NOMINALIZATION AND PREDICATION IN ṰT-MA'IN

by

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A DISSERTATION

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DISSERTATION ABSTRACT

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Ụt-Ma'in is a Kainji, East Benue-Congo language, spoken in northwestern Nigeria (ISO 639-3 code [gel]). This study contributes to our understanding of Benue-Congo languages by offering the first indepth look at nominalization phenomena in any Kainji language. Kainji is an undesrdescribed 50+ language subgroup of Benue-Congo; current descriptions are limited to articles and dissertations on a few languages, unpublished wordlists, and unpublished grammar sketches. This study looks at the morphosyntax of predication in Ụt-Ma'in, especially the extensive use of nominalization and NP agreement phenomena within a wide range of predicative functions. Five of fourteen noun class prefixes are involved in nominalization of the verb; a nominalized verb, along with a goal complement or an object, can be incorporated into the nominalized phrase in the same way that a noun modifier is marked within a NP. These nominalized verb phrases are extensively used in auxiliary constructions that cover a diverse range of tense, aspect, and mode designations; the syntactic transitivity of the clause determines the morphosyntax used. Intransitive auxiliary constructions use the full range of nominalizing noun class marking; in contrast, transitive auxiliary constructions show a shift in their use of the noun class agreement morphology

required. The progressive auxiliary construction specifically has shown the most adjustment in the system.

The Ụt-Ma'in associative morpheme is in widespread use across different syntactic constructions. The associative can create a modifying phrase from a descriptive noun with a wide range of semantic relationship between the two nouns. The associative also serves as the relative pronoun introducing a descriptive relative clause. The associative can mark a goal or an object that is contained within the nominalized verb phrase. When a nominalized verb phrase is the complement to an auxiliary construction, the associative marks only the object complement of the verb. Finally, the associative marks the nominative form of nouns in certain morphosyntactic environments; this results in a so-called marked-nominative word form and clause alignment pattern. These diverse uses of the associative and the accompanying agreement marking are pervasive in Ụt-Ma'in and are a major focus of this study.

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To my dear cousin and brother Charles Andrew Morris

who with grace and patience,

daily fights the good fight and ALS,

whose endurance through trials is testimony to a life well-lived

and an example to us all,

joyful in hope,

patient in affliction,

faithful in prayer.

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CHAPTER I

INTRODUCTION

Ụt-Ma'in is a Kainji, East Benue-Congo language spoken in northwestern Nigeria (ISO 639-3 code [gel]). This study looks at the morphosyntax of predication in Ụt-Ma'in, especially the extensive use of nominalization and noun phrase agreement phenomena within predication. Five of fourteen Ụt-Ma'in noun class prefixes are involved in nominalization of the verb; a nominalized verb phrase, along with a goal complement or an object, can be incorporated into the nominalized phrase in the same way that a noun modifier is marked within a noun phrase. These nominalized verb phrases are extensively used in auxiliary constructions that cover a diverse range of tense, aspect and mode designations. The morphological marking of the nominalized verb phrase within an auxiliary construction is determined by the syntactic transitivity of the clause. Intransitive auxiliary constructions use the full range of nominalizing noun class marking; in contrast, transitive auxiliary constructions show a shift for the nominalized verb phrase in their use of the noun class agreement morphology required. The progressive auxiliary construction specifically has shown the most adjustment in the system.

The Ụt-Ma'in associative morpheme is in widespread use across different syntactic constructions. Within the noun phrase, the associative can create a modifying phrase from a descriptive noun and allows a wide range of semantic relationships to hold between modifying and head nouns (Chapters III through IV). Within the noun phrase, the associative also serves as the relative pronoun introducing a descriptive relative

clause (Chapter XI). Within a nominalized verb phrase, the associative can mark a goal or an object that is contained within the nominalized verb phrase (Chapter IV). When a nominalized verb phrase is the complement to an auxiliary construction, the associative marks only the object complement of the verb (Chapter VII and 9). Finally, the Ụt-Ma'in associative marks the nominative form of nouns in certain morphosyntactic environments; this results in a so-called marked-nominative case marking (Chapter XI). These diverse uses of the associative and the accompanying agreement marking are pervasive in Ụt-Ma'in and are a major focus of this study.

Chapter I includes a sociolinguistic profile of the Ụt-Ma'in speaking people, explanation of the data used herein, discussion of Ụt-Ma'in's genetic affiliation within Benue-Congo, and a review of previous literature on Ụt-Ma'in. Chapter II contains a brief overview of the sound system and transcription conventions used in this study. Understanding the morphosyntax of predication in Ụt-Ma'in requires an understanding of word classes, nominal morphology, noun class morphology, noun phrase structure, nominalization processes, basic clause structure, and negation patterns. These topics are covered in Chapters III-V. Remaining chapters describe nonverbal predication (Chapter VI), four distinct types of multi-verb constructions (Chapters VII-X), and relative clause constructions (Chapter XI). Appendices present a list of abbreviations used in this study (Appendix A) and an inventory of the data used for this study (Appendix B). Appendices C through E each contain a sample annotated text. Each includes an introduction to the context and content of the text. The text is then presented in three versions: an orthographic transcription, an English translation, and a marked up interlinearized text. Each interlinearized text is labeled for grammatical constructions

with reference to the part of this study where the construction is described in detail. In this way the texts serve as additional evidence for the grammatical phenomena presented in the study, but also show the discourse context for the occurrences of many other grammatical forms.

1.1 The Ụt-Ma'in language and its speakers

Ụt-Ma'in is a language of northwestern Nigeria. Most speakers live near the border of Kebbi State and Niger State in Fakai Local Government Area; the land area is reported to be approximately 2,247 square kilometers (Nigeria Population Commission 2006). The northern language area border is the Ka River. The oldest towns are located at the top of the hills, many along the ridge that runs from the towns of Rijau to Zuru. The principal town of Ụt-Ma'in speakers is Mahuta, located on the road that runs from Dabai, near the town of Zuru, to the town of Koko on the main road to the Kebbi State capital Birnin Kebbi. The United Nations Office for the Coordination of Humanitarian Affairs (2017) present a projected 2016 population of Fakai Local Government Area as 161,365, an increase of more than 40,000 relative to the 2006 census population that reported a population of approximately 120,000 (Nigeria Population Commission 2006).

Most Ụt-Ma'in speakers are farmers of millet, guinea corn (sorghum), and dry-farmed rice. There is a relatively low population density in this agricultural community, 71.8 people per square kilometer.

Ụt-Ma'in speakers comprise a minority group among minority language groups in the area. The Ụt-Ma'in language area is bordered by Hausa ([hau],Chadic, Afroasiatic) spoken to the north and west, by C'Lela [dri] and Gwamhi-Wuri-Mba [bga] spoken to

the northeast and east, by Ụt-Hun [uth] to the south, and Ụs-Saare [uss] to the southeast.[1] With the exception of Hausa, all other neighboring languages belong to the Northwest Kainji Cluster, Benue-Congo, language family.

Most native speakers of all Northwest Kainji languages are bilingual in Hausa. Hausa is used between speakers who do not share a common first language. For example, an Ụt-Ma'in speaker and a C'Lela speaker interacting in a market setting would likely use Hausa to communicate.

Figure 1 shows the rough geographic location of the Kainji sub-families within Nigeria (McGill and Blench 2012: 91). Ụt-Ma'in, Ụt-Hun, Ụs-Saare, C'Lela and Gwamhi-Wuri-Mba are located within the pink oval labeled Northwest Kainji.

Despite the tendency for bilingual speakers to shift to the language of wider communication, McGill and Blench (2012) report that threats of language shift are more restrained by a strong sense of ethnic identity through language use among speakers of West Kainji languages in Kebbi State, than among speakers of the east Kainji languages of Plateau State, where considerable shift to Hausa threatens the East Kainji languages (represented by the green oval labeled East Kainji in Figure 1). McGill and Blench (2012:109-112) attribute the differences to a strong sense of ethnic identity among the West Kainji language communities in response to generations of oppression by

[1] Ụt-Hun [uth] and Ụs-Saare [uss] are newly adopted labels (January 2019) within the ISO 639-3. They were previously considered two dialects of one language, Hun-Saare, and Hun-Saare was formerly labelled within the ISO 639-3 [dud]. Studies previous to 2019 refer to Ụt-Hun [uth] and Ụs-Saare [uss] as Hun-Saare [dud], Dukanci (Hausa label for the language), or sometimes Dukawa (Hausa label for the people). The record of name change request is available at: https://iso639-3.sil.org/request/2018-014.

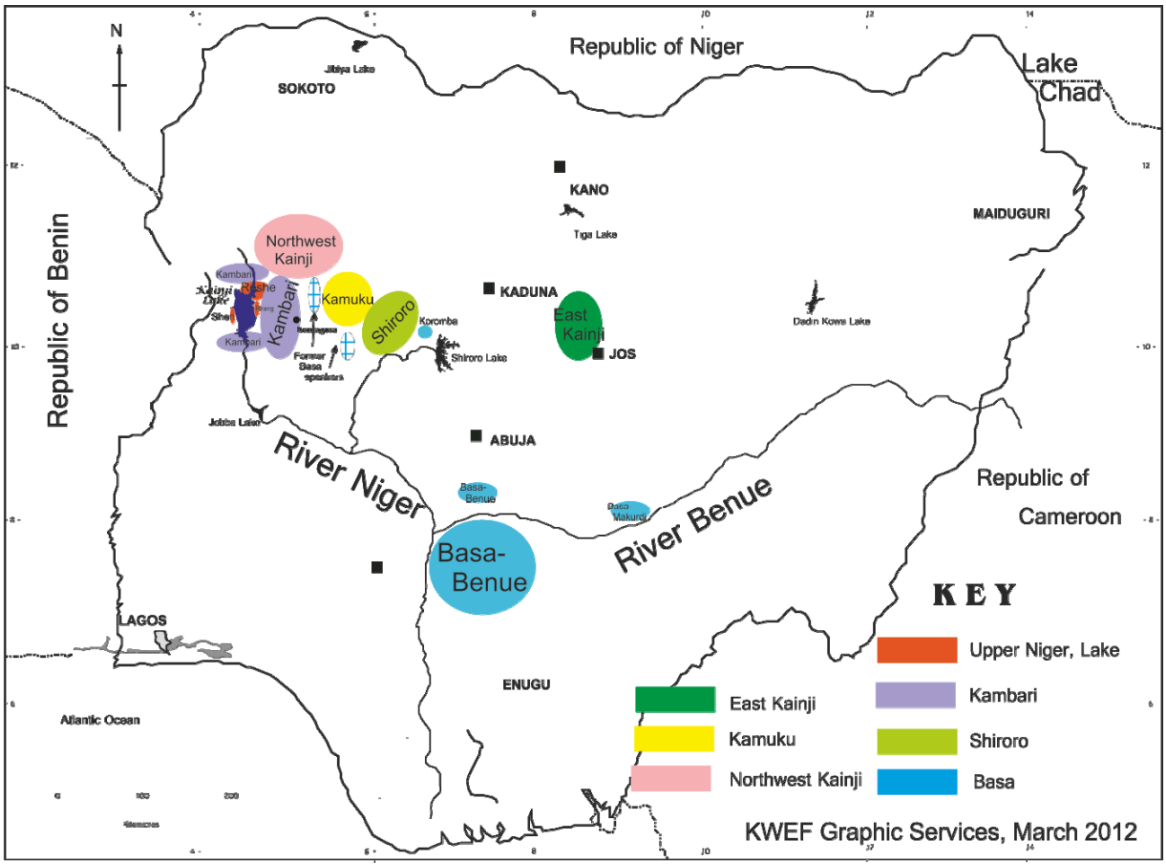

Figure 1: Map of Kainji language clusters (McGill and Blench 2012: 91)

Hausa-speaking peoples.[2] As a result, ethnic identity, of which language is an integral part, supersedes any other identity factor among most West Kainji groups. This is true for Ụt-Ma'in speakers also. Children are still learning the West Kainji languages, and language itself is seen as a marker of ethnic identity.

[2] Oppression by Hausa-speaking peoples goes at least as far back as the slave-raiding connected to the establishment of the Kontagora Emirate under Umaru Nagwamatse (b.1806-d.1876), grandson of the prominent 19th century Usman ɗan Fodio who founded the Sokoto caliphate c. 1804 (Hogben and Kirk-Greene 1966: 500).

Town dwellers, particularly those with parents from two ethnic groups, learn little of their father's language. Ụt-Ma'in speaking men commonly marry outside of their ethnic group, often to Lelna women (i.e., C'Lela speakers). Mothers use their first language with children in the home, but fathers tend to use Hausa or English with their children when the mother is from another ethnic group. Hausa is crucial for life in the multi-ethnic town settlements along the main roads. Hausa traders have been in these towns for decades, if not centuries.

1.2 Varieties of Ụt-Ma'in

Ụt-Ma'in is a cover term for seven mutually intelligible language varieties and is not in widespread use; however, it is commonly used by my language consultants when they interact with other speakers from their communities. The name Ụt-Ma'in was proposed in c. 2000 at a gathering of representative speakers from all seven varieties who were meeting to discuss the development of a writing system (cf. Heath et al. 2004). Ụt-Ma'in roughly translates as 'our (incl.) language', as in example (1). The term *ụr-ma'in* [ɔ̄r.mā.ʔīn], as in (2), preceded this term and is used by all varieties as a label for the 'culture' shared by speakers of the mutually intelligible language varieties. The root *mā* is used in the autonyms of language names of at least three of the varieties: Ụt-Ma'Ror, Ụt-Ma'Jiir, and Ụt-Ma'Kụụr. The cover term Ụt-Ma'in takes the base of Ụt-Ma and replaces the clan name with the first person plural inclusive possessive pronoun *īn* '1PL.INCL.POSS'. However, the meaning of the root *mā* has been called "untranslatable" by my consultants when it does not have an accompanying noun class marker.

(1) ɵ̄t-mā?=īn
C6-??=1PL.INCL.POSS
‘our language’

(2) ɵ̄r-mā?=īn
C5-??=1PL.INCL.POSS
‘our culture’

Each Ụt-Ma'in variety has a distinct name for both the language variety and the speakers of that variety. These names were first reported by Regnier (2003: 2) based on a language survey and wordlist collection in the Ụt-Ma'in area. Regnier included “Koor” and “Ker” as separate groups. Recent interviews conducted by Ibrahim Tume Ushe, a native speaker of Ụt-Ma'in (p.c., August 2017) have revealed that these are two names used for the same variety which is the northernmost of the Ụt-Ma'in speaking groups. Ụt-Ma'in autonyms as reported by Regnier (2003) and Tume (p.c.) are given in Table 1; groups are listed in alphabetical order based on the autonym root of the language variety name, i.e. the capitalized portion following the hyphen of each name in column one. The autonym (Tume p.c., from column 3 of Table 1) or the autonym root is used with each example used throughout the study.

Table 1: Autonyms of Ụt-Ma'in speaking groups

People Autonym (Regnier 2003)	Language Autonym (Regnier 1992)	Language Autonym (Tume p.c.)	People Autonym (Tume p.c)	Principle towns (Regnier 2003)
æs-Fer	ət-Fer	Ụt-Fer	Ụs-Fer	*Kukum, Sakaba
Kag-ne	ət-Kag	Ụt-Kag	Kag-nẹ	*Fakai, Mahuta
a-Koor, Kər-ni	ətma-Koor	Ụt-Ma'Kụụr	Kụụr-nẹ	*Kele, †Old Kele
Jiir	ət-Jiir	Ụt-Ma'Jiir	Jiir-nẹ	Bokoh, Bajida, †*Gele
a-Ror	ətma-Ror	Ụt-Ma'Rọr	A'Rọr	*Mahuta, Birnin Tudu, Matseri, Tungan Dutsi
æs-Us	ət-Us	Ụs-Us	A'ụs-Us	*†Rafin Kanya, now scattered among other groups
a-Zuksun	ət-Zuksun	Ụt-Zuksun	A'Zuksun	*Tungan Kuka

*indicates the traditional center of the group
†indicates a traditional center used only for festivals

Varied names used for the different varieties of Ụt-Ma'in aside, there has been a history of using other languages' names for these Ụt-Ma'in speaking groups. Early reports by anthropologists often gave C'Lela and Hausa names for the Ụt-Ma'in speaking groups (Temple 1922; Harris 1938). Table 2 is a comprehensive overview of the Ụt-Ma'in autonyms for the names of languages, names for people, and names for one person. Also included are the Ụt-Ma'in names for neighboring ethnic/language groups, including name of language, name for people, and name for one person. Cells containing all of these Ụt-Ma'in terms are shaded. In the final three columns are parallel terms from the C'Lela language and the Hausa language. Many of these are the names for the Ụt-Ma'in varieties that have been used in anthropological and linguistic literature prior to c.2000.

Table 2: Terms for language varieties and people

	ISO 639-3 code for language varieties	**Ụt-Ma'in term**				**Parallel C'Lela term**	**Parallel Hausa term**	
		Culture	**Language variety**	**People**	**Person**	**People**	**Language variety**	**People**
Northwest Kainji	gel	Ụr-Ma'in	Ụt-Ma'in	A'in bẹẹt/ A'it bẹẹt	--	--	Fakkanci	Fakkawa1
			Ụt-Ma'Rọr	A'Rọr	Wa-u-Rọr	Pək-nu*		
			Ụt-Kag	Kag-ne*	Wa-u-Kag	ə̀d-Gwan		
			Ụs-Us	A'ụs-Us	Wa-u-Us	Pək-nu*		
			Ụt-Ma'Jiir	Jiir	Wa-u-Jiir	Geeri-ni*	Gelanci	Gelawa*
			Ụt-Zuksun	A'Zuksun	Wa-u-Zuksun	Wipsi-ni*	--	Zussun/Zusu*
			Ụt-Fer	Ụs-Fer	Wa-u-Fer	Wipsi-ni*	--	Kukumawa *
			Ụt-Ma'Kuur	Kər-ni*	Wa-u-Kuur	Keri-ni*	--	Kelawa*
	dri	Ụr-Reer [ɔ̄lːéːr]	Ụt-Reer	Reer-nẹ	Wa-u-Reer	Lélnà	Dakkakanci	Dakkarkari
	uth (f.k.a. dud)	Ụr-ma'Hun	Ụt-Hun	Hun-nẹ	Wa-u-Hun	Rọgnọ	Dukanci	Dukawa
	uss (f.k.a. dud)		Ụs-Saare					
	bga	Ụr-ma'Gwamhi	Ụt-Gwamhi	Gwamhi-nẹ	Wa-u-Gwamhi	Lyase-ne	Banganci	Bangawa
	dam	--	--	--	--	--	--	Damakawa
Other	bqx, asg, awc, kdl, tsw, tvd‡	Ụr-ma'Baar	Rem-dụ ụt-Baar	Baar-nẹ	Wa-u-Baar	--	--	--
	hau	Ụr-ma'Kwụndi	Ụt-Kwụndi	Kwụndi-nẹ	Wa-u-Kwụndi	Kọgnọ	Hausa	Hausawa

*Indicates a label reported by Regnier (2003).

‡This list includes languages that generally fall under the label Kambari.

-Names are written using the Ụt-Ma'in orthography. Correspondences between orthographic symbols and IPA symbols are given in §2.8.

-Shaded cells contain Ụt-Ma'in language names; the final three columns contain names in the C'Lela and Hausa languages.

1.3 Ụt-Ma'in genetic classification

Ụt-Ma'in has been most recently classified as Kainji, Central-Nigerian, East Benue-Congo, Benue-Congo, Niger-Congo language (Blench 2018:66); see Figure 2 where Kainji is underlined (Watters 2018: 5); see also Gerhardt (1989). Numbers in parentheses after language grouping labels in Figure 2 indicate number of languages, putting the current count of Kainji languages at fifty-nine. All seven Ụt-Ma'in varieties are counted here as one, i.e., one of the 59 Kainji languages.

Figure 2: Classification of Kainji languages within Benue-Congo (Watters 2018: 5)

Benue-Congo (976)
- West Benue-Congo (83)
- East Benue-Congo (893)
  - Central-Nigerian (133)
    - Kainji (59)
    - Plateau (54)
    - Jukunoid (20)
  - Bantoid-Cross (760)
    - Cross-River (68)
    - Bantoid (692)
      - Wider Bantoid (152)
    - Bantu (540)

Within Kainji, Ụt-Ma'in is classified as part of the Northwest cluster (Blench 2018: 6). The most closely related languages are C'Lela [dri][3], Gwamhi-Wuri-Mba [bga],

[3] Abbreviations within [square brackets] following language names are the ISO 639-3 codes to help identify the languages.

Ụt-Hun [uth], and Ụs-Saare [uss].[4] Blench's proposed organization of the Northwest Kainji languages is presented in Figure 3; it also includes the now moribund language Damakawa, whose ethnic population have now shifted to speaking C'Lela (McGill 2008; McGill and Blench 2012: 103). Blench's organization of Northwest Kainji is tentative as the placement of Damakawa has shifted between his 2012 and 2018 proposals; this is indicated by the (?) in Figure 3.

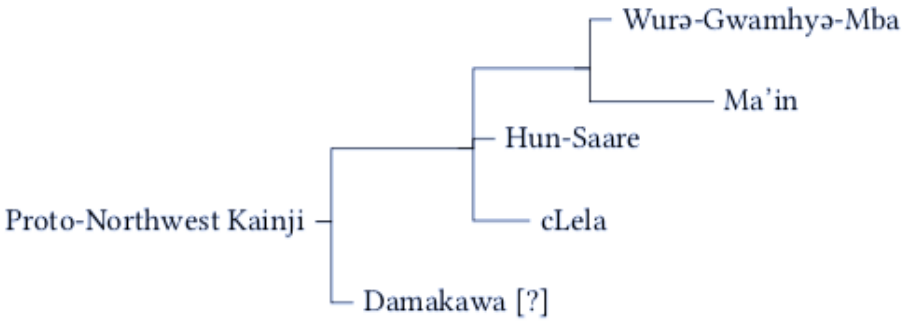

Figure 3: Blench's (2018: 72) proposal Northwest Kainji

The larger picture into which the Northwest Kainji languages fit is displayed in Figure 4. This entire subclassification of Kainji is based primarily on data from a comparative wordlist, as very few published studies of Kainji languages exist. For a state-of-the-art list of documentation and descriptive materials on Kainji languages, see McGill and Blench (2012: 98-101).

[4] Until recently, the Ụt-Hun and Ụs-Saare languages were considered one under the label Hun-Saare [dud], also known by the Hausa name Dukanci.

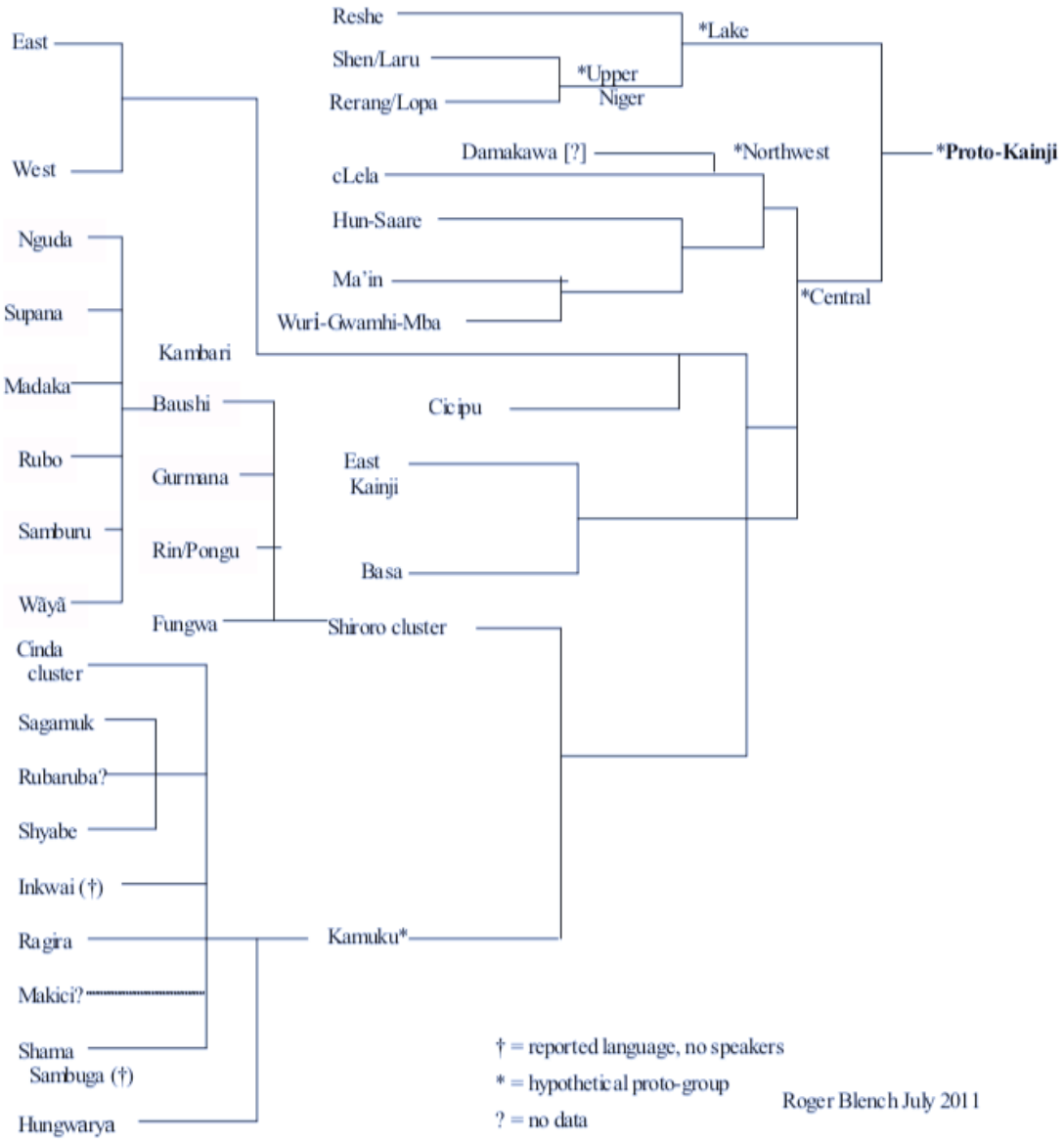

Figure 4: Kainji subgroups (McGill and Blench 2012: 95)

1.4 Data used for this study

Data used for this study were collected between 2005 and 2017. I conducted approximately 12 months of fieldwork. From 2005-2007, the primary focus was on the Ror variety; some Fer and Jiir texts were also recorded during this time. In these early years I was based in Jos, Plateau State, Nigeria and made several trips to the U̲t-Ma'in

language area. Ibrahim Tume Ushe, Sunday John, and Serah Sunday also traveled to Jos to assist with recordings, translations, and analysis of previously recorded texts. In 2013, two months of fieldwork resulted in the collection of nine "Pear Story" retellings (Chafe 1980) - seven from the Ror variety (three female speakers and four male speakers), one of the Kuur variety (male speaker), one from the Jiir variety (male speaker); and additional wordlists from all nine speakers. In January 2017, a short visit to the language area afforded some translations of previously recorded materials. In February 2017, Tabita Ibrahim and Victoria Yohanna travelled to Jos to assist with translation and analysis of previously recorded texts. From July-September 2017, four months of fieldwork were sponsored by the Firebird Foundation for Anthropological Research and the Center for the Study of Women in Society (of the University of Oregon). Data was collected on all seven varieties in-situ with many visits to the language centers, mostly facilitated by native-speaker consultants Ibrahim Tume Ushe and Sunday John.

Approximately seven and a half hours of recorded and translated data were available for this study. The primary recordings of language data and U̱t-Ma'in texts used for this study are listed in Appendix B. I use the term "text" to refer to both the originally written and originally audio-recorded data listed below. All recorded data has a recording length listed in the final column. Five sample analyzed texts are included in additional appendices.

Genres include:

i. folk narratives
ii. narratives about personal experiences
iii. songs
iv. word games
v. retellings of observed events - particularly after watching the silent film developed by Chafe (Chafe 1980), known as the Pear Story.
vi. read texts
vii. crafted texts - these include translated materials and adult literacy educational materials
viii. dialogues - often interview style with all participants speaking in Ụt-Ma'in. These were facilitated by consultant, Ibrahim Tume Ushe. Many were recorded on his own initiative.

CHAPTER II

ỤT-MA'IN SOUND SYSTEM AND TRANSCRIPTION CONVENTIONS

2.1 Introduction

In this chapter I present an introduction to the sound system of Ụt-Ma'in based primarily on the Ụt-Ma'Ror variety. Data presented without explicit brackets is in the phonemic representation used throughout the paper (cf. §2.8). Square brackets indicate a phonetic represention. In some cases I mark morpheme boundaries with hyphens within phonetic brackets. Forward slashes indicate phonemic representation.

Contrastive tones are illustrated in §2.2; the Ụt-Ma'in syllable is discussed in §2.3; vowel contrasts are illustrated in §2.4; consonant contrasts and sequences are illustrated in §2.5; glides and sequences are illustrated in §2.6; the phonetic occurrence of geminate consonants is discussed in §2.7; and the working orthography is illustrated in §2.8 along with the transcription conventions used in this remainder of this study.

2.2 Contrastive tones

Ụt-Ma'in has three contrastive level tones: high (H), mid (M), and low (L). In this section I demonstrate tonal contrast with noun stems. Each noun stem is presented with its noun class prefix; all noun class prefixes in citation form have a M tone. The three tone levels are demonstrated for CVC syllable noun stems on the sequences /bah/ in Table 3 and /gah/ in Table 4.

Table 3: Minimal tone triplets for noun stems /bah/

STEM TONE	SINGULAR	GLOSS	PLURAL	GLOSS
H	ɔ̄r-báh	'C5-foot'	ɔ̄t-báh	'C6-feet'
M	ɔ̄r-bāh	'C5-bag'	ɔ̄t-bāh	'C6-bags'
L	ɔ̄r-bàh	'C5-lake'	ɔ̄t-bàh	'C6-lakes'

In Table 3, the noun class morphology is identical for all three singular/plural pairs; the contrast in word meaning is only available from the tonal contrast itself. In the case of Table 4, the tone is contrastive on the noun stems, but there is also a difference in the noun class marking.

Table 4: Minimal tone triplets for noun stems /gah/

STEM TONE	SINGULAR	GLOSS	PLURAL	GLOSS
H	ɔ̄r-gáh	'C5-lump of cooked grain'	ɔ̄t-gáh	'C6-lumps of cooked grain'
M	ū-gāh	'C3-plait'	ɔ̄s-gāh	'C4-plaits'
L	--	--	ɔ̄t-gàh	'C6-being dry'

Tone is also used to distinguish stems with closely related meanings, as in (3).

(3) H ɔ̄t-gáp 'C6-slapping'
M ū-gāp 'C3-slap'
L ɔ̄t-gàp 'C6-hitting'

For many otherwise homophonous stems, there is a contrast between two of the three levels, but not a full three way contrast of all three level tones, as demonstrated in (4) and (5). In (4), there is a contrast between a H and L tone stem, but no known M to complete the triplet. In (5), there is a contrast between a M and L tone stem, but no known H to complete the triplet.

(4)	H	ə̄r-gə́g	‘C5-bundle’
	M	--	--
	L	ū-gə̀g	‘C3-molar’

(5)	H	--	--
	M	ə̄r-gə̄h	‘C5-marriage’
	L	ū-gə̀h	‘C7-lizard’

2.3 Syllable

In this section I discuss the syllable types found in Ụt-Ma'in and present a maximal syllable template including restrictions on the complexity of the rhyme. The syllable structure here is also an account of the distribution of phonemes in Ụt-Ma'in.

A minimal syllable is a short V. This is most commonly found in particles, pronouns and noun class affixes as illustrated in (6).

(6)	[ə́]	‘LOC’	[á]	‘CAUG.OBJ’
	[í]	‘CDIM.OBJ’	[ū]	‘C3’ (prefix)
	[ɛ́]	‘C2.obj’	[ɔ́]	‘C3.obj’

Other common syllable types are VC, CV, and CVC. VC is a very common syllable shape for noun class prefixes in citation form, as in(3) through (5). CV is a common shape for noun class agreement pronouns, as illustrated in (7).

(7)	[wá]	‘C1.OBJ’	[tɔ́]	‘C6.OBJ’
	[sɛ́]	‘C4.OBJ’	[mɔ́]	‘C6B.OBJ’
	[dɛ́]	‘C5.OBJ	[já]	‘C7.OBJ’

CVC is a common syllable shape for noun and verb stems, as illustrated in all examples of the previous section. All consonants (see §2.5) are contrastive as onsets; only /p, b, m, t, s, z, n, r, k, g, w, h/ occur as codas. Consonant contrasts and distributions are illustrated in §2.5.

Regarding the maximal syllable, in Figure 5, σ represents the syllable; O, the syllable onset; R, the syllable rhyme; Nu, the syllable nucleus; Cd, the syllable coda. C indicates a consonant; G, a glide; and V, a vowel. Parentheses indicate optional elements (here I use "V(:)" to represent optional length). A maximal rhyme is either type R_1 with the long V: or R_2 with a CC coda; these are schematized below the maximal syllable to make clear the limitations on the rhyme structure. A rhyme may have a heavy nucleus V:C (type R_1) or a heavy coda VCC (type R_2), but not both a heavy nucleus and a heavy coda (*V:CC).

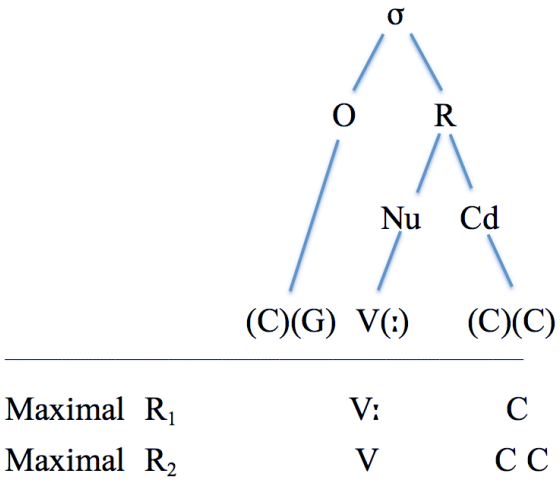

Figure 5: Ụt-Ma'in syllable

Examples in (8) and (9) illustrate the maximal syllables found in monomorphemic Ụt-Ma'in stems. In these examples, each stem occurs after its citation form noun class prefix, separated by a period that indicates the syllable boundary. In all examples in (8) and (9), the onsets are the maximal CG. In (8) are three examples of the maximal R_1, i.e., V:C; in (9) are two examples of the maximal R_2, i.e., VCC.

(8) σ V.C G V: C

[ū.gwā:r]	‘C7-goat’
[ū.pjā:t]	‘C7-moon’
[ə̄r.njə̄:w]	‘C5-mushroom’

(9) σ VC.C G V C C

[ə̄r.kwə̄nt]	‘C5-hoe’
[ə̄r.kwə̄mp]	‘C5-okra’

Glides are contrastive in onset position. Glides /j, w/ can occur as a simple C onset, as in (10). The glide /w/ can occur as a C coda, as in (11). In examples (10) and (11), the position of the G is represented in the syllable template as C.

(10)

[ū.wár]	‘C3-body’
[ə̄m.jár]	‘C6B-health’

(11)

[ə̄s.hɛ́w]	‘C4-dance’
[àw]	‘C2.crabs’

Maximal consonant sequences in onset are of the type CG, where G represents a glide. Sample CG sequences [gw], [pj], [nj], and [kw] are illustrated in (8). All CG sequences are illustrated in §2.6.2. Glides are discussed further in §2.6, including the limitations regarding which consonants can co-occur with glides in onset position.

In citation form, noun and verb stems have a coda; some stems that appear to be vowel-final generally are pronounced in isolation with a final glottal consonant [h ~ ʔ], in free variation, as illustrated in (12), (cf. §2.5.6). The glottal fricative is constrastive with vowel initial stems in onset position, but the glottal stop is not. The glottal stop [ʔ] is inserted at morpheme boundaries between a vowel final morpheme and a vowel initial morpheme.

(12)

[dɛ́]	‘C5.OBJ’	[ə̄r.dɛ́h] ~	[ə̄r.dɛ́ʔ]	‘C5-breast’
[tɔ́]	‘C6.OBJ’	[ū.tɔ́h] ~	[ū.tɔ́ʔ]	‘C3-ear’

Vowel contrasts are illustrated in §2.4. All heavy nuclei are of the same vowel quality, as suggested in (8). There are no VV sequences for vowels of different qualities within monosyllabic stems, with perhaps one exception: [ə̄t.ə̀ɛ̀] ‘C6.melting’ that is alternately pronounced [ə̄t.ə̀ʔ.ɛ̀ʔ].[5]

Another issue regarding heavy nuclei concerns an alternation between creaky voice and glottal stop for particular stems. I do not know whether long [V꞉] is contrastive with creaky [V̰꞉]. I do know that certain stems can be pronounced with creaky [V̰꞉] or as sequences including a glottal stop [VʔV]. If one of these stems occurs after a V noun class prefix, the stem occurs with a nucleus of creaky [V̰꞉]. If one of these stems occurs after a VC noun class prefix, the stem occurs as the sequence [VʔV], which divides into a second stem syllable. This alternation can be represented by the formalisms in (13).

(13) [V̰꞉] → [V̰꞉] / [V + C__C]
[V̰꞉] → [VʔV] / [VC + C__C]

The coda sequences CC are limited to the following combinations of consonants: /ks/, /kt/, /st/, Np, Nt, Nd, Nk, and Ng, where N indicates a nasal consonant that shares place of articulation with the following consonant. Some examples can be seen in (8). All coda clusters are illustrated in §2.5.7.

[5] See §2.5.6 for information about when a glottal stop is inserted between the vowels of two separate morphemes. The implication is that perhaps this synchronic stem contains a historical morpheme boundary.

2.4 Vowels

Ụt-Ma'in has an eight vowel system with two contrastive lengths:[6] three front vowels /i, e, ɛ/, two central vowels /ə, a/, and three back vowels /u, o, ɔ/ as displayed in Figure 6.

	Front	Central	Back
Close	i iː		u uː
Near Close-Mid		ə əː	
Close-Mid	e eː		o oː
Open-Mid	ɛ ɛː		ɔ ɔː
Open		a aː	

Figure 6: Ụt-Ma'in phonemic/contrastive vowels

Contrasts between pairs of all Ụt-Ma'in vowels are illustrated in Table 5. All eight vowel qualities have a long counterpart, as demonstrated in Figure 6 and illustrated in Table 6.

Table 5: Ụt-Ma'in vowel contrasts

CONTRAST	EXAMPLE	GLOSS	EXAMPLE	GLOSS
/i/ and /e/	ə̄r.kìŋg	'C5-stump'	ə̄m.rím	'C6B-darkeness'
	ə̄r.kèŋgì	'C5-frontier'	ə̄s.rēm	'C4-speech'
/i/ and /ɛ/	kīt	'side (something)'	nín	'C2.teeth'
	kɛ́t	'C3.harvesting maize'	nɛ́n	'C2.ripeness'
/e/ and /ɛ/	ə̄m.rèh	'C6B-pain'	ə̄r.tèh	'C5-arriving'
	ə̄t.rɛ̀h	'C6-eating'	ə̄t.ɛ̀h	'C6-laying (egg)'
/ə/ and /a/	ū.gə̀g	'C7-molar'	ə̄s.kàr	'C4-horns'
	ū.gāh	'C3-plait'	ə̄t.ə̄kə̀r	'C6-cutting open'
/u/, /o/, /ɔ/	ū.kūh	'C3-shell (turtle)'	ə̄t.kūt	'C6-thighs'
	ə̄r.kōh	'C5-frog'	ə̄s.kót	'C4-thorn trees'
	ə̄s.kɔ́h	'C4-silk (maize)'	ə̄t.kɔ́t	'C6-crests (bird)'

[6] Section 2.3 suggests vocalic length is a feature of the syllable. For comprehensive discussion, here I contrast all long and short vocalic qualities. Ultimately, I take no stand in this work on whether length is contrastive at the syllable level or the phoneme level.

Table 6: Ụt-Ma'in long vowels in contrast to short vowels

CONTRAST	EXAMPLE	GLOSS	EXAMPLE	GLOSS
/i/ and /iː/	ə̄t.rìst	'C6-abandoning'	ə̄t.pìs	'C6-corn cobs'
	ə̄t.rìːs	'C6-porcupines'	ə̄t.ìːs	'C6-sinking'
/e/ and /eː/	ə̄r.ēr	'C5-arrow'	ə̄t.rèst	'C6-dropping'
	éːr	'eight'	ə̄r.ēːs	'C5-standing'
/ɛ/ and /ɛː/	ə̄m.rɛ́g	'C6B-trying'	ə̄r.hɛ́.ʔɛ̀h	'C5-falling'
	ə̄m rɛ́ːg	'I succeeded'	hɛ̄ːg	'fell'
/ə/ and /əː/	ə̄r.pjá.kə́t	'C5-flower'	ə̄t.zə̀m	'C6-spoiling(intr)'
	ū.kə́ːt	'C7-chicken'	ə̄t.tə̂ːm	'C6-chewing'
/a/ and /aː/	tār	'C2.tax'	ə̄t.kàs	'C6-tracks (animal)'
	ī.tāːr	'CDIM-tiny stone'	ə̄t.tàːs	'C6-villages'
/u/ and /uː/	ə̄r.kūg	'C5-trunk (tree)'		
	ə̄m.húːg	'C6B-dust'		
/o/ and /oː/	ū.dòr	'C7-nape of neck'	ə̄m.óg	'C6B-juice'
	ū.kòːr	'C7-valley'	ə̄r.góːg	'C5-axe'
/ɔ/ and /ɔː/	ə̄r.kɔ́t	'C5-crest (bird)'	ə̄t.dɔ̀g	'C6-wildernesses'
	ū.kɔ́ːt	'C7-guinea fowl'	ə̄s-tɔ̄ːg	'prayers'

Based on the wordlist in Smith (2007), Figure 7 presents the frequency distribution of the eight vowel qualities. The mid-central /ə/ is by far the most common. This is due to its occurrence in many noun class prefixes that occur in the citation form of all nouns.[7] In addition, all verbs in nominalized form are categorized within the same system of noun classes, and most verbs are cited in a nominalized form. The mid-central /ə/ is also found in many word stems. The second most common vowel is /a/. The least common vowels are /o/ and /e/.

[7] The Ụt-Ma'in noun class system is described in §1.1.3.1.1.

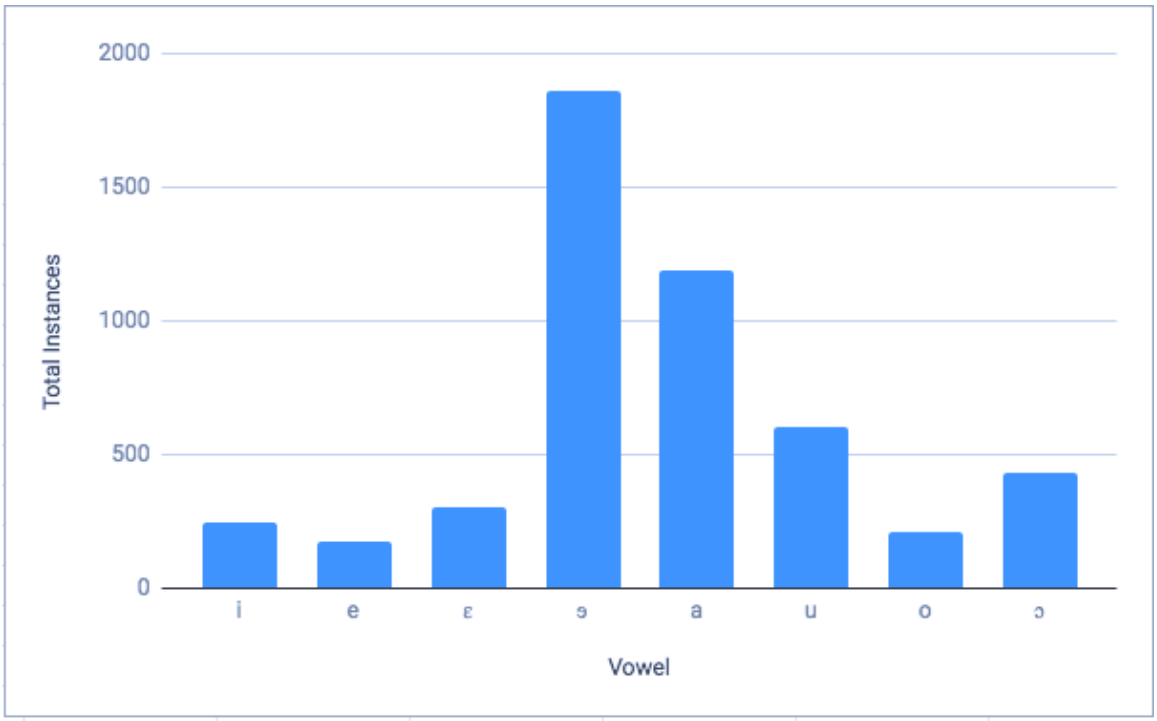

Figure 7: Distribution of Ụt-Ma'in vowels in Smith (2007) wordlist

2.5 Consonants

In this section I present an inventory of Ụt-Ma'in consonants and evidence of contrast. There are six places of articulation for consonants: bilabial, labiodental, alveolar, (alveo)palatal, velar, and glottal. Figure 8 contains all contrastive consonants. The glottal stop [ʔ] is in parentheses in Figure 8 to indicate that I question its phonemic status; the glottal consonants are discussed in §2.5.6.

	Bilabial	Labiodental	Alveolar	(Alveo)Palatal	Velar	Glottal
Voiceless plosives	p		t		k	(ʔ)
Voiced plosives	b		d		g	
Voiceless affricates				tʃ		
Voiceled affricates				dʒ		
Voiceless fricatives		f	s	ʃ		h
Voiced fricatives		v	z			
Nasals	m		n			
Rhotic			r			
Approximants				j	w	

Figure 8: Ụt-Ma'in phonemic consonant inventory

All voiceless plosives are aspirated to some degree; /t/ and /k/ show the greatest aspiration and /p/ the least. Aspirated and unaspirated plosives are not contrastive. The norm of /t/ is heavily aspirated [t^h] in coda position and slightly less aspirated in onset position. Since aspirated stops are not contrastive with non-aspirated stop counterparts, in this study I do not indicate aspiration unless in regard to syllable boundaries, where an aspirated final plosive can indicate a coda. The alveolar rhotic, represented as /r/, has three allophones: trilled [r], tap [ɾ] and lateral [l], all in free variation for many speakers. For all speakers [lː] can occur at a morpheme boundary at the junction of two alveolar rhotics /r/, or as the realization of an /r/ and a voiced alveolar stop /d/ consonant coming together at a morpheme boundary (§2.7.2). The nasals /m/ and /n/ contrast. /n/ has an allophone [ŋ] before the velar stops /k, g/ in coda consonant clusters (§2.5.7.2). The glottal fricative /h/ has two allophones: the glottal stop [ʔ] and the glottal fricative [h] in free variation in coda position. The glottal stop only occurs in onset

position when a vowel-final morpheme and a vowel-initial morpheme occur in the same word. The glottal fricative is contrastive with other consonants in onset position.

Examples of all consonant contrasts are illustrated, organized by place of articulation, in the sections below.

2.5.1 Bilabial consonants

Example (14) shows contrast of bilabial consonants /p, b, m/ and the labiovelar glide /w/ in stem initial position, where they can occur as an onset C. Each example is a noun; each stem occurs following a noun class prefix involving [u], which can be from class 1, 3, or 7. In example (14), each stem-initial consonant precedes the mid-central vowel /a/.

(14)	/p/	ū.pán	‘C3-facial incision’
	/b/	ū.bár	‘C3-loincloth’
	/m/	ū.mák	‘C7-kidney’
	/w/	ū.wár	‘C3-body’

Example (15) shows contrast of bilabial consonants /p, b, m/ and the labiovelar glide /w/ as C codas. Each stem final consonant follows a central vowel /a/.

(15)	/p/	ū.sáp	‘C7-sword’
	/b/	ū.gwáb	‘C7-bamboo’
	/m/	ū.ám	‘C3-pus’
	/w/	ū.àw	‘C7-crab’

2.5.2 Labiodental consonants

Example (16) shows contrast of labiodental consonants /f, v/ in stem initial position as C onset. Each example is a noun; each stem occurs following a noun class prefix

involving [u], which can be from class 1, 3, or 7. Each stem initial consonant precedes the mid-central high tone vowel /a/. Labiodental consonants do not occur in codas.

(16)	/f/	ū.fáh	‘C7-snake’
	/v/	ū.ván	‘C3-knife’

2.5.3 Alveolar consonants

Example (17) shows contrast of alveolar consonants /t, d, s, z, n, r/ in syllable onset position. Each example is a noun; each stem occurs following noun class 6B prefix *ɔ̄m-* and precedes the central vowel /a/.

(17)	/t/	ɔ̄m.táh	‘C6B-saliva’
	/d/	ɔ̄m.dáp	‘C6B-sap’
	/s/	ɔ̄m.sáh	‘C6B-sea’
	/z/	ɔ̄m.zān	‘C6B-emptiness’
	/n/	ɔ̄m.náp	‘C6B-knowledge’
	/r/	ɔ̄m.ráb	‘C6B-poison’

Example (18) shows contrast of alveolar consonants /t, s, z, n, r/ as C codas. /d/ is not found in as a C coda. Each example is a noun; each C coda consonant follows a high-tone central vowel /a/.

(18)	/t/	ɔ̄r.fát	‘C5-life’
	/d/	--	--
	/s/	ɔ̄m.bás	‘C6B-urine’
	/z/	ɔ̄r.kwáz	‘C5-wrist’
	/n/	ū.kán	‘C7-ladder’
	/r/	ū.wár	‘C3-body’

2.5.4 (Alveo)palatal consonants

The consonants discussed in this section only occur as onsets. Example (19) shows contrast of (alveo)palatal consonants /tʃ, ʒ, ʃ, j/ in syllable onset position. Each example

is a noun; each stem occurs following noun class 5 prefix *ə̄r-* and precedes a mid-central vowel /ə/.

(19)	/tʃ/	ə̄r.tʃə̀mə̀s	'C5-clay.stool'
	/dʒ/	ə̄r.dʒə́r	'C5-cudgel'
	/ʃ/	ə̄r.ʃə̀t	'C5-asking'
	/j/	ə̄r.jə̄ʔ	'C5-dwelling'

Example (19) shows contrast of all alveolar and alveopalatal fricatives /s, z, ʃ/ in syllable onset position. Each example is a noun; each stem occurs following noun class 5 prefix *ə̄r-* and precedes the central vowel /a/.

(20)	/s/	ə̄r.sàr	'C5-wall'
	/z/	wá.zán.níp	'C1.guilty person'
	/ʃ/	ə̄r.ʃár	'C5-water pot'

2.5.5 Velar consonants

Example (21) shows contrast of velar consonants /k, g/ and the labiovelar /w/ as C onsets. Each example is a noun; each stem occurs following noun class 5 prefix *ə̄r-* and precedes a low-tone mid-central vowel /ə/.

(21)	/k/	ə̄r.kə̀h	'C5-tumour'
	/g/	ə̄r.gə̀t	'C5-cheek'
	/w/	ə̄r.wə̀n	'C5-morning'

Example (22) shows contrast of velar consonants /k, g/ and the labiovelar /w/ in coda position. Each example is a noun; each stem final consonant follows a mid central vowel /a/.

(22)	/k/	ū.mák	'C3-kidney'
	/g/	ə̄r.mág	'C5-debt'
	/w/	ū.àw	'C7-crab'

2.5.6 Glottal consonants

The glottal fricative /h/ is constrastive with vowel-initial stems in syllable onset position as shown in (23). Aspiration is included for examples in this section where the prominence of the aspiration is an indicator of a syllable boundary.[8] For example, I analyze the noun [ə̄t^h.ə̄k^h.ə̀r] ‘c6-cutting.open’ as VC.VC.VC because the coda [t^h] has prominent and prolonged aspiration (VOT of coda [t^h] 0.0858) in constrast to the CVC root [tɛ́k] ‘middle’ (VOT of onset [t] 0.0345). Analyizing [ə̄t^h.ə̄k^h.ə̀r] ‘C6-cutting.open’ as VC.VC.VC provides the V-initial stem [ə̄k] that contrasts with the h-initial stem of [ə̄t^h.hɔ́k^h.sɛ̀] ‘C6-hiccough’.

(23)	/h/ initial stems		V-initial stem	
a.	[ə̄r.híh]	‘C5-head’	[íh]	‘C2.grasshoppers’
b.	[hɛ́h]	‘C2.termites’	[ɛ́]	‘C2.OBJ’
c.	[hóm.mɔ́]	‘copulation AG6B.DEF/ the copulation’	[oǵ.mɔ́]	‘juice AG6B.DEF/ the juice’
d.	[ə̄t^h.hɔ́k^h.sɛ̀]	‘C6-hiccough’	[ə̄t^h.ə̄k^h.ə̀r]	‘C6-cuting open’
e.	[hɔ́k.sɛ̀.tɔ́]	‘hiccough AG6.DEF/ the hiccough’	[ə̄k^h.ə̀r.tɔ́]	‘cutting open AG6.DEF/ the cutting open’
f.	[ə̄t^h.hɔ́t^h]	‘C6-crossroads’	[ə̄t^h.ə̀st^h]	‘C6-catching (in air)’

The glottal stop [ʔ] is in free variation with [h] in coda position, but is not contrastive in syllable onset position. However, a phonetic glottal stop [ʔ] may be inserted at a morpheme break between two vowels. For example, [ū.ʔə̄k] ‘C3-half’ occurs with a [ʔ] at the morpheme break between the noun class 3 prefix /ū-/ and the noun root /ə̄k/. This can be represented by the formalism (24).

[8] Further investigation of syllable weight is needed, particularly with regard to the role of aspiration/VOT in calculating syllable weight.

(24) Ø → [ʔ] / [V___+V]

I analyze this as an insertion because the plural form *ɔ̄t-ɔ̄k* has a prominently aspirated consonant-final noun class 6 prefix [ɔ̄t^{h}-]; the glottal stop does not occur. There is no evidence that the lexical form of the root has a glottal stop. In (25), an additional example of glottal insertion is shown for a singular/plural pair.

(25)	Singular	Gloss	Plural	Gloss
	[ū.ʔɔ̄k]	'C3-half'	[ɔ̄t^{h}.ɔ̄k^{h}]	'C6-halves'
	[ū.ʔún]	'C7-monitor.lizard'	[ún]	'C2-monitor.lizards'

The glottal fricative /h/ is contrastive in coda position with vowel-final syllables However, in coda position the glottal fricative [h] and the glottal stop [ʔ] are in free variation, as demonstrated in (26). Further, their occurrence is possibly a phrase final phenomenon. That is, in rapid speech word-final glottal consonants rarely occur unless they are also phrase final. In citation form a glottal consonant almost always occurs on noun and verb stems as the coda of otherwise vowel final words, but the glottal consonant varies in manner between the stop and fricative. In (26), the first column contains glottal-final stems showing the [CVh] ~ [CVʔ] forms in free variation; the second column contains contrasting vowel-final CV syllable words.

(26)	glottal-final stems		V-final stems	
	[ɔ̄r.dɛ́h] ~ [ɔ̄r.dɛ́ʔ]	'C5-breast'	[dɛ́]	'C5.OBJ'
	[ū.tɔ́h] ~ [ū.tɔ́ʔ]	'C3-ear'	[tɔ́]	'C6.OBJ'
	[ɔ̄t.ɛ̀h] ~ [ɔ̄t.ɛ̀ʔ]	'C6-laying (eggs)'	[ɛ́]	'C2.OBJ'
	[íh] ~ [íʔ]	'C2.grasshoppers'	[í]	'CDIM.OBJ'
	[wáh] ~ [wáʔ]	'C1.child'	[wá]	'C1.OBJ'

2.5.7 Consonant sequences in coda position

Consonant clusters are found in Ụt-Ma'in as codas. The following sections illustrate the known instances of the following codas: /ks/, /kt/, /st/, Np, Nt, Nd, Nk, and Ng, where "N" represents a homorganic nasal that occurs in the same place of articulation as the following stop. This is the only position in which the velar nasal occurs within a single morpheme. Across morphemes, [ŋ] is always followed by a velar consonant, and hence I do not analyze it as phonemically contrastive with [n].

2.5.7.1 /ks/ and /kt/ in coda position

In my data there is one instance of the sequence /ks/ in coda position, in the verb root *bàks* 'remember'. There is one instance of the sequence /kt/ in coda position: *ū-mákt* 'C1-barren woman'. For the plural form, *Ø-mákt-nɛ̀* 'C2-barren woman-H.PL' the mid-central vowel can be inserted between the [k] and [t] to produce [mák.ɘ̀t.nɛ̀]. The pronunciation [mákt.nɛ̀] is also attested, by the same speaker.

2.5.7.2 Homorganic nasal plus stop in coda position

[m, n, ŋ] occur as homorganic nasals (N) before consonants of the same place of articulation, specifically:

N → m / _ [p]$_{\#}$

N → n / _ [t, d]$_{\#}$

N → ŋ / _ [k]$_{\#}$

There are two stems with instances of the sequence /mp/ in coda position: *ū-kàmp* 'C7-corn stalk' and *ə̄r-kwə̄mp* 'C5-okra'.

There are three stems with instances of the sequence /nt/ in coda position; these are presented in Table 7. There is only one instance of a N plus alveolar stop sequence that does not have an voiceless (and therefore aspirated) release: *ū-sônd* 'C3- pestle'.

Table 7: Distribution of /nt/ consonant cluster

Final /nt/		
*int		
*ent		
*ɛnt		
/əNt/	ū-rə̀nt	'C7-mosquito'
/əNt/	ə̄r-kwə̄nt	'C5-hoe'
/aNt/	ū-zwánt	'C7-insect'
/uNt/	ə̄s-hùnt	'C4-sweat'
*ont		
/ɔnt/	ə̄r-gɔ̀nt	'C5-adam's apple'
/ɔnt/	ū-gɔ̀nt	'C7-eggplant'
/ɔnt/	ə̄s-tɔ̀nt	'C4-swearing'

There are sixteen instances of the sequence /Nk/ in the corpus used for this study, including both nouns and verbs; all examples are presented in nominal(ized) form with Table 8 shows the distribution of /Nk/ in coda position; there are no examples of /Nk/ following the vowels /u/ and /o/.

There is one commonly occurring word with the sequence /Ng/. The verb *nɔ̀m* 'do, create, make' plus the past tense suffix *-ːg* 'PST' has two available pronunciations [nɔ́m.ɡ́g] and [nɔ́ŋg]. This past tense verb form is used in the presentational impersonal construction, which is common in the early lines of folk narratives (see Chapter V §5.2).

Table 8: Distribution of /Nk/ as consonant clusters

Final /ŋk/		
/iNk/	ɔ̄r-kìŋk	‘C5-stump’
/eNk/	ū-t^{h}éŋk	‘C7-shin’
	ɔ̄t^{h}-èŋk	‘C6-disappearing’
	ɔ̄m-gèŋk	‘C6B-walking sideways like a crab’
	ɔ̄sːeːŋk	‘C6.choking’
	ɔ̄t-kútárèŋk	‘C6-brain’
/ɛNk/	gjɛ̀ŋk	‘crooked’
/ɔNk/	ɔ̄m-dɔ̀ŋk	‘C6B-fever’
/aNk/	ɔ̄m-àŋk	‘C6B-work’
	ɔ̄ʤːâŋk	‘c6.stamping with foot’
	ū-màŋk	‘C3-repairing’
	ɔ̄t-māŋk	‘C6-decorate’
	ɔ̄m-ràŋk	‘C6B-smoothness’
*uNk		
*oNk		
/ɔNk/	ɔ̄r-pɔ́ŋk	‘C5-forehead’
	ɔ̄zːɔ̀ŋk	‘C6-preparing’

2.5.7.3 /st/ in coda position

The cluster /st/ only occurs on noun class 6 nominalized verb forms. This may be an indication that the source of the consonant cluster involves a historical morpheme boundary, involving verbal derivational morphology akin to the so-called verbal extensions of related Bantu languages (see Chapter III §3.3.1) for commonly occurring verbal suffixes in Ụt-Ma'in). Table 9 shows the distribution of /st/ following all vowels except /ɛ/. For at least the word *ɔ̄ʔ-ʧɔ̀st* ‘C6-lowering (sth)’, the root is known to be *ʧíz* ‘descend’, though it surfaces as *ɔ̄ʔ-ʧɔ̀z* ‘C6-descending’ when nominalized. This would indicate that the cluster /st/ is (historically) the result of adding a /t/ suffix to a root

ending in an alveolar fricative. The suffix adds a causative meaning (see Chapter III §3.3.1).

Table 9: Distribution of /st/ consonant clusters as codas

Final /st/		
/ist/	ɔ̄t-rìst	‘C6-abandoning (sth)’
/est/	ɔ̄t-rèst	‘C6-dropping (sth)’
*ɛst		
/əst/	ɔ̄t-də̀st	‘C6-picking up (sth)’
/əst/	ɔ̄t-tʃə̀st^{h}	‘C6.lowering (sth)’
/əst/	ɔ̄t-ə̀st	‘C6-catching (sth)’
/əst/	ɔ̄t-pə̂st	‘C6-straining (food)’
/ast/	ɔ̄t-hàst	‘C6-taking away (sth)’
/ust/	ɔ̄t-ùst	‘C6-losing (sth)’
/ost/	ɔ̄t-hòst	‘C6-undressing’
/ɔst/	ɔ̄t-tɔ̀st	‘C6.leaning (sth) against (sth)’

2.6 Glides

This section presents the distribution of glides.

2.6.1 Glides as C in onset and coda

The glide /w/ occurs as a simple syllable onset with limited distribution. It only occurs before the central vowels /ə/ and /a/. /w/ occurs as a syllable coda following the vowels /ɛ, ə, a/.

Table 10: Distribution of /w/

Initial /w/			Final /w/		
*wi			*iw		
*we			*ew		
*wɛ			/ɛw/	ə̄s-hɛ́w	‘C4-dance’
/wə/	ə̄r-wə̀n	‘C5-morning’	/əw/	ə̄r-njə̄ːw	‘C5-mushroom’
/wa/	ū-wár	‘C3-body’	/aw/	ū-àw	‘C7-crab’
*wu			*uw		
*wo			*ow		
*wɔ			*ɔw		

The sequence /wa/ commonly occurs as a noun class 1 marker: *wā* ‘C1.SUBJ’, *wá* ‘C1.OBJ’, *-wá* ‘AG1’. The sequence /wə/ is also used for the noun class 1 relative pronoun: *wə̀* ‘C1.REL’.

The glide /j/ occurs as a syllable onset with limited distribution. It only occurs before the vowels /i, ə, a, ɔ/. /j/ does not occur as a coda. There are no */ai/ or */aj/ sequences in Ụt-Ma'in.

Table 11: Distribution of /j/ as syllable onset

Distribution of /j/		
/ji/	[ə̄t-jíb]	‘C6-dip’
*je		
*jɛ		
/jə/	[ū-jə̄h]	‘C3-rain’
/ja/	[ə̄m-jár]	‘C6B-health’
*ju		
*jo		
/jɔ/	[ə̄m-jɔ̄h]	‘C6B-wickedness’

Although not found lexically in the onset of a stem, the sequence /jɛ/ is found as an allomorph of the focus marker *ɛ́* when the focus marker is suffixed to verb stems that

end in a vowel, as in *ɔ́-jé* 'COP-FOC'; it is also found in the second syllable of the stem *ə̄r-və̄jɛ̄h* 'C5-breath'.

The sequence /ja/ commonly occurs as a noun class 7 marker: *jā* 'C7.SUBJ', *já* 'C7.OBJ', *-já* 'AG7'. The sequence /ju/ as a CV syllable commonly occurs as the result of two morphemes coming together, as in (27) and (28)

(27) /ʃār.jù.ʤán/
ʃār = j-ˋ = u-ʤán
bone = AG7-ASSOC-C7-fish
'fish bone'

(28) /té.jù.rāh/
té = j-ˋ = u-rā
wood = AG7-ASSOC = C3-fire
'firewood'

2.6.2 Glides as G in syllable onset CG sequences

When a CG sequence is the onset of a syllable, there are certain co-occurrence restrictions regarding which C and which G can co-occur. There are also restrictions on the vowels of the nuclei for syllables with CG onsets.

All CG sequences occur before the mid-central vowel /ə/; most also occur before /a/. Other vowels rarely occur following a CG sequence. This matches the pattern for glide onsets-plus-nuclei in general, as described in the previous section, §2.6.1.

Bilabial and labiodental consonants /p, b, m, v/ precede /j/ before the central vowels /ə/ and /a/. There are only two examples of a /vj/ sequence in onset position: *ə̄t-vjə̀h* 'C6-wringing out' and *ə̄t-vjə̀n* 'C6-blowing nose'.

(29)	/p + j/	/pjə/	ə̄t.pjə́h	‘C6-entrance huts’
		/pja/	ū.pjāːt	‘C7-moon’
	/b + j/	/bjɛ/	ū.bjɛ́n	‘C3-waist’
		/bjə/	ə̄t.bjə̀z	‘C6-fainting’
		/bja/	ə̄r.bjām	‘C5-roof’
	/m + j/	/mjə/	ə̄t.mjə̀g	‘C6-twisting’
		/mja/	ə̄m.mjāh	‘C6B-wind’

Alveolar consonants /n, r/ occur with /j/ before the central vowels /ə/ and /a/, as in (30).

(30)	/n + j/	/njə/	ə̄r.njə̄ːw	‘C5-mushroom’
		/nja/	ū.njáh	‘C3-gift’
	/r + j/	/rjə/	ū.rjə̀n	‘C3-shadow’
		/rja/	ū.rjàp	‘C7-whip’

The velar consonant /k/ occurs with /j/ before the vowels /e, ə/; /g/ occurs with /j/ before the central vowels /e/ and /a/.

(31)	/k + j/	/kjə/	ə̄t.kjə̀r	‘C6-piercing’
		/kja/	ə̄r.kjàt	‘C5-difficulty’
	/g + j/	/gje/	ū.gjə̀r	‘C3-fear’
		/gjə/	ə̄m.gjə́p	‘C6B-night’

The glottal fricative /h/ occurs with /j/ before the central vowels /ə/ and /a/.

(32)	/h + j/	/hjə/	ə̄m.hjə́h	‘C6B-blood’
		/hja/	ə̄m.hján	‘C6B-vision’

The alveolar consonants /s, z, r/ occur with /w/ before the the central vowels /ə/ and /a/.

(33)	/s + w/	/swə/	ə̄t.swə́ːt	‘C6-lick’
		/swa/	ə̄r.swàh	‘C5-nose’
	/z + w/	/zwə/	ū.zwə̄ːn	‘C3-dry season’
		/zwa/	ə̄r.zwáh	‘C5-worm’
	/r + w/	/rwə/	ə̄t.rwə̀m	‘C6-snatching’
		/rwa/	ə̄t.rwāb	‘C6-clay (lumps)’

The alveopalatal consonant /tʃ/ occurs with /w/ before /ɛ, ə, a/; /dʒ/ occurs with /w/ before the central vowels /ə/ and /a/.

(34)	/tʃ + w/	/tʃwɛ/	tʃwɛ̀n	‘slowly’
		/tʃwə/	ū.tʃwə̄m	‘C3-darkness’
		/tʃwa/	tʃwā.né	‘enter.IMP’
	/ʤ + w/	/ʤwə/	ʤwə̄ːr	‘C3-fear’
		/ʤwa/	ū.ʤwáːk	‘C7-horse’

The velar consonant /k/ occurs with /w/ before /ɛ, ə, a/; /g/ occurs with /w/ before the central vowels /ə/ and /a/.

(35)	/k + w/	/kwɛ/	ə̄t.kwɛ̀h	‘C6-scabbies’
		/kwə/	ū.kwə́k	‘C7-groundnut shell’
		/kwa/	ə̄r.kwáz	‘C5-wrist’
	/g + w/	/gwə/	gwə́p	‘C1.virgin’
		/gwa/	ə̄t.gwàh	‘C6-vomit’

2.7 Consonant assimilation resulting in geminate consonants

In this section, I present a very preliminary analysis of Ụt-Ma'in geminate consonants. These Ụt-Ma'in forms occur in citation forms of nouns in classes 4, 5, 6, and 6B as well as in several morphosyntactic constructions, i.e., whenever the prefixed form of a noun is used (see Chapter III §3.1.1.2). At some morpheme boundaries between consonant-final noun class affixes and consonant-initial stems, consonant assimilation occurs, resulting in geminate [CC] sequences or long [Cː]. Example (36) illustrates the assimilation in a word marked for noun class 4. The geminate [dː] is apparent when we compare the plural noun class 6 word, [ə̄dːòr] ‘C4-napes of necks’, with its singular counterpart in noun class 7, [ūdòr] ‘C7-nape of neck’. In the sections below the phenomenon is illustrated for the full range of noun classes with a VC prefix.

(36)	[ə̄dːòr]	‘C4-napes of necks’	(from morphemic ə̄s-dòr)
	[ūdòr]	‘C7-nape of neck’	

McGill (2012), a historical study of the development of long consonants in the related language Cicipu, brought to my attention the possibility that Ụt-Ma'in may have geminate consonants. In Ụt-Ma'in, the source of these geminate consonants is quite transparently the interaction of a prefix and a consonant initial stem. However, unlike in Cicipu, Ụt-Ma'in geminate consonants are limited to a subset of the consonant inventory based on features of place and manner of articulation. Further, they are transparently the result of consonant assimilation at a morpheme boundary. The spectrographic evidence does not allow us to distinguish one way or the other whether there is a syllable boundary in the midst of a geminate consonant.

For this study, I consider these geminate consonants as phonetic phenomena and analyze them as heterosyllabic. I thus do not analyze Ụt-Ma'in as having contrastive short and long consonant phonemes, but I do intend here to bring attention to and illustrate the phonetically long consonants and the particular morphophonemic environments where they are found. This synchronic phonetic pattern in Ụt-Ma'in should help understand the development of the inventory of contrastive geminite consonants as reported for Cicipu, and as may exist in other un(der)described Kainji languages.

2.7.1 Geminate consonants in noun class 4

With class 4 nouns, geminite consonants are the result of the /s/ of the noun class 4 prefix fully assimilating to the place and manner of certain stem-initial consonants. /s/ only assimilates to alveolar and alveopalatal consonants in this environment, as

illustrated in Table 12.[9] Column one gives the illustrated sequence of consonants; column two gives the phonetic pronunciation of the class 4 noun form; column three gives the morphological analysis; and column four gives the gloss. The final two columns of Table 12 include preliminary duration measurements in seconds (SS) from one speaker based on field recordings. The column labelled "Duration (SS) Plural [C:]" contains a measurement in seconds of the relevant lengthened consonant [C:] from a recording of the noun class 6 form. The column labelled "Duration (SS) Singular [C]" contains a measurement in seconds of the corresponding short consonant [C] from a recording of the singular form, as relevant. Some forms have no singular counterpart, which is indicated by two dashes "--". In the phonetic form, length is represented by [ː]. The specific position of length is determined by spectographic analysis. Thus, for example, in the word for 'soup', the closure of the affricate is held (before the fricative release), but the aspiration and labialization are not visibly lengthened compared to non-geminate word forms.

2.7.2 Geminate consonants in noun class 5

Gemintate [lː] is most commonly found in words marked for noun class 5. In

Table 13, the geminate [lː] results from the /r/ of the noun class 5 prefix combining with an initial /r/ consonant of the stem. The stem initial /r/ is evident in the plural examples, where the noun class 6 prefix *ɔ̄t-* precedes each example stem.

[9] /s/ assimilates to all alveolar stops and alveopalatal stops and affricates except the voiceless alveolar stop.

Table 12: Geminate consonants in noun class 4 citation forms

Sequence	Phonetic Form	Morphological Form	Gloss	Duration (SS) [C:]	Duration (SS) Singular [C]
/s/ + /d/	[ə̄dːòr]	ə̄s-dòr	'C4-napes of neck'	0.161856	0.075346[10]
/s/ + /s/	[ə̄sːɛ́ʔ]	ə̄s-sɛ́h	'C4-oil palms'	0.226799	0.143962[11]
/s/ + /sw/	[ə̄sːwə̄mə̄r]	ə̄s-swə̄mə̄r	'C4-plucking'	0.230354	--
/s/ + /z/	[ə̄zːə̄g]	ə̄s-zə̄g	'C4-weeds'	0.224517	--
/s/ + /zw/	[ə̄zːwà]	ə̄s-zwà	'C4-stabbing'	0.178450	--
/s/ + /ʃ/	[ə̄ʃːāb]	ə̄s-ʃāb	'C4-bark (tree)'	0.211458	--
/s/ + /t͡ʃw/	[ə̄t͡ʃːwā]	ə̄s-tʃwāh	'C4-soup'	0.237416	--
/s/ + /d͡ʒw/	[ə̄d͡ʒːwà]	ə̄s-ʤwàh	'C4-splinters'	0.213476	--

Table 13: Geminate [lː] in noun class 5

Singular				Plural	
Sequence	Phonetic	Morphological	Gloss	Plural	Gloss
/r/ + /r/	[ə̄lːém]	ə̄r-rém	'C5-tongue'	ə̄t-rém	'C6-tongues'
/r/ + /rj/	[ə̄lːjāpə̀g]	ə̄r-rjāpə̀g	'C5-rape'	ə̄t-rjāpə̀g	'C6-rape'
/r/ + /rw/	[ə̄lːwāb]	ə̄r-rwāb	'C5-clay (lump)'	ə̄t-rwāb	'C6-clay (lumps)'

Table 14 includes preliminary duration measurements (in seconds) from one speaker based on field recordings. The column labelled "Duration [lː]" contains a measurement in seconds of the [lː] in the given example. The column labelled "Duration [r]" contains a measurement in seconds of the corresponding plural form from

Table 13. Each instance of [lː] is more than twice the duration of the [r] in the corresponding plural form.

[10] The singular form is [ū.dòr] *ū-dòr* 'C7-nape of neck'.

[11] The singular form is [ū.sɛ́ʔ] *ū-sɛ́ʔ* 'C7-oil palm'.

Table 14: Duration measurements of [lː] and [r]

Sequence	Phonetic Form	Morphological Fomr	Gloss	Duration [lː] Singular Form	Duration [r] Plural Form
/r/ + /r/	[ə̄lːém]	ə̄r-rém	‘C5-tongue’	0.220941	0.098383
/r/ + /rj/	[ə̄lːjāpə̀g]	ə̄r-rjāpə̀g	‘C5-rape’	0.157115	0.079106
/r/ + /rw/	[ə̄lːwāb]	ə̄r-rwāb	‘C5-clay (lump)’	0.219566	0.091217

Long [lː] is also found in the word [ūːtə́lːə̀] *ū-tə́lːə̀* ‘C3-market’, which is likely based on the root [túr] ‘pot’ as illustrated in (37). In (38) and (39), [túr] is the head noun root modified by an Associative Construction. But in both examples, the final [r] of the head noun root interacts with the initial [d] of the noun class 5 agreeement prefix of the Associative Construction to become [lː].

(37) [ə̄r.túr]
ə̄r-túr
C5-pot
‘pot’

(38) [túlːə̀lːwáb]
túr = d-ə̀ = r-rwáb
pot = AG5-ASSOC = C5-clay
‘pot (made) of clay’

(39) [túlːə̀rkwàm]
t^{h}úr = d-ə̀ = r-kwàm
pot = AG5-ASSOC = C5-iron
‘pot (made) of iron’

Other instances of [lː] are found at morpheme boundaries when the sequences /r + r/ or /r + d/ occur, as in (40) and (41).

(40) [ə̄hɔ́ mɔ́ʔə̤l:ə̀s tʃán]
A = GO.AUX V [P]
ə̄n = hɔ́ mɔ́ʔɔ́r d-ə̀ = s-tʃán
3PL = go.AUX remove AG5-ASSOCC4-feather
'They went on removing the feathers' (GF_2007_IT_Juur: 0092)

(41) [gāndə̀ zál:á]
gān = də̀ zár = dá
one = C5.SUBJ NEG.COP.EXT = NEG
'One, there is not.' (PS_IY_Ror_2013: 071)

2.7.3 Geminate consonants in noun class 6

For class 6, geminate consonants are the result of the /t/ of the noun class 6 prefix fully assimilating to the place and manner of certain stem-initial consonants. /t/ only assimilates to alveolar and alveopalatal consonants in this environment, as illustrated in Table 15. Column one gives the illustrated sequence of consonants; column two gives the phonetic pronunciation of the class 6 noun form; column three gives the morphological form; and column four gives the gloss. The final two columns of Table 15 include preliminary duration measurements (in seconds) from one speaker based on field recordings. The column labelled "Duration (SS) Plural [Cː]" contains a measurement in seconds of the relevant lengthened consonant [Cː] from a recording of the noun class 6 form. The column labelled "Duration (SS) Singular [C]" contains a measurement in seconds of the relevant consonant [C] from a recording of the singular form. The final column contains a percentage calculated from the duration of [Cː] divided by the duration of [C]. In each case, the lengthened consonant is at least 150% longer that the non-lengthened counterpart. In the case of [tː] and [dː], the closure of the lengthened consonant is more than twice as long as the corresponding consonant [d].

When the initial consonant of the stem is an alveolar nasal /n/, the class 6 prefix and the stem initial /n/ are realized phonetically as [nː].

Table 15: Geminate consonants in noun class 6 citation forms

Sequence	Phonetic Form	Morphological Form	Gloss	Duration (SS) Plural [C:]	Duration (SS) Singular [C] [12]	[C:]/[C] = %
/t/ + /t/	[ɔ̄tːɔ́ʔ]	ɔ̄t-tɔ́ʔ	‘C6-ears’	0.23041	0.11433	202%
/t/ + /d/	[ɔ̄dːɛ́ʔ]	ɔ̄t-dɛ́ʔ	‘C6-breasts’	0.19832	0.06976	284%
/t/ + /s/	[ɔ̄sːɛ̄p]	ɔ̄t-sɛ̄p	‘C6-songs’	0.23465	0.14141	166%
/t/ + /sw/	[ɔ̄sːwáʔ]	ɔ̄t-swàʔ	‘C6-noses’	0.22360	0.12728	176%
/t/ + /z/	[ɔ̄zːúp]	ɔ̄t-zúp	‘C6-forests’	0.22404	0.09638	232%
/t/ + /ʃ/	[ɔ̄ʃːār]	ɔ̄t-ʃār	‘C6-bones’	0.23586	0.12827	184%
/t/ + /t͡ʃ/	[ɔ̄t͡ʃːān]	ɔ̄t-tʃān	‘C6-feathers’	0.24936	0.16317	153%
/t/ + /d͡ʒ/	[ɔd͡ʒːɔ́r]	ɔ̄t-dʒɔ́r	‘C6-cudgels’	0.21661	0.11822	183%
/t/ + /d͡ʒw/	[ɔ̄d͡ʒːwɔ́n]	ɔ̄t-dʒwɔ̂n	‘C6-knees’	0.20326	0.13050	156%
/t/ + /n/	[ɔ̄nːúʔ]	ɔ̄t-núʔ	‘C6-mouths’	0.204073	0.089318	228%
/t/ + /n/	[ɔ̄nːát]	ɔ̄t-nát	‘C6-sores’	0.185440	0.095136	195%
/t/ + /n/	[ɔ̄nːɔ̀m]	ɔ̄t-nɔ̀m	‘C6-things’	0.185775	0.082705	225%

2.7.4 Geminate consonants in noun class 6B

For noun class 6B, a geminate [mː] results from the /m/ of the noun class 6B prefix combining with an initial /m/ consonant of the stem, illustrated in Table 16. Class 6B is often used for mass and non-count nouns so there is no way to draw a comparison

[12] The corresponding singular forms are as follows: [ū.tɔ́ʔ] *ū-tɔ́h* ‘C3-ear’, [ɔ̄r.dɛ́ʔ] *ɔ̄r-dɛ́h* ‘C5-breast’, [ū-sɛ̄p] *ū-sɛ̄p* ‘C3-song’, [ɔ̄r.swàh] *ɔ̄r-swàh* ‘C5-nose’, [ɔ̄r.zúp] *ɔ̄r-zúp* ‘C5-forest’, [ū.ʃār] *ū-ʃār* ‘C7-bone’, [ū.t͡ʃān] *ū-tʃān* ‘C7-feather’, [ɔ̄r.d͡ʒɔ́r] *ɔ̄r-dʒɔ́r* ‘C5-cudgel’, and [ɔ̄r.d͡ʒwɔ́n] *ɔ̄r-dʒwɔ́n* ‘C5-knee’.

between singular and plural forms. Instead, the column "Duration (SS) [m]" contains a measurement of the initial [m] in [ū.mús] *ū-mús* 'C7-cat', uttered by the same speaker.

Table 16: Geminate [mː] in noun class 6B

Sequence	Phonetic Form	Morphological Form	Gloss	Duration (SS) [mː]	Duration (SS) [m]	[C:]/[C] = %
/m/ + /m/	[ɔ̄mːɛ́h]	ɔ̄m-mɛ́h	'C6B-milk'	0.257700	0.112540	229%
/m/ + /mj/	[ɔ̄mːjāh]	ɔ̄m-mjāh	'C6B-wind'	0.173311	0.112540	154%
/m/ + /m/	[rīmːɔ̀]	rīm-mɔ̀	'black-AG6B'	0.161260	0.112540	143%

Long [mː] is also found at other morpheme boundaries involving noun class 6B morphology. In (42), the adjective *rīm* 'black' takes the noun class 6B agreement suffix *-mɔ̀* '-AG6B'. As a result of the /m + m/, the adjective is pronounced as [rīmːɔ].

(42) [bɔ́ːm rīmːɔ̀]
bɔ́-ɔ́m rīm-mɔ̀
water-C6B black-AG6B
'dark color'

We can tell that the lengthened [mː] is not lexically part of the adjective root *rīm* 'black' because in (43) the adjective takes the class 2 agreement suffix *-ɛ̀* '-AG2' and there is no length.

(43) [fáʔrīmɛ̀]
fá rīm-ɛ̀
snake black-AG2
'spitting cobra'

Other instances of [mː] are found at morpheme boundaries when the sequences /m + m/ occur.

2.8 Orthography and transcription conventions

Although the inventory of sounds discussed in this chapter has been based on only the Ụt-Ma'Ror variety, data from multiple varieties of Ụt-Ma'in are included throughout the remainder of this study. The occurrence of variety specific pronunciations is maintained, but the symbols used have all been presented in this chapter.

In the data transcriptions presented in the remainder of this study, I use a phonemic representation of the sounds of Ụt-Ma'in, with perhaps one exception. I write the syllable-final glottal consonant only when it is prominent in particular utterences. The occurrence of a glottal consonant provides some information about morphemes that do not cliticize in particular environments.

Long vowel syllable nuclei are indicated by the vowel symbol followed by the length symbol, e.g., <a:>. Note that length is represented in Table 17 below as part of the vowel phonemes for comparison with their orthographic representation. As stated in §2.4 I make no determination in this study as to whether the vowel length contrastive at the phoneme level or if the contrast is better understood as a syllable contrast.

Table 17 summarizes the phonemes presented in §2.4 through §2.6 and aligns each phoneme with the practical orthographic symbol, as used by speakers who are involved in ongoing literature development and who are actively supportive of language development in the community. The practical orthography is used in the presentation of the sample texts in the appendices.

Table 17: Ụt-Ma'in Phones and Ụt-Ma'in orthographic symbols

Phoneme(s) as written in the body of ths work	Orthographic symbol, used in Appendix texts	Phoneme(s) as written in the body of this work	Orthographic symbol, used in Appendix texts
/a/	**a**	/n/	**n**
/aː/	**aa**	/o/	**o**
/b/	**b**	/oː/	**oo**
/tʃ/	**c**	/ɔ/	**ọ**
/d/	**d**	/ɔː/	**ọọ**
/e/	**e**	/p/	**p**
/eː/	**ee**	/r/	**r**
/ɛ/	**ẹ**	/s/	**s**
/ɛː/	**ẹẹ**	/t/	**t**
/f/	**f**	/u/	**u**
/g/	**g**	/uː/	**uu**
/h/	**h**	/ə/	**ụ**
/i/	**i**	/əː/	**ụụ**
/iː/	**ii**	/v/	**v**
/dʒ/	**j**	/w/	**w**
/k/	**k**	/j/	**y**
/l/	**l**	/z/	**z**
/m	**m**	/ʔ/	**'**

CHAPTER III

WORDS AND PHRASES

Before looking at predicative uses of nominals, I will first describe what I mean by noun and Nominal. This chapter takes into consideration noun word forms, noun phrase (NP) structure and agreement phenomena, and how these nominal constructions are distinct from other word categories, notably verbs and adjectives. For completeness and because few descriptions of Ụt-Ma'in exist, this chapter also presents other word categories including: Numerals/Quantifiers, Adverbs, Prepositions, Pronouns, Demonstratives, and clause level Particles.

The morphosyntactic behaviors of each word category are described below. Regarding the three main word categories, the typologically unmarked function of nouns in Ụt-Ma'in is to reference an object; adjectives primarily modify with a property concept; verbs predicate an action (Croft 2001:88ff). Figure 9 models the three major Ụt-Ma'in word categories arising due to the intersections of semantics and function. In order to use a particular word category for a non-prototypical function, additional morphology (e.g. derivation) or additional syntax (e.g. phrase structure) must be used. Figure 10 adds some of the available morphosyntactic means used to fill in the grid of semantics and function.

For example, in order to use a noun in a modification function, the noun will occur within a Prepositional Phrase (PP) or an Associative Phrase (AssocP; see Chapter IV). A noun or adjective may occur as the main predicate within a Copula Construction. A verb, for example, may have a modification function within a Relative Clause when an

entire clause is used to modify a noun (see Chapter XI). Central to the thesis of this work, note that verbs can occur with additional morphology to function as Action Nominals, and in turn these Action Nominals can occur in various NP constructions typical of all nouns.

	REFERENCE FUNCTION	MODIFICATION FUNCTION	PREDICATION FUNCTION
OBJECT CONCEPT	**NOUNS**		
PROPERTY CONCEPT		**ADJECTIVES**	
ACTION CONCEPT			**VERBS**

Figure 9: Ụt-Ma'in major word categories
(based on the part-of-speech theory of Croft 2001:88)

	REFERENCE FUNCTION	MODIFICATION FUNCTION	PREDICATION FUNCTION
OBJECT CONCEPT	**NOUNS**	*PPs, AssocPs*	*Copula Cnxs*
PROPERTY CONCEPT	*Nominals*	**ADJECTIVES**	*Copula Cnxs*
ACTION CONCEPT	*Nominals*	*AssocPs, Relative Clauses*	**VERBS**

Figure 10: Ụt-Ma'in major word categories and other construction (Cxn) types

In Ụt-Ma'in, almost every word is multi-morphemic; this is briefly discussed here, but further detail is provided in subsequent sections. Each major word category in Ụt-Ma'in has certain categories of morphology characteristically associated to it; this category-default morphosyntactic coding is marked by dotted-rectangular lines in Figure 11. Nouns in Ụt-Ma'in are lexically assigned to a noun class and most noun classes are evident in overt morphology on the noun word; noun class designation also indicates number (§3.1). In fact, all referring expressions in Ụt-Ma'in are assigned a noun class. Adjectives in Ụt-Ma'in must agree with the noun class of a referent noun (NOUN CLASS AG); this is the simplest morphological form they can have. The referent noun may be within the same phrase or the same clause, or the referent is generally recoverable from the discourse (§3.1.5). Verbs in Ụt-Ma'in may be marked for TENSE by means of a suffix. In some cases and in some clauses, pronominal subjects may cliticize to the verb word, but this is not required argument indexation or agreement on the verb (§3.3).

The solid boxes in Figure 11 represent the use of additional morphosyntactic coding beyond the category-default morphology of each major word category, by means of which parts of speech can fulfill non-charcteristic functions. These additional morphosyntactic devices include word formation affixes and phrase syntax.

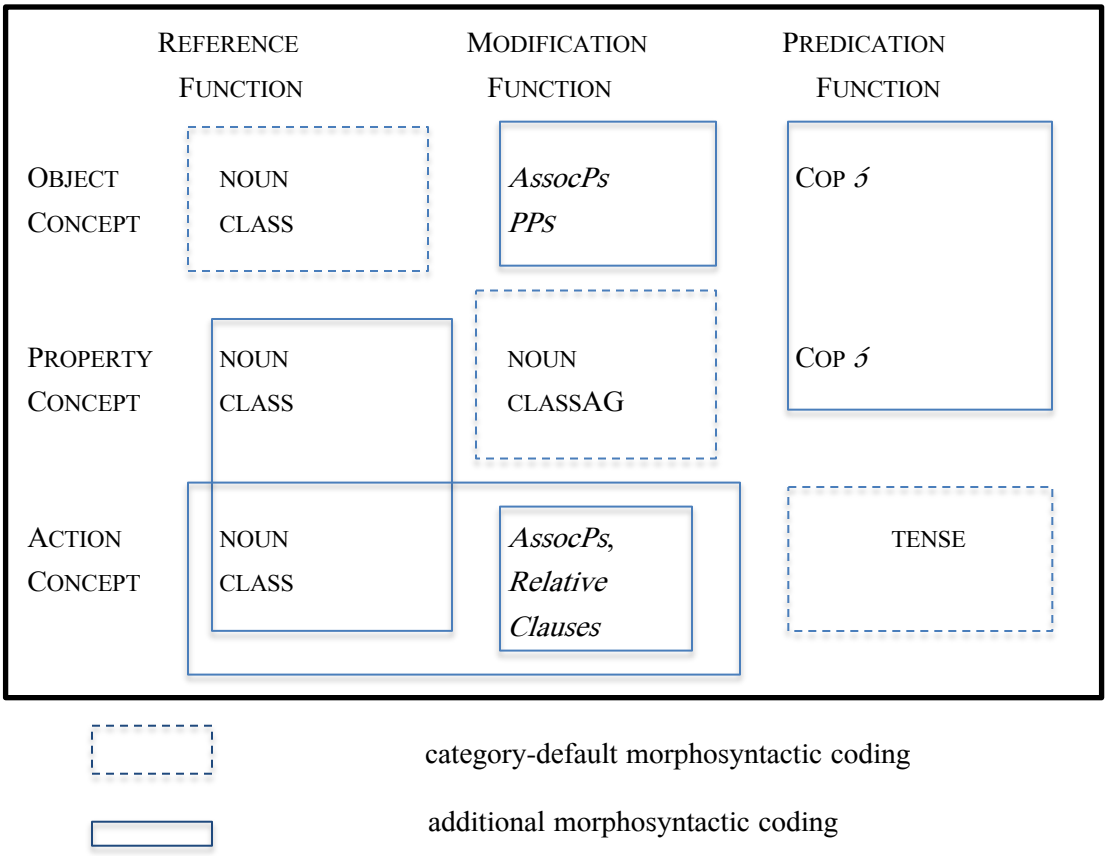

Figure 11: Morphosyntactic coding of Ụt-Ma'in word categories in various functions

In the remaining sections of this chapter, I describe the morphosyntactic behavior of the various word categories beginning with the major categories noun (§3.1), adjective (§3.2) and verb (§3.3). Section 3.4 describes other word classes which share some structural properties with nouns including numerals and quantifiers, but which have a different distribution in syntax. Section 3.5 describes the morphosyntactic properties of pronouns, definite and indefinite markers, and demonstratives. All three are directly tied to the expression of noun class for the referent noun. The final sections discuss prepositions, interjections, ideophones and clause-level particles.

3.1 Nouns

Ụt-Ma'in noun words vary in shape based on the particular noun phrase (hereafter NP) construction in which they occur. Each lexical noun is assigned to a particular class. After a brief introduction to the noun class system of Ụt-Ma'in, I survey the morphosyntactic properties of nouns in various phrase types or constructional environments. This section is not meant as an exhaustive presentation of NP morphosyntax. I refer the reader to Smith (2007: Chapters 2 and 3) for more thorough treatment of Ụt-Ma'in noun class morphosyntax and morphophonemic realizations.

3.1.1 Overview of the noun class system of Ụt-Ma'in

Ụt-Ma'in is a noun class language in which elements within a NP show concord or agreement with the head noun (Gerhardt 1989; Smith 2007); I exclusively use the term "agreement" for such concord. The Ụt-Ma'in noun class system has fourteen distinct morphosyntactic patterns (Smith 2007: 26), presented in Table 18. The various forms in each row of Table 18 indicate the particular forms, found in different morphosyntactic contexts, that correspond to each class. The class labels (expressed by numerals), used when glossing examples throughout this paper, follow Smith (2007) and Paterson (2012).[13]

[13] Smith (2007) counts thirteen distinct patterns. Blench (2018) adds the fourteenth pattern, 2B, that was only mentioned as an aside in Smith (2007). Except for class 6 and 6B, which are not related, the B classes share agreement with the other class of that number (e.g., class 3 and 3B), but differ in noun prefix or suffix.

Table 18: Noun class morphological system (Smith 2007: 100; Blench 2018:76)

Class Label	Number	Noun Prefix	Noun Suffix	Agreement Prefix	Agreement Suffix	Pronoun
1	SG	*u-*	*-Ø*	*u-/w-/ Ø-*	*-wa*	*wa*
1B	SG	*Ø-*	*-Ø*	*u-/w-/ Ø-*	*-wa*	*wa*
2	PL	*Ø-*	*-Ø*	*Ø-*	*-ɛ*	*ɛ*
2B	PL	*Ø-*	*(-nɛ)*	*Ø-*	*-ɛ*	*ɛ*
3	SG	*u-*	*-u*	*u-/ Ø-*	*-ɔ*	*ɔ*
3B	SG	*Ø-*	*-Ø*	*u-/Ø-*	*-ɔ*	*ɔ*
4	PL	*s-*	*-s*	*s-*	*-sɛ*	*sɛ*
5	SG	*r-*	*-d*	*d-*	*-dɛ*	*dɛ*
6	PL	*t-*	*-t*	*t-*	*-tɔ*	*tɔ*
6B	MASS/DIM PL	*m-*	*-m*	*m-*	*-mɔ*	*mɔ*
7	SG	*u-*	*-j*	*j-*	*-ja*	*ja*
7B	SG	*Ø-*	*-j*	*j-*	*-ja*	*ja*
DIM	SG	*i-*	*-i*	*i-*	*-i*	*i*
AUG	PL	*a-*	*-a*	*a-*	*-a*	*a*

The class labels also follow the Bantu numbering tradition in that odd numbers indicate singular forms and even numbers indicate plurals (cf. discussion of the Bleek-Meinhof numbering system in Welmers 1973: 163). A null Ø symbol indicates no overt morphological marking. When the null Ø symbol occurs in examples, it is glossed with the appropriate class label for that particular lexeme based on agreement phenomena. Tone is omitted Table 18 because tone varies based on the particular grammatical construction in which the affixes occur.

I use the term NOUN CLASS to refer to the pattern seen across a whole row in Table 6. That is, the combined pattern of the morphological class used on a particular noun (Corbett's (1999:150) controller gender) plus the set of class agreeing markers that occur on other clause constituents (Corbett's (1991:150) target gender). I use the term

noun class PAIRINGS to refer to sets of two noun classes that occur with the same noun root, where one class prefix marks the singular and a second distinct class prefix marks the plural. These pairings provide insight into the semantic characteristics that unify groups of nouns in Ụt-Ma'in.

3.1.2 Semantics of noun classes in Ụt-Ma'in

The assignment of a noun to a noun class is not completely arbitrary, as there is evidence of active semantic assignment of loan words (Paterson 2012:232). Singular and plural noun classes pair together for particular lexemes, and it is precisely this organization that shows the greatest semantic cohesion (e.g. the pair of classes 1 ‘singular’ and 2 ‘plural’ is used for humans). Semantic classification tendencies occur for pairings of nouns designating human, animate, inanimate, size and shape concepts. Table 19 lists the semantic generalizations for each singular/plural pairing indicated by SMALL CAPS in the Semantics column. In some cases, the few attested examples in a particular pairing are represented by glosses rather than a generalization or characteristic. For example, a member of the pairing 5/6 has high likelihood of being INANIMATE and ROUND, but the pairing 5/2 contains only one item ‘puff adder’. Individual lexeme examples are in ‘single quotes’ in the Semantics column.

Table 19: Semantic tendencies in Ụt-Ma'in noun classes and noun class pairings

Noun Class Or Class Pairing	Noun Affixes	Object Pronouns	Semantics		# in 2007 wordlist	# Loans in 2007 wordlist
1B/2	*wa-/a-*	*wá/é*	HUMAN	AGENT NOMINALIZATIONS	29	-
1/2B	*ū-/Ø-*	*wá/é*		'barren woman', 'fool'	2	-
1/6	*ū-/t-*	*wá/tɔ́*		'grandchild'	-	1
1B/6	*Ø-/t-*	*wá/tɔ́*		HUMANS	6	-
3/2	*ū-/Ø-*	*ɔ́/é*		'giant'	1	-
7B/2B	*Ø-/Ø-*	*já/é*		HUMANS	4	-
7/2B	*ū-/-nɛ*	*já/é*		'prostitute', 'witch'	2	-
5/2	*r-/ Ø-*	*dé/ é*	ANIMATE	'puff adder'	1	-
7/2	*ū-/Ø-*	*já/é*		ANIMALS, FRUITS, CROPS	77	6
3/6	*ū-/t-*	*ɔ́/tɔ́*	INANIMATE, SHAPE	inanimate, kinship terms	61	3
3B/6	*Ø-/t-*	*ɔ́/tɔ́*		'entrance hut'/'fish trap'	2	-
3/4	*ū-/s-*	*ɔ́/sé*		INANIMATE and/or LONG	10	2
3B/4	*Ø-/s-*	*ɔ́/sé*		'heart'/'dream'/'island'	3	-
5/6	*r-/ t-*	*dé/tɔ́*		INANIMATE and/or ROUND	139	8
5/4	*r-/s-*	*dé/sé*		'thatch' / 'arrow'	2	-
7/4	*ū-/s-*	*já/sé*		NON-FOOD PLANTS and/or LONG	72	11
7/6	*ū-/t-*	*já/tɔ́*		'feather'/'iron'/'baby sling'	4	4
3/AUG	*ū-/ā-*	*ɔ́/á*	SIZE	AUGMENTATIVE	4	-
DIM/4	*ī-/s-*	*í/sé*		'argument'	1	-
DIM/6M	*ī-/m-*	*í/mɔ́*		DIMINUTIVE	6	-
2	*Ø-*	*é*	NON-COUNT, MASS	'beer', 'money', 'beach'	3	-
3	*ū-*	*ɔ́*		SEASONS,DIRECTIONS, PROPERTIES	19	2
4	*s-*	*sé*		SPEECH ACTS	19	-
5	*r-*	*dé*		EMOTIONS,BOUNDARIES,AGE	25	1
6	*t-*	*tɔ́*		NON-COUNT NOUNS	40	-
6B	*m-*	*mɔ́*		MASS NOUNS,LIQUIDS,POWDERS	78	-
7	*ū-*	*já*		'eczema'	1	-

The distribution of noun classes and noun class pairings in Table 19 is based on elicited single root items; 462 single/plural pairings and 185 single class stems are represented in Table 19.[14] The final two columns indicate the number of pairings that occurred in Paterson (2012), based on data from Smith (2007); known loan words have a separate count. Some nouns (especially mass and non-count nouns) occur in an unpaired class, that is, there is no apparent singular/plural distinction.

Noun class assignment can be manipulated by speakers to adjust the meaning of a particular referring form. For example in (44), the root *tāʔār*, presumably has a meaning like 'rock-substance'; the root may be used with various noun classes to mean 'rock', 'pebble', 'gravel', 'boulder', or 'foundation stones' (Paterson 2012: 231).

(44)	ɵr-tāʔār	'rock'	CLASS 5
	ɵt-tāʔār	'rocks'	CLASS 6
	ī-tāːr	'pebble'	CLASS DIM
	ɵm-tāʔār	'gravel, pebbles'	CLASS 6B
	ū-tāːr	'boulder'	CLASS 3
	ā-tāːr	'boulders'	CLASS AUG
	ɵs-tāʔār	'foundation stones'	CLASS 4

[14] The data for the study of noun class semantics were collected using the SIL Comparative African Wordlist (1700 words; Snider and Roberts 2004). Many items elicited from the wordlist were multi-morphemic and therefore showed multiple noun class marking. These forms are included in the appendix of Smith (2007) but are not counted here.

3.1.3 Structure of the Noun Phrase (NP)

A minimal NP contains just a noun root and a noun class prefix. Modified NPs vary in possible structure, as different modification structures require the modified N to either carry a class prefix or a class suffix (uniformly abbreviated as a small capital C).

(45) C-N

A NP may contain definiteness markers (INDEF and DEF)[15], demonstratives (DEM), associative phrases (ASSOCP), adjectives (ADJ), possessive Pronouns (NP_{POSS}), and relative clauses (RELCL).[16] Noun class agreement marking on modifiers is indicated by the abbreviation AG. Figure 12 shows the distribution of class markers on N and modifiers of N in the various structures; the final column contains examples of each modifier type with the class 4 noun *ōs-fâr* 'C4-shea.tree'. Examples of each modifier with a noun from each noun class are available in Smith (2007: Chapter 5).

[15] The definite marker is identical to the object/focus pronoun. There is no identifiable root to the definite marker; the period in AG.DEF indicates that there is no way to separate a noun class agreement morpheme from DEF.

[16] When used as modifiers, quantifiers and numerals have nominal word structure with a noun class prefix, like all other nouns. However, the noun class used must be the same as the head noun being modified (Cf. .

Modifier Type	Pre-N Modifier	N	PostN Modifier	Example NP
none		C-N		ə̄s-fàr 'shea trees'
Quantifier/Numeral		C-N	AG-NP_{QUANT}	ə̄s-fàr ə̄s-tán 'five shea trees'
Indefinite Marker	AG-INDEF	N	AG	sɛ̀kɛ̄n fàr sɛ̄ 'certain shea trees'
Associative Phrase		N	AG-ASSOCP	fàr s-ə̀ = m-wɔ́r 'long/tall shea trees'
Adjective		N-C	ADJ-AG	fàr-ə̀s ját-sɛ̀ 'big shea trees'
Possessive Pronoun		N-C	NP_{POSS}	fàr-ə̀s = ró 'your shea trees'
Definite Marker		N-C	AG.DEF	fàr-ə̀s sɛ́ 'the shea trees'
Demonstrative		N-C	AG-DEM	fàr-ə̀s s-ín-sɛ̄ 'these shea trees'
Relative Clause		N	AG-RELCL	fàr s = ə̀ hɛ̄ːg 'shea trees that fell'

Figure 12: Prefixal and suffixal class forms (C/AG) in NPs

Figure 13 summarizes the order of elements within possible NP structures, where all modifiers are optional as indicated by parentheses, and are shown in paradigmatic columns. For example, a particular NP may have either a RELCL or an ASSOCP, but not both.

<table>
<tr><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
<tr><td rowspan="4">(INDEF)*</td><td rowspan="4">N</td><td colspan="4">(RELCL)***</td><td rowspan="4">(INDEF)*</td></tr>
<tr><td rowspan="3">(ASSOCP)</td><td rowspan="3">(ADJ)</td><td rowspan="3">(NP_{QUANT})</td><td>(NP_{POSS})</td></tr>
<tr><td>(DEM)**</td></tr>
<tr><td>(DEF)**</td></tr>
</table>

*INDEFINITE marking is a two-part morpheme, i.e. a circum-morph.

**DEFINITE marking and DEMONSTRATIVES do not co-occur with INDEFINITE marking.

***Relative Clauses co-occur with nothing except INDEFINITE marking.

Figure 13: Order of elements within the NP

3.1.3.1 Noun class prefixes on nouns in citation form

Ụt-Ma'in noun class prefixes have either the shape of a single Vowel (V) or single Consonant (C) as presented above in Table 18. In citation form, consonantal prefixes occur with an epenthetic central vowel [ə] to form an initial VC syllable (46). In citation forms, both V and VC forms of the noun class prefixes bear a mid-tone.

(46) a. ə̄r-kɔ́ːr
C5-basket
'basket'

b. ə̄t-kɔ́ːr
C6-basket
'baskets'

c. ū-nú
C3-mouth
'mouth'

d. ə̄t-nú
C6-mouth
'mouths'

Ongoing phonetic research (Colleen Starwalt, p.c.) suggests that there is evidence of geminate consonants in the prefixed noun class marker, e.g., (46b is phonetically [ɘ̄kːɔ́ːr] and (46d) is phonetically [ɘ̄nːú]. See also the discussion in Chapter II §2.7.[17]

3.1.3.2 When nouns occur with noun class prefixes

Nouns take a noun class prefix in a number of constructions including: citation form (46); when a single noun is modified by a numeral (48) and (50); when an unmodified NP is the object of a verb (47) or is the second NP in a copular construction (Chapter VI); when a noun is a modifier of another noun in an AssocP (49); and when a noun is the object of prepositional phrase (50) or postpositional phrase (51).

(47) wā ūms **ɘ̄r-kɔ́ːr**
C1.SUBJ carry C5-basket AG5-one
'he carried (away) a basket' (PS_MP 2013: 012)

V C-N AG-Num
(48) sé: wā ūmùs **ɘ̄r-kɔ́ːr** ɘ̄r-gàn
then C1.SUBJ carry C5-basket AG5-one
'then he carried (away) one basket' (PS_MG 2013: 017-018)

AG-Assoc = C-N
(49) ɔ́ = mɛ́n t-ɔ̀ = r-**kɔ́ːr**
LOC = stomach AG6-ASSOC = C5-basket
in the middle of the basket' lit: 'in the stomachs of the basket' (PS_IY 2013: 091)

[17] This supersedes McGill's (2012:39) suggestion that Northwest Kainji languages might only have root-medial long consonants. In Smith (2007: 28-29), I analyzed these long consonants in Ụt-Ma'in as sequences of consonants at morpheme boundaries. To date, my own data has shown that all long consonants are at morpheme boundaries or where there is a candidate for a historic morpheme boundary. These geminate consonants warrant further future investigation.

				PP = C-N	AG-NUM
(50)	wā	wɔ̄	tɔ́	ɔ́ = **t-kɔ́ːr**	ɔ̄t-jɔ̄ːr
	C1.SUBJ	put	C6.OBJ	LOC = C6-basket	AG6-two

'he put them in two baskets' (PS_MG 2013: 012)

			V	C-N = POSTP
(51)	únwā	jít = wɔ̀	ārk = ɛ́	**ɔ̄r-kɔ́ːr** = nɛ̀
	C1.DEM	far = C1.REL	leave = FOC	C5-basket = with

'...that other one who left with the basket' (PS_IY 2013: 025)

Notice that the shape of a single noun class prefix (whether C5 singular or C6 plural) varies in these data for phonological shape between VC as in (46), (48), and (51) , versus just C, as in (49) and (50).

3.1.3.3 When nouns occur with noun class suffixes

Nouns occur with a noun class suffix in several NP constructions including: when a noun is modified by an adjective (52), definite marker (53), or possessive pronoun (54); when a noun is modified by a relative clause or a modified NP that includes an ASSOCP (52); when an unmodified noun is the S/A of a clause (section Chapter V §5.3).

	N-C	A-AG			
(52)	**nɛ̄tá-ù**	rɛ̀k-jà	wá	ɔ́	ū-rɛ̄
	woman-C7	small-AG.C7	C1.FOC	COP	C3-eat

'the small woman, she is eating' (LW07 2006)

		N = AG-ASSOC	N-C = DEF.AG
(53)	wā = há-n̄ = ɔ́	bé = d-ə̀	**kɔ́ːr-ɔ́t** = tɔ́ː
	C1.SUBJ = go-DIST = LOC	place = AG5-ASSOC	basket-C6 = DEF.AG6

'he came to the place of those baskets' (PS_IY 2013: 025)

			V	N-C = NP_{POSS}
(54)	a. wā = zə̄	ū-rə̄	hóg	**ʔɔ́n-ə̄r** = rí
	C1.SUBJ = say	C3-creator.god	hear	pitifulness-C5 = 1SG/POSS
	'she said to God, "Hear my pitifulness, '			

			N-C = NP_{POSS}		
b. ə̄m	nák	ə̄zə̄	**nú-ú** = rí	ɔ́,
1SG.SUBJ	know.PST	that	mouth-C3 = 1SG.POSS	DEF.AG3
' "I know it is my fault" '				
lit: 'she said to God "Hear my pity, I know that this my mouth" '				
(SR_SJ 2013: 012)				

		N-C	
(55)	ū = hɛ́ʔɛ́	**mɔ́ngɔ̀r-tə̀**	ʔàzgəsːə̀tɛ̀
	C7.SUBJ = fall	mango-C6	roll.out.REP.PRF
	'he fell; the mangoes poured out everywhere' (PS_Ror_2013)		

Relative to determining prefixal versus suffixal distribution of the class marker, internal NP structure supersedes argument marking function. For example, an object NP will have a noun class prefix (e.g., *ə̄r-kɔ́ːr* 'C5-basket'in (48) and *ū-rə̄* 'C3-god' in (54)), unless an object NP contains a modifier that triggers a noun class suffix (e.g., *ʔɔ́n-ə̄r = rí* 'pitifulness-C5 = 1SG.POSS' 'my pitifulness'?). This is discussed fully in Chapter V §5.3 with regard to resulting argument alignment patterns; further discussion is also in Chapter XI.

3.1.3.4 When nouns occur with no noun class affix

There are at least two situations in which a noun will not have a noun class affix. First, certain noun classes never have an overt marker for the noun word. Only the agreement patterns reveal the noun class for nominals of these classes (see Table 18).

	N-C	ADJ-AG			
(56)	**rwág-Ø**	ját-è	ɛ́	ɔ́	ū-rɛ̄
	elephant-C2	big-C2	C2.FOC	COP	C3-eat

'the big elephants, they are eating' (LW07 2006)

Second, when a noun is modified by an ASSOCP, there are at least two patterns of cliticization that result in the separation of noun class marking from a noun word. The ASSOCP bears the only indication of the noun class of the head noun within the NP. In many cases the head noun occurs with no overt noun class morphology as in (57) where the associative marker, AG-ASSOC, cliticizes to the modifier noun word i.e. the C-N structure *u-tətərsɛ̀* in (57), leaving the head noun *kɔ́ːr* bare.

			[N	[**AG-ASSOC** = C-N]$_{\text{ASSOCP}}$] $_{\text{NP}}$
(57)	wā = vástɛ̀	m̄-ʃɔ́ːs	[**kɔ́ːr**	[**d-** ` = u-tətərsɛ̀]]
	C1.SUBJ = end	C5-filling	basket	C5-ASSOC = C3-third

'He finished filling the third basket.' (PS_IY 2013: 014)

However, example (58), shows that the ASSOCP and the noun class prefix of the modifier noun can also cliticize rightward onto the head noun, separating the noun class prefix *t-* 'C6' from the modifier noun.

			[N = [**AG-ASSOC** = C	N] $_{\text{ASSOCP}}$] $_{\text{NP}}$
(58)	músá	ɔ́ʔ-tɛ́	[kwàt = [**j-ə̀** = t	kwə̀m]]
	PN	COP-PFT	ring = C7-ASSOC = C6	wealth

'Musa has a valuable ring.' (lit: ring of wealth)' (MA_IY_2013: 006)

The ASSOCP is fully discussed in Chapter IV.

3.1.4 Negation of nouns

The nominal negator *zá* 'NEG' is used within NPs to negate something about the nominal concept, as in (59) through (62). It always attaches to the left edge of a noun or

Pronoun, preceding any noun class prefix. The marker may be related to the noun *ɔ̄m-zān* ‘emptiness’.

(59) zá = wà-kɔ̄n
NEG = C1-there
‘nobody ’ (lit: ‘no he/she there’; Ror, Smith 2007: 142)

(60) zá = ɔ̀-kɔ̄n
NEG = C3-there
‘nothing’ (lit: ‘no it there’; Ror, Smith 2007: 142)

(61) zá = t-tʃán
NEG = C6-feather
‘featherless’ (GF_IT_Juur_2007: 31)

(62) a. wá = t-níp
C1 = C6-truth
‘innocent person’ (lit: ‘person truth’)
(Ror, Smith 2007: 142)
b. wá = zá = t-níp
C1 = NEG = C6-truth
‘guilty person’ (lit: ‘person no truth’)

The form *zá* also serves as the negative copula (Chapter VI) and is used in two types of auxiliary constructions, described in Chapter VII §7.3.3. Although *zá* may be verbal in origin, synchronically *zá* functions as a nominal negator that creates an NP structure that can be modified by NP internal modifiers, for example by a relative clause as bracketed in (63).

(63)

[[NP] = REL					]$_{NP}$
[[zá = kó-wàn]$_{NP}$ = à	dɛ́	fág = d-ɔ̀ = mɛ́	“.....”	]$_{NP}$
NEG = every-C1 = C2.REL	FUT	call = AG5-ASSOC = 1SG.OBJ		

‘not everyone who will call me (“Lord, Lord”) ... ’ (MT_draft_2019: 7.21)

3.1.5 Derivational nominalization processes

There are at least two derivational processes that result in nouns (Smith 2007: 49-50). First, Agent Nominalization is created by prefixing *wá-* for singular and *á-* for plural to the citation form of a noun. These prefixes form nouns referencing an agent closely associated with the noun lexeme (e.g., *wásbɔ̀r* 'neighbor' from *wá* 'C1' + *s-bɔ̀r* 'C4-boundary'). Second, Action Nominals are formed by means of 5 noun class prefixes used with verb lexemes. The formation of these is further discussed in §3.2.3, their use in AssocPs is discussed in Chapter III, and their use as predicates is discussed in Chapters 6 and 7.

3.2 Adjectives

There are only eight known roots used as adjectives, presented in (64). These are considered bound roots; that is, they must occur with a noun class agreement suffix that agrees with the noun class of the modified nominal element (cf. *nɛ̄tá-ù rɛ̀k-jà* 'woman-C7 small-AG.C7' in (52)). If a particular referent is not recoverable, AG3 for singular or AG6 for plural are often used as a default class marking. Other property concept meanings can be expressed by nouns in an AssocP (Chapter IV). Within an NP, the order is noun followed by an adjective, as in (65) where the adjective *pò* 'new' occurs.

(64)				
	sɔ̀	'good'	pús	'white'
	jɔ̀	'bad'	rīm	'black'
	ját	'big'	ʤás	'red'
	rɛ̀k	'small'	pò	'new'

	N-C	ADJ-C
(65)	bɔ́-m	pò-mɔ̀
	water-C6B	new-AG6B
	‘new water’	

Adjectives may also be used as predicates following the copular verb *ɔ́*, as in (66); this is more thoroughly discussed in §6.2.2.2.

(66)	mɛ̄r	zɔ̄	bjá-ɔ̄r	rí	ɔ́	ját-dɛ̀…
	P.NAME	say	granary-C5	1SG.POSS	COP	big-AG5
	‘Mer said, “My granary is big…” ’					

3.3 Verbs

The label “verb” is used for the Ụt-Ma'in word category that possesses a certain set of morphosyntactic properties when it predicates an action. Verbs are most often clause medial, occurring between the Subject argument and any Object argument (see Chapter V for further discussion; and §5.3 for discussion of alignment patterns and Subject/Object properties). Verbs in basic clauses (Chapter V) are not marked for agreement with clausal arguments, but as described in §3.2.2 pronoun arguments may cliticize to verb words.

Verbs inflect for the category of tense (§3.2.1), by means of suffixes. The Bare Verb form has no overt morphology; past tense is marked by a *-ːg* ‘PST’ suffix; perfect tense is marked by the *-t(ɛ̀)* ‘PRF’ suffix. Additionally, a verb may be marked with iterative *-s* ‘ITR’ or causative *-st* ‘CAUS’. These derivational suffixes are reminiscent of proto-Niger-Congo “verbal extensions” (Voeltz 1977; Hyman 2007: 150). A distal marker *-ɔ̄n* ‘DIST’ and a focus marker *-ɛ́* ‘FOC’ may also occur at the end of the verb stem.

3.3.1. Verb suffixes

The verb word form is schematized in (67). The discussion below comments on co-occurrence restrictions, as not all optional morphemes may necessarily co-occur.

(67) V_{ROOT}-(ITR)-(PST)-(CAUS)-(DIST)-(PFT)-(FOC)

The minimal verb word is the Bare Verb form (§3.2.1.1). Otherwise, verbs are inflected for tense in Ụt-Ma'in by means of suffixes. The overt tense morphemes are paradigmatic in their meaning opposition, that is they never co-occur. However, they are not in the same position within the verb word. Table 20 shows the tense-aspect paradigm of the transitive verb *rɛ* 'eat'. An example of intransitive verb *ʧiz* 'descend/come down' is shown in Table 21.

Table 20:Tense-aspect paradigm of the verb 'eat'

VERB FUNCTION	VERB FORM	GLOSS
BARE VERB	rɛ̄	'eat'
PAST	rɛ́-ːg	'ate'
PAST + DISTAL	rɛ́-g-ɔ̄n	'ate far away/ate food from far away'
PERFECT	rí-ːt / ré-ːt	'has eaten'
ITERATIVE + PERFECT	rē-ːs-tɛ̀	'has eaten all'
PAST + CAUSATIVE	rɛ̀-gɔ̀-sːɛ̀	'has fed'

Table 21: Forms of the verb 'descend'

VERB FUNCTION	VERB FORM	GLOSS
BARE VERB	ʧíz	'descend'
BARE VERB + DISTAL	ʧɔ́z-ɔ̄n	'descend from far above'
PAST	ʧíz-ːg [ʧɔ́gɔ́z]	'descended'
PAST + DISTAL	ʧíz-ːg-ɔ̄n [ʧɔ́zgɔ̄n]	'descended from far above'
CAUSATIVE	ʧíz-st [ʧɔ̄st]	'lower something from above'
CAUSATIVE + DISTAL	ʧíz-st-ɔ̄n [ʧɔ̄stɔ̄n]	'lower something from far above'
CAUSATIVE + DISTAL + PERFECT	ʧíz-st-ɔ̄n-t(ɛ̀) [ʧɔ̄stɔ̄nt]	'has lowered something from far above'

As seen by the forms in Table 20 and Table 21, the CAUSATIVE precedes the PERFECT, but follows the PAST tense morpheme. I have not encountered the sequences CAUSATIVE + PAST or PERFECT + CAUSATIVE.

3.3.1.1 Bare verb form

The most basic form of the verb in Ụt-Ma'in is the Bare Verb form, made up of the verb root or derived stem with no overt tense marking (Paterson 2015). In the analysis presented here and in Paterson (2015), the Bare Verb may be said to have a null-marked discourse-dependent tense interpretation. The Bare Verb form has two major uses. First, the Bare Verb form is prevalent in narrative discourse with the function of presenting Main Event Line predications. In this context, it often has a past time reading or a perfective aspectual reading (Paterson 2015). However, in other uses, the Bare Verb can have a present or gnomic reading:

	S	V	O		
(68)	nɛ̄t-ə̄t = ín	rɛ̄	r-gá	ɔ́	t-tʃwā = nɛ̀
	people-C6 = 2PL.INCL.POSS	eat	C5-cooked.grain	and	C6-soup = with
	'Our (incl.) people eat cooked grain and soup.'				

3.3.1.2 Past and Perfect verb forms

The PAST suffix *-ːg* 'PST' on a CV root triggers lengthening or copying of the root vowel. For CVC roots with a voiceless final consonant, the final consonant of the root is deleted and the /g/ occurs as [k], see (70). For a handful of roots, metathesis moves the past morpheme before the final consonant of the stem, as in *ʧíz + ːg* [tʃə́gə́z] 'descended' from Table 21.

(69)	wā	ré-ːg	ə̄r-gá	gjə̄p.
	C1.SUBJ	eat-PST	C5-cooked.grain	yesterday
	'He ate cooked grain.'			

		[náp + *ːg*]	
(70)	ɔ̄m	nák	dà
	1SG.SUBJ	know.PST	NEG
	'I do not know.'		

The perfect suffix *-t(ɛ̀)* does not co-occur with the past tense suffix. It has the form *-ːt* with CV verb roots (71), and it has the form *-tɛ̀* with other verb roots (72).

(71)	wā	ré-ːt	nɔmə̀mrɛ̀
	C1.SUBJ	eat-PFT	food
	'she has eaten food' (TB_VA_Fer 2013: 032)		

(72)	wā	dɔ̄rg-tɛ̀	tāʔār-ɔ̄t	tɔ́ = t-bɛ̄ːt
	C1.SUBJ	pick.up-PFT	stone-C6	C6.DEF = AG6-all
	'he picked up all of the stones' (SJ_SS_2006: 10.20.009)			

3.3.1.3 Distal suffix

A Distal Marker *-ɔ̄n* commonly occurs on verbs to indicate that an action involved a "far away location". Typically it attaches to the tense-inflected verb stem.

(73)	wā	rɛ́-g-ɔ̄n	ɔ̄t-rwā
	C1.SUBJ	eat-PST-DIST	C6-yam
	'he ate yams from somewhere far away'/'he ate yams while he was far away from here' (LW10_SJ_Ror 2006: 007)		

With certain roots it has a ventive interpretation, as in (74) where the verb root *há* 'go' + DISTAL yields the meaning 'come'.

(74)	ɛ̄	há-ːg-ɔ̄n
	C2.SUBJ	go-PST-DIST
	'they came from far away.' (GF 2007: 01:00.621-01:01.227)	

3.3.1.4 Enclitics

Other meaningful bits occur on the ends of some verbs. These are analyzed as phrasal affixes or clitics, as they actually attach to the end of a clause. Subject Focus,[18] Clause Dependency, and Negation are all evident in (75). Compare the clause final NEG marker in (75a) with the clause final NEG marker in (75b). In (75a) clause dependency is indicated by lengthening of the final vowel and a high tone =[ː +́]; whereas in (75b) the negative particle is only =*dà*. Although =*dà* 'NEG' occurs directly adjacent to the verb in (75a), it is shown to be a clausal affix in (75b), where it attaches to the final *tɔ́msɔ́* 'also' rather than the verb *rɛ̀* 'eat'.

(75) a. wá rɛ̀ː=**dà**=[ː +́]=́ ābókí-ū=wā jā tɔ́mɔ́,
C1.FOC eat =NEG=FOC=DEP friend.-C7=C1.POSS C7 also

b. wā=rɛ̀ tɔ́msɔ́=**dà**
C1.SUBJ=eat also=NEG

'(When) he$_i$ did not eat, his$_i$ friend$_j$, he$_j$ also, he$_j$ also did not eat.'
(EH_VA_Fer 2013: 018-019)

I describe the use of Action Nominalizations as predicates within Auxiliary Constructions in Chapters VII and IX. A sample of some of these is included in Table 22 for comparison with the forms of the verb *rɛ* 'eat' in Table 20. These forms serve as predicates, but have morphological patterns that come historically from nominal structures, not the verbal patterns seen for verb words in this section.

[18] Subject focus, encliticizes to the verb or to the negative marker, is often used in conjunction with a focus pronoun. In (75) the pronoun *wá* 'C1.FOC' is identical in form to the class 1 object pronoun (§3.4).

Table 22: Additional forms of ‘eat’

FUNCTION	FORM	GLOSS
FUTURE	ə̄t-rɛ́	‘will eat’
FUTURE AUX CXN	dɛ́ = rɛ̄ = də	‘will eat’
FUTURE NEGATIVE AUX CXN	zá rɛ̄ = də... dá	‘will not eat’
PROGRESSIVE AUX CXN	ɔ́ = rɛ̄ = də	‘is eating’
PAST PROGRESSIVE AUX CXN	ɔ́gɔ́ = rɛ̄ = də	‘was eating’
tɛ̀kɔ́ AUX CXN	tɛ̀kɔ́ = rɛ̄ = də	‘is in the middle of eating’
mɛ̀ntə AUX CXN	ɔ́ = mɛ̀n = tə = t-rɛ̀	‘is eating’

All attested verb suffix co-occurrence sequences are schematized in Figure 14.

VERB FUNCTION	VERB FORM
BARE VERB	V
DISTAL	V-*ə̄n*
CAUSATIVE + DISTAL	V-*st-ə̄n*
PAST	V-*ːg*
PAST + DISTAL	V-*ːg-ə̄n*
PAST + CAUSATIVE	V-*ːg-st*
PERFECT	V-*t(ɛ̀)*
PERFECT + DISTAL	V-*t-ə̄n*
ITERATIVE + PERFECT	V-*s-t(ɛ̀)*
CAUSATIVE + DISTAL + PERFECT	*V-st-ə̄n-t(ɛ̀)*

Figure 14: Attested verb suffix co-occurrences in Ụt-Ma'in

3.2.2 (Nascent) argument indexation

If a full noun NP occurs as a subject or object there is no argument indexation on the verb. This is, for instance, the case in (76).

(76) kɔ̀-yɔ́-hɛ́ nó = yá kɔ́-ːt ɔ̄t-tɔ́
every-C7-there bird = C7.DEF put-PRF C6-ear
'Every bird there listened' (GF_IT_Jiir 2007: 018)

However, if a pronoun occurs as a subject or object, there are some instances of cliticization to the verb in fast speech, but these cliticized pronouns are easily separated from the verb in slow speech or repetition tasks. This is not agreement, as these cliticized pronouns are the only indication of the argument in the particular clause.

(77) ɛ̄ = há-ːg-ɔ̄n
C2.SUBJ = go-PST-DIST
'they (all the birds) came from far' (GF_IT_Jiir 2007: 018)

(78) nā = nʲɛ̄ = wá = tɔ́ː
INDEF.SUBJ = give = C1.OBJ = C6.OBJ
'He was given them.' (lit: 'They give him them (sweet potatoes').
(KB_IY_Ror_2013: 004)

3.2.3 Action Nominals

All verbs can have a nominalized form expressing an action.[19] In this section we survey the form and uses of Action Nominals.

[19] Agent nominalization is described in §2.1.5. To express locations or instruments related to some activity, a nominalized V may be used as the modifying NP in an Associative Construction in phrases meaning 'place of activity' (an example is included in (82)) or 'thing of activity'. See discussion of Associative Construction semantics in Chapter III.

Nominalization is accomplished by means of simply placing noun class markers on verb roots. Action Nominals have been found in five of the fourteen noun classes, as shown in Table 23. Of the 349 action nominals presented in Smith (2007), 241 are in class 6, with the remainder distributed among four other noun classes. (It is interesting to note that noun class markers that do not function as nominalizers are used either for human/animate categorization i.e., classes 1, 2 and 7, or for specific size categorization, i.e. classes DIM and AUG.)

Table 23: Noun class forms for Ụt-Ma'in Action Nominals (Smith 2007; Paterson 2012)

Class Label	Noun Affixes	Agreement Pronouns	# Nouns in 2007 wordlist	# Action Nominals in 2007 wordlist	Examples
3	*ū-*	*ɔ́*	19	**26**	*ū-swáːt* 'fasting'; *ū-hʲūw* 'stealing'
4	*ɔ̄s-*	*sɛ́*	19	**26**	*ɔ̄s-dòròg* 'thinking'; *ɔ̄s-fǎg* 'calling'
5	*ɔ̄r-*	*dɛ́*	25	**46**	*ɔ̄r-ʃátɛ̀* 'sliding'; *ɔ̄t-ɛ̀ŋk* 'losing'
6	*ɔ̄t-*	*tɔ́*	40	**241**	*ɔ̄t-mjɔ̀g* 'twisting'*; ɔ̄t-dɔ̀sʲ* picking up'
6M	*ɔ̄m-*	*mɔ́*	78	**25**	*ɔ̄m-hóg* 'hearing'; *ɔ̄m-zàp* 'shivering'

Ụt-Ma'in Action Nominals may be used as the arguments of finite verbs, as in (79) where *tɔ́m* 'to hoe'[20] occurs with a noun class 5 prefix referring to the activity of hoeing. This Action Nominal then serves as the object of the verb *nák* 'knew'.

(79) wɔ̄n nák ɔ̄r-tɔ́m sók
3SG.SUBJ know.PST C5-hoe(v.) well
'He knew hoeing well.'

[20] Although the English translation 'hoe' is ambiguous, the root *tɔ́m* indicates the action *hoe* (v). I have included (v.) in the English gloss of *ɔ̄r-tɔ́m* to help differentiate action from implement and to make clear that this is a nominalized verb.

In (80), the verb root *hé* 'fall' serves as the head of a modified NP, which is the object of the main verb *hjáng* 'saw'. Compare that to *hé* 'fall' in (81), where it serves as the main verb of the clause and is marked for past tense.

(80) wə̄n hján-g hé꞉ d-ə̀=t-túr
3SG.SUBJ see-PST fall AG5-ASSOC=C6-pot
'He/she saw the falling of the pots' (LW11 2006: 004)

(81) jā hɛ̄-=:g ɔ́-mɛ́ dù d-ə̀=m-bə̄
C7.SUBJ fall-PST LOC-inside well AG5-ASSOC=C6B-water
'it (a lizard) fell inside the well of water.'[21] (Primer 2009:73)

Within the ASSOCCXN, Action Nominals may be used as modifiers of other nouns. In (82) *ə̄r-ʃə̄ʔə̄t* 'C5-sitting' is used as the modifier of the head noun 'place'.

(82) bé t-ə̀=r ʃə̄ʔə̄t ɔ́ mɛ́n ū-tát
place AG6-ASSOC=C5 sit COP stomach C3-many
'Places for sitting are many within (the banquet hall).' (GL 2008: c14 v22)

Action Nominals may be used as adverbial modifiers to entire clauses. In (83) the nominalized verb *ə̄t-rɛ̀* 'C6-eating' gives added detail about the event of leaving, that is "they left while at the same time eating (fruit)." The interpretation here must be that the Action Nominal has the same subject as the main verb of the clause.

(83) ɛ̄ ārɔ́k ə̄t-rɛ̀
C2.SUBJ leave C6-eat
'They left eating' (IT_PS_Jiir_2013:48)

[21] The text from this primer is converted from the practical orthography to the IPA-based writing system used in this paper.

(84) sɛ wɔ̄n ha-ɔ̄n ɔ̄r-kɔ́ːr = nɛ̀
then 3SG.SUBJ go-DIST C5-basket = with
ɔ́ Ø hɔ́ ɔ̄r-kɔ̀brɔ̀ ɔ̄t-kɔ̀bɔ̀r ɔ̄t-kɔ̀bɔ̀r
LOC SAME.SUBJ go C5-picking C6-picking C6-picking
'then, one came with a basket and goes picking (fruit), picking, picking.'[22]
(PS_IJ_Kuur_2013:009)

In summary, a verb root is nominalized by means of one of five noun class prefixes, after which Action Nominals may serve as an argument of a main clause verb, modifier of another noun, or as an adverbial modifier of an entire clause.

3.4 Other word categories exhibiting noun-like structures and behaviors

3.4.1 Numerals

Numerals exhibit some noun-like structures and behaviors. In counting, numerals 1 to 10 have no affixation (Smith 2007: 69). However, when used within a NP or in reference to an already established NP, numerals show agreement with the noun class of the head noun or the noun referent, and display this agreement as a prefix. The agreement prefixes mimic the noun class prefixes themselves (e.g., *ɔ̄r-kɔ́ːr ɔ̄r-gàn* 'C5-basket AG5-one' in (85) versus *t-kɔ́ːr ɔ̄t-jɔ̄ːr* 'C6-basket AG6-two' in (86). Numerals above 10 combine two numeral roots by means of the high-tone conjunction *ɔ́* 'and'.

[22] It is not immediately clear why the class marker shifts from class 5 to class 6, or word form changes between a stem with CVCCV structure versus a stem with CVCVC structure; the form represented here is faithful to this particular speaker/text: the two forms are *ɔ̄r-kɔ̀brɔ̀* 'C5-picking' and *ɔ̄t-kɔ̀bɔ̀r* 'C6-picking'. The change in order of the final two segments of the two forms is deliberate and as produced by the speaker.

The numeral *ə̄r-ʃīk* 'C5-twenty' displays a noun class prefix and is pluralized in higher, more complex numerals by means of the plural class 6 prefix *ə̄t-*, as seen in (87).

	C-N	AG-NUM
(85) a.	ə̄r-kɔ́ːr	ə̄r-gàn
	C5-basket	AG5-one
	'one basket'	

	C-N	AG-NUM
(86) b.	ə̄t-kɔ́ːr	ə̄t-jə̄ːr
	C6-basket	AG6-two
	'two baskets'	

	C-NUM
(87) a.	ə̄r-ʃīk
	C5-twenty
	'twenty'

	C-N	AG-NUM
b.	ə̄t-ʃīk	ə̄t-jə̄ːr
	C6-twenty	AG5-two
	'fourty' (lit: 'two twenties')	

The lexeme *bɛ̄ːt* 'all' is considered a numeral because it follows the agreement pattern of numerals, by taking the agreement marker as a prefix in the form identical to the noun class prefix. In (88) *bɛ̄ːt* 'all' occurs with the prefix *ū-* 'C3-' in agreement with the referent *ū-bù* 'C3-house'. It is not that all of the water fell, rather the entire house fell.[23]

(88)	bɔ́-mə̀	gə̀p	ū-bù	hɛ́mə̀ssɛ̀	ū-bɛ̄ːt
	water-C6B.SUBJ	hit	C3-house	fall.PRF	C3u-whole
	'water hit the house having fallen completely' (Smith 2007: 74)				

[23] This appears to be an adverbial use of the quantifier *bɛ̄ːt* 'all' and it is translated accordingly as 'completely'; however, the agreement is clearly with the noun referent *ū-bù* 'C3-house'.

Contrast the class 3 marking of *ū-bɛ̄ːt* 'C3-whole' with the class 6 marking in (89) below, *t-bɛ̄ːt* 'C6-all'. The prefix on *bɛ̄ːt* 'all' always matches the noun class of the head noun.

(89) wā fāk nɛ̄t-ɔ̄t tɔ́ t-bɛ̄ːt
C1.SUBJ call.PST person-C6 C6.DEF C6-all
'He called all of the people.' (GK 2013)

3.4.2 Quantifiers

Quantifiers are distinct from numerals because they do not show agreement with the noun being modified; they are also distinct from regular nouns because they do not require the associative marker when they modify a noun. I present only two examples here, as I have only encountered two examples with this morphosyntactic pattern.

The quantifier *ū-tát* 'C3-many' has a constant noun class prefix from class 3. In (90), *ū-tát* is the predicate following the copular verb *ɔ́*. It does not agree with the noun class of the noun it is describing. If the quantifier were behaving as a numeral, one would expect it to occur with class 6 agreement after the copula (see §6.2.1.4).

(90) [dímt=t-ɔ̀ nó] ʔɔ́ [ū-tát] ɔ́=t-máʔrɔ̀r
name=C6-ASSOC bird COP C3-many LOC=C6-PN
'Names of birds are many in Ụt-Ma'Rọr (variety of Ụt-Ma'in)' (MM_2017:209)

(91) ɔ̄t-hɔ́ ū-tát
C6-days C3-many
'many days'

The other known quantifier with this behavior is *tʃāʃī* 'few', as shown in (92).

(92) ɔ̄t-hɔ́ tʃāʃī
C6-days few
'a few days'

I predict that there are more forms that behave this way, but further investigation is needed.

3.4.3 Nominal clausal modifiers

Certain nominals occur clause finally to add additional meaning to the entire clause. For example, nouns that indicate time may be used to specify the day of the event profiled by a particular clause as in (93).

(93) ɔ̄m dét:ɛ́ t-rɛ̄ u-sōt
1SG.SUBJ FUT.OBL C6-eat C3-tomorrow
'I must eat tomorrow'

These "adverbial" nominals follow NP morphosyntactic patterns and have inherent class designations. They may also occur clause initially. As an example of NP structure (94) begins with a definite NP *dà-ù=ɔ́* 'time-C3=C3.DEF' with the meaning 'now' (literally, 'that time'), where 'now' is establishing the a tense interpretation relative to the entire clause.

(94) dà-ù=ɔ̄ ràndí-m-ə̀ ɔ́ fə̀n-ū=rí
time-C3=C3.DEF spider.web-C6M-SUBJ COP road-C7=1SG.POSS
'Now, spider web is my road.' (FSC_IT_Juur_2007:20)

The noun *ū-dà* 'C3-time' has developed a second specialized meaning to introduce adverbial dependent clauses. In (95) it occurs in the form *dà* with the meaning 'when'.

(95) dà ɔ̄m té-n=ɛ́ dàk-ə̀ zár=dá
time 1SG arrive-DIST=DEP land-C3.SUBJ NEG.COP.EXT=NEG
'When I arrived, there was no land.' (SFC_IT_Juur_2005: 32)

3.5 Pronouns, determiners and demonstratives

Pronouns in Ụt-Ma'in may occur as arguments of a verb or may to refer to a possessor within an NP when the referent is known. Table 24 displays the pronoun system in Ụt-Ma'in organized by the following criteria:

i. TYPE: personal pronouns and class marked pronouns

ii. PERSON: first, second, or third person

iii. NUMBER: singular and plural, inclusive versus exclusive

iv. FUNCTION: subject, object, and possessive

Table 24: Pronoun paradigm

Type	**Person**	**Singular**			**Plural**	
Personal Pronouns		SUBJ	OBJ	POSS	SUBJ	OBJ/POSS
	1	*ɔ̄m*	*mɛ́*	*rí*	*īn* 'INCL' / *īt* 'EXCL'	
	2	*bɔ̄*		*ró*	*nɔ̄*	
	3	*wɔ̄n*		*rò*	*ɔ̄n*	
		nā 'NSPEC'				
C1	3	*ū/wā*	*ú/wá*	*wá*		
C2					*ɛ̄*	*ɛ́*
C3		*ɔ̄*	*ɔ́*			
C4					*sɛ̄*	*sɛ́*
C5		*dɛ̄*	*dɛ́*			
C6					*tɔ̄*	*tɔ́*
C6B					*mɔ̄*	*mɔ́*
C7		*jā*	*já*			
CAUG					*ā*	*á*
CDIM		*ɛ̄*	*ɛ́*			

Personal possessive pronouns are distinct segmentally and tonally for singular forms. They occur after the modified N. The N itself occurs with a noun class suffix; this is demonstrated for the first person possessive pronoun *rí* in (96).

			N-C = NP_{POSS}		
(96)	mɛ̄r	zɔ̄	bjá-r = **rí**	ɔ́	**ját-dɛ̀**
	PN	say	barn-C5 = 1SG.POSS	COP	big-C5

'Mer said, "My barn is big." ' (Primer 2009)

Definite markers are formally identical to the object form of noun class agreement pronouns. When used to indicate definiteness within the NP, they occur after the noun which itself occurs with a noun class suffix which parallels the structure seen for personal possessive pronouns, as in (98).

					N-C = C.DEF
(97)	dà-ù	dɛ́ʔɛ́	ɔ̀dɔ̀	tʃāmpá	nɛ̄tá-ù = já
	time-C3	travel	GOAL	husband	woman-C7 = C7.DEF

'Then he went to the woman's husband.' (GK_IT_Ror_2013:9-10)

Demonstratives are marked for agreement with the head noun, shown for class 7 as shown in (98). The noun occurs with the same suffixed class marking as the DEF marker.

				N-C	DEM-C
(98)	bɔ̄ = nɔ́m = **mɛ́**		ɔ̄m-sɛ́g = m-ɔ̀	kwàt-ù	**ín-jà**
	2SG = do = 1SG.OBJ		C6B-loan = C6B-ASSOC	ring-C7	DEM-C7

' "... you loan me **that** ring..." (lit: 'you do me a loan of that ring')
(MA_IY_Ror_2013: 010)

Table 25 displays the various noun class marked forms of the demonstratives. Segmentally the class-marked suffix of each demonstrative is formally identical to the class-marked pronoun. The tonal pattern is HL. The demonstrative is a [Vn] sequence to which the class agreement is circumfixed for classes 4, 5, and 6; only the suffix is used for 1, 2, 3, and 7. The initial V harmonizes to the roundness feature of the vowel within the class marker suffix. For class 6B the nasal is pronounced with the labial place of articulation of the *m-* class marker.

Table 25: Class marked Demonstratives

Class	DEMONSTRATIVE
C1	ín-wà
C2	ín-ɛ̀
C3	ún-ɔ̀
C4	s-ín-sɛ̀
C5	d-ín-dɛ̀
C6	t-ún-tɔ̀
C6B	m-úm-mɔ̀
C7	ín-jà

CHAPTER IV

THE ASSOCIATIVE CONSTRUCTION

4.1 Introduction

In this chapter, I discuss a subsection of NP morphosyntax in order to help the reader understand the complexities of NP structures that are used by the auxiliary constructions discussed in Chapters 7 and 9.

In order to use a noun to modify another noun within a single NP, Ụt-Ma'in uses what I call an Associative Phrase (AssocP). Example (99) shows a simple Associative Construction (AssocCxn) where the head 'ring' is modified by a bracketed AssocP containing the dependent noun 'wealth'. In (100) the bracketed dependent is itself a modified NP 'the baskets'. In both cases, the second NP is modifying the first NP.

(99) kwàt = [j-ə́ = t kwə̀m]
ring = AG7-ASSOC = C6 wealth
'ring of wealth'

(100) bé = [d-ə́ kɔ́ːr-ə́t = tɔ́ː]
place = AG5-ASSOC basket-C6 = C6.DEF
'place of the baskets'

Note that the modifying second NP is a fully expandable NP that can have the full range of modifiers that any NP may have. It may even include a nested AssocP as shown in (101) and (102). Whne nested, the agreement on the Associative Marker will agree with the noun class of the NP it is modifying. An NP that contains an AssocP can also contain other modifiers, as shown in (103), where the final definite marker agrees with the class 6 noun that is the head/first noun of the AssocCxn, and not with the

second/modifying noun. Contrast this with the definite marker in (100), where the definite marker agrees with the noun class of the second/modifying noun.

(101) fâr s-ə̀ = m wɔ́r
shea.butter.trees AG4-ASSOC = C6B length
'shea butter trees of length/ tall shea butter trees'

(102) fâr = s-ə̀ rān = t-ə̀ m-wɔ́r
shea.butter.trees = AG4-ASSOC leaves = C6-ASSOC C6B-length
'shea butter trees of leaves of length/ long-leaved shea butter trees'

(103) jà = [t-ə̀ = s-té] = tɔ́
fruit = [AG6-ASSOC = C4-tree] = C6.DEF
'those fruits of trees'

The term "associative" was used by Welmers (1963: 432; 1973: 275) to describe a morpheme in widespread use throughout Niger-Congo languages; the function is the association of some modifying phrase to a head noun. The modifying phrase is headed by the associative morpheme that is marked for noun class agreement with the head noun. Other terms for this construction within of descriptions of Niger-Congo languages include "possessive", "genitive" (Welmers 1963),"connective," and "connexive" (specifically for Bantu languages; Van de Velde 2013: 217). Ụt-Ma'in uses the associative for a broad range of functions, and even extends its use to the formation of relative clauses (cf. Chapter XI). Ụt-Ma'in uses a separate construction for possessive NPs, as shown in (104) with a full NP and in (105) with a possessive pronoun; (106) provides the same stem as head NP in an AssocCxn for comparison to the possessive.

(104) kúr-ɔ́t nɛ̄tá-ú = já
rooms-C6 woman-C7 = AG7.DEF
'that woman's rooms'

(105) kúr-ə́t =rí
rooms-C6=1SG.POSS
'my rooms'

(106) kúr t-ə̀=m rō:g
rooms AG6-ASSOC=C6B sleeping
'bedrooms/rooms of sleeping'

The Ụt-Ma'in ASSOCCXN parallels Van de Velde's (2013: 246-247) description of what he calls the Bantu connective construction:

i. two nominal constituents are in a relation of dependency
ii. the dependent nominal follows the head nominal
iii. the dependent nominal is marked by a dedicated connective relator (Ụt-Ma'in ASSOC), which agrees with the head nominal
iv. the connective construction is not only dedicated to the expression of possession, nor to any other [particular] relation

In §4.2, I survey the morphosyntax and the noun class/agreement morphology of the Ụt-Ma'in ASSOCCXN and explore the range of semantics communicated when the modified head is a typical noun like 'rock' or 'goat'. When an Action Nominal like 'singing' or 'branding' is the head of an ASSOCCXN, there is shift in some noun class agreement patterns and a shift in the range of semantic relationships the ASSOCP allows. If the head is an action nominal formed from a transitive root, the erstwhile object will occur in the ASSOCP (i.e. structurally as if it were a modifier of the action nominal) (§4.4). In transitive auxiliary constructions, any overt objects are also encoded in an ASSOCP. Section §4.5 introduces these phenomena though they are more fully explored in Chapters VII and IX.

4.2 Form of the AssocCxn

The Ụt-Ma'in Associative Marker is a low-tone, marked for agreement with the head noun of the AssocCxn.[24] At this point it may be helpful to more explicitly define four particular terms, and provide an example of each taken from (107):

- Associative Marker (Assoc): a low-tone, often supported by a mid-central vowel, e.g., *ə̀* 'Assoc'
- Associative Complex (AssocC): the Associative Marker plus any class marking that cliticizes to it, e.g., *t-ə̀=m* 'Ag6-Assoc=C6m'
- Associative Phrase (AssocP): the Associative Complex and the modifier (N_{MOD}) which follows, e.g., *t-ə̀=m wə́r* 'Ag6-Assoc-C6m length'.
- Associative Construction (AssocCxn): essentially an NP that contains an AssocP, e.g., *rān t-ə̀=m wə́r* 'leaf Ag6-Assoc=C6m length', 'leaves of length'

In each instance of the associative in the examples which follow, the N head and N modifier (mod) and related morphology are labeled. AG_{HEAD} indicates the agreement prefix corresponding to the noun class of the head noun. C_{MOD} indicates the class prefix of the N modifier. Equal signs " = " indicate clitic boundaries in the pronunciation of the particular utterance. In (107) and (108), the citation form of the two nouns in the AssocCxn are given after the translation.

[24] Welmers (1963: 446) claims that some Niger-Congo languages have a tonal associative morpheme, but he does not name any of those languages.

	[N_{HEAD}	[[AG_{HEAD}-ASSOC = C_{MOD}]$_{AssocC}$	N_{MOD}]$_{AssocP}$]$_{AssocCxn}$	V
(107)	[rān	t-ə̀ = m	wɔ́r]	hɛ̄ːg
	leaf	AG6-ASSOC = C6M	length	fall.PST
	'long leaves fell' (lit: 'leaves of length fell')			
	(citation: *ə̄t-rān* 'C6-leaf'/'leaves' and *ə̄m-wɔ́r* 'C6M-length')			

	[N_{HEAD}	[[AG_{HEAD}-ASSOC = C_{MOD}]$_{AssocC}$	N_{MOD}]$_{AssocP}$]$_{AssocCxn}$	V
(108)	[rān	s-ə̀ = s	tʃwā]	hɛ̄ːg
	leaf	AG4-ASSOC = C4	soup	fall.PST
	'leaves from soup fell' (lit: 'leaves of soup fell')			
	(citation: *ə̄s-rān* 'C4-leaf'/'cooked leaves' and *ə̄s-tʃwā* 'C4-soup')			

In the ASSOCCXN, the noun class of the head noun is only apparent via an agreement prefix on the Associative Marker.[25] Examples (107) and (108) illustrate instances of the ASSOCCXN functioning as the subjects of main verbs. In these examples, the same root *rān* 'leaf' occurs as the head noun of the subject phrase. The exact meaning of a phrase with the root *rān* (whether 'long leaves' versus 'leaves having been cooked in soup') can only be interpreted from the noun class that is marked by the agreement prefix on the ASSOCP.

The ASSOCCs in (107) and (108) are spoken as separate phonological words, characteristic of careful speech. Sometimes, the cliticizes to the head noun root (109), separating the class marker of the modifier noun from the modifier noun root. In (109)

[25] Recall from Table 18 in Chapter III that noun class marking and agreement marking for certain classes have distinct forms; therefore, I maintain a terminological distinction between agreement marking (glossed as AG with a noun class label, e.g., *d-* 'AG5-') and noun class marking on a noun (glossed as C with a noun class label, e.g., *r-* 'C5-'). In the Associative complex, both an agreement affix and a noun class affix occur: agreement marking is prefixed to the Associative marker (identifying the noun class of the head noun); while the enclitic on the Associative marker is the inherent noun class marker of the modifying noun.

the noun class 7 agreement prefix is consonantal, but the noun class marker of the modifier noun is the vowel *u*, bearing the low tone of the associative marker.

(109) a. wà-kɔ̄n nē̄t wā wɔ̀ gágɔ́n
C1-there person C1.DEF C1.REL married

[N_{HEAD}[[= AG_{HEAD}-ASSOC = C_{MOD}]$_{AssocC}$ N_{MOD}]$_{AssocP}$]$_{AssocCxn}$
b. nētá=j-`-u íbò
woman = AG7-ASSOC = C1 Igbo.person
'...a certain person who married an Igbo woman...'

However, the AssocC may also cliticize to another element of the NP, as in (110). My very earliest wordlist-transcriptions in 2006 contained many AssocCxns. At the time the items were transcribed as single phonological words. A sample of these is included in (111) through (115). There is variation in pronunciation from speaker to speaker and even between utterances by the same speaker.

[N_{HEAD} [[AG_{HEAD}-ASSOC = C_{MOD}-]$_{AssocC}$ N_{MOD}]$_{AssocP}$]$_{AssocCxn}$
(110) wā = vástɛ̀ m̄-ʃɔ́ːs [kɔ́ːr [d-`= u-tɔ̄tɔ̄rsɛ̀]]
C1.SUBJ = end C5-filling basket C5-ASSOC = C3-third
'he finished filling the third basket' (PS_IY_Ror 2013: 014)

(111) *rèmɔ̀tmɛ̀n* 'stomachache'
rè = m-ɔ̀ = t-mɛ̀n
pain = AG6B-ASSOC = C6-abdomen
'pain of abdomen'

(112) *ísdùná* 'ankle'
ís = d-` = u-ná
eye = AG5-ASSOC = C3-leg
'eye of leg'

(113) *rèmə̀rhí* ‘headache’

rè = m-ə̀ = r-hí

pain = AG6B-ASSOC = C5-head

‘pain of head’

(114) *jàdə̀rtʃāmpá* ‘boy’

jà = d-ə̀ = r-tʃāmpá

offspring = AG5-ASSOC = C5-man

‘offspring of male’

(115) *tʃāmjə̀tkōm* ‘hammer’

tʃām = j-ə̀ = t-kōm

anvil = AG7-ASSOC = C6-hand

‘anvil of hands’

Table 26: Attested forms of the ASSOCC

		NOUN CLASS OF DEPENDENT (ie., ASSOCIATED) NOUN							
		C1	C2	C3	C4	C5	C6	C6M	C7
NOUN CLASS OF HEAD NOUN	C1								
	C2				*Ø-ə̀=s*	*Ø-ə̀=r*	*Ø-ə̀=t*	*Ø-ə̀=m*	*Ø-ˋ=u*
	C3		*Ø-ə̀=Ø*	*Ø-ˋ=u*	*Ø-ə̀=s*	*Ø-ə̀=r*	*Ø-ə̀=t*	*Ø-ə̀=m*	*Ø-ˋ=u*
	C4		*s-ə̀=Ø*	*s-ˋ=u*	*s-ə̀=s*	*s-ə̀=r*	*s-ə̀=t*	*s-ə̀=m*	*s-ˋ=u*
	C5		*d-ə̀=Ø*	*d-ˋ=u*	*d-ə̀=s*	*d-ə̀=r*	*d-ə̀=t*	*d-ə̀=m*	*d-ˋ=u*
	C6		*t-ə̀=Ø*	*t-ˋ=u*	*t-ə̀=s*	*t-ə̀=r*	*t-ə̀=t*	*t-ə̀=m*	*t-ˋ=u*
	C6M		*m-ə̀=Ø*	*m-ˋ=u*	*m-ə̀=s*	*m-ə̀=r*	*m-ə̀=t*	*m-ə̀=m*	*m-ˋ=u*
	C7	*j-ˋ=u*	*j-ə̀=Ø*	*j-ˋ=u*	*j-ə̀=s*	*j-ə̀=r*	*j-ə̀=t*	*j-ə̀=m*	*j-ˋ=u*

Table 26 presents all attested class combinations in the ASSOCC found in Ụt-Ma'in NOUN + NOUN ASSOCCXNs. All blank cells in Table 26 involve a C1 or C2 noun and indicate that an ASSOCCXN has not been encountered for that combination of classes in

the spontaneous data available. Pronominal possession is indicated by a separate construction, and this may be why exclusively human-referent C1 nouns are rarely used in the modifying position within the ASSOCCXN. Table 25 displays the morphological/segmental components of the ASSOCC; it does not indicate whether the complex stands alone phonologically as a well-formed word; sometimes ASSOCCs cliticize to one of the noun roots, as seen in various examples in this chapter.

Note that the dependent modifier NP may be more complex than a single noun root, as seen in (116). The modifier NP is definite and there is no class prefix on the modifier noun. In this construction, the noun class of the modifier noun is suffixed to the noun.

(116) wā = há-n̄ = ɔ́ bé = d-ə̀ **kɔ́ːr-ɔ́t** = tɔ́ː
C1.SUBJ = go-DIST = LOC place = AG5-ASSOC basket-C6 = DEF.AG6
'He came to the place of those baskets' (PS_IY_Ror_2013: 025)

Figure 15 schematizes the ASSOCCXN; here MOD indicates any modification relationship. In the next section, we turn to the semantic range of the modification relationship.

	Associative Construction	
	Head	**[AssocP]**
SIMPLE MODIFIER	N_{HEAD}	$[AG_{HEAD}\text{-ASSOC} = C_{MOD}\text{-}N_{MOD}]$
COMPLEX MODIFIER	N_{HEAD}	$[AG_{HEAD}\text{-ASSOC} = [NP_{MOD}]]$

Figure 15: ASSOCCXN with noun head

4.3 Function of AssocCxns

The Ụt-Ma'in AssocCxn exhibits a range of semantic relationships between the head noun and the modifying noun including:

i. part-whole: dependent represents ‘whole’
ii. material: head is made of material expressed by dependent
iii. contents: head contains dependent
iv. place of origin: head originates from dependent
v. place of use: head is used at place expressed by dependent
vi. time of use: head is used at time expressed by dependent
vii. function: head is used for function/activity expressed by dependent
viii. property concept: dependent expresses a property of head
ix. ordinal number: dependent expresses ordering of head[26]
x. idiomatic: metaphoric meaning results from head + dependent

Examples of each semantic relationship are given in Table 27 and a more extensive list is included in Appendix F.

[26] Not a cardinal number. For example, the phrase ‘three baskets’ requires the structure of the numeral phrase described in Table 27. The ordinal expression‘third basket’ uses the associative construction presented here.

Table 27: Semantic relationship in ASSOCCXNs

FUNCTION OF MODIFIER	FORM	GLOSS
(part)whole	kéŋg = **j-ə̀** = r-swà	'bridge of nose' lit: 'frontier of nose'
	zwār = **d-` ** = u-ʃó	'beauty of face'
	swā = **d-` ** = u-rwág	'elephant's trunk' lit: 'nose of elephant'
material	jə̀n **ə̀** = r-rwáb	'bed made of clay'
	rén = **d-ə̀** = m-dáp	'trap made of sap'
contents	dù = **d-ə̀** = m-bə̄	'well of water'
place of origin	nētá = **j-` ** = u ʔíbò	'Igbo woman' lit: woman of Igbo-land'
place of use	nɔ̀m = **d-ə̀** = r-hí	'hat' lit: 'thing of head'
time of use	rè = **t-ə̀** = m-rím	'evening meal' lit: 'eating of darkness'
function	bé **t-ə̀** = r-ʃə̄ʔə̄t	'places of sitting'
	kwàt = **j-ə̀** = t kwə̀m	'ring of wealth'
property	bɔ́ **m-ə̀** = t-ūt	'old water' lit: 'water of old'
	fàr **s-ə̀** = m wɔ́r	'tall shea-butter trees' lit: 'shea-butter trees of length'
ordinal number	kɔ́ːr **d-` ** = u-tə̄tə̄rsɛ̀	'third basket'
idiomatic	kán = **s-ə̀** = kɔ́ːt	'dawn' lit: 'crying of chickens/roosters'
	bɔ́ = **m-ə̀** = t-rān	'green' lit: 'water of leaves'

4.4 ASSOCCXNs with action nominal as head

Action nominals may be the head of an ASSOCCXN. In example (117), the verb root *və̄k* 'greet' serves as the head of the NP *və̄k sə̀s ūt* 'greeting of old'. The NP containing the ASSOCCXN serves as the subject argument of the main clause. We know the phrase containing *və̄k* 'greet' is nominal because there is class agreement marking that occurs on the ASSOCC that follows it. The structure of the ASSOCCXN is identical to the structures shown in §4.2 for noun heads. The dependent noun here is expressing the property concept of 'old' parallel to the function included in §4.3.

	[V_{HEAD}	[[AG_{HEAD}-ASSOC = C_{MOD}]$_{AssocC}$	N_{MOD}]$_{AssocP}$]$_{AssocCxn}$			
(117)	[vɔ̄k	s-ɔ̀-s	ūt]	zá	t-barɔ̄m	dà.
	greet	AG4-ASSOC-C4	old	NEG.COP	C6-change	NEG
	'The greeting of old will not change.'					

The goal argument of an action nominal may be coded by the AssocP. In (118) we see the verb root *ha* 'go' followed by a goal complement. The AssocP is prefixed by the class 6M agreement form *m-*, which cliticizes to the goal complement 'market'. The entire nominal phrase *hā m-* ̀*-u-tɔ́lːɔ̀* 'going ASSOC market' is the object of the main verb *zɔ̄ŋtɛ̀* 'prepare.PRF'.

			[V_{HEAD}	[[AG_{HEAD}ASSOC = C_{MOD}]$_{AssocC}$ = N_{MOD}]$_{AssocP}$]$_{AssocCxn}$
(118)	tʃàmpájɔ̀	zɔ̄ŋtɛ̀	[hā	m-ˋ = u-tɔ́lːɔ̀]
	man.C7.SUBJ	prepare.PRF	[go	AG6M-ASSOC-C3-market]
	'The man prepared to/for going to market.' (Lit. 'The man prepared market-going.')			
	(citation: *ɔ̄m-hā* 'C6m-going' and *ū-tɔ́lːɔ̀* 'C3-market')			

In contrast to (118), example (119) shows how a goal argument is expressed within a locative phrase when *ha* 'go' is a finite main verb in a clause.[27]

(119)	hɔ̄ːb-ɔ̄t = rī	[**hā-ːg**	ɔ́ = tūlːɔ̀ = ˋ = u	māhūtā]
	friend-C6 = 1SG.POSS	[go-PST LOC = market = ASSOC = C3		Mahuta.town]
	'My friend went to Mahuta's market'			

With action nominals, an object must be coded by the AssocP. In the NP in (120), the head noun is an action nominal *nɔ́m* 'doing'; it is shown with the notional object *rɛ́n* 'trap' of the root 'do'. The AssocC *dɔ̀t* 'AG5.ASSOC.C6' occurs between the two nouns.

[27] Note that the class 3 noun *tūlːɔ̀* 'market' is unmodified in (118) but is itself modified by an associative phrase in (119). The location of this inherent class marker depends on the NP structure (Smith 2007; §1.1.3.1.3). Vowel quality and tone is also different between these two utterances of 'market', [ɔ́] in (118) and [ū] in (119). The difference in tone may be caused by a phonetically down-stepped H tone following the H of the preceding locative.

	$[V_{NMLZ:HEAD}$	$[[AG_{HEAD}$-ASSOC = $C_{OBJ}]_{ASSOCC}$	$N_{OBJ}]_{ASSOCP}]_{ASSOCCXN}$
(120)	nɔ́m	d- ə = t	rɛ́n
	do	AG5-ASSOC = C6	trap

'setting of traps' (citation: *ə̄r-nɔ́m* 'C5-doing' and *ə̄t-rɛ́n* 'C6 -trap')

Table 28 shows all the noun class combinations that can grammatically occur in the ASSOCC when the head noun is an action nominal. This is necessarily a subset of the forms from Table 26 in §4.2, since only five noun classes participate in nominalization of verbs (§3.2.3). Shaded cells indicate attested combinations in the data available. The white cells indicate forms I expect but which are not attested in the text corpus used for this study.

Table 28: ASSOCC forms expected with nominalized verb head

		NOUN CLASS OF SECOND NOUN						
		2	3	4	5	6	6B	7
NOUN CLASS OF HEAD	3	*Ø-ə=Ø*	*Ø- ` =u*	*Ø-ə=s*	*Ø-ə=r*	*Ø-ə=t*	*Ø-ə=m*	*Ø- ` =u*
	4	*s-ə=Ø*	*s- ` =u*	*s-ə=s*	*s-ə=r*	*s-ə=t*	*s-ə=m*	*s- ` =u*
	5	*d-ə=Ø*	*d- ` =u*	*d-ə=s*	*d-ə=r*	*d-ə=t*	*d-ə=m*	*d- ` =u*
	6	*t-ə=Ø*	*t- ` =u*	*t-ə=s*	*t-ə=r*	*t-ə=t*	*t-ə=m*	*t- ` =u*
	6B	*m-ə=Ø*	*m- ` =u*	*m-ə=s*	*m-ə=r*	*m-ə=t*	*m-ə=m*	*m- ` =u*

In summary, the ASSOCCXN is used to "associate" the meaning of a modifier NP to a head noun. If the head noun is an action nominal, the association can be between the head noun and a modifier similar to the types discussed in §4.3, a goal-object complement (118) or a patient-object complement (119). These functions are summarized in Figure 16.

Type of Nominal Head	[AssocP]	
N_{HEAD}	[AG_{HEAD}-ASSOC = C_{MOD}	N_{MOD}]
$V_{NMLZ:HEAD}$	[AG_{HEAD}-ASSOC = C_{MOD}	N_{MOD}]
$V_{NMLZ:HEAD}$	[AG_{HEAD}-ASSOC = C_{GOAL}	N_{GOAL}]
$V_{NMLZ:HEAD}$	[AG_{HEAD}-ASSOC = $C_{PATIENT}$	$N_{PATIENT}$]

Figure 16: ASSOCCXNs with N_{HEAD} vs. $V_{NMLZ:HEAD}$ as head

4.5 ASSOCCXNs in transitive auxiliary constructions

In all known transitive auxiliary verb constructions, the main lexical verb is in a nominalized form (Chapter VII and Chapter IX). However, the only indication of the nominal status of the nominalized verb is the associative agreement marking that is required with the object of the ertshile now-nominalized verb. The object of the nominalized verb must be coded within an ASSOCP. Auxiliary verb predication constructions are fully discussed in Chapters VI and VII. The purpose here is to demonstrate that the ASSOCCXN is the source of affixes in the transitive auxiliary constructions. For example, in (121) the future obligation auxiliary *dɛ́tːɛ́* 'FUT.OBL' requires a nominal complement. The nominal complement is an ASSOCCXN with the action nominal *rɛ* 'eat' as the head. The object of 'eat' is within the ASSOCP that is marked for agreement with the noun class of the head action nominal, i.e., *t-* 'AG6'.

	S	AUX	V_{HEAD}	AG-ASSOC = P	
			[V_{HEAD}	[[AG_{HEAD}-ASSOC = C_{OBJ}]$_{ASSOCC}$ = N_{OBJ}]$_{ASSOCP}$]$_{ASSOCCXN}$	
(121)	ɔ̄m	dɛ́tːɛ́	rɛ̄	**t-ɔ̀** = r-gá	ūsōt
	1SG.SUBJ	FUT.OBL	eat	**AG6-ASSOC** = C5-cooked.grain	tomorrow

'I must eat cooked grain tomorrow.' (citation: *ɔ̄t-rɛ̀* 'C6-eat')

Class 4 agreement is shown in the transitive past progressive auxiliary construction in (122) for the action nominal *ɔ̄s-vɔ̄k* 'c4-greet'. Again, the only indication of the nominal status of the V_{HEAD} is the class 4 agreement marking required for the object. In contrast

the syntactically intransitive past progressive auxiliary construction in (123) is marked as nominal by the nominalizing class 4 prefix *s-*. Theses change in marking related to transitivity are discussed thoroughly in Chapter VI.

	S	AUX	V_{HEAD}	AG-ASSOC = P
			$[V_{HEAD}$	$[[AG_{HEAD}$-ASSOC = $C_{OBJ}]_{ASSOCC}$ = $N_{OBJ}]_{ASSOCP}]_{ASSOCCXN}$
(122)	ɔ̄m	ɔ́-gɔ́	vɔ̄k	**s-** ` = u-nɛ̄ŋgɛ̄n
	1SG.SUBJ	PROG-PST	greet	**AG4-ASSOC** = C7-old.man
	'I was greeting the old man.'			

	S	AUX	C_{HEAD}-V_{HEAD}
(123)	ɔ̄m	ɔ́-gɔ́	s-vɔ̄k
	1SG.SUBJ	PROG-PST	C4-greet
	'I was greeting.'		

When a ditransitive verb is used in an auxiliary construction, the associative marker often cliticizes to the nominalized verb; the two object arguments follow in the order R(ECIPIENT) then T(HEME). This is the same as the constituent order in basic clauses. Example (124) demonstrates the verb *njā* 'give', which has a nominalized class 5 citation form of *ɔ̄r-njā* 'C5-give'. The associative occurs immediately following the main lexical verb, which is shown to be nominalized by the occurrence of class 5 agreement on the associative.

	S	AUXV-TNS	V = AG-ASSOC	R	T
(124)	ɔ̄m	ɔ́-gɔ́	njā = **d-ɔ̀**	wɔ̄n	ɔ̄r-gá
	1SG.SUBJ	PROG-PST	give = **AG5-ASSOC**	3SG.OBJ	C5-cooked.grain
	'I was giving him cooked grain.'				

There is some variation in agreement marking of ASSOCCXNs within auxiliary constructions. In (125), class 5 agreement marking occurs on the associative following the nominalized lexical verb *gén* 'cross-plant'. However, the verb has a nominalized

class 6 citation form *ɔ̄t-gèn* 'C6-cross.plant'.[28] Class 6 *t-* agreement marking on the associative was rejected by my consultant for (126). I include this here to foreshadow the grammaticalization of some action-nominal headed AssocCxns within auxiliary constructions, which are more fully discussed in Chapter VI.

(125) ɔ̄m ɔ́=gèn **d-ə̀**=Ø-hjə ɔ́=mɛ́ ū-tāk
1SG.SUBJ PROG=cross.planted C5-ASSOC=C2-guinea.corn LOC=INSIDE C3-field
'I cross-planted guinea corn in a field.' (SJ_Ror_2017:83)

(126) *ɔ̄m ɔ́gèn **t̲ə̀**hjə ɔ́mɛ́ ūtāk
'I cross-planted guinea corn in a field.' (SJ_Ror_2017:83)

For the transitive progressive auxiliary construction specifically, the attested forms of the AssocC are reduced to allowing only two agreement prefixes. An action nominal in class 4 requires class 4 agreement on the AssocP that contains the object. An action nominal nominalized by any other noun class (C3, C5, C6, C6B) and used in a transitive progressive auxiliary construction, require class 5 agreement on the AssocP that contains the notional object. The allowed reduced set of AssocCs is shown as shaded in Figure 17. The white cells present the forms that can grammatically occur when the head of an associative is an action nominal (cf. Table 28 in §4.4) to highlight the shift in forms in the transitive progressive construction. The reduced set of forms is evidence of more advanced grammaticalization in the transitive progressive construction and is fully discussed in Chapter VII.

[28] Cross-planting involves adding a second crop, in rows perpendicular to those of an already planted field.

		Noun Class of Dependent Noun					
Noun Class of Head		3	4	5	6	6B	7
	3	*Ø-ˋ=u*	*Ø-ə̀=s*	*Ø-ə̀-r*	*Ø-ə̀=t*	*Ø-ə̀=m*	*Ø-ˋ-u*
	4	*s-ˋ=u*	*s-ə̀=s*	*s-ə̀-r*	*s-ə̀=t*	*s-ə̀=m*	*s-ˋ-u*
	5	*d-ˋ=u*	*d-ə̀=s*	*d-ə̀-r*	*d-ə̀=t*	*d-ə̀=m*	*d-ˋ-u*
	6	*t-ˋ=u*	*t-ə̀=s*	*t-ə̀-r*	*t-ə̀=t*	*t-ə̀=m*	*t-ˋ-u*
	6B	*m-ˋ=u*	*m-ə̀=s*	*m-ə̀-r*	*m-ə̀=t*	*m-ə̀=m*	*m-ˋ-u*

Figure 17: ASSOCC forms attested with Action nominal lexical head in the intransitive progressive (all cells) and the transitive progressive (shaded cells) auxiliary constructions

The expected AG3, AG6, and AG6B are not attested in the progressive.

CHAPTER V

BASIC VERBAL PREDICATION

In order to understand the involvement of nominalization within many Ụt-Ma'in predicates, I first describe the most basic clauses which do not involve nominalization. Section 5.1 presents basic constituent order of transitive, intransitive, and ditransitive clauses that have only a single verbal element that expresses the main lexical predicate of the clause. Section 5.2 presents alternates to basic order related to putting a particular argument in the clause-initial focus position. Section 5.3 presents alignment patterns found in the data related to noun class marking on nouns and NPs and pronoun form for both personal pronouns and class-marked pronouns. Section 5.4 presents the basic clause negation strategy, which uses a clause final negator clitic. Section 5.5 describes the passive-like strategy of impersonal constructions and completes the chapter.

5.1 Basic clause constructions

In order to describe the order of constituents in Ụt-Ma'in, I use the following abbreviations: S stands for the single argument of an intransitive verb; A for the most AGENT-LIKE argument of a transitive verb; and P for the most PATIENT-LIKE argument of a transitive verb (Croft 1990; Haspelmath 2011). For ditransitive clauses, R refers to the RECIPIENT argument and T refers to a THEME argument of a ditransitive verb (Croft 1990 and Dryer 1996). The prevalent constituent order in Ụt-Ma'in is SV in intransitive clauses (127), and AVP in transitive clauses (128). A ditransitive basic clause has AVRT constituent order (129). Basic clauses minimally require a V(erb) and its S(ingle)

argument. Basic clauses are distinguished from more complex constructions by their use of one and only one V that contains the main lexical predicate of the clause.

	S	V	
(127)	wā	már-g	(gjɘ̄p)
	C1	die-PST	yesterday
	'He died (yesterday).'		

	A	V	P		A	V	P
(128)	a. nā	hɔ́-g	ū-gwā:r	b.	nā	hɔ́-g	já
	NPERS	kill-PST	C7-goat		NPERS	kill-PST	C7
	'Someone killed the goat.'				'Someone killed it.'		

	A	V	R	T
(129)	tʃāmpā-jɘ̄	njā-:g	wɘ̄n	ɘ̄r-gá
	man-C7	give-PST	3SG.OBJ	C5-cooked.grain
	'A man gave him food.'			

P, R and T object arguments of transitive and ditransitive verbs can be omitted if context allows the listener to retrieve the relevant argument, it is a "definite null" in the sense of Fillmore (1986). On the whole, verbs in Ụt-Ma'in on the whole are quite flexible in terms of syntactive transitivity. Throughout this study, I use the shorthand INTR to indicate that a clause is syntactically intransitive, i.e., there is no expressed object, regardless of whether the identity of an understood argument can be retrieved contextually. If I intend to discuss the semantic intransitivity, I state that explicitely. Similarly, I use TRAN as shorthand for syntactically transitive, i.e, there is an overtly expressed object. In basic verbal predication constructions certain verbs require an overt expressed object or as mentioned above an "definite null". However, when we turn to auxiliary constructions (in Chapters VII through X) many semantically transitive verb roots no longer require the expressed or retrievable object when in nominalized form

(cf. the discussion of transitivity in basic auxiliary construtions in §7.3.1). That is, nominalization could be viewed as having an (optional) syntactic ditransitivizing effect.

In fast speech, pronominal S/A arguments may cliticize to the left side of non-nominalized verb. Less frequently, pronominal P, R and T arguments cliticize to the right side of the verb. These cliticized pronouns always occur in the same order as NP equivalents within the phrase. The equal sign " = " indicates a clitic boundary, as in (130). The order SV may be expressed as S = V for intransitive; AVP as A = V = P for transitive; and AVRT as A = V = R = T for ditransitive.

A = V = R = T

(130) nā = njē = wá = tɔ́:

INDEF.SUBJ = give = C1.OBJ = C6.OBJ

'He was given them.' (lit: 'They give him them [sweet potatoes]').

(KB_IY_Ror_2013: 004)

These cliticized pronouns do not occur if a non-pronoun NP is used as an argument. In (131), the R argument is cliticized to the V, but the A and T arguments have no indexation on the V.

	A	V = R	T
(131)	rɔ̄ʔ-ə̀	njá-:g = wá	zwār = d- ` -u-ʃə́
	god-C3.SUBJ	give-PST = C1.OBJ	beauty = AG5-ASSOC-C3-face

'God gave him a handsome face.' (YM_IY_Ror_2013: 008)

5.2 Focus Constructions

Clause initial position is used to draw attention or emphasis to a particular argument of a verb. Both subject and object NP arguments occur in the fronted focus position. With subject focus, the verb is also marked with the suffix *-ɛ́* 'FOC'. In (132),

subject focus is achieved by placing the NP *nét-t tɔ́* 'those people' prior to the subject pronoun, *tɔ̄*.

	A_{FOC}	A	V	P	
(132) a.	**nét-t tɔ́,**	ā = **tɔ̄**	hján-ɛ́ː	nɔ̀m = d-ə̀ = r-hí	dɛ́,
	people-C6 = C6.DEF	COND = C6.SUBJ	see-FOC	thing = AG5-ASSOC = C5-head	C5.DEF
b.	sɛ́ = ɛ́	fɔ̀g	wɔ̄n	ɔ̄s-kɛ́ːr	
	then = C2.SUBJ	call	3SG	C4-whistle	

'Those people, when they saw the hat, then they call him whistling.'
(PS_PS_Ror_2013: 027)

When a pronoun is used in clause-initial focus position, a high-tone form of the pronoun occurs. This high-tone form is identical to the "object pronoun", but with reference to the "subject" (S/A) of the clause> The particular pronouns are *ú* 'C1.FOC' in (133) and *mɛ́* '1SG.FOC' in (134). When the pronoun is 1SG, the mid-tone subject pronoun is not allowed to co-occur with the focus-marked verb, as shown in (135).

	S_{FOC}	V-ɛ́	
(133)	ú	jɔ̄n-ɛ́ː	hɔ́gdə̀mɛ́ʔ
	C1.SUBJ	rise.up-FOC	ashamed

'Only he leaves ashamed.' (GK_IY_Ror_2013: 084)

	A_{FOC}	V-ɛ́	P
(134)	mɛ́	hján-ɛ́	ɔ́
	1SG.FOC	see = FOC	C3.OBJ

'I am the only one who saw it.' (SJ_BB_Ror_2013: 039)
(lit: Me saw it.)

(135) * ɔ̄m hjánɛ́ ɔ́

Objects (P, R, or T) may occur in the clause initial focus position to bring emphasis to a particular object argument as in (136); the verb does not have focus marking when an object is the focused constituent. In (136), the final vowel cliticized to the verb stem is a cliticized R argument pronoun, not the subject focus marker.

	T	A = V = R
(136)	ə̄t-tə̄t,	ū = njə̄ = ɛ́
	AG6-three	C7.SUBJ = give = C2.OBJ

'Three (fruits), he gave them.' (PS_PS_Ror_2013: 030)

5.3 Argument alignment patterns

Ụt-Ma'in constituent order reflects a Nominative/Accusative alignment (Plank 1979; Nichols 1992); that is, S and A arguments pattern together and typically occur before V; and P arguments occur after V.

However, Ụt-Ma'in has two distinct alignment patterns based on the form and complexity of the NP structure of the argument: Nominative/Accusative alignment and Neutral alignment, schematized in as in Figure 18. The bullet points under each alignment type refer to the type of argument to which the pattern applies, e.g., noun class marked pronouns have Nominative/Accusative alignment; S and A pronominal arguments have a mid-tone subject form and P pronominal arguments have a high-tone form, cf. §5.3.5.

Nominative/Accusative

- Unmodified NPs
- CLASS MARKED Pronouns
- Personal Pronouns: 1SG

Neutral

- Modified NPs
- Personal Pronouns: 1PL.INCL, 1PL.EXCL, 2SG, 2PL, 3SG, 3PL, NSPEC

Figure 18: Alignment Patterns in Ụt Ma'in

NPs demonstrate two clausal alignment patterns: clauses have neutral alignment of modified NPs and clauses have nominative/accusative alignment for unmodified NPs. Modified NPs have at least one modifier in addition to the noun head; the modifier may be a Demonstrative, Definite Marker, adjective, etc. Unmodified NPs have only a head Noun and obligatory noun class morphology, but no additional modifiers. Synchronically, S/A unmodified NPs occur with noun class suffixes and P argument unmodified NPs occur with noun class prefixes. This may be *accidental* case development, possibly from a reanalyzed relative clause structure (see discussion in Chapter XI).

Pronouns divide into two groups as well. Nominative/Accusative alignment is exhibited by 1SG pronouns and third person class-marked pronouns. First person pronouns are distinguished by both segmental content and tone, *ɔ̄m* '1SG.SUBJ' and *mɛ́* '1SG.OBJ'. The class marked pronouns are distinguished by tone only, for example *tɔ̄* 'C6.SUBJ' versus *tɔ́* 'C6.OBJ'. Neutral alignment is exhibited by non-1SG human referent pronouns that are outside of the class marked pronoun system: *īn* '1PL.INCL', *īt* '1PL.EXCL', *bɔ̄* '2SG', *nɔ̄* '2PL', *wɔ̄n* '3SG', *ɔ̄n* '3PL', and the non-specified pronoun *nā* 'NSPEC'.

The following subsections describe each of the alignment situations in more detail.

5.3.1 Neutral alignment of modified NPs

The structure of the bracketed NPs in (137) through (139) is identical, though they serve distinct grammatical functions. The word order of the NP relative to the verb alone serves to identify the syntactic role of each argument.

(137) a. wā hɛ̀ʔɛ̀
C1.SUBJ fell
b. bá = wá hɛ̀ʔɛ̀
after = C1.FOC fell
S V
c. [jà = t-ə̀ = s-té = tɔ́] āzgə̄ssɛ̀
fruit = C6-ASSOC = C4-tree = C6.DEF roll.out
'He fell. After he fell, those fruit rolled out.' (SJ_PS_Ror_2013: 028)

A V P
(138) **[jà = t-ə̀ = s-té = tɔ́]** ʃámə̀ t-mɔ́ŋɔ̀ré
fruit = C6-ASSOC = C4-tree = C6.DEF resemble C6-mango.fruit
'Those fruits resemble mangoes.' (SJ_PS_Ror_2013: 048)

A = V P
(139) ɛ́ = kár-g-ə̀sː **[jà = t-ə̀ = s-té = tɔ́]**
C2.SUBJ = pick-PST-ITR fruit = C6-ASSOC = C4-tree = C6.DEF
'They gathered those fruits.' (SJ_PS_Ror_2013: 030)

5.3.2 Nominative/Accusative alignment: unmodified NPs

The structures of the bracketed NPs in (143) and (144) are distinct from each other in regards to the location of the noun class marking. These examples are taken from the same text and the reference is to the same discourse-world referent. The word order and the noun class marking serve to identify the syntactic role of each argument. Unmodified subject NPs occur with suffixed noun class marking as in (140) and (141), the nominative; unmodified object NPs occur with prefixed noun class marking as in (142), the accusative. The different order and forms of the C7 class marker in (140) through (142) could be interpreted as a kind of "case marking", since the same lexical item has a different form depending on whether it is in subject (S/A) or object (P) role.

Examples (143) through (144) show a partial pattern for noun class 6; I do not have an example with ‘mangos’ as an A argument.

		S-NOM		
(140)	sɛ̄	kɔ́ːt-**jɛ̀**	rwɔ̄n	ɔ̄r-vástɛ̀
	then	guinea.fowl-C7.SUBJ	exit	C5-last

‘Then a guinea fowl exited last.’ (GF_IT_Juur_2007: 071)

		A-NOM				
(141)	kɔ̀ná	kɔ́ːt-**jɛ̀**	zɔ́-tːɛ̀…	ɔ̄r-kjàt	ɔ̄r-kjàt	ɔ̄r-kjàt
	there	guinea.fowl-C7	say-PFT	C5-difficult	C5-difficult	C5-difficult

‘There a guinea fowl has said, “Difficult, difficult, difficult”’
(GF_IT_Juur_2007:093&095)

			ACC-P		
(142)	a. á = b	hján	**ū-**kɔ́ːt,		
	COND = 2SG	see	C7-guinea.fowl,		
	b. zwár-r = wá		rwɔ́-t-ɔ̄n	ɔ́ = hɔ́-r = dɛ̄	
	beauty-C5 = C1.POSS		exits-PFT-DIST	LOC = day-C5 = C5.DEF	

‘If you see a guinea fowl, his beauty has exited long ago from that day’
(GF_IT_Juur_2007: 047-048)

	S-NOM	
(143)	[mɔ́ŋgɔ̀r-**tɛ̀**]	àzgɔ̀-sːtɛ̀
	mango.fruit-C6.SUBJ	pour-ITR-PFT

‘Mango fruit rolled out (of the basket).’ (PS_PS_Ror_2013:018)

			ACC-P
(144)	wā	ká-ːn	[**ɔ̄t-**mɔ́ŋgɔ̀r]
	C1.SUBJ	pluck-DIST	C6-mango.fruit

‘He picked mango fruits’ (PS_PS_Ror_2013: 004)

5.3.3 Nominative/Accusative alignment: 1SG personal pronouns

Nominative/Accusative alignment is attested for first person singular pronouns; subject pronoun is *ɔ̄m* ‘1SG.SUBJ’ and the object pronoun is *mɛ́* ‘1SG.OBJ’ as shown in

(145) and (146). That is S and A are aligned in the form *ə̄m*, and P is distinct in the form *mɛ́*. The argument role of a 1SG pronoun is distinguished by three criteria.

i. word order: The subject pronoun always precedes V; the object pronoun follows V, unless fronted to the clause initial focus position;

ii. segmental content: There are instances of *ə̄m* '1SG.SUBJ' shortening to *=m* which cliticizes to the preceding clausal element (147), but the object form *mɛ́* is never shortened and always has the distinct front vowel [ɛ];

iii. tonal content: The subject form *(ə̄)m* is consistently mid-tone; the object form *mɛ́* is consistently high-tone.

	A_{NOM}	V	P	
(145)	**ə̄m**	hján	ə̄nːɔ̀m	ə́ = mɛ́
	1SG.SUBJ	see	C6.thing	LOC = inside
	'I see things inside'			

	A	V	**P_{ACC}**	
(146)	nā	gjín	**mɛ́**	ə̀ = zán
	NSPEC	hate	1SG.OBJ	LOC = emptyness
	'They hate me outside.' (SFC_IT_Juur 2005:L24)			

	because = **S_{NOM}**	V		
(147)	rémə̄ = zə̄ = **m**	hə́-ːt = ə́t	bàks	ə́ = bɔ̄ = nɛ̀
	word = say = 1SG	go-PFT = C6	remembering	LOC = 2SG = with
	' "...because I always remember you." ' (MA_IY_Ror_2013: 011)			

	A = V = **R_{ACC}**	T	
(148)	bɔ̄ = nɔ́m = **mɛ́**	ə̄m-sɛ́g = m-ə̀	kwàt-ù ín-jà
	2SG = do = 1SG.OBJ	C6B-loan = C6B-ASSOC	ring-C7 DEM-C7
	' "... you loan me that ring..." (lit: 'you do me a loan of that ring') (MA_IY_2013: 010)		

5.3.4 Neutral alignment: personal pronouns (not 1SG)

Neutral alignment is observed for the personal pronouns *ɪ̄n* '1PL.INCL', *ɪ̄t* '1PL.EXCL, *bɔ̄* '2SG', *nɔ̄* '2PL', *wɔ̄n* '3SG', *ɔ̄n* '3PL, and *nā* 'NSPEC'. Examples (149), (150), and (151) show the form *bɔ̄* '2SG' used for A, R, and P arguments; each instance is bolded and labeled for the argument role. Note that example (151) has two clauses and *bɔ* '2sg'occurs twice; *bɔ̄* '2SG' is the A argument of the first verb *ɔ́* 'COP' and the P argument of the second verb *mɔ̄-tː* 'make-PFT'. Word order alone serves to identify the syntactic role of each argument.

A

(149) **bɔ̄** = nɔ́m = mɛ́ ɔ̄m-sɛ́g = m-ɔ̀ kwàt-ù ín-jà
2SG = do = 1SG.OBJ C6B-loan = C6B-ASSOC ring-C7 DEM-C7
' "... you loan me that ring..." (lit: 'you do me loaning of that ring')
(MA_IY_2013: 010)

R

(150) rɔ̄-ɔ̄ já-ːg **bɔ̄** ʔ-tʃàn = dà
god-C3 give-PST 2SG C6-feather = NEG
'creator did not give you feathers' (GF_IT_Juur_2007: 029)

A V A V **P**

(151) **bɔ̄** ɔ́ ɔ́kā rɔ̄-ɔ̄ mɔ̄-tː **bɔ̄** zá = t-tʃán ɔ́ = r-tàkɔ̀n
2SG COP like god-C3 build-PFT 2SG NEG = C6-feather LOC = C5-beginning
'you are like creator made you featherless in the beginning' (GF_IT_Juur_2007: 30-31)

S V

(152) ínjà nō = já **bɔ̄** há-ːn-ɛ́
DEM-C7 bird = C7.DEF 2SG go-DIST-FOC
'This bird, you come.' (GF_IT_Juur_2007: 087)

5.3.5 Nominative/Accusative alignment: CLASS MARKED pronouns

Nominative/Accusative alignment is attested for all class marked pronouns; subject pronouns are mid-tone and object pronouns are high-tone. The argument role of class marked pronouns is distinguished by two criteria:

i. word order: The subject pronoun always precedes V; the object pronoun follows V, unless fronted to the clause initial focus position.

ii. tonal content: The subject form is consistently mid-tone; the object form is consistently high-tone.

The class 1 pronoun occurs as the mid-tone S argument *wā* in (153) and as the high-tone the R argument *wá* in (154). The class 6 pronoun occurs as the mid-tone A argument *tɔ̄* in (155) and as the high-tone T argument *tɔ́* in (154) and high-tone P argument *tɔ́* in (156).

S_{NOM}

(153) wā márg (gjɔ̄p)
C1.3SG.SUBJ die-PST yesterday
'He died (yesterday).'

R_{ACC} T_{ACC}

(154) nā = njē = **wá** = **tɔ́:**
INDEF-give-C1.OBJ-C6.OBJ
'He was given them.' (lit: 'They give him them (sweet potatoes').
(KB_IY_Ror_2013: 004)

A_{NOM}

(155) nɛ́t-t tɔ́, ā = **tɔ̄** hján-ɛ́ nɔ̀m = d-ə̀ = r-hí dɛ́,
people-C6 = C6.DEF COND = C6.SUBJ see-FOC thing = AG5-ASSOC = C5-head C5.DEF
'Those people, when they saw the hat, ...' (PS_PS_2013: 027)

(156) a. wə̀ná hjáné ə́=ís-ə̄r ró à
who.Q see LOC=eye-C5=2SG.POSS Q
P_{ACC}
b. kò wárə̀ **tə́** nā wárə̀ wə̄n=né
or tell C6.OBJ NSPEC tell 3SG=with
'Did you see it with your eyes? or tell(ing) it with having been told?'
(GK_IY_Ror_2013)

The class 2 pronoun occurs as the mid-tone S argument *ɛ̄* in (157), mid-tone A argument *ɛ̄* in (158), and as the high-tone P argument *ɛ́* in (159).

S_{NOM}
(157) ɛ̄ʔ=àrə̀k
C2.SUBJ=leave
'They left.' (SJ_PS_2013: 044)

A_{NOM}
(158) **ɛ̄** nóm ə̄s-tɔ̀ːg
C2.SUBJ do C4-prayer
'They prayed' (PW_IT_2013: 019)

P_{ACC}
(159) ū hjén jáːg-ə̀=ɛ́ ū hjén-s **ʔɛ́**
C1.SUBJ see childern-C2=C2.DEF C1.SUBJ see-ITR C2.OBJ
'She sees the children; she sees them regularly.' (PW_IY_Ror_2013: 093-094)

5.3.6 Object alignment

Based solely on word order, P and R arguments occur immediately after the verb; P and T arguments occur clause finally. Thus, word order in basic clauses can be considered neutral. In Chapter VI, however, we see that auxiliary constructions show a primary/secondary object pattern marked by the use of an associative cosntruction (cf. §7.3.1.3). In a primary/secondary object pattern, P and R are marked distinctly from T, demonstrated in Figure 19 (Dryer 1986: 814; 2007: 256).

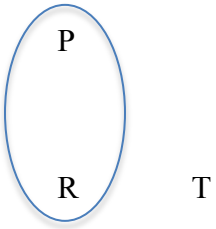

Figure 19: Object alignment

5.4 Negative Basic Clause Construction

Negation of basic clauses is achieved by use of the clause negator enclitic *=da* 'NEG'. The tone of the negative enclitic varies from utterance to utterance.

Transcriptions are marked for the tone that occurs in each example.

(160) ɔ̄m nák=**dá**
1SG.SUBJ know.PST=NEG
'I do not know.'

(161) nɔ̀m-g-ɛ̀=**dà**
do-PST-FOC=NEG
'It's impossible.'

(162) rɔ̄-ɔ̄ já-ːg bɔ̄ ʔ-tʃàn=**dà**
god-C3 give-PST 2SG C6-feather NEG
'creator did not give you feathers' (GF_IT_2007: 29)

(163) wá rè=**dá**, ābókì-ù=wā jā tɔ́mɔ́, wā=rè tɔ́mɔ́=**dá**
C1.OBJ eat=NEG friend-C7=C1.POSS C7 also C1.SUBJ=eat also=NEG
'He did not eat. His friend, he also. He also did not eat.'

The negation in (164) cannot mean 'I know the place we must not meet'.

(164) ɔ̄m nāk [bé=d-ɔ̀ īʔ dét: nɔ̀m d-ɔ̀=t ōrōm]=**dá**
1SG.SUBJ know place-C5-REL 2PL.SUBJ FUT.OBL do C5-ASSOC=C6 meeting=NEG
'I did not know the place where we must meet.' (Minna_SJ_2013: 7-8)

5.5 Impersonal Constructions

5.5.1 Passive-like impersonal construction

To avoid mention of the agent/subject, the passive-like Ụt-Ma'in impersonal construction can be used (Payne 1997: 206ff; Creissels 2011: 302). The verb has no morphological indication of passive, rather the non-personal, non-referential subject pronoun *nā* is used. It can be translated as 3PL 'they' or 3SG 'someone', but it does not reference directly anyone posited as existing in the discourse. In example (165) the context allows for the interpretation of the agent as the 'other birds' mentioned by name in preceding clauses. However, this is a de-emphasis of the known agent in a commentary phrase by the narrator. The narrator could easily have used a class 2 referent subject pronoun *ɛ̄* referring to a long list of just mentioned birds, as is done 20 seconds earlier in the same text, (166).

(165) nā jāsū wɔ́n ū-tʃān ū-gàn
NSPEC give 3SG C7-feather C7-one
'**they** gave him one feather'
'he was given one feather' (GF 2007: 01:25.708-0127.118)

(166) …ɛ̄ há-ːg-ɔ̄n
C2.SUBJcome-PST-DIST
'(kwarụg birds, gamsraga birds, …and kuut birds…) **they** came from far away.'
(GF 2007: 01:00.621-01:01.227)

The Ụt-Ma'in *nā* impersonal construction is akin to the non-promotional passive in C'Lela (Dettweiler 2015: 120-121). Dettweiler mentions that an alternate interpretation of the C'Lela *nà* impersonal is first person plural inclusive, whereas the Ụt-Ma'in *nā*

impersonal pronoun has a third person plural interpretation. The Ụt-Ma'in inclusive first person plural form is *īn* '1PL.INCL' in contrast to *īt* '1PL.EXCL' (Smith 2007:79).

5.5.2 Presentational Impersonal Construction

A specialized use of the *nā* impersonal constructions involves a formulaic way of introducing characters and settings in narrative texts. In this presentative construction (Hengeveld 1992: 118; Creissels 2013: 16), the *nā* impersonal pronoun occurs as the subject of the verb *nɔ́m-g* 'do-PST' sometimes shortened as *nɔ́ŋ* 'did'; this verb must be in past tense, bolded in examples (167) through (171). The introduced element, underlined in examples (167) through (171), occurs as the P object of the verb. The NP containing the introduced element is often in the indefinite construction.

(167) a. nā **nɔ́ŋ** <u>dà-ə̀ = dím ə̄m-rā</u>
NSPEC do.PST time-ASSOC = back C6B-far
'There was <u>a time far back</u>,'

b. dà-ə̀ = ɔ́ dàk-ə̀ zár = dá
time-C3 = C3.DEF land-C3.SUBJ NEG.COP.EXT = NEG
'that time, there was no land.'

c. nā **nɔ́ŋ** <u>ɛ̀kɛ̄n nɔ̀mə̀hɔ́g = ɛ̄ tə̄t</u>
NSPEC do.PST c2.some living.things = C2 three
'There were three living creatures.'

d. ɛ̄ nɔ́m-ɔ́g ī-nān i = ` = s-rɛ́m
C2.SUBJ do-PST CDIM-argument AGDIM = ASSOC = C4-talking
'They did a debate...'

e. ə̄zə̄ wábā m-hā-ə̄n ɔ́ = dàk-ù únɔ̀
saying first.one C6B-go-DIST LOC = land-C3 DEM.C3
'saying who was the first to come to this land.' (SFC_IT_Jiir_2007: 001-004)

In (167), a 'time far back' is introduced as a major topic of the following narrative. None of the events in the main event line of the narrative take place in that 'time far

back', rather the 'time far back' is the topic of debate within the narrative. The major characters 'three living creatures' are also introduced using a second presentative construction in (167c).

In the Fer and Jiir dialects, the pronoun *ā* can be used instead of *nā* in clauses introducing characters, as in (168).

(168) ā **nɔ́ŋ** wàkɔ̄n fārɔ̄k = wā
NSPEC do.PST C1.certain king = C1
'There was a certain king...' (KO_MI_Fer_2013: 003)

(169) a. ā **nɔ́ŋ** ū-dà ɔ́ = dím
NSPEC do.PST C3-time LOC = back
'There was a time far back,
b. nō-Ø nɔ́ŋ bɔ̄n = d-ɔ̀ = s-hɛ́w
bird-C2 do.PST invitation = AG5-ASSOC = C4-dance
'Birds made an invitation for dancing' (GF_IT_Jiir_2007: 004-005)

(170) a. nā **nɔ́ŋ** wàkɔ̄n zwār = wā
NSPEC do.PST C1.certain young.man = C1
'There was a certain young man,'
b. ɔ́ = ɔ́-kɔ̄n tà:s = ɔ̄
LOC = C3-certain village = C3
'in a certain village'
c. wā = ʔɔ́ sɔ̄-jà
C1.SUBJ = COP good-AG7
'He is handsome,'
d. wā ɾátɛ́ ʃīk = dá
C1.SUBJ NEG.have money = NEG
'(but) he does not have money.' (YM_IY_Ror_2013: 001-004)

(171) a. nā **nɔ́m-ɔ́g** jàkɔ̄n nētá = jā
NSPEC do-PST C7.certain woman = C7
'There was a woman'

b. ɔ́ ɔ̀kɔ̄n bɔ́ ɔ̄
LOC C3.certain town C3
in a certain town.'

c. nētá-ū = já gòt tʃāmpá-ú = wá ɔ̄s-hí = né ɔ̄r-hí dá
woman-C7 = DEF.C7 look husband-C7 = C1.POSS C4-hair = with C5-head NEG
'The woman had no respect for her husband.'
lit: The woman didn't look at her husband (like a) head with hair'

d. nētá-ú = já kɔ̀b ɔ̄t-mèn
woman-C7 = DEF.C7 receive C7-pregnancy
'The woman got pregnant.' (SR_SJ_Ror_2013: 001-003)

CHAPTER VI

NONVERBAL, EXISTENTIAL, AND POSSESSIVE PREDICATION

In this chapter I explore the function and form of nonverbal predication constructions that are distinct from basic verbal predication described in Chapter V. First, the main semantic component of each predicate is nonverbal (following Hengeveld 1992: 27). That is, the main lexical predicate is not an Ụt-Ma'in verb as defined in §3.3. This need not mean that there is no verbal element, rather that any verb that may be present is a COPULA. The copula exists only to support the nonverbal lexical predicate element (Stassen 1997: 97) or to indicate to the listener "that the nucleus of the predicate is a nonverbal element" (Overall et al 2018: 02). Second, those clauses that require a copula in the affirmative require a negation strategy that is distinct from that found in basic clauses (§5.4). The fact that they have a shared negation strategy unifies clear copular constructions (see §6.2.3) with existential and possessive constructions. For this reason, existential (§6.2.5) and possessive (§6.2.4) predication are discussed within this chapter.

In Ụt-Ma'in there are two nonverbal predicate macro-constructions: the Juxtaposed NP construction and the Copular construction, schematized in Figure 20. PRED in Figure 20 represents a range of morphosyntactic structures including: NPs, adjectives, prepositional phrases, postpositional phrases, and quantifier/numeral phrases.

JUXTAPOSED NP CONSTRUCTION	NP	Ø	NP_{PRED}
COPULAR CONSTRUCTION	NP	COP	$PRED_{NV}$

Figure 20: Schematic of nonverbal macro-constructions

In the juxtaposed NP constructions a NP serves as predicate, employing a "zero copula" (Stassen 1997: 62), shown as a null Ø in Figure 20. The second NP is often a pronoun that agrees in noun class with the first NP. These Juxtaposed NP constructions are used for functions of identification/equation and categorization/proper inclusion (Overall et al 2018: 6 and Payne 1997: 111). They are restricted to affirmative present tense interpretations or gnomic interpretations (Stassen 1997: 110). There are no attested instances of 1st or 2nd person pronouns, suggesting that these structures are only available for 3rd person (Stassen 1997: 107).

In the copular constructions NPs, adjectives, quantifiers, and adpositional phrases serve as the lexical portion of predicates, shown as PRED in Figure 20. Copular constructions have a much wider range of functions including: a second identification/equation construction, attribution of a property, and establishing location, §6.2. When the copular constructions are compared with basic verbal predication clauses (see Chapter V), one sees that the Ụt-Ma'in copula *ɔ́* occurs in the same morphosyntactic slot as verbs. Like regular verbs, the copula may be marked for tense with the PST suffix *-:g*. Stassen (1997:91ff) considers an element like *ɔ́* to be a "verbal copula" since the copula *ɔ́* can take a verbal suffix.[29] Specific forms of the copula are used for the verbal element in existential and possessive constructions: *ɔ́tːɛ́* 'COP.POSS' and *ɔ̄ró* 'COP.EXIST'. All copulas are shown in Table 29.

[29] I am not speculating on the origin of the copular verb, rather only observe that the synchronic copula is "verbal". Also, there is no evidence that the copulas can be nominalized.

Table 29: Forms of the Ụt-Ma'in copula

Affirmative		Negative	
ɔ́	'COP'	zá	'NEG.COP'
ɔ̄ró	'COP.EXIST'	zár	'NEG.COP.EXIST'
ɔ́t:(ɛ́)	'COP.POSS'	zát:(ɛ́)	'NEG.COP.POSS'

Table 30 compares the Ụt-Ma'in patterns to typologies in Overall et al (2018: 6ff) and Payne (1997: 111ff), including the typical (apparently universal) word category associated with each function following Overall et al (2018: 6). Both typologies include Existential and Possessive in their discussion of nonverbal predication, and we will see that these functions are also apparent in Ụt-Ma'in. All Ụt-Ma'in nonverbal constructions that have an NP predicate are shaded in Table 30. For each NP predicate a subscript indicates the functional interpretation of a NP. For example, an NP_{LOC} is a NP that can be understood to be a location like *ū-bù* 'C3-house'. When used in a copula construction it is the semantic properties of the noun that provide the range of functions covered by the typologies. NP_{EQUIV} is an NP that can be interpreted as the equivalent of the NP_{SUBJ} of the clause; NP_{ATTR} is an NP that can be interpreted as a property concept describing the NP_{SUBJ} of the clause. ADJ stands for adjective; NUM stands for numeral; QUANT stands for quantifier, PREPP for prepostitional phrase; POSTP for postpositional phrase.

Table 30: Ụt-Ma'in non-verbal predicate constructions relative to Typologies of functions

Functions		Ụt-Ma'in Construction		
Overall et al. (2018:6)	Payne (1997)		Ụt-Ma'in Predicate Cxn	
Categorization	Proper Inclusion	NP	NP	
Identification	Equative	NP_{SUBJ}	COP	NP_{EQUIV}
Permanent & Temporary Properties	Attributive	NP_{SUBJ}	COP	NP_{ATTR}
		NP_{SUBJ}	COP	ADJ
		NP_{SUBJ}	COP	NUM
Location	Location	NP_{SUBJ}	COP	NP_{LOC}
		NP_{SUBJ}	COP	$PREPP_{LOC}$
Possession	Possession	$NP_{SUBJ/PSSR}$	COP	$POSTP_{PSSD}$
		$NP_{SUBJ/PSSR}$	COP.POSS	NP_{PSSD}
Existential	Existential	NP_{SUBJ}	COP	
		NP_{SUBJ}	COP.EXT	
		NP_{SUBJ}	COP.EXT	QUANt
		NP_{SUBJ}	COP.EXT	$PREPP_{LOC}$
		NP_{SUBJ}	COP.EXT	ADJ

6.1 Juxtaposed NP Constructions

In the Juxtaposed NP Construction (above the bold line in Table 12), two NPs occur next to each other with no intervening copula, verb, or other predicating element. In all examples in this section, NPs will be [bracketed].

(172) [dīm-ə̄r = rí] [āvámūrə̄]
name-C5 = 1SG.POSS PN
'My name is Avamurụ'

(173) [ūn-tɔ́] [bū = tɔ́]
DEM.NEAR-C6 house = C6.DEF
'These are the houses.'

The juxtaposed NP construction can be used for personal introduction, as in response to a request for your own name seen in (172). The NPs are equated as referring to the same entity, with the second NP considered equivalent to the first NP. These are always interpreted as indicating present time/speech time or are interpreted as holding true within another time as established in a narrative discourse. This is similar to the interpretation of the Bare Verb construction (Chapter V; see also discussion of time interpretation in narrative in Paterson (2015)).

When two NPs are juxtaposed, there can be a proper inclusion reading as shown in (173); that is, the first NP is considered a member of the set designated by the second NP, as shown in (174) and (175).

(174) [tʃāmpá-ú = já]$_{\text{MEMBER}}$ [wá-r-tɔ́m = wá]$_{\text{SET}}$
man-C7 = DEF.C7 C1-C5-to.hoe = DEF.C1
'That man is a farmer.'

(175) [nētá-ú = já]$_{\text{MEMBER}}$ [wá-t-kɔ́sɛ̀ = wá]$_{\text{SET}}$
woman-C7 = DEF.C7 C1-C6-show = DEF.C1
'That woman is a teacher.'

6.2 Copular Constructions

6.2.1 Nominal Predicate Constructions

The Ụt-Ma'in Nominal Predicate Construction is composed of two NPs linked together by the copula *ɔ́*. The copula may be marked for tense with the verbal suffix *-ːg* 'PST'. The first NP has the morphosyntactic characteristics of the subject in verbal clauses; the second NP has the morphosyntactic characteristics of an object in verbal

clauses and has its own noun class marking independent of the subject (cf. discussion of subject and object properties in §5.3).

The Nominal Predicate Construction is used for three functions: identification (Overall et al. 2018: 4; cf. equative in Payne 1997: 114), attribution (Payne 1997: 111ff, which includes both temporary and permanent properties), and location (Overall et al. 2018: 4; Payne 1997: 111). In what follows, I illustrate these functions one at a time.

In Figure 21, subscript labels indicate the function of the NP. NP_{EQUIV} indicates a semantically "equivalent" noun in an Identification NP Predicate Construction, NP_{ATTR} indicates a noun in an Attributive NP Predicate Construction, and NP_{LOC} indicates a locative noun in the Locative NP Predicate Construction. NP_{QUANT} indicates either a Numeral NP or a Quantifier NP following the copula in a Quantifier NP Predicate construction. Any of the NP predicate elements can be fronted in a Focus NP Predicate Construction.

FUNCTION	FORM
IDENTIFICATION	NP ɔ-TNS NP_{EQUIV}
ATTRIBUTIVE	NP ɔ-TNS NP_{ATTR}
LOCATIVE	NP ɔ-TNS NP_{LOC}
QUANTIFIER	NP ɔ-TNS NP_{QUANT}

Figure 21: Functions of the Predicate Nominal Construction

FOCUS NP PRED CXN	NP_{FOC} NP ɔ-TNS-ɛ

Figure 22: Schematic of a Focused Predicate Nominal Construction

6.2.1.1 Identification function of the Predicate Nominal Construction

We first look at the Predicate Nominal Construction that equates the concepts expressed by two nouns or NPs. Example (176) shows a Nominal Predicate Construction used for identification. Preceding the copula *ɔ́* is the 3SG.SUBJ pronoun *wɔ̄n*; following the copula is the noun *ū-dárídàŋ* 'spider'. Example (176) was elicited while discussing a folk story where Mr. Spider is a main character. In the folk story, Mr. Spider introduces himself using the focus clause in (177), which has an object form pronoun as the first NP. The clause in (176), also with the function of identification, was offered to express another character's perspective from within the story.

	NP_{SUBJ}	COP	NP_{EQUIV}
(176)	wɔ̄n	ɔ́	ū-dàrīdàŋ
	3SG.SUBJ	COP	C7-spider

'He is Mr. Spider.' (elicited)

	$NP_{OBJ.FOC}$	COP	NP_{EQUIV}
(177)	mɛ́	ɔ́	ū-dàrīdàŋ
	1SG.OBJ	COP	C7-spider

'Me, (I) am (Mr. Spider).' (FSC 2007:14)

From the same folk story with Mr. Spider still speaking, the Nominal Predicate Construction in (178) equates the NP *ràndí-m-ɔ̀* 'spider.web-C6M-SUBJ' with the NP *fɔ̄n-ū=rí* 'my road'. This has the same basic function of identification as does the Juxtaposed NP Construction seen in 6.1.

(178)	ɔ́dàʔɔ̄	[ràndí-m-ɔ̀]	ɔ́	[fɔ̄n-ū=rí]
	now	spider.web-C6M-SUBJ	COP	road-C7=1SG.POSS

'Now spider web is my road.' (FSC_IT 2007:20)

6.2.1.2 Attributive function of the NP Predicate Construction

To form an Attributive NP Predicate construction, one need only use a descriptive noun as the second NP, as in (179); *m-ʤ̄igə̄n* 'C6M-dirtyness' has it's own noun class marker and is not marked for agreement with the noun it is modifying.[30]

	NP	COP	NP_{MOD}
(179)	káʔát-ɔ́t = rí	ɔ́	m-ʤ̄igə̄n
	shoe-C6 = 1SG.POSS	COP	C6M-dirtyness
	'My shoes are dirty.' (elicited_DY_2017)		

6.2.1.3 Locative NP Predicate Construction

To form a NP Predicate Construction with a locative interpretation, one need only use a noun expressing a semantic location following the copula *ɔ́*. In (180), the noun *ū-bù* 'C3-house' is interpreted as the location of the speaker. This clause was provided as an explanation of one's own location when, for example, asking via phone where a person is currently located; that is, the listener would not have visual reference to the speaker's location.

(180)	ə̄m	ɔ́	ū-bù
	1SG.SUBJ	COP	C3-house
	'I am at home.' (elicited_IT_2017)		

In (181), the NP *ísə̀rdù* 'eye of well' is interpreted as the location of the lizard. In (182) *ə̄r-dú* 'C5-mortar' is interpreted as the location of the calabash; the overt locative phrase *ɔ́mɛ́ ūkúr* 'inside the room' is within the NP headed by *dú* 'mortar'.

[30] Adjectives are a separate word category (see 1.1.3.1.5 and Smith 2007: 86) and show distinct morphosyntaxwhen functioning as a predicate, namely agreement with the noun class of the NP which precedes the copula; copular adjectival predicates are discussed in §6.2.2.2.

(181) [gə̀-jə̀] ɔ́ [ísə̀rdù], jā hɛ̄ːg ɔ́-mɛ́ dùdə̀mbə̄
lizard-C7.SUBJ COP eye.of.well C7.SUBJ fall.PST LOC-inside well.of.water
'Lizard is at the door of the well; it fell inside the well of water.' Primer (2009:73)

(182) [kɔ́k d-ə̀ = Ø-kɔ́w] ɔ́ [ə̄r-dú ɔ́-mɛ́ ū-kúr]
calabash C5.AG-ASSOC = C3-sowing COP C5-mortar LOC-inside C3-room
'The calabash (used for) sowing is on the mortar inside the room'

Use of the NP predicate construction for expression of location is less frequent than use of a prepositional phrase expressing location, which will be described in §6.2.2.3.

6.2.1.4 Quantifier NP Predicate Constructions

To form a NP Predicate Construction with a quantification interpretation, one need only use a quantifier NP with the copula *ɔ́*. The quantifier noun *ū-tát* 'C3-many' does not alter in any way to agree with another NP. It always occurs with the class 3 prefix, as seen in (183).

	NP		*ɔ́*	NP_{QUANT}	
(183)	[dímt = t-ə̀	nó]	ʔɔ́	[ū-tát]	ɔ́ = t-máʔrɔ̀r
	name = C6-ASSOC	bird	COP	C3-many	LOC = C6-PN

'Names of birds are many in Ụt-Ma'Rọr (variety of Ụt-Ma'in)' (MM_Ror_2017: 209)

In the next section I describe uses of the copula *ɔ́* with nonverbal predicates that are not NPs.

6.2.2 Other nonverbal predicate constructions with copula ɔ́

Beyond NP predicates, numerals, adjectives, locative prepositional phrases and similative clauses headed by the preposition *ɔ́kā* 'like, as', can serve as predicates following the copula *ɔ́*.

6.2.2.1 Numeral predicate construction

Numeral predicates are marked for agreement with the noun class of the subject. In (184), the numeral gān 'one' occurs with the AG5 prefix in agreement with the C5 NP *rɛmdə̀ ásus* 'language of the Us people' that precedes the copula.[31]

(184) rɛm = d-ə̀ á-s-ùs ɔ́ = r-gān ɔ́ = kàg-nɛ̀ = nɛ̀
tongue = AG5-ASSOC C2-C4-PN COP = C5-one LOC = PN-C2 = with
'Language of the Us people is one with Kag people.' (UW_Us_2017: 1.15-1.17)

6.2.2.2 Predicate Adjective Constructions

There are only eight known adjectives (Smith 2007: 86 and discussion in §3.5). These may form a predicate following the copula *ɔ́*, as in (185) through (188). In (185), the adjective *ját* 'big' must be marked for agreement with the noun class of the subject. Example (186) demonstrates that the copula can be marked for past tense in an Adjective Predicate construction. In (187) the same adjective *ját* 'big' is marked for agreement with the class 7 noun *rwág* 'elephant'; in (188) the adjective is marked for class 5 agreement with the subject *bjá* 'barn'.

(185) bū-ū = ɔ́ ʔɔ́ = **ját-ə̀**
house-C3 = C3.DEF COP = big-C3.AG
'That house is big.' (elicited SJ_2017_GD_144-146)

(186) bū-ū = ɔ́ ʔɔ́-gɔ̄ː **ját-ə̀**
house-C3 = C3.DEF COP-PST big-C3.AG
'That house was big.' (elicited SJ_2017_GD_415-417)

(187) rwág-ú Ø já, jā ɔ́ **ját-jà**
elephant-C7 C7.OBJ C7.SUBJ COP big-C7
'Elephant, it is; it is big.' / 'That elephant, it is big' (elicited SJ_2006)

[31] Alternately, this could be interpreted as a type of identity predicate.

(188) mēr zɔ̄ bjá-ɔ̄r rí ɔ́ **ját-dɛ̀**
PN say barn-C5 1SG.POSS COP big-C5
'Mer said, "My barn is big." ' (Primer 2009)

Though I have just said that predicate adjectives agree in class with the subject, at first glance (189c) seems to show a mismatch between the C7 noun class marking on the adjective and the C1 class to which the subject *wā* 'C1.SUBJ' belongs. The referent of *wā* 'C1.SUBJ' is clearly the noun the C1 noun *zwàr* 'young.man', established as a class 1 in (189a) In Ụt-Ma'in, CLASS 1 is the class of most human referents; but some human referent nouns occur in class 7. Perhaps the use of class 7 on the adjective is related to the meaning of 'good + person', where the intended referent is the class 7 noun *ū-tʃāmpá*, which is the general word for 'man/husband'.This parallels patterns for other Benue-Congo languages, notably at least some Bantu languages, where nouns denoting humans can belong to more than one noun class. In Chichewa, nouns in class pairings 12/13 and 7/8 denoting humans can trigger syntactic agreement with the appropriate 12/13 or 7/8 pronoun, or can trigger semantic agreement with the 1/2 (human) pronoun (Corbett 1991:248-250; see also Welmers 1973:175).

(189) a. nā nɔ́ŋ wà-kɔ̄n zwār = wā
INDEF.SUBJ do.PST C1-there young.man = C1
'There was a certain young man,'
b. ɔ́ = ɔ́-kɔ̄n tà:s = ɔ̄
LOC = C3-there village = DEF.AG3
'in a certain village.'
c. wā = ʔɔ́ sɔ̄-jà
C1.SUBJ = COP good-AG7
'He is handsome,'
d. wā ɾátɛ́ ʃīk = dá
C1.SUBJ NEG.have money = NEG
'(but) he does not have money.' (YM_IY_Ror_2013: 1-4)

6.2.2.3 Prepositional locative predication construction

A prepositionally-marked locative phrase can be the complement of the copula *ɔ́*. There is no marking of agreement between the NPs encoded within a prepositional phrase and the clause initial NP. In (190) the overt locative preposition *ɘ́-dɔ́m* 'LOC-top' follows the copula and precedes the noun *ɘ̄r-fə̀rə̀k* 'C5-throne'; the clause expresses the location of *fə̀rə̀k* 'king'. Example (191) expresses the metaphorical association of a particular kind of bird among the larger category of all birds using a copula and a locative prepositional phrase. [32]

	NP	*ɔ́*	LOC	
(190)	fə̀rə̀k-Ø	ɔ́	[ɘ́-dɔ́m	ɘ̄r-fə̀rə̀k]
	king-C1	COP	LOC-top	C5-throne

'A king is on a throne' (Primer 2009:95)

		NP	*ɔ́*	LOC	
(191)	kó	kɔ́ːt-Ø	ɔ́	[ɘ́ = tɛ̀kə̀	Ø-nó]
	even	guinea.fowl-C2	COP	LOC = middle.of	C2-bird

'Even the guinea fowl are a kind of bird.' (lit: 'are in the middle of birds')
(MM_Ror_2017: 223)

6.2.2.4 Similative predicate construction

The structure of a similative predicate resembles the prepositional locative predicate structure. In the Similative construction the general LOC morpheme *ɘ́* precedes the morpheme *kā* which yields a meaning of 'same' or 'like'. However, the possible instantiations of the predicate differ from the prepositional locative predicate

[32] Alternately, this can be understood as a kind of categorization predicate. However, it clearly has locative phrase syntax and as such is included in this section.

construction, as the constituent that follows *ɔ́kā* may be can be either an NP (192) or an entire clause (193).

(192) ɔ́ nā ɔ́ ɔ́kā fɛ̃ s-ˋ= u-te
and NPERS COP like branches AG4-ASSOC=C7-tree
'and they are like branches of a tree'

(193) bɔ̄ ɔ́ ɔ́kā rɔ̄-ɔ̄ mɔ̄-tː bɔ̄ zá=t-tʃán ɔ́=r-tàkɔ̀n
2SG COP like god-C3 build-PFT 2SG NEG=C6-feather LOC=C5-beginning
'you are like creator made you featherless in the beginning' (GF_IT_Juur_2007: 30-31)

Figure 23 summarizes uses of copula *ɔ́* described in this section.

FUNCTION	CONSTRUCTIONAL FORM		
ADJECTIVE PREDICATE CXN	NP	*ɔ́*	ADJ
OVERT LOCATIVE PREDICATE CXN	NP	*ɔ́*	$\text{PREPP}_{\text{LOC}}$
SIMILATIVE PREDICATE CXN	NP	*ɔ́*	*ɔ́kā* NP/CL

Figure 23: Other constructions with copula ɔ́

In the next section I describe the negation pattern of copular constructions. Use of a single negative strategy for the negative counterpart of all the constructions discussed in 6.2.1 and 6.2.2 supports including possessive (6.2.4) and existential (6.2.4) predicates within this chapter on copular constructions.

6.2.3 Negative Copular Construction

Negative copular construction uses the negative copula *zá*. The source of *zá* 'NEG.COP' is likely the nominal negator zá 'no', shown in (194) and (195), or vice-versa.

(194) zá=ʔ-tʃán
NEG=C6-feather
'featherless' (GF_IT_Juur_2007: 31)

(195) a. wá = n-níp
C1 = C6-truth
'innocent person'

b. wá = zá = n-níp
C1 = NEG = C6-truth
'guilty person'

The *zá* 'NEG.COP' is used in place of the *ɔ́* 'COP' to negate a copular clause. There is some variation in the pronunciation of the initial consonant of the negative copula; some speakers use the fricative /z/, some the flap /ɾ/, and some the stop /d/. The NP that precedes the negative copula has the same subject properties we have seen with Basic Verbal Constructions and Copular Constructions. In (196b), the subject pronoun *ə̄m* '1SG.SUBJ' is cliticized to the negative copula. The semantically main predicate is the class marked indefinite pronoun *ɔ̀-kə̄n* 'c3-there' which translates in other non-negative contexts as 'something'. When it co-occurs with the negative copula, then *ɔ̀-kə̄n* translates as 'nothing'. Here we know that the negation is on the clause level (i.e. is negating the predication, and not just an NP) for two reasons: the use of the subject form pronoun preceeding the *zá* and the co-occurring use of the clausal negator *=da*.

(196) a. mɛ́ Ø tɔ́k-Ø = wá ə̄m ɔ́-jɛ́;
1SG.FOC JUXT servant-C2-C1.POSS 1SG.SUBJ COP-FOC
b. ə̄m = zá ɔ̀-kə̄n = dà.
1SG.SUBJ = NEG.COP C3-there = NEG
'Me, his servant I am; I am nothing (lit: I not something).' GL_2008: 1.33

The examples below present a the negative copula with an adjective predicate (197) and a locative prepositional phrase predicate (198).

(197) a. té = jə̀ ɔ́ sɔ̄-jà yā mɔ́t jà = tə̀ ɔ́ sɔ̄-tɔ̀
tree-C7.REL COP good-AG7 C7.SUBJ bear fruit-C6.REL COP good-AG6
b. **té = jə̀ zá sɔ̄-jà = dà** yā mɔ́t jà-t jɔ̀-tɔ̀
tree-C7.REL NEG good-AG7 = NEG C7.SUBJ bear fruit-C6 bad-AG6
'A tree that is good, it has produced fruit that is good. **A tree that is not good**, it has produced bad fruit. (GM_draft 2019: 12.33)

(198) ɛ̄ = **zá** tɛ̄kɔ̄ nɛ̄t-t ját-tɔ̀ = **dà**
C2.SUBJ = NEG.COP middle.of person-C6 big-AG6 = NEG
'They are not important people' (lit: 'They are not among big people.')
(PTY_draft_2019: 4.13)

6.2.4 Possessive Predication Constructions

There are at least six reasons to include possessive and existential predication in the chapter on nonverbal predication: (1) there is a possessive predication construction that uses the ɔ́ 'COP' with a postpositional phrase as the lexical element of the predicate; (2) the copula *ɔ́* 'COP' is the first component of the posseesive verbal element *ɔ́tːɛ́* and of the existential *ɔ̄ró* 'exist'; (3) the nominal negator *zá* turned copula is the first component of the negative possessive verbal element *zátːɛ́* 'NEG.COP.POSS' and of the negative existential *zár* 'NEG.COP.EXIST'; (4) only a nonverbal element may follow the copular forms used in possessive and existential predcates; (5) the existential *ɔ̄ró/zár* may be used for locational, quantitative, attributive predication parallel to the *ɔ́/zá* copulas; and (6) possessive and existential predicates are included in the typology of nonverbal predication (Overall et al. 2018). These structural and semantic properties are described in the final sections of this chapter.

There are five possessive constructions in Ụt-Ma'in schematized in Figure 24. In each, the NP_{PSSR} precedes the copular element and the NP_{PSSD} follows the copular element. It is possible to focus the possessed noun by placing it in clause initial position. The negative copula *zá* is only attested with *zátːɛ́* in the negative possessive construction. The Past tense Possessive 'with' construction provides a "no longer true"

reading of a previous possessive state; no negative morpheme occurs. In Figure 24 the think horizontal line indicates a division in th possessive constructions by the verb used.

FUNCTION	CONSTRUCTIONAL FORM				
POSSESSIVE 'WITH' PRED CXN		NP_{PSSR}	*ɔ́*	NP_{PSSD}	*=nɛ̀*
PAST POSSESSIVE 'WITH' PRED CXN		NP_{PSSR}	*ɔ́gɔ́*	NP_{PSSD}	*=nɛ̀*
POSSESSIVE PRED CXN		NP_{PSSR}	*ɔ́tːɛ́*	NP_{PSSD}	
FOCUS POSSESSIVE PRED CXN	NP_{PSSD}	NP_{PSSR}	*ɔ́tːɛ́*		
NEGATIVE POSSESIVE PRED CXN		NP_{PSSR}	*zátːɛ́*	NP_{PSSD}	*=da*

Figure 24: Schematic of Possessive Predicate Constructions

6.2.4.1 Affirmative Possessive Predication Constructions

There are two affirmative possessive predication constructins. First, the Possessive 'with' construction transparently uses *ɔ́* 'COP' plus a possessed NP within a postpositional phrase carrying *=nɛ̀* 'with', as in (199).

(199) a. dɔ̄gɔ̄ dà nā mátɔ́ wá:,
from time NSPEC give.birth C2.OBJ
NP_{PSSR} ɔ́ NP_{PSSD} =nɛ̀

(200) b. wá ɔ́ [nɔ̄m=Ø - ɔ̀ s-tɛ̄] =nɛ̀
C1.OBJ COP thing=C2-ASSOC C4-tree =with
'(a) From the time she was born, (b) she has a demon' (lit: 'she is with things of trees')
(PW_IY_Ror_2013_6.380 - 9.610)

Towards the end of the same text, the speaker uses the same construction to present the woman's supernatural children who are the descendants of her and the evil spirit. This is not describing the birth of children; she "has" these children in the sense that they exist and belong to her; in fact the speaker emphasizes that she is the only one who sees them.

	NP_{PSSR}	***ɔ́***	**NP_{PSSD} ＝nɛ̀**			
(201)	ɔ̄n	ɔ́	já:g＝nɛ̀	ū-tát	ɔ́＝mɛ̄n＝t-ə̀-m	bɔ́
	3PL.SUBJ	COP	children＝with	C3-many	LOC＝middle＝C6-ASSOC-C6B	water
	‘they have (lit. are with) children, many in the water world’ (PW_IY_Ror_2013: 092)					

In (202), also from the same text, the second possessive construction which uses the form *ɔ́t:ɛ́* ‘COP.POSS’ is used to describe the exact same situation of possessing mythical children. The possessed item need not be animate. See (203) and (204) for additional examples.

	NP_{PSSR}	***ɔ́t:ɛ́***	**NP_{PSSD}**		
(202)	wā	ɔ́t:ɛ́	já:g	ɔ́＝mɛ̄n＝t-ə̀-m	bɔ́
	C1.SUBJ＝COP.POSS		children	LOC＝middle＝C6-ASSOC-C6B	water
	‘She has children in the water world’ (PW_IY_Ror_2013: 089)				

	NP_{PSSR}	***ɔ́t:ɛ́***	**NP_{PSSD}**
(203)	[wɔ̄ná]	ɔ́t:ɛ́	[bū＝ɔ́]
	C1.REFL	COP.POSS	house＝C3.DEF
	‘He, himself, has the house.’ (elicited_SJ_Ror_2006_12_02: 71-72)		

	NP_{PSSR}	***ɔ́t:ɛ́***	**NP_{PSSD}**	
(204)	músà	ɔ́t:ɛ́	kwàt＝j-ə̀-t	kwə̀m
	PN	COP.POSS	ring＝C7-ASSOC-C6	wealth
	‘Musa has a ring of wealth’ (MA_IY_Ror_2013: 006)			

6.2.4.2 Past and Negative Possessive Predication Constructions

The Possessive ‘with’ construction can occur in the past tense, with the tense marked on the copular verb, as in (205). Use of the past tense morpheme expresses that a state of possession is no longer true.

(205)	mɔ̄	ɔ́-gɔ̄	m-tòr	nɛ̀
	C6B.SUBJ	COP-PST	C6M-cold	with
	‘It (the water) was cold (it is not cold now).’			(elicited_SJ_Ror_2017: BB85)

(206)	īt	ɔ́-ːg	ū-gjér＝nɛ̀
	1PL.EXCL	COP-PST	C3-fear＝with
	‘We had fear.’ (lit: ‘We were with fear.’) (UH_Juur_2017: 010)		

The negative possessive predication construction uses *zátːɛ́* 'NEG.COP.POSS' replacing the *ótːɛ́* 'COP.POSS'. The clause final clitic *=dá* is also required. Example (207) is from a story about a young man who wants to marry, but struggles to find a wife because he is poor.

			NP_{PSSR}	*zátːɛ́*	NP_{PSSD} *=dá*
(207)	wā=ʔɔ́	sɔ̄-jà,	wā	ɾátːɛ́	ʃīk=dá
	C1.SUBJ=COP	good-C7.AG	C1.SUBJ	NEG.COP.POSS	money=NEG

'He is handsome, (but) he does not have money.' (YM_IY_Ror_2013: 003-004)

In the next section I describe existential nonverbal predication.

6.2.5 Existential Constructions

There are seven existential constructions in Ụt-Ma'in schematized in Figure 25. The NP that precedes the copular element demonstrates the subject properties described in 5.3. I express it here as NP_{SUBJ}. To predicate the existence of a referent without regard to any other feature/value, the clause may end with one of two forms of the copula *ɔ́* (*ɔ́jɛ́* and *ótːɛ́*) or with the existential copula *ɔ̄ró*. However, a quanitifer or a $PrepP_{LOC}$ may follow the *ɔ̄ró* 'COP.EXT' to predicate the existence of referent in a particular location, or it may express a particular numerical value. The negative counterpart of both these existential predicate constructions uses *zár* 'NEG.COP.EXT' plus the phrase final *=da* '=NEG' In Figure 25, MOD indicates various modifier phrase types that can occur as discussed in the sections below.

FUNCTION	CONSTRUCTIONAL FORM			
COP.FOC EXISTENTIAL PRED CXN	NP_{SUBJ}	*ɔ́jɛ́*		
COP.PFT EXISTENTIAL PRED CXN	NP_{SUBJ}	*ɔ́tːɛ́*		
EXISTENTIAL PRED CXN	NP_{SUBJ}	*ɔ̄ró*		
EXISTENTIAL PRED + QUANT CXN	NP_{SUBJ}	*ɔ̄ró*	NP_{QUANT}	
EXISTENTIAL PRED + LOC CXN	NP_{SUBJ}	*ɔ̄ró*	$PrepP_{LOC}$	
EXISTENTIAL PRED + A CXN	NP_{SUBJ}	*ɔ̄ró*	A	
NEGATIVE EXISTENTIAL PRED CXN	NP_{SUBJ}	*zár*		*=da*
NEGATIVE EXISTENTIAL PRED + CXN	NP_{SUBJ}	*zár*	MOD	*=da*

Figure 25: Schematic of Existential Predicate Constructions

6.2.5.1 Affirmative Existential Constructions

When the copula forms *ɔ́jɛ́* and *ɔ́tːɛ́* are used to predicate the existence of some entity, they occur clause finally, as in (208) and (209) for *ɔ́jɛ́* and (210) for *ɔ́tːɛ́*. These perhaps should be considered presentational constructions(Creissels 2013: 15). Example (210) occurs in a text after explanation of the differences between saying something in the trade language Hausa and the local Ụt-Ma'in language.

(208) dɛ̄ ɔ́-jɛ́
C5.SUBJ COP-FOC
'It exists.'

(209) wá-t-kɔ́sɛ̀=wá, ɔ̄m ɔ́-jɛ́
C1-C6-teach=C1.POSS 1SG.SUBJ COP-FOC
'His teacher, I am/exist.'

(210) īyá ɔ́tːɛ́
like.that COP.PFT
'That is how it is.' (MM_Ror_2017: 351)

(211) a. bé=d-ə̀ [kwə̀m-t=nɔ̄ ɔ́tːɛ́]
place=AG5-REL property-C6 2PL.POSS COP.PFT
b. [kə̀ná], [ʤāb-ɔ̄=ró] ɔ́tːɛ́
there heart-C3=2SG COP.PFT
'The place that your property has been located, there has been located your heart.'
(MT_draft_2019: 6.21)

The existential copula *ɔ̄ró* can predicate the existence of any referent. In (212), the NP *pò-mɔ̄* 'tiredness-C6B.SUBJ' carries the subject suffix, and the existence of "tiredness" is asserted.

(212) pò-mə̀ ɔ̄ró
tiredness-C6B.SUBJ COP.EXT
'I am tired.' (lit: 'There is tiredness.') (Hausa *akwai gajiya*)

This *ɔ̄ró* form resembles the copula plus locative *ʔɛ̀l-ló* 'COP-there' used to predicate existence in the related and neighboring language C'Lela (Dettweiler 2015: 112). In C'Lela the copula *ʔɛ̀l* is used in a variety of constructions separately from *ló* 'there'; Detteweiler (2015: 95) describes *ló* 'there' as an Adverb. This compartive evidence suggests that the Ụt-Ma'in existential copula *ɔ̄ró* may come from a copula plus locative, though Ụt-Ma'in *ɔ̄ró* by itself does not express locative 'there'. (To predicate the existential location of a referent, an additional locative morpheme is required, as *ɔ́=kɔ̄n* 'LOC=there' in (217).)

The existential copula is used to predicate the existence of bird names in (213). In an excerpt discussing 'dove' names with a Ror speaker, *ɔ̄ró* 'COP.EXT' is used two times although five different 'doves' are named. Clause (213a) is a repetition by the speaker of the question posed to the speaker.

(213) a. dím = t-ə̀ Ø-nō = á
name = AG6-ASSOC C2-bird = Q

b. dím = t-ə̀ Ø-nō ʔɔ́ ū-tát ə́ = t-mà-ròr
name = AG6-ASSOC c2-bird COP C3-many LOC = C6-language = PN

c. nā = dáyá r-gòròp ná = bíyú gòròp-r ʤáz-dɛ̀
NSPEC = one C5-dove NSPEC = two dove-C5 red-AG5

d. gòròp-r ʤáz-dɛ̀ ə́ = gòròp-r pús-dɛ̀ dɛ̄ = **ɔ̄ró**
dove-C5 red-AG5 LOC = dove-C5 white-AG5 C5.SUBJ = COP.EXT

e. sánàn gòròp ī-dānkɔ̄kɔ̀
and.then dove CDIM-PN

f. (ə́) = d-ə̀ rīm-dɛ̀ **ɔ̄ró**
LOC = AG5-REL black-AG5 COP.EXT

'(a)(What are the) names of birds? (b) Names of birds are many in Ụt-Ma'Ror. (c) The first one is a dove; the second one is a red dove. (d) Red dove and White dove; it exists. (e) And then there is the dove (called) little Dankọ̀kọ̀, (f) and a black on exists (too).'

(MM_Ror_2017: 206, 209, 211-217)

The form *ɔ̄ró* occurs in the Ror variety, but the form *rɔ̄ró* is found in the southernmost variety, Juur. Example (214) is a longer list of various bird names from a Juur speaker. This initial *r* consonant resembles the copula *rɔ* 'be' in the closely related Ụt-Hun language whose area borders the Juur people (Bendor-Samuel et al. 1973: 69). The *rɔ̄ró* form is used in the most northern language variety Kuur, as illustrated in the mention of snake names in the region in (215).

(214) a. (dím = t-ə̀ Ø-nō) ə̄t-má = īn = á, tó
name = AG6-ASSOCC 2C-bird C6-language = 1PL.INCL.POSS = Q okay
b. *kagəmkagəm-Ø* ***rə̄ró***
heron-C2.SUBJ COP.EXT
c. *gòròp-r* = ***rə̄ró***
dove = C5.SUBJ = COP.EXT
d. *və́rə̀nvə̀-Ø* ***rə̄ró***
cattle.egret-C2.SUBJ COP.EXT
e. *kwásgə̀-jə̄* ***rə̄ró*** *já* *já* *rə̀k-jà*
lizard.buzzard-C7.SUBJ COP.EXT C7 C7 small-C7
f. *pə̀npə̀k-r* ***rə̄ró***
longtail.nightjar- C5.SUBJ COP.EXT
g. *kwàrg-r* ***rə̄ró***
bush.fowl-C5.SUBJ COP.EXT
h. *ū-kúːt* *jā* ***rə̄ró***
c7-chicken C7 COP.EXT
'(a)Names of birds in our language? Ok. (b) There are heron... (c) There is the dove...
(d) There are cattle egret... (e) There is the lizzard buzzard; it is the small one...
(f) There is the longtail nightjar... (g) There is the bush fowl... (h) Chicken, there is.
(HH_HF_Juur_2017: 193, 196, 211, 225, 226, 231, 257, 262)

(215) kɔ́ks-bə̀ rə̄ró è?-bə̀ rə̄ró
black.cobra-C7.SUBJ COP.EXT python-C7.SUBJ COP.EXT
'There is the black python and there is the python.' (HK02_Kuur_2017: 007)

Example (216) demonstrates that a quantifier NP may follow the existential copula. Example (217) demonstrates that a locative prooun may follow the existential copula; in (218b) a locative $PrepP_{LOC}$ follows the existential copula. Example (219) demonstrates that an adjective may follow the existential copula.

(216) àŋk-mə̀ ə̄ró ū-tát
work-C6B.SUBJ COP.EXT C3-much
'Much work exists.'

(217) no-jə̀ ***ə̄ró*** ə́ = kə̄n...
bird-C7.SUBJ COP.EXT LOC-there
'There is a bird there... (MM_Ror_2017: 238)

(218) a. wà-kɔ̄n hā-ːn ɔ̄zɔ̄ wɔ́n
C1-there go-DIST saying 3SG
b. [jà-kɔ̄n nɛ̄tá jā] **ɔ̄ró** ɔ́ = bɔ́-ú = rò...
C7-there woman C7.DEF COP.EXT LOC = town-C3 = 3SG.POSS
'(a) Someone came saying (to) him, (b) "There is a certain woman in his town... " '
(GK_IY 2013: 00:11.048 - 00:14.863)

(219) ī-dānkɔ̄kɔ̀ ɛ̄ **ɔ̄ró** rɛ̀k-ɛ̀
CDIM-K.O.bird C2.SUBJ COP.EXT small-AG2
'i-dankọkọ, they are small.' (MM_Ror_2017: 211)

6.2.5.2 Negative Existential Constructions

The Negative Existential construction is formed using the copula *zár* 'NEG.COP.EXT' plus the phrase final *=dá* 'NEG'. In (220), the two negators *zár+dá* are adjacent and pronounced phonetically as [zál:á].

NP *zár=dá*
(220) dà ɔ̄m té-n = ɛ́, dàk-ɔ̀ zár = dá
time 1SG arrive-DIST = FOC land-C3.SUBJ NEG.COP.EXT = NEG
'When I arrived, there was no land.' SFC_IT_Juur_2005: 32)

(221) gān = dɔ̀ zár = dá
one = C5.SUBJ NEG.COP.EXT = NEG
'One, there is not.' (PS_IY_Ror_2013: 071)

A second NP can occur bewteen the *zár* 'NEG.COP.EXT'and the clause final *=da* 'NEG', as seen in (222).

(222) wà-kɔ̄n zár náp = d-ɔ̀ = r-nú dā
C1-there NEG.COP.EXT knowledge = AG5-ASSOC = C5-mouth NEG
'There was no one who knew the begining' (SFC_IT_Juur 2005: 22)
(lit: Someone there is not knowledge of mouth.')

6.3 Chapter summary

Figure 26 summarizes the Ụt-Ma'in nonverbal predicate constructions described in this chapter. The final two columns indicate the copular element found in each

construction. As can be seen, a number of question marks occur in the final columns, highlighting an absence of data in the corpus used for this study and hence still needed research.

Payne (1997)	Ụt-Ma'in Nonverbal Cxn			Uses *ɔ́* Copula	Uses *zá* Negative
Proper Inclusion	NP	Ø	NP	✗	✗
Equative	NP	Ø	NP_{EQUIV}	✗	✗
	NP_{SUBJ}	COP	NP_{EQUIV}	☑	?
Attributive	NP_{SUBJ}	COP	NP_{ATTR}	☑	?
	NP_{SUBJ}	COP	A	☑	☑
	NP_{SUBJ}	COP	NP_{QUANT}	☑	?
Location	NP_{SUBJ}	COP	NP_{LOC}	☑	☑
	NP_{SUBJ}	COP	$PrepP_{LOC}$	☑	?
Possession	$NP_{SUBJ/PSSR}$	COP	$PostP_{PSSD}$	☑	?
	$NP_{SUBJ/PSSR}$	COP.POSS	NP_{PSSD}	?	☑
Existential	NP_{SUBJ}	COP		☑	☑
	NP_{SUBJ}	COP.EXT		?	☑
	NP_{SUBJ}	COP.EXT	NP_{QUANT}	?	?
	NP_{SUBJ}	COP.EXT	$PrepP_{LOC}$	?	?
	NP_{SUBJ}	COP.EXT	NP_{MOD}	?	☑

Figure 26: Ụt-Ma'in nonverbal predicates and copula use

CHAPTER VII

OVERVIEW OF MULTI-VERB CONSTRUCTIONS AND TYPE I AND TYPE II AUXILIARIES

7.1 Introduction to multi-verb constructions

Chapters VII through X describe a variety of multi-verb constructions (CXNs) that are structurally unified in that the tense-aspect-mode-polarity (TAMP) designation is indicated by an auxiliary or possibly matrix verb and the main semantic predicate is contained within a nominalized VP. The major multi-verb constructions discussed in Chapters VII through X are schematized in Figure 29, in contrast to the basic verbal predication constructions presented in Chapter V. In Figure 27, the abbreviation AUX indicates the position of two potential auxiliaries (Chapter VII §7.3). The abbreviation LEX indicates the position of three lexical elements that co-occur with the progressive auxiliary (Chapter VII §7.4). LEXAUX indicates the position of the many "lexical auxiliaries" described in Chapter IX. The abbreviation "(TNS)" in parentheses indicates an optional tense suffix. Shaded lines in Figure 27 indicate a negative (NEG) construction. The abbreviation "(O)" in parentheses indicates an optional object. The remainder of this section briefly introduces the constructions, what structurally unifies them, and the rationale for handling them in separate chapters.

Chapter	Construction Label	Schematized Structure			
CH 5	BASIC VERBAL PREDICATION CXN	S/A	V (TNS)	(O)	
	NEG BASIC VERBAL PREDICATION CXN	S/A	V(TNS)	(O)	= da
CH 7	TYPE I: BASIC AUXILIARY CXN	S/A	AUX(TNS)	VP_{NMLZ}	
	NEG TYPE I: AUXILIARY CXN	S/A	*zá*	VP_{NMLZ}	= da
	TYPE II: PROG + LEX CXN	S/A	*ɔ́* = LEX	VP_{NMLZ}	
	NEG II: PROG + LEX CXN	S/A	*zá* = LEX	VP_{NMLZ}	= da
CH 8	'WANT' SAME SUBJ PREDICATION CXN	A	*ɔ́ = s-sà*	VP_{NMLZ}	
	NEG 'WANT' SAME SUBJ PREDICATION CXN	A	*zá = s-sà*	VP_{NMLZ}	= da
CH 9	TYPE III: LEXICAL AUX CXN	S/A	LEXAUX(TNS)	VP_{NMLZ}	
	NEG TYPE III: LEXICAL AUX CXN	S/A	LEXAUX(TNS)	VP_{NMLZ}	= da
CH 10	'DO' PREDICATION CXN	S/A	*nɔ́m*(TNS)	VP_{NMLZ}	
	NEG 'DO' PREDICATION CXN	S/A	*nɔ́m*(TNS)	VP_{NMLZ}	= da

The first column gives the chapter number where the constructions are described.

VP_{NMLZ} contains any objects within the nominalized phrase

Figure 27: Multi-verb constructions in contrast to basic verb constructions

For all multi-verb constructions listed in Figure 27, the Subject NP (S/A) comes first. Second, the "auxiliary" verb (or phrase) occurs in what would be the same "V" slot of a typical basic predication clause (Chapter V). Third, the semantically main verb occurs in a nominalized verb phrase (VP_{NMLZ}) form after the auxiliary verb. Objects always follow their lexical verb, that is, the order is VO within the nominalized phrase.

As stated above, the abbreviation "(TNS)" in Figure 27 indicates optional tense marking on verb or auxiliary verb forms: for basic verbal predicates covered in Chapter IV, both past *-ːg* 'PST' and perfect *-tɛ̀* 'PFT' occur. For Type I auxiliary constructions, only optional past tense *-ːg* 'PST' can occur. For Type III auxiliary constructions and 'do' predication constructions, either the past *-ːg* 'PST' or the perfect *-tɛ̀* 'PFT' may optionally occur.

The morphological shape of the nominalized V in the auxiliary constructions varies based on whether the expression is syntactically intransitive (INTR) or syntactically (di)transitive (TRAN).[33] For INTR structures, the nominalization is marked by a noun class prefix on the V (cf. §3.2.3). For TRAN structures, the object is expressed in an ASSOCP dependent to the nominalized V head (cf. Chapter IV, specifically §4.5). As in basic verbal predication clauses, the order is V–P_{OBJ}/ V–R_{OBJ}–T_{OBJ} within the nominalized phrase, but only P and R objects immediately following the V are required to be in an ASSOCCXN; T objects of ditransitives are not within an ASSOCCXN unless the R object NP is omitted.

There are three formally distinct types of U̱t-Ma'in auxiliary constructions. Two are described here in Chapter VII, and the third is described in Chapter IX. The discussion of auxiliary constructions is divided into two chapters because of a split in the negation strategy used. Auxiliary construction Types I and II have a shared "double" negation strategy that uses both the nominal negator *zá* 'NEG' (which has developed into the negative copula/auxiliary) and the *=da* 'NEG' clausal negation enclitic (see §6.3 and §6.4). The Auxiliary construction Type III uses only the *=da* 'NEG' clausal negation enclitic (see Chapter IX).

The Type I auxiliary construction expresses progressive and future by means of the particular auxiliary chosen. Progressive aspect is expressed by *ó*, the copula-turned-auxiliary-verb (cf. Chapter VI §6.2), that may occur in a bare verb form or a past tense

[33] Recall that in this study INTR is used as shorthand for syntactically intransitive, i.e. there is no expressed object NP; TRAN is used as shorthand for syntactically transitive, i.e. there is an expressed object NP (see discussion in §5.1).

form. Future tense is marked by the auxiliary *dé*. Both progressive and future clauses are negated with the same negative morpheme *zá* 'NEG.COP', a copula-turned-negative-auxiliary.

Type II auxiliaries are complex. These auxiliary words all contain the *ɔ́* progressive auxiliary procliticized to another lexical item from a small restricted set; all Type II auxiliary constructions have a progressive or immediate future interpretation.

For the most part, Type III auxiliaries are forms that still double as synchronic lexical verbs. When used as auxiliaries, they have varied meanings of future obligation, telicity, habitual action, continuative, inchoative, completive and frequentative aspect.

Clausal constructions with all three types of auxiliaries require the same subject for both the auxiliary and the semantically main nominalized verb that is the structural complement to the auxiliary verb.

Chapter VIII deals with several 'WANT'-constructions, which may be thought of as matrix-plus-complement constructions. I discuss the 'want' constructions immediately after Chapter VII because of the structural similarities that they share with Type I and II auxiliary constructions. In particular, (i) they occur with the copula-turned-auxiliary *ɔ́* (of the same as the Type I progressive auxiliary) preceding the nominalized verb *s-sà* 'C4-want'; (ii) they follow the "double" negation pattern used by Type I and II auxiliaries; and (iii) when the subject of the complement clause is the same as the subject of the 'WANT'-matrix clause, then the complement clause is nominalized like the semantically main verb of an auxiliary construction. The 'WANT' constructions are, however, handled in a separate chapter because when the subject of the complement clause is different from the subject of the 'WANT'-matrix clause, the complement clause

not nominalized; rather, it is a fully inflected finite clause with the pattern of the basic verbal predication described in Chapter V. Both nominalized and finite ‘WANT’-complement clauses are described in Chapter VIII.

Finally, Chapter X describes predications using the verb ‘DO’. ‘DO’ predication constructions are quite varied. One of the constructions is similar to the multi-verb constructions covered in Chapters VII-IX, which is the reason for mentioning ‘DO’ predication constructions in this overview. In particular, there is a transitive ‘DO’ construction whose P argument is a nominalized verb. In this transitive construction, the ‘DO’ verb and the semantically main nominalized complement of ‘DO’ must have the same subject and the verbs themselves are in fact co-referential to the same “activity”. In this way, the ‘DO’ verb in the relevant transitive construction has an auxiliary-like function relative to the main semantic predicate expressed in the nominalized complement.

The next section discusses the criteria used for determining what is an “auxiliary” and what criteria have been used to delimit what are considered auxiliary constructions in Chapters 7-10.

7.2 Identifying auxiliary verbs in Ụt-Ma'in

Since nominalized verbs can be used as the complement to many Ụt-Ma'in verbs, I must establish some criteria for what I call an auxiliary. I define an Ụt-Ma’in auxiliary as a verb that exhibits at least some verbal morphosyntax and gives the clause its tense, aspect, or mode interpretation, but the auxiliary verb does not express the main lexical predicate of the clause (Heine 1993:22-23). Figure 28 schematically compares the basic

verbal predication construction (Chapter V) and the Type I basic auxiliary construction (§7.3). The bold boxes list properties of the verb phrases and indicate differences between the two construction types. In the Basic verbal predication construction, any optional tense marking is on the only verb of the clause which is also the main semantic predicate; any object follows the verb. For the Type I basic auxiliary construction, the tense is marked on the auxiliary verb, which also expresses some other aspect or mode category; the main semantic predicate is within the nominalized verb complement (VP_{NMLZ}); any object is contained within an ASSOCP within the nominalized VP.

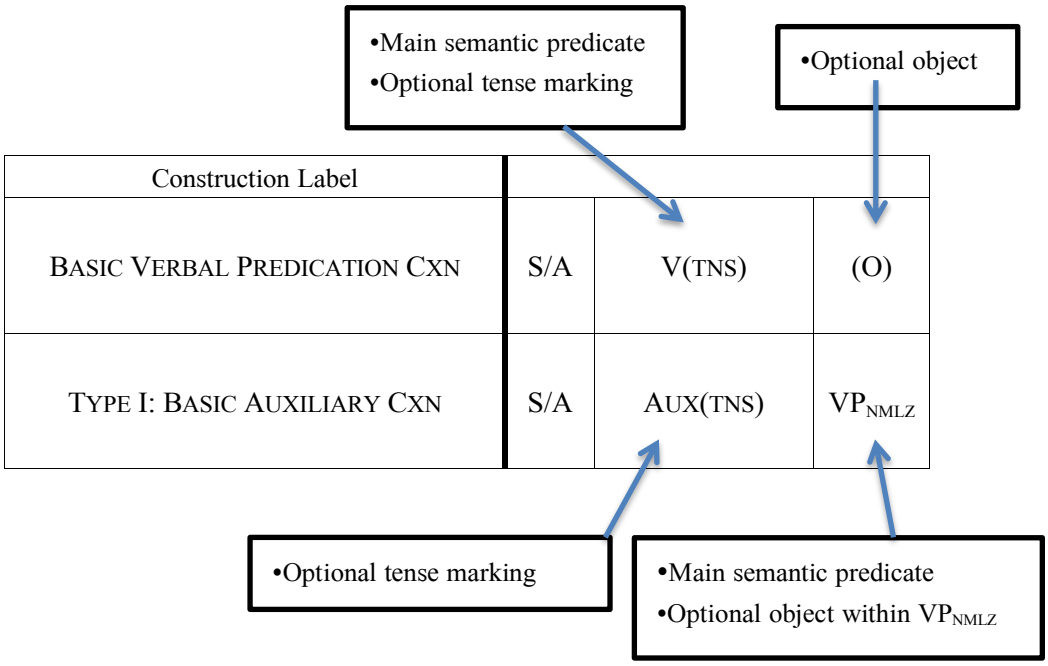

Figure 28: Comparison of basic verbal predication to Type I basic auxiliary predication

As Figure 30 shows, Ụt-Ma'in auxiliaries occur in the same syntactic position as the verb in basic verbal predication construction. For example, in (224) the auxiliary *ɔ́-g* 'PROG-PST' occurs immediately following the subject argument *wā* 'C1.SUBJ' parallel to

the verb *tátɔ̄n* 'shoot.PFT.DIST' in the Basic predication construction that occurs in (223). The nominalized main semantic verb of the auxiliary construction follows the auxiliary, in the same syntactic position as the P argument in a basic predication construction. For example, the nominalized verb *ɔ̄m-hā* 'C6B-walking' in (224) occurs in the same syntactic position as the P argument *ɔ̄m-ràndí* 'C6B-thread' in (223).

		A	V	P	
(223)	kɔ́ná	dàrìdàŋg-jə̀	tá-t-ɔ̄n	ɔ̄m-ràndí	tàrː
	there	spider-C7.SUBJ	shoot-PFT-DIST	C6B-thread	IDEO

'There Spider shot his spider web, "tarrrrrr".' (SFC_IT_Jiir_2006: 020)

	S	AUX	VP_{NMLZ}
(224)	wā	ɔ́-g	ɔ̄m-hā
	C1.3SG.SUBJ	PROG-PST	C6B-walk

'He was walking.'

Some Ụt-Ma'in auxiliaries can be marked for tense via verb suffixes, as exemplified by the past tense suffix on the progressive auxiliary in (224). All auxiliary verbs in Ụt-Ma'in add grammatical or functional meaning to the clause. Categories expressed by auxiliaries in Ụt-Ma'in include: progressive, future, negative, inceptive, deontic, habitual, completive, frequentative, continuative.

Some auxiliaries are straightforward indicators of aspect and show evidence of having grammaticalized. But some verbs present a challenge in terms of whether they should be included in the set of auxiliaries. For example, I do not consider *zɔ̄ŋtɛ̀* 'prepare.PRF' in (225) an auxiliary because it expresses the main lexical predicate; there is no semantic shift, bleaching or broadening in its use. However, I consider *héstɛ̀* 'start' in (226) an auxiliary because the function of *héstɛ̀* is to only mark the phasal boundary of the main semantic activity of 'build', a so-called inchoative aspect, akin to aspectualizer auxiliaries (cf. Heine's (1993: 60) quasi-auxiliaries and Brinton's (1988:

82) catenatives). In (226) the main lexical predicate is encoded by *mā* 'build'. We know that 'build' is nominalized because its P argument 'big house' is expressed within an ASSOCCXN (cf. §3.2.3, §4.4, and §4.5).

	A	V	[P]	
(225)	tʃàmpájə	zɔ̄ŋtɛ̀	[hā	m-ˋ=u-tɔ́lːə]
	man.C7.SUBJ	prepare.PRF	[go	AG6B-ASSOC=C3-market]

'The man prepared market-going.'
(citation forms: *ɔ̄m-hā* 'C6B-going' and *ū-tɔ́lːə* 'C3-market')
Free English translation: 'The man prepared to/for going to market.'

	A=Aux	VP_{NMLZ}	
(226)	wā=hɛ́stɛ̀	[mā=d-ə̀=bū-ū	ját-ə̀]
	C1.SUBJ=start	build-C5-ASSOC-house	big-C3.AG

'He starts to build a big house' (elicited SJ_2017_GD_519-521)

Regarding argument structure, "true" auxiliaries have a shared argument structure between the auxiliary verb and the nominalized semantically main verb. The inchoative auxiliary in (226) conveys only one event, the event of building. The auxiliary only serves to add aspectual meaning focussed on a particular phase of the building – the "start of building". In addition, an auxiliary like *hɛ́stɛ̀* 'start' shares the argument structure of the nominalized verb that is the semantically main predicate. The non-auxiliary in (225) portrays two separate events – the event of preparing and the event of going/traveling. Further, these two events have separate argument structures. "Preparing" requires a P argument, something must be prepared. "Going" requires no P argument, but may take a goal argument instead.

With this background on the definition and identification of auxiliaries and on the structure of auxiliary constructions generally, we now turn to Type I and Type II auxiliary constructions.

7.3 Type I: Basic Auxiliary Constructions - progressive and future

Basic auxiliary constructions are so-called "basic" because they are the most common of the auxiliary constructions. They occur often in recorded dialogues reporting witnessed events, and are the most common of the auxiliary constructions in narrative texts. In the Spider, Frog and Chameleon text (SFC_IT_Jiir_2006), presented in detail in Paterson (2015: 240-245), 11% (9 out of 79 clauses) are progressive or future auxiliary constructions. No other auxiliary constructions occur in this particular text. The only other clause construction type that occurs more frequently is the – pervasive – Bare Verb construction that carries the main event line of the narrative: 36.5% (27/79 clauses). In narrative texts they are used to establish the setting in the early lines of the text, in the reported speech of characters within the text, and in summary/conclusion statements at the end of texts.

The basic auxiliary verb forms are also the simplest of all auxiliary word forms. The copula-turned-auxiliary verb *ɔ́* 'PROG' yields a progressive aspect, indicating an incomplete action that may be construed as either present time or past time (Comrie 1976: 35; see §6.2 for discussion of the copula). The negative copula-turned-negative auxiliary verb *zá* 'NEG.AUX' is used along with the clausal negator *=da* 'NEG' to negate both the *ɔ́* progressive and the *dɛ́* future constructions. Because of this shared negation strategy, the future auxiliary verb *dɛ́* 'FUT' is included as a Type I auxiliary.

Table 31: Type I auxiliaries

Affirmative AUX		Negative AUX	
ɔ́	'PROG'	*zá*	'NEG'
dɛ́	'FUT'		

We now examine constructions with each of the Type I auxiliaries.

7.3.1 Affirmative progressive auxiliary constructions

In this section I present the affirmative intransitive (INTR), transitive (TRAN) and ditransitive (also TRAN) progressive auxiliary constructions. This section also serves as an introduction to the differences in structures due to transitivity that hold true for many types of multi-verb constructions and auxiliary constructions in particular. The differences in transitivity are reflected in the morphosyntactic details of the nominalized verb phrase that follows the auxiliary.

Figure 29 presents schematized structures for the three transitivity values of the Progressive Auxiliary Constructions. In Figure 29, C- stands for a noun class prefix and AG- stands for a noun class agreement prefix.[34]

[34] The prefix C- only occurs on the head of a noun/nominalized phrase; the prefix AG- occurs on non-head elements (cf. §1.1.3.1.3). In Figure 29 the non-head element is the associative phrase (cf. §1.1.3.1.3 and Chapter IV). Sometimes C- and AG- are formally identical, e.g., the C4 prefix is *s*- and the AG4 prefix is also *s*-. For other noun classes, C- and AG- are formally distinct, e.g., the C5 prefix is *r*- but the AG5 prefix is *d*- (cf. Table 18).

TYPE 1: BASIC AUXILIARY CXN	S/A	AUX	VP_{NMLZ}
INTR PROGRESSIVE AUXILIARY CONSTRUCTION	S	ɔ́-(TNS)	C-V
TRAN PROGRESSIVE AUXILIARY CONSTRUCTION	A	ɔ́-(TNS)	V AG-ASSOC = P
DITRANSITIVE PROGRESSIVE AUXILIARY CONSTRUCTION	A	ɔ́-(TNS)	V = AG-ASSOC R T

Figure 29: Morphosyntax of Progressive Auxiliary Constructions

For purposes of illustrating the morphosyntactic differences in the nominalized verb phrase relative to syntactic transitivity, consider (227)-(229). In each example, the 1SG subject pronoun *ɔ̄m* '1SG.SUBJ' occurs clause initially and the progressive auxiliary is in the past tense form, *ɔ́-gɔ́* 'PROG-PST'. A nominalized verb phrase then follows the auxiliary in each case. However, the nominal class marking on the nominalized VP is distinct for each transitivity value. For the intransitive progressive (227), the nominal class marking is prefixed to the lexical verb root. For the transitive progressive (228), the nominal class marking is prefixed to the associative marker that follows the lexical verb root (this associative marker often cliticizes to some element of the following NP; cf., Chapter IV). For the ditransitive progressive (229), the nominal class marking patterns after the transitive progressive in that it prefixes to the associative marker that follows the verb root; however, as shown in (229), the associative marker rarely cliticizes to the following NPs. More often it is an enclitic on the verb root.

INTRANSITIVE PROGRESSIVE AUXILIARY CONSTRUCTION

	S	AUX-TNS	C-V
(227)	ə̄m	ɔ́-gɔ́	m-hā
	1SG.SUBJ	PROG-PST	C6B-walk

'I was walking.'

TRANSITIVE PROGRESSIVE AUXILIARY CONSTRUCTION

	A	AUX-TNS	V	AG-ASSOC = P
(228)	ə̄m	ɔ́-gɔ́	və̄k	s-ˋ = u-nɛ̄ŋgɛ̄n
	1SG.SUBJ	PROG-PST	greet	AG4-ASSOC = C7-old.man

'I was greeting the old man.'

DITRANSITIVE PROGRESSIVE AUXILIARY CONSTRUCTION

	A	AUX-TNS	V = AG-ASSOC	R	T
(229)	ə̄m	ɔ́-gɔ́	jā = d-ə̀	wə̄n	ə̄r-gá
	1SG.SUBJ	PROG-PST	give = AG5-ASSOC	3SG	C5-cooked.grain

'I was giving him cooked grain.'

The following sections look at details of the progressive constructions for each transitivity value.

7.3.1.1 Intransitive progressive construction

The Ụt-Ma'in intransitive progressive construction consists of the following elements: a subject and the auxiliary verb *ɔ́* 'PROG' followed by the main semantic verb. The word order and subject marking in the progressive construction are identical to what occurs in simple main clause syntax, i.e., the constituent order is A/SV, and the same subject pronoun/noun forms are used in both structures. In the Progressive, PAST TENSE may be suffixed to the auxiliary, as can be seen by comparing (230) and (231). This is different from the structure of non-progressive constructions, where the tense is suffixed to the main verb (cf., *már-g* 'die-PST').

	S	AUX	V
(230)	wā	ɔ́-g	ɔ̄t-màr
	C1.SUBJ	PROG-PST	C6-die
	'He was dying.'		

(231)	wā	ɔ́	ɔ̄t-màr
	C1.SUBJ	PROG	C6-die
	'He is dying.'		

In an intransitive progressive construction, a prefix occurs on the semantically main verb. For instance, in both (230) and (231), the root *màr* 'die' occurs with the *ɔ̄t-* prefix, identical to the noun class 6 prefix from the noun class morphology presented in Chapter III Table 18.[35] The noun class morphology may be viewed as either nominalizing the lexical verb, or as reflecting that the lexical verb has been nominalized by conversion. True verbs can be used in the bare verb form in a basic verbal predication construction (Chapter V §5.1). When these roots occur with a noun class marker, I consider them to have been nominalized Chapter III §3.3.3. Nominalized verbs can then be used in various constructions sensitive to NP and noun class morphosyntax.

Five noun class prefixes are attested in the intransitive progressive construction: *ū-*, *s-*, *r-*, *t-* and *m-*. These correspond to class prefixes from classes 3, 4, 5, 6 and 6B, and are shown in (232).

[35] When a noun class affix underlyingly consists of a single consonant, grammatical tone, which is morphologically part of that consonantal prefix, is phonetically realized on an epenthetic mid-central vowel [ə].

(232) a. wā ɔ́-g ū-swá꞉t
C1.SUBJ PROG-PST C3-fast
'He was fasting (from food).'
b. wā ɔ́-g ɘ̄s-vɘ̄k
C1.SUBJ PROG-PST C4-greet
'He was greeting.'
c. wā ɔ́-g ɘ̄r-ʃɘ̄ʔɘ̄t
C1.SUBJ PROG-PST C5-sit
'He was sitting.'
d. wā ɔ́-g ɘ̄t-swà
C1.SUBJ PROG-PST C6-drink
'He was drinking.'
e. wā ɔ́-g ɘ̄m-hā
C1.SUBJ PROG-PST C6B-walk
'He was walking.'

The choice of prefix on nominalized verbs used in the progressive is lexically specified. In the following section, I discuss what, if anything, determines variation among class prefixes in the Intransitive Progressive auxiliary construction.

7.3.1.1.1 Variation among class prefixes

Some roots, like *hɔ̀g* 'hear' in (233) and (234), can occur in the intransitive progressive construction with either of two noun class prefixes without a change of meaning. In cases where a nominalized verb root can combine with more than one prefix, one of the two prefixes always corresponds to class 6 *ɘ̄t-*, seen in (234). Not all lexical verb roots have such flexibility. Smith (2007: 37) suggested that perhaps noun class 6 on a verb root always indicates nominalization, whereas any other noun class on a root may indicate the presense of an activity noun. In the progressive construction, both forms of 'hear' are found. Perhaps the use of *ɘ̄m-hɔ̀g* 'C6B-hear' is historically from the nominal predicate copula construction meaning 'He is (located in an activity

of) hearing', but synchronically the clause can mean only 'He is in this moment hearing.'

(233) wā ɔ́-g ɔ̄m-hɔ̀g
C1.SUBJ PROG-PST C6B-hear
'He was hearing'

(234) wā ɔ́-g ɔ̄t-hɔ̀g
C1.SUBJ PROG-PST C6-hear
'He was hearing'

While these clauses have no expressed object, and hence count as syntactically INTR as defined in this work, they are not necessarily semantically intransitive. For example, in (232b, c), (233), and (234), there may be understood patients, addressees, etc. of the verbs, but they are not expressed. Semantically these are sometimes akin to Fillmore's (1986: 96) "definite null" complements in that they refer to an identifiable participant retrievable from the discourse context. However, the same structure may also may reflect instances of "indefinite null" complements (Fillmore 1986:96) where no recoverable object is required; in Fillmore's words "the referent's identity is unknown or a matter of indifference" (Fillmore 1986:96). For example, "greeting" is a very common social activity in a Nigerian context in which one visits the home of a friend or relative for an extended visit that may take several hours. A non-past version of a clause like (232b) might be used in response to a question like "What is he doing right now?" If asked over the phone, it would be understood that the person was not available for any other task/activity because they were in the midst of greeting someone; but there is no grammatical requirement to establish or express that person somewhere in the discourse.

We must also consider whether these clauses have the form and function of an antipassive construction, as the argument of an otherwise transitive verb is not expressed with the INTR form (Creissels 2012: 1). First, I recognize that this INTR form can convey an antipassive meaning, but as explained in the preceding pargraph this is not always true, as when the unstated object is a discourse "definite null" participant. Second, according to the criteria in Creissels' (2012) proposal, antipassive constructions are:

i. formally intransitive
ii. involve verbs that also occur in prototypical transitive constructions
iii. have the agent encoded as the unique core argument of the intransitive predication
iv. may suppress the patient

By these criteria, the Ụt-Ma'in intransitive progressive construction is not a dedicated antipassive construction as the exact same INTR construction is used for both intransitive verbs with affected-patient subjects, as shown in (230) for 'die', and for clauses with agent subjects, as in (232d) for 'drink'. The word order, use of the copula, and morphological marking on the verb are identical between (230) and (232d).

Thirdly, it has been claimed by (Payne 1997: 219) that antipassive constructions typically have an overt marker of intransitivity. But there is no dedicated semantically intransitive-izing morpheme at play here; rather, there are instances of a particular form of the verb followed by (a) object-ommission for definite null objects or (b) the option to omit the notional P argument because it is unimportant or unknown. In sum, the

INTR structure allows a speaker to choose to demote (i.e., delete) the object or notional P, but the INTR construction does not function as a dedicated antipassive structure.

7.3.1.1.2 Loss of prefix on nominalized verb

In the intransitive progressive there are instances of presumably nominalized verb roots occurring without a class prefix. In this section, I trace steps in the loss of the prefix. I conclude that this is a loss because I assume that historically the progressive construction developed from one of the predicate nominal copula constructions presented in §6.2.1 (see also Paterson (2019) for discussion). The synchronic intransitive progressive construction seems to be comprised of the basic predicate nominal construction (§6.2.1), into which a nominalized verb (§3.2.3) is inserted as the nominal predicate. From these source elements, we have almost all of the grammar of the intransitive progressive: the order of subject–predicate in the intransitive progressive construction is preserved from the order properties of the predicate nominal construction, along with the subject properties of the first NP, the verb *ɔ́* 'COP', and a slot for a nominal following the copula. Figure 30 displays the structure of the source constructions and the synchronic intransitive progressive construction that is clearly a combination of two more basic constructions.

Source	Predicate Nominal Cxn	NP	ɔ́	C-N
Source	Nominalized Verb			C-V_{NLZD}
	INTR PROGRESSIVE CXN	S	ɔ́	C-V_{NLZD}

Figure 30: Schematic of the intransitive progressive source elements

First, recall that we have seen that a nominalized verb can function in a fully nominal role (cf. §3.2.3). When functioning as "fully" nominal, such nominalized verbs occur with noun class marking. We see this noun class prefix in the INTR progressive. For instance, in the intransitive progressive in (235), the root *ʃə̄ʔə̄t* 'sit' occurs with the class 5 prefix *r-* following the progressive auxiliary. Compare this to the noun class marking co-occurring with *ʃə̄ʔə̄t* 'sit' in (236), repeated from (82), where it is fully nominal and occurs as the modifying NP in an ASSOCCXN.

(235) ɛ̄kɛ̄n ɔ́ r-ʃə̄ʔə̄t ɔ́ rə̄rə̄lːɛ́
C2.some PROG C5-sit LOC mountain.C5.DEM
'Some people are living on that mountain.' (SJ_Ror_2006)

(236) bé t-ə̀=r ʃə̄ʔə̄t ɔ́ mɛ́n ū-tát
place AG6-ASSOC-C5 sitting COP stomach C3-many
'Places for sitting are many within (the banquet hall).' (GL 2008: c14 v22)

However, as a second step of development, in (237) the same root *ʃə̄ʔə̄t* 'sit' occurs again after the progressive auxiliary but without a noun class marker – even though 'sit' is the main semantic element in the intransitive progressive auxiliary construction, and even though semantically main lexical verbs in this construction are typically nominalized by overt class morphology.

(237) wā ɔ́ ʃə̄ʔə̄t
1SG.SUBJ PROG sit
'He is sitting.' (GK 2013: 4)

Other verbs besides 'sit' also show absence of noun class prefix in the intransitive progressive auxiliary construction. By comparing (238) and (239), we see that the root *rí:g* 'roam' has a noun class prefix in the 'go' auxiliary construction (cf. §9.4.1), but loses the class prefix when it participates in the intransitive progressive. In (238) *rí:g* 'roam' occurs as a nominalized verb complement to the verb *hɔ́* 'go', carrying the class

6 *t-* prefix. However, in (239), 'roam' occurs in the intransitive progressive construction with no class prefix but with the same eventive meaning. The loss of nominal morphology on nominalized lexical verbs in the intransitive progressive construction seems to be an ongoing process in that it does not occur across all verb roots and probably not for all speakers.[36]

(238) wā hɔ́ ɔ̄t-rí:g ɔ́ bé = dɔ̀ zá m-bɔ́
1SG.SUBJ go.IR C6-roam LOC place = AG5.REL NEG.COP C6M-water
'He goes roaming in the place that there is no water.' (GL_2008: 11.24)

(239) wā ɔ́ rí:g ɔ́-dàʔ-ɔ́ r-sō
1SG.SUBJ PROG roam LOC-time-C3.DEF C5-nakedness
'He is roaming now, naked.' (PW_IY_Ror_2013: 41)

Regardless of the reason that the prefixes do not occur, the absence of the prefix in some instances shows that there is a shift in the grammar. In particular, the auxiliary verb ɔ́ no longer requires overt class (i.e., nominalization) marking of an (erstwhile) nominal complement in all instances where there is progressive meaning. This is unlike the required presence of a class prefix on the second NP of the nominal predicate construction (cf. §6.2.1).

In summary, these examples show that one variant of the synchronic intransitive progressive structure is no longer identical to its source construction. In the next

[36] In the text from which (239) is taken, two of six intransitive progressive constructions occur with no nominal prefix. It seems that the occurrence of a noun class prefix is related to the particular verb used. Further research might reveal that absence of prefixes in this construction also reflects speaker's stylistic choice.

section, we see how a P argument is overtly expressed in the transitive progressive construction.

7.3.1.2 Transitive progressive construction

In this section I first present the morphosyntax of the transitive progressive construction. In §7.3.1.2.1, I present evidence that, although the progressive constructions in general parallel the morphosyntactic structure of the nominal predicate copula cosntructions, the grammar of the ASSOCCXN within the transitive progressive construction is showing a shift away from the NP source. This demonstrates the actualization of a new more "verbal" transative progressive construction. In §7.3.1.2.2, I present an additional piece of evidence that the ASSOCCXN within the transitive progressive has a more limited function than in other nominalized contexts.

The transitive progressive shows several properties similar to the intransitive progressive. Subject properties in the transitive progressive construction are the same as in most clause types, and the progressive auxiliary *ɔ́* carries any tense marking. However, there are other differences from other constructions. In order to understand crucial differentiating features of the transitive progressive construction, let us first take a look at two different clauses involving the progressive auxiliary and the same nominalized verb *vɔ̄k* 'greet'.

	S	AUX	s-V
(240)	ɔ̄m	ɔ́-g	ɔ̄s-vɔ̄k
	1SG.SUBJ	PROG-PST	C4-greet
	'I was greeting.'		

	A	AUX	V	s- ̀ = P
(241)	ɔ̄m	ɔ́-g	vɔ̄k	s- ̀ = u-nɛ̄ŋgɛ̄n
	1SG.SUBJ	PROG-PST	greet	AG4-ASSOC = C7-old.man
	'I was greeting the old man.'			

In (240) we find a structure that looks like the familiar intransitive progressive construction discussed in the preceding section. However, in (241) we see that when an overt object NP is added within the complement of the auxiliary, all of a sudden *vɔ̄k* no longer takes a noun class prefix. Instead an agreement-marked ASSOCP occurs following the verb *vɔ̄k* 'greet'. The ASSOCP is marked for agreement with noun class 4, corresponding to the class of the citation form of the nominalized verb *ɔ̄s-vɔ̄k* 'C4-greet'.

7.3.1.2.1 Changes in agreement marking of the ASSOCCXN

In this section, we discuss changes in the agreement marking on the ASSOCP which contains the object of the nominalized verb in a transitive progressive construction. The changes provide evidence that we are no longer dealing with only a nominalized verb phrase as a complement of the auxiliary *ɔ́*. Instead, the formal changes hint that the originally-nominalized verb forms are gradually becoming less noun-like and more verb-like.

The grammar of the transitive progressive construction partially differs from that of the intransitive progressive construction in relation to the nominal morphology that occurs with the semantically main nominalized verb. In the transitive progressive construction, one of two noun class prefixes can occur on the low-tone associative marker before the post-verbal object NP. These are *s-*, as in (241), and *d-*, as in (242). In (242), the *d-* and low tone are cliticized to the mid-tone pronoun *wɔ̄n* '3SG'.

	A	AUX	V	d-ˋ	P
(242)	wā	ɔ́	gwɔ̄	d-ə̀=	wɔ̄n
	C1.SUBJ	PROG	rescue	AG5-ASSOC=	3SG

'He is rescuing him.' (ConvReVYPear 2017)

The choice of *s-* vs. *d-* on the associative marker in the transitive progressive construction seems to be lexically specified on a verb-by-verb basis. That is, the prefix is related to the lexical noun class assignment of the particular (nominalized) verb used in the transitive progressive construction, and they are glossed in that way here, e.g. AG4 for class 4 agreement. Crucially, the choice between *s-* and *d-* is not dependent on the lexical noun class of the object noun, like 'old man' or '3SG', within the nominalized complement but rather on the lexicalized noun class of the nominalized verb. If the lexical classification of the nominalized verb is class 4, the prefix is *s-*. If the lexical classification of the nominalized verb is anything other than class 4, the prefix is *d-*. The distribution of prefixes on nominalized verbs is discussed in §3.2.3 (see also Smith (2007: 66) and Paterson (2012: 255-256)). Table 32 presents a summary of the changes in "nominal" marking of the semantically main nominalized verb forms in the transitive progressive construction, organized by lexicalized noun classification.[37] Column one contains the citation form of the nominalized verb (i.e., as said or used outside of the transitive progressive construction). Column two contains the form of the nominalized verb as used in an intransitive progressive construction. Column three contains an example number in this study where that intransitive progressive clause occurs as part of a full example. Column four contains the form of the nominalized

[37] These changes are true of at least the transitive progressive construction. Additional investigation is needed to assess whether the patterns hold for other auxiliary constructions.

transitive VP including the bracketed ASSOCCXN as found in an example in this study. The final column contains the example number in this study where one can see that transitive progressive clause as part of a full example.

Table 32: Comparison of verb forms in progressive constructions

Citation form of V_{NMLZ}	Intransitive V_{NMLZ}	#	Transitive progressive VP $_{NMLZ}$	#
ū-gáp 'C3-slap'	ū-gáp 'C3-slap'	(243)	gáp [d-ə = t tɔ́] slap [AG5-ASSOC = C6 ear]	(244)
ə̄s-və̄k 'C4-greet'	ə̄s-və̄k 'C4-greet'	(240)	və̄k [s- ` = u-nɛ̄ŋgɛ̄n] greet [AG4-ASSOC = C7-old.man]	(241)
ə̄r-gwə̄ 'C5-rescue'	ə̄r-gwə̄ 'C5-rescue'	(n/a)	gwə̄ [d-ə wə̄n] rescue [AG5-ASSOC 3SG]	(242)
ə̄t-rɛ̄ 'C6-eat'	ə̄t-rɛ̄ 'C6-eat'	(n/a)	rɛ̄ [d-ə = r-gá] eat [AG5-ASSOC = C5-cooked.grain]	(247)
ə̄m-hɔ́g 'C6B-hear'	ə̄m-hɔ́g 'C6B-hear'	(233)	hɔ̀g = [d-ə = m-ɛ́ʔ] hear = [AG5-ASSOC = C6B-shame]	(245)

As one can see, in the transitive progressive construction, only noun classes 4 and 5 retain the "expected" citation noun class marking on the associative. All other classes, class 3, 6 and 6B, use a default *d-* prefix on the ASSOCCXN. For example, in (243) the verb root *gáp* 'slap' is in an intransitive progressive construction, with no overtly expressed object (INTR). Notice that *gáp* 'slap' takes the class 3 nominalizing prefix *ū-*; the citation form of 'slap' is either *ū-gáp* 'C3-slap' or *ə̄t-gáp* 'C6-slap'. Now consider (244), where *gáp* 'slap' occurs in a transitive progressive construction. This example is taken from the summary section of a folk narrative where the various animals are rejoicing at the end of the events of the story. Here, some animals are slapping their

ears as an indication of applause. The noun class marker cross-referencing the nominalized verb 'slap' in the ASSOCP is class 5 *d-* (i.e., *d-ə-t* 'AG5-ASSOC-C6'), and not the "expected" citation class 3 *u-* that occurs in (244).[38]

(243) è-k^{h}ɛ̄n ɔ́ ū-gáp
C2-some PROG C3-slap
'Some are slapping.'

(244) è-k^{h}ɛ̄n ɔ́ gáp d-ə = t tɔ́
C2-some PROG slap AG5-ASSOC = C6 ear
'Some are slapping their ears.' (FSC 2007:40)

Let us also consider the root *hɔ́g* 'hear'. This verb is attested with two distinct noun class prefixes in the intransitive progressive construction, namely class 6M *ɔ̄m-hɔ̀g* and class 6 *ɔ̄t-hɔ̀g*; see (233) and (234). No apparent change in meaning is determined by the variation in class prefix. However, when the verb root 'hear' occurs in the transitive progressive construction, as in (245), neither the class 6M *m-* agreement prefix nor the class 6 *t-* prefix occurs. Rather, class 5 *d-* occurs.

(245) wā ɔ́-g hɔ̀g = d-ə = m-ɛ́ʔ
C1. 3SG.SUBJ PROG-PST hear = AG5-ASSOC = 6M-shame
'He was hearing shame/He was ashamed.'(GK 2013)

In sum, verb roots such as 'slap' and 'hear' combine with a restricted set of noun class prefixes in the intransitive progressive construction, but trigger an even smaller set of noun class agreement morphology on the associative marker in the transitive progressive construction.

[38] If a head noun is class 3, it triggers a null prefix on the agreement form. The associative marker expected for class 3 agreement would have the form *Ø-ə* 'AG3-ASSOC'. See Chapter IV, Table 26.

This reduction in agreement marking to *d-* and *s-* is unique to the transitive progressive auxiliary construction. Though other transative auxiliary constructions also involve nominalizations, they do not trigger such reduced class agreement. Indeed, in other nominalized contexts that use the AssocCxn, the agreement class marking on the AssocCxn is just like that found with noun roots. For instance, (246) contains a transitive future obligation auxiliary construction (§9.1), and the erstwhile object of the nominalized semantically main verb is "associated" to the nominalized head by means of the AssocCxn. However, in the transitive future obligation construction, class 6 agreement is used; this parallels in every way the structure we saw for nouns in Chapter IV. In (246) the agreement prefix *t-* corresponds to the class of the citation form of 'eat/eating'. In the progressive auxiliary construction in (247), the agreement marker must be class 5 *d-* and cannot be the class 6 *t-* that occurs in the transitive future obligation auxiliary construction. This is demonstrated by the ungrammatical example in (248). My consultants rejected the *t-* prefix in this example and with the *t-* prefix there was no acceptable reading with another meaning. In contrast, in order to use the *ɔ́* progressive auxiliary and a transitive nominalized complement, the verb *rɛ̄* must be followed by the *d-* prefixed AssocP containing the object of the nominalized verb.

(246) ɔ̄m dɛ́ʔtɛ́ rɛ̄ **t-ɛ̀**-r-gá ūsōt
1SG.SUBJ DEON eat AG6-ASSOC-C5-cooked.grain tomorrow
'I must eat cooked grain tomorrow.' (citation: *ɔ̄t-rɛ̀* 'C6-eating')

(247) wā ɔ́ rɛ̄ **d-ɛ̀**-r-gá
C1.SUBJ PROG eat AG5-ASSOC-C5-cooked.grain
'He is eating cooked grain.'

(248) *wā ɔ́ rɛ̄ **t-ɛ̀-**r-gá
Intended: 'He is eating cooked grain.'

In sum, Class 5 *d-* has come to be the most frequently used – if not required – marker in the transitive progressive construction, regardless of what class the same event-encoding lexeme would occur with in the intransitive progressive construction or in citation form.

Because of the strong semantic tendencies within the Ụt-Ma'in noun class system (cf. §3.1.2), we might expect that the shift to class 5 in the transitive progressive construction would have some semantic impetus. However, there is no known reason why nominalized verbs in the transitive progressive construction shift to class 5. In contrast, there does appear to be a semantic coherence to use of class 4 in the transitive progressive construction: most class 4 nominalized verbs in this construction refer to speech activities. Thus, class 5 may have arisen for most non-speech verbs in this construction simply in opposition to the strong semantic coherence of class 4 verbs.

In summary, the shaded cells in Table 33 show the class 4 and 5 associative agreement forms, which are the only ones used within the transitive progressive construction. This is a subset of those forms used with a nominalized verb as head in various nominalized contexts (cf. Table 28).

Table 33: AssocC forms of the transitive progressive construction

		Noun Class of Second Noun					
Noun Class of Head		3	4	5	6	6M	7
	3	*Ø- ` -u*	*Ø-ə̀-s*	*Ø-ə̀-r*	*Ø-ə̀-t*	*Ø-ə̀-m*	*Ø- ` -u*
	4	*s- ` -u*	*s-ə̀-s*	*s-ə̀-r*	*s-ə̀-t*	*s-ə̀-m*	*s- ` -u*
	5	*d- ` -u*	*d-ə̀-s*	*d-ə̀-r*	*d-ə̀-t*	*d-ə̀-m*	*d- ` -u*
	6	*t- ` -u*	*t-ə̀-s*	*t-ə̀-r*	*t-ə̀-t*	*t-ə̀-m*	*t- ` -u*
	6M	*m- ` -u*	*m-ə̀-s*	*m-ə̀-r*	*m-ə̀-t*	*m-ə̀-m*	*m- ` -u*

A few verbs do not trigger any agreement marking on the associative marker in the transitive progressive construction. This is further evidence of the shift away from the NP source to a distinct VP structure. In the transitive progressive auxiliary construction, the associative marking is the only evidence that the main semantic verb is nominalized. With the lack of, or loss of agreement marking for certain verbs, the construction is also losing evidence that the verb form ever was nominalized. In the next examples I demonstrate some of these "lost" agreement markers.

In Table 34, intransitive and transitive progressive constructions are contrasted for three verbs: *zɔ̀ŋg* 'prepare', *wàr* 'tell', and *ʤā:s* 'wash'. All three intransitive clauses have a noun class marker prefix. However, in the transitive clauses, no agreement marking occurs on the ASSOCP. Instead, only the associative low-tone on the epenthetic vowel *ə* precedes the object. Neither *d-* 'AG5' nor *s-* 'AG4' occurs. Here, also note that the lack of an agreement marker is not related to any morphological property of the object: it happens with objects with an overt noun class prefix, as with *t-ʧwə̄* 'C6-loads', and with no overt noun class prefix as with *Ø-hjə̄* 'C2-guinea corn', or with a pronoun object form like *wá* 'C1.OBJ'.

Table 34: TRAN progressive constructions with no AG marker, and their INTR counterparts

INTRANSITIVE PROGRESSIVE CNXS			TRANSTIVE PROGRESSIVE CXNS				
S	AUX	V_{NMZL}	A	AUX	V	ASSOC	P
wā	ɔ́	t-zɔ̀ŋg	wā	ɔ́	zɔ̀ŋg	ə̀	t-tʃwə
C1.SUBJ	PROG	C6-prepare	C1.SUBJ	PROG	prepare	ASSOC	C6-loads
'He is preparing (himself/dressing)'			'He is preparing the loads (travel bags)'				
S	AUX	V_{NMZL}	A	AUX	V	ASSOC	P
wā	ɔ́	t-wàr	wā	ɔ́	wàr	ə̀	wá
C1.SUBJ	PROG	C6-tell	C1.SUBJ	PROG	tell	ASSOC	C1.OBJ
'He is telling'			'He is telling him'				
S	AUX	V_{NMZL}	A	AUX	V	ASSOC	P
wā	ɔ́	m-ʤāːs	wā	ɔ́	ʤāːs	ə̀	Ø-hjə̄
C1.SUBJ	PROG	C6M-wash	C1.SUBJ	PROG	wash	ASSOC	C2-guinea.corn
'He is washing'			'He is washing the guinea corn'				

In the TRAN examples in Table 34, the associative morpheme is still used but it is no longer marked for agreement. The loss of agreement reveals the ongoing change we see in the intransitive progressive construction, namely the loss of nominal prefixal morphology on what was a nominalized semantically main verb (§7.3.1.1.2).

A possible further step in reanalysis may be the loss of the ASSOCP altogether, not just the agreement marker on the associative. With the borrowed root *kārə̀ntɛ̄* 'read' (< Hausa *karanta*) in (249), there is no indication that the ASSOCCXN occurs at all. This needs further exploration, as this could also be a unique case because of the fact that the verb is a borrowed form.

(249)

S	AUX	V_{NMZD}	A	AUX	V	ASSOC	P
wā	ɔ́	m-kārə̀ntɛ̄	wā	ɔ́	kārɔ́ntɛ̄	Ø	ū-rān
C1.SUBJ	PROG	C6M-read	C1.SUBJ	PROG	read	ASSOC	C3-paper
'He is reading'			'He is reading a paper'				

Changes in agreement marking are found only in auxiliary constructions and are not attested in other nominalized verb contexts. Even though the shift in agreement marking is apparently proceeding lexical item by lexical item, all change is in one direction, namely toward reducing the nominal properties of the construction. As the agreement marking on the ASSOCCXNS disappears, the semantically main verb phrases are less identifiable as having been nominalized and the resultant form of the lexical predicate is indistinguishable from a verb. This is certainly the case of *kārə́ntɛ̄* 'read' in (249).

The variation allowed in agreement marking on ASSOCPs in the transitive progressive auxiliary construction are summarized in Table 35.

Table 35: Changes in agreement marking in the Ụt-Ma'in transitive progressive construction

	AGREEMENT CLASS CORRESPONDS TO CITATION CLASS PREFIX	CLASS 5 AGREEMENT PREFIX	ASSOCIATIVE MARKER OCCURS
Class 4 verbs	✓	*	✓
Class 5 verbs	✓	✓	✓
Most verbs from classes 3, 6, and 6B	*	✓	✓
Some verbs from classes 3, 6, and 6B	*	*	✓
Class 6B verb 'read'	*	*	*

The changes evident in the progressive are: (i) nominalized verbs in citation classes 3, 6, and 6M shift to class 5; (ii) a few verbs lose agreement marking altogether; (iii) one verb loses the associative marker as well. The transitive progressive construction is clearly moving away from its predicate nominal source.

7.3.1.2.2 Limitation on the AssocCxn

In the transitive progressive construction there is an additional piece of evidence that the cosntruction is shifting away from it's nominal source. This evidence is related to a limitation on the use of the AssocCxn. In Chapter IV §4.4 we saw that the AssocCxn can express a range of meanings, and could be used to express both a patient complement and a goal complement of a nominalized verb (cf. (118). This is not true with the associative occurs as a required part of the progressive construction. In the transitive progressive, the AssocCxn can only express the patient object of the semantically main nominalized verb. To express goal complements in the progressive, speakers must use a prepositional phrase for the goal, as in finite main clauses. Thus, in both (250) and (251), the goal argument *ū-tɔ́lːə̀* 'C3-market' of the verb *hā* 'go' is in a locative phrase marked by the high-tone preposition *ɔ́* 'LOC'.

(250)	wā	ɔ́	m-hā	ɔ́	ū-tɔ́lːə̀
	C1.SUBJ	PROG	C6M-go	LOC	C3-market
	'He is going to the market.'				

(251)	hɔ̄ːb-ɔ̄t = rī	hā-ːg	ɔ́	tūlːə̀-ù	māhūtā
	friend-c6 = 1sg.poss	go-PST	LOC	market-C3	Mahuta.town.POSS
	'My friend went to the Mahuta market'[39]				

In the next section, I turn to the morphosyntax of the ditransitive progressive auxiliary construction.

[39] See note regarding forms of 'market' on page 90.

7.3.1.3 Ditransitive progressive auxiliary construction

The ditransitive progressive construction follows the patterns of the transitive progressive construction: tense may be marked on the auxiliary verb; and no prefix occurs on the nominalized verb but rather nominalization is apparent from the use of the ASSOCCXN following the main lexical verb. Word order and subject properties are as in other constructions; the R_{OBJ}-T_{OBJ} order of main clauses is maintained. In the ditransitive, only the linearly first post-verbal object is coded by the ASSOCCXN, as seen in (232). If either object is fronted for focus, the fronted argument is not contained within an ASSOCP, but the remaining in situ argument is within an ASSOCP.

	S	AUX-TNS	V = [AG-ASSOC	R_{OBJ}]	T_{OBJ}
(252)	ɔ̄m	ɔ́-gɔ́	jā = d-ɔ̀	wɔ̄n	ɔ̄r-gá
	1SG.SUBJ	PROG-PST	give = AG5-ASSOC	3SG	C5-cooked.grain

'I was giving him cooked grain.'

Some verbs, such as *kɔ́sɔ̀* 'show' in (253), require the associative marker but do not trigger agreement. The citation form of 'show' is in class 6 *ɔ̄t-kɔ́sɛ̀*, seen in other nominalized contexts such as in (254); but no noun class marking is attested in the progressive, either with or without expressed arguments. In (253), there is almost no indication of the nominal status of the V even though it is a Progressive. The only indicator of the progressive is the auxiliary.

(253) wā = ɔ́ kɔ́sɔ̀ = ɔ̀ = wɔ̄n ʤāb-ɔ̄ jáz-ɔ̀
C1.SUBJ = PROG show = ASSOC = 3SG heart-C3 red-AG3
'He is mistreating her.' lit: 'He is showing her red heart.' (PW_IY_Ror_2013: 037)

(254) wā hɛ́sɛ̀ t-kɔ́sɛ̀
C1.SUBJ start C6-show
'He began teaching' (JF_2015: L43)

7.3.1.4 Summary of progressive auxiliary constructions

Figure 31 summarizes the various morphological forms of the intransitive, transitive and ditransitive auxiliary constructions. The choice of the prefix on the nominalized verb in the intransitive is dependent on the lexicalized citation form of the particular verb. Some verbs can occur in the intransitive progressive without any noun class prefix. This loss of nominal marking is indicated in Figure 31 by the schematized clause structure in the solid thick-lined box at the bottom of the intransitive progressive section.

The choice of agreement prefix on the associative marker in the transitive progressive construction is also lexically determined: verbs with class 4 and class 5 citation-forms continue to use their citation form in the progressive, butall other verbs with citation forms in C3, C6, and C6B default to the class 5 agreement marker *d-* in the transitive progressive. Some verbs from citation classes C3, C6, and C6B no longer use any agreement marking on the ASSOCP. At least one C6B verb does not use the associative maker at all in the transitive progressive construction. These modifications of nominal marking are indicated in Figure 31 by the schematized clause structure in the two rows within the solid thick-lined box at the bottom of the transitive progressive section.

Ditransitive progressive constructions are rare, as there are fewer ditransitive verbs. Figure 31 includes the form of a class 5 citation form verb that uses the AG5 prefix *d-* on the ASSOCP complement of the progressive auxiliary. All known ditransitive verbs have their citation form in class 5 or noun class 6. The ditransitive progressive auxiliary construction of a class 6 citation form verb has no agreement

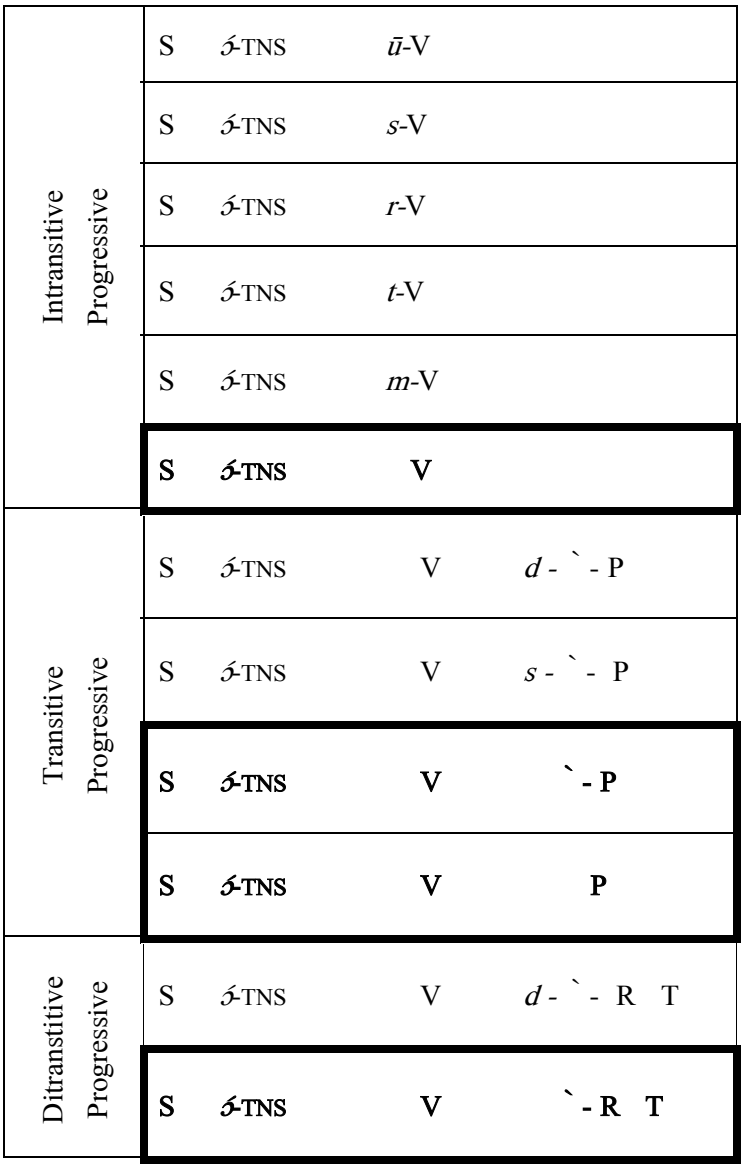

Figure 31: Summary of the Progressive Constructions in Ụt-Ma'in

marker on the ASSOCP within the progressive construction. This change from the "expected" nominal marking is indicated in Figure 31 by the schematized clause structure in the solid thick-lined box at the bottom of the ditransitive progressive section.

As the noun class prefixes and the noun class agreement forms are apparently gradually being dropped in the progressive auxiliary constructions, it leaves only the progressive auxiliary as the one unified indicator of the progressive construction.

7.3.2 Affirmative future constructions

In this section I introduce the intransitive (INTR) and the transitive (TRAN) future auxiliary constructions. I also include in this section what I call the *t*-future construction that has no future auxiliary and uses a distinct paradigm of pronouns for its S/A argument; but like the auxiliary constructions, the *t*-future uses a nominalized verb phrase for the main semantic predicate. The transitive (TRAN) *t*-future construction also makes use of the ASSOCP to encode the object of the nominalized verb.

The future auxiliary is *dɛ́* 'FUT'. The likely source of the *dɛ́* auxiliary is the motion verb *dɛ́ʔɛ́* 'travel, go'. The clause structure with this auxiliary is identical to what has already been illustrated for the progressive, i.e. the auxiliary is followed by a nominalized verb phrase.

Example (255) shows an intransitive future auxiliary construction. The verb 'greet' is in its nominalized form, prefixed with the class 4 *s-* . The future time adverbial *ūsét* 'the day after tomorrow' further indicates the future time interpretation of the clause, although this adverbial is not required, as shown in (256).

(255) ɔ̄m dɛ́ s-vɔ̄k ūsét
1SG.SUBJ FUT C4-greet day.after.tomorrow
'I will greet the day after tomorrow.'

(256) ɔ̄m dɛ́ ɔ̄s-vɔ̄k
1SG.SUBJ FUT C4-greet
'I will greet.'

The transitive future auxiliary construction patterns like the transitive progressive auxiliary construction. The transitive semantically main verb is nominalized and heads an ASSOCP which contains the semantic P argument. Verbs with a nominal citation form in class 4 occur with the expected class 4 agreement marking.

(257) ɔ̄m dɛ́ vɔ̄k = s- ` = u-nɛ̄ŋgɛ̄n
1SG.SUBJ FUT greet = C4-ASSOC = C7-old.man
'I will greet the elder (man)'

Nominalized verbs with citation forms in other classes occur with class 5 agreement marking on the ASSOCP. The future thus patterns like the transitive progressive construction described in §7.3.1.2. To illustrate, in (258) class 5 agreement marking occurs on the verb 'write', even though the citation form of the verb 'write' is class 6 *ɔ̄t-gɛ́n* 'C6-write'.

(258) ɔ̄m dɛ́ gɛ́n = d- ` = u-rān
C1.SG.SUBJ FUT write = AG5-ASSOC = C3-leaf
'I will write a letter.' (elicited SJ_DY_2017)

We now turn to the auxiliary-less *t*-future construction. Like the future auxiliary construction, the *t*-future construction uses a nominalized verb phrase for the semantically main predicate element. In the intransitive *t*-future construction, the subject is juxtaposed to a *t-* prefixed verb form. Note that this *t-* is identical to the noun class 6 prefix *t-*. If the subject is 1SG, the object or focus form of the pronoun must be used, as in the clause *mɛ́ = t-há* 'I will go' underlined in (259).[40]

[40] Class marked pronouns occur in this position with the high-tone marked object form. Personal pronouns other than 1SG, have the same form for both subject and object forms (cf. Chapter III §3.4 and Chapter V §5.3), so they show no differnce in the *t*-future construction .

						S = FUT-V
(259)	sɛ̄	wáʔ-ɔ́ = wá	zɔ̄	tɔ̀ʔ	ū-ɔ̄sɔ̄	mɛ́ = t-há
	then	child-C1 = C1.POSS	say	okay	C1-father	1SG.FOC = FUT-go

'then his (second) child said, "okay, father, I will go." (MT_draft_2019: 21.30)

I recognize this as a nominal construction for two reasons; (1) the form of the prefix on the associative marker is identical to the class 6 noun class prefix, and (2) in the transitive, the prefix does not occur on the verb; rather the agreement prefix is on the ASSOCP which contains the P argument. In (260), the ASSOCP is underlined, and the P argument is bracketed. In this case, the P argument is an entire finite clause.

	A	V	FUT-ASSOC = [P]		
(260)	a. mɛ́	tʃwàn	t-ə̀ = [m	já	bɔ̄
	1SG.FUT	love	C6-ASSOC = 1SG.SUBJ	give	2SG

'I will love to give you'

b. wáʔás = d-ə̀ nɔ̀m = ə̀ wɔ́-t-ˊ = u-kɔ́ːt]
story = C5-ASSOC thing = ASSOC put-PFT-FOC = C7-guinea.fowl
'a story of what makes the genue fowl' (GF_IT_Juur_2007: 001-002)

7.3.3 Type I Negative Auxiliary Constructions

In this section I describe the negation strategy for Type I auxiliary constructions. Recall from Table 31 that both the progressive and the future auxiliary constructions have a shared negation pattern using the negative-copula-turned-negative-auxiliary verb *zá* 'NEG.Aux' and the clausal negator enclitic *=da*.[41] This is one of the structural reasons to group the progressive and future together.[42]

[41] The tone of the negative enclitic *=da* varies from utterance to utterance. Transcriptions are marked for the tone that occurs in each example.

[42] Chapter IX deals with auxiliary constructions that only use the enclitic clausal negator *=da*.

To state the facts in more detail, to negate a progressive or future auxiliary construction, the negative auxiliary *zá* occurs in the AUX slot, replacing the *ɔ́* 'PROG.AUX' or *dɛ́* 'FUT.AUX' auxiliary. This occurs immediately between the S/A argument and the nominalized main sematic predicate. To illustrate, in (261) the negative auxiliary construction is in bold and the two negator elements are underlined. The semantically main predicate is of citation class 6B, marked *m-há* 'C6B-go'. The co-occurrence of two negative markers can be explained from the nature of the clause: it contains the nominal negator *zá* 'NEG.AUX' because the predicate is in nominal form; and it contains the clausal negator *=da* 'NEG' because the entire structure is clausal.

				S = NEG.AUX	C-V = NEG
(261)	a.	wáʔ-ɔ́ = rò	zɔ̄	ɔ̄m = <u>zá</u>	m-há = <u>dà</u>...
		child-C1 = 3SG.POSS	say	1SG.SUBJ = NEG.AUX	6B-go = NEG
		'His child said "I am not going"...			
	b.	sɛ̄ ɔ̄sō-ɔ̀	dɛ́'ɛ̀	ɔ̄dɔ̀ = wɔ̀	ū-yɔ̄rɔ̄msɛ̀...
		then father-C1.SUBJ	go	GOAL = 1SG.REL	C3-second
		'then father went to the second (one)...			
	c.	sɛ̄ wáʔ-ɔ́ = wá	zɔ̄	tɔ̀ʔ	ū-ɔ̄sō mɛ́ = t-há
		then child-C1 = C1.POSS	say	okay	C1-father 1SG.FOC = FUT-go
		'then his (second) child said, "okay, father, I will go." (MT_draft_2019: 21.29-30)			

The negative transitive Type I auxiliary construction follows the pattern we have seen for progressive and future auxiliary constructions. Principally, the nominal prefix that is part of the intransitive negative Type I auxiliary does not occur on the verb. Instead, the nominalized status of the semantically main predicate is deduced from the occurrence of an ASSOCP that contains the object of the nominalized verb. In (262) the transitive negative Type I auxiliary construction is in bold; the negative auxiliary *zá* and

the negative clausal enclitic *=da* are underlined; the ASSOCP containing the P argument is in [square] brackets.

				A = NEG.AUX	V	[ASSOC = P] = NEG
(262)	á = m	wār	nɔ̄	nɔ̄ = <u>zá</u>	já	[ə̀ = t-níp] = <u>dà</u>
	COND = 1SG.SUBJ	tell	2SG	2SG = NEG.AUX	give	ASSOC = C6-truth = NEG
	'If I tell you, you will not believe me' (JF_2015: L352)					
	lit: 'If I tell you, you will not give truth.'					

The negative ditransitive Type I auxiliary construction patterns like the transitive, using the ASSOCP to mark the object in closest proximity to the verb (see also §7.3.1.3 for a parallel description of the affirmative ditransitive progressive construction). In (263), the negative ditransitive Type I auxiliary construction is in bold. In this example the speaker has shortened the negative auxiliary *zá* to the single segment *d=*, which is cliticized to the preceding subject and the following verb.[43] The two negative elements are underlined; the R argument within the ASSOCP, *d-ə̀=wá* 'AG5-ASSOC = C1.OBJ', and the T argument *r-gɔ̄* 'C5-cooked.grain', are in [square] brackets.

		A = NEG.AUX = V	[AG5-ASSOC = R]	[T] = NEG
(263)	nā = zɔ́	nā = <u>d</u> = njá	[d-ə̀ = wá]	[r-gɔ̄] = <u>dá</u>
	INDEF.SUBJ = say	NSPEC = NEG = give	AG5-ASSOC = C1.OBJ	C5-marriage = NEG
	'Someone said, "He will not be given marriage." ' (YM_IY_2013:007)			
	lit: someone said "they will not give him marriage" OR "they are not giving him marriage"			

Example (264) shows a ditransitive negative auxiliary construction with a fronted T argument. In (264), the negative ditransitive Type I auxiliary construction is in bold. In this example, the voiced alveolar stop [d] is used in place of the [z] of the negative

[43] Recall from §6.2.3 that there is some variation in the pronunciation of the initial consonant of the negative copula *zá* (here used as the negative auxiliary); some speakers use the fricative /z/, some the flap /r/, and some the stop /d/.

auxiliary *zá*. The two negative elements are underlined; the R argument within the ASSOCP, *ə̀ bɔ̄* 'ASSOC 2SG', and the fronted T argument *kwàt-u īn-yá* 'ring-C7 DEM-C7' are in [square] brackets.

		[T]	A = NEG.AUX	V = [ASSOC	R] = NEG
(264)	músá zɔ̄	[kwàt-u īn-yá]	ɔ̄m = <u>dá</u>	sɛ̀g = [ə̀	bɔ̄] = <u>dā</u>
	PN say	ring-C7 DEM-C7	1SG.SUBJ = NEG	loan = ASSOC	2SG = NEG

'Musa said, "That ring, I will not loan to you..." (MA_IY_Ror_2013: 012-013)

Having now addressed both affirmative and negative Type I auxiliary constructions, the next section turns to surveying Type II Auxiliary Constructions.

7.4 Type II Auxiliaries: Progressive + Lexeme Constructions

The data contained in this section were discovered within texts. Given currently available data, not all transitivity or polarity values can be displayed for each construction.

There are two Type II auxiliary phrases, and a possible third auxilary in development. I call these "auxiliary complexes" or "auxliary phrases" since they are structurally made up of at least two morphemes from different word classes. I consider them to be auxiliaries because the function of the complex/phrase is to indicate an aspectual meaning for the entire clause.

The first element of the Type II complex auxiliary word is the copula-turned-auxiliary *ɔ́*. The two Type II auxiliary complexes take the forms *ɔ́tɛ̄k* 'being in the middle of', which has a progressive interpretation, and *ɔ́mɔ́t* 'being about to', which has an immediate future interpretation. The source of the element *tɛ̄k* is likely the preposition *ə́tɛ̄k* 'in the middle of'. The source of the element *mɔ́t* is likely the nominalized verb *ɔ̄t-mɔ́t* 'C6-divide'. All three are assumed to be negated by the *zá*

'NEG.AUX', as is the case with all other clause types that use the *ɔ́* copula-turned-auxiliary (see §6.2.3 and §7.3.3).[44]

7.4.1 'in midst of' auxiliary construction

To form the 'in the midst of' auxiliary complex, the element *tɛ̄k* 'middle/between' occurs immediately following the progressive auxiliary, resulting in the form *ɔ́tɛ̄k* 'PROG2' with a progressive meaning. When the clause is syntactically intransitive, the main semantic verb is nominalized and occurs with its lexically specified citation class prefix. For example, in (265) the nominalized verb is *ɔ̄t-ká* 'C6-pick', which is also the citation form for this verb.

	S	ɔ́=tɛ̄k	C6-V					
(265)	wā	ɔ́=tɛ̄k	ɔ̄t-ká,	jàkɔ̄n	tʃāhā=jā	tè-ːn	ɔ́dɔ́m	ū-kɛ̀kɛ̀
	C1.SUBJ	PROG=middle	C6-pick	C7-there	man=C7	arrive-DIST LOC=top		C3-bicycle

'While he was in the middle of picking (fruit), a certain man arrived on a bicycle.' (SS_PS_Ror_2013: 013-014)

The same verb *ká* 'pick' is used in a transitive structure in (266). The class prefix does not occur on the nominalized verb, but we know that the semantically main verb is nominal because an agreement-marked ASSOCP expresses the object of the nominalized verb. The agreement marker on the ASSOCP in this example is *d-* 'AG5', paralleling the restrictions on the transitive progressive auxiliary construction which, with the exception of noun class 4, only occurs with *d-* 'AG5' marking regardless of the citation

[44] There are no negative examples of these Type II auxiliary complexes within the current text corpus. The *ɔ́=s-sà* 'want' verb complex has a similar form with a distinct function, described in Chapter VIII. There the 'want' complex is shown to use *zá* and *=da* in the formation of negative clauses.

form of the nominalized verb (see §7.3.1.2). (For discussion of how the class markers behave in nested ASSOCCXNs, see chapter 4.)

	A	ɔ́ = tɛ̄k	V = [AG5-ASSOC	[P	]]
(266)	wā	ɔ́ = tɛ̄k	ká = [d-ə̀	[jà	t-ə̀ = s-té]]
	C1.SUBJ	PROG = middle	pick = AG5 -ASSOC	fruit	C6.AG-ASSOC = C4-tree

'He is in the middle of picking fruits of trees.' (SS_PS_Ror_2013: 003)

7.4.2 Immediate future 'about to' auxiliary construction

The immeiate future 'about to' auxiliary is composed of *ɔ́* plus *mɔ́t*. Example (267) demonstrates the intransitive immediate future auxiliary construction. It is unclear whether the *= t* that cliticizes to *mɔ́t* is a noun class marker for the verb 'stand', or whether it is related to the juxtaposed *t*-future construction (§7.3.2), demonstrated in (268) with the same verb *ē:s* 'stand'.

	S	ɔ́ = mɔ́t = C6?	V
(267)	ū	ɔ́ = mɔ́t = ə̄t	ē:s
	C7.SUBJ	PROG = IMM.FUT	stand

'He is about to stand.' (T_VY_2017: 177)

	S = FUT	V
(268)	mɛ́ = t	ē:s
	1SG.FOC = FUT	stand

'I will stand.' (T_VY_2017: 177)

Example (269) demonstrates the 'about to' future auxiliary in a transitive construction. As expected for a transitive auxiliary construction, the nominalized semantically main verb occurs with no prefix, and the P argument is within an ASSOCP.

	A	ɔ́ = mɔ́t	V-C5-ASSOC = [P]
(269)	wā	ɔ́ = mɔ́t	gɛ́n-d-ˋ = [u-rān]
	C1. SUBJ	PROG = IMM.FUT	write-C5-ASSOC-C3-leaf

'He is about to write a letter.' (SJ_DY_2017: 083)

7.5 Chapter summary

In this chapter, I presented Type I and II auxiliary constructions which cover meanings of progressive, future, and immediate future. These auxiliary constructions are characterized by their use of a nominalized main verb following the auxiliary, The nominalized main verb is then structured by NP morphosyntax, including agreement marking on the ASSOCP used to convey the object of the nominalized main verb. Significant detail was presented regarding a shift from the nominal origins of the morphosyntactic patterns to the synchronic verbal construction.

In the next chapter, we turn to constructions that involve 'WANT'. The 'WANT' verb form resembles the Type 2 auxiliaries, functions partly like a Type 2 auxiliary and functions partly like a matrix verb.

CHAPTER VIII

'WANT' PREDICATIONS

8.1 Introduction

This chapter presents the predication types that involve the copula plus nominalized verb expression of 'WANT'. First, I present 'want' with NP complements (§8.2). Second, I present 'want' with nominalized verb complements; the 'want' verb and the nominalized verb must share the same subject (§8.3). Third, I present the 'want' verb with finite clause complements; these need not have the same subject, but same subject is accommodated (§8.4). Finally in §8.5, I discuss the negation of all 'want' predication types that uses the "double" negation strategy like the Type I and II auxiliary constructions in the previous chapter (Chapter VII).

The structure of the 'WANT'-verb transparently involves the progressive auxiliary *ɔ́* (Chapter VII §7.3) plus the nominal *ɔ̄s-sà* 'C4-desire, yielding the form *ɔ́sːà* 'want' An example of *ɔ̄s-sà* can be seen as the complement of *ɔ́ttɛ́* 'have' in (270).

(270) ɔ́ka bɔ̄ ɔ́ttɛ́ s-sà
like 2SG have C4-desire
'…as you have desire' (JF_2009: LP448)

The 'want'-verb serves as a transitive verb as in example (271) and as a matrix verb as in (272).

	A	V	[P]
(271)	ɛ̄	ɔ́ = s-sà	[nɔ́m-ɔ́t = tɔ́]
	C2.SUBJ	PROG = C4-want	thing-C6.C6.DEF

'They want those things.' (MT_draft_2019: 6.07)

	$A_{MATRIX/COMP}$	V_{MATRIX}	P_{MATRIX}	
			$[V_{COMP}$ = C6B-ASSOC GOAL]	
(272)	ɔ̄m	ɔ́ = s-sà	hā = m-ɔ̀	sōkōtō
	1SG.SUBJ	PROG = C4-want	go = C6B-ASSOC	sokoto.city
	'I want to go to Sokoto.'			

The structure of the 'want'-verb is comparable in complexity to the Type II auxiliary complexes described in Chapter VII (§7.4), as it involves the *ɔ́* 'PROG.AUX' plus another element. However, 'want' is distinct from the Type II auxiliary complexes since the "extra" element involves the prefixed form of a nominalized verb, not the bare root.

The 'WANT' predication constructions also differ from the multi-verb constructions described in Chapter VII in that the complement to the 'WANT' verb may have one of several forms: an NP complement (§8.2), a VP_{NMLZ} complement clause (§8.3), or a fully finite clause (§8.4). The VP_{NMLZ} complement only occurs when the nominalized VP and the 'WANT' matrix verb have the same subject. When the subjects have different referents, the 'WANT'-complement clause is a fully finite clause.

All 'WANT' predications with clausal complements are distinct from the other multi-verb predication types presented in this study so far in that two events are always profiled: the event of 'wanting' and the event depicted in the 'WANT'-complement.

8.2 NP 'WANT'-complement

The verb complex *ɔ́sːà* 'want' can take a NP complement, like *nɔ́mə́t tɔ́* 'those things' in (273), *kwə̀m də̀r fát* 'life's riches' in (274), or *t-kwəm* 'C6-wealth' in the negative 'WANT' construction in (254). In (254), the negative-copula-turned-negative-

auxiliary *zá* 'NEG.AUX' replaces the *ɔ́* 'PROG.AUX' of the 'WANT'-verb. In (276), we see that a pronoun can also serve as the P argument of *ɔ́sːà* 'want'.

	A	V	[P]
(273)	ɛ̄	ɔ́ = s-sà	[nɔ́m-ɔ́t = tɔ́]
	C2.SUBJ	PROG = C4-want	thing-C6.C6.DEF

'They want those things.' (MT_draft_2019: 6.07)

	A	V	[P]	
(274)	á = bɔ̄	ɔ́ = s-sà	[kwɘ̀m	d-ɘ̀ = r-fát]
	COND = 2SG	PROG = C4-want	wealth	AG5-ASSOC = C5-life

'If you want the life's riches,...' (RM_draft_2019: 9.5)

	A	V	[P]
(275)	wā	zá = s-sà	[t-kwɘ̀m] = dá
	C1.SUBJ	NEG.AUX = C4-want	C6-wealth = NEG

'He does not want riches' (JF_2009: LP101)

	A	V = [P]
(276)	gwɔ̄p	ɔ́ = s-sàː = [wá]
	girl	PROG = C4-want = C1.OBJ

'a girl likes him (lit. a girl wants him)' (YM_IY_Ror_2013: 011)

These examples show that, whatever its composition may be, synchronic 'want' can function as the lexically and syntactically main verb of a simple transitive clause. Given this, its ability to take a nominalized complement clause (discussed in the next section) suggests that it should be analyzed as a matrix verb, rather than as an auxiliary verb.

8.3 Nominalized same subject 'WANT'-complement clauses

Nominalized same-subject complement clauses of 'WANT' can be syntactically intransitive (INTR), meaning there is no expressed object; or they can be syntactically transitive (TRAN) with an expressed object (cf. §5.1)

The difference in syntactic structure partly relies on whether the object of the nominalized complement clause occurs immediately after the nominalized verb. We see an INTR example in (277) where the P argument of the nominalized complement clause is fronted to the initial focus position (cf. §5.2). In (277), the 'WANT'-matrix verb *ɔ́sːà* occurs in the typical V slot, immediately after the A argument, labeled $A_{MATRIX/COMPL}$. The P argument of the 'want'-matrix verb is a nominalized verb, NP_{NMLZ} - labeled P_{MATRIX}. As a result, the nominalized complement verb has a noun class prefix (i.e.., *ɔ̄t-* 'C6') – which is the characteristic INTR form .

	P_{COMPL}	$A_{MATRIX/COMPL}$	V_{MATRIX}	P_{MATRIX} [C-V_{NMLZ}]
(277)	ɔ́	ɔ̄m	ɔ́=s-sà	ɔ̄t-nɔ̀m
	C3.FOC	1SG.SUBJ	PROG=C4-want	C6-do

'It (the thing), I want to do.' (RM_draft_2019: 9.16)

If a complement of the nominalized verb occurs immediately after the complement verb, the structure is syntactically transitive (TRAN). That is, an ASSOCP containing the P argument or the goal complement follows the nominalized complement verb, as in (257).

	$A_{MATRIX/COMP}$	V_{MATRIX}	P_{MATRIX} [V_{COMP}=C6B-ASSOC GOAL]	
(278)	ɔ̄m	ɔ́=s-sà	hā=m-ɔ̀	sōkōtō
	1SG.SUBJ	PROG=C4-want	go=C6B-ASSOC	sokoto.city

'I want to go to Sokoto.'

A TRAN nominalized 'WANT'-complement clause can also take a different form, where the P argument of the 'WANT'-complement clause is coded by a possessive pronoun instead of being in an ASSOCCXN. This only occurs when the P argument is a personal pronoun rather than a class marked pronoun (cf. §3.5).

	$A_{MATRIX/COMP}$	V_{MATRIX}	P_{MATRIX}
			$[V_{COMP}\text{-}C = POSS_{COMP.OBJ}]$
(279)	ɛ̄	ɔ́ = s-sà	hján-ɔ́m = ró
	C2.SUBJ	PROG = C4-want	see-C6B = 2SG.POSS

'They want to see you.' (lit: 'they are wanting your seeing') (JF_2009: LP154)

The *ɔ́sːà* 'want' verb form can express both present gnomic-time 'wanting' or it can be used for past time, even though the verb is not explicitly marked for past tense. Analogously to the fact that the temporal interpretation of the bare verb form in Ụt-Ma'in can be determined by the time established by various lexical and grammatical in a particular discourse (Paterson 2015), the *ɔ́sːà* 'want' predication constructions similarly can be interpreted as meaning past time if the discourse-level time interpretation has been established.[45] For example, (281), taken from within a narrative text, has no overt marking for past tense. The translation reflects the past-time established four clauses earlier by the phrase *dɛ̀kɔ̄n hɔ́ dɛ̄* 'a certain day', which places the entire narrative in the past in relation to the speech time.

	A = 'WANT'-matrix	['WANT'-complement]
		[V R = T]
(280)	wa = ´ = s-sà	[nɔ́m wá = s-vɛ̀r]
	C1 = PROG = C4-want	do C1.OBJ = C4-clever

'He wanted to deceive him.' (lit: is wanting do him clever)
(MA_IY_Ror_2013: 007)

[45] Although the *ɔ́g* 'PROG.AUX.PST' past tense form of the progressive auxiliary exists (§7.3.1), there are no instances of a past tense marked form of the 'want' verb, i.e., **ɔ́gssa*.

8.4 Finite clause complements of 'want'

When the subject of the 'WANT'-matrix verb is different from the subject of the complement clause verb, the complement clause must occur as a fully finite clause. This is illustrated by the underlined clause in (281). The entire clause [S V Goal][46] is the P argument of *ɔ́sːà* 'want'.

	A	V_{MATRIX}	[Finite Complement Clause]P_{MATRIX}		
			[S	V	GOAL]
(281)	ɔ̄m	ɔ́=s-sà	bɔ̄	há	ɔ́=sōkōtō
	1SG.SUBJ	PROG=C4-want	2SG	go	LOC=sokoto.city
	'I want you to go to Sokoto'				

A same-subject complement clause can optionally be fully finite. In (282), both the 'WANT'-matrix verb and the complement clause of 'WANT' share the same referent as subject. But rather than a nominalized verb phrase that omits the subject of the complement clause, the subject pronoun *wā* 'C1.SUBJ' occurs and is co-referent with the proper name subject *áwdù* 'Audu' of the 'WANT'-matrix clause.

			S	PROG=C4-want [S=V=P]	
(282)	dɛ̀-kɔ̄n	hɔ́=dɛ̄	áwdù	ɔ́=s-sà	<u>wā=nɔ́m=m-há</u>
	C5-there	day=C5	PN	PROG=C4-want	C1.SUBJ=do=C6B-journey
	'On a certain day, Audu wanted to go on a journey.' (MA_IY_Ror_2013: 003-004)				
	(lit: 'Audu is wanting he do journey')				

8.5 Negation of 'want' predication constructions

To negate a 'WANT'-construction, the *zá* 'NEG.AUX' and the clause negator enclitic *=da* 'NEG' are used together. To illustrate, example (283) contains a negative

[46] Here as elsewhere S indicates the single argument of an intransitive clause.

'want' construction with an NP complement, repeated from (275). The two negative elements are underlined; the NP object of the 'WANT'-complement is in [square] brackets.

	A	V	[P]
(283)	wā	<u>zá</u> = s-sà	[t-kwɔ̀m] = <u>dá</u>
	C1.SUBJ	NEG.AUX = C4-want	C6-wealth = NEG

'He does not want riches' (JF_2009: LP101)

This double negation parallels the negation pattern used for Type I and II Auxiliary constructions described in Chapter VII(§7.3.3) and the negative predicate nominal constructions described in Chapter VI (§6.2.3).

Example (284) illustrates the negative 'want' construction that has a fully finite complement clause. Here the voiced alveolar stop [d] is used in place of the [z] of the negative auxiliary *zá*.[47] The two negative elements are underlined; the fully finite 'WANT'-complement clause is in [square] brackets.

	A_{MATRIX} NEG = V_{MATRIX}	[Finite Complement Clause] = NEG			
		[A_{COMP} = V_{COMP}		R_{COMP}	T_{COMP}]
(284)	ū	<u>dá</u> = s-sà	[nā = nɔ́m	wɔ̄n	ɔ̄s-tɔ̄ːg] = <u>dá</u>
	C7.SUBJ	NEG.AUX = C4-want	NSPEC = DO	3SG	C4-pray = NEG

'She does not want them to pray for her' lit: 'she does not want they do her prayer' (PW_IY_Ror_2013: 078)

[47] Recall from §6.2.3 that there is some variation in the pronunciation of the initial consonant of the negative copula *zá* (here used as the negative auxiliary); some speakers use the fricative /z/, some the flap /r/, and some the stop /d/.

CHAPTER IX

TYPE III: LEXICAL AUXILIARY CONSTRUCTIONS

Type III lexical auxiliary constructions are described in this chapter. What separates them from Types I and II described in Chapter VII is that only the clause final enclitic *=da* 'NEG' is used to negate these constructions. Type III auxiliary constructions make use of auxiliaries that are more lexically-contentful than the copula source of the progressive auxiliary, showing grammaticalization from lexical verbs to a lesser degree than Type I and Type II. The combined meaning of Type III auxiliaries plus nominalized verbphrase conveys only one event and has only one argument structure, as in the telic auxiliary construction shown in (285). Type III auxiliary constructions require the same subject for both the auxiliary and the nominalized semantically main lexical verb.

	A	Aux	V	P
(285)	ɔ̄m	tām-ɔ̄g	bjɔ̀t	d-ɔ̀ = wɔ̄n
	1SG.SUBJ	touch-PST	encounter	AG5-ASSOC = 3SG.OBJ

'I met him one time' (SJ_BB_Ror_2017:87)

Intransitive Type III auxiliary constructions use a nominalized verb with a noun class prefix, as in the *t*-V structure in the future obligation construction seen in (286).

	S	AUX	t-V	
(286)	ɔ̄m	dɛ́ʔtɛ́	t-rɛ̄	ūsōt
	1SG.SUBJ	FUT.OBL	C6-eat	tomorrow

'I must eat tomorrow.' (elicited_SJ_BB_Ror_2013)

Transitive Type III auxiliary constructions make use of the ASSOCP within the nominalized verb phrase to encode the object, as in the *t*-ASSOC = P in the future obligation construction seen in (287).

	A	AUX	V	t-ASSOC = P	
(287)	ɔ̄m	dɛ́ʔté	rɛ̄	t-ə̀ = r-gá	ūsōt
	1SG.SUBJ	FUT.OBL	eat	AG6-ASSOC = C5-cooked.grain	tomorrow

'I must eat cooked grain tomorrow.' (elicited_SJ_BB_Ror_2013)

For each section, I first show any non-auxiliary uses of the root which has also developed the auxiliary function (which I refer to as LEXAUX). The auxiliary use of a given root may be restricted to a particular inflected form of that root, i.e., the verb *swá* 'drink' is only used as an auxiliary when in the past tense form *swá:g* 'drank', but the verb *tá:s* 'finish' is attested as an auxiliary in both the *tá:s* 'finish' bare verb form and the *tá:stè* 'has finished' perfect form. Table 36 presents the Type III auxiliaries described in this chapter, including their function, forms, and their likely lexical sources.

9.1 Future obligation auxiliary construction

The future obligation auxiliary is *dét:é*. This may be historically related to the future auxiliary *dé* (§7.3.2) with the addition of the perfect suffix *-tɛ*. I believe both of these auxiliaries developed from the verb *dɛ́ʔɛ̀* 'go'.

dɛ́ʔɛ̀ 'go' > dé 'FUT.AUX'

dɛ́ʔɛ̀ 'go' > dɛ́ʔ + té 'FUT + PRF/ will have' > dét:é 'FUT.OBL/must'

Figure 32: Possible pathway of development for the FUT and FUT.OBL auxiliaries

Table 36: Function, forms and likely sources of Type III Ụt-Ma'in auxiliaries

FUNCTION	FORM	GLOSS	LIKELY SOURCE
Future Obligation	*détːé*	FUT.OBL	*déʔè* 'travel', plus *-tè* 'perfect'
Habitual	*hópɔ́*	HAB	unknown, only attested in auxiliary construction
Perfect Habitual	*hóptè*	HAB.PFT	unknown, plus *-tè* 'perfect'; only attested in auxiliary construction
Telic	*tāmɔ̄g*	TEL	*tàm* 'touch', plus *-ːg* 'past'
Continuative 'go'	*hɔ́*	GO.AUX	*hà* 'go'
Continuative 'eat'	*rɛ̄ ūʃɔ́*	EAT.AUX	literally 'eat face'; calque of Hausa *ci gaba* 'eat face'
Continuative 'repair'	*màŋ*	REPAIR.AUX	*màŋ* 'repair, resolve'
Inchoative 'start'	*hɛ́sɛ̀*	START.AUX	*hɛ́sɛ̀* 'start'
Perfect Inchoative 'start'	*hɛ́ːstè*	START.AUX.PFT	*hɛ́sɛ̀* 'start', plus *-tè* 'perfect'
Inchoative 'begin'	*tákɔ̄n*	BEGIN.AUX	*tákɔ̄n* 'begin'
Completive	*tàːs*	FINISH.AUX	*tàːs* 'finish'
Perfect Completive	*tàːstè*	FINISH.AUX.PFT	*tàːs* 'finish', plus *-tè* 'perfect'
Frequentative	*swáːg*	FREQ	*swá* 'drink', plus *-ːg* 'past'

First, example (288) shows *déʔɛ̀* 'go' used as a main verb.

(288) wā = déʔɛ̀ ɔ̄dɔ̀ músá
C1.SUBJ = go GOAL PN
'He went to Musa.' (MA_IY_Ror_2013: 005)

Example (289) presents an intransitive future obligation auxiliary construction. The clause is syntactically intransitive because there is no expressed object. When the clause is intransitive, the nominal status of the nominalized semantically main verb is marked by the noun class prefix, e.g., noun class 6 marked by the *ɔ̄t-* prefix in (289).

	S	Aux	ɔ̄t-V	
(289)	ɔ̄m	détːé	ɔ̄t-rɛ̄	ūsōt
	1SG.SUBJ	FUT.OBL	C6-eat	tomorrow

'I must eat tomorrow.' (elicited_SJ_2013)

Example (290) presents a transitive future obligation construction with the same nominalized semantically main verb found in (289). The expressed object in (290) is encoded in the agreement marked ASSOCCXN. The noun class AG6 prefix agrees with the inherent noun class of the nominalized main semantic verb (the citation form of 'eat' is *ɔ̄t-rɛ̄* 'C6-eat'). This is the agreement pattern expected within NPs, and it is a pattern that is distinct from the shift in agreement patterns seen for the progressive auxiliary constructions (§7.3.1.2.1). Recall that for the progressive, all agreement for class 6 nominalized verbs with overt object shifts to class 5 agreement marking.

	S	Aux	V	t-Assoc = O	
(290)	ɔ̄m	détːé	rɛ̄	t-ɔ̀ = r-gá	ūsōt
	1SG.SUBJ	FUT.OBL	eat	AG6-ASSOC = C5-cooked.grain	tomorrow

'I must eat cooked grain tomorrow.' (citation: *ɔ̄t-rɛ̀* 'C6-eat')

Example (291) shows a future obligation auxiliary construction embedded in a relative clause. Interestingly, the negative particle *dà* structurally negates the verb of the matrix clause, not the verb of the deontic relative clause.

(291) ə̄m nák bé = [də̀ īt dɛ́tːɛ́ nɔ̀m = d-ə̀ tōrōm] dà
1SG.SUBJ know.PST place-AG5.REL 1PL.EXCL FUT.OBL do = AG5-ASSOC meeting NEG
'I do not know the place [at which we will meet.]' MinnaText (2013:14.170-18.050)
(lit: 'I knew the place [of must doing of meeting] not.')

9.2 Habitual auxiliary construction

The habitual auxiliary *hópə́* translates to English as something close to 'always occurs'. I treat this as a Type III auxiliary (LEXAUX) because it patterns with other Type III auxiliaries in providing an aspectual interpretation for the clause it which it occurs, portrays only one event, and the main semantic verb is in nominalized form, even though there are no non-auxiliary uses of this form or any form with similar meaning from which the auxiliary may have developed. That is, it doesn't fit the "less grammaticalized" characterization of other Type III auxiliaries. To express the equivalent of the English adverb 'always', Ụt-Ma'in NPs like *ə̄rhɔ́ ə̄rbɛ̄ːt* 'every day' or *ūdà ūbɛ̄ːt* 'all the time' are used, as in the opening phrase of (292). Either the adverb or the auxiliary can be used to express the habitual. In the case of (292), both the Ụt-Ma'in adverbial expression of 'always' and the Ụt-Ma'in habitual auxiliary occur within the same clause.

Example (292) is from a text about a woman who is tormented by demons. The woman habitually hides from being seen ('always sitting in the shade') and habitually inflicts self harm. Example (292) predicates two events of sitting in the shade and hitting her head on the ground; the first repeats the root for 'sit' to emphasize the continuous nature of 'sitting'.

			S	AUX	[[VP_{NMLZ}]
(292)	a. ū-dà	ū-bɛ̄ːt	wā	hópɔ́	[ʃɔ̄ːt ɔ̀ = m-ʃɔ̄ːt ɔ́ = m-jàrà]
	C3-time	AG3-all	3SG.SUBJ	HAB	sit ASSOC = C6B-sitting LOC = C6B-shade
	'All the time, she is always sitting in the shade				

	[VP_{NMLZ}		]]
b. *ɔ́*	[wà = d-ɔ̀	r-hí	ū-dàk]
and	put = C5.AG-ASSOC	C5-head	C3-land

'and hitting her head on the ground' (PW 2013: 26.729-31.435)

The transitive clause in (292b) uses the ASSOCCXN inside of the nominalized VP; the entire nominalized VP occurs immediately after the auxiliary *hɔ́pɔ́* 'always'. We know that the complement of *hɔ́pɔ́* 'always' is nominal because any complements of the semantically main verb are within ASSOCPs.

9.3 Telic auxiliary construction

The verb root *tām* 'touch' can be used as an auxiliary, with the semantically main verb in a nominalized structure. As an example of the verb *tām* 'touch' used as the main semantic verb in a simple clause sense, see (293).

	S	V	P
(293)	ná-jɔ̀	tām-ɔ̄g	hí = d-ˋ = u - zūr
	cow-C7.SUBJ	touch-PST	head = AG5-ASSOC = C7-lion

'Cow touched the head of Lion.' (Primer 2009)

As an auxiliary 'touch' gives a telic meaning of 'having occurred once in the past', as shown with the semantically main verb *bjɔ̀t* 'encounter' in example (294).

(294)	ɔ̄m	tām-ɔ̄g	bjɔ̀t	d-ɔ̀ = wɔ̄n
	1SG.SUBJ	touch-PST	encounter	AG5-ASSOC = 3SG.OBJ

'I met him once' (SJ_BB_Ror_2017:87)

In example (295) the adverbial numeral phrase *ū-sò ū-gàn* 'C3-time C3-one' further emphasizes the one-time occurrence of the event of 'eating cooked guinea corn grain'.

	S	Aux	[V = Assoc	[P	]]$_{VP}$		
(295)	ɔ̄m	tāmɔ̄g	[rɛ̀ = d-ɔ̀	[gá = d-ɔ̀	hjɔ̄]]	ū-sò	ū-gàn
	1SG.SUBJ	TEL.AUX	eat = AG5-ASSOC	cooked.grain = AG5.ASSOC	guinea.corn	C3-time	C3-one

'I ate cooked guinea corn one time.' (SJ_BB_Ror_2017:87)

Negation of a telic auxiliary construction uses the clausal final negator *=dá* 'NEG'; compare the transitive clauses in (296) and (297). Notice that, at least in these particular examples, the associative marker is a pro-clitic on the object in the affirmative clause but is an enclitic to the nominalized verb in the negative clause. I make no claim here that a negative clause "causes" the shift in the locus of the associative marker.[48]

(296)	ɔ̄m	tām-ɔ̄g	bjɔ̀t	d-ɔ̀ = wɔ̄n
	1SG.SUBJ	touch-PST	encounter	AG5-ASSOC = 3SG.OBJ

'I met him once' (SJ_BB_Ror_2017:87)

(297)	ɔ̄m	tām-ɔ̄g	bjɔ̀t = d-ɔ̀	wɔ̄n = dá
	1SG.SUBJ	touch-PST	encounter = AG5-ASSOC	3SG.OBJ = NEG

'I did not meet him (even) once' (SJ_BB_Ror_2017:89)

9.4 Continuative auxiliary constructions

There are three continuative auxiliary constructions. The first two use roots that still clearly function also as lexical verbs; as auxiliaries, the following semantically main verb is in a nominalized form. The third continuative uses a phrase calqued from Hausa

[48] More work is needed to understand the preferred syllable structure and the subsequent pronunciation of the associative marker in its various functions.

ci gaba ‘eat front’; in Ụt-Ma'in it is calqued as *rɛ̀ ūʃɔ́* ‘eat face’. The semantically main verb is also nominalized but is within an accompaniment construction.

9.4.1 GO.AUX continuative construction

The auxiliary *hɔ́* ‘GO.AUX’ likely comes from the root *hā* ‘go’. Example (298) shows *hā* as the only verb of the clause; here it is marked for past tense.

(298) hɔ̄ːb-ɔ̄t = rī hā-ːg ɔ́ tūlːɔ̀-ù māhūtā
friend-c6 = 1sg.poss go-PST LOC market-C3 Mahuta.town.POSS
‘My friend went to the Mahuta market.’

When used as an auxiliary, *hɔ́* ‘GO.AUX’ gives a meaning of continuous motion of the S/A argument while simultaneously doing the action encoded by the nominalized complement. That is, it expresses a kind of associated motion. The continuous motion can be further emphasized in the discourse by the use of repeated clauses. For example, *hɔ́ = t-kɔ̀bɔ̀r* ‘go picking’ is repeated four times in (300), and the entire clause in (301) is repeated twice by the narrator as he describes the movement and repeated action of ‘removing’ feathers.

(299) a. a̰ = wá tʃɔ̄z-ɔ̄n-ɛ́,
COND = C1 come.down-DIST-DEP
‘When he came down from up high,

	S	GO.AUX = C-V	
b. dà-ù = ɔ́	wā	hɔ́ = t-dàʔàs	ɔ́ = t-kɔ́ːr
time-C3 = C3.DEF	C1.SUBJ	go.AUX-C6-pour	LOC = C6-basket

‘now he went pouring (fruits) into a basket.’ (IY_Ror_PS_2013: 007-008)

When syntactically intransitive, the main lexical verb’s nominalized form is marked by a noun class prefix. In examples (299) and (300), the GO.AUX clauses are syntactically intransitive, but the understood P participant is recoverable from discourse

(again Fillmore (1986: 96) definite null complements). In both cases, it is clear from context that 'fruit' is the undergoer of the action of *t-dàʔàs* 'C6-pour' in (299) and *t-kəbrə̀* 'C6-pick' (300).

(300) a. sɛ̄ wə̄n hā-ə̄n ə̄r-kɔ́ːr=nɛ̀
then 3SG.SUBJ go-DIST C5-basket=with
'Then, one came with a basket'

S GO.AUX=C-V GO.AUX=C-V
b. ə́ Ø hə́=t-kəbrə̀ hə́=t-kəbrə̀
LOC SAME.SUBJ go.AUX=C6-pick go.AUX=C6-pick
'and goes picking (fruit), goes picking,'

GO.AUX=C-V GO.AUX=C-V
c. hə́=t-kəbrə̀ hə́=t-kəbrə̀
go.AUX=C6-pick go.AUX=C6-pick
'goes picking, goes picking.' (IJ_PS_Kuur_2013: 009)

A syntactically transitive complement of a GO.AUX is in (301). The main lexical verb occurs without the noun class prefix, but it can be identified as nominal because its P argument is within an ASSOCP, here marked for class 5 agreement.

(301) [ə̰hə́mə́ʔə̰lːəstʃán]
A=GO.AUX V [P]
ə̄n=hə́ *mə́ʔə́r* *d-ə̀=s-tʃán*
3PL=go.AUX remove AG5-ASSOCC4-feather
'they went on removing the feathers' (GF_2007_IT_Juur: 0092)

9.4.2 PREPARE.AUX continuative construction

The second continuative auxiliary is *màŋk*. This comes from the verb *màŋk* that can mean a range of things from 'repair' to 'prepare' to 'reconcile'. Example (302) shows the bare verb form of *màŋk* used as the main and only verb of a basic clause; example (303) shows *màŋk* with the perfect suffix *-tɛ̀* 'PFT' with the addition of a goal

complement in this example giving the idea of ‘reconcile’ between parties. As an auxiliary, *màŋk* is only attested in the bare verb form.

(302) ɔ̄n màŋk nɔ́m t-ə̀s wɔ́s
3PL prepare thing AG6-ASSOC = C4 smell
‘They prepared the spices.’ (JF_2009: LP423)

(303) wā màŋk-tɛ̀ t-nɛ̄t ɔ̄t-bɛ̄::t ɔ̄dɔ̄ ū-rɔ̄
C1.SUBJ reconcile-PFT C6-people AG6-all GOAL C3-god
‘He reconciled all people to God.’ (JF_2009: LPIN13)

The verb *màŋk* ‘repair/prepare’ can be used as an auxiliary to indicate that an action that had started in the past is continuing or repeating in the present. There is an element of perseverance on the part of the characters carrying out this continued action, for example they may refuse to be thwarted by the actions of others. Both (304) and (305) are intransitive. The lexical verbs are both in nominalized form with the noun class 5 prefix.

S REPAIR.AUX C-V
(304) nēt-ɔ́ = wá màŋk ɔ̄r-mɔ́-ɔ̄n
person-C1 = C1.DEF CONT.AUX C5-return-DIST
‘That person continued to return from far.’ (PW_IY_Ror_2013: 048)

S REPAIR.AUX C-V
(305) á = tɔ̄:g = nɛ̀ màŋk ɔ̄r-há-ɔ̄n
C2 = pray = with CONT.AUX C5-go-DIST
‘The pastors continued to come.’ (PW_IY_Ror_2013: 048)

9.4.3 EAT.AUX continuative construction

In Ụt-Ma'in the EAT.AUX auxiliary has the form *rɛ̀ ūʃɔ́* ‘eat face’. This is a calque from Hausa *ci gaba* ‘eat front/continue’. First, in (306) the verb *rɛ̀* ‘eat’ occurs as a

lexical verb, carrying the past tense marker and demonstrating the non-auxiliary use of this verb.

(306)	wā	rɛ́-ːg	ə̄r-gá	gjə̄p.
	C1.SUBJ	eat-PST	C5-cooked.grain	yesterday
	'He ate cooked grain.'			

The structure of the EAT.AUX construction is unique among the Ụt-Ma'in auxiliary constructions. As an auxiliary, *rɛ̀* 'eat' must occur with the noun *ū-ʃə́* 'c3-face' in the expression 'eat face' to produce the meaning of 'continue'. The main semantic verb of the clause is nominalized and is contained within an accompaniment construction. The form of the accompaniment construction is *ə́* VP_{NMLZ} *=nɛ̀* 'LOC VP_{NMLZ} = with'. The accompaniment construction is used as an oblique in other clauses, as in (307) where it is an oblique within a predicate numeral construction.

				[LOC [NP] = with]
(307)	rɛm = d-ə̀	á-s-ùs	ɔ́ = r-gān	[ə́ = [kàg-nɛ̀] = nɛ̀]
	tongue = AG5-ASSOC	C2-C4-PN	COP = C5-one	LOC = PN-C2 = with
	'Language of the Us people is one with Kag people.' (UW_Us_2017: 1.15-1.17)			

In the intransitive EAT.AUX construction, the semantically main lexical verb is nominalized and marked with a noun class prefix, like *m-há* 'C6B-go' in (308). The nominalized verb form again occurs within an accompaniment construction.

	S	EAT.AUX	[LOC [VP_{NMLZ}] = with]
(308)	wā	rɛ̀ = ū-ʃə́	[ə́ = [m-há] = nɛ̀]
	C1.SUBJ	eat = C3-face	LOC = C6M-go = with
	'He continued going.' (lit: He eats forward with going.)		
	(PS_PS_Ror_2013: 014)		

In the transitive, there is no prefix on the semantically main lexical verb, but the P object is encoded in an ASSOCP, *d-ə̀ = tɔ̀kɔ̄n mɔ̀ŋgɔ̀r tɔ̄* 'C5-ASSOC some mango fruits' in

(309). The entire nominalized verb phrase occurs within an accompaniment construction.

		A	EAT.AUX	[LOC	[VP_{NMLZ}
(309)	a.	wā	rɛ̀ = ū-ʃɵ́	[ɵ́	[ká-ɵ̄n = d-ə̀
		C1.SUBJ	eat = C3-face	LOC	pick-DIST = C5.AG-ASSOC
				] = with]	
	b.	tɔ̀kɔ̄n	mɔ̀ŋgɔ̀r	tɔ̄] = nɛ̀]	
		C6.some	mango.fruit	C6 = with	

'He continued picking some mango fruits.'
(lit: He eats forward with picking from far some mango fruits.)
(PS_PS_Ror_2013: 007-008)

9.5 Inchoative constructions

Two inchoative constructions exist. These came to light when a consultant was asked to emphasize the beginning of the process of 'building a big house'.[49]

9.5.1 START.AUX inchoative construction

The verb *héstɛ̀* 'start' may be used intransitively as the only verb of the clause. The activity 'started' is implied from context. In (310b), the main and only verb is *héstɛ̀* 'start'; the activity that started is recoverable from the previous clause (310a).

(310)	a.	wa	tɔ̀p = ɛ́				
		C1.SUBJ	pay = C2.OBJ				
		'he paid them,'					
	b.	tɵ̄msɵ̄	wā	héstɛ̀	dɵ̄gɵ̄	ámvástɛ̀	m-há	ártàkɔ̀n = nɛ̀
		also	C1.SUBJ	start	from	last.ones	C6B-going	first.ones = with

'also, he started from the last ones going to the first ones.' (PTY_draft_2019: 20.8)

[49] There are no instances of these verbs used as auxiliaries in the narrative texts available for this study.

This intransitive example is the closest to a non-auxiliary use of *hɛ́stɛ̀* 'start' found in the corpus. There are no examples of *hɛ́stɛ̀* 'start' used transitively and occurring with a non-activity complement. For example, there are no instances of *hɛ́stɛ̀* 'start' used in parallel to the English *start dinner*, where the complement of start is an NP with no reference to an activity only the noun object (Heine 1991: 048).

Heine (1991: 48) points out that some linguists, specifically Freed (1979:83) and Brinton (1983: 82-84), consider English terms such as *begin*, *continue* and *stop* as "aspectualizers" related to the event that could be coded by a noun complement (e.g., *dinner* is actually a reference to starting the event of *preparing dinner* or *eating dinner*). With this in mind, it is possible to understand the Ụt-Ma'in example in (310b) as an instance of an elided nominalized complement.

When used as an auxiliary, the verb *hɛ́stɛ̀* 'start' is followed a nominalized form of the semantically the main lexical verb. In (311), an INTR use of *hɛ́stɛ̀* 'start'. The nominalized complement is *t-kɔ́sɛ̀* 'C6-show'.

(311) wā hɛ́stɛ̀ t-kɔ́sɛ̀
C1.SUBJ start C6-show
'He began teaching' (JF_2015: L43)

In (312) we see a TRAN use of *hɛ́stɛ̀* 'start'. The semantically main verb phrase is bracketed in (312). One can tell that the verb *mā* 'build' is nominalized because it takes its P argument in an ASSOCP marked for class 5 agreement.

A = START.AUX [VP]
(312) wā = hɛ́stɛ̀ [mā = d-ə = bū-ū ját-ə]
C1.SUBJ = START.AUX build = C5-ASSOC = house-C3 big-C3.AG
'He starts to build a big house' (elicited SJ_2017_GD_519-521)

9.5.2 BEGIN.AUX inchoative construction

The word *tàkə̀n* can be used as a noun meaning 'beginning', as a verb meaning 'begin' with an elided nominalized complement, or as an auxiliary meaning 'begin' with a nominalized complement containing an activity predicate. In (313), the noun is used within an oblique adverbial phrase. In (314) the verb is used intransitively as the main and only verb of the clause.

(313) ə̄r-tàkə̀n=nɛ=́ rwánà nɔ́ŋ bɔ̄ ə̀k
C5-beginning=with=DEP PN DO.PST 2SG pride
'In the beginning, Rwana made you proud.' (RW_IT_Jiir_2007: 028)

(314) nā tàkə̀n ɔ́ gārírì
NSPEC begin LOC PN
'They began in Galili.' (PTY_draft_2019: 10.37)

When used as an auxiliary, as in (315), the verb *tákə̄n* 'begin' takes the semantically main lexical verb as a nominalized complement. In (315) the nominalized complement verb is *mā* 'build'. Again, we know it is nominalized because it takes its P argument in an AssocP marked for class 5 agreement.

A=BEGIN.AUX [VP]
(315) wā tákə̄n mā-d-ə̀=bū-ū ját-ə̀]
C1.SUBJ BEGIN.AUX build=C5-ASSOC=house-C3 big-C3.AG
'He begins to build a big house' (elicited SJ_2017_GD_493-495)

9.6 FINISH.AUX completive construction

The verb *tá:s* 'finish' may be used as an intransitive lexical verb, a transitive lexical verb, or as an auxiliary. The verb *tá:s* 'finish' is used intransitively in (316) where it the main verb of a clause after several related activities, in this case "creation" activities.

(316) a. wā má ū-dàk = é
C1.SUBJ build C3-land = DEP
'He [God] built the land,'

b. wā nɔ̀m = s kójɘ̀hɛ̀ té = jā
C1.SUBJ do = ITR everwhere.C7 tree = C7
'he created every kind of tree,'

c. wā tá:s = tɛ̀
C1.SUBJ finish = PFT
'he had finished.'

d. kójɘ̀hɛ̀.C7 nɔ̀m jā = nɔ̀m
everwhere.C7 thing C7.SUBJ = do
'Everthing was done.' (BT_IT_Jiir_2007: 005-008)

Three lines later, the auxiliary use is demonstrated through the same verb *tá:s = tɛ̀* together with a ditransitive nominalized verb phrase as its complement.

A = FINISH.AUX [VP_{NMLZ}]
(317) nā = tá:s = tɛ̀ já = d-ɘ́ kó = ū-jān ū-nɔ̀m
NSPEC = FINISH.AUX = PRF give = AG5-ASSOC each = C3-one C3-thing
'They finished giving everyone each a thing (a body)' (BT_IT_Jiir_2007: 010)

Example (318) shows the perfect form of FINISH.AUX together with an intransitive nominalized verb phrase; the main lexical verb is in a nominalized form with a class 5 prefix, *r-rwɔ́n* 'C5-exit'.

(318) a. sɛ̄ kɔ́:t-jɘ́ rwɔ́n ɔ̄r-vástɛ̀
then guinea.fowl-C7.SUBJ exit C5-last
'then guinea fowl came out last

S FINISH.AUX C-V
b. ... káhín wɔ̄n tá:s-tɛ̀ r-rwɔ́n.
before 3SG FINISH.AUX-PRF C5-exit
'... before he had finished coming out.' (GF_IT_2007: 071,076)

Example (319) shows the bare verb form of FINISH.AUX with a transitive nominalized verb phrase. The semantically main lexical verb is *sàk* 'cook'; we know it

is nominalized because its P argument is in an ASSOCP, *d-ə̀ ɔ̄t-kútùŋkù* 'C5-ASSOC C6-sweet.potatoes'.

			A	FINISH.AUX	[VP_{NMLZ}	]
(319)	wā	bít,	nā	tá:s	sàk = [d-ə̀	ɔ̄t-kútùŋkù]
	C1.SUBJ	meet	NSPEC	finish	cook = AG5-ASSOC	C6-sweet.potato

'(as) he met (them), the sweet potatoes were finished being cooked'
lit: 'he meet, they (NSPEC) finish cooking of sweet potatoes'
(KM_IY_Ror_2013: 003)

9.7 DRANK.AUX frequentative construction

The inflected verb *swá:g* 'drank' can be used in an idiomatic expression indicting a frequently occurring event, which we will see in (323). First, (320) illustrates *swá* 'drink' as a main lexical verb of a simple transitive clause; (321) shows the past tense form *swa:g* 'drank' as the main verb of a simple transitive clause.

	A	V	P	LOC
(320)	nā	swá	mɛ́	ɔ̄r-dù
	NSPEC	drink	1SG.OBJ	C5-well

'They drink me from the well.' (SFC_IT_Jiir_2004: 024)[50]

	A		V	P
(321)	nɛ̄t-ɔ̄t	t-ún-tɔ̀	swá-:g	kɛ́ʔ = da
	person-C6	C7-DEM-C6	drink-PST	beer = NEG

'Those people didn't drink beer.' (PTY_draft_2019: 2.15)

Interestingly, the verb 'drink' is often used metaphorically in a phrase that translates as 'suffer' or 'struggle' with the object *ɔ̄r-kɔ̀b* 'C5-lack', as shown in (322).

[50] This example comes from a text where Mr. Frog is describing how people hate him (i.e., find him in their drinking water) but how he was the first creature that God created.

(322) a. dà dà ɔ̄r-màt té = jɛ́
then time C5-give.birth arrive = DEP
'When time of delivery arrived,

	A	V	P	
b.	nɛ̄ta-ū = já	swá-ːg	ɔ̄r-kɔ̀b	sók
	woman-C7 = DEF	drink-PST	C5-lack	very

'that woman suffered (lit: drank lack) very much.' (SR_SJ_Ror_2013: 005-006)

When used as an auxiliary, it does not covey a necessarily emotional or challenging activity. The auxiliary use of 'drink' is effetively neutral regarding a value judgment. It only conveys a meaning of a frequently occurring activity; this is best translated into English as 'often'.

As an auxiliary, 'drink' is only attested in the past tense form *swá-ːg*. The frequentative auxiliary occurs in the same position as other auxiliaries and, as in (323), we know that the semantically main lexical component is nominalized because the P argument is within an AssocCxn.

	A	Aux	[VP_{NMLZ}	]
(323)	ɔ̄m	swá-ːg	bjə̀t	d-ə̀ = wɔ́n]
	1SG.SUBJ	DRINK.AUX-PST	encounter	C5-ASSOC = 3SG.OBJ

'I often encounter him.' (lit: I drank encountering of him)
(SJ_BB_Ror_2017:88)

9.8 Chapter summary

In this chapter I presented Type III auxiliary constructions. These constructions convey a range of aspects. Transitive nominalized verbs take objects marked by an AssocCxn like Type I and II auxiliary constructions described in Chapter VII. Distinct from Type I and II auxiliary constructions, Type III auxiliary constructions do not

require “double” negation. Rather they are negated in the same way as basic verbal predication clauses.

In the next chapter, I present the varied constructions involving the verb *nɔm* ‘do’.

CHAPTER X

'DO' PREDICATIONS

The verb *nɔm* 'do' is involved in a variety of constructions: an intransitive construction, a transitive construction, a ditransitive construction, idiomatic expressions, and a formulaic presentational construction used to introduce characters at the outset of folk narratives.[51] This chapter explores the various uses of *nɔm* and the various meanings of those constructions. Of particular interest to the main focus of this dissertation is the use of *nɔm* to predicate activity nouns.

Activity nouns are distinct from nominalized verbs. A nominalized verb can be used as the main and only verb in a basic predication clause (Chapter V). An activity noun can only be a predicate when assisted by an auxiliary verb (Chapters VI and IX), or as we see in this chapter by the verb 'do'. For instance, in the elicited examples (324) through (329), the root *aŋk* 'work', citation form *ə̄m-àŋk* 'C6B-work', can be a predicate with the assistance of *nɔm* in (324) or with the progressive auxiliary as in (325). But 'work' cannot be the main and only verb of a basic clause in the bare verb form (326) or in the perfect form (328); this is demonstrated by the ungrammatical examples. 'Work' is also clearly a noun that can serve as the argument of another verb, as with the clause initial argument of the existential clause in (329).

(324) ə̄m nɔ́m-tɛ̀ **ə̄m-àŋk**
1SG.SUBJ do-PFT C6B-work
'I have done work.'

---

[51] No tone is indicated in running English prose for *nɔm* 'do' because the tone of the verb is dependent on the construction in which it is used. Tone is indicated on each construction schema and in each example.

(325) wā ɔ́ = **m-àŋk**
C1.SUBJ PROG = C6B-work
'He is working.'

(326) wā ɔ́-g = **ɔ̄m-àŋk**
C1.SUBJ PROG-PST = C6B-work
'He was working.'

(327) *ɔ̄m **àŋk**
Intended :'I work.'

(328) *ɔ̄m àŋktɛ̀
Intended :'I have worked.'

(329) **àŋk-mə̀** ɔ̄ró ū-tát
work-C6B.SUBJ EXT C3-many
'There is much work.' (lit: 'Work exists many')

This seems to suggest that *ɔ̄m-àŋk* 'C6B-work' is not a nominalized form, but must be an activity noun. The transtive and ditransitive *nɔ́m* constructions are one way to express *ɔ̄m-àŋk* 'C6B-work' as a predicate.

In this chapter, I make a distinction between nominalized verb and activity noun. Both can be used with *nɔ́m* to form a predicate. If a word is called an activity noun, I have specific evidence that that word can not be used as the main and only verb of a basic clause.

10.1 Forms and functions of *nɔ́m*

The verb *nɔ́m* has a range of meanings dependent on the construction in which it is used. When used intransitively as a syntactically main verb, *nɔ́m* can communicate 'happened' or 'was done', as in (330).

	[		S] = V
(330)	[kójəhɛ̀	nɔ̀m	jā] = nɔ̀m
	everwhere.C7	thing	C7.SUBJ = do

'Everthing was done.' (BT_IT_Jiir_2007: 005-008)

When used transitively as a syntactically main verb, and if the P argument is a physical object, *nɔm* indicates 'make' in the sense of 'create' or 'bring into being', as seen in (331). In somewhat idiomatic English the translation could be either 'do' (332) or 'make/create' (333) when the P argument names an activity. Crucially, the tone on *nɔm* is Low when *nɔm* has a physical item noun as its P argument, as in (331), but whenever *nɔm* has an activity noun or a nominalized verb as its P (or T argument if the clause is ditransitive; see (334)), the tone of *nɔm* is always high.[52]

	A	V	P		
(331)	īt	nɔ̀m	ɔ̄t-pórá	dɔ̄gɔ̄	ū-té
	1PL.EXCL	make	C6-stool	from	C7-wood

'We (excl) make stools from wood.' (SJ_BB_Ror_2017: 099)

(332)	ɛ̄	nɔ́m	ɔ̄s-tɔ̄ːg
	C2.SUBJ	do	C4-prayers

'They prayed.' (lit: 'They do prayer.') (PW_IY_Ror_2013: 061)

	A	V	[P]
(333)	nō	nɔ́ŋ	[bɔ̄n = d-ə = s-hɛ́w]
	bird	do.PST	invitation = AG5-ASSOC = C4-DANCE

'Birds gave an invitation for dancing' (GF_IT_Jiir_2007: 005)

When used ditransitively, the documented sense of *nɔm* in the corpus is 'do (an activity)'; in example (334) the lexical activity is encoded in the nominal *ū-kéːr*

[52] Many of the auxiliary verbs described in Chapters VI and VII have a high tone on the auxiliary in their auxiliary function. Perhaps the high tone is part of the grammatical structure that allows a multi-verb predication. Tone alternation of verb roots is an area for future investigation.

'C3-whistle'.[53] This nominal occurs in the same structural position in the clause as does the T argument of other ditransitive clauses (cf. §5.1). The entity that is the goal argument of the 'do-whistling' activity occurs in the same position as the R argument of other ditransitive clauses.

			S	V	R_{GOAL}	$T_{ACTIVITY}$
(334)	ɛ̄	kɘ́b	ɛ̄	nɔ́m	wɘ̄n	ū-kéːr
	C2.SUBJ	took	C2.SUBJ	do	3SG	C3-whistle

'they took (the hat) and they whistled at him'

lit: 'they took and they did him whistling.' (SJ_PS_Ror_2013: 36)

If the T argument of a ditransitive clause contains an nominalized verb, an object (of the nominalized verb) can be included. If an object of the nominalized verb is included, it is contained in an AssocCxn. In (335), the semantically main event concept of the clause is expressed by the nominalized verb *ɘ̄m-ségˊ* 'C6B-loan. The object of 'loan' *kwàtù ínjà* 'ring.C7 DEM.C7' is contained within the AssocP that follows the noun 'loan'. The AssocP is headed by the agreement marked associative marker *=m-ɘ̀* 'C6B=ASSOC'.

	$S = V = R_{GOAL}$	$[T_{ACTIVITY}$	]
(335)	bɔ̄=nɔ́m=mɛ́	ɘ̄m-ségˊ=m-ɘ̀	kwàt-ù ín-jà
	2SG=do=1SG.OBJ	C6B-loan=C6B-ASSOC	ring-C7 DEM-C7

' "... you loan me that ring..." (lit: 'you do me loaning of that ring')

(MA_IY_Ror_2013: 010)

[53] This is an activity noun. There is no verb meaning 'to whistle'.

10.2 Tense marked forms of *nɔm*

The verb *nɔm* 'do' can be marked for past or perfect tense. Past tense *nɔm* can have form *nóŋ* as in (333) or *nómə́g* as in (336). Perfect tense *nɔm* has the form *nómtɛ̀* as in (337) and (338).

(336) ɔ̄m nóm-ə́g ɔ̄m-àŋk gjə́p.
1SG.SUBJ do-PST C6B-work yesterday
'I worked (lit. did work) yesterday.' (elicited SJ_DY_IY 2017: p88)

(337) ə́ wā nóm-tɛ̀ m-ànk
and C1.SUBJ do-PFT C6B-work
'and he had done work'

(338) ka = m nóm-tɛ̀ m-hā ə́ mìnà
as = 1SG.SUBJ do-PFT C6B-go LOC PN
'As I have travelled (lit. have done going) to Minna.' (Minna_IY_Ror_2013: 001)

10.3 Negation of *nɔm*

To negate a *nɔm* construction, the clause final negator enclitic *da* is used, as in (339). (339). In this respect, *nɔm* constructions follow the Type III auxiliary constructions (Chapter VIII).

(339) wɔ̄n nóŋ s-rém dà
C1.SUBJ do.PST C4-word NEG
'he did not say anything' (lit: he did words not) (MP_PS_Ror_2013: 034)

10.4 Idiomatic uses of nɔm

The verb *nɔm* is used in several idiomatic expressions, as illustrated in (340) and (341). In (340) 'do sitting' is a common lexicalized expression for 'decide'. This is related to the position of the decision maker in traditional society. The local king must

be sitting on a designated rock, as specified for his specific village when he is speaking his judgment as king.

(340) dà fārək nɔ́mɛ́ r-ʃəʔət
then king do-SUBJ.FOC C5-sitting
'Then the king decided' (lit: 'then king do sitting') (GK_IY_Ror_2013: 032)

In (341) 'do him day of sins' a common lexicalized expression for 'forgive'. This is likely a reference to an annual day of atonement observed by communities in the Ụt-Ma'in speaking area.

(341) wā nɔ́ŋ wən hɔ́=d-ə=ʔ bàʔàs-ət=rò
C1.SUBJ do.PST 3SG day=AG5-ASSOC=C6 sin-C6=3SG.POSS
'He [the king] forgave him of his sin.' (lit: he did him day of his sin')
(GK_IY_Ror_2013: 082)

10.5 Presentational impersonal *nɔm*

The verb *nɔm* is also commonly used in a presentational impersonal construction as shown in (342). To introduce a central character at the start of a narrative,[54] an impersonal subject pronoun *nā* occurs together with the past tense marked form of *nɔm* 'do'.[55] The impersonal construction is described more fully in Chapter V §5.5. The impersonal pronoun *nā* is behaves structurally as an A argument. *nā* always precedes the verb; the presented character occurs in the P argument position immediately after the verb.

[54] I have not encountered this construction mid-narrative at the point of arrival of a new character. Presentational impersonal cosntructions seem limited to establishing central main characters at the start of the narrative.

[55] In the Fer and Jiir dialects, the pronoun *ā* is used instead of *nā.* See additional discussion in §5.5.2.

The character introduced is contained within an NP as the complement to *nɔm*. In this construction, *nɔm* is always in a past tense form, either *nɔ́mə́g* or *nɔ́ŋ*.

	A	V	[P]	
(342)	nā	nɔ́m-ə́g	[jàkə̄n	nɛ̄tá = jā]
	NSPEC	do-PST	C7.there	woman = C7
	'There was a certain woman'			
	ə́	ɔ̀kə̄n	bɔ́	ə̄]
	LOC	C3.there	town	C3
	'in a certain town.' (SR_SJ_Ror_2013: 001)			

10.6 Summary of *nɔm* constructions

The *nɔm* constructions are diverse in their functions. They vary across intransitive, transitive, and ditransitive structures. The *nɔm* constructions are displayed collectively in Figure 33 (not including the idiomatic expressions involving *nɔm*). The function of a particular construction is listed in the first column, separated from the form of the construction by a thick dark line. The presentative 'did' construction (§10.5) is specified for past tense, but all other *nɔm* constructions can have a bare verb, past tense or perfect tense verb form; this is indicated by "(TNS)" following *nɔm* in each construction schemata. Intransitive 'happen' has no complement. Transitive 'make/create' ('come into being') has a noun naming a physical item as the P argument. Transitive 'do' has an activity noun or nominalized verb as its P argument. Ditransitive 'do' has a goal or benefactive argument as its R argument and an activity noun or nominalized verb as its T argument. Presentative 'do' has an impersonal subject and the "presented character" follow *nɔ́mə́g/nɔŋ* 'did'.

FUNCTION	'DO' CONSTRUCTION SCHEMA		
INTRANSTIVE 'HAPPEN'	S	*nɔ̀m*(TNS)	
TRANSITIVE 'MAKE/CREATE'	A	*nɔ̀m*(TNS)	P
TRANSITIVE 'DO'	A	*nɔ́m*(TNS)	$P_{ACTIVITY}$
DITRANSITIVE 'DO'	A	*nɔ́m*(TNS)	$R_{GOAL/BEN}$ $T_{ACTIVITY}$
PRESENTATIVE 'DID'	*nā*	*nɔ́mə́g/nɔŋ*	$P_{CHARACTER}$

Figure 33: *nɔm* 'DO' predication constructions in Ụt-Ma'in

Among the *nɔm* constructions, transitive and ditransitive 'do' are most like the auxiliary constructions described in Chapters VII and IX. In these constructions, *nɔm* functions like an auxiliary, with an activity noun or nominalized verb expressing the main semantic predicate of the clause. With *nɔm*, ditransitive constructions are different from ditransitive progressives in terms of the order of constituents. These properties are summarized in Table 37 and demonstrated in the examples below.

Table 37: Comparison of 'DO' and PROG ditransitive constructions

CONSTRUCTION LABEL	CONSTITUENT ORDER
nɔm 'DO' DITRANSITIVE	A_{DO} DO R_{DO} [V P]T_{DO}
PROGRESSIVE DISTRANSITIVE	A PROG V R T

In (343), the *nɔ́m* 'do' verb has an R and a T argument; but the nominalized verb that is the head of that T argument has its own event structure. It has a P argument embedded within an ASSOCCXN within the nominalized verb phrase. The order of constituents is A_{DO} *nɔm* R_{DO} [V P_{OBJ}]T_{DO}. Altogether, the nominalized verb and the

matrix verb have two distinct argument structures, revealing the two-event nature of *nɔm* ditransitive constructions.

	A_{DO} = nɔm = R_{DO}	[V		P]T_{DO}
(343)	bɔ̄ = nɔ́m = mɛ́	ə̄m-sɛ́g = m-ə̀	kwàt-ù	ín-jà
	2SG = do = 1SG.OBJ	C6B-loan = C6B-ASSOC	ring-C7	DEM-C7
	‘ “... you loan me that ring...’ (lit: ‘you do me loaning of that ring’)			
	(MA_IY_Ror_2013: 010)			

In the progressive example in (344), the progressive auxiliary ɔ́ and the nominalized verb *jā* ‘give’ have one event structure and one argument structure. The order of all constituents is A Aux V R T. The associative marker precedes the R argument in (344), whereas in the preceding *nɔm* example, no associative marker is necessary because the R argument is an argument of the matrix verb, and not of the nominalized verb.

	A	PROG	V	R	T
(344)	ə̄m	ɔ́-gɔ́	jā = d-ə̀	wə̄n	ə̄r-gá
	1SG.SUBJ	PROG-PST	give = AG5-ASSOC	3SG	C5-cooked.grain
	‘I was giving him cooked grain.’				

CHAPTER XI

THE MYSTERY OF "MOVING" AFFIXES

IN NORTHWEST KAINJI

11.1 Introduction

In Chapter III §3.1.3 of this study, we saw how the morphological shape of the U̲t-Ma'in noun word varies in terms of the placement of the noun class marker based on the morphosyntactic environment in which it is used. In Chapter V §5.3 we saw that alignment patterns in U̲t-Ma'in also depend on the structure of the NP: specifically, unmodified nouns exhibit a distinct pattern from modified NPs (cf. Chapter V Figure 18). Unmodified noun subjects have a noun class suffix; unmodified noun objects have a noun class prefix.

How did this come to be? Why do unmodified noun subjects have a noun class suffix and unmodified noun objects, a noun class prefix? Why does this distinction dissolve when the noun is modified? How does understanding the variation of noun class marking within the NP (Chapter III) help us understand the suffixed noun class marking that occurs on an unmodified noun subject?

In this chapter I propose that the source of the suffixed noun class marking on the unmodified noun subject is a relative clause with a relativized subject. Structurally, there is no change in the form of the relative clause; the relativized subject is reanalyzed as the subject of a main clause. The relative pronoun already marked for agreement with the noun class of the head noun is reanalyzed as a subject marker.

First, I establish that patterns seen in U̲t-Ma'in are not unique to this one language. At least two other closely related languages, C'Lela [dri] and U̲t-Hun [uth], exhibit similar behavior related to the placement and varied form of noun class markers.

Second, I argue that the suffixed noun class marking on S/A arguments functions as overt morphological nominative (NOM) case and that the prefixed noun class marking on P arguments functions as overt morphological accusative (ACC) case. Further, the unique form and function of the U̲t-Ma'in NOM case marking and the prolific functions/locations of the ACC case marking are organized into a Type 2 Marked Nominative system according to the criteria proposed by König (2006: 657-658; 2008: 8&158): (i) A and S are treated the same and simultaneously different from P, (ii) the ACC form is used as the citation form, and (iii) specific to a type 2 Marked Nominative system, both case forms are morphologically marked; however, the ACC is additionally functionally unmarked (used in a wide range of functions). The NOM in contrast is used in a very restricted set of functions.

Third, I argue that noun class marking is a required element of the NP, not of the noun word. Almost all NPs have an indication of the noun class of the head noun; the exceptions being a few instances of null marked class (cf. Chapter III §3.1.1). Overt case marking manifests as a particular form of the noun class marker (distinct segmental and tonal forms) plus the location of the noun class affix (as a suffix for S/A arguments and as a prefix for P arguments). This overt case marking is only a feature of an NP argument if that NP argument has no modifier; when modifiers occur in the same NP, no case distinction is made, i.e., the alignment system is neutral (cf. Chapter V §5.3.1). The use of overt morphological case marking is not a feature of a clause type nor is it

TAM designation nor reflective of one; it is entirely dependent on the structure of the NP. König (2006: 658) uses the term "split language" when there is both a case system and neutralizations of the case system because of a certain condition, such as definiteness in Wolaitta (North Omotic) or even NP structure such as in Dinka (Western Nilotic). The Ụt-Ma'in case system can be considered a Type 2 Split Marked Nominative system that has all case distinctions neutralized in modified NP structures.

Fourth, I argue that the prefix-marked form of the ACC is the historical form of the noun word, matching the "expected" Niger-Congo prefixed noun class word form. The potentially innovative suffix-marked NOM form is the result of reanalyzing a relative clause structure as main clause syntax. In order to make this comparison, I describe the synchronic grammar of Ụt-Ma'in relative clauses and discuss possible pathways of development from relative clause to main clause syntax.

11.2 "Moving" affixes in other Northwest Kainji languages

Ụt-Ma'in is not the only Northwest Kainji with noun affix "mis"-behavior. As early as 1967, Hoffmann (1967: 252-254) wondered at the mystery of the "moving" noun class affixes for a C'Lela [dri] and Ụt-Hun [uth], Northwest Kainji cluster languages closely related to Ụt-Ma'in. This was in contrast to his previous studies of Kambari[56] languages (also a Kainji sub-family neighboring the Northwest Kainji groups, cf. Chapter1 Figure 1), whose noun class affixes are always predictably prefixes. At the

[56] McGill and Blench (2012: 99) include seven distinct Kambari languages. Hoffmann (1963a&b) were studies of the Cishingini/Tshishingini variety also known as Cerntral Kambari.

conclusion of his C'Lela noun class description, he dedicates a final section to pondering the relationship between prefix and suffix class systems among the languages of West Africa. Hoffmann (1967: 253) states:

> Here [for both C'Lela and Ụt-Hun] the single noun presents a picture that we have come to regard as typical for a prefix-type class language, viz. with the class prefix as an *obligatory* component of the word… and not at all optional… Nevertheless this class prefix *disappears* in Dakarkari [C'Lela] (and in Duka [Ụt-Hun]) in the moment the noun becomes the head of an extended nominal group with a qualifier marked by concord following it. (square brackets and italics mine; parentheses original author)

In C'Lela and Ụt-Hun the "obligatory" noun class prefixes "disappear" when the noun is modified by other NP internal elements.

Heath and Heath (2002: 53) describe the "movement" of the Ụt-Hun noun class affixes as a "flip". This is a slightly different perspective focused on the grammatical function of the noun: "Simplistically, the class marker is before the noun when the noun is the object of the verb, and it follows the noun when the noun is the subject of the verb." In further description of NP structures, Heath and Heath (2002: pp. 55) state that "when a modifier is present, the position of the CM[class marker] is not a function of the syntactic position of the NP". Their data show that nouns occur with suffixed noun class markers of two distinct forms – in Heath and Heath's (2002: 57) terms, affixed CM [class markers] and GCM [genitive class markers] which are "used to show the relationship between two or more nouns."

These phenomena noted by Hoffmann (1967) and Heath and Heath (2002) are true of Ụt-Ma'in. The presence of modifiers correlates with the placement and shape of the

noun class affix, and the grammatical function of a noun correlates with the placement and shape of the noun class affix.

11.3 Type 2 Split Marked Nominative in U̲t-Ma'in

U̲t-Ma'in is a Type 2 Split Marked Nominative language as defined by König (2006: 657-658). When (i) a language treats S/A (NOM) the same and simultaneously differently than P (ACC), (ii) the ACC form is used as the citation form, and (iii) the ACC form is the functionally unmarked form of the noun, i.e., used in a wider range of grammatical functions, then case marking in that language is called Marked Nominative (König 2006: 657-658; 2008: 8, 158). Marked Nominative languages exhibit an alignment pattern similar to an accusative pattern. When a language has an accusative pattern, the nominative is typically the citation form of the noun; in a Marked Nominative pattern, the citation form is the accusative (König 2006: 657).

In U̲t-Ma'in the suffixed noun class marking on S/A arguments functions as overt morphological nominative (NOM) case, and the prefixed noun class marking on P arguments functions as overt morphological accusative (ACC) case. The U̲t-Ma'in NOM case marking suffix has a very restricted occurrence, i.e., the word form it creates is used for very few functions. In contrast, the ACC prefixed word form is used in a wide number of functions, including as the citation form of the noun. By König's (2006: 658) definition, U̲t-Ma'in is a Marked Nominative language because it meets the criteria in (i) through (iii) listed above. Criterion (i) is demonstrated in §11.3.1; criteria (ii) and (iii) are demonstrated in §11.3.2.

By König's (2006: 658) definition, Ụt-Ma'in is considered a Type 2 Marked Nominative language because both the NOM and ACC forms have overt morphology. This is demonstrated in §11.3.2.

In §11.3.3, we see that case distinctions are neutralized when modifiers occur within the NP. By König's (2006: 658) definition, Ụt-Ma'in is thus considered a Type 2 Split Marked Nominative language.

11.3.1 Morphological evidence of Marked Nominative

Unmodified Ụt-Ma'in subject NPs occur with suffixed noun class marking, analyzed and labeled here as nominative (NOM). The S argument in (345) and the A argument in (346) are both marked by the noun class 7 suffix *-jə̀* 'C7'. Unmodified object NPs occur with prefixed noun class marking, analyzed and labeled here as accusative (ACC). The P argument in (347) is marked by the noun class 7 prefix *ū-* 'C7'.

		S-NOM	V	
(345)	sɛ̄	[kɔ́ːt-**jə̀**]	rwə̄n	ə̄r-vástɛ̀
	then	guinea.fowl-C7	exit	C5-last

'Then a guinea fowl exited last.' (GF_IT_Juur_2007: 071)

		A-NOM	V	[P]		
(346)	kə̀ná	[kɔ́ːt-**jə̀**]	zɔ́-tːɛ̀…	[ə̄r-kjàt	ə̄r-kjàt	ə̄r-kjàt]
	there	guinea.fowl-C7	say-PFT	C5-difficult	C5-difficult	C5-difficult

'There a guinea fowl has said, "Difficult, difficult, difficult." '
(GF_IT_Juur_2007:093&095)

	A	V	ACC-P	
(347)	a. á = b	hján	[**ū-**kɔ́ːt],	
	COND = 2SG	see	C7-guinea.fowl,	
	b. zwár-r = wá		rwɵ́-t-ɵ̄n	ɵ́ = hɔ́-r = dɛ̄
	beauty-C5 = C1.POSS		exits-PFT-DIST	LOC = day-C5 = C5.DEF

'If you see a guinea fowl, his beauty has exited long ago from that day'
(GF_IT_Juur_2007: 047-048)

The different affix order and forms of the C7 class marker in (345) through (347) can be interpreted "case marking", since the same lexical item has a different form depending on whether it is in subject (S/A) or object (P) role. The word order and the affixation type of noun class marking serve to identify the syntactic role of each argument.

Examples (348) and (349) show a partial pattern for noun class 6 with the noun for 'mangos' with citation form *ɵ̄t-mɔ́ŋgɔ̀r* 'C6-mangos'. The structures of the bracketed NPs in (348) and (349) are distinct from each other in regards to the location of the noun class marking: the S argument of (348) is marked by the noun class 6 suffix *-tɛ̀* 'C6'; the P argument of (349) is marked by the noun class prefix *ɵ̄t-* 'C6'. A different noun, *ɵ̄t-nɛ̄t* 'C6-people' is shown as the A argument in (350) to complete the paradigm for noun class 6. We can see that the the noun class 6 suffix *-tɛ̀* 'C6' marks the A argument in the same way that it marked the S argument in (348).

	S-NOM	V
(348)	[mɔ́ŋgɔr-**tɛ̀**]	àzgɛ̀-sː-tɛ̀
	mango.fruit-C6.SUBJ	pour-REP-PFT

'Mango fruit rolled out (of the basket).' (PS_PS_Ror_2013:018)

	A	V	ACC-P
(349)	wā	ká-ːn	[**ɵ̄t-**mɔ́ŋgɔr]
	C1.SUBJ	pluck-DIST	C6-mango.fruit

'He picked mango fruits' (PS_PS_Ror_2013: 004)

	A-NOM	V	[P					]
(350)	[nēt-tə̀]	zō	[wá = bár = ` = u-wám		tá:gtɛ̀	ū-sáknà	dá]	
	people -C6	say	C1 = loincloth = ASSOC =	C7-monkey	finish.PFT	C3-doubt	NEG	
	‘People say, “One with the skin of a monkey never has not stopped doubting”[57]							
	(Primer 2009: 50.97)							

From the above examples we can establish (i) that S/A are treated the same and simultaneously different from P and (ii) that both S/A (NOM) and P (ACC) are overtly marked by morphology.

11.3.2 Functions of NOM and ACC word forms

The citation form of an U̲t-Ma'in noun is the same as the ACC word form, having the shape C-N, where C- reflects the noun class. This word shape is demonstrated in Table 38 for all noun classes (cf. Chapter III §3.1.3.1).

This prefixed word form is also used in a wide range of functions including: the object function (attested in the previous section), the nominal predicate of a copula clause (Chapter VI §6.2.1, when the predicate is an unmodified NP), the form used for the possessor in a possession ASSOCP (Chapter IV §4.2), the form used following a preposition and preceeding post-positions (cf. (125) in Chapter IV), the form used for focused participants in the clause initial focus position (Chapter V §5.2), and the form used when a noun is modified by a numeral (Chapter III §3.4.1). Except for modification by a numeral, use of the ACC word form in these functions is also dependent on the noun being unmodified.

[57] This is an idiom that means something like “a guilty person always feels guilty when his area of guilt has been mentioned.”

Table 38: Citation forms of Ụt-Ma'in nouns by noun class

NOUN CLASS	NOUN PREFIX	CITATION FORM	
1	ū-	ū-mákt	'barren woman'
1∅	∅-	∅-hámə̀t	'visitor'
2	∅-	∅-ná	'oxen, bovines'
3	ū-	ū-bù	'house'
3∅	∅-	∅-bò	'dream'
4	ə̄s-	ə̄s-bò	'dreams'
5	ə̄r-	ə̄r-kɔ́k	'calabash'
6	ə̄t-	ə̄t-kɔ́k	'calabashes'
6B	ə̄m-	ə̄m-nɔ̀ːg	'oil'
7	ū-	ū-ná	'ox, bovine'
7	∅-	∅-tʃā̀mpá	'man'
AUG	ā-	ā-kɔ́k	'huge calabashes
DIM	ī-	ī-kɔ́k	'tiny calabash'

In contrast, the suffixed NOM word form is only ever used for an unmodified noun in S/A argument function. Figure 34 displays the many and varied functions of the ACC form in contrast to the single function of the NOM form.

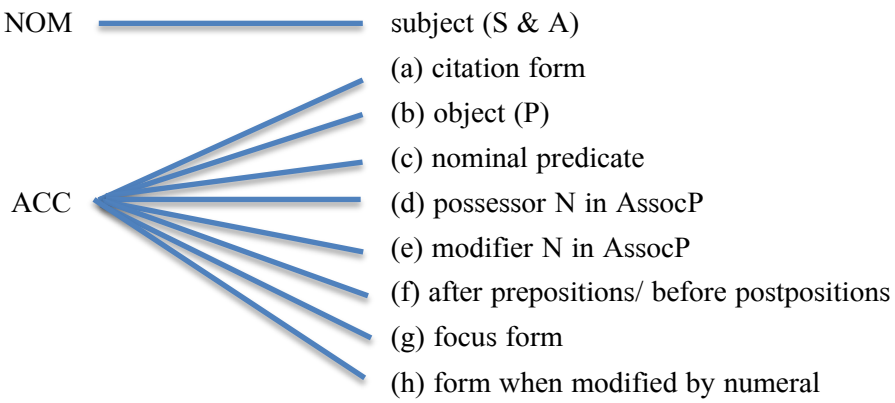

Figure 34: Functions covered by NOM and ACC word forms in Ụt-Ma'in Ma'in (unmodified Ns, except for condition h)

The NOM form is not merely a noun with suffixed noun class marking. The NOM word form is a suffixed noun class marker with a specific vowel and a specific tone. The next four examples all have an NP with a noun head 'woman'; the citation form of 'woman' is *ū-nētá* 'C7-woman'. Compare the noun class NOM suffix *-jə̀* in (351), with (i) the noun class 7 *-ù* suffix in (352) and (353) which occurs on a head noun when it is modified by an adjective (352) or definite marker (353), (ii) the noun class 6 definite marker *=já* in (355b, c), which I analyze as a clitic but which nevertheless can occur adjacent to the noun root. I do not consider these other suffixed noun class forms to function as NOM case because they have tone and vowels that are distinct from the NOM suffix as demonstrated in §3.1.3.3 and these other suffixed forms can occur in any argument function. This is demonstrated in (353c) where the the definite phrase 'that woman' is identical in structure to the phrase used in (353a), but functions as a possessor. These examples have noun suffixes because of the specific morphosyntax pattern required for the modifiers contained within them.

	A-NOM			
(351)	nētá-jə̀	nóŋ	íjā	rém=ɔ̄zɔ̄
	woman-C7	do.PST	that	word=saying…
	'Woman did that because…' (MT_draft_2019: 9.21)			

	[N-C	A-AG]			
(352)	[nētá-ù	rèk-jà]	wá	ɔ́	ū-rɛ̄
	woman-C7	small-AG.C7	C1.FOC	COP	C3-eat
	'the small woman, she is eating' (LW07 2006)				

N-C = DEF.C

(353) a. [nɛ̄tá-ù = já] wá-t-kɔ́sɛ̀ = wá
woman-C7 = DEF.C7 C1-C6-show = DEF.C1
'That woman is the teacher.'

N = DEF.C

b. nɛ̄tá = já wá-t-kɔ́sɛ̀ = wá
woman = DEF.C7 C1-C6-show = DEF.C1
'That woman is the teacher.'

N-C = DEF.C

c. dá fàrə̀k nɔ́mɛ́ r-ʃə̄ʔə̄t ɛ́ tʃāmpá [nɛ́ta-ù = já]
then king do.foc c5-sitting with husband woman-C7 = DEF.C7
'The the king judged that woman's husband.' (GK_IY_Ror_2013: 032)

Having surveyed the various functions of the NOM and ACC word forms, we now turn to the morphosyntactic environment that neutralizes the case disctinction of the word forms.

11.3.3 Neutralization between Marked Nominative and Accusative

In Ụt-Ma'in, any case distinctions signalled by prefixal versus suffixal noun class marking are neutralized when modifiers occur in the NP. I illustrate with the structures of the bracketed NPs in (354) through (356). Though the bracketed phrases are identical, they serve distinct grammatical functions. Here, then, word order alone identifies the syntactic role of each argument.

(354) a. wā hɛ̀ʔɛ̀
C1.SUBJ fell
b. bá = wá hɛ̀ʔɛ̀
after = C1.FOC fell
S V
c. **[jà = t-ə̀ = s-té = tɔ́]** āzgə̄ssɛ̀
fruit = AG6-ASSOC = C4-tree = AG6.DEF roll.out
'He fell. After he fell, those fruits rolled out.' (SJ_PS_Ror_2013: 028)

	A	V	P
(355)	**[jà = t-ə̀ = s-té = tɔ́]**	ʃámə̀	t-mɔ́ŋɔ̀ré
	fruit = AG6-ASSOC = C4-tree = AG6.DEF	resemble	C6-mango.fruit

'Those fruits resemble mangoes.' (SJ_PS_Ror_2013: 048)

	A = V	P
(356)	ɛ̄ = kár-g-ə̀sː	**[jà = t-ə̀ = s-té = tɔ́]**
	C2.SUBJ = pick-PST-REP	fruit = AG6-ASSOC = C4-tree = AG6.DEF

'They gathered those fruits.' (SJ_PS_Ror_2013: 030)

11.4 Noun class as a required element of the NP

In U̱t-Ma'in, noun class marking is a required element of the NP, not of the noun word. First, some marking of class is via clitics that attach to the root elements of the phrase based on syllable structure. For instance the head noun of the bracketed NPs in (354) through (356) is a class 6 noun, with the citation form *ə̄t-jà* 'C6-fruit'.[58] Noun class 6 is identified within the NP by an overt morphological marker that cliticizes to the noun stem, but the marker need not be attached to the noun stem.

Second, other examples demonstrate that sometimes class marking is registered only on agreeing targets of a head noun, not on the head noun itself (Chapter III §3.1.3.4). For example, (357) is an excerpt from an U̱t-Ma'Jiir text where the shrike bird is sent to call all the birds for a "gathering of dancing".[59] The invitation is repeated three times in succession as the shrike calls out. The first time (a), the P argument has

[58] See also numerous examples of the associative construction in Chapter IV and Appendix I where additional evidence demonstrates that the indicators of noun class in many NPs is indeed not pronounced with the noun root it is the classifier for.

[59] Example (356) does not contain a prototypically transitive verb as the object conveys the purpose of 'coming' rather than an affected P, but the clause structure is otherwise identical to a transitive clause.

the noun class 5 ACC prefix *ə̄r-*, and class is marked on the modifying ASSOCP by the agreement marker *d-*. The second and third time in (b) and (c), there is no prefix on the head noun; the only indication of its noun class is on the modifying ASSOCP.

			C5-N_{HEAD}	AG5-ASSOC = C4-N
(357)	a. kɔ́wān-ə̀	há-ːn-ɛ́	ə̄r-bə̄n	d-ə̀ = s-hɛ́w
	everyone-C2.SUBJ	go-DIST-FOC	C5-gathering	C5-ASSOC = C4-dancing
	‘ “Everybody come for the gathering of dancing” ’			
			N_{HEAD}	AG5-ASSOC = C4-N
	b. kɔ́wān-ə̀	há-ːn-ɛ́	bə̄n	d-ə̀ = s-hɛ́w
	everyone-C2.SUBJ	go-DIST-FOC	gathering	C5-ASSOC = C4-dancing
	‘ “Everyone come for the gathering of dancing.” ’			
			N_{HEAD}	AG5-ASSOC = C4-N
	c. kɔ́wān-ə̀	há-ːn-ɛ́	bə̄n	d-ə̀ = s-hɛ́w
	everyone-C2.SUBJ	go-DIST-FOC	gathering	C5-ASSOC = C4-dancing
	‘ “Everyone come for the gathering of dancing.” ’(GF_IT_Juur_2007: 012-014)			

Having now demonstrated that NPs in Ụt-Ma'in are the element marked for the noun class of the head rather than the noun word, we now turn to the possible source of marked nominative case marking in a relative clause structure.

11.5 Relative clause as source of NOM marking

I suggest that the source of the suffixal noun class marking on an unmodified noun subject is a relative clause which relativizes on its subject. This hypothesis arises because there is no structural difference in form between a [N_{HEAD} – relative clause] construction on the one hand, and, on the other hand, a main clause [Subject – Verb] construction where the subject is an unmodified N. The unique suffix-marked NOM case pattern may thus be the result of reanalyzing an NP with a relative clause as a main

clause. Under this hypothesis, the relative pronoun remained as the only indicator of the noun class of the head noun, and phonologically shifted first to a clitic, and then to become a fully attached as a suffix on the head N.

In contrast, the prefixal ACC form is just the retained historical form of a citation noun word, matching the "expected" Niger-Congo prefixed noun class pattern. This also explains why the prefixed form is used in a much wider range of functions (cf. §11.3.2).

To elaborate the details of how a marked nominative case-marking system arose, § 11.5.1 discusses the structure of relative clauses, §11.5.2 discusses the reanalysis of an NP structure as a main clause, and §11.5.3 discusses how these marked-nominative case clauses are used in a discourse context.

11.5.1 Relative clauses in Ụt-Ma'in

In order to make the comparison between the NOM word form and relative clause (RELCL) structure, I first describe the synchronic grammar of the Ụt-Ma'in relative clause. Within the NP, a Ụt-Ma'in relative clause follows its head noun. The relative pronoun is a noun class form that agrees with the modified head noun. The relative pronoun occurs between the head noun and the modifying clause. Within the RELCL, the order of major constituents follows main clause order, typically S/A V (P), with the exception that the relativized constituent is elided.

Table 39 displays the full paradigm of relative pronoun forms for all noun classes; this is elaborated on from Smith (2007:88). In Table 39, an example of the relative pronoun in use is presented next to each relative pronoun form. The NP that contains

the RELCL is in the P argument position of the matrix clause. Each example is of the pattern in (358), where the P of the matrix clause corresponds to the subject of the relative clause.

(358) 'I saw (a/some) HEADNOUN RELPN fell.'

In each example in Table 39, the acc noun class prefix on the P argument of the matrix clause is marked as optional with parentheses. This is based on the variation we saw in the previous section (cf. §11.4).

The next set of examples displays the various RelCl internal constituents that can be relativized on. All of S/A and P arguments can be relativized on, as well as NP obliques. In the next set of examples, the relative pronoun is underlined. The RELCL is bracketed. The constituents of the RELCL are labeled with a subscript RC. A bracketed null symbol [Ø] marks the location of the elided position of the constituent relativized on.

RELATIVIZED S ARGUMENT

		[REL	S_{RC}	V_{RC}	]		
(359)	nɛ̄t	[<u>t-ə̀</u>	[Ø]	há-ːn-ɛ́	r-tàkə̀n]	tʃə́ŋ	ə̄zə̄…
	person	C6-REL	Ø	go-DIST-FOC	C5-beginning	think.PST	saying

'People who came first thought that...' (MT_draft_2019: 20.10)

RELATIVIZED A ARGUMENT

	NP_{HEAD}			REL	[A_{RC}	V_{RC}	$P_{RC]}$	]
(360)	wà-kə̄n	nɛ̄t	wā	<u>w-ə̀</u>	[[Ø]	gágə́n	nētájùʔíbò]	
	C1-certain	person	C1.D	C1.-REL	Ø	married	woman.AG7.ASSOC.C1.Igbo	

'... a certain person who married an Igbo woman'

Table 39: Relative pronoun forms and relative clause examples

CLASS	RELATIVE PRONOUN FORM	EXAMPLE
C1	wə̀	ə̄m hjáŋ (ū-)mákt wə̀ hɛ̄:g 1SG.SUBJ see.PST C1-barren.woman C1.REL fall.PST 'I saw a barren woman who fell.'
C1B	wə̀	ə̄m hjáŋ (∅)-fārə̄k wə̀ hɛ̄:g 1SG.SUBJ see.PST C1B-king C1.REL fall.PST 'I saw a king who fell.'
C2	ə̀	ə̄m hjáŋ (∅)-rwāg ə̀ hɛ̄:g 1SG.SUBJ see.PST C2-elephant C2.REL fall.PST 'I saw elephants that fell.'
C3	ə̀	ə̄m hjáŋ (ū)-jə̄ ə̀ hɛ̄:g 1SG.SUBJ see.PST C3-rain C3.REL fall.PST 'I saw rain that fell.'
C3B	ə̀	ə̄m hjáŋ (∅)-swás ə̀ hɛ̄:g 1SG.SUBJ see.PST C3B-entrance.hut C3.REL fall.PST 'I saw an entrance hut that fell.'
C4	sə̀	ə̄m hjáŋ (ə̄s)-rjàp sə̀ hɛ̄:g 1SG.SUBJ see.PST C4-whip C4-REL fall.PST 'I saw whips that fell.'
C5	də̀	ə̄m hjáŋ (ə̄r)-ʃár də̀ hɛ̄:g 1SG.SUBJ see.PST C5-water.pot C5-REL fall.PST 'I saw a water pot that fell.'
C6	tə̀	ə̄m hjáŋ (ə̄t)-tə̄rə̀m tə̀ hɛ̄:g 1SG.SUBJ see.PST C6-hail C6-REL fall.PST 'I saw hail that fell.'
C6B	mə̀	ə̄m hjáŋ (ə̄m)-óg m-ə̀ hɛ̄:g 1SG.SUBJ see.PST C6B-juice C6B-REL fall.PST 'I saw some juice that fell.'
C7	jə̀	ə̄m hjáŋ (ū)-fɛ̂ j-ə̀ hɛ̄:g 1SG.SUBJ see.PST C7-branch C7-REL fall.PST 'I saw a branch that fell.'
C7B	jə̀	ə̄m hjáŋ (∅)-tʃāmpá j-ə̀ hɛ̄:g 1SG.SUBJ see.PST C7B-man C7-REL fall.PST 'I saw a man who fell.'
CAUG	à	ə̄m hjáŋ (ā)-tāʔār à hɛ̄:g 1SG.SUBJ see.PST CAUG-rock CAUG.REL fall.PST 'I saw huge rocks that fell.'
CDIM	ì	ə̄m hjáŋ (ī)-tāʔār ì hɛ̄:g 1SG.SUBJ see.PST CDIM-rock CDIM.REL fall.PST 'I saw a tiny stone that fell.'

RELATIVIZED P ARGUMENT

	N_{HEAD}	REL	$[A_{RC}$	V_{RC}	P_{RC}	]
(361)	nɔ́m	t-ə̀	[ə̄m	hján	[Ø]	ɔ́=mɛ́]
	thing=C6-REL		1SG.SUBJ	see	Ø	LOC=inside

'what I see inside' (lit: things that I see inside) (VY_PS 2013: 001)

RELATIVIZED LOCATION

			N_{HEAD}	REL	$[A_{RC}$	AUX_{RC}	VP_{NMLZ}-P_{RC}	OBLLOC]	
(362)	ə̄m	nák	bé	d-ə̀	[ī́t	dɛ́ʔtɛ́	nɔ̀mdə̀ tōrōm	[Ø]]	dà
	1SG.SUBJ	know.PST	place-C5-REL		1PL.EXCL	DEON	doing.of C6.meeting	Ø	NEG

'I did not know the place where we must meet.' (MN_SJ_Ror_2013:14.170-18.050)

11.5.2 Reanalysis of an NP with a relative clause as a main clause

Now that we have seen the grammar of the relative clause, let us imagine how the NP containing a relative clause structure could come to be reinterpreted as a main clause. I propose that main clauses with unmodified NP subjects have been reanalized from clefted focus NPs containing a relative clause with a relativized subject. This is schematized in Figure 35. In Figure 36, I represent the relative pronoun as the source of the NOM subject marker.

clefted NP containing a RELCL > focused NP containing a RELCL > main clause

Figure 35: Pathway from NP with relative clause to main clause

REL pronoun > noun class indicator for reanalized main clause > NOM subject marker

Figure 36: Pathway from relative pronoun to Nominative (NOM) subject marker

First, synchronically NPs can be fronted to the initial focus position of a clause. NPs modified by relative clauses can also occur in this fronted position. For example, in (363), an NP that contains a RELCL 'person who insults his father' is placed before (or occurs outside the core of) the entire matrix clause 'he will be killed'. This fronted NP refers to the same entity as the P argument of the impersonal construction that is the matrix clause.

(363) a. nɛ̄t wə̀ pjápɛ́ ə̄sō-ū wá...
person C1.REL insult father-C1=C1.POSS
'Person who insults his father...'

b. nā dɛ́ hɔ̀=d-ə̀=wá
NSPEC FUT.AUX kill=C5-ASSOC=C1.OBJ
'he will be killed.' (lit: they will kill him) (MT_draft_2019: 15.04)

(364) nɛ̄t-ə̀ pjápɛ́ ə̄sō-ū wá...
person-C1.SUBJ insult father-C1=C1.POSS
'That person insults his father.'

(365) nɛ̄t=wá pjápɛ́ ə̄sō-ū wá...
person=C1.DEF insult father-C1=C1.POSS
'That person insults his father.'

All that is required for (363) to be read as two matrix clauses instead of as a fronted NP with a RELCL followed by a matrix clause is to reanalyze the class-marked relative pronoun as the "marker of noun class". If its purpose is now to identify the class of the noun, it can then begin to be interpreted as "just a class marker" and then "necessary as a class marker" since the clause otherwise has no indication of the noun class of the head noun. The result of this reinterpretation is an unmodified noun preceding a fully inflected verb (which is the inflected verb of the erstwhile relative clause). There is no change in structure but the reanalysis yields a suffixed noun in the canonical U̱t-Ma'in S/A position. The pathway from relative clause marker to main

clause marker is not unlike the proposed shift of the Trumai [tpy, Cariban] relativizer that developed into a focus particle, which then further developed into additional functions in main clause syntax (Guirardello 1999: Chapter 5). The point is that relative clause syntax is attested in other languages as the source of main clause syntax.

11.5.3 Discourse function of unmodified noun subjects

Now that we have seen how NPs containing a relative clause could have come to be reinterpreted as main clause syntax, the current section turns to look at how unmodified NP subject clauses are used in broader discourse. In narrative discourse, clauses with unmodified NP subjects are rarely used and always have definite reference to an established and prominent participant. In addition, clauses with unmodified NP subjects occur where who or what is the main participant shifts in the narrative context; this is not unlike a constrastive focus function of relative clauses in English, e.g., *It's John who I saw* (Evans 2007: 413). In Ụt-Ma'in, the function of an erstwhile relative clause (turned finite main clause) with what is now an unmodified NP subject is to communicate that 'it is this participant who…', in contrast to the participant or participants prominent in the preceding part of the discourse. In this section I present evidence to support this claim about the discourse function of clauses with unmodified NP subjects.

Outside of any broader discourse context, individual clauses with unmodified subjects have indefinite reference, as in the elicited examples in (366) and (367). However, within longer stretches of narrative discourse, unmodified noun subjects rarely occur, and when they do occur they can not be understood as indefinite.

	S_{NOM}	V
(366)	tʃāmpā-jə̀	àrə̀k
	man-C7.SUBJ	leave
	'A man leaves'	

	A_{NOM}	V	P_{ACC}
(367)	tʃāmpā-jə̀	rɛ́ːg	ə̄r-gá
	man-C7.SUBJ	eat.PST	C5-cooked.grain
	'A man ate food.'		

The next set of examples are taken entirely from a single folk narrative about "How guinea fowl birds lost their head feathers." The first mention of a guinea fowl within the tale is underlined in (368). 'guinea fowl' first occurs in a prefix-marked accusative form, *ū-kɔ́ːt* 'C7-guinea.fowl'. It is the P argument of the verb 'put' but with the sense of 'cause' or 'make' in the opening lines of the story, lines 001-002. Despite the English free translation with '**the** guinea fowl' in line b, the reference here is to the generic category of "type."

(368)	a. mɛ́	tʃwàn	t-ə̀ = [m	já	bɔ̄
	1SG.FUT	love	C6-ASSOC = 1SG.SUBJ	give	2SG
	'I will love to give you'				

b. wáʔás = d-ə̀	nɔ̀m = ə̀	wɔ́-t- ´ = u-kɔ́ːt	
story = C5-ASSOC	thing = ASSOC	put-PFT-FOC = C7-guinea.fowl	
'the story of what makes the guinea fowl'			

c. ə̄s-kán,	ə̄r-kjàt	ə̄r-kjàt
C4-cry	C5-difficult	C5-difficult
'cry "difficulty, difficulty" '[60] (GF_IT_Juur_2007: 001-002)		

In this text, twenty six clauses pass without further mention of a guinea fowl. Those intervening clauses give introductory information about a dance festival and the

[60] The sounds of the word *ə̄r-kjàt* also mimics the sound of a guinea fowl's cry.

gathering of all kinds of birds. In this story there is one bird of every type that is a character representing all birds of his type. To help distinguish between references to the type guinea fowl and the character Guniea Fowl, I use the label "Mr. Guinea Fowl" when the character of the narrative is intended and the generic lower-case "guinea fowl" when the type is intended.

In line 028, the narrator talks directly to Mr. Guinea Fowl and references him as *bɔ̄ u-kɔ́ːt* 'you, Mr. Guinea Fowl'. This is underlined in (369). I include this example to show that Guinea Fowl is a main character in this story.

	R_{FOC}	A	V	R	T
(369)	bɔ̄ u-kɔ́ːt	rɔ̄-ɔ̀	já-ːg	bɔ̄	ʔ-tʃàn = dà
	2SG C7-guinea.fowl	god-C3.SUBJ	give-PST	2SG	C6-feathers = NEG
	'You, guinea fowl, creator did not give you feathers.' (GF_IT_Juur_2007: 028)				

Thirty-two clauses of the 101 clauses in the text refer to Mr. Guinea Fowl using pronouns. Without a doubt, Guinea Fowl is a main character in the story, and yet, there are three clauses that use the NOM marked unmodified NP form *kɔ́ːt-jɔ̀* 'guinea.fowl-C7.SUBJ', shown in (370), (371), and (372). These instances cannot be interpreted as indefinte references, like the elicited clauses we saw in (366) and (367). Each clause that contains an unmodified noun reference to Mr. Guinea Fowl also contains an event that moves the main story line forward. Each occurence of an unmodified noun subject reference to Mr. Guinea Fowl occurs after a brief episode of other birds being the main actors.

		S_{NOM}				
(370)	kɔ̀ná	kɔ́ːt-jɔ̀	hɔ́-tɛ̀	bélːò	ɔ̀ = nō-ú	ɔ̄m-ʃàg
	there	guinea.fowl-C7	go-PFT	place.C5.3SG.POSS	ASSOC = bird = C7	C6B-borrow
	'Then the guinea fowl has gone to his place of borrowing from the birds' (GF_IT_Juur_2007: 032-033)					

S_{NOM}

(371) sɛ̄ kɔ́ːt-jə̀ rwɔ̄n ɔ̄r-vástɛ̀
then guinea.fowl-C7.SUBJ exit C5-last
'Then guinea fowl exited last.' (GF_IT_Juur_2007: 071)

A_{NOM}

(372) kɔ̀ná kɔ́ːt-jə̀ zɔ́-tːɛ̀…ɔ̄r-kjàt ɔ̄r-kjàt ɔ̄r-kjàt
there guinea.fowl-C7 say-PFT C5-difficult C5-difficult C5-difficult
'There guinea fowl has said, "Difficult, difficult, difficult" '
(GF_IT_Juur_2007:093-095)

I propose that these main event line clauses contain unmodified subject NPs because the restated noun serves to switch the local discourse topic back to Mr. Guinea Fowl, after narrating the activity of other characters. There is no reason to use any modifiers to let the hearer know which guinea fowl the speaker has in mind; there is only one Mr. Guinea Fowl. This is crucial to an understanding of the function of these "unmodified" NOM NPs in Ụt-Ma'in. Unmodified does not mean indefinite, even though the language has a definite modifier (Smith 2007: 75; Chapter III §3.1.3). The discourse context alone can provide identifiability.

11.6 Chapter summary

At least a part of the mystery of the moving affixes in Ụt-Ma'in has been addressed in this chapter, namely, why do unmodified noun subjects have a noun class suffix but unmodified noun objects have a noun class prefix? And also, why does this distinction dissolve when the noun is modified?

In this chapter I have argued that the source of the suffixed noun class marking on the unmodified subject nouns lies in the structure of NPs containing relative clauses. A fronted NP containing a relative clause can, with little effort, be reanalyzed as a main

clause. Particularly when the relative clause expresses an event that is sequenced with the event conveyed by the main clause, the structure is semantically ripe for reanalysis. Structurally, there is no change in the order of the NP constituents: the head noun (i.e. the relativized subject) is reanalyzed as the (unmodified) subject of the main clause; the relative pronoun, already marked for agreement with the noun class of the head noun, is reanalyzed as a subject marker; and becomes a noun class affix attached to the right edge of the head noun; the relative clause itself is reinterpreted as the remainder of a main clause (i.e., as a main-clause verb phrase).

We saw that the discourse function of unmodified NP subjects in folk narratives is to re-establish a character as the local topic, after activity by other characters.

The outcome of now having a suffixed noun class marker just on subjects is that, when compared to the form of unmodified nouns in P argument position, the Marked Nominative pattern emerges. The "normal" prefixal class form is used for P arguments (i.e., it ends up being the ACC form) and also is used for a broader range of functions, simply by virtue of the fact that it is the "original" shape of the noun word.

König (2008:201) notes that little is known about the development of marked nominative systems, but does speculate on some possible sources such as passive, topic, and definiteness markers. She does not include relative clauses as a source for the marked nominative, but as shown in this chapter, the relative clause structure is likely the source of the NOM pattern in U̲t-Ma'in.

CHAPTER XII

THEMES IN DISCOVERY

The initial goal of this study was to document the grammar of predication in Ụt-Ma'in. We have seen that in order to understand many of the predication types (Chapters V through X), we must first understand the sometimes complex structures of the noun phrase in Ụt-Ma'in, particularly with regard to the prolific noun class system (Chapter III). Out of this study additional questions arose, which this study has attempted to answer. In this brief chapter I highlight some of the major insights that have been gleaned from this study of Ụt-Ma'in nominalization and predication. I present these as themes discovered and as areas for future research.

With so many predicates dependent on nominal structures, this is a language in flux, as all languages are, in regard to change over time. Let us consider the use of the Associative Construction (ASSOCCXN) structure as a means of encoding the object of a nominalized verb (Chapters IV). Its structure parallels that of a noun modified by a second noun. So, when it contains a nominalized verb as the head, is it nominal or verbal? With the data available, the answer must be "sometimes."

For the progressive constructions, specifically (Chapter VII), there is evidence that a shift has occurred from the nominalized verb having the status of a noun phrase complement of an auxiliary, to being a fully verbal phrase. Recall that the transitive (TRAN) progressive auxiliary constructions no longer strictly adhere to the noun class agreement required of NPs containing Associative phrases (ASSOCPs); instead, only noun class 4 and 5 agreement forms are attested in the TRAN progressive auxiliary construction. Also, recall that some erstwhile nominalized verbs in the transitive

progressive construction show a complete loss of agreement marking. This shift in agreement requirements is not true of all the auxiliary constructions. For example, the future obligation auxiliary construction still allows the noun class 6 agreement form.

Understanding the origins of the "extra" marking positioned between verbs and their objects in the auxiliary constructions helps us to understand the modern structures. However, there is a more subtle shift at work that affects how we should categorize these forms modernly. To be specific, we have needed to evalute whether these structures are modernly best viewed as NPs, nominalized verb phrases, emerging finite verbal phrases, or fully-fledged finite verb phrases. My evaluation is "yes" to all of the above. In one context or construction, the form and meaning of the larger phrasal or clausal construction must inform our understanding of the categorization and labeling of each of the diverse ASSOCCXNS.

When the entire phrase is used as a noun, the structure remains nominal. When the entire phrase serves as the predicate following a TAMP auxiliary, the structure may be considered verbal. The crucial point to remember is that the morphosyntax can guide us in our determination of categories. As the morphosyntax shifts, as described for the progressive, we see actualization of the change in function from nominal modification to verbal predication.

Similarly, and perhaps more fundamentally, there is some difficulty in identifying at what level a "lexeme" exists in Ụt-Ma'in. For example, certain roots are only understood in any concrete way in the world once their noun class is apparent. In fact, in language use, a noun is never expressed without its noun class which guides the

listener to the meaning of the "lexeme".[61] The lexeme must be understood to be at least at the level of a word (Table 40), but I propose it it must be understood at the level of the NP (as argued for in Chapter XI §11.4). To support this proposal, Table 40 presents various word forms/noun phrase forms of the root *tāːr/tāʔār,* the meaning of which is dependent on the listener knowing the noun class by which the root is categorized by the speaker. Certainly there is some abstract meaning shared among these forms, but in actual use, the expression of the abstract meaning requires a form larger in structure than just the root.

However, the manifestation of noun class within an NP in U̲t-Ma'in serves an even wider range of functions than just the "disambiguation" of size/shape and number as given above. The particular marking used to identify the noun class of a root within an NP communicates various syntactic functions, including overtly marking definiteness, case, and even a nominal's status as head of a noun phrase. These syntactic functions are demonstrated in Table 41 for the citation form *ə̄m-tāʔar* 'pebbles'.

[61] This is most strikingly clear for nouns with an overt noun class marker. This argument is harder to support for the "null-marked" noun classes, whose forms do exist in some situations with no overt marking; however, we must consider that the "null-marked" forms are definite-null-marked in the sense that the speaker/listener must have a mental representation of the noun class of the word in order to properly use the noun in an utterance. Often the noun class of a null-marked noun is available within the same NP or nearby context, in which case the main argument holds: a noun is never expressed without its noun class so as to guide the listener to the meaning of the "lexeme".

Table 40: Manifestations of noun class on the root *tāːr* in citation forms

FORM	TRANSLATION	COMMENT
*tāːr/ *tāʔār	?rock like substance?	Cannot be interpreted without a noun class
ɔ̄r-**tāʔār** C5-rock	'rock'	Citation form of 'rock'; singular counterpart to *ɔ̄t-tāʔār*
ɔ̄t-**tāʔār** C6-rock	'rocks'	Citation form of 'rocks'; plural counterpart to *ɔ̄r-tāʔār*
ī-**tāːr** CDIM-rock	'pebble'	Citation form for 'pebble'; singular counterpart to *ɔ̄m-tāʔār*
ɔ̄m-**tāʔār** C6B-rock	'gravel, pebbles'	Citation form for 'pebbles'; plural counterpart to *ī-tāʔār*
ū-**tāːr** C3-rock	'boulder'	Citation form for 'boulder'; singular counterpart to *ā-tāʔār*
ā-**tāːr** CAUG-rock	'boulders'	Citation form for 'boulders'; plural counterpart to *ū-tāʔār*
ɔ̄s-**tāʔār** C4-rock	'long stones used as foundation of mud-built granaries'	Citation form for 'foundation stones'; plural in form and meaning; no singular counterpart specific to this shape and purpose

The construction within which a root is found determines the "word category." Some roots show a greater range of functions than displayed in Table 41, making the classification of the root into a particular "part of speech" nearly impossible. In particular, the root *màr* can function in a wider range of functions than *tāːr/ tāʔār*. The root *màr* can serve as a verb as well as in all the structurally dependent NP types we saw in Table 41. The abstract meaning of *màr* must include both the result of dying and the activity of dying. Its reference to a discourse-world result (nominal use) or a discourse-world event (verbal use) is entirely dependent on the phrase structure or construction with which it is used.

Many Ụt-Ma'in roots have the flexibility of *màr*. Further exploration of the range of construction types available for roots in Ụt-Ma'in is necessary to understand to what extent roots can be categoirzed into typologically-understood word classes. The larger phrasal or clausal constructions (involving both form and meaning) must inform our understanding of the categorization of all roots. We cannot know the "word class" of a particular root without that larger context.

Table 41: Manifestations of noun class for 'pebbles' relative to syntactic functions

FORM	TRANSLATION	COMMENT
ɵm-**tāʔār** C6B-rock	'pebbles'	Citation form for 'pebbles'; plural counterpart to *ī-tāʔār*; ACC case form used for objects of verbs, objects of prepositions, 2nd NP of an ASSOCCXN, and a nominal predicate, among other functions (Chapters III, IV, V and XI).
tāʔār-mə rock-C6B	'pebbles'	NOM case form used for S/A argument in all predication types (Chapters IV); this form can not serve as a nominal predicate. The form is identical to the 1st NP of an ASSOCCXN and to the head of an NP containg a relative clause (Chapter XI).
tāʔār-ɵm mɔ́ rock-C6B AG6B.DEF	'the pebbles'	Can be used for definite referents in all argument roles including subject and in any location an NP can occur, such as the object of a preposition; it can also serve as a nominal predicate, among other functions (Chapters IV and V).
*tāːr/ *tāʔār	n/a	Can not be used alone in this form as a noun with any recoverable discourse world referent.
*tāːr/ *tāʔār	n/a	Can not be used as a verb root; cannot occur with verb suffixes.

Table 42: Manifestations of noun class for ‘death/dying’ relative to syntactic functions

FORM	TRANSLATION	COMMENT
ɔ̄m-**màr** C6B-die	‘death’/ ‘dying’	Citation form for ‘death’ ACC case form used for objects of verbs, objects of prepositions, 2nd NP of an ASSOCCXN, and as a nominal predicate, among other functions (Chapters III, IV, V and XI). Also can occur with the full range of TAMP auxiliaries as the semantically main verb for INTR constructions (Chapter VII-X)
màr-mɔ̀ die-C6B	‘death’	NOM case form used for S/A argument in all predication types (Chapters IV and XI); this form can not serve as a nominal predicate. The form is identical to the 1st NP of an ASSOCCXN and to the head of an NP containg a relative clause (Chapter XI).
màr-ɔ̄m mɔ́ die-C6B AG6B.DEF	‘the death’	Can be used for definite referents in all argument roles including subject and in any position an NP can occur, such as the object of a preposition; it can also serve as a nominal predicate, among other functions (Chapters IV and V)
*màr	n/a	Can not be used alone in this form as a noun with any recoverable discourse world referent
màr die	‘die’	Can be used as a bare verb form with present or past nterpretation depending on the discourse context (Chapter V and Paterson 2015)
már-ɛ́ die-SUBJ.FOC	‘die’	Can be used as a subject focused verb form (Chapter V)
már-ᵊg die-PST	‘died’	Can occur with past verb suffix (Chapter V)
mɔ̀r-ɔ̄stɛ̀ die-PRF	‘has died’	Can occur with perfect verb suffix (Chapter V)
ɔ̄t-**màr** FUT-die	‘will die’	Can occur with the *ɔ̄t*-Future (Chapter VII)

In sum, we cannot understand predication within U̲t-Ma'in without understanding nominalization and noun phrase syntax, and we cannot understand the word class categorization and meaning of any noun-class-marked element without an understanding of the larger syntactic construction and the discourse context within which it is found.

APPENDIX A

LIST OF ABBREVIATIONS

1	1st person
2	2nd person
3	3rd person
A	agent-like argument of a transitive verb
ACC	accusative
ADJ	adjective
AG	agreement
ASSOC	associative
ASSOCC	associative complex
ASSOCP	associative phrase
ATTR	attributive
AUG	augmentative
AUX	auxiliary
C	noun class
C	consonant (Chapter II)
CAUS	causative
CL	clause
COND	conditional
CONJ	conjunction
COP	copula
CXN	onstruction
D	determiner
DEF	definite
DEM	demonstrative
DEP	dependant
DIM	diminutive
DIST	distal
EXCL	exclusive
EQUIV	equivalent
EXT	existential
f.k.a.	formerly known as
FOC	focus

FUT	future
G	glide
IDEO	ideophone
INCL	inclusive
INDEF	indefinite
INTR	intransitive
ITR	iterative
k.o.	‘kind of’
LOC	locative
MOD	modifier
N	nasal consonant (Chapter II)
N	noun
NEG	negative
NMLZ	nominalized
NOM	nominative
NP	noun phrase
NPERS	non-personal
NSPEC	non-specific
NUM	numeral
NV	nonverbal
O	Onset (Chapter II)
O	object
OBJ	object
P	patient
PL	plural
PN	proper name
POSS	possessive pronoun
POSTN	post-noun
POSTP	postpositional phrase
PREPP	prepositional phrase
PRED	predicate
PRF	perfect tense
PROG	progressive
PSSD	possessed
PSSR	possessor
PST	past tense
Q	question particle
QUANT	quantifier

R	recipient
REL	relative pronoun
RELCL	relative clause
S	single-argument of an intransitive verb
SG	singular
SUBJ	subject
sth.	something
T	theme
TAMP	tense, aspect, mode, polarity
TNS	tense
TRAN	transitive
V	vowel
V	verb
VP	verb phrase

APPENDIX B

LANGUAGE DATA, LANGUAGE VARIETIES AND LANGUAGE CONSULTANTS

Data used for this study were collected between 2006 and 2019. Approximately seven and a half hours of recorded and translated data were available for this study. The primary recordings of language data and U̲t-Ma'in texts used for this study are listed in this appendix. I use the term text to refer to both written and recorded data listed below; all recorded data has a recording length listed in the final column. Sample texts that have been transcribed, glossed, and translated are included in additional appendices.

Column 1 gives a category or genre for the text. Genres include:

i. folk narratives
ii. personal narratives about personal experiences
iii. songs
iv. word games
v. retellings of observed events - particularly retelling of events after watching the silent film developed by Chafe (Chafe 1980), known as the Pear Film.
vi. read texts
vii. crafted texts - these include translated materials and adult literacy educational materials
viii. dialogues - often interview style with all participants speaking in U̲t-Ma'in. These were facilitated by my consultant, Ibrahim Tume Ushe. Many were recorded on his own initiative.

Column 2 is the abbreviation used when referring to an example from a particular text. These abbreviations are used throughout the study. Column three is a full title of the text. Column 4 is the abbreviation used for the main speaker. Column 5 is the

Ụt-Ma'in language variety of used by the main speaker. Column 6 is the length of the recording in hours, minutes, and seconds (HH:MM:SS).

1	2	3	4	5	6
Genre	**Abbreviation**	**Title**	**Speaker**	**Variety**	**HH:MM:SS**
Narrative	GK_IY_Ror_2013	King of Gossip	IY	Rọr	0:02:48
Narrative	KM_IY_Ror_2013	Kambari Man	IY	Rọr	0:00:21
Narrative	MA_IY_Ror_2013	Musa and Audu	IY	Rọr	0:00:35
Narrative	PW_IY_Ror_2013	Possessed Woman	IY	Rọr	0:03:26
Personal Narrative	Minna_IY_Ror_2013	My Trip to Minna	SJ	Rọr	0:00:53
Proverbial Narrative	SR_IY_Ror_2013	Sow and Reap	SJ	Rọr	0:00:37
Narrative	YM_IY_Ror_2013	Young Man who wants to Marry	IY	Rọr	0:00:27
Retelling	SJ_PS_Ror_2013	Pear Story Retelling - SJ	SJ	Rọr	0:04:24
Retelling	VY_PS_Ror_2013	Pear Story Retelling - VY	VY	Rọr	0:05:47
Retelling	PS_PS_Ror_2013	Pear Story Retelling - PS	PSa	Rọr	0:04:54
Retelling	IJ_PS_Kuur_2013	Pear Story Retelling - IJ	IJ	Kuur	0:06:46
Retelling	MG_PS 2013	Pear Story Retelling - MG	MG	Rọr	0:04:10
Retelling	IY_PS_Ror_2013	Pear Story Retelling - IY	IY	Rọr	0:04:40
Retelling	MP_PS_Ror_2013	Pear Story Retelling - MP	MP	Rọr	0:01:52
Retelling	IT_PS_Jiir_2013	Pear Story Retelling - IT	IT	Jụụr	0:05:27
Retelling	SS_PS_Ror_2013	Pear Story Retelling - SS	SS	Rọr	0:03:40
Narrative	KB_IT_Jiir_2007	King Bụnni Karikaka	IT	Jụụr	0:03:45
Narrative	KO_MI_Fer_2013	King of the Okra	MI	Fer	0:01:54
Narrative	EH_VA_Fer_2013	Evil Husband	VA	Fer	0:00:53

1	2	3	4	5	6
Genre	**Abbreviation**	**Title**	**Speaker**	**Variety**	**HH:MM:SS**
Narrative	TB_VA_Fer_2013	Two Birds	VA	Fer	0:01:30
Reading	LK_MM_Fer_2013	Luke 6: 27-31 Reading	MM	Fer	0:01:21
Hortatory	MB_IT_Jiir_2007	Personal Message to Becky	IT	Jʊ̱ʊ̱r	0:03:20
Narrative	GF_IT_Jiir_2007	Story of Guinea Fowl	IT	Jʊ̱ʊ̱r	0:03:55
Narrative	SFC_IT_Jiir_2005	Spider, Frog and Chameleon	IT	Jʊ̱ʊ̱r/Rǫ̱r	0:03:45
Elicitation	Ror_Wordlist	SILCAWL 1700	SJ/SS/IT/ PSt/JI	Rǫ̱r	0:20:31
Elicitation	VB_Ror_2013	Verb Discussion	SJ/MG/M P	Rǫ̱r	0:37:00
Elicitation	LW01_Ror_2006	Ling Workshop 01	SJ	Rǫ̱r	0:02:12
Elicitation	LW02_Ror_2006	Ling Workshop 02	SJ	Rǫ̱r	0:01:45
Elicitation	LW03_Ror_2006	Ling Workshop 03	SJ	Rǫ̱r	0:02:10
Elicitation	LW04_Ror_2006	Ling Workshop 04	SJ	Rǫ̱r	0:03:27
Elicitation	LW05 2006	Ling Workshop 05	SJ	Rǫ̱r	0:00:49
Elicitation	LW06 2006	Ling Workshop 06	SJ	Rǫ̱r	0:02:45
Elicitation	LW07_Ror_2006	Ling Workshop 07	SJ	Rǫ̱r	0:03:58
Elicitation	LW08_Ror_2006	Ling Workshop 08	SJ	Rǫ̱r	0:02:25
Elicitation	LW09_Ror_2006	Ling Workshop 09	SJ	Rǫ̱r	0:03:42
Elicitation	LW10_Ror_2006	Ling Workshop 10	SJ/SS	Rǫ̱r	
Elicitation	LWdis_Ror_2006	Ling Workshop Discussion	SJ	Rǫ̱r	0:00:52
Narrative	RH_IT_Jiir_2007	Rwana and her husband	IT	Jʊ̱ʊ̱r	0:04:00
Narrative	TS_IT_Jiir_2007	Why the tortoise has a hard shell	IT	Jʊ̱ʊ̱r	0:02:09
Narrative	BT_IT_Jiir_2007	Why the bat can not look up	IT	Jʊ̱ʊ̱r	0:01:20
Hortatory	WC_IT_Jiir_2007	Warning to children	IT	Jʊ̱ʊ̱r	0:04:58

1	2	3	4	5	6
Genre	**Abbreviation**	**Title**	**Speaker**	**Variety**	**HH:MM:SS**
Crafted	Primer 2009	How to read Ụt Ma'in	SJ/IT/PSt/JI	Rọr	0:11:02
Crafted	Primer 2009	How to read Ụt-Ma'in: Final Story	SJ/IT/PSt/JI	Rọr	0:08:10
Crafted	GL 2008	Gospel of Luke Translation	SJ/IT/PSt/JI	Rọr	n/a
Dialogue	MM_Ror_2017	Matseri Market	MM	Rọr	0:16:04
Dialogue	HK00_2017	Headmaster at New Kele 00	HM	Kuur	0:04:58
Dialogue	HK01 2017	Headmaster at New Kele 01	HM	Kuur	0:01:11
Dialogue	HK02 2017	Headmaster at New Kele 02	HM	Kuur	0:00:59
Dialogue	HK03 2017	Headmaster at New Kele 03	HM	Kuur	0:01:25
Dialogue	HK04 2017	Headmaster at New Kele 04	HM	Kuur	0:01:08
Wordlist	HK05 2017	Headmaster at New Kele 05 wordlist	HM	Kuur	00:11:22
Wordlist	HK06 2017	Headmaster at New Kele 06 wordlist	HM	Kuur	00:09:38
Dialogue	KE 2017	Kuka Elder - Mụngụ	MU	Zuksun	0:10:33
Dialogue	KM18 2017	Kuka Man 18 Mụngụ	MU	Zuksun	0:11:35
Dialogue	KM19 2017	Kuka Man 19 Mụngụ	MU	Zuksun	0:12:26
Dialogue	KM20 2017	Kuka Man 20 Mụngụ	MU	Zuksun	0:06:06
Song	LM_Fer_2017	Lema Mazi's songs	LM	Fer	0:09:47
Game	WG_Fer_2017	Word Game at Kukum tree	WG	Fer	0:07:53
Narrative	KT_Fer_2017	Boy's story at Kukum tree	KS	Fer	0:07:04
Dialogue	UW_Us_2017	Us Women	UW	Us	0:31:00
Crafted	PTY_draft_2019	Work of those sent by Jesus	n/a	Ror	n/a
Crafted	MT_draft_2019	Matiyu's Gospel	n/a	Ror	n/a

1	2	3	4	5	6
Genre	**Abbreviation**	**Title**	**Speaker**	**Variety**	**HH:MM:SS**
Crafted	RM_draft_2019	Letter to Roma from Burus	n/a	Ror	n/a
Dialogue	UK_Jiir_2017	At home of Usman Keta and Tani Ai	UK	Jiir	
Dialogue	HF_Juur_2017	At home of Hassan Faruk	HF	Jiir	
Crafted	JF_Ror_2009	Fakai Jesus Film	Multiple	Ror	2:08:00

APPENDIX C

SAMPLE TEXT A- MUSA AND AUDU (MA_IY_ROR_2013)

Introduction to text: *Musa and Audu*

This short narrative tells of two friends, Musa and Audu. This story is told as a joke with the two names being non-referential, generic and common Hausa names used by many language communities in the area. Audu, who wants to take a trip, needs some financial assistance; Audu asks for Musa to give him a "ring of wealth". When Audu approaches Musa, Audu's specific reason for asking Musa for help is that "[Audu] always remembers [Musa]" when he travels. Musa replies that he will not give him the "ring of wealth" precisely for that reason. Audu "always" and seemingly only remembers Musa when he needs money. The final lines of Musa's response are a play on words. Musa repeats Audu's words as Musa's reason for rejecting the request, implying that perhaps Audu should not only consider Musa when he needs assistance.

Orthographic transcription: *Musa and Audu*

Musa nɛ̱ Audu, ɛ̱ ọ ụr-hụụb. Dɛ̱kɛ̱n họ-dɛ̱ Audu ọssa wa nọm m-ha. Wa dɛ̱'ɛ̱ ụdụ Musa. Musa ọttɛ̱ kwaat-yụ ụt-kwụm. Wa ọssa wa nọmụ wa ụs-vɛ̱r; wa ọnk kwaat-u ya ụdụ Musa. Wa zụ, "Ụm ọssa zụ bọ nọmụ mɛ̱ m-sɛ̱g mụ kwaat-u inya. Ụm nọm m-ha remụ zụ ụm hụụt ụt-bakụs ụ bọ nɛ̱." Musa zụ "Kwaat-u inya, ụm da sɛ̱gụ bọ da, ụ remụ zụ a bọ dɛ̱'ɛ̱, bọ hụụt ụt-bakụs ụ mɛ̱ nɛ̱."

Translation: *Musa and Audu*

Musa and Audu, they are friends. On a certain day, Audu wanted to go on a journey. He went to Musa because Musa had a valuable ring. He wanted to trick him to

collect that ring from Musa. He said, “I want to say, you loan me that ring when I travel because I always remember you.” Musa said, “That ring, I will not loan to you because when you go you always remember me.”

Interlinearized text: *Musa and Audu*

The text is presented in units of six lines with an optional seventh line. Line one contains the Ụt-Ma'in orthography that corresponds to the text as presented in §2.8; this line is in **bolded** font. Line two contains numbered phonological groupings that roughly equate to clauses or phrases, e.g., 001 and 002. The numbers in line two were established by running a the Silence Recognizer MPI-PL within the ELAN transcription program to establish gaps between phonological units. Line three contains [bracketed] construction labels and the chapter in which the contraction is described in this study is contained in parentheses where applicable; these labels are in small caps, e.g., [IDENTIFICATION PREDICATE NOMINAL (Ch 5)]. Line four contains a phonemic transcription using IPA symbols as used in the examples throughout the study. The data presented in line four is *italicized*; [brackets] are used to match the boundaries of the construction labels from line three. Line five contains glosses for the phonemic transcriptions. Line six contains a free translation that corresponds to the text as presented in the translation section above. An optional seventh line contains a literal translation when useful as a bridge between the glosses in line five and the free translation in line six.

Musa nɐ̲ Audu, ɐ̲ o u̲r-hu̲u̲b.

001 002

[IDENTIFICATION PREDICATE NOMINAL (Ch 5)]

[*músā = nɛ̀ Aúdù* *ɛ́ = ɔ́ = l-hɔ̀ːb*]

PN with PN C2 = COP = C5-friend

'Musa and Audu, they are friends.'

Dɐ̲kɐ̲n ho̲-dɐ̲ Audu o̲ssa wa no̲m m-ha.

003 004

['WANT' MATRIX (Ch 7) [INTRANS 'DO' (Ch 9)]]

dɛ̀-kɔ̄n *hɔ́ = dɛ̄* [*aúdù* *ɔ́ = s-sà* *wā = nɔ́m = m-há*]

C5-there day = C5 PN PROG = C4-want C1.SUBJ = do = C6B-journey

'On a certain day, Audu wanted to go on a journey.'

(lit: 'Audu is wanting he do journey')

Wa dɐ̲'ɐ̲ u̲du̲ Musa; Musa o̲ttɐ̲ kwaat-yu̲ u̲t-kwu̲m.

005 006

[BASIC INTRANSITIVE (Ch 4)] [POSSESSIVE PREDICATE (Ch 5)]

[*wā = dɛ́ʔɛ́ = dɔ̀* *músá*], [*músá* *ɔ́ʔ-té* *kwàt = j-ɔ̀ = t* *kwɔ̀m*]

C1.SUBJ = go = to PN PN COP-PFT ring = C7-ASSOC = C6 wealth

'He went to Musa (because) Musa has a valuable ring.' (lit: ring of wealth)

Wa o̲ssa wa no̲mu̲ wa u̲s-vɐ̲r; wa o̲nk kwaat-u ya

007

['WANT' (Ch 7) [NOMINALIZED 'DO' (Ch 9)...

[*wa = ˊ = s-sà* [*nɔ́m* *wá = s-vɛ̀r* *wā = ɔ́ŋk* *kwàt-ù = já*

C1 = PROG = C4-want do C1.OBJ = C4-wisdom C1 = collect ring-C7 = C7.DEF

'He wanted to deceive him (lit: is wanting do him clever) to collect that ring...'

u̲du̲ Musa.Wa zu̲, "Um o̲ssa zu̲

008 009

...]] ['SAY' MATRIX ['WANT' MATRIX (Ch 7)...

ɔ̄dɔ̀ mūsā] [*wā = zɔ̄ = [m* *ʔɔ́ = s-sá* *zɔ̄ː*

from PN C1.SUBJ = say = 1SG.SUBJ PROG = C4-want say

'...from Musa. 'He said, " I want to say,...'

bǫ nǫm mę m-sęg mų kwaat-u inya.

010

[DITRANSITIVE 'DO' (Ch 9)]

[*bɔ̄=nɔ́m=mɛ́* *ə̄m-sɛ́g=m-ə̀* *kwàt-ù ín-jà*]

2SG=do=1SG.OBJ C6B-loan=C6B-ASSOC ring-C7 DEM-C7

' "... you loan me that ring...'

(lit: 'you do me loan of that ring')

Ųm nǫm m-ha, remų zų ųm hųųt ųt-bakųs ų bǫ nę."

011

[INTRANSITIVE 'DO' (Ch 9) [ADV.PURP [GO.AUX CLAUSE (Ch 8)]]

[*ə̄m=nɔ́m=m-há-ː* [*rémə̄=zə̄=*[*m* *hɔ́-ːt=ɔ́t* *bàks=ɔ́=bɔ̄=nɛ̀*]]

1SG.SUBJ=do=C6B-going-DEP word=say=1SG.SUBJ GO.AUX-PFT=C6 remembering=LOC=2SG=with

' "... (when) I travel because I always go remembering you." '

(lit: 'because I have gone remembering with you.')

Musa zų "Kwaat-u inya, ųm da sęgų bǫ da,

012 013

['SAY' MATRIX [[NEGATIVE DITRANSITIVE FUT.AUX WITH FRONTED T ARGUMENT (Ch 6)]

[*músá zə̄* [*kwàt-u* *īn-yá* *ə̄m=dá* *sègə̀* *bɔ̄=dā*]

PN say ring-C7 DEM-C7 1SG.SUBJ=NEG borrow 2SG=NEG

'Musa said, "That ring, I will not loan to you...'

ų remų zų a bǫ dę'ę, bǫ hųųt ųt-bakųs ų mę nę."

014 015

[ADV.PURP [ADV.TIME [GO.AUX (Ch 8)]]]]

[*rémə̄=z=*[*ā* *bɔ̄=dɛ́ʔɛ́* [*bɔ̄=hɔ́-ːt* *ə̄t-bàks* *ɔ́=mɛ́=nɛ̀*]]]]

word=say=when 2SG=go 2SG=GO.AUX-PFT C6-remember LOC=1SG.OBJ=with

'..."because when you go you always go remembering me." '

(lit: you have gone remembering with me)

APPENDIX D

SAMPLE TEXT B - KAMBARI MAN (KM_IY_ROR_2013)

Introduction to text: *Kambari Man*

This short narrative tells of a man from the neighboring Kambari language community visiting the family of his wife. It is not clear whether the wife and wife's family are Ụt-Ma'in speakers. It may be that this is told of a Kambari man visiting Kambari relatives. The man is served fried sweet potatoes that are too hot to eat. As a result he burns his tongue and begins to cry. However, to hide his error in eating food that was too hot, he gives an alternate reason for his tears, namely that he was thinking of the death of Jesus on the cross. His religious cover story is also the punch line of this humorous story.

Orthographic transcription: *Kambari Man*

Wakụn wa kambari wa dẹ'ẹ ụdụ a manụ wa nẹ. Wa bit, na taastẹ sak-dụ ụt-kutunku m-dụng nẹ. Na ye' wa to, wa ọ mẹn-tụ ụt-rẹ. Ra-ụ dọọrs wa u-nu. Wa sụk m-is, rap rap rap. Na zụ yan-ọ wa ọttẹ ụs-kan.Wa zụ wa baksụn m-bakụs ụ marụm Yẹsọ nẹ ụ dọm u-kan; ọ wa wa ụs-kan.

Translation: *Kambari Man*

A certain Kambari man travelled to his in-laws. When he met (them), the sweet potatoes had finished cooking with heat. He was given them (the sweet potatoes). When he is in the middle of eating, fire burned his mouth. He began to shed tears. Someone said, "Why are you crying?". He said he was remembering the death of Jesus on the cross; that made him cry.

Interlinearized text: *Kambari Man*

The text is presented in units of six lines with an optional seventh line as described for Sample text A in §2.

Wakụn wa kambari wa dẹ'ẹ ụdụ a manụ wa nẹ.

001 002

[INTRANS PREDICATION (Ch 4)]

[*wà-kə̄n wá-kāmbārī = wā dɛ́ʔɛ̀ ə̀də̀ á = máːn-ə́ = wá = nɛ̀*]

C1-there C1-kambari.person = C1 travel to C2 = in.laws-C2 = C1.POSS = with

'A certain Kambari person traveled to his in-laws.' (lit: to those with his inlaws)

Wa bit na taas sak-dụ ụt-kutunku m-dụng nẹ.

003

[TRANS PRED(Ch 4)] [IMPERSONAL TELIC AUX (Ch 4 & Ch 7)]

[*wā-bít* [*nā táːs sàk d-ə̀ ʔt-kútùŋkù ə̄m-də̀ŋ = nɛ̀*]

C1.SUBJ-met NPERS finish cook C5.AG-ASSOC C6A-sweet.potato C6B-heat = with

'He met (them having) finished cooking of sweet potatoes with heat.'

Na ye' wa to, wa ọ mẹn-tụ ụt-rẹ…

004

[IMPERSONAL DITRANS PRED (Ch 4)] [ADV.TIME[LOCATIVE PRED NOMINAL (Ch 5)]]

[*nā = jɛ̄ = wá = tɔ́ː*] [*wā - ˊ = mɛ̀n t-ə̀ = t-rɛ̀*]

INDEF.SUBJ-give-C1.OBJ-C6.OBJ C1.SUBJ = COP = stomach C6.AG-ASSOC = C6-eat

'He was given them, (and when) he is in the middle of eating...

…ra-ụ dọọrs wa u-nu.

005

[DITRANS PRED (Ch 4)]

[*rā- ə̀ dɔ̀ːr-s = wá ū-nú*]

fire-C3 burn-REP = C1.OBJ C3-mouth

'fire burns him (on the) mouth'

Wa sụk m-is, rap rap rap.

006

[TRANS PRED (Ch 4)]

[*wā-sə̄k ə̄m-ʔís*] *ɾàp ɾàp ɾàp ɾàp*

C1.SUBJ = put C6B-eye IDEO IDEO IDEO IDEO'

'He started to cry, drip, drip, drip'

Na zu̱ yan-o̱ wa o̱tte̱ u̱s-kan.

007

[IMPERSONAL 'SAY' MATRIX ['WHAT' QUESTION [POSSESSIVE PRED (Ch 5]]]

[*nā=zɔ̄* [*jān-ɔ́* [*w=ɔ́ʔ-t=ɔ̄s-kán*]]]

INDEF.SUBJ=say what-C3 C1.SUBJ=COP-PFT=C4-crying

'Someone asked, "Why are you crying?" ' (lit: "what is he have crying?")

Wa zu̱ baksu̱n baksu̱n mar-m Ye̱so̱ no̱m u̱ do̱m u-kan.

008a

['SAY' MATRIX [V-DIST V-DIST ...

[*wā= zɔ̄* [*báks-ɔ̄n* *bàks-ɔ̄n*

C1.SUBJ=say remember-DIST remember-DIST

' He said (he was) remembering long ago

008a

[REL.CL [TRANS 'DO']]]]

[*màrè-m* [*jésɔ̄-ɔ̀* *nɔ̀m màré* *ɔ́ʔ=dɔ́m ū-kān*]]]]

death-C6B.REL PN-C3.SUBJ do death LOC=top C3-cross

'death that Jesus did die on the cross'

O̱ wa wa u̱s-kan.

009

[DITRANS PRED (Ch 4)]

[*ɔ̄* *wá=wá* *ɔ̄s-kán*]

C3.SUBJ put=C1.OBJ C4-cry

'That made him cry.'

APPENDIX E

SAMPLE TEXT C - YOUNG MAN (YM_IY_ROR_2013)

Introduction to text: *Young Man*

This text is about the plight of a young man who wants to get married. He is handsome and likable, but he has no money so none of his other qualities matter. In the end he is discouraged and told to make way for another man with the necessary means to make a good husband.

Orthographic transcription: *Young Man*

Na nǫng wakụn zwar wa ụ ǫkǫn taas-ǫ. Wa ǫ sǫ-ya; wa zattẹ shik da. Ụ remụ zụ wa zattẹ shik da, a wa dẹ'ẹ ụssa ụr-gụ, na zụ na da ya-dụ wa ụr-gụ da. Rụ-ụ yaag wa zwar-dụ u-shụ, amma wa zattẹ shik da. Wa dẹ'ẹ ụ ǫkǫn bu-ǫ ụssa ụr-gụ. Gwụp ǫssa-u wa; i-matẹ nẹ ǫssa. Remụ zụ wa zattẹ shik da, na zụ na da yadụ wa ụr-gụ da. Da na zụ wa hatẹ wa ya a-shik nẹ ụr-be.

Translation: *Young Man*

There was a certain young man in a certain village. He was handsome, but he didn't have any money. Because he didn't have any money, when he went wanting marriage, he was told he would not be given marriage. God gave him a beautiful face, but he didn't have any money. He went to a certain town wanting marriage. A girl liked him; also her parents liked (him). Because he didn't have any money, he was told he would not be given marriage. Then, he was told, he should make room for those with money.

Interlinearized text: *Young Man*

The text is presented in units of six lines with an optional seventh line as described for Sample text A in Appendix C.

Na nǫng wakǫn zwar wa ǫ ǫkǫn taas ǫ.

001 002

[PRESENTATIONAL 'DO' (CH 10)]

[*nā nɔ́ŋ wà-kɔ̄n zwār=wā ´=ɔ̀-kɔ̄n tà:s=ɔ̄*]

INDEF.SUBJ do.PST C1-there young.man=C1 LOC=C3-there village=C3

'There was a certain young man in a certain village.'

(lit: 'They did a certain young man in a certain town.')

Wa ǫ sǫ-ya, wa zattę shik da.

003 004

[PREDICATE ADJECTIVE (Ch 6)] [NEGATIVE POSSESSIVE PRED (Ch 6)]

[*wā=ʔɔ́ sɔ̄-jà*] [*wā ɾá-tɛ́ ʃīk=dá*]

C1.SUBJ=COP good-C7 C1.SUBJ NEG.COP-PFT money=NEG

'He is handsome, (but) he does not have any money.'

Remǫ zǫ wa zattę shik da,

005

[Adv. REASON [NEGATIVE POSSESSIVE PRED (Ch 6)]

[*rémɔ̄=z-wā ɾá-tɛ́ ʃìk=dá*]

word=say-C1.SUBJ NEG.COP-PFT money=NEG

'And because he does not have any money,

a wa dę'ę ǫssa ǫr-gǫ,

006

[ADV.TIME [INTRANS PRED (Ch 5) [NOMINALIZED PURPOSE (Ch 4)]]]

[*á=[wá dɛ́ʔɛ́ [sá=ɔ̀=r-gɔ̄*]]]

COND=C1 go want-ASSOC=C5-marriage

'when he goes wanting marriage,'

na zu̱ na da nya-du̱ wa u̱r-gu̱ da.

007

[IMPERSONAL 'SAY' MATRIX [IMPERSONAL NEG DITRANS PRED (Ch 5)]

[*nā=zɔ́* [*nā=d=njá* *d-ə̀=wá* *r-gə̄=dá*]

INDEF.SUBJ=say INDEF=NEG=give C5-ASSOC=C1.OBJ C5-marriage=NEG

'Someone said, "He will not be given marriage." '

Ru̱-u̱ yaag wa zwar-du̱ u-shu̱,

008

[DITRANS PRED (Ch 5)]

[*rə̄ʔ-ə̀* *njá-ːg=wá* *zwār=d-* ̀*-u-ʃɔ́*]

god-C3.SUBJ give-PST=C1.OBJ beauty=AG5-ASSOC-C3-face

'God gave him beauty of face,'

amma wa zattu̱ shik da.

009

[NEGATIVE POSSESSIVE PRED (Ch 6)]

[*àm=wá* *rá-tɛ́* *ʃīk=dá*]

but-C1.FOC NEG.COP-PFT money=NEG

'but he does not have any money.'

Wa de̱'e̱ u̱ o̱ko̱n bu-o̱ u̱s-sa u̱r-gu̱.

010

[INTRANS PREDICATION (Ch 5) [NOMINALIZED PURPOSE VP (Ch 4)]]

[*wā=dɛ́ʔɛ̀* ́*=ɔ̀kɔ̄n* *bū=ɔ́* [*s-sà=* ̀*=r-gə̄*]]

C1.SUBJ=travel LOC= C3.certain compound=C3 C4-want=FACE=C5-marriage

'He went to a certain family wanting marriage.'

Gwu̱p o̱ssa-u wa; I matu̱ nu̱ o̱ssa.

011 012

[POSSESSIVE PRED (Ch 6)] [POSSESSIVE PRED (Ch 6)]

[*gwə̄p ɔ́=s-sàː=wá*] [*ī=nɛ̀* *mátɛ́=nɛ̀* *ɔ́=s-sà*]

girl PROG=C4-want=C1.OBJ C2=with bore=with PROG=C4-want

'Girl wants him; the parents (those together who bore) want (him).'

remu zu wa zatte shik da

013

[ADV. REASON [NEGATIVE POSSESSIVE PRED (Ch 6)]]

[*rém=ə̀=z* [*wā dáttɛ̀ ʃìk=dá*]]

because=ASSOC=saying C1.SUBJ NEG.HAVE money=NEG

'(But) because he does not have money,'

na zu na da yadu wa ur-gu da

014

[IMPERSONAL 'SAY' MATRIX [IMPERSONAL NEG DITRANS PRED (Ch 5)]

[*nā zə̄ n=dá=ː d-ə̀=wá=r gə̄=dá*]

NSPEC=say NSPEC=NEG=give C5-ASSOC=C1.OBJ=C5 marriage=NEG

'Someone said, "He will not be given marriage." '

da na zu wa hate wa ya a shik ne ur-be

015 016

[Adv. Time [IMPERSONAL 'SAY' MATRIX [JUXT INTRANS PREDICATION (Ch 5)]]]

[*dá* [*nā zə̄* [*wā=há-tɛ̀-ː wā=já á=ʃìk=nɛ̀ ə̄r-bé*]]]

time NSPEC=say C1.SUBJ=go-PFT-DEP C1.SUBJ=give C2=money=with C5-place

'Then they said, he (should) go, he (should) give those with money a place.'

APPENDIX F

CATALOGUE OF ASSOCIATIVE CONSTRUCTIONS:

FORM AND FUNCTION

This appendix contains an inventory of Associative Constructions (ASSOCCXNS) with a broad range of functions.

Function of modifier	Form	Gloss
(part)whole	kéŋ = j-ə = r-swà	'bridge of nose' lit: 'frontier of nose'
	zwār = d- ` = u-ʃɔ́	'beauty of face'
	swā = d- ` = u-rwág	'elephant's trunk' lit: 'nose of elephant'
	mɛ́n t-ə = r-kɔ́ːr	'middle of basket' lit: 'stomachs of basket'
	mɛ̄n = t-ə = m bɔ́	'middle of water' lit: 'stomachs of water'
	bé = d-ə kɔ́ːr-ɔ́t = tɔ́ː place = AG5-ASSOC basket-C6 = C6.DEF	'place of those baskets'
	dím = t-ə nó	'names of birds'
	rɛm = d-ə á-s-ùs	'language of the Us people'
	kwɔ́k = ə = r gɛ̄	'eggshell' lit: 'shell of egg'
	kwɔ́k = t-ə = t gɛ̄	'eggshells' lit: 'shells of eggs'
	kɔ́k = ə = r-ís	'eyebrow' lit: 'calabash of eye'
	kɔ́k = t-ə = r-ís	'eyebrows' lit: 'calabashes of eye'
	tʃáp = ə = r-ís	'eyelash' lit: 'feather of eye'
	tʃáp = t-ə = r-ís	'eyelashes' lit: 'feathers of eye'

Function of modifier	Form	Gloss
	kéŋ = j-ə = t-swà	‘bridge of noses’ lit: ‘frontier of noses’
	hɔ́ = j-ə = r-nɔ̀	‘anus’ lit: ‘hole of buttock’
	hɔ́ = s-ə = r-nɔ̀	‘anuses’ lit: ‘holes of buttocks’
	hɔ́ = j-ə = r-rɛ̀t	‘clitoris’ lit: ‘hole of vagina’
	hɔ́ = s-ə = r-rɛ̀t	‘clitorises’ lit: ‘holes of vagina’
	sóʔ = ̀ = u-kɔ́p	‘armpit’ lit: ‘cave of shoulder’
	sóʔ = ə̀ = t-kɔ́p	‘armpits’ lit: ‘cave of shoulders’
	ʤó = j- ̀ = u-kīʃímì	‘thumb’ lit: ‘finger of decrepit old man’
	ís = d- ̀ = u-ná	‘ankle’ lit: ‘eye of leg’
	ís = t- ̀ = u-ná	‘ankles’ lit: ‘eyes of leg’
	bá = d- ̀ = u-ná	‘foot’ lit: ‘bag? of leg’
	bá = t-ə = s-ná	‘feet’ lit: ‘bags? of legs’
	kɔ́k = d-ə = r-hí	‘skull’ lit: ‘calabash of head’
	kɔ́k = t-ə = r-hí	‘skulls’ lit: ‘calabashes of head’
	ʃār = ̀ = u-ʃîn	‘spine’ lit: ‘bone of back’
	ʃār = s- ̀ = u-ʃîn	‘spines’ lit: ‘bones of back’
	ʃār = j- ̀ = u-gàs	‘rib’ lit: ‘bone of side(of body)’
	ʃār = s- ̀ = u-gàs	‘ribs’ lit: ‘bones of side (of body)’

Function of modifier	Form	Gloss
	hí = d-ˋ = u - zūr	‘head of lion’
	jɔ̀n ɔ̀ = r-rwáb	‘bed made of clay’
material	rén = d-ɔ̀ = m-dáp	‘trap made of sap’
	rén = t-ɔ̀ = m-dáp	‘traps of sap’
	jà = d-ɔ̀ = r-tʃāmpá	‘boy’ lit: ‘offspring of male’
	jà = t-ɔ̀ = t-ʃāmpá	‘boys’ lit: ‘offspring (pl) of men’
	jà = d-ɔ̀ = r-nɛ̄tá	‘girl’ lit: ‘offspring of female’
	jà = t-ɔ̀ = t-nɛ̄tá	‘girls’ lit: ‘offspring (pl) of women
	dù = d-ɔ̀ = m-bɔ̄	‘well of water’
contents	fɔ̀n = j-ɔ̀ = m-hjɔ́	‘vein’ lit: ‘road of blood’
	fɔ̀n = s-ɔ̀ = m-hjɔ́	‘veins’ lit: ‘roads of blood’
	fɔ̀n = j-ɔ̀ = m-bɔ́	‘spring’ lit: ‘road of water’
	fɔ̀n = s-ɔ̀ = m-bɔ́	‘springs’ lit: ‘roads of water’
	kɔ̀b = d-ɔ̀ = m-jár^{x}	‘sick’ lit: ‘lack of health’
	kɔ̀b = d-ɔ̀ = rés = d-ɔ̀ = ʤáb	‘impatient’ lit: ‘lack of keeping heart’
	kɔ̀b = d-ɔ̀ = r-húrɛ̀	‘restlessness’ lit: ‘lack of resting’
	kɔ̀b = d-ɔ̀ hɔ́g = d-ɔ̀ = t-tɔ̀	‘stubborness’ lit: ‘lack of hearing of ears’
	kɔ̀b = d-ɔ̀ = ʃík ū-nɔ̀m	‘lack of money thing’
	kɔ̀b = d-ɔ̀ = m-nōʔ	‘lightweight’ lit: ‘lack of weight’
	kɔ̀b = d-ɔ̀ = m-ràŋg	‘rough’ lit: ‘lack of smoothness’
	kɔ̀b = d-ɔ̀ = r-hí	‘stupid’ lit: ‘lack of head’
	nɛ̄tá = j-ˋ = u ʔíbò	‘Igbo woman’ lit: woman of Igbo-land’

Function of modifier	Form	Gloss
place of origin/source	jà = d- ` = u-mús	‘kitten’ lit: ‘offspring of cat’
	já = t-ə = mús	‘kittens’ lit: ‘offspring (pl) of cats’
	zɔ́n = m-ə = r-hɔ̄	‘sunshine’ lit: ‘light of sun’
	zɔ́n = m- ` = u-pjāːt	‘moonlight’ lit: ‘light of moon’
	jà = t-ə = s-té = tɔ́ fruit = AG6-ASSOC = C4-tree = C6.DEF	‘those fruits of trees’
place of use	nɔ̀m = d-ə = r-hí	‘hat’ lit: ‘thing of head’
	kwá = j- ` = u-ná	‘ankle ring, bangle’ lit: ‘bracelet of leg’
	kwá = s- ` = u-ná	‘ankle rings, bangles’ lit: ‘bracelets of leg’
	rè = t-ə = m-rím	‘evening meal’ lit: ‘eating of darkness’
time of use/activity	rwɔ́n = d-ə = r-hɔ̄	‘sunrise’ lit: ‘rising of sun’
	bé t-ə = r-ʃɔ̄ʔɔ̄t	‘places of sitting’
function	kóm = ə = t- tʃwàʔ	‘right hand’ lit: ‘hand of soup’
	kwàt = j-ə = t kwə̀m	‘ring of wealth’
	bɔ́ m-ə = t-ūt	‘old water’ lit: ‘water of old’
property	dà = ə = m-tòr	‘cold weather’ lit: ‘time of coldness’
	fə̀r s-ə = m wɔ́r	‘tall shea-butter trees’ lit: ‘shea-butter trees of length’
	swə̀r = d-ə = m-hə̀k	‘widening’ lit: ‘lengthening of largeness’
	kɔ́ːr d- ` = u-tɔ̄tɔ̄rsɛ̀	‘third basket’
ordinal number	kán = s-ə = kɔ́ːt	‘dawn’ lit: ‘crying of chickens/roosters’
idiomatic	bɔ́ = m-ə = t-rān	‘green’ lit: ‘water of leaves’
	bɔ́ = m- ` = u-dàk	‘brown’ lit: ‘water of ground’
	kɔ̀b = ə = wáʔ	‘orphan’ lit: ‘lack of child’ (cannot mean ‘childless adult’)

Function of modifier	Form	Gloss
	kɔ̀b = ə = já:g	‘orphans’ lit: ‘lack of children’ (can not mean ‘childless adult’)
	jà = d-ə = m-zàn	‘bastard, illegitimate child’ lit: ‘offspring of emptyness’
	já:g = ə = m-zàn	‘bastards, illegitimate children’ lit: ‘offspring (pl) of emptyness’

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