi-*	*yah-*	*datčah*
IND	wood	DIST	oblique	by	stand

poles are leaning

hawat- 'liquid' + *nikah-* 'under'

(61) *háhawattiká·wánʔisaʔ* (Chafe j573)

hák#	*hawat-*	*nikah-*	*ʔa=waniʔ*	*-saʔ*
IND	liquid	under	turn	IMPFV

she turned it in the solution

ʔawi- 'above' + *da-* 'hanging'

(62) *hítʔáwdaʔbinʔ* (Chafe a532)
hít# *ʔawi-* *da-* *(ʔi)biʔn*
PAST above hanging hit
he hit something in the air

While most of the above examples are self-explanatory, a few comments are in order. First, note that the locative items indicate general, and not specific locations, positions, and directions. So, *hawat-* of examples (34), (43), and (61) designates a 'liquid' location. In (34), a literal gloss of the stem *nikahyút-na-hawat-ʔini-ʔaʔ* is 'for several buckskin or leather entities to be in a lying posture in liquid'. A more natural gloss of the entire verb construction, however, is 'there are naked kids swimming', presumably, in water. In (43) *hawat-nukah-yuk* is literally 'go in under liquid'; more naturally, it means 'dive in'. Again, the inference is that the liquid entity is water. Finally, the verb stem in (61), *hawat-nikah-ʔa=waniʔ* is literally glossed as 'turn (something) under liquid'. Here, the inference is that the liquid is some sort of cleaning or curing solution. The same generality in meaning can be seen by the locative *kid(i)-*. *kid(i)-* is a locative element that designates the surface of any elevated structure. In (40), *kid-ʔini-ki=nús* is a verb stem meaning 'tie something or someone that is in a lying posture on top of something'. In this particular case, the elevated structure the speaker is referring to is a scaffold. *yaʔk-* 'dense growth', exemplified in (45), can designate any area of dense, naturally occurring, vegetation, such as timber, thicket, brush, or weeds. We'll observe this same type of generality in meaning in the patientive class items to be considered below in section 4.

The above examples also illustrate that locative elements frequently cooccur with position 8 patientives, which also provide information about an absolutive referent (see examples 31, 33-37, 42, 48, 52-55, and 60). Note that patientive and locative morphemes that designate entities of a similar class are usually distinct in form. For example, a patientive morph that designates 'fire' is *nika-* (54). The locative element designating 'fire' is *(ʔa)ka-*, as in (44) and (46). The locative form for 'liquid' is *hawat-* (34, 43, and 61); the patientive form is *kan-* (52). Where the patientive and locative form is the same, their respective meanings are usually distinct. Thus, locative *yaʔk-* is 'dense growth' (45); patientive *yaʔk-* is 'wood' (60).

Three of the examples above include the verb root *yuʔ(u)* (38, 56, and 58). *yuʔ(u)* is a root that must appear in combination with a locative class member. It is most comfortably glossed as 'put' or 'place'. Thus, *kahd-yuʔ* is 'put in a spread-out position' (38); *t-ʔihá·d-wa-yuʔ(u)* means 'for several to be put together', 'combine' (56); and *(ʔi)t'ad-yuʔ* means 'put together', 'glue' (58). Other stems include: *da-yuʔ(u)* 'hang', *ʔini-kaʔah-yuʔ(u)* 'put under', *daht-yuʔ(u)* 'attach', and *kahd-yuʔ(u)* 'put in'.

The last four examples include composite locative stems. We'll consider the first of these in detail. In (59), *ʔawi-* 'oblique (position)', *cu-* 'pile form' (shaped like a pile), and *dak-* 'sticking up' combine with the motion root *yásiʔ* 'roam' and the distributive *na-* in the stem *na-ʔawi-cu-dak-yásiʔ* for the meaning 'for several to roam about hunched over'. Each one of these locative elements provides information as to how the absolutive referents are positioned in their environment. *dak-* specifies that the entities in question are, more or less, vertical; that is, they're moving about on their

legs, and not crawling on their hands and knees, or sliding on their bellies, for example. *cu-* indicates the overall shape of each of the entities; they have the form of piles, broad at the bottom, more narrow on top. Finally, *ʔawi-* informs us that their angle relative to the ground is oblique. That is, although they are vertical, they are not perpendicular to the ground. The combined semantics of these individual locative elements yields the meaning 'stooped or hunched over'. The distributive *na-* specifies that the absolutive referent is distributed over space, thus implying plurality.

Now in the stem just considered, each of the locative elements represent positions. The same is true of the locative elements in (60). In (61) and (62), however, a locative element designating a location occurs positionally before a locative element indicating a position. Thus, in (61), *hawat-* designates the location of the absolutive referent, '(in) liquid', and *nikah-* specifies the position of that referent relative to the location, 'under'. Likewise, the locative element *ʔawi-* 'above', 'air' in (62) is positioned in the verb stem to the left of the positional element *da-* 'hanging'. The absolutive entity indexed by this construction is 'hanging in the air'.

4. PATIENTIVE

The position 8 patientive class consists of prefixes and incorporated noun roots that function to specify the type or kind of absolutive argument. As the term *patientive* suggests, this argument is usually a semantic patient.

As indicated in Chapter I, section 2.1 and above in section 4, many polysynthetic morphologies have a class (or several classes) of elements consisting of noun roots. Although the incorporating class can be quite extensive, it is a closed

class of elements (i.e. it is not coterminous with the entire noun-root lexicon) which is defined by a particular stereotypical or prototypical semantic category. In Caddo, the patientive class includes elements that indicate body parts (e.g. *k'ánt-* 'head', *ʔič'ah-* 'eye'), body products (e.g. *bak(a)-* 'word', *kák'ušt-* 'saliva'), cultural products (e.g. *nisah-* 'house', *t'ánk-* 'pipe'), and natural phenomena (e.g. *háwt-* 'wind', *wadát-* 'earth'). Their semantic restriction is to inanimate patients of the verb[5], though terms for body parts are sometimes used in a locative or instrumental sense.[6]

Like the distributives discussed in Chapter V, and the locative, postural, and manner elements considered above, patientive class morphemes are always associated with the absolutive argument of the verb. This type of relation is also true of noun roots in noun-verb compounds (Moravcsik 1978:267), a construction of which noun incorporation is often considered a particular type (see, for example, Mithun (1984)).

Also like the locative morphemes, the patientive class items are generic in function and do not directly refer to the absolutive argument. Instead, following Silverstein (1984:281-2), they *allude* to the implicit sense structure of the verbal patient through their specified categorial value as a constituent of their morphological class. Woodbury (1975:12-13) captures this same feature of noun incorporation in the Iroquoian language Onondaga when she states "...an incorporated noun can never do

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[5] There are two important exceptions to the animacy restriction; see below.

[6] Chafe (1976:70-72) constitutes the first description of Caddo noun incorporation. For incorporation studies of other Caddoan languages, see Parks (1976:250-253) and Rood (1976:197-198). For incorporation studies of other Native American languages belonging to language families with constituent members spoken in the Eastern and Southeastern regions of the United States, see, among others: Baker (1988, 1995), Bonvillain (1989), Booker (1981), Chafe (1970), Dahlstrom (1988, 1990, 1991, 1993, MS), Denny (1989), Haas (1941, 1982), Kroeber (1909, 1911), Mellow (1989), Melnar (1995), Miner (1982), Mithun (1984), Norcross (1993), de Reuse (1994), Sapir (1911), and Woodbury (1975).

more than designate its referent...".[7] Unincorporated nouns, on the other hand, can denote their referents; i.e. they can refer to their objects as a thing. Thus, as part of the derivational machinery in Caddo, incorporated nouns and other patientive prefixes function to modify the meaning of the verb by narrowing the sense of its patient. In this respect, all patientive elements have a classificatory function. As classifiers, patientives necessarily indicate a class of items and do not specify any particular class member.

The class of items which a particular patientive morpheme indicates may be relatively large or quite small. Indeed, some classes may consist of only one or two members. Thus, the incorporated noun *kák'ušt-* 'saliva', always means 'saliva' in the recorded database. As I demonstrate below, patientives designating body parts are the most general in their classificatory function.

Now, each patientive term has a default interpretation that is consistent with the prototypical or stereotypical member of its class. This default interpretation is the "elsewhere" meaning that comes into play when no other more specific meaning is contextually available. Thus, the default interpretation of *kan-*, a patientive that functions to classify an absolutive referent as a liquid entity, is 'water'. Compare the constructions in (63).

(63) *cikambasisíh?ničah* (Chafe a003)

ci-	*kan-*	*ba=sisih*	*-'i?n(i)*	*-čah*
1AGT	liquid	boil	CAUS	INTENT

I'm going to boil water

[7] 'Designation' is defined according to Scheffler and Lounsbury (1971:3) as "the relationship between a sign and an object as an exemplar of a kind or as a member of a class of things."

(ii) *bah?uh kúh?akanniyah* (Chafe h333)
bah?uh kúk# ?a- kan- yi=yah
blood LOC.SUB DEFOC.PAT liquid go.along
vein, where the blood flows

In (64ii), *kan-* 'liquid' specifies the type of absolutive entity, which in this example, is directly referenced by the noun *bah?uh* 'blood'.

As is the case with the locative class position, the patientive class position consists of two, locally ordered positions.[8] In the local order, elements associated with semantic patients always occur (in local position B) before elements associated with instruments or locations (in local position A). This is schematized in Figure VII-II:

FIGURE VII-II: Local order of patientive position

PAT	
B pat	A pat/loc/inst

In this local order, the entity designated by B modifies the type or kind of entity designated by A. Thus, an outside wall or roof of a building is designated by the position 8 collocation *nisah-* 'house' + *?iniku?-* 'back' (i.e. the part of the body that is the back), as in the following example:

(64) *kúhnisáhnikuh?a?* (Chafe c951)
kúk# nisah- ?iniku?- ?a?
LOC.SUB house back be
where the outside wall or roof is

[8] Also like the locative position, up to three patientive items have been recorded in the patientive position. It is, however, very infrequent in the data.

Here, *nisah-* 'house', specifies the type of 'back' indicated by *ʔiniku ʔ*-; i.e. 'house back' or 'back of a house'. As classifiers, *nisah-ʔiniku ʔ*- may designate the wall or roof of any type of building, including, for example, a house, church, or barn.

As noted, incorporated noun roots have freely occurring cognates functioning syntactically as nouns. The cognate either occurs without affixation, with the nominal marker -*ʔuh*, or the locative marker -*yih*. Consider example sets (65) through (71) where unincorporated nouns are compared with their incorporated counterparts.

(65) *níyá·cih* (Chafe h239)
niyat -yih
road LOC
road, on or in the road

(ii) *kúhniyakkač'uhsa ʔ* (Chafe h178)
kúk# niyat- kač'uh -sa ʔ
LOC.SUB road fork IMPFV
at the fork of the road, where the road forks

(66) *wadát hatinu ʔ* (Chafe y074)
wádat ha# tinu ʔ
earth A red
red earth, red clay

(ii) *dím ʔadáppán ʔhah* (Chafe a705)
yi- 'n- wadát- wani ʔ -hah
DEFOC.AGT APP earth put.in HAB
one puts in cement

(67) *k'uhut* (Chafe x222)
k'uhut
grass
grass, hay

(ii) *nakik'uhčuš* (Chafe g839)
nak# yi- k'uhut- `kúš
INST.SUB DEFOC.AGT grass cut
scythe, mower

(68) *háw·t'uh* (Chafe b164)
háwt *-ʔuh*
wind N
wind

(ii) *háháwcaʔsuh* (Chafe b165)
hák# *háwt-* *ya=ʔasuh*
IND wind come
wind is blowing

(69) *sučih* (Chafe e622)
su *-yih*
nose LOC
nose, in or on the nose

(ii) *kahʔisukáy·ʔah* (Chafe d482)
kak# *(ʔi)su-* *kah-* *yaʔah*
SUB nose enclosed.space be
nostril

(iii) *kahdahsukáy·ʔah* (Chafe d481)
kak# *daʔk-* *su-* *kah-* *yaʔah*
SUB tree nose enclosed.space be
tree hollow

(iv) *kahdánt'iswí·ʔah* (Chafe h439)
kak# *dánt-* *(ʔi)su-* *yaʔah*
SUB breast nose be
nipple

(70) *č'ahʔuh* (Chafe d730)
č'ah *-ʔuh*
eye N
eye, in or on the eye

(ii) *ʔič'ánčá·niʔčah* *kassiʔ* (Chafe b543)
ʔič'ah- *na-* *ka=ʔniʔ* *-čah* *kassiʔ*
eye DIST buy INTENT bead
he's going to buy beads

(71) *k'áncih* (Chafe e616)
k'ánt -yih
head LOC
head, in or on the head

(ii) *kakk'án$^{?}$áy·$^{?}$ah* (Chafe c371)
kak# k'ánt- na- ya$^{?}$ah
SUB head DIST be
heads, stamps

(iii) *kahnah$^{?}$k'án·day* (Chafe g722)
kak# nahk- k'ánt- da- yu$^{?}$
SUB bone head hanging place
pin

(72) *kák'uš* (Chafe x505)
kák'uš
saliva
saliva

(ii) *nakikák'ušcah$^{?}$away$^{?}$* (Chafe h524)
nak# yi- kák'ušt- yah- $^{?}$a=wa$^{?}$
INST.SUB DEFOC.AGT saliva away throw
cuspidor

These examples illustrate the degree to which patientives are generalized in respect to their freely occurring cognates. As is immediately apparent, incorporated noun roots indicating body parts are particularly productive in their classifying function. Thus, the noun root *($^{?}$i)su-* 'nose' in (69) refers to the body part in the unincorporated structure (69i). In (69ii), this root combines with the locative *kah-* 'enclosed space' to designate the inside part of the nose, or 'nostril'. Here *($^{?}$i)su-* modifies the verb stem to specify the type of enclosed space. In (69iii), another incorporated root is added to the verb stem of (69ii). Here, *da$^{?}$k-* 'tree' specifies the type of 'nostril', i.e. a tree's nostril, or, a tree hollow. In this construction, *($^{?}$i)su-* clearly does not designate an actual nose, but rather a nose-like appendage. The same is true of (69iv), where *dánt-*

'breast' combines with *(ʔi)su-* 'nose' to designate a breast's or udder's nose-like appendage. The noun root *ʔič'ah-* 'eye' is exemplified in (70). Unincorporated, it means 'eye'; incorporated, it is used to designate any small, round object. In (70ii), the object that *ʔič'ah-* classifies is overtly indicated by the noun *kassiʔ* 'bead'. *k'ánt-* is a noun root meaning 'head'. In (71ii) and (71iii) it functions to designate objects that contain a head or head-like appendage, such as 'stamp' and 'pin', respectively. Note that in (71iii), *k'ánt-* combines with the incorporated noun root *nahk-* 'bone'. *nahk-* is used to designate any hard material, including bone and metal. Thus the collocation *nahk-k'ánt-* designates a hard head-like appendage.

In the following text fragments, we see some of the different kinds of objects which one incorporated noun root, *ʔič'ah-* 'eye', classifies.

(73) *wít waʔnáh* (Chafe 1977:31, lines 2 and 3)
wít waʔnáh
self each
each one

(ii) *nasaʔč'ánniwtakáh*

nas#	*sa-*	*ʔič'ah-*	*na-*	*ni-*	*wa=tak*	*-ah*
GEN.COND	IRR	eye	DIST	PORT	emerge	PERF

when they removed their eyes

(iii) *hákiʔč'ánnáywat'áwʔisaʔ*

hák#	*yi-*	*ʔič'ah-*	*na-*	*yah-*	*hawat-*	*ʔa=waʔ(i)*	*-saʔ*
IND	DEFOC.AGT	eye	DIST	away	liquid	throw	IMPFV

they threw them in the water

Example (73) is extracted from a narrative where ducks are playing a game in which they remove their eyes, throw them in water, and then dive in after them. When they emerge from underwater, their eyes are back in place. These examples record the first two of these four events. In each clause, the incorporated noun root *ʔič'ah-* 'eye'

occurs to designate the patientive absolutive referent as a class or type of eye, i.e. 'eye-like'. In this case, the referent happens to be the actual body part 'eye'. Notice that the distributive *na-* in (73i) and (73iii) and the locatives *yah-* 'out of sight', 'away' and *hawat-* 'liquid' in (73iii) also provide information about the absolutive argument. The distributive informs us that several eyes belonging to different ducks are being removed and thrown in the water. The locatives tell us where the absolutive referent is situated; the eyes in (73iii) are out of sight, in the water.

Later on in this narrative, Coyote, the infamous trickster, joins the game with the intention of eating the ducks. But when Coyote takes his eyes out and throws them toward the water, the ducks play a trick on him and intercept his eyes as he dives in, and Coyote emerges from the water blind. But the ducks aren't completely heartless:

(74) *č'ahka?ay?* *di?čánníwáhdah* (Chafe 1977:32, lines 18 and 19)
č'ahka?ay? *yi-* *?ič'ah-* *na-* *ni-* *wahd* *-ah*
bone nettle DEFOC.AGT eye DIST PORT come PERF
bone nettle they brought eyes
they brought bone nettles

(ii) *náná* *wa?náh* *di?č'ahdaw?náh*
náná *wa?náh* *yi-* *?ič'ah-* *da-* *bi?n* *-ah*
that each DEFOC.AGT eye target hit PERF
they hit each target

(iii) *kúh?ič'áhamman?na?*
kúk# *?ičah-* *hammak-* *na-* *?a?*
LOC.SUB eye hole DIST be
(Coyote's) eye sockets

In (74i), the patientive absolutive argument of the verb *di?čánníwáhdah* 'they brought eyes' is overtly indicated by the noun *č'ahka?ay?* 'bone nettle'. A literal gloss of the entire construction might be 'they brought several eye-like bone nettles'. Here, the

incorporated noun root *ʔič'ah-* specifies the type or kind of bone nettle: small, round, and resembling an eye. The ducks take these bone nettles and aim for Coyote's empty eye sockets. (74ii) and (iii) indicate that the ducks achieve their goal. In (74ii), *ʔič'ah-* 'eye' occurs with another patientive prefix, *da-* 'target'. In this construction, *ʔič'ah-* specifies the type of target that the ducks hit with their bone nettles, i.e. an eye-like target. Note that the targets aren't the actual eyes, but rather the space where eyes typically attach. This sense of the semantic patient is further narrowed in the next clause when it's further specified that the eye-like target consists of eye-like holes (*ʔič'ah-* 'eye' + *hammak-* 'hole'), interpreted as 'eye sockets'.

In another story, the forever-hungry Coyote turns into a mortar in order to come into direct contact with food. After making this transformation, Coyote jumps into a river or lake with the intention of floating along until someone finds him. Soon a group of women spot something floating in the water and pull out their discovery:

(75) *diʔč'ahyahdán·ʔáh...* (Chafe in press:line14 and 28)
yi- *ʔič'ah-* *yah=dánʔ* *-ah*
DEFOC.AGT eye pull.out PERF
they pulled something (the mortar) out

Here, the small, roundish object that the women retrieve from the water is, in fact, Coyote-turned-mortar.

As mentioned above, there are two exceptions to the patientive-class animacy restriction. One is the morpheme *haya-*, discussed earlier in Chapter VI, sections 1.2 and 1.3. This prefix specifies that the semantic patient is animate. It is predominately lexicalized in intransitive verbs denoting 'following':[9]

[9] Many Caddo patientives, like other verb-stem elements, have become lexicalized in particular verb stems. Usually, this is the result of the institutionalization of a recognized activity (see Mithun

(76) *hítcihâyni ʔat* (Chafe b177)
hít# *ci-* *haya-* *ni-* *ʔa=d*
PAST 1AGT animate.patient PORT go
I followed (something animate)

This contrasts with following something inanimate, like the tracks of animals:

(77) *háhnunnacánniyah* (Chafe c607)
hák# *nu-* *n-* *nat-* *yán-* *yi=yah*
IND 3DAT APP track CAUS go.along
he's tracking it

The other patientive morpheme that designates animates is *hačah-*. This marker specifically indicates an unspecified human patient and is most often used to indicate in-laws. For example:

(78) *cihačáybáw·nah* (Chafe j368)
ci- *hačah-* *yi=bahw* *-nah*
1AGT human.patient perceive PERF
I saw my daughter-in-law

See Chapter III, section 2.3.3 for the use of the defocusing prefixes in in-law avoidance.

5.0. VERB-STEM COMPOUNDING

Verb-stem compounding is the morphological combining of two or more verb stems, including verb roots. The primary stem is the rightmost stem in a compound

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1984:848). Thus, the institutionalization of 'climbing mountains' yields the compound *mountain-climb* in English. Sometimes, when the base stem is transitive, such as the verb *climb*, the result of its combination with a semantic patient is detransitivization; thus, **I will mountain-climb Mt. Everest* is ill-formed. This is the case in the Caddo 'following' verbs. So, the transitive stem *ni-ʔa=d* 'go after' long ago combined with the patientive *haya-* 'animate patient' to derive the intransitive stem, glossed 'follow' (see Chapter VI, footnote 10). In such detransitivized stems, the lexicalized patientive morpheme is not associated synchronically with the absolutive argument. It is, however, still associated with a semantic patient.

verb; the secondary stem attaches to the left of the primary stem. There are three formally distinct types of compounding; these include, in order of decreasing productivity, i) compounding with concomitant nominalization of the secondary stem. ii) serial verb-stem compounding, and iii) coordinate verb-stem compounding. These different techniques are reviewed in section 5.1. It is worth noting here that, like the patientive elements just discussed in section 4, the nominalized secondary stem of type I always designates the type or kind of absolutive argument of the verb.

Any type of verb stem, except those including a copular root, may occur as a secondary stem in a compound structure. Thus, for example, active, middle, causative and dative applicative stems all occur as secondary stems. In contrast, only two types of stems occur as primary elements in compounds: copular roots and active stems. Caddo has three copular roots: *ya ʔah/yah*, *ʔa ʔ*, and *ʔit/hit/it*; these are addressed in section 5.2. Active primary stems are explicitly discussed in section 5.3.

5.1. VERB-STEM COMPOUNDING TECHNIQUES

There are three, formally distinct techniques of verb-stem compounding in Caddo. Each type is associated with a different function. In the first, most common technique, the secondary stem is nominalized, usually by a linking element, *-t-*, which occurs between the two stems. The nominalized stem generally has a resultative interpretation and functions to classify the type or kind of absolutive referent. Consider example set (79):

(79) *kaki·kišwan ʔ* (Chafe e819)

kak#	*yi-*	*ʔakiš-*	*wan*	*-ʔ*
SUB	DEFOC.AGT	kernel	cook.with.dry.heat	CAUS

to parch corn, roast coffee

(ii) *háh?akišwán·t'a?* (Chafe e824)
hák# *?akiš-* *wan* *-t-* *?a?*
IND kernel cook.with.dry.heat NOM is
there is some parched meal

(iii) *kinih* *kišwán·t'uh* (Chafe x433)
kinih *kiš-* *wan* *-t-* *-?uh*
hominy kernel cook.with.dry.heat NOM N
parched corn hominy

In example (79ii), the secondary stem *?akiš-wan* 'parch kernels' is combined with the copula *?a?* 'be'. The nominalizer *-t-* converts the secondary stem to a noun indicating a result state. Thus, the result of 'parching kernels' is 'parched kernels'. In (79iii), this same nominalized stem functions as a noun stem to which the general noun suffix *-?uh* attaches.

One copular root, *?it/hit/it* never cooccurs with the *-t-* nominalizer. Nevertheless, these compounds are semantically identical to the compounds containing *-t-*, so I will analyze the secondary stems in the compounds with *?it/hit/it* as zero-derived nominalizations. As in the prior case, the nominalized secondary stem has a resultative interpretation. Thus, the nominal meaning of the secondary stem in (80) below, *?awi-kah-núš* 'tie in a bundle', is 'something tied in a bundle', or 'bundle'.

(80) *kah?áwkahnú·šit* (Chafe f036)
kak# *?awi-* *kah-* *núš* *it*
SUB ABS.SG enclosed.space tie be
be that which is bundled up, tied in a bundle

The second technique of compounding constitutes verb-stem serialization. In this type of compounding, there is no linking element and no nominalization of the secondary stem. The compounded stems retain their verbal function. This technique is exemplified in (81).

(81) *háhdaysah$^{?}a^{?}$* (Chafe a761)
hák# *day$^{?}$=sah* *$^{?}a^{?}$*
IND cook.with.hot.embers be
it's broiling, roasting, barbecuing

In this construction, the secondary stem *day$^{?}$=sah* denotes a process, 'cook with (i.e. by means of) hot embers'. This stem combines directly with the copula *$^{?}a^{?}$* 'be', here functioning as a progressive, for the meaning 'be cooking with hot embers'.

The third verb-stem compounding technique involves the linking element *-si-*, which seems to function as a coordinator. This element is extremely rare in the database, and, in fact, only occurs in three, very similar constructions. This final compounding technique is exemplified in (82).

(82) *híháybáwsínán·$^{?}$at* (Chafe h655)

hí#	*ha-*	*yi=bahw*	*-si-*	*na-*	*ni-*	*$^{?}a$=d*
HORT	space	perceive	COOR	DIST	PORT	go

let him go along and see the scenery

In this verb, the stem *ha-yi=bahw-si-na-ni-$^{?}a$=d* 'go along with and see the scenery' is composed of the secondary active stem *ha-yi=bahw* 'see a location' and the primary stem *na-ni-$^{?}a$=d(ih)* 'accompany'.

5.2. SECONDARY STEM + COPULA

As noted above, there are three distinct copular roots: *ya$^{?}$ah/yah*, *$^{?}a^{?}$*, and *$^{?}$it/hit/it.*[10] *ya$^{?}$ah/yah* indicates relatively permanent conditions and is often used in naming and specifying what something or someone is or someone does. In this respect, *ya$^{?}$ah/yah* functions something like Spanish *ser*. *$^{?}a^{?}$* often has a locative

[10] *yah* is a fast-speech form of *ya$^{?}$ah*. For some constructions in this chapter, only the fast speech form is recorded. Refer to Chapter I, section 1, for the difference between slow and fast speech.

connotation and is used to indicate temporary conditions. Caddo *ʔaʔ* is thus similar in function to Spanish *estar*. The difference between these two copulas is exemplified in (83):

(83) *nátti ʔ kà·ní·ʔah* (Chafe b571)
nátti ʔ kah- ʔini- yaʔah
there enclosed.space lying be
he stays there inside

(ii) *hákkà·niʔaʔ* (Chafe b567)
hák# kah- ʔini- ʔaʔ
IND enclosed.space lying be
he's inside

The verb stems in (83i) and (83ii) are identical except for the copula. In the first construction, the use of *yaʔah* indicates the relatively permanent sense of 'staying' or 'remaining'. In (83ii), *ʔaʔ* is used to convey temporary location. The participant is inside *right now*.

ʔit/hit/it is a copula that only appears in compounds; that is, it cannot occur as the only stem in a particular verb. This copula is generic in function, in that it is unspecified for the features associated with the other two copulas. Finally, unlike *yaʔah/yah* and *ʔaʔ*, and as mentioned above, *ʔit/hit/it* never cooccurs with the nominalizer *-t-*; however, the secondary stem is often, but not always, nominalized.

Each of the three copular roots is combined with secondary stems in examples (84) through (94).

Secondary stem + *yaʔah/yah*

(84) *kaki·wikahnuš* (Chafe f037)
kak# yi- ʔawi- kah- núš
SUB DEFOC.AGT ABS.SG enclosed.space tie
to tie in a bundle

(ii) *ʔàwkahnúščah* (Chafe h060)
ʔawi- kah- núš -t- yaʔah
ABS.SG enclosed.space tie NOM be
it is tied in a bundle, it is a tied bundle

(85) *ʔáwʔabín·ničah* (Chafe f179)
ʔawi- ʔa=bíd -ʔi'n(i) -čah
ABS.SG fold CAUS INTENT
she's going to fold it

(ii) *ʔáwʔabín·nic'ah* (Chafe f178)
ʔawi- ʔa=bíd -ʔi'n(i) -t- yaʔah
ABS.SG fold CAUS NOM be
it's folded, it is something folded

(86) *háhniwáy·saʔ* (Chafe c772)
hák# ni- wán -saʔ
IND PORT join IMPFV
it joins

(ii) *tiwán·cah* (Chafe c776)
ni- wán -t- yah
PORT join NOM be
it's joined, it's something joined

(87) *kanittihʔaʔ* (Chafe j049)
kani# t- ʔa=ʔnih -ʔaʔ
DEFOC.AGT.QUOT APP make FUT
they will make it for him

(ii) *c'issaʔattihcah* (Chafe i655)
c'it# saʔa- t- ʔa=ʔnih -t- yah
CONT 2PAT APP make NOM be
you have a different way, you are made for a different purpose

Secondary stem + *ʔaʔ*

(88) *háhcihnúššaʔ* (Chafe c169)
hák# ci- ki=núš -saʔ
IND 1AGT tie IMPFV
I'm tying it

(ii) *hákkuhkašwanúšt'a?* (Chafe c167)
hák# *ku-* *haka-* *ki=wa=núš* *-t-* *?a?*
IND 1PAT INDV tie.PL NOM be
we are tied up

(89) *diškidah* (Chafe e586)
yi=šuk *-id* *-ah*
write CIS PERF
he wrote (from a distance)

(ii) *háhiškitt?a?* (Chafe e583)
hák# *yi=šuk* *-id* *-t-* *?a?*
IND write CIS NOM be
he's enrolled, it's printed, it's numbered, he has a tatoo, etc.

(90) *kah?áw·di·* (Chafe d089)
kak# *?a=widíy*
SUB swell
to swell

(ii) *háhwidí·t'a?* (Chafe d088)
hák# *widíy* *-t-* *?a?*
IND swell NOM be
he has a swelling, he's swollen

Secondary stem + *?it/hit/it*

(91) *kaki·wikahnuš* (Chafe f037)
kak# *yi-* *?awi-* *kah-* *núš*
SUB DEFOC.AGT ABS.SG enclosed.space tie
to tie in a bundle

(ii) *kah?áwkahnúšit* (Chafe f036)
kak# *?awi-* *kah-* *núš* *it*
SUB ABS.SG enclosed.space tie be
be that which is bundled up, tied in a bundle

(92) *hítakanáydahaw?* (Chafe c706)
hít# *haka-* *náyda=ha?=w*
PAST INDV count
he counted it

(ii) *háhakanáydah ʔwissaʔ* (Chafe c699)
hák# *haka-* *náyda=haʔ=w* *ʔit* *-saʔ*
IND INDV count be IMPFV
he's counting

(93) *sánháhyah* (Chafe x183)
sa- *na=hak* *-nahy* *-ah*
IRR dry INCH PERF
is it dry?

(ii) *hítcínháitdinʔ* (Chafe c448)
hít# *ci-* *na=hak* *hit* *-diʔn*
PAST 1AGT dry be CAUS
I dried it, I made it something dry

(94) *kah ʔáwkudah* (Chafe i109)
kak# *ʔawi* *kud* *-ah*
SUB ABS.SG sever PERF
that which broke

(ii) *kah ʔáwkudit* (Chafe i108)
kak# *ʔawi-* *kud* *it*
SUB ABS.SG sever be
be that which is broken

Compare examples (84), (88), and (91), where each secondary stem is an active stem and contains the root morpheme *núš* 'tie'. In (84ii), the stem *ʔawi-kah-núš* 'tie in a bundle' combines with the copula *yaʔah* 'be' to signify 'be tied in a bundle', or, more literally, 'be a tied bundle'. In this example, the secondary stem is nominalized by *-t-* for the derived meaning 'tied bundle'. The use of the copular root *yaʔah* indicates *what* the entity designated by the nominalized secondary stem is, i.e. something that is tied in a bundle. This contrasts with the copular function in (88ii), *haka-ki=wa=núš-t-ʔaʔ* 'for several live entities to be tied up'. Here, the copula *ʔaʔ* indicates that the 'tied up' state is temporary. The nominalized secondary stem *haka-ki=wa=núš* designates an absolutive argument consisting of several tied-up,

individuated, animate entities. Finally, the secondary stem *ʔawi-kah-núš* 'tie in a bundle' combines with the copula *it* in (91ii). Here, *it* serves as a semantically empty formative to which the nominalized stem attaches.

Note that the compound stem in (92ii) is a serial verb-stem construction. The combination of *haka-náyda=haʔ=w* 'count several distinct entities' and the copula *ʔi* 'be' yields the progressive meaning 'be counting'.

5.3. SECONDARY STEM + ACTIVE STEM

Active stems that occur as primary stems in compound constructions fall into three principle categories: motion verb stems, the stem *ʔnaʔ/(ʔa)=ʔnih* 'do', 'make', and the stem *yúk* 'vanish', 'use up'.[11] Examples (95) through (102) illustrate this compound type.

The stem *ʔnaʔ/ʔa=ʔnih* 'do', 'make' has been grammaticized in some stems to indicate iteration. This function is exemplified in (99) and (100). *yúk* 'vanish', 'use up' has been grammaticized as an intensifier in all occurrences of this constructions type and may be glossed as 'completely' or 'thoroughly'. *yúk* is illustrated as a primary stem in (101) and (102).

Secondary stem + motion stem

(95) *dáháy·bah* (Chafe a864)
yahʔ- *ha-* *yi=bahw*
2AGT space perceive
see (an area)

[11] The allomorph *ʔnaʔ* occurs word-finally and, *(ʔa)=ʔnih* occurs word-internally.

(ii) *híháybáwsínán·ʔat* (Chafe h655)
hí# *ha-* *yi=bahw* *-si-* *na-* *ni-* *ʔa=d*
HORT space perceive COOR DIST PORT go
let him go along and see the scenery

(96) *hítdaswiyah* (Chafe e237)
hít# *yas-* *ʔawi-* *yas*
PAST walking ABS.SG move.by.foot
he walked

(ii) *háhyaswiyáhdisaʔ* (Chafe e243)
hák# *yas-* *ʔawi-* *yas* *kid(i)* *-saʔ*
IND walking ABS.SG move.by.foot pass.by IMPFV
he's walking by

Secondary stem + *ʔa=ʔnih*

(97) *hítáy·yuh* (Chafe b273)
hít# *háy=yúh*
PAST tell
he told

(ii) *t'áyyúht'aʔnihah* (Chafe d555)
t'a- *háy=yúh* *-t-* *ʔa=ʔnih* *-hah*
1AGT/2PAT tell NOM make HAB
I am making up a story on you.

(98) *kittúsʔaʔ* (Chafe c208)
ki=ttús *-ʔaʔ*
freeze FUT
it will freeze

(ii) *hinah* *kakkittúnʔnaʔ* (Chafe c205)
hinah *kak#* *ki=ttús* *-t-* *ʔnaʔ*
frozen.liquid SUB freeze NOM make
ice cubes

(99) *wátt'áy·bah* (Chafe i381)
wát# *t'a-* *yi=bahw*
SIM 1AGT/2PAT perceive
pretend like I see you

(ii) *cí·báwt'a ʔnihah* (Chafe g992)
ci- *yi=bahw* *-t-* *ʔa=ʔnih* *-hah*
1AGT perceive NOM do HAB
I saw it again

(100) *hítci ʔčah* *naba ʔ* (Chafe d705)
hít# *ci-* *(ʔi)čahk* *na#* *ba ʔ*
PAST 1AGT shoot OBL arrow
I shot it with an arrow

(ii) *ci·čaht'a ʔnihah* (Chafe g993)
ci- *(ʔi)čahk* *-t-* *ʔa=ʔnih* *-hah*
1AGT shoot NOM do HAB
I shot it again

Secondary stem + *(ʔi)yúk* 'vanish', 'use up'

(101) *ʔiyú·kah* (Chafe e654)
(ʔi)yúk *-ah*
use.up PERF
it's gone, used up

(ii) *ʔa ʔnihah* (Chafe f682)
ʔa=ʔnih *-hah*
do HAB
he makes it, he does it

(iii) *ci·nihcúh ʔnah* (Chafe x274)
ci- *ʔa=ʔnih* *-t-* *yúk* *-ʔ* *-nah*
1AGT do NOM use.up CAUS PERF
I'm through doing something

(102) *hík̓kiwánuš* (Chafe c168)
hít# *ki=wa=nús*
PAST tie.PL
they tied it

(ii) *dihwánúščúh ʔnah* (Chafe g545)
yi- *ki=wa=nús* *-t-* *yúk* *-ah*
DEFOC.AGT tie.PL NOM use.up PERF
he's completely tied up

The first two examples include motion stems as primary stems. In (96ii). the primary stem *kid(i)* 'pass by' combines with another motion stem *yas-ʔawi-yas* 'for one to be walking' to yield the serial verb-stem construction *yas-ʔawi-yas kid(i)* 'for one to walk by'.

Primary stems including the root *ʔnaʔ/ʔa = ʔnih* 'do', 'make' are exemplified in (97) through (100). The secondary stem in (97ii) is *háy=yúh* 'tell'. This stem is nominalized and compounded to the primary stem for the literal meaning 'make a telling' or 'make up something told'. The 2nd person PATIENT in this event is a semantic patient; he or she is directly affected by the story-inventing event.

(99) and (100) include constructions where the primary root *ʔnaʔ/ʔa = ʔnih* 'do', 'make' is grammaticized to indicate iteration. Thus, *yi=bahw-t-ʔa = ʔnih* (99ii) is 'see again' and not 'make something seen'.

The remaining examples all include the primary root *(ʔi)yúk* 'use up', 'finish'. In (101i), it occurs as the only root in the verb and retains its specific, non-grammaticized meaning. However, as (101iii) and (102ii) illustrate, when this element combines with secondary stems, it has an intensifying function. Thus, the compound stem *ki=wa=nús-t-yúk* means 'be completely tied up', 'be something completely tied up'.

6. CONCLUSION

In this chapter, I identified and described the function of several verb-stem categories and types that share one common property: they each provide information about the absolutive referent of the verb.

Postural elements of position class 3 specify an absolutive referent's posture as 'sitting', 'standing', or 'lying'. Manner elements of position classes I and 7 indicate an animate absolutive referent's manner of motion as 'swaying', 'loping', 'floating', 'walking', 'running' or 'jumping'. The position class 4 locatives specify the direction in which an absolutive referent is moving, the position that the absolutive referent is in relative to its environment, and the absolutive referent's location. Patientive items, which include both incorporated noun roots and (unincorporated) prefixes, function to designate the type or kind of, with two exceptions, an inanimate patientive absolutive referent. Finally, nominalized secondary verb stems in verb-stem compounds also designate the type or kind of an absolutive referent, although in this case, there is no animacy restriction. Each of these categories are highlighted in Table VII.II. Their constituent morphemes are given where space permits.

TABLE VII-II: Partial Caddo verb prefix template with stem, posture, manner, locative, and patientive categories specified

PAT	MAN	ABS NUM	DIST	LOC	POST	CONT	TRAN	ROOT/ STEM
8	7	6	5	4	3	2	1	0
k'ánt- 'head' *ʔič'ah-* 'eye' *bak(a)-* 'word' *kák'ušt-* 'saliva' *nisah-* 'house' *t'ánk-* 'pipe' *háwt-* 'wind' *wadát-* 'earth' *niyat-* 'road' *k'uhut-* 'grass' *(ʔi)su-* 'nose' *nahk-* 'bone' *ʔiniku ʔ-* 'back' *kan-* 'liquid' etc.	*yas-* 'walking'			*da-* 'suspended' *daht-* 'behind' *dak-* 'sticking up' *hawat-* 'liquid' *kahd-* 'under' *kahd-/ká-* 'in' etc.	*ʔawis-/ʔawi-* 'sitting' *ʔanikis-* 'standing' *ʔini-* 'lying'			ANIM PL
				MAN 1 *dahán-* 'swaying' *dakán-* 'loping' *(ʔi)č'áhda-* 'floating' *yas-* 'running' *yan-* 'jumping'				

CHAPTER VIII
CONCLUSION

The Caddo verb is a complex structure. Its template consists of twenty-six positions associated with a number of over-arching categorical distinctions, including: person, case, reality, tense, aspect, mood, subordination, negation, number, animacy, distribution, voice, posture, manner of motion, location, and semantic patient type. We've seen that the various combinations of these categories into single polysynthetic structures constitute words that typically have the scope of sentences.

While much can be said in summary of such a rich morphological system, I would like to leave the analysis of the Caddo verb with two principal observations, both involving the specification of core participants. First, the Caddo verb overtly marks animate, and especially human participants as much as possible. This is reflected most clearly in the pronominal prefix system where 1st and 2nd persons have equal priority of occurrence over Defocusing person, which has priority of occurrence over 3rd person. Recall from Chapter III that the 1st, 2nd, and Defocusing persons must be human (or anthropomorphized animals), while the 3rd person can be human, animate but not human, or inanimate. The 3rd person is never overtly marked in the pronominal prefix system unless that 3rd person is a grammatical DATIVE. DATIVE case

encompasses the semantic roles of beneficiary, goal/recipient, and possessor, and thus, typically references humans.

In addition to the pronominal prefixes, there are two patientive class elements, *haya-* 'animate patient' and *hačah-* 'human patient' that optionally designate animates. As mentioned in Chapter VII, these two morphemes are exceptional in that the patientive class, as a whole, is semantically restricted to inanimates; thus, they are the only patientive forms to specify animacy. Like all patientive class members, these forms provide information about the most immediately involved participant, or absolutive argument. This brings us to my second observation: the pervasive specification of absolutives.

Obviously, the most immediately involved participant in an event or state is of particular importance. In accusative grammatical systems, the most immediately involved argument is marked as the *subject* of intransitive clauses and the *object* of transitive clauses. Thus, the absolutive referent is marked differently in accordance with the verb's valence type, and some other factor is responsible for formally aligning intransitive and transitive subjects.[1]

In ergative grammatical systems, the most immediately involved argument is marked the same in intransitive and transitive clauses. Thus, it is the feature of *most immediately involved* that is grammaticized in ergative systems.

In Caddo, ergative patterning is not grammaticized; instead, Caddo grammatical case follows an AGENT-PATIENT pattern, where semantic roles are grammaticized. In an AGENT-PATIENT system, the most immediately involved

[1] Chafe (1994:82-92) and Mithun and Chafe (in press) refer to this factor as the *starting point* for expressing the idea of a verbal situation.

participant can be marked as an AGENT, PATIENT, or DATIVE, as demonstrated in Chapter V. Now, although absolutives are not directly marked in the Caddo verb, several derivational categories provide information about absolutive entities. These include the absolutive number, distributive, postural, manner, locative, and patientive categories. Absolutive number specifies the number of the most immediately involved entity in an event or state and is lexically restricted. The distributive prefixes indicate that an absolutive entity is spread out, often implying plurality. The postural class includes elements that specify the posture of the absolutive entity. Manner prefixes indicate the manner in which an absolutive referent is moving. Locatives specify the location or position of an absolutive entity, or the direction in which an absolutive entity is traveling. Finally, the patientive elements classify the type or kind of absolutive entity.

Thus, even though the 3rd person is not always overtly marked in the Caddo verb, we have seen that Caddo has several derivational devices for disambiguating the absolutive referent in an event or state, which can be a 3rd person. These devices, along with the pronominal prefix system, assist speech act participants in identifying *all* the core entities in a verbal situation, including 3rd persons, and contribute to making the Caddo verb word a self-contained proposition.

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CLS	Chicago Linguistic Society
IJAL	International Journal of American Linguistics
Lg	Language

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