

A GRAMMAR OF NORTHERN AND SOUTHERN GUMUZ

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DISSERTATION ABSTRACT

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Title: A Grammar of Northern and Southern Gumuz

Gumuz is a Nilo-Saharan dialect cluster spoken in the river valleys of northwestern Ethiopia and the southeastern part of the Republic of the Sudan. There are approximately 200,000 speakers, the majority of which reside in Ethiopia. This study is a phonological and grammatical analysis of two main dialects/languages: Northern Gumuz and Southern Gumuz.

The study provides an overview of the Gumuz people and culture, including historical accounts of the language(s) and migration patterns. Most major aspects of the language are described and analyzed in detail: phonology, nouns, pronouns, demonstratives and other noun phrase constituents, verbs and verbal morphology, noun incorporation, verbal classifiers, noun categorization, basic clauses, and subordinate clauses. Northern and Southern Gumuz varieties are contrasted throughout.

Gumuz tone has two levels, High and Low, with tonal downstep of High. The tonal melody on bound pronominals on verbs indicates transitivity.

Nouns are divided into two basic types: relational and absolute. Relational nouns have an inherent relationship with another nominal element, either within a noun-noun compound or with a (historical) possessive affix. Two sets of relational nouns —

attributive and relator nouns— obligatorily take an inherent possession suffix if not in a compound.

Gumuz has two noun-noun constructions: the Associative Construction and the Attributive Construction. The first is left-headed with ‘noun of noun’ semantics. The second is right-headed with the initial noun expressing an inherent quality of the second.

Certain body part terms have grammaticalized as a variety of other morphosyntactic categories, in particular as relator nouns, verbal classifiers, and class morphemes, the final two of which are noun categorization devices. Many of these same body part terms can be incorporated into the verb or form part of lexicalized verb-noun compounds.

Deverbal nominalizations with /ma-/ are found throughout the language structures. These /ma-/ nominalizations serve as both subject and object complements. They are also commonly found in other subordinate clauses such as relative and adverbial clauses. Purpose clauses are formed with the dative preposition plus a /ma-/ nominalization. Finite purpose clauses take pronominal inflection and have further grammaticalized as future tense main clause verbs in Southern Gumuz.

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CHAPTER I

INTRODUCTION

Gumuz is a Nilo-Saharan language/dialect cluster spoken in Western Ethiopia and across the border in southeastern Sudan. This study compares the phonology and selected aspects of the grammar of two major dialects within the Gumuz cluster: Northern Gumuz (NoG) and Southern Gumuz (SoG), both of which are spoken in the Benishangul-Gumuz Region of western Ethiopia. Analysis is based on twenty months of fieldwork in Ethiopia conducted from September of 2007 through April of 2009. Language data was gathered from thirty-three native speakers of Gumuz: fourteen from NoG and nineteen from SoG. The Gumuz language consultants provided a total of sixty-eight texts of varying lengths and multiple genres, thirty-four texts from NoG and thirty-four texts from SoG. In addition, a list of approximately two thousand words was collected from each dialect as well as countless hours of elicited language data. To aid in further comparison, I worked with two additional Gumuz language consultants from Yaso *wereda*¹ eliciting several hours of language data and one text. To date, this is the first description of Gumuz which analyzes and compares the grammar and phonology of the two main dialects - that of the north and that of the south. In addition, this description includes the first tonal analysis of any Gumuz dialect.

This first chapter gives an overview of the Gumuz language, where it is spoken, a description of the dialect cluster, Gumuz culture, history, and migrations. It also includes a review of previous descriptions of the Gumuz language and the various attempts to classify it. Chapter II provides a description of the phonological inventories of NoG and SoG, phonological rules, and a discussion of tonal contrasts as well as tonal downstep and related rules. Chapter III covers the basic shape and phonology of simple noun words

¹ A *wereda* is a political division roughly equivalent to a county in the United States. Ethiopian regions are divided into zones, which are further divided into *weredas*. A *wereda*, in turn, is divided into smaller units called *k'ebeles*.

in Gumuz, relational versus absolute nouns, as well as all known inflectional and derivational morphology on nouns. Chapter IV describes both bound and free pronominals. These include personal pronouns, subject and object pronominals on the verb, possessive suffixes on nouns, as well as interrogative and relative pronouns. Chapter V discusses the possible constituents of both noun phrases and prepositional phrases, the latter of which demonstrates some syntactic properties of a noun phrase. Chapter VI describes nonfinite nominal modification constructions, which demonstrate properties of both compounds and phrases. Chapter VII covers the structure of the verb word, discussing verbal morphology and the relative positions of morphemes on the verb. The grammars of the two Gumuz dialects, NoG and SoG, are most divergent with regard to verbal morphology. Thus, the similarities and differences between the two are discussed in great detail in Chapter VII. Chapter VIII introduces the synchronic process of noun incorporation in Gumuz, as a prelude to the more grammaticalized (and lexicalized) historically incorporated nouns/class morphemes to be discussed later in Chapter IX. Chapter IX describes both the verbal classifiers and class morphemes which historically arose from body part terms in Gumuz. The resultant noun categorizations that arose from these grammaticalized body part terms (some of which are verbally incorporated and others of which form part of NN compounds) are described in detail. Chapter X describes simple clauses found in Gumuz, including copular clauses, expressions of possession, comparative and superlative constructions, intransitive and transitive clauses, and possible ditransitives. Case marking alignment is also briefly discussed. Chapter XI describes the various constructions in Gumuz in which verbs nominalized with /ma-/ are utilized. These constructions include complements, subordinate clauses, progressive aspect, and the negative jussive/imperative forms. Chapter XII covers the various clausal constructions ranging from participant nominalizations to fully finite relative clause constructions. Lastly, Chapter XIII discusses various adverbial clauses including temporal, conditional, concessive, hypothetical/counterfactual, causal, and purpose clause constructions.

1.1. The Gumuz Language

1.1.1. Location

Gumuz is spoken in the Blue Nile valley (and the valleys of its tributaries) of northwestern Ethiopia and the Roseires Dam area of southeastern Sudan (Republic of the Sudan). The Gumuz people number 159,418 in Ethiopia (Ethiopian Census 2007) and approximately 40,000 in Sudan (Lewis 2009). The language/dialect cluster extends as far north as the district of Metemma in the Amhara region of Ethiopia and as far south as the village of Dimt'u in the Benishangul-Gumuz region. It is spoken as far east as the Mandura district to the north of the Blue Nile and as far west as the Roseires area along the Blue Nile in Sudan (Bryan 1945, Jordan 2002). This entire area is not exclusively occupied by the Gumuz people as they share much of the land with the Boro (Shinasha), Bertha, Oromo, Amhara, Kunfel, and Awi² (Awngi speakers). However, the last four groups tend to live in the highlands, while the Gumuz remain in the lowlands.

Figure 1.1 below is a language map of Gumuz, covering areas in both Ethiopia and Sudan. An approximate border of where the Gumuz language is spoken is given in green with red lines indicating major roads and blue lines for rivers. Not much is known, however, about the Gumuz people and language in Sudan (indicated by question marks on the map) other than brief accounts given by Schuver (1883), Bryan (1945) and James (1977). The best approximation regarding their location in Sudan was provided in Bryan 1945 which included place names, longitude and latitude. In addition, Linda Jordan interviewed some native Gumuz speakers at the Yarenja refugee camp in western Ethiopia which is located along the Blue Nile just north of where the Biles and Blue Nile rivers converge. All claimed to be from villages/towns located in and around the Blue Nile Valley of the Sudan up to Er Roseires: Magaanza, Alman, Jarada, and "Riserisi" (Jordan 2002) (presumably the last place name is Er Roseires). Around the turn of the last century, a small group of Gumuz numbering around 1,000 were relocated south to an area just outside the town of Welk'it'e by orders of Menelik, the emperor of Ethiopia (Bender

² The Awi are often referred to as the "Agau" in much of the literature.

1976). A Gumuz man from the area was later interviewed reporting that there were approximately 150 Gumuz from his village there, but he was uncertain as to how many others in the area spoke the same language (Unseth 1989). According to the most recent (2007) census, there are 1,529 Gumuz residing in the Southern Nations, Nationalities and People’s Region (SNNP) of Ethiopia where Welk’ite is located.

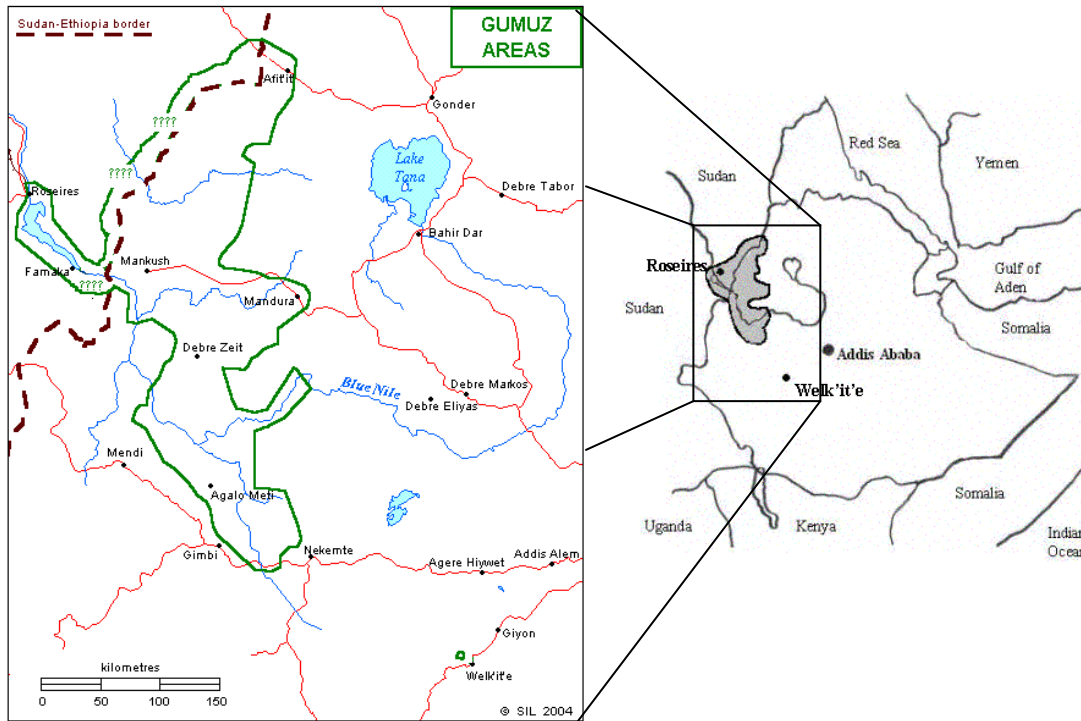


Figure 1.1. Gumuz Language Map³

1.1.2. The Gumuz Dialects

According to the findings of Ahland, et al. (2002) and Ahland (2004), there are at least two dialect centers for Gumuz: that spoken in Kamashi Zone, south of the Blue Nile (Sirba Abay and Agelo Met’i *weredas*) and that spoken in Mandura *wereda*, north of the

³ Country borders on the map in Figure 1.1 are only approximate. It is also expected that the Gumuz do not live within Dinder National Park on the Sudanese border.

Blue Nile. A possible third dialect center (based on historical sound changes and grammatical distinctions) is located in Yaso *wereda* (please refer to Figure 1.2 for a map of zones and *weredas* in the Benishangul-Gumuz Region).⁴ Dialect centers were originally based on intelligibility testing (Ahland et al. 2002), the results of which were later corroborated with historical subgroupings. Ahland (2004) found that the Gumuz dialects spoken in Mandura, Metemma (North Gonder Zone, Amhara Region), north Dibat'e, and Yaso *weredas* formed a subgroup. The first three broke off and formed a further subgroup. The Gumuz spoken in the remaining *weredas* (Guba, Sirba Abay, Agelo Met'i, and Wenbera) have shared retentions which correlate with high mutual-intelligibility scores. The map in Figure 1.3 gives approximate areas where Northern Gumuz (NoG), Southern Gumuz (SoG) and Yaso dialects are spoken. NoG represents the Metemma-Mandura-Dibat'e subgroup with Mandura as the proposed dialect center, while

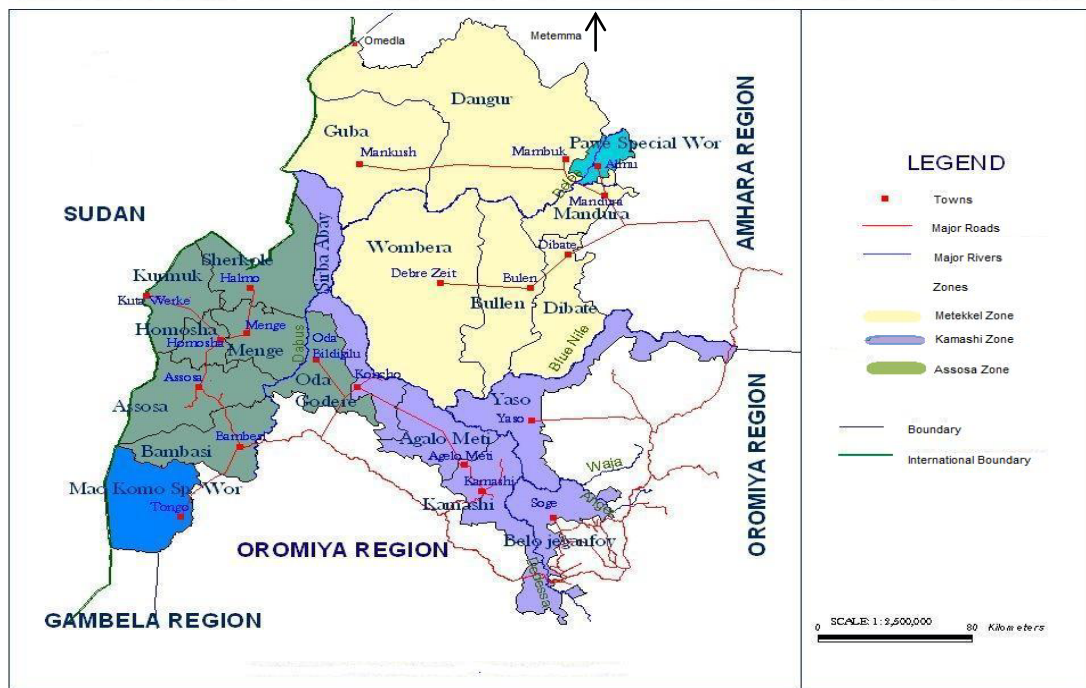


Figure 1.2. Map of Zones and Weredas of the Benishangul-Gumuz Region

⁴ The Gumuz language(s) is mainly spoken in the Benishangul-Gumuz Region of Ethiopia but also spans the North Gonder Zone of the Amhara Region where the town of Metemma is located.

SoG represents the remaining Gumuz *weredas* from the 2004 comparative study (save Yaso).⁵ Thus, SoG includes dialects spoken in Sirba Abay, Agelo Met'i, Wenbera (Wombera), and the southern Guba *weredas*.

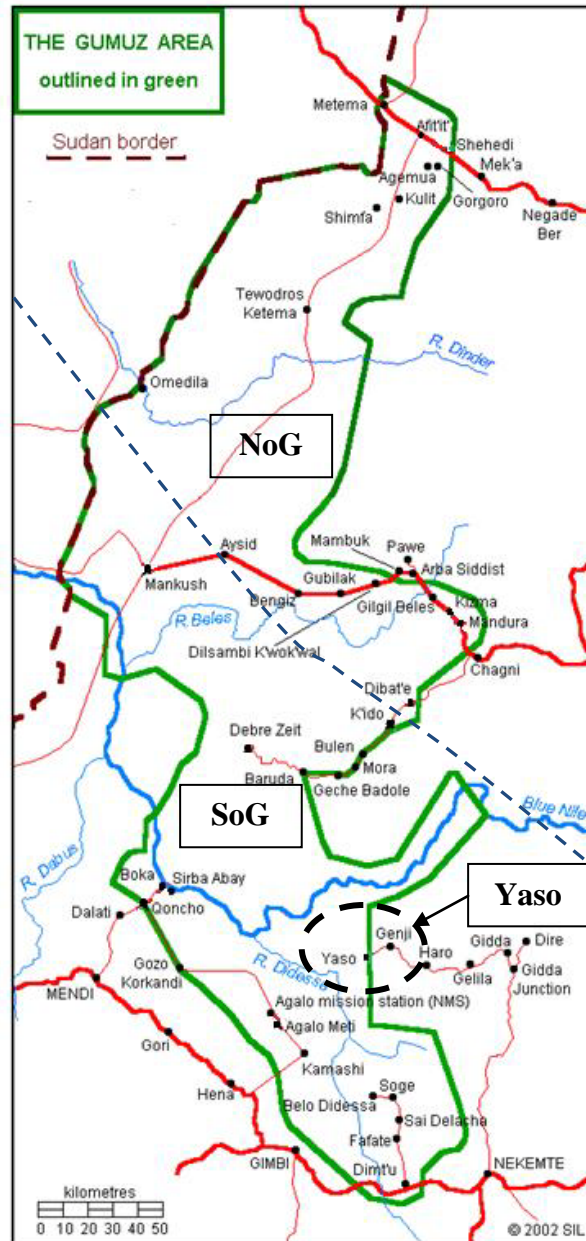


Figure 1.3. Map of NoG, SoG, and Yaso Dialects

⁵ What I label Northern Gumuz (NoG) here is part of the “Eastern Gumuz” subgroup in Ahland (2004).

A phonological inventory of contrastive consonants from Omedila (Omedla) village on the Ethio-Sudan border (Aster Zewde 1983) suggests that the Gumuz spoken in the northwestern part of Dangur *wereda* has a similar consonant inventory to that of NoG; while the Gumuz spoken in the town of Mankush in Guba *wereda* (south and west of Dangur *wereda*) patterns with SoG. Likewise, the Gumuz spoken in the southern half of Dibat'e *wereda* located in the eastern part of the Gumuz area appears to pattern with the SoG dialect while Gumuz spoken in the northern half tends to pattern with NoG. The Gumuz varieties spoken in each of these dialect centers are not mutually intelligible (Ahland et al. 2002). Also, the dialect boundaries are approximate and do not satisfactorily account for all variation within Gumuz. One reason for this is likely due to the fact that Gumuz children are expected to speak the dialect of their father even if the family moves away from the area where the father's dialect is spoken. I encountered one such example of this when recording a conversation between two Gumuz speakers who were born and raised in the same SoG *wereda* (Sirba Abay). Because the father of one of the consultants was originally from a different area, the language consultant maintained these dialectal differences while conversing. The differences were not great enough to impede intelligibility but were notable nevertheless. One might then assume that clan membership would be a better predictor of shared dialect. However, in this particular instance, the two speakers were from the same clan, Dawea, and the same further subdivision called Baandara.

According to one Gumuz language consultant from Kamashi town (SoG), there exist two main clan sections to which all other Gumuz clans belong Dúkunza and Dákádeá.⁶ The consultant offered a shibboleth related to each clan: those from the Dúkunza clan say [áh] for the 3SG pronoun and those from Dákádeá say [áŋa]. According to this consultant, people belonging to the Dúkunza clan live in Mandura, Kamashi and Belo Jegonfoy *weredas* (eastern part of map, Fig. 1.2 and 1.3). People

⁶ I suspect that this major division only accounts for the Gumuz who are more directly related to that language consultant. Also, the clan division name **Dákádeá** means 'people of the lowlands' as **dá(á)**- is a plural (relative) pronoun in Gumuz and **kádeá** means 'lowlands'.

belonging to the Dákádeá clan live in Sirba Abay, the Mankush area of Guba, and Belo Jegonfoy *weredas* (all located in the western part of the map in Fig. 1.2 and 1.3, save Belo). While this does not account for all locations where Gumuz are known to live, it does show that even with a major clan division, there exists geographical overlap.

1.2. Language Consultants and Data Collection

Language consultants were chosen on the basis of whether they were born in a Gumuz-speaking area; how long they lived outside their home area, if applicable (no longer than three years); and whether their parents were native speakers of Gumuz. I selected three main Gumuz language consultants from Mandura *wereda* to represent the NoG dialect. These three consultants provided several texts, a 2000 item word list, and hours of elicited language data. One NoG consultant was born in Mandura town of Mandura *wereda* and is part of the Dú⁺béágwea⁷ clan. The other two consultants are from the Dúgisá⁸ clan, one born in Esits' village, Mandura *wereda* and the other born in Baabits'a village, Mandura *wereda*. Two other language consultants from NoG provided a few hours of elicited data and several texts. One was born in Dangur *wereda* and the other in Mandura *wereda*. The remaining nine language consultants for NoG, two of whom are women, provided texts of various genres. All were born in Mandura *wereda* and were still living there at the time of data collection.

I selected two main language consultants to represent the SoG dialect, both of whom were born in Agelo Met'i *wereda*, Kamashi Zone.⁹ These two main consultants provided hours of elicited data as well as texts. Ten other SoG consultants (one of whom is a woman) provided elicited data and texts as well. These consultants were born in

⁷ Dú⁺béágwea means 'child of the trough for planting potatoes'.

⁸ Dúgisá means 'child of one who is bowlegged (as one who is in her 8th month of pregnancy)'. This is also pronounced Dújasá.

⁹ The clan of one of the two main SoG consultants is Dámosá. However, I do not know the clan affiliation of the second consultant, but his dialect is identical to that of the first consultant who is from the Dámosá clan.

Agelo Met'i and Sirba Abay *weredas*. Six other consultants (one of whom was a woman) only provided texts. These consultants were born in Wenbera, Sirba Abay, Agelo Met'i, and Kamashi *weredas*. The clans represented by these sixteen consultants are Dámosá, Wolasa, and Dáwééja (Baandara).¹⁰ The consultant who provided a 2000 item word list was from the Baandara clan. In addition, for purposes of comparison, I elicited data from two language consultants born in Yaso *wereda*, one man and one woman. The man was from Dábook'á clan and the woman from Dálúngwa clan. I also recorded one text from the male consultant.

As mentioned previously, thirty-four texts were collected for each dialect (NoG and SoG). All were interlinearized. These texts represent hortatory, personal narratives, folktales, expository, and procedural genres. The socio-cultural topics of the texts include seasonal events, marriage/family practices, legends, and games.

1.3. Gumuz People

Bender (1978) observed that the Gumuz engaged in hoe/grain agriculture and were largely sedentary. Today, many Gumuz engage in hunting, pastoralism, fishing, gold-mining, and slash and burn agriculture. Hunting has been part of their culture for at least two hundred years as Salt (1810: 378-81) reports that the Gumuz hunted and ate elephant, rhinoceros, [cape] buffalo, deer, snake, rat, or whatever they could procure.

The Gumuz are monogamous and patrilocal, but practice matrilineal descent (Abbink 2003:916). However, the Gumuz can have more than one wife, though this practice is not very common (Irwin 1968, James 2002). One cultural practice that has been common among the Gumuz from at least the 1800's (Salt 1810) through the more recent present (James 2002) is sister exchange. When a Gumuz man would like to marry, he and a man from another clan exchange sisters as wives. This sister exchange has been practiced through clan exogamy in every Gumuz area of Ethiopia except *Guba*, an area bordering Sudan where the Gumuz have been converted to Islam (Ahland et al. 2002).

¹⁰ Some consultants who gave *Dáwééja* as their *HC* (Amharic [zər] 'seed, lineage') also gave *Baandara* as their *joka* 'clan, seed'. It is not clear, however, which is the larger group.

Now, however, the practice of sister exchange is against Ethiopian law and, as a result, is becoming less common.

1.3.1. Gumuz Language Names

The Gumuz language and people group has been designated by a variety of names, imposed both by outsiders and the Gumuz people themselves. Many of these autonyms are clan names (of various levels) such as: Mendeya, Debatsa, Debuga, Dehenda, Gunza (Dakunza, Dukunz), Domola, Funj¹¹ (Funyi), Disoha, Jamara, etc. (James 1986, Lewis 2009, Ahland et al. 2002). The name *Gumuz* is believed to be related to the *Gunza* clan mentioned above (Bender 1979), but other sources are possible. For example, James (1981:26) suggests the word *gunza* ‘man’ (and not only the name of a clan) may be the source. James also suggests that another possible source for the name *Gumuz* is the 16th century kingdom of Ganz located along the Blue Nile in Ethiopia. Other autonyms include Sese (Saysay),¹² Sai, and Bega¹³ (Wallmark 1981). Monikers imposed on them by outsiders, or exonyms, are generally considered pejorative like *Shankalla* (*Shanqilla*, *Shank’illa*) used by Ethiopian highlanders, which has come to mean ‘black slave’ (a general term referring to all dark-skinned peoples) (Pankhurst 1977); and *Hamej* used by Arabic speakers on the Sudanese border, which means ‘ignorant serf’ (Cerulli 1956:14) or, according to James (1981:27), simply “non-Funj”.

¹¹ The Funj are a group of people from Sudan with whom other people groups also claim ancestry, namely the Berta (Lewis 2009). This term is also related to the “Dar Fung” to whom Bryan (1945) makes reference.

¹² James (1977) reports that the name *Sese* comes from the neighboring Oromo language and is thus an outsider name for the *Dukunzilla* clan. I suspect, however, that *Sese* refers to the larger section of clans called *Dákádeá* (see Section 1.1.2).

¹³ Unseth (1985) reports that this name is not used in the area south of the Blue Nile. According to my own knowledge, the name *Bega* is most likely related to the word for ‘people/person’ in Gumuz, **ḡaga**, as the Gumuz often call their language **sa-ḡaga** (mouth-person). Wolde-Selassie Abutte (2004) also found that “Bega” was a self-name for the Gumuz living in Mettekel Zone, north of the Blue Nile. In addition, the area farthest north where Gumuz is spoken was often referred to in the past as *Bega-midir*, which is a compound comprising the Gumuz word for ‘people’ and the Amharic word for ‘land’. One can compare this with the neighboring *Agau-midir* (Agau-land).

The name *Gumuz* was first applied to the people and language of the Roseires area of Southeastern Sudan by Bryan (1945) in her study of the languages spoken along the Ethio-Sudan border. Bender (1976) also used the name *Gumuz* to refer to one specific variety of Gumuz spoken in Metemma near the border of Sudan on the northern boundary of the entire Gumuz area. However, because of the abundance of autonyms, Bender (1976:62) concludes, that “as a cover name, *Gumuz*, seems a reasonable choice”. Since that time, most researchers have referred to the people and language as *Gumuz*. Even the Gumuz of the *Sese* dialect area south of the Blue Nile now refer to their language as *səGumuz* ‘Gumuz language’ as is indicated by the Gumuz title of Uzar’s (1997) introductory language course.¹⁴

1.3.2. Gumuz History and Migration

There is reason to believe that the ancestors of the Gumuz may have been some of the earliest inhabitants of the region north of the Blue Nile river in Ethiopia. Beke (1845:91) claimed that the Agau people were “the original inhabitants of Abyssinia”, but the Agau themselves relayed to him that the “Shankalas” inhabited the land before they invaded and forced the Gumuz into the Blue Nile valley. Other sources suggest that the Gumuz may have inhabited the areas of Gojjam and Metekkel as long ago as the 15th century. In the annals of the Ethiopian warrior king, Yishaq (1413-30), Amharic¹⁵ verse written in his honor refers to the ጎሙን “Goman” or “Gweman,” the “Shankala” who were forced to pay tribute to him (Taddesse 1982:6). However, because of the existence of other “Shankala” in the area, namely the Kwama or Koma (who presently live far to the south of this area), it is difficult to say that this reference is referring to the Gumuz of today.

The Gumuz have suffered a long history of slavery which has contributed to many forced migrations. Incidents of outsiders raiding the Gumuz area for slaves may

¹⁴ That the Sese speakers have accepted this term may not be very surprising if, in fact, *Gumuz* is related to the term *Dukunza*, ‘son of Kunz’, a larger clan associated with Gumuz people north of the Blue Nile.

¹⁵ Amharic would have been the language of the rulers at the time.

date back to ancient times. According to Grottanelli (1948: 285), the ancient Egyptians had *Gumusa* slaves. Records show that the highland *red* or light-skinned peoples have been raiding the *black* areas of Ethiopia and Sudan for centuries (Pankhurst 1977). The highlanders' intent was to seize land and slaves. Thus, the Gumuz have frequently been forced to leave their land and resettle in other parts, usually in the less desirable river valleys. According to James (1977:10),

The Shangalla (or Gumuz) at Didessa Bridge ... have told me that they settled there for safety from the Arabs under the protection of Moroda Bakare, the [Oromo] ruler of northern Wellega at the turn of the century, who accepted [the Ethiopian emperor's] rule.

Ahmad (1999:441) suggests that from 1900 to 1935 was "the peak of the Amhara-Agew slave raiding activities in Gumuz country west of Damot and Agaumedir".¹⁶ These slave raids forced the Gumuz to flee to Sudan where the British subsequently set up a regional anti-slavery headquarters at Roseires. The Gumuz people who were perhaps furthest displaced as a result of these slave raids were those who were relocated to Welk'it'e as farm workers.

Not only did the native highland peoples invade the Gumuz, but near the beginning of the twentieth century the Italian fascists also forced them to leave their land. According to Irwin (1968:131), the *Saysay* people considered the Wellega bank as their ancestral home but were forced by the fascists to flee to Gojjam on the north side of the Blue Nile. They later returned to Wellega, however, "when their land became too poor to support crops and flocks".

More recent Gumuz migrations appear to be not by force. Unseth (1985:93) reports that "many of the Gumuz in Wellega have moved there from the Wembera Metekel vicinity in living memory". More recent reports had similar findings. Ahland et al. (2002:xxiii) reported that the Gumuz in the lower Diddessa valley had only recently arrived there. The people dated their arrival in the area to the 1970's (Ethiopian calendar, or late 1970's or early 1980's of the Gregorian calendar), claiming that they had moved

¹⁶ Literally, this means "land of the Agau" which comprised part of Gojjam and the land to its east.

from various locations in the Agelo Meti, Yaso, and Kamashi *weredas*. In 2008 I arrived at the village of Boca Abay (Sirba Abay *wereda*) only to find that everyone in the village had moved to the other side of the river for reasons unknown.

There is also evidence that the Gumuz had a falling out with their Funj (see footnote 11) allies near Guba on the Sudan border, which caused some of the Gumuz to leave for the north and northeast near the beginning of the twentieth century (James 2002).

Thus, the constant resettlement of the Gumuz has resulted in people from different clans becoming geographically contiguous as well as the converse: people from the same clans have resettled to areas no longer geographically contiguous (Unseth 1985).

1.4. Literature Review

1.4.1. Early Descriptions of the Gumuz Language

The earliest literature dealing with the Gumuz language was that of Salt (1810) who, in his travels through Ethiopia, gathered word lists from various ethnic groups. Beke (1845) also wrote on the languages of “Abyssinia,” providing vocabulary from the “Shankalla of Agaumider”. Conti Rossini (1919-1920) later published a book on the people of western Ethiopia in which he provides the vocabulary of *Gunza*, a variety of Gumuz spoken in Ethiopia along the north bank of the Blue Nile River. However, Rossini’s data was a combination of data from d’Abbadie (1890) and the two previously mentioned 19th century sources, Beke and Salt. The locations where the language data were gathered are not entirely clear.

Years later, Bryan (1945) conducted a study of all the languages along the Ethiopia-Sudan border, referring to the Gumuz language spoken in the Roseires area of Sudan. She confirmed that the vocabulary of Conti Rossini’s *Gunza* and that of *Gumuz* are “practically identical” (1945:191). She refrained, however, from genetically

classifying the Gumuz language and what she refers to as the other “Northern Dar Fung”¹⁷ languages fully, as the available linguistic material was too limited at the time.

1.4.2. Later Descriptions of the Gumuz Language

Fleming (1960), Irwin (1966), and Bender (1965) all collected word lists of various Gumuz varieties. Forslund (1969) produced some unpublished notes on a variety of Gumuz called *Sese* around the same time period. Irwin, an American Peace Corps volunteer, classified Gumuz verbs into three types based upon supposed infixation and suffixation patterns (1966:16). He also described the language as having five tenses: *future*, *present-past*, *completed past*, *present anticipation*, and *present continuous* (1966:2-21). Irwin was the first to attempt any type of comparison among Gumuz varieties. Comparing vocabulary between *Gumuz* and *Sese*, he found only 55% cognates (1966:27). Regarding a related Gumuz clan, he observed that “the Dukunz speak a mutually intelligible dialect with the Saysay and recognize common ancestral descent” (1968:133). However, the most notable and in-depth of analyses of the Gumuz language were published by Bender, Unseth, Uzar, and Innocenti in the years following.

1.4.2.1. Descriptions by M. Lionel Bender

Bender devoted a great amount of study to the classification of Nilo-Saharan languages and was the first to produce an authoritative published source on the Gumuz language (1979). Bender published other works that also refer to the Gumuz language and people (1975, 1976, 1978, 1981, 1984, 1996), but the majority of these studies were dedicated to the classification of Nilo-Saharan languages, as will be discussed in more detail in the following section. In his description of Gumuz, Bender discusses the Gumuz people, the classification of their language, and the phonology, morphology, and syntax of four Gumuz varieties. In the latter half of the article, he provides a comparative

¹⁷ “Dar Fung” is a province of Sudan where these languages were spoken.

lexicon including data from Sai, Sese, Gojjam, Kokit, Disoha, and Hamej¹⁸ speakers. Bender 1979 was thus the first comparative study of geographically noncontiguous Gumuz dialects. In this comparative study, Bender proposed a five vowel system for the Gumuz variety in Kokit and compared it to Irwin's six vowel system for Sese. The two vowel analyses differed only by an additional schwa that Irwin posited. Bender also proposed an inventory of thirty-three consonants for his "Sai" data (the variety of SoG spoken in Kamashi and Belo Jegonfof *weredas*). Comparing consonant inventories, he noted that "there is little difference among my Sai, Disoha, Kokit, and Metemma elicitation" (1979: 40). Bender also noted various alternations that occur in the language, namely *d' ~r*, *l ~r*, *r ~r* and *k' ~k*. With regard to tone, Bender states "lexical tone has not been found, but tone may be significant grammatically" (1979:42). Throughout the article, Bender provides comparative paradigms from independent pronouns and person agreement markers to various voices and tenses.

1.4.2.2. Descriptions by Peter Unseth

In the 1980's, Unseth conducted a sociolinguistic language survey of Gumuz in which he collected 99-item wordlists (prepared by Bender) in 11 different Gumuz villages in the vicinity of the Blue Nile and to the south of it. Based on a formula applied to lexicostatistical data, he concludes that "the Gumuz language spoken in this area has a significant degree of homogeneity and mutual intelligibility, despite the wide variety of language names" (1985:104). Although Unseth compared speech forms from a variety of villages, all but one of these villages were located south of the Blue Nile. Thus, the northern varieties of Gumuz were not included in this study. Unseth did, however, compare his word lists with those of Bender (1979) in the northern areas and concluded that Gumuz was not so homogeneous.

¹⁸ According to Bender, there is no "Hamej" language. It is a pejorative appellation for black people, similar to *Shankalla*. However, one of the speakers Bender interviewed from Kokit identified himself as such, and Bender therefore uses this term to distinguish between any variation between this speaker and the other from Kokit who does not consider himself "Hamej."

Some years later, Unseth published a brief article on the phonology of Gumuz as spoken in the village of Sirba located in Sirba Abay *wereda* (1989). Unseth proposed a consonant inventory of thirty-two consonants with four places of articulation for stops: labial, alveolar, palatal, and velar. Unseth limited the topics of this paper to 1) labialized velar stops, 2) tone, 3) syllabic nasals, 4) velar and palatal nasals, and 5) glottal stops.

Unseth's phonological analysis differs from Bender's in regard to the labialized velars, tone, and the palatal nasal. While Bender tentatively analyzed labialized velars as a sequence, Unseth argues that the syllable structure of Gumuz makes it necessary to analyze them as single segments with secondary articulations, instead of a sequence. He then suggests that these labialized velars are actually allophones of their nonlabialized counterparts, as these labialized velars are found only morpheme-finally. As additional evidence for this latter claim, he suggests that positing labialized velars as phonemes also has little support in language history. Citing Bender (1983:285), he notes that the (supposedly) closest genetic relative to Gumuz, proto-Koman, has "no convincing case for proto-labialized consonants."

Possibly the most significant contribution that Unseth (1989) makes is his evidence for lexical contrast in tone. Previous researchers had recognized that Gumuz was tonal (James 1977:13, Bender 1979, Aster 1983); however, Unseth was the first to provide published evidence for lexical tone.¹⁹ Although Aster Zewde (1983) in her unpublished paper on Gumuz phonology posited three distinct levels of tone, Unseth (1989) only distinguishes between high and low. Unseth also acknowledges that Edith Uzar, the wife of Henning Uzar, researched tone and posited three distinct levels (1989:625). In addition to his findings on lexical tone, Unseth also observed a strong correlation between stress and high tone in Gumuz. However, he adds that "though tone and stress are obviously related, stress is (at least partially) determined by tone, not vice versa" (1989:625).

¹⁹ It should be noted that he had previously presented one minimal pair to provide evidence for lexical tone in his dialect survey of Gumuz (1984:98).

1.4.2.3. Descriptions by Henning Uzar

The Reverend Henning and Edith Uzar, missionaries with the German Hermannsburg Mission or ELM, began learning and researching the Gumuz language around the time that Unseth conducted his dialect survey. In 1989, the Reverend published an article on the phonology as well as the tense/mode/aspect system of the variety of Gumuz spoken where he was working, *Sese*. Because the consonant phoneme chart of Unseth (1989: 617) was provided to him via personal communication, there is practically no difference in the consonant phoneme chart from Unseth's article.

Uzar agrees with Unseth's analysis in regard to the labialized velar stops, analyzing them as single segments which are allophones of their nonlabialized counterparts (1989:354). However, he suggests modifying the morpheme-final rule to state, "labialized velars occur in morpheme-final position except before rounded vowels." He further asserts that this labialization causes vowel rounding when a suffix is added, positing the following rule (1989:355):

$$C^w + [\text{ə}] \rightarrow C\text{ɔ}, C\text{u}$$

As to the syllable patterns of Gumuz, Uzar demonstrates the possible syllable nuclei, syllable structures, and number of syllables within a single word. Like Unseth's analysis (Unseth 1989:625-628), Uzar shows that nasals often occupy the syllable nucleus (1989:366). The following are the possible syllable structures he provides with V indicating the syllable nucleus and S indicating sonorant: V, CV, CVC, CVSC, VC, and CSV (1989:367). It should be noted that syllabic nasals only occupy the V and VC patterns. Lastly, Uzar explains that while nouns usually consist of only one or two syllables, verbs generally consist of three or more. He documents verbs as long as eleven syllables (1989:367, 368).

With respect to the tense system of Gumuz, Uzar documents a *remote past* tense which had not previously been described. Also, he provides evidence that Irwin's *present-past* and *past completed* tenses could very well be combined into one tense. He further notes that *present continuous* is better interpreted as an aspect and "*present anticipation* is not at all a tense" (1989:370).

Because both Irwin and Uzar had analyzed the same variety, Sese, Uzar adds as a disclaimer that “there remains the possibility of non-trivial dialectal differences in verb morphology” within Gumuz (1989:370). He reduces Irwin’s three verb types to two, labeling them *split* and *unsplit*.²⁰ The root in the *unsplit* type stays intact while the root in the *split* type is interrupted by the first part of a discontinuous suffix, *-aka*, and is then followed by the last part of the verb root (1989:371).

Uzar also provides data illustrating the future tense, remote past, as well as the *perfective, frequentive, and continuous* aspects. In addition to tense and aspect, he provides examples of *jussive, conditional/irrealis, interrogative, and negative* moods. Lastly, Uzar provides a paradigm of *person markers* which seems to differ slightly from those of Bender (1979).

Uzar (1997) is an unpublished introductory course for the Gumuz language. Even though the intended audience is not linguists, the booklet is somewhat of a linguistic description of the language, complete with a consonant phoneme chart, phonological rules, morphology and syntax. In this course booklet, Uzar revises his consonant inventory to include labialized segments, perhaps due to Unseth’s comment that he believed the labialized velars were diachronically moving toward phonemic status in the language. The revised analysis includes thirty-eight consonants.

Like Unseth, Uzar (1997) only posits two levels of tone for the Sese (SoG) variety. He acknowledges, however, that sometimes a middle tone can be heard, but he maintains that “middle tone seems to be not phonemically relevant (it is only a predictable phonetic variant).” He subsequently gives examples of lexical items that follow four “tone patterns:” *high-high, low-low, high-low, and low-high* (1997:10).

As to comparative work with Gumuz dialects, Uzar provides a comparative chart of numerals from the Gumuz spoken in Agelo Meti and Sirba Abay. He also reports that the Gumuz in these two areas rely extensively on the numerals of a neighboring Cushitic language, Oromo, especially for numbers higher than twenty (1997:36).

²⁰ While Irwin’s *suffixing* and *infixing* verbs were likely better labels, I believe that neither of these represents the verb morphology, as ‘split’ verb stems comprise two morphemes, instead of merely one.

1.4.2.4. Contributions by Colleen Ahland

Ahland (2004) provides an historical analysis of Gumuz spoken in eight locations within Ethiopia (based on Ahland et al. 2002), and explores the relationship between historical change and intelligibility across these Gumuz varieties. This work argues that the less innovative the language variety, the more likely other varieties of the language will be able to understand it. Using the comparative method with lexical items from these eight locations, Ahland (2004) proposes an historical tree for Gumuz, demonstrating that Metemma, Mandura, and North Dibat'e locations form an historical subgroup.

(Ahland 2010a) demonstrates that in the Mandura variety of Gumuz, the putative “split” (Uzar 1989, 1997) or “infixing” (Irwin 1966) verbs do not comprise merely a single root after all. Rather, these verbs have incorporated nouns which create a complex verbal stem. These incorporated nouns serve many functions in Gumuz and, in some cases, they have grammaticalized as classifiers in a process similar to that described by Mithun (1986:385). This was the first documentation of a system of predicate (verbal) classifiers in the languages of Africa.

1.4.2.5. Mandura Gumuz Description by Marco Innocenti

Marco Innocenti (2010) is a brief grammar of the Gumuz language as spoken in the Mandura *wereda*. The grammar includes chapters on phonology, nouns, personal pronouns, determiners, prepositions and adverbs, coordinating conjunctions, adjectives, pronouns and interrogative adverbs, numbers, case and complements, verbs, deverbal nouns, and subordinate clauses. Innocenti posits six vowels and contrastive vowel length for all but /ə/. He includes thirty-eight consonants (2010: 13-20). No tonal analysis is included although marking of tone is at times attempted.

1.4.3. Other Contributions to the Study of the Gumuz Language

1.4.3.1. Aster Zewde

In the early 1980's, Aster Zewde, a student at Addis Ababa University, gathered data on Gumuz for a senior essay on phonology (1983). Her data were gathered in Guba *wereda*, Omedla village and in her analysis there are thirty-eight phonemic consonants and five phonemic vowels. Aster (1991) is based on data gathered in Metekkel Zone and proposes a phoneme inventory of five vowels and thirty-nine consonants including *uvular* consonants.

1.4.3.2. Aklilu Yilma

Aklilu (2002) is a comparative study on phonological variation between the dialects of the following areas: Mandura, Guba, Bulan, Metema, Dibat'e, Mambuk, Wembera and Obo Abay. This study also compares independent pronouns, nominal morphology and verbal morphology of these varieties. According to Aklilu, there is a different strategy for marking definiteness in each of the following Gumuz areas: Mandura, Sai, Sese, and Obo Abay. There are also varying strategies across varieties to mark plurality across Sese, Sai, Mandura, and Kokit. This study noted nominative case markers in Metemma and cites Zelealem (1993) as reporting another nominative case marker distinct from that of Metemma in the Dibat'e variety. In addition, Aklilu provides a number of comparative charts for independent pronouns, numerals, verb subject agreement, tense markers, as well as aspect markers.

1.4.3.3. Ehret

While in terms of Nilo-Saharan linguistics, Christopher Ehret is best known for his classification of the Nilo-Saharan super-family (2001)(to be discussed in the following section), within this same work, he has also contributed a small portion specifically on the historical study of Gumuz. In an attempt to reconstruct Proto-Nilo-Saharan pronouns, he reconstructs some of the pronouns of the subfamilies within Nilo-Saharan, including Gumuz. Using a teleological approach to reconstruction, starting with

the knowledge of the various Nilo-Saharan pronouns, Ehret proposes a pre-*proto-Gumuz* pronoun set which reflects the forms of both modern-day spoken *Gumuz* (of the *Sai* variety)²¹ and the broader Nilo-Saharan super family.

1.4.3.4. Ahland et al. (2002)

In an attempt to conduct a more comprehensive study of intelligibility, Michael Ahland, Linda Jordan and I conducted a study of the *Gumuz* language as spoken in eight *Gumuz* locations, both to the north and south of the Blue Nile (2002). In this report, the *Gumuz* locations are referred to by the following *wereda* names (except for *Dibat'e wereda* which is divided into north and south): Guba, Mandura, North *Dibat'e*, South *Dibat'e*, Wembera, Sirba Abay, Agelo Meti, Yaso, and Metemma. Additional investigation was carried out in the Yarenja Refugee Camp in an attempt to compare the *Gumuz* language of Sudan with that of Ethiopia. The study also involved sociolinguistic questionnaires about language and culture. Word lists of approximately 320 items were also gathered in eight of the *weredas* along with a few grammatical paradigms.

The goal of Ahland (2002) was to assess the level of comprehension across the various *Gumuz* locations in order to make practical recommendations for language development work in *Gumuz*. The study found the following varieties would group together under Agelo Meti as a communication center: Guba, North *Dibat'e*, Wembera, the Sudanese of the Yarenja Refugee Camp, Metemma, and Yaso. The one variety that would not be part of the Agelo Meti communication center would be Mandura (2002:1).

1.5. Genetic Classification

From the time that *Gumuz* came to be recognized in the linguistic literature, scholars have debated its classification. Bryan (1945) was the first to comment on *Gumuz's* possible classification, stating that although “the linguistic material available is too slight for any attempt at classification, ... comparison of vocabularies ... shows that there are certain words in common between the languages of this group [i.e. “Northern

²¹ “*Sai*” corresponds roughly with the variety of *Gumuz* spoken in Kamashi *wereda* of the SoG area.

Dar Fung” languages]” (1945:190,191). She thus used what she called an “arbitrary double method of classification, partly linguistic partly geographical,” admitting this system was “unsatisfactory” (1945:188). After Greenberg’s initial classification of African languages (1963), Bender (1991) and Ehret (2001) proposed competing classifications of Gumuz and Nilo-Saharan as a whole as more language data was made available.

1.5.1. Greenberg (1963) Classification

Using a method of mass comparison, Greenberg (1963) was the first to propose Nilo-Saharan as one of the language super-families in Africa , based on 29 pieces of grammatical evidence He proposed the subgroupings for NS found in Figure 1.4.

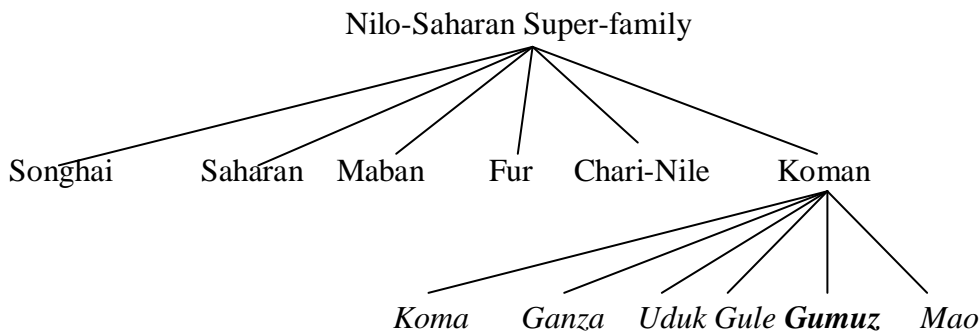


Figure 1.4. Gumuz within the Nilo-Saharan Tree (Greenberg 1963)

1.5.2. Bender Classifications

After having collected additional data on Gumuz, Bender (1981) concluded that Gumuz appeared to be quite divergent from the other so-called *Koman* languages and thus even began to question the subgrouping he had tentatively proposed in 1976. Commenting on its lack of similarity to “Koman” languages, Bender (1979) states,

I found 10% or less common basic lexicon between Gumuz and Koman languages in one study...and 8% or less in another. Comparisons with other languages are even weaker. Grammatically,

the case is not much better. At this point, Gumuz may be best considered a possible isolate in *Sahelian*²² -- perhaps not even a Sahelian language at all (1979:40).

Nevertheless, Bender (1983:259) suggests that “there is a greater chance that Koman is part of a larger family under Nilo-Saharan, ‘Komuz,’ consisting of Koman and Gumuz”. Bender (1991) later proposes the classification seen in Figure 1.5. He labels as “isolates” the first four languages that he proposes split from Proto-Nilo-Saharan. The five language families from left to right in Figure 1.4 (starting with Maban and ending with Berta), he labels “satellites.” The remaining group of languages, which includes Gumuz, he labels “core.” He clarifies, however, that these names are for “descriptive convenience and are not to be taken too literally” (1991:4). Bender (1991) recognizes that there are still problems with trying to classify the Gumuz language, and ultimately concludes that “It is embarrassing that the assumed natural families (Central Sudanic, East Sudanic, Komuz) show some inconsistencies” (1991: 5).

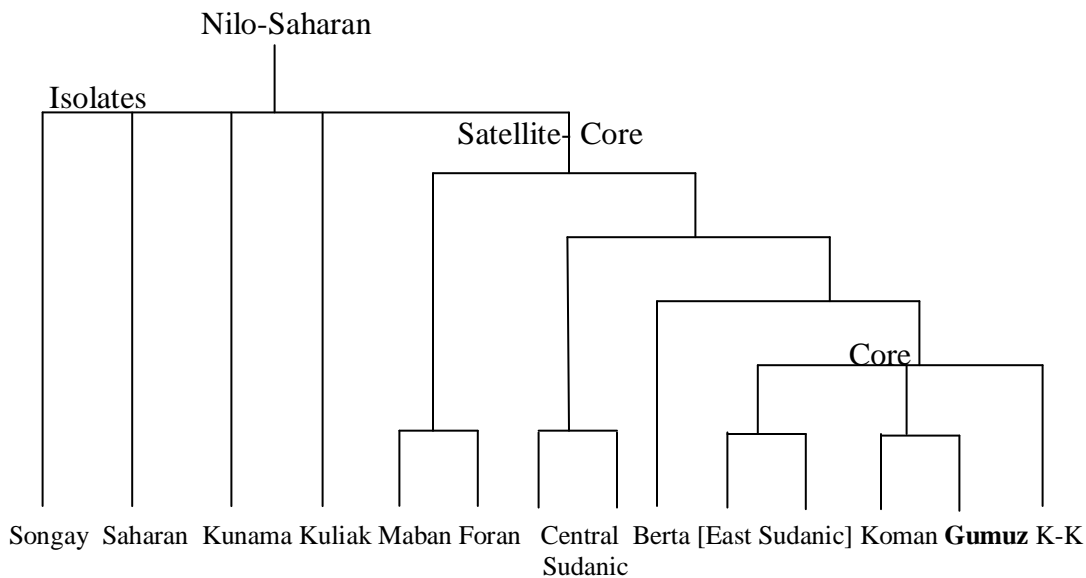


Figure 1.5. Bender 1991 Classification

The most recent classification by Bender (1996a, 2000) no longer recognizes “Komuz” as a family, concluding that Gumuz and Koman are “quite distinct, not

²² *Sahelian* is sometimes used in place of *Nilo-Saharan*.

showing a special relationship” (2000:56). Figure 1.6 shows Bender’s most recent classification of Gumuz within Nilo-Saharan, with Koman and Gumuz as separate branches off of the “Core” branch.

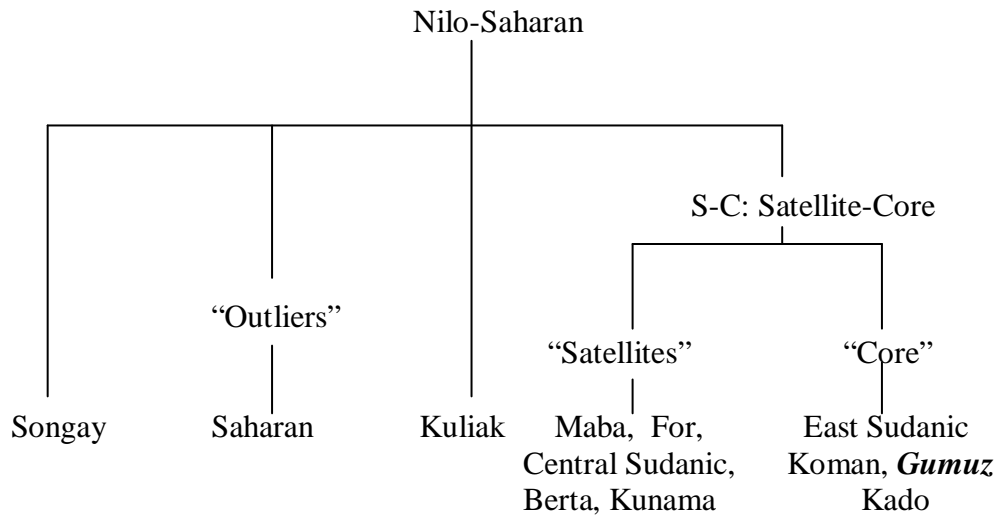


Figure 1.6. Bender 1996 Classification

1.5.3. Ehret Classification

In 1989, Christopher Ehret published an alternate subclassification of Nilo-Saharan from that of Bender (1983) and (1996). The main difference between the two competing classifications is that Ehret’s is based on binary divisions and focuses primarily on one kind of indicator, stem innovations in basic vocabulary. Bender, on the other hand, bases his classifications on the classical comparative method, considering both sound change and analogy in the lexicon as well as the morphology (1996a:19). In 2001, Ehret proposed a more complete classification of Nilo-Saharan. However, his classification of Gumuz remained the same. In both (1989) and (2001), he proposes that the first major division was between Sudanic and Koman, the latter of which comprises Western Koman and Gumuz (Figure 1.7).

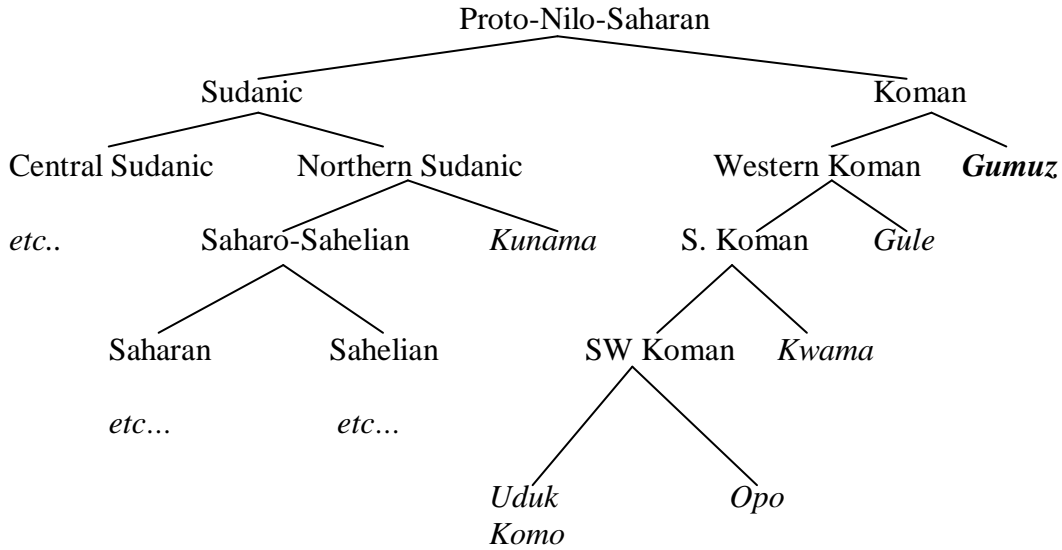


Figure 1.7. Ehret Classification (2001)

In his later work Ehret (2001) asserts that semantic innovation sets off Koman in its own primary branch, providing the example of the root *dweɾ ‘to put together.’ For example, the Sudanic reflexes of this protoform exhibit a reference to “the loose bringing together of a large number of things”, while the Koman reflex refers to quite the opposite meaning: “the firm joining together of two things” (2001:87). Ehret, however, admits that “the postulation of a two-way primary division...nevertheless remains far less well-established than the subsequent branchings in the subclassification” (2001:87). But he refers to further evidence of the proposed two-way original split from Proto-Nilo-Saharan (PNS). Greenberg’s ‘movable *k^h- prefix is purportedly found everywhere but in the Koman languages.²³ He argues that this prefix is an innovation for Sudanic. As a further comment on Gumuz as it pertains to the Koman family, Ehret writes,

The two primary branches of Koman, Gumuz and Southern Koman ... stand together in their semantic innovations against various combinations of the Sudanic subgroupings. Because the available Gumuz evidence is meager, just six such cases all drawn from the core vocabulary can be cited. But their testimony is consistent: one demarking Koman from all of Central Sudanic, Kunama, Saharan

²³ It should be noted here that Bender (1989) disagrees with this assertion stating, “Ehret states that ‘movable k’ is not found in Komuz; my own conclusion was that Komuz retains the k- prefix” (1989:18).

and Eastern Sahelian (root 1483); one setting the Koman branch off from Kunama, Saharan, For, and Eastern Sahelian (root 1157) and another distinguishing it from Kunama, Saharan, and Eastern Sahelian (root 921); still another matching Gumuz and Southern Koman as against Central Sudanic and Eastern Sahelian (root 14); and a fifth example excluding Eastern Sahelian and Saharan (2001:86).

1.5.4. Blench Classification

Most recently, Blench (personal communication) has proposed yet another classification of Nilo-Saharan languages. In comparing Nilo-Saharan roots, he has determined that what he labels “Central African” seems to share common roots, and that these roots are lacking in Bertha, Kunama, Shabo, the Koman languages, and Gumuz. He has also determined that there are more cognates found within Gumuz and Koman and the previously presumed isolate, Shabo. Figure 1.8 displays his most recent Nilo-Saharan tree.

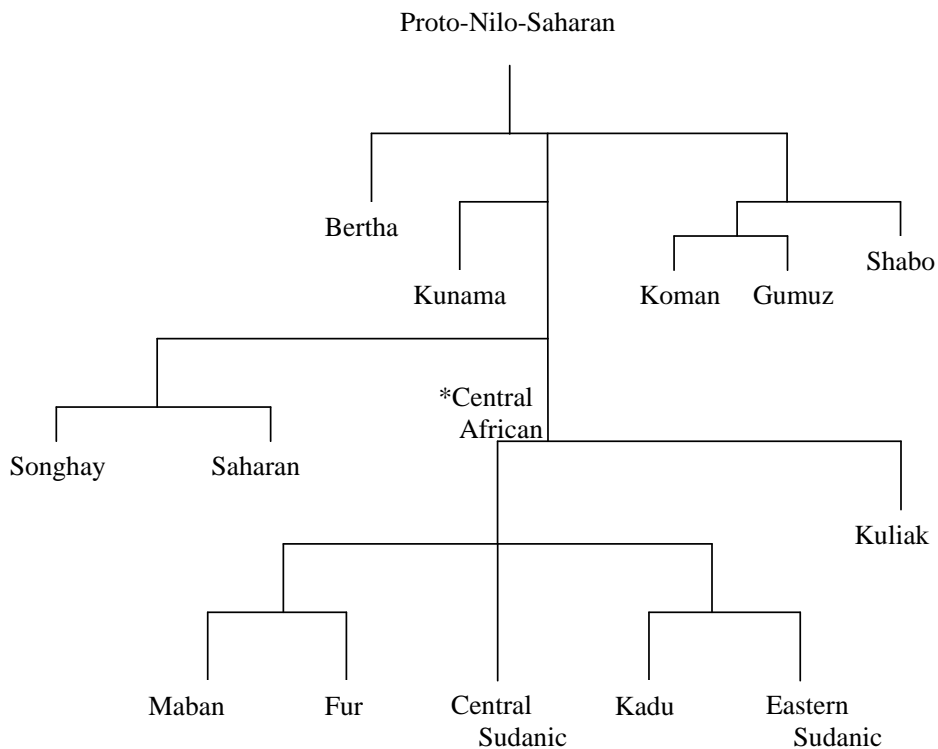


Figure 1.8. Blench 2012 Classification

1.5.5. Gumuz as a Possible Isolate

Bender was the first to cast doubt on Gumuz's status as a Nilo-Saharan language (1979:40) (see section 1.4.2 above). He later wrote in an article for *Encyclopedia Aethiopica* that Gumuz may be an isolate (2005: 916):

The intriguing possibility remains that [Gumuz] may not be Nilo-Saharan after all, which means that it is an African "isolate" not belonging to any of the great Africa phyla and perhaps representing an ancient phylum now otherwise extinct.

Mikkola (1999), a both quantitative (statistical) and qualitative study, claims that there are serious doubts about Gumuz sharing any significant lexical elements with Nilo-Saharan. Regarding these doubts Mikkola comments, "...the inclusion of questionable units, at least Songai and Kuliak, plus Gumuz, could not be substantiated" (1999.:130). He provides a tentative Nilo-Saharan classification with Gumuz as a possible independent family outside of Nilo-Saharan.

Dimmendaal (2008:843) raised doubts about Gumuz and the Koman subfamily, commenting that their genetic status is "debatable" as they are lacking some of the more widespread Nilo-Saharan morphological markers. But he concludes that their "debatable" status is likely due to lack of data for these languages. Dimmendaal (2011: 297) later refers to Gumuz as an "isolate".

(Ahland 2010b) revisited the question of Gumuz as a possible language isolate, concluding that it is most likely a part of the Nilo-Saharan (N-S) super family. Gumuz exhibits eleven of the forty-six retentions for N-S proposed by Greenberg (1963) and later modified by Bender (1989, 1991). Despite the relatively low number of N-S retentions, the classifier system in Gumuz may be a link to some of the more pronounced typological features of Nilo-Saharan such as number-marking, case-marking, and Greenberg's 'movable k'. While Dimmendaal notes that Gumuz lacks the archaic typological feature of tripartite number marking (singulative, plurative, and replative) (2000, 2008), Ahland (2010b:15-17) argues that there is reason to believe the tripartite number marking system is related to the Gumuz classifier system, as these classifiers can

also indicate number. In addition, the two most widespread accusative case markers in N-S (Dimmendaal 2010:30), reconstructed as *-kò (Ehret 2001:203) and *-si (Ehret 2001:205),²⁴ may be related to two of the verbal classifiers in Gumuz. Lastly, the class morpheme /kʷá-/ (CL1:HEAD) has a similar distribution to and appears to be cognate with Greenberg’s ‘movable k’ prefix (1963, 1981) found throughout N-S languages.

In addition to positing a possible historical relationship to the three typological features of N-S noted above, (Ahland 2010b) also finds that at least one classifier in Gumuz (/Vc/, /cá-/ CL1:EYE) encompasses a nearly identical idiosyncratic semantic class to the ‘object reference marker’-s(I) found in Fur, a N-S language of Sudan.²⁵ Table 1.1 demonstrates the semantic categories represented in the two languages.

Table 1.1. (from Ahland 2010b:14)
Comparison of Possible Noun Categorization Cognates in Fur and Gumuz

Noun Categorization Morpheme	Semantics of Classified Nouns	Examples of Nouns
Fur -s(I) “object reference marker” (Waag 2010)	<ul style="list-style-type: none"> • <i>entities that are ‘dependent’ offspring, and/or associated with seeds</i> • <i>liquids, mass nouns</i> • <i>fire</i> • <i>clothing (for extremities)</i> 	<ul style="list-style-type: none"> • child, calf, puppy, egg • honey, stew, oil, water • brain, pus, flour • fire • shoes, sandals, gloves
Gumuz cá- /-Vc ‘eye, seed’ (cá- as a class morpheme)	<ul style="list-style-type: none"> • <i>small seed-like objects</i> • <i>liquids</i> • <i>wounds and entities associated with wounds</i> • <i>fire</i> • <i>outer coverings</i> 	<ul style="list-style-type: none"> • beans, seeds • blood, water, coffee, tea, sauce • wounds, knives, needles, spears • fire, light • clothes, tree bark, orange peel

²⁴ Ehret reconstructs *-si as an oblique case marker but Dimmendaal (2010:32) suggests this is related to the -si /-sI accusative markers found in the Fur and Kunama languages.

²⁵ While Greenberg (1963), Bender (1996), Ehret (2001) and Blench (personal communication) place Fur within Nilo-Saharan, Jakobi (1990: 5-7) casts doubt on the status of Fur as a Nilo-Saharan language.

With regard to Gumuz’s relationship to the Koman languages, Ahland (2010b) finds a regular sound correspondence in Gwama which corresponds with a regular sound correspondence that Ahland (2004) had previously found across dialects within Gumuz:

ŋ (SoG): χ (NoG): Ø (Yaso)

Ahland (2010b) argues that this regular sound correspondence could be extended to include the Gwama language (based on data from Lockwood 2006). The lexical items exhibiting regular sound correspondences between Gwama, SoG, NoG, and Yaso are given in Table 1.2.²⁶ The sound which regularly corresponds in Gwama is transcribed as “y” to match the source transcription (Lockwood 2006) which is equivalent to [j] in IPA.

Table 1.2. Regular Sound Correspondence Between Gwama and Gumuz

	Gwama (Lockwood 2006)	SoG (Sirba, Guba, Wenbera, Agelo Meti)	NoG (Metemma, Mandura, N. Dibat’e)	Yaso and Kamashi	
Sound correspondence	y	ŋ	χ	Ø	
Lexical items	śóyò	aŋwa	aχwa	oa	‘clothes’
	kéyà-ké	kant-ííl	kaχat-ííl	kaat-ííl	‘sweep’
	páyàk’	pánk’a	páχák’a	páák’á	‘shell’
	ùhày ~ ùyàà	áŋa	áχó	á (ámé)	3SG Pro
	t’útóyó ‘flea’	jántá tóŋwá	jantóχwa	jantoa	‘spider’
	pàyní-pày	poŋ	póχ	po	‘fly (v)’

Lastly, Ahland (2010b) proposes a possible common origin for both the Gumuz natural sex-based masculine prefixes /odá-/ [wədə-] (masculine, nonhuman) and /óó-/

²⁶ In Chapter II “Phonology”, I propose that the Gumuz reflexes represented in Table 1.2 should be reconstructed with *k which differs from the proposal of *ŋ in Ahland (2004). Thus, Gwama [y] would correspond with proto-Gumuz *k. This correspondence is restricted to post-vocalic environments. Coincidentally, *k corresponds to Ehret’s pre-Proto-Gumuz pronoun reconstruction for the 3SG: *k^hwa (2001:248).

[wə-] (masculine, human) and the masculine gender prefix of Western Nilotic. Reh (1996) suggests the masculine gender prefix *o-* in Anywa originated from an irregular modified form of *wáádó* ‘son.’²⁷ Similarly, Heine & Vossen (1983) propose that the Western Nilotic masculine gender prefix *o-* comes from a cliticized form of ‘son’ /*wad/* (as found, for example, in Shilluk).

Therefore, with more Gumuz data, the classification issues regarding Gumuz and possible related Koman languages may soon be resolved. The following grammar of both Northern and Southern Gumuz will hopefully shed light on the historical development of the Gumuz language(s) and whether or not it is indeed an isolate.

²⁷ Such a form is curiously similar to the Arabic *walad* ‘child.’ This could be an early borrowing from Arabic into a W. Nilotic parent language which was then inherited in daughter languages. Also noteworthy is that the word for ‘child’ in Gwama (Koman) is *wàl* (Lockwood 2006).

CHAPTER II

PHONOLOGY

This chapter presents the phonological inventories of both Northern Gumuz (NoG) and Southern Gumuz (SoG) and discusses the status of suspicious segments in each of the dialects. Also discussed are phonological rules for both segments and tone.

2.1. Consonants

2.1.1. Northern Gumuz (Mandura)

Previous proposals for consonant inventories for the Northern Gumuz varieties included 38 phones (Aster 1983), 39 phones (Aster 1991), from 41 to 42 phones (Ahland 2004) and 38 phones (Innocenti 2010).¹ However, only the last two publications included inventories based on data from the Mandura wereda, while the former inventories were based on data from Dangur wereda.² Though my earlier analysis for the Mandura variety proposed 42 contrastive phones (2004:57), this present study concludes that there exists an inventory of 39 consonants (Table 2.1), 8 of which have questionable phonemic status (indicated in parentheses in Table 2.1).

¹ Ahland (2004) included consonant inventories from three NoG locations: Mandura, Metemma, and (north) Dibat'e.

² Aster's later analysis of Gumuz consonants was based on data from "Gojjam province, Metekel Awraja" (1991:6), an area which comprises several weredas, including that of Mandura and Dangur. Thus, it is unclear whether or the data was from Mandura, Dangur, or another wereda.

Table 2.1. Northern Gumuz (Mandura) Consonant Inventory

	Labial		Alveolar		Alveo-Palatal	Palatal		Velar		Labialized Velar		Uvular		Glottal
	vl	vd	vl	vd		vl	vd	vl	vd	vl	vd		Lab.	
Stop	p	b	t	d		c	ɟ	k	g	(k ^w)	(g ^w)			
glottalized	pʰ	b̥	tʰ	d̥		cʰ		kʰ		(k ^w)				ʔ
Affricate			ts		tʃ									
glottalized			tsʰ		tʃʰ									
Fricative	f	(v)	s	z		ʃ	ʒ					χ	(χ ^w)	
Nasal	m		n			(ɲ)		ŋ	(ŋ ^w)					
Approx. lateral			l											
Flap (trill)			(r)											
Semi-vowel	w					j								

The data for the phonological analysis of Northern Gumuz is based on more than 2000 lexical items taken from a 1700-item word list as well as texts and elicitation sessions; whereas in Ahland (2004), the conclusions were based on only 323 lexical items.

Lexical data demonstrating contrasts for phonetically similar consonants for the consonants in Table 2.1 are provided in Appendix B.

2.1.1.1 Suspect Consonants in Northern Gumuz

There are several suspect phonemes in the Mandura inventory. Some simply have limited distribution, while the labialized consonants and semi-vowels have questionable contrasts and plausible alternative analyses.

2.1.1.1.1 Consonants with Limited Distribution

Four of the 39 consonant phonemes in Table 2.1 have a limited distribution (indicated by parentheses in Table 2.1). The voiced labiodental fricative /v/ only occurs in two lexical items and is limited to intervocalic and word-initial positions. Furthermore,

/v/ is suspected of being introduced into regular Gumuz lexical items via derivation from ideophones. Ideophones are known to often have their own special phonology (Voeltz and Killian-Hatz 2001:2), including consonants that are not found in other word classes. One lexical item which likely originated from an ideophone is the verb **váχ** ‘clear land (for planting)’. This verb can take the same morphology as any other verb in Gumuz. However, there also exists a related ideophone in SoG: **vakavak** ‘sound of something moving through the air’ (or **vak** ‘single motion through the air’). This is used for fruit falling from a tree or cutting grass with a sickle. The cognate for **váχ** in SoG is **vánj** ‘to cut (grass)’. Thus, there is little doubt that the source of this verb is an ideophone (see section 2.3 for further discussion of historical sound changes). The other lexical item with /v/ is **wúvára** ‘spitting cobra’. This may have an ideophonic source or may be a borrowing.

The palatal nasal /ɲ/ is also quite limited in distribution. This consonant only occurs word-internally in intervocalic environments or before a palatal consonant. Its occurrence in the latter environment is the result of nasal assimilation (discussed in section 2.1.1.3.3) and the former intervocalic environment is often the result of an assimilation rule as well: when a consonant follows a front vowel, the consonant tends to palatalize. There exists at least one lexical item for which neither rule applies: **gaɲ-áts** ‘forbid’. However, here one could analyze the palatal nasal as a sequence of a nasal followed by a short high front vowel (or a palatal semi-vowel), in which case it would be difficult to ascertain the form of the underlying nasal.

Another suspect consonant phoneme is the labialized velar nasal, which is limited to three words in the NoG (Mandura) variety: **kónwa** ‘cape buffalo’, **zanwá** ‘beehive’ and **ɲwar** (sound of growl). The latter is part of the ideophone construction **káa ɲwar** ‘say “growl”’. The first two lexemes may involve a nasal followed by a short round vowel (or a semi-vowel). However, as either /u/ or /o/ can weaken to labialization, it is difficult to posit the exact sequence of segments if such is the case (see further discussion of labialized consonants below). The other possible explanation may be spread of the rounding feature. However, rounding spread is most often anticipatory in Gumuz (left-

spread) and is not often progressive (right-spread) (see sections 2.1.1.1.2 and 2.2.4). With only two possible lexical items which have this possible phoneme and its limitation to an intervocalic environment, the inclusion of a labialized velar nasal in the NoG (Mandura) phonemic inventory is marginal at best.

Lastly, the flap in Table 2.1 is sometimes an allophone of /d/. Some occurrences of /r/ are not clearly an allophone of /d/ for, in many cases, it depends on hyper- or hypo-articulation (fast speech versus careful speech) of the speaker. Also, many occurrences of [r] are found morpheme internally and therefore the phoneme cannot be realized in a word-initial environment. Thus, while contrast between /d/ and /r/ exists, it only exists in environments in which the allophone [r] occurs (i.e. intervocalically and word-finally). There also exists at least one instance of a trill [r] in the data: [mára] ‘very, much, a long period of time’. However, this word has a syntactic distribution similar to other ideophones in Gumuz and thus, like other ideophones, it may draw from a unique phonological inventory. The trill is thus assumed not to be related to the flap nor the /d/. There are no known contrasts of the flap (or trill) word-initially except for with the word ‘rice’ **ruz** which is borrowed from Amharic (which is ultimately borrowed from Greek).

2.1.1.1.2 Labialized Consonants

Much discussion has been devoted to the status of labialized consonants (mainly velars) in Gumuz. Bender assumed the labialized velars were “best interpreted as sequences” for his “Sai” data (1979:41). Unseth also excluded these from the consonant inventory, analyzing them as allophones of their non-labialized counterparts (1989:621), explaining that they likely arose from weakened round vowels historically (1989:623). Uzar produced two phonemic inventories of his “Sese” data (1989, 1997), the latter of which included a labialized series. Aster posited a labialized series in both of her analyses (1983, 1991) as did Innocenti (2010:15). Only the latter two analyses, Aster (1991) and Innocenti (2010), were based on varieties from NoG. In Tables 2.1 and 2.2, I have included a labialized series for both NoG and SoG. However, these are likely the synchronic (and in many instances, historic) result of weakening of round vowels, as

suggested by Unseth (1989: 623). More specifically, it appears as though short round vowels tend to weaken and become labialization on the previous velar (or uvular) consonant.³ Such labialization can also occur with labial consonants but not as regularly, perhaps due to the ‘labial’ and ‘velar’ features which these segments share.⁴ Furthermore, because there are two short round vowels that can potentially reduce to secondary articulation on velar consonants, discovering the original vowel that led to labialization is at times not possible (and thus may be better relegated to diachrony). The labialization from short round vowels tends to occur when the round vowel is immediately followed by another vowel. Compare the singular and plural forms of ‘guest’ below. When the plural infix /-á-/ is added to the first syllable of the unmarked singular form **kodóχwá** ‘guest’ the short round vowel becomes labialization on the previous velar (2.1).⁵

	SINGULAR	PLURAL
(2.1) ‘guest’	kodóχwá	kw-á-dóχwá

Labialization also results when the short round vowel is in word-final position, as in /-(V)kʷ/ ‘CL1:head’. The original vowel surfaces when the inherent possession marker /-má/ is added. In example (2.2), both the imperative (a) and the infinitival (b) forms of the verb ‘rear/raise’ are given. When a suffix is added (e.g. the derived infinitival form), one can discover the original short /o/ vowel (2.2 b).⁶

³ I assume that the uvular fricative was originally a velar fricative and moved to the uvular place of articulation via contact with the Agau language.

⁴ Short round vowels tend to reduce to a labio-velar off-glide following labial stops as well, as in ‘rat’ [bwa] /bua/. However, there are no known instances of labialized labial stops in which the underlying vowel is unknown.

⁵ The plural infix can only be used on a small subset of human nouns. See Section 3.2.2 of Chapter III “Nouns”.

⁶ The short round vowel is sometimes articulated as voiceless labialization, as shown in (2.2a).

(2.2)	a.	PHONEMIC fag-ák'ó rear- CL1:head 'Raise (him)/(her).'	PHONETIC [fəgáók'w]
	b.	ma-fag-ák'ó-má NMLZ-rear- CL1:head-IP:O 'to raise (him)/(her)'	[məfəgáók'ómá]

One clue supporting the hypothesis that there is a final round vowel that causes labialization is found in the vowel preceding the labialized consonant. In example 2.2, the preceding vowel may surface as [əo], varying with [o] (Fig. 2.1).

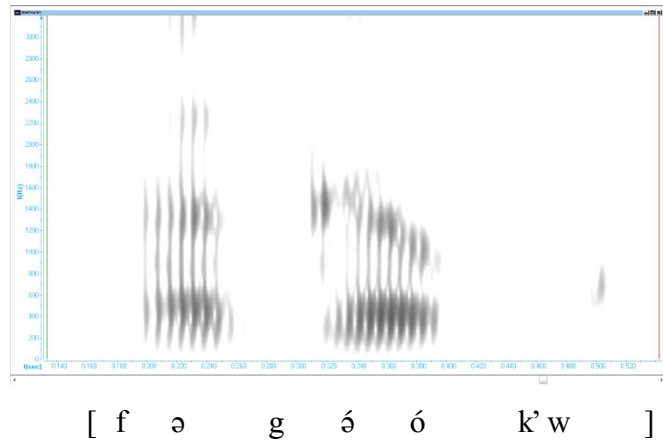
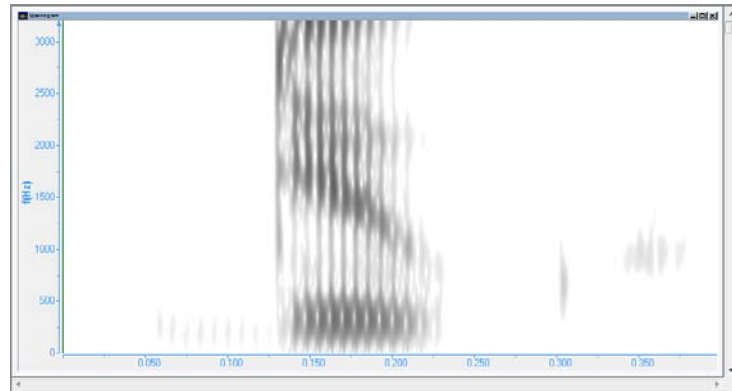


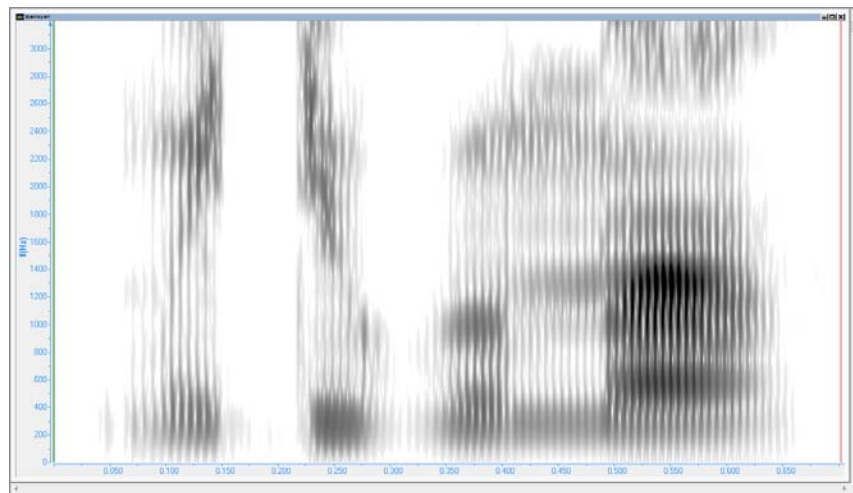
Figure 2.1. Anticipatory Assimilation to /o/

When the source of labialization is /u/ (following the velar stop), the vowel preceding the labialized consonant is phonetically realized as [iɯ] or [u]. The spectrogram for /dagu/ 'run' is given below. Because the source of the phonetic labialization is /u/, the vowel previous to the labialized velar surfaces as [diugw]. When the /-má/ (inherent possession) suffix is added for the infinitive form, the original /u/ which follows the velar surfaces as a distinct [u]: [mədiugumá].



[d i u g w]

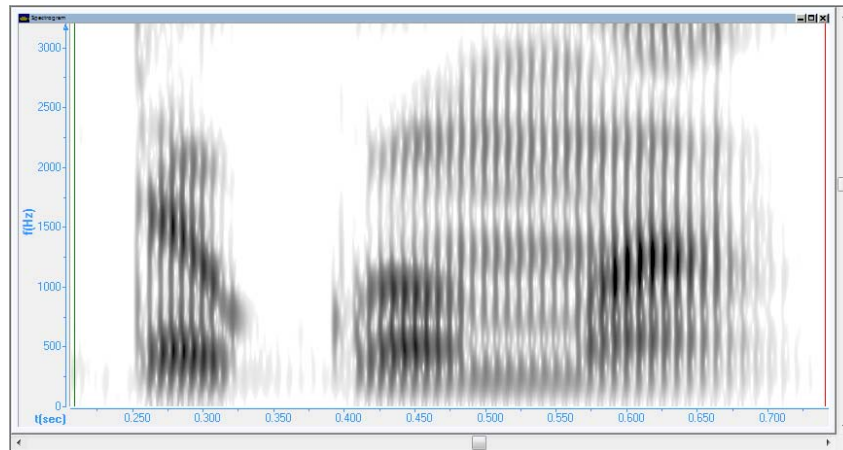
Figure 2.2. Anticipatory Assimilation to /u/



[m ə d iu g u m á]

Figure 2.3. Phonetic Realization of /u/ Labialization

Likewise, for /dág^oa/ ‘tamarind tree’ (phonetically [dǎógwa]), the initial /a/ partially assimilates to the /o/ and the final /o/ is fully realized when the *-má*/ (3.SG.POSS) suffix is added. Thus ‘his tamarind tree’ phonetically surfaces as [dǎó¹gómá] (Fig. 2.4).



[d ə o g o m a]

Figure 2.4. Phonetic Realization of /o/ Labialization

While it is possible to discover the underlying short vowel for the majority of phonetically labialized consonants in Gumuz, I will continue to represent these as labialized consonants (for velars and uvulars) as this is how these vowels are most often realized in the language.⁷ Furthermore, there are a few instances in which speakers vary the realization of the same vowel between [u] and [o], perhaps demonstrating that a weakening rule is no longer synchronically real and that the labialization has phonologized.

2.1.1.1.3 Semi-vowels

Most occurrences of the semi-vowels [j] and [w] are the result of strengthening of a short (front or back) vowel. However, there still exists unambiguous contrast between semi-vowels and front and round vowels which is limited to a few lexical items in limited environments (see Appendix B). As mentioned in the previous section, short round

⁷ Also, the original round vowel will be represented in instances in which the vowel surfaces. This representation more or less mirrors the orthographic representation decided on by the Gumuz community in May 2010.

vowels often reduce to labialization on a preceding labial or velar consonant. A related (historical) process involving short front vowels following alveolars and velars resulted in the palatal stop series (Ahland 2004). This strengthening process can also be observed with long vowels. When a long (front or back) vowel is word-initial in a VC syllable, the onset of the vowel tends to strengthen to a palatal approximate (for front vowels) or a labiovelar approximate (for back vowels). For example, **ír** ‘see’ is often realized phonetically as [jír].

2.1.1.2 Palatal Stops

One of the more striking contrasts among the consonants is the contrast between palatal stops and alveopalatal affricates. Such a distinction can be difficult for outsiders to perceive. Below are spectrograms of a minimal pair in NoG: **dééca** ‘S/he will give’ (Fig. 2.5) and **déétʃa** ‘S/he will blow (one’s nose)’ (Figure 2.6).⁸ The first example demonstrates the voiceless palatal stop which is characterized by having a low first formant and high second formant at the release of the stop (Ladefoged 2003:148).

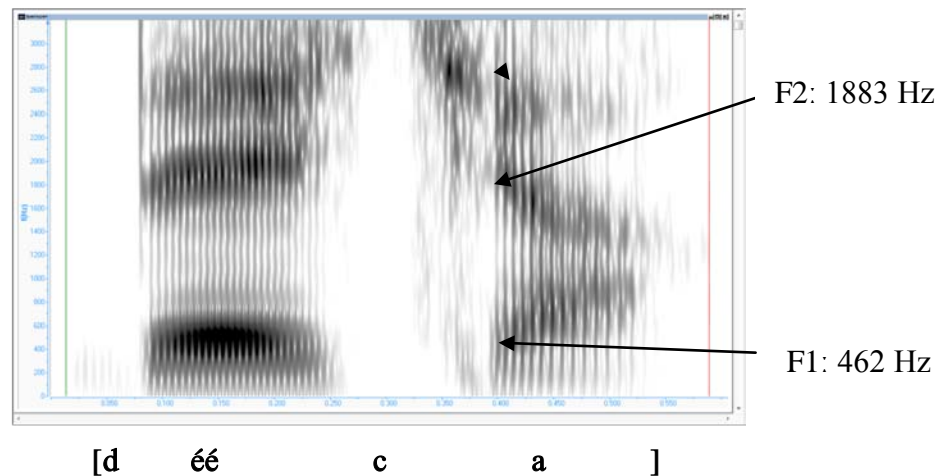


Figure 2.5. Spectrogram of the Voiceless Palatal Stop

⁸ If one compares the ejective stops as well, there exists a minimal quadruplet between palatal stops and alveopalatal affricates: **dééca** ‘S/he will give’, **déétʃa** ‘S/he will blow (one’s nose)’, **dééc’a** ‘S/he will shave (one’s head)’, **déétʃ’a** ‘S/he will marry’. However, this is only true for certain speakers in the Mandura area; others use the lexeme **c’ed** for ‘shave’ (instead of **c’a**).

The second spectrogram demonstrates the voiceless alveopalatal affricate . The main differences are that the stop closure is longer for the affricate and, upon release of the obstruent, the F1 is higher and the F2 is lower than for the palatal stop.

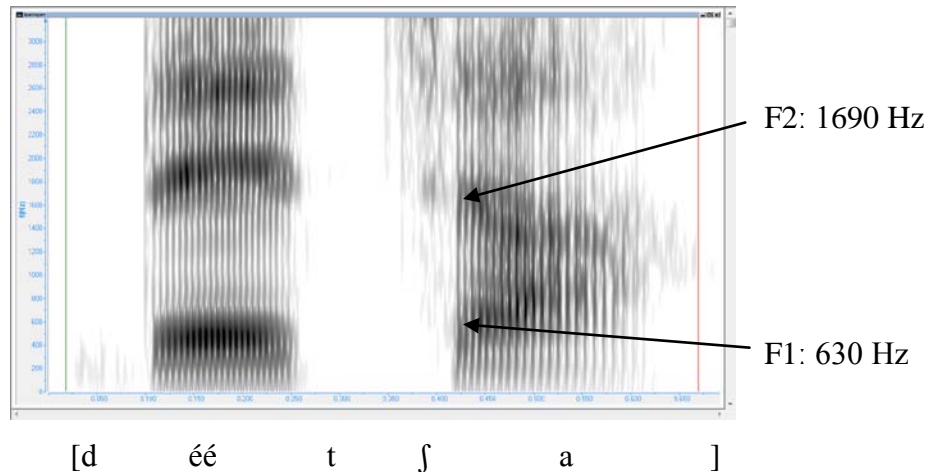


Figure 2.6. Spectrogram of the Alveo-palatal Affricate

Several researchers have observed some form of ‘free variation’ between palatal stops and palatalized stops in Gumuz (Bender 1979:41, Unseth 1989:618, Ahland 2004:63). That is, [c] tends to vary with [k^j], and [tʃ] tends to vary with [g^j]. I have found that this ‘free variation’ only occurs occasionally for speakers of the Mandura variety as most speakers produce the palatal stop. As palatal stops likely arose from palatalized stops historically in Gumuz (Ahland 2004:94), such variation is not surprising synchronically.

2.1.1.3 Phonological Processes

The sections which follow describe some of the more salient phonological rules involving the consonants of NoG.

2.1.1.3.1 Final Devoicing

In accordance with the findings of Uzar in the Southern Gumuz variety of “Sese” (SoG) (1989), I have found that Northern Gumuz (Mandura) stops devoice word-finally. For example words like **kób** ‘be proud’, **bid** ‘heal’, **atíj** ‘order’, and **fag** ‘grow’ are pronounced [kóp], [bit], [atíic] and [fək], respectively. This is found in contrast to words such as **dáp** [dáp] ‘it sprouted’, **bit** ‘descend’ [bit] **getác** ‘coil (rope)’ and **gák** ‘push’ [gók] whose final consonant remains voiceless regardless of environment.⁹

2.1.1.3.2 Weakening of /d/

The alveolar implosive **ɖ** tends to weaken to a flap post-vocally in NoG. However, in careful speech, the implosive is often pronounced. This variation between [d] and [ɖ] had been noted in previous analyses (Bender 1979:40, Uzar 1989:358, Aklilu 2002, Ahland 2004). While the weakening of the implosive can be observed in most lexical items that have an original implosive historically, such as **wíd** [wír] ~ [wíd] ‘see’, **fád** [fór] ~ [féd] ‘rise’, the /d/ is not often realized for certain other lexical items such as **áda** (1SG) which is most often [ára], even in careful speech. Surprisingly, the original /d/ is more often realized when the 1SG morpheme functions as a bound pronominal. Innocenti also observed this variation with the 1SG pronoun in the Mandura area (2010: 27). Thus, /d/ is still considered part of the proper phonemic representation of the 1SG morpheme in NoG, as well as in other lexemes.

2.1.1.3.3 Nasal Assimilation

Uzar (1989: 357) observed nasal assimilation in the Sese (SoG) variety of Gumuz, which (Ahland 2004) also observed in the Yaso and Agelo Meti locations (SoG). Such a rule is generally manifested as a co-occurrence restriction in the data for NoG. That is, only the bilabial nasal can occur before bilabial consonants, the alveolar nasal before

⁹ These are not exactly examples of neutralization of contrast in the word-final environment, as the voiceless stops have an aspirated release while the voiced stops do not.

alveolar consonants, and the velar nasal before velar consonants. Such is also the case for syllabic nasals followed by a consonant. In addition, the palatal allophonic nasal variant is found before a palatal stop.

Table 2.2. Nasal Assimilation by Place and Syllable Type

	Bilabial	Alveolar	Palatal	Velar
N.C	m̩boχ ‘cough’	ŋtá ‘bamboo’	-	ŋga ‘food, porridge’
CVN.C	ómp’ú ‘thigh’	ʃaant’á ‘bag’	[maɔŋja] ‘fire’	sáánká ‘liver’
CVNC	daamb ‘try, test’	gaanz ‘grow old’	-	táŋk’w ‘swallow’

Further evidence that a nasal assimilation rule exists is found with the pluractional verb prefix **N-**. In examples (2.3-2.5), the pluractional morpheme assimilates to the place of articulation of the following consonant.

- (2.3) ma-**m**-bátʃ-ámá ‘to beat (hit repeatedly)’
(2.4) d-a-**n**-c’á’r-íl ‘He cut repeatedly’
(2.5) d-ú-a-**ŋ**-gám-é-ts ‘They saw each other many times over there.’

2.1.1.3.4 Epenthesis

Occasionally, sequences of like vowels across morpheme boundaries are broken up by epenthesizing a glottal stop. For example, the word for ‘donkey’ is **náánúá** and the 2SG POSS suffix is **/-uá/**. As the final /a/ of ‘donkey’ assimilates to the previous /u/ vowel, the result is the juxtaposition of a long /u/ and a short /u/. While this extra long vowel length is often realized, speakers sometimes avoid the extra long length contrast by inserting a glottal stop at the morpheme boundary: **[náánúú-ʔúá]** ‘your (sg) donkey’.

2.1.1.3.5 Metathesis

Speakers of NoG at times utilize metathesis in order to break up unallowable consonant sequences and to preserve preferred syllable structures. For example, the word **íílá** ‘belly’ is often compounded with other nouns to form NN constructions referring to

the inside or inner part of the second noun of the compound (i.e. it can act as a relator noun or have a part-whole relationship, see Chapter V). For example, ‘floor’ is the combination of the nouns **íílá** ‘belly’ and **máts’á** ‘house’. As the final **-a** merely marks a lexical item as a noun (see Chapter IV), this marker is not always maintained in the first noun of the compound. Thus, ‘floor’ is **ííl + máts’á**. However, a lateral followed by a nasal or any other consonant is rare and dispreferred in NoG and so also is the VC syllable type. To avoid the dispreferred phonotactics, the sounds of the first syllable are metathesized when the compound is formed (2.6).

- (2.6) a. líí- máts’á ‘floor’
 belly-house
- b. líí-tʃagwa ‘sole (of foot)’
 belly-foot

Metathesis may also explain vowel rounding before a labialized velar (instead of an assimilation or rounding harmony analysis). Because short round vowels are dispreferred word-finally, it may be that the sounds in the final syllable are metathesized for phonotactic reasons. However, metathesis would not explain why the previous vowel is still rounded (or partially assimilated to the rounding of the following vowel) as in example (2.2b) when a short round vowel is not in word-final position (i.e. when the **/-má/** suffix is added).

2.1.1.4 Free Variation of /n/ and /l/

Certain speakers of Northern Gumuz in the Mandura area tend to vary /n/ with /l/. This may be according to clan as the two language consultants who displayed this free variation were both from the Dúgisá clan. The free variation also seems to be restricted to certain lexical items, and was most often found with the locative preposition **ná=**.

2.1.2 Southern Gumuz (Kamashi Zone)

Bender (1979:41) had posited 33 consonants for his Sai data and Uzar (1989:348) posited 34 in his earlier analysis, which he later updated to include 38 consonants (1997:1). Uzar's earlier analysis was similar to Bender's in that Uzar had not originally included the labialized velars as phonemes; his later analysis also included a labialized voiced bilabial stop /bʷ/. This later analysis also eliminated the implosive velar /g/. Ahland (2004:72-73) proposed 37 consonants for the Agelo Meti location and 39 consonants for the Sirba Abay location. That analysis also included an implosive velar /g/ for the Agelo Meti location, and a labialized labial /b/ for the Sirba Abay location. Neither of these are proposed as phonemes in the present analysis. Table 2.3 charts the 38 consonants I posit for the Southern Gumuz varieties, two of which have limited distribution (thus given in parentheses).

Table 2.3 Southern Gumuz Consonant Inventory

	Labial		Alveolar		Alveo-Palatal	Palatal		Velar		Labialized Velar		Glottal
	vl	vd	vl	vd		vl	vd	vl	vd	vl	vd	
Stop	p	b	t	d		c	ɟ	k	g	(k ^w)	(g ^w)	
glottalized	p'	ɓ	t'	d'		c'		k'		(k ^w)		ʔ
Affricate			ts		tʃ							
glottalized			ts'		tʃ'							
Fricative	f	(v)	s	z		ʃ	ʒ					h
Nasal	m		n			(ɲ)		ŋ		(ŋ ^w)		
Approximant lateral			l									
flap			r									
semi-vowel	w					j						

2.1.2.1 Suspect Consonants in Southern Gumuz

The suspect phonemes in SoG are similar to those of NoG. The labialized velars as well as the semi-vowels are suspect for the same reasons: both could be the result of an underlying vowel (see section 2.1.1.1.2 above). On the other hand only two consonants are suspect due to limited distribution (in NoG, four consonants are suspect for this reason). In SoG, the alveolar flap has a wider distribution than the alveolar implosive, as many instances of word-initial *ɖ have historically weakened to /r/ in SoG, with no evidence of synchronic free variation of these two phonemes. Similar to Northern Gumuz, the voiced labiodental fricative /v/ is very rare and is only found in one lexical item outside of ideophones, which tend to have a distinct phonological inventory in Gumuz. /v/ is found in the word **vanj** ‘cut (grass)’ and in the ideophones **vakavak** ‘sound of something moving through the air’ (or **vak** ‘single motion through the air’), and **vam** ‘sound of someone passing another quickly’. All of its occurrences in SoG are word-initial.

The second suspect phoneme is the palatal nasal. This consonant is found once word-initially: **nawa** ‘cat’. It is also found intervocalically in **báñisipisa** ‘crab’ and **waana** ‘mud wasp’. Other occurrences of this consonant are predictable via nasal assimilation. It is also likely that the high front vowels in ‘crab’ resulted in palatalization of the nasal. Thus, inclusion of this consonant in the consonant inventory is marginal at best.

2.1.2.2 Phonological Rules

The same phonological rules for NoG also apply in SoG. One finds final devoicing of consonants, weakening of the /d/, and nasal assimilation. However, there are only a few instances of metathesis, as epenthesis (discussed below) is the preferred strategy for avoiding dispreferred phonotactics.

As for weakening of the /d/, one notable difference from NoG is that this weakening tends to occur in all environments, not just post-vocalically. In some lexical items, the sound change appears to be complete as no free variation between /d/ and /r/ is known to exist for those items. For example, ‘thorn-tree’ is **ɖak’a** in NoG, but is always

pronounced **rak'a** in SoG. On the other hand, **ďá** 'go' is pronounced [ďá] when the implosive is word-initial; but when a prefix is added, it is often pronounced as a flap, especially in fast speech.

	PHONEMIC	PHONETIC
(2.7)	b-á-ďá-ká AFF-3.SG.INTR-go-NFUT 'S/he went.'	[bǝrká]

Other voiced stops in SoG tend to weaken post-vocally as well. The voiced bilabial implosive /b̄/ tends to weaken to an unreleased voiced bilabial stop [b̄] word-finally, while the voiced bilabial stop /b/ weakens to a fricative (in some dialects) word-finally (which is in opposition to the final devoicing 'rule').¹⁰ This is evidenced in the near minimal pair /táb/ 'do again' and /tab/ 'be thick' which are pronounced [táb̄] and [tǝβ] respectively.

Lastly, speakers of SoG have a tendency towards haplology. That is, a CV syllable which is (nearly) identical to an adjacent syllable tends to be deleted, especially if the V of the CV syllable is a short /a/ and carries L tone. For example, the underlying form of 'we (exclusive) shouted' is /b-íla-lúŋ-ágá/ (AFF-1PL.EXCL.INTR-shout-NFUT). Because the 1PL inclusive morpheme ends with the CV syllable /la/ and the following syllable begins with /lú/, the first syllable in the sequence is deleted and the word surfaces as [bílúŋágá].¹¹

¹⁰ The speaker who demonstrated the word-final weakening is from Kamashi town, Kamashi *wereda*.

¹¹ This might also be interpreted as deletion of a low toned schwa. However, there is no noticeable lengthening of the /l/ consonant. Also, haplology in this particular verb results in a near minimal pair with the 3PL form: bí⁴lúŋgágá. Also noteworthy is that the intransitive tonal pattern in the 1PL EXCL conjugation is lost.

2.1.2.3 Free Variation of /l/ and /r/

Speakers of SoG who live in and around Kamashi town tend to vary the post-vocalic /l/ with [r] which results, for example, in the following two homophones: /kâl/ [kâr] ‘say’ and /kârl/ [kâr] ‘finish, run out’. Bender also recorded variation between /r/ and /l/ in his Sai data which only occurred “occasionally” (1979: 41). Other speakers of SoG do not seem to exhibit such variation between the liquid consonants.

2.2 Vowels

Most previous analyses of Gumuz posit a five-vowel system with length distinctions (Bender 1979:40; Aster 1983, 1991; Uzar 1989, 1997). Irwin (1966), however, posited six phonemic vowels, including the schwa.¹² Innocenti (2010:17) also includes the schwa but only for orthographic reasons, in order to promote the correct pronunciation of Gumuz words, a convention which Uzar (1997:2) had also adopted when using Latin script. Like these previous analyses (save Irwin’s), I have found that both varieties of Gumuz (NoG and SoG) exhibit a five vowel system with length distinctions and that the [ə] is indeed an allophone of /a/ as proposed by Uzar (1989:361).

2.2.1 Vowel Quality

As noted by Uzar (1989:359), the high and mid vowels in Gumuz vary between “close” and “open” realizations. In this present analysis, I find what I assume to be the same allophonic variation in both NoG and SoG - [e, i, o, u] ~ [ɛ, ɪ, ɔ, ʊ] - and have found that this variation tends to correlate with vowel length. That is, long vowels *tend* to be more peripheral in the vowel space while short vowels tend to be more centralized

¹² Irwin (1966) recorded as many as seven vowels. However, Bender (1979) interpreted Irwin’s analysis as having six vowels.

(see Fig. 2.7 and 2.8).¹³ This is most notable for the low central vowel /a/. Short /a/ is most often realized as [ə] and thus fits the pattern of short vowels laxing or centralizing.¹⁴

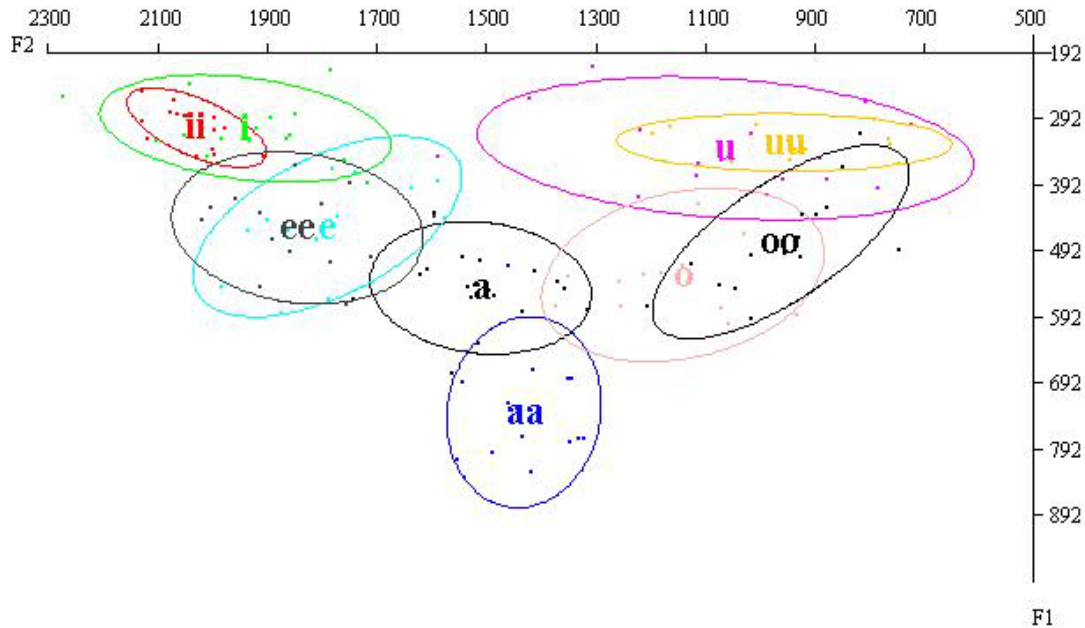


Figure 2.7. Vowels in SoG by Length

¹³ Measurements in Figure 2.7 are based on the following number of tokens for each vowel: /a/ N=18; /aa/ N=18; /i/ N=17; /ii/ N=18; /e/ N=13; /ee/ N=14; /u/ N=17; /uu/ N=13; /o/ N=15; /oo/ N=15. Measurements in Figure 2.8 are based on the following number of tokens for each vowel: a/ N=24; /aa/ N=22; /i/ N=24; /ii/ N=15; /e/ N=9; /ee/ N=16; /u/ N=11; /uu/ N=12; /o/ N=17; /oo/ N=11. All vowels measured were word-internal with a variety of consonants preceding and following.

¹⁴ I have refrained from referring to this distinction as ATR mainly due to the fact that the [a] and the [ə] do not behave in the typical ATR pattern. That is, if it were an ATR harmony system, [ə] should pattern with [i, e, u, o] as +ATR in a typical 10 vowel system with ATR contrasts (Casali 2008:499); but this is not the distribution we find in Gumuz. Furthermore, it is not the vowel quality that is contrastive so much as the vowel length. Thus, any resemblance to the feature [ATR] is purely a phonetic effect.

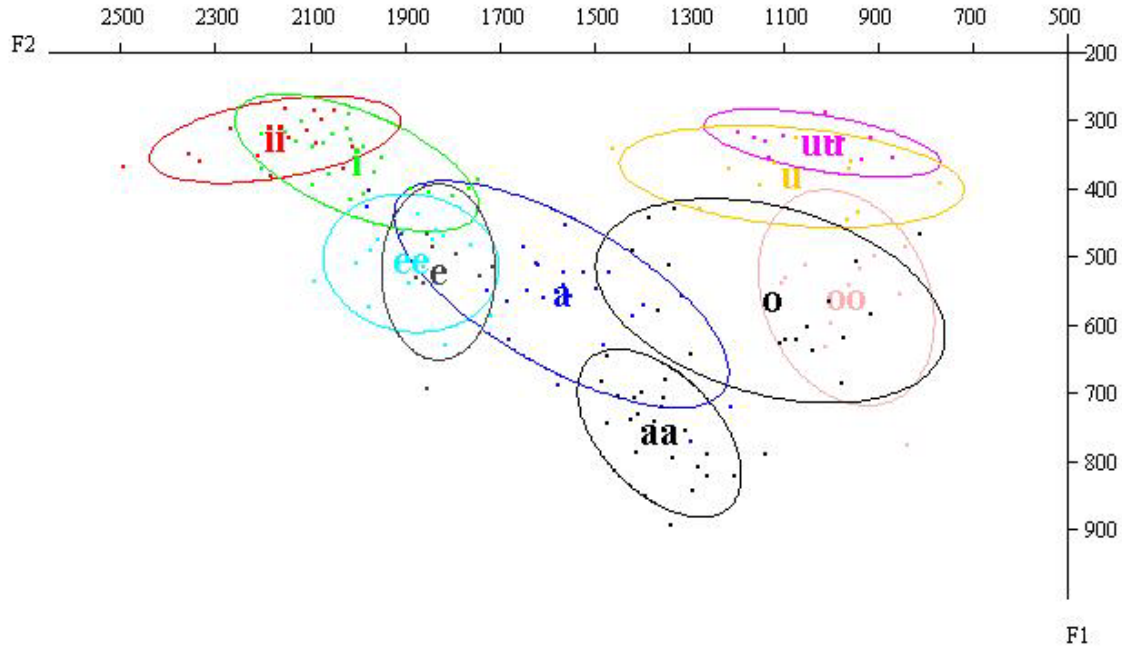


Figure 2.8. Vowels in NoG by Length

As mentioned above, the tendency for centralization is most evident with the vowel /a/. Short /a/ is realized as [ə] whose distribution is limited to a word-internal environment. In other environments, there is neutralization of contrast between /a/ and /aa/, at least in terms of vowel quality. Consider the words /dá/ ‘thing’ and /daa/ ‘axe’ in NoG. As the vowels occur word-finally, both are realized as [aa] with no significant difference in vowel quality or vowel length (Table 2.4).¹⁵

Table 2.4. Neutralization of Contrast Between /a/ and /aa/

	Vowel Duration (ms)	F1	F2
[dáá] ‘thing’ /dá/	200	857	1433
[dáa] ‘axe’ /daa/	220	797	1359

¹⁵ Measurements in Table 2.4 are based on the average measurement of three tokens.

However, the vowel length contrast between these two lexemes is realized when the 3 SG POSS suffix /-**má**/ is added.¹⁶ As a result, the vowel quality of /dá/ ‘thing’ changes as well, becoming more centralized. The change in duration and vowel quality is given in Table 2.5 and charted in Figure 2.9.¹⁷ Such morpheme-final contrasts between /a/ and /aa/ are more common in NoG as a result of an historical sound change (to be discussed in section 2.3.1). Even though such a contrast is rare word-finally in SoG, only the phonetic realization [a] is found word-finally; [ə] is never realized word-finally in either variety of Gumuz.

Table 2.5. Contrast in Length and Quality of /a/ vs. /aa/

	Vowel Duration (ms)		Vowel Quality of 1 st vowel	
	1 st vowel	2 nd vowel	F1	F2
[dó-má] ‘his thing’	72	210	522	1528
[daa-má] ‘his axe’	161	163	849	1397

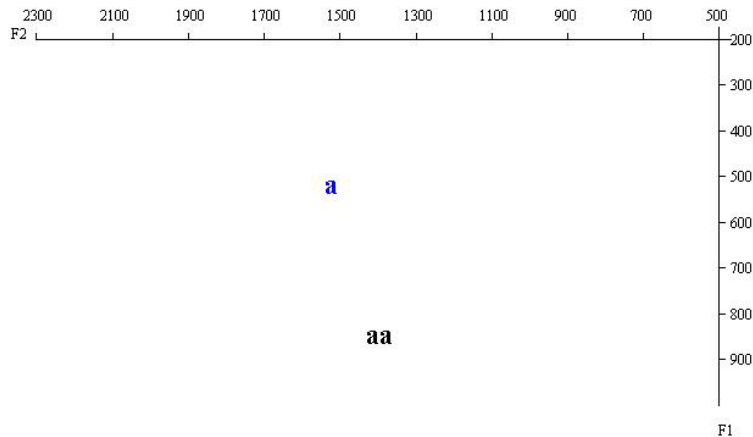


Figure 2.9. Vowel Quality Contrast Between /a/ and /aa/

¹⁶ Vowel length contrast is determined by relative length of vowels within a word.

¹⁷ Again, measurements in Table 2.5 and Figure 2.9 are based on the average measurement for three tokens.

Only one instance of a word-final vowel length contrast is known to exist in SoG. The word for ‘one’ **meetáa** has a long /aa/ vowel, forming a near-minimal pair with ‘chicken’ **mátá** in both varieties.¹⁸ However, again, the phonetic vowel quality for the long and short vowels is identical word-finally.

That [ə] is an allophone of /a/ is perhaps further evidenced in Noun-Noun (NN) compounds. In isolation, the word for ‘language’ /sa/ is realized as [saa]. However when it functions as the first noun in a NN compound, /sa/ is realized as [sə]:

/sa/ ‘language’ + /gúmíza/ ‘Gumuz’ > [səgúmíza] ‘Gumuz language’

Because the final /-a/ morpheme occurs on all nouns (see Chapter III), one might assume that just /s/ is the root for ‘language’, with [ə] epenthesized in a NN compound (see discussion of epenthesis in section 2.2.5 below). However, when the second noun of a NN compound begins with a vowel, /sa/ ‘language’ is still realized as [sə] with a [ʔ] epenthesized. Alternatively, one can also lengthen the vowel in the compound, further corroborating that the root for ‘language’ is /sa/ and not merely /s/:

/sa/ ‘language’ + /ágáwá/ ‘Agau’ > [sʔágáwá] ~ [sáágáwá] ‘Agau language’

The vowels /a/ and /aa/ are both pronounced [a] word-initially. However, if a difference in phonemic vowel length is the result of two /a/ vowels coming together across a morpheme boundary, vowel length distinctions are measurable. For example, the nominative prefix is /á-/ in Gumuz. When this is prefixed to a noun which begins

¹⁸ A similar near-minimal pair exists in NoG; however, there appears to be no difference in surface vowel length for the final vowel: **meetáa** ‘one’ and **meetá** ‘squirrel’.

with /a/, there is a measurable length difference even though the vowel quality remains [a] whether the /a/ is long or short (Table 2.6).¹⁹

Table 2.6. Vowel Duration and Vowel Quality of Initial /a/

Lexeme	Vowel Duration (ms)		Vowel Quality (Hz)			
	1 st vowel	2 nd vowel	1 st vowel		2 nd vowel	
			F1	F2	F1	F2
aja ‘water’	133	169	838	1424	823	1502
á-aja ‘water.NOM’	226	168	861	1354	768	1432

While /a/ [ə] for the most part is shorter in duration than /aa/ [a], speakers sometimes use change in vowel quality instead of length in order to indicate contrast between the two vowels. Consider the minimal pair below and the corresponding vowel lengths of the final syllables. In both words, the final vowel is roughly double the length of the preceding vowel. Even though the lengths of the two final vowels appear to be equivalent, the final vowel of ‘s/he is generous’ is [a] while the final vowel of ‘s/he is engaged’ is [ə].

Table 2.7. Vowel Quality Contrast for /aa/ vs. /a/

	Vowel Duration (ms)			Vowel Quality of final vowel	
	1 st vowel	2 nd vowel	3 rd vowel	F1	F2
[daŋgəχəc] ‘s/he is engaged’	107	59	106	686	1580
[daŋgəχác] ‘s/he is generous’	160	88	177	743	1477

¹⁹ It is unknown whether the first vowel of **aja** ‘water’ is phonemically long or short as there are no known environments in which it is reduced to schwa. Evidence of underlying vowel length would require the addition of a preceding morpheme which does not end in a vowel. When the proclitic /ká=/ ‘to, for’ is affixed to the noun, a glottal stop is inserted between morphemes and the vowel quality of /a/ remains the same ([a]), suggesting that the initial vowel of **aja** ‘water’ is long. As there are no known length contrasts word-initially within a monomorphemic word, I will continue to represent monomorphemic words with initial [a] as having a short vowel.

One seeming exception to /a/ being realized as schwa word-internally is with the /a-/ 3SG prefix on verbs (NoG). This prefix tends to be slightly longer in duration than a schwa found within a verb root (see examples above in Table 2.7 in which the first vowel is the 3SG prefix realized as [a] and the second is a schwa). The vowel length possibly suggests that this morpheme actually has a long vowel /aa-/.²⁰ However, the vowel quality varies between [ə] and [a] in analogous environments. Because the vowel of the 3SG morpheme assimilates to the vowel quality of adjacent vowels, which is typical of short /a/ and not of long /aa/, the vowel in the 3SG prefix is considered short. Figure 2.10 charts the vowel quality of this morpheme found in several verbs.²¹

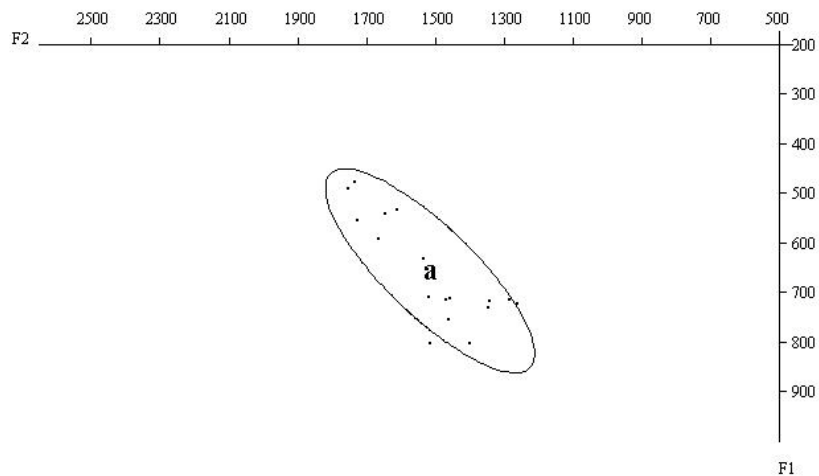


Figure 2.10. Vowel Quality of 3SG /a-/ in NoG

Similar vowel quality contrasts are apparent with the varying lengths of the high front vowel /i/. Consider the NoG word for ‘seven’ in Table 2.8, in which the first vowel

²⁰ The average length for the 3SG subject marker /a-/ as uttered by one speaker from the Mandura area was 122 ms (based on 18 tokens, each from a distinct verb). In comparison, the average length of 22 tokens of /aa/ as uttered within 22 distinct lexemes (from Figure 2.8) was 136 ms while the average length of /a/ (24 tokens) was 69 ms.

²¹ These measurements are based on 18 tokens, each from distinct verbs as spoken by one speaker from the Mandura area.

is short and the second vowel is long. The vowel longer in duration occupies a more peripheral position in the vowel space.²² The same is true for the short /i/ in ‘moon’ as opposed to the long /ii/ in ‘pus’.

Table 2.8. Relationship Between Vowel Duration and Quality of /ii/ and /i/

Lexeme	Vowel Duration (ms)		Vowel Quality (Hz)	
	1 st Vowel	2 nd Vowel	1 st Vowel	2 nd Vowel
			F1/F2	F1/F2
liḡíít ‘seven’ N=3	54	159	393/2099	379/2187
ḡíja ‘moon’ N=3	86	212	311/2026	658/1476
ḡíia ‘pus’ N=3	126	169	297/2078	677/1382

Considering /ee/ vs. /e/, no strong tendency towards centralization was found for the short vowel. There exists one near minimal pair in NoG between long and short /e/, with a strong correlation between reduction/undershoot (i.e. failure to achieve the intended phonetic target) and vowel length: **métá** ‘chicken’ and **meetáa** ‘one’ (Table 2.9). However, as can be seen in vowel charts for NoG and SoG (Figures 2.7 and 2.8), there is only a slight tendency overall towards reduction for short /e/. This tendency is better represented in the second pair of words, ‘goat’ and ‘to be rotten’ in Table 2.9 below.

Table 2.9. Correlation Between Vowel Quality and Vowel Length for /e/

Lexeme	Vowel Duration (ms)			Vowel Quality of /e/ or /ee/	
	1st Vowel	2nd Vowel		F1	F2
métá ‘chicken’ N=3	74	212		528	1734
meetáa ‘one’ N=3	175	192		479	2000
méʔa ‘goat’ N=3	63	164		465	1910
	1 st V	2 nd V	3 rd V		
meeʔáámá ‘to be rotten’ N=3	158	142	118	473	1962

²² The vowel quality of /ii/ may also be affected by the H tone; that is, high tone may cause a vowel to be more peripheral as well.

Furthermore, there are very few known instances of short /e/ in either SoG or NoG. This may be due to the fact that short /e/ is sometimes indistinguishable from short /a/ [ə] as evidenced in the overlap in the vowel space in Figure 2.8 (and to some extent in Figure 2.7). There are certain environments, however, in which short /e/ can be distinguished from short /a/ even when occurring in the same vowel space: when a front vowel occurs before /ʔ/, /l/, or /g/, the following consonant tends to become palatalized after /e/.

In contrast to the front vowels, the back vowels, especially the mid back vowel, show a much stronger correlation between length and vowel quality. However, because the short back vowels are often realized as [wɪ] for /u/ and [wə] for /o/, and because measurements were made at the halfway point through the vowel spectrogram, these vowels often appear to be more central. If these allophones of back round vowels were eliminated from comparison, the trend toward centralization might appear less strong. On the other hand, the allophones [wə] and [wɪ] may simply be a function of vowel reduction and thus related to the trend toward centralization. Note that there are two distinct short /o/ clusters in Figure 2.8. The more central cluster represents short /o/ realized with a rising F2 ([wə]). There is a similar yet less obvious trend for short /o/ in SoG (Figure 2.7).

Short /u/ does not appear to have as strong a tendency toward labialization as does short /o/ in either variety of Gumuz.

2.2.2 Vowel Length

2.2.2.1 The Problem of Vowel Length Contrasts

As discussed in section 2.1.1.1 above, short round vowels tend to reduce to labialization of the previous consonant, especially if the previous consonant is a velar. Minimal pair (and near minimal pair) contrasts between long and short round vowels are most often found in multi-morphemic words. Consider the phonological minimal pair: /-k'óá/ [-k'wá] 'head, top' and /k'óóá/ [k'ówá] 'dog'. As single morphemes, these do not surface phonetically as minimal pairs for vowel length (as the short vowel surfaces as

labialization). However, these do surface as a minimal pair for vowel length when pronounced with the 3SG POSS suffix /-má/ along with the locative proclitic /ná=/. These complex words behave identically in the NoG and SoG varieties. The measurements given in Table 2.10 below are from a speaker of NoG. Similarly, the words ‘rat’ /búá/ [bwá] and ‘tumor’ /buua/ [buwa] are [búmá] ‘his rat’ and [búúmá] ‘his tumor’, respectively, when the 3SG Poss suffix is added (NoG only).

Table 2.10. Phonetic Vowel Length Constrasts for /o/

	Vowel Duration (ms) N=3		
	1 st Vowel	2 nd Vowel	3 rd Vowel
ná = k’óá-má [nók’ómá] LOC-top-3SG.POSS ‘on (its) top’	41	46	138
ná = k’óóá-má [nók’óóámá] LOC-dog-3SG.POSS ‘on his/her dog’	48	175	139

In addition to the measurements in Table 2.10, the [o] of /k’óóá/ ‘dog’ (without any possessive suffix) exhibits a third (phonetic) length contrast: the first vowel [o] has a duration of 98 ms while the final [a] has a duration of 154 ms. Thus, on the surface, there appear to be three length contrasts for [o]: a very short duration after velars when simultaneously before another vowel which could be analyzed as consonant labialization (e.g. ‘on its top’ of Table 2.10), a longer “short” [o] which is not analyzable as consonant labialization (e.g. ‘dog’), and long [oo] (e.g. ‘on his/her dog’). The difference between the single morpheme ‘dog’ and the examples in Table 2.10 is that the final underlying /-a/ noun marker of ‘top’ and ‘dog’ in Table 2.10 is assimilating to the previous [o] vowel. Thus, /k’óá - má/ ‘its top’ surfaces as [k’ómá]; and /k’óóá-má/ ‘his/her dog’ surfaces as [k’óóámá]. However, the surface vocalic portion of ‘top’ /k’óá/ ‘top’ is essentially identical to the vowel duration of /ná= / in the previous syllable. Thus, the /o/, which often surfaces as labialization, appears to have no vowel duration of its own. And the underlying features of /o/ only surface when a short, word-medial /a/ follows (giving the

/o/ surface vowel duration). When a long /aa/ follows, the previous round vowel labializes on the preceding consonant. The same is true for the /u/ of ‘rat’ [bwá] /búá/. Therefore, these two vowels might better be represented phonologically as vowel offglides on a consonant: /k^oá/ ‘top’ and /b^ua/ ‘rat’.

A similar issue with surface contrastive vowel length occurs when suffixing the 2SG POSS morpheme /-uá/ to /b^uá/ ‘rat’ versus to /buá/ ‘tumor’ in NoG.²³ If one compares the surface vowel lengths of the [u]’s in ‘tumor’, ‘your rat’, and ‘your tumor’, one might expect three distinct phonetic vowel lengths. However, the [u] of ‘your rat’ which is comprised of /b^uá/ + /-uá/ is only slightly longer than that of [bua] ‘tumor’. On the other hand, the [u] of ‘your tumor’ (/bua/ + /-uá/) is nearly three times the length of the [u] in /bua/ ‘tumor’.

Table 2.11. Phonetic Vowel Length Contrasts for /u/

	Mean Vowel Duration (ms), N = 3	
	1 st Vowel [u]	2 nd Vowel [a]
[buwa] ‘tumor’	130	161
[búúwá] ‘your rat’	142	159
[buuuwá] ‘your tumor’	366	177

In SoG, on the other hand, it is clear that there exist at least three length contrasts, two of which surface only across morpheme boundaries. Compare the similar verb forms containing the stems for ‘be greedy’, ‘be fast’, and ‘play’. Four contrasting vowel length ratios are calculated between the vowel(s) of the first syllable and the vowel of the second syllable in each word where /ii/ is a fixed length and [a] is of varying lengths (Table 2.12).

²³ The /u/ of /-uá/ 2SG POSS is toneless (see Chapter III), and the labialization plus short /a/ of the noun root/stem progressively assimilates to the height of the suffix vowel. Thus, only various lengths of [u] surface when this suffix attaches to C^wV nouns, regardless of whether the underlying vowel of the labialization is /o/ or /u/.

Table 2.12. Phonetic Vowel Length Contrasts in SoG

	Mean Vowel Duration (ms), N = 3			
	1 st Vowel(s) [a]	2 nd Vowel [i]	3 rd Vowel [a]	Ratio
b-a-sii-gá-á-ts AFF-3SG.TR-take?-NFUT-DC-BODY 's/he is greedy'	65	175	147	.4:1
b-áá-sii-gá-á-ts AFF-2SG.TR-take?-NFUT-DC-BODY 'you are greedy'	138	194	148	.7:1
b-a-a-síí ^t -gá-á-ts AFF-3SG.TR-VD-play?-NFUT-DC-BODY 's/he is fast'	185	168	153	1.1:1
b-á-a-síi-gá AFF-3SG.INTR-VD-play-NFUT 's/he plays'	121	114	168	1.1:1
b-áa-a-síi-gá AFF-2SG.INTR-VD-play-NFUT 'you play'	162	126	177	1.3:1

In Table 2.12, the first vowel of 's/he is greedy' is a short /a/ which has a length ratio of .4:1 with the vowel of the second syllable. In contrast, the first vowel of 'you (sg) are greedy' is phonemically long /aa/ and exhibits a length ratio of .7:1 with the vowel of the second syllable. These first two ratios reflect a phonemic vowel length contrast. On the other hand, the vowels of the first syllable of 's/he is fast' and 's/he plays' are a sequence of two short /a/ vowels across morpheme boundaries. This results in a longer vowel duration than a phonemically long vowel. Lastly, the sequence of the phonemically long vowel /áa-/ (2SG intransitive) followed by the short vowel /a-/ (valence decreaser) of 'you (sg) play' results in the highest vowel length ratio of 1.3:1.²⁴

A similar extra long vowel length is found in NoG in the verb /**dúuué**/ 'they came'. As the verb root is /**ua**/ 'go (away)' and the 3PL intransitive prefix is /**úu-**/, this results in a sequence of a long vowel followed by a short vowel. The resulting ratio between the

²⁴ Of course, a larger scale study of vowel duration involving more than one or two tokens for each example word would provide more conclusive results.

duration of this sequence of /u/ vowels and the following /-é/ (TOWARDS) suffix is 1.9:1.²⁵

2.2.2.2 Reduction/elision of Short Vowels

Short vowels in Gumuz not only have a tendency towards centralization but are sometimes deleted entirely. This is often true when the short vowel follows a sonorant word-internally. Thus **musa** ‘cow/bovine’ and **mátá** ‘chicken’ (SoG) become [wódáúmsa] ‘cock’ and [wodám-tá] ‘bull’ when the non-human male gender prefix /oodá-/ is added.²⁶

2.2.3 Glide Formation in Vowel Sequences

As mentioned in section 2.1.1.1, there exists a subset of short back (round) vowels which reduce to a labio-velar approximant when occurring in a sequence of two or more vowels; while front vowels reduce to the palatal approximant in similar environments. In word-initial environments, the initial front or back (non-low) vowel of a VV sequence reduces to an approximant. In word-internal environments, if there exist more than one identical (non-low) vowel in a sequence, the final (identical) vowel will reduce to an approximant. Lastly, in non-identical vowel sequences occurring word-finally, the final (non-low) vowel of the sequence will reduce to an approximant.

2.2.4 Vowel Harmony/Assimilation

In Gumuz, there exists a process of vowel assimilation which is similar to vowel harmony. However, this process of assimilation has not phonologized in the language. Therefore it is not typical of “vowel harmony”, as vowel harmony is considered an “all-or-nothing” (categorical) phenomenon (Ohala 1994:491). In Gumuz, rather, one can

²⁵ The reason for the higher ratio of ‘they came’ in NoG is due to the vowel /e/ (second vowel of the ratio) being short, whereas the second vowel of the ratio in ‘you play’ of Table 2.12 is long.

²⁶ The previous vowel partially assimilates to the /u/ of /musa/ before the /u/ is deleted. Also note that nouns with the gender ‘prefix’ /oodo-/ follow the tonal pattern of a N-N compound (see Chapter 3 on Nouns). This prefix surely arose from a noun historically.

observe partial and at times total regressive (anticipatory) assimilation of one vowel with the vowel of the following syllable.

In addition to anticipatory assimilation, short /a/ ([ə]), unlike the other short vowels, often undergoes total assimilation to the vowel quality of an adjacent vowel (either preceding or following). In fact, the only environment in which a short /a/ surfaces as [a] adjacent to another vowel is word-finally. In all other environments, the /a/ assimilates to the vowel quality of the adjacent vowel. For example, the /u/ of **dua** ‘child’ (NoG and SoG) is short. However, when the 3SG POSS suffix **-má** is added, the final /a/ of the noun stem totally assimilates to the vowel quality of the previous /u/ vowel. This results in the apparent lengthening of the /u/ vowel: **duu-má** ‘his/her child’.

All short vowels in Gumuz participate in partial assimilation. I use *partial assimilation* to refer to two different assimilatory processes.

One sense of partial assimilation is in reference to the assimilation of the [ə] with the vowel (or labialized vowel) of the following syllable. When the [ə] assimilates to a round vowel of the following syllable, rounding typically occurs approximately halfway through the [ə] vowel (see Figures 2.1-2.4 of this chapter). Thus, in this manner, assimilation is only “partial”.

I also use *partial assimilation* to refer to assimilation according to one or a set of features of a following vowel; versus *total assimilation* of all features of a vowel to all features of the following vowel. In this second sense of partial assimilation, assimilation typically targets the feature of height and affects all short vowels save /a/. For example, the future tense prefix **/ê-** (NoG) often assimilates to the height of the vowel of the following syllable. In (2.8) the high vowel of the root **/bit/** ‘descend’ causes the **/ê-** prefix to be realized as [î-].

	NoG		PHONETIC
(2.8)	PHONEMIC	-->	
	/d-é-bit-á/		[d-í-bit-á]
	AFF-FUT-descend-3SG.INTR		
	‘he will descend’		

This anticipatory assimilation process not only can affect affix vowels but also vowels of the root. In (2.9), the /o/ of the verb root /**kól**/ ‘return’ assimilates to the height of the vowel in the 3PL suffix /-**ú**/.

	SoG PHONEMIC	PHONETIC
(2.9)	/é-ma-kól-ú-é-k’w/ COND-NMLZ-return-3PL.TR-TWRD-HEAD ‘If they return (sth.)...’	[émokúluwéok’w]

Underlying vowels can also be lowered when assimilating to the height of a following vowel. For example, the verb root for ‘go away’ is /**ú(á)**/.²⁷ When the TOWARDS suffix /-**é**/ is added, the /u/ vowel of the root is lowered to [o] (and the short /a/ assimilates to the [o]).

	SoG	
(2.10) a.	/b-á-úá-gá/ AFF-3SG.INTR-go.away-NFUT ‘He went away.’	[búúgá]
b.	/b-á-úá-gá-é/ AFF-3SG.INTR-go.away-NFUT-TWRD ‘He came (from there to here).’	[bóógéé]

Phonemically long vowels do not assimilate to the vowel of a following syllable and long /aa/ in particular blocks the anticipatory assimilation of any vowels previous to it. Compare the minimal pair **ea** ‘mother’ and **ea** ‘hand’ in NN constructions with **dua** ‘child’ (NoG). In the NN construction meaning ‘mother of a child’, the /e/ of **ea** ‘mother’

²⁷ It is difficult to determine whether a final /a/ exists in the root for ‘go away’. When uttered in the imperative (which is generally the bare root/stem of the verb), the /a/ is pronounced [wá] ‘go away’. However, imperatives which exhibit a CV syllable pattern generally do not have the final /a/ in the nonfuture forms in NoG: **sá** ‘eat!’ vs. **d-a-s** (AFF-3SG.TR-eat) ‘he ate (sth.)’. It may be that the final /a/ of the imperative CV verb roots is epenthesized in order to create a pronounceable form. That is, these CV imperative forms may simply be comprised of a single consonant verb root. In the case of ‘go away’, however, the root would be a short vowel which may also be unallowed phonotactically.

assimilates to the height of the /u/ in the second noun **dua** (2.11a). However, the /e/ of **ea** ‘hand’ in ‘hand of a child’ does not assimilate to the height of /u/ in **dua** (2.11b).

	NoG PHONEMIC		PHONETIC
(2.11) a.	/eá-dua/ mother-child ‘mother of a child’		[íi-duwa]
b.	/eáá-dua/ hand-child ‘hand of a child’		[eá-duwa]

2.2.5 Epenthesis

In order to break up unallowable consonant sequences in Gumuz, a short /a/ is often inserted. For example, when a consonant-initial suffix is added to a CVC verb root, an unallowable consonant sequence would often result. But a short /a/ [ə] is inserted to break up this sequence. For example, when the nonfuture /-gá/ suffix is added to CVC verb root **fag** ‘grow’ in SoG, a short /a/ must be inserted (2.12).

	SoG PHONEMIC	-->	PHONETIC
(2.12)	/b-á-fag-gá/ AFF-3SG.INTR-grow-NFUT ‘S/he grew.’		[bəfəgəgá]

2.3 Historical Sound Change

In addition to synchronic phonological rules, I have also found at least two historical sound changes that exist between NoG and SoG. There likely exist other historical sound changes when comparing these two dialects but a deeper historical analysis of sound change is beyond the scope of this grammar.

2.3.1 Lateral Deletion

In NoG, lateral approximates were deleted historically following a short /a/. Because the deleted *l was often (but not always) between two short /a/'s, this resulted in a long /aa/. In Table 2.13, compare the lexical items from SoG (in which the original *l is maintained) with the cognate in NoG (where the *l is deleted).

Table 2.13. Lateral Deletion

	SoG	NoG
‘snake’	holá	χwaá
‘axe’	ɖála	ɖaa
‘hand’	ela	eaa
‘be short’	p'al	p'aa
‘say’	kâl	káa
‘return’	kôl	kwáa

There exists one seeming exception to the above process of lateral deletion and subsequent vowel length in NoG. The cognate words for ‘hole, pit’ in SoG and NoG are **hola** and **χwa**, respectively. The final /a/ in ‘hole, pit’ of NoG is short, and not long as it is with ‘snake’ (Table 2.3). This difference in length becomes evident when the /-má/ 3SG possessive suffix is added in NoG: **χwaámá** ‘his/her snake’ versus **χomá** ‘his/her hole/pit’.

2.3.2 Nasal Insertion and Velar Weakening

NoG and SoG demonstrate a regular sound correspondence between the uvular fricative (in NoG) and the velar nasal (in SoG). I had previously identified this sound change as *ŋ > h (Ahland 2004). However, there is reason to believe that the sound in proto-Gumuz was a voiceless velar stop *k. In Ahland (2004: 82), this hypothesis was presented as an alternative analysis but initially rejected based on the complexity of the analysis. I now believe that this unusual sound correspondence may be reflexes of nasal insertion before velars in SoG, and the weakening of the voiceless velar from *k > Ø in SoG (following nasal insertion), and *k > h > χ in NoG. Thus, the etyma corresponding

to the regular sound correspondence in Table 2.14 would be ***k'aka** 'crocodile', ***tika** 'ant', ***ɓak** 'hunt', and ***uka** 'fish (n)'.

Table 2.14. Velar Nasal-Uvular Fricative Correspondence

	SoG	NoG	Yaso	
Sound correspondence	ŋ	ɣ	Ø	
Lexical items	k'aŋa	k'aɣa	k'aa	'crocodile'
	tiŋa	tiɣa	t'a	'ant'
	ɓeŋ	ɓaɣ	ɓa	'hunt'
	uŋa	uɣa	ua	'fish (n.)'

There exists some evidence that nasals were inserted before velar stops historically in Gumuz. For example the historical compound for 'leaf' is **ts'in'já** which is comprised of **ts'éa** 'ear, leaf' and **já** 'tree' (<*g'já). Also, there exists variation between the pronunciations of certain words which involve a voiced velar stop following a vowel. For example, the word for 'three' is pronounced [okáág] in NoG versus [okááŋk] in SoG. Lastly, there is indirect evidence for nasal insertion in that native speakers of SoG tend to insert nasals before voiced velar stops when speaking Amharic, a language of wider communication in Ethiopia. That is, a word such as /ʃiməgəle/ 'elder' from Amharic is pronounced [ʃiməŋgəle]. Other evidence that the proto-Gumuz sound representing the sound correspondence in Table 2.14 may have been a post-vocalic *k is found in the ideophone **vakavak** 'sound of something moving through the air' (or **vak** 'single motion through the air'). This eventually was adopted as a verb, taking full verbal inflection in both NoG and SoG. In NoG, the verb is **váɣ** 'clear land (for planting) and in SoG the verb **ván** 'cut (grass) with a sickle'.

2.4 Tone

This section describes tone levels in Gumuz and related tone rules using nouns as examples. However, the same rules apply to tonal behavior in verbs. While this section focuses mainly on tone in Northern Gumuz (NoG), the same tonal patterns and rules have

been observed in Southern Gumuz (SoG). The differences in SoG tonal behavior are mentioned where applicable.

2.4.1 Tone Levels and Melodies

In Gumuz, there are two contrastive tone levels, H and L. In two syllable nouns, there are four possible tone melodies, HH, LL, HL, and LH, which are most clearly demonstrated in monomorphemic nouns. The data below are presented with their phonetic pitch levels for each syllable.

$\left[\begin{array}{c} - \\ - \end{array} \right]$	$\left[\begin{array}{c} - \\ \backslash \end{array} \right]$	$\left[\begin{array}{c} - \\ \backslash \end{array} \right]$	$\left[\begin{array}{c} - \\ - \end{array} \right]$
giʃa	ʃoka	dogwa	k'wafa
'rock'	'tribe, clan'	'tamarind tree'	'toad'

Similar tone melodies are found in 1 syllable nouns H, L HL²⁸ and LH.

$\left[\begin{array}{c} - \\ \end{array} \right]$	$\left[\begin{array}{c} \backslash \\ \end{array} \right]$	$\left[\begin{array}{c} \backslash \\ \end{array} \right]$	$\left[\begin{array}{c} / \\ \end{array} \right]$
ja	sa	ruz	χwa
'tree'	'word'	'rice'	'snake'

In 3-syllable nouns, however, 8 possible tone melodies are found: HHH, LLL, HLL, HHL, HLH, LLH, LHH, and LHL.

$\left[\begin{array}{c} - \\ - \\ - \end{array} \right]$	$\left[\begin{array}{c} - \\ - \\ \backslash \end{array} \right]$	$\left[\begin{array}{c} - \\ - \\ \backslash \end{array} \right]$	$\left[\begin{array}{c} - \\ - \\ \backslash \end{array} \right]$
fəχəza	gəzəza	wagəna	sərəma
'horse'	'grass'	'monkey'	'small drum'

²⁸ The only one syllable noun found to express the HL melody is [ruz], which is borrowed from Amharic, a nontonal language. However, the HL melody is commonly found in single syllable verb roots (see Chapter VII).

$\left[\begin{array}{cc} - & - \\ & - \end{array} \right]$	$\left[\begin{array}{ccc} & & - \\ - & - & \end{array} \right]$	$\left[\begin{array}{ccc} & - & - \\ - & & \end{array} \right]$	$\left[\begin{array}{cc} & - \\ - & \searrow \end{array} \right]$
wazun̄kwa	kwakwəba	kudoχwa	χobara
‘hornbill’	‘turtle’	‘guest’	‘loincloth’

The two contrasting tone levels are more clearly established when put in a frame with the genitive pronouns, [l̄ma] ‘my’ and [l̄má] ‘his’. Note that there may also be register-lowering at word boundaries.

HH Nouns	$\left[\begin{array}{ccc} - & & - - \\ & - & \end{array} \right]$	l̄ma gɪfa	‘my rock’	$\left[\begin{array}{ccc} - - & & - - \\ & & \end{array} \right]$	l̄ma gɪfa	‘his rock’
LL Nouns	$\left[\begin{array}{ccc} - & & - - \\ & - & \searrow \end{array} \right]$	l̄ma ʃoka	‘my clan’	$\left[\begin{array}{ccc} - - & & - \searrow \\ & & \end{array} \right]$	l̄ma ʃoka	‘her clan’
HL Nouns	$\left[\begin{array}{ccc} - & & - \searrow \\ & - & \end{array} \right]$	l̄ma dogwa	‘my tamarind tree’	$\left[\begin{array}{ccc} - - & & - \searrow \\ & & \end{array} \right]$	l̄ma dogwa	‘his tamarind tree’
LH Nouns	$\left[\begin{array}{ccc} - & & - \\ & - & \end{array} \right]$	l̄ma kʷafa	‘my toad’	$\left[\begin{array}{ccc} - - & & - \\ & & \end{array} \right]$	l̄ma kʷafa	‘her toad’

The above genitive noun phrases can also be uttered as nouns with bound possessive pronominal suffixes on the right edge of the noun. These pronominal suffixes are comprised of the same bound pronominals as found in the free genitive pronouns which have identical tonal melodies. Thus, /-m̄a/ with the HL melody is the 1SG possessive, while /-m̄á/ with a H melody is the 3SG possessive form. These contrasting HL and H melodies are clearly demonstrated on nouns with HH and LL melodies.

HH Nouns	$\left[\begin{array}{c} - - \\ \quad \backslash \end{array} \right]$	$\left[\begin{array}{c} - - - \\ \quad \quad \quad \end{array} \right]$
	giʃəma 'my rock'	giʃəma 'her rock'
LL Nouns	$\left[\begin{array}{c} - \\ - \quad - \\ \quad \backslash \end{array} \right]$	$\left[\begin{array}{c} - \\ - \quad - \\ \quad \quad - \end{array} \right]$
	ʃokəma 'my clan'	ʃokəma 'his clan'

2.4.2 Downstep

There clearly exist multiple tonal processes in Gumuz. However, in this dissertation, I cannot give a full treatment of tone. Instead, I will describe the notable process of automatic downstep (downstep of H tones which occurs following L tones) as well as nonautomatic downstep (downstep of H tones due to a floating L tone) (Stewart 1965), and one rule associated with this process. In this section I use verbs as well as nouns for illustration.

When the 1SG Possessive suffix is added to nouns with LH melodies, the tonal contrast is neutralized between LL ('my clan', above) and LH nouns ('my toad', below). However, tonal contrast is maintained between LL and LH nouns with the 3SG Possessive suffix.

LH Nouns	$\left[\begin{array}{c} - \\ - \quad - \\ \quad \backslash \end{array} \right]$	$\left[\begin{array}{c} - \\ - \quad - \quad - \\ \quad \quad \quad \end{array} \right]$
	kʷafəma 'my toad'	kʷafəma 'his toad'

When the 3SG possessive suffix appears on HL melody nouns, a quite unusual pattern surfaces which neutralizes contrast in tonal melody with that of HH nouns (see 'her rock' above) when the 1SG possessive suffix is added. When the 3SG Possessive suffix is added, a High-Mid-Mid (HMM) melody surfaces.

HL Nouns $\left[\begin{array}{c} - - \\ \quad \backslash \\ \end{array} \right]$ dogoma ‘my tamarind tree’ $\left[\begin{array}{c} - \\ - - \\ \end{array} \right]$ dogoma ‘his tamarind tree’

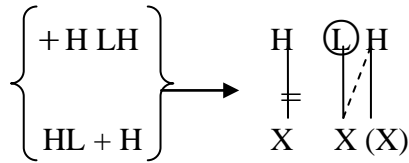
This new ‘contrastive’ mid (M) tone height, is either the result of coalescence of the H and L tones (and subsequent spread of the newly formed M tone) or a downstepped H which has spread. This phenomenon is repeated throughout both NoG and SoG when an HLH sequence is formed (underlyingly) across morpheme boundaries. In all these examples, an H tone following this surface M tone is realized at the same pitch level as the mid. Thus, this phenomenon must be downstep as the register for H tones has been reset.

For example, the free form of the 3PL possessive pronoun (in NoG) is the Genitive **lə- H + -mama HLH** which forms **lə^hmámá**. When this is followed by a noun which begins with an H tone, this following H tone maintains the same pitch level or lower than the previous downstepped H tone. If this new pitch level were truly a phonologized M tone, one would expect the following H to be realized at a higher pitch level. This downstepping is exemplified with the HH melody noun, **giʃá** ‘rock’, below.

$\left[\begin{array}{c} - - - - \\ \end{array} \right]$
 ləmama giʃa ‘their rock’
 H+HLH HH

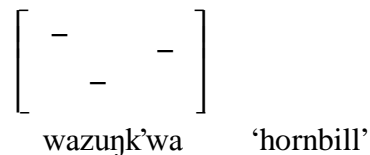
From these examples, one can establish the following tone rule. Here, the final H tone spreads left delinking the L. This floating L tone then causes the following H tones to downstep. The nonautomatic downstep rule below applies when two morphemes come together even when the L tone which causes downstep is not at a morpheme boundary (as in the genitive pronoun ‘their’ given above).

Nonautomatic Downstep



This nonautomatic downstep rule appears to be optional in certain instances in SoG, namely within verbal conjugations in which either a HLH sequence is acceptable or a H⁺HH for the same verbal conjugation. The nonautomatic-downstep rule also applies within NN compounds (the Associative Construction, Chapter VI). For example, when the noun **ca H** ‘seed’ forms a compound with **opa LH** ‘bean’, the resulting surface form is **cóó’pá**. ‘bean seed’.

If a HLH sequence is found in a monomorphemic noun, the above tone rule does not apply. While the L tone does cause *automatic* downstep of the following H, the final H does not spread left causing the L tone to delink, such as with the noun ‘hornbill’ below.



While the above non-automatic downstep rule predicts the behavior of most HLH tone sequences across morpheme boundaries (including H + HLH), it does not predict the tonal behavior of certain other HLH tonal sequences across morpheme boundaries, such as HL+ HL and HL +H. It is sometimes the case that these tonal sequences result in a total loss of the L tone that occurs between two H’s. The application of non-automatic downstep versus L tone deletion appears to be more predictable in verbs. When verbal prefixes and roots come together, the non-automatic downstep rule applies (or is optional). When verbal suffixes and roots come together, the L tone deletion rule applies. For example, L tone deletion (in lieu of nonautomatic downstep) occurs when verbal suffixes such as the directional ‘towards’ /-é/ or the middle voice marker /-á/ follows an

HL verb root. The NoG verb root **kwáa** ‘return’ carries an HL tonal melody (2.13a) but when the directional suffix is added, the final L tone of the root deletes (2.13b).

- (2.13) a. d-á-kwáa
 AFF-3SG.INTR-return
 ‘S/he returned.’
- b. d-á-kwáá-é
 AFF-3SG.INTR-return-TWRD
 ‘S/he returned here (towards speaker).’

For nouns, either non-automatic downstep or L tone deletion can occur when the HLH(L) tonal sequence involves a root plus a suffix. For example, the 1SG possessive pronoun suffix in Gumuz carries an HL tonal melody. When the possessive suffix is attached to HL nouns such as ‘tamarind tree’, no tonal downstep results. Instead, the HL+HL tonal sequence surfaces as HHL (see ‘my tamarind tree’ above). On the other hand, when a noun root carries a HL melody and its suffix carries H tone, the non-automatic downstep rule applies as with ‘his tamarind tree’. Similarly, if an HL noun root is followed by a HL noun root as with noun-noun compounds (see Chapter VI, section 6.1.1), the non-automatic downstep rule applies resulting in a H¹HHL tonal sequence. It is clear that further investigation is needed for predicting the application of non-automatic downstep versus L tone deletion.

Lastly, downstep of H tones occurs at word boundaries in both NoG and SoG. The sentence in example (2.14) is comprised of morphemes which carry H tone melodies only. Each subsequent phonological word is downstepped even though there are no underlying L tones.



- (2.14) [bársógá tsáká nílíímíts’ómá] ‘I ate guinea fowl in his house.’
 (I ate) (guinea fowl) (in his house)

CHAPTER III

NOUNS

This chapter covers the basic shape and phonology of simple noun words in Gumuz (section 3.1), as well as all known inflectional morphology on nouns (section 3.2). Derived nouns including nominal compounds are discussed (section 3.3). However, the marking of case is covered in Chapter X “Basic Verbal Clauses and Alignment”.

3.1. The Phonological Shape of Simple Noun Stems

Nearly all simple noun stems in Gumuz (both NoG and SoG) — save a few borrowed nouns — end in **/-a/** (toneless). This suffix does not appear to be derivational, nor does it have any clear meaning and, for this reason, will be labeled a nominal marker (NM).¹ Thus, simple noun stems are comprised of a noun root plus a final **/-a/**. This final **/-a/** may be dropped when the root is incorporated into the verb (see Chapter VIII). Otherwise, it appears to be maintained in one form or another in simple noun stems.

Most simple noun stems in Gumuz are bisyllabic exhibiting a CV.CV syllabification pattern (with V representing either a long or short vowel), e.g. **boosa** ‘stomach’ (NoG, SoG). The syllabification patterns CVN.CV and CV.V are also commonly found in nouns: e.g. **sáánká** ‘liver’ (NoG) and **kea** ‘beer’ (NoG, SoG). Less common are V.CV and V.V bisyllabic nouns, e.g. **ooká** ‘sun’ (NoG, SoG) and **éá** ‘mother’ (NoG, SoG). Fewer simple noun stems comprise three syllables, most of which are CV.CV.CV, e.g. **báxágá** ‘gourd’ (NoG), and even fewer comprise one syllable, e.g. **sa** ‘word, language’ (NoG, SoG). As mentioned in Chapter II, there are four possible tonal melodies in two syllable noun stems: HH, HL, LL, and LH. These tonal melodies are also found in one syllable noun stems in NoG, whereas only L and H are found in one syllable noun stems in SoG.

¹ However, there are certain noun forms which differ segmentally from a corresponding verbal form only in the presence or absence of the final **/-a/**: e.g. **ifá** ‘egg’ vs. **if** ‘lay an egg’, **ngifá** ‘speech, what is said’ vs. **ngif** ‘speak, tell’ (data is the same for both NoG and SoG).

3.2. Nominal Inflection

Nouns in Gumuz can be (but are not often) inflected for number (discussed below) and can be inflected for case (to be covered in Chapter XIII). In addition, nouns in NoG and SoG can be marked with possessive pronoun suffixes (described in detail in section 4.2.2 of Chapter IV, “Pronouns”). Following is a position class diagram for inflectional morphemes on the noun word in both NoG and SoG:

(Case)-(Number)-[Noun Stem]

As just mentioned, nouns in Gumuz are not often marked for number. Instead, context and/or verbal inflection is used to determine number.² Compare the following:

NoG

(3.1) mbáándá бага гúmíза é⁺-lá d-a-ηgaʃ-áts
two person Gumuz like-this AFF-3SG.TR-speak-BODY
‘Two Gumuz people told (me) so.’

(3.2) бага é⁺-lá d-a-ηgaʃ-áts
person like-this AFF-3SG.TR-say-BODY
‘Someone told (me) so.’

(3.3) d-úu-ts á-baga ká = gó-baangá
AFF-3PL.INTR-go NOM-person DAT=place-monitor.lizard
‘The people went to the monitor lizard (approached the monitor lizard).’

The fact that number is not generally inflectionally marked in Gumuz nouns, as demonstrated in examples (3.1-3.3), has caused scholars to question the placement of Gumuz within the Nilo-Saharan (N-S) family. Within Nilo-Saharan, a tripartite nominal system of singulative (i.e. overt morpheme or stem shape for singular but zero for plural), plurative (i.e. overt morpheme or stem shape for plural but zero for singular), and replacive (i.e. overt morphemes or stem shapes for both singular and plural) marking is widespread and is found in three of the six major original subfamilies proposed by

² Regarding examples (3.1-3.3), certain dialects within both NoG and SoG have a singular weak suppletive form for ‘person (SG)’: /baha/ or /baɣa/.

Greenberg 1963: Maban, Fur, and Chari-Nile (Dimmendaal 2000: 216). Dimmendaal (2000:217) proposes that such a system is very old and the lack of such a system should be considered an innovation.

While number-marking on nouns is not common in Gumuz, there do exist at least four noun/nominal strategies for marking plural. However, unlike many other N-S languages, there are no known singulative markers aside from a few grammaticalized uses of class morphemes (discussed further in Chapter XII) and there is no known replacive system other than for a handful of idiosyncratic lexemes (section 3.2.1.4).

3.2.1. The **má-/ ṛ(á)**- Plural Prefix

Plural marking in Gumuz is generally reserved for animate nouns, most often humans. For kinship terms, plural is generally marked with the prefix **má-** (NoG) or **ṛ-** ~ **ṛá-**(SoG) (3.4).³

(3.4)

Gloss	Singular		Plural	
	<i>NoG</i>	<i>SoG</i>	<i>NoG</i>	<i>SoG</i>
‘my father’	baabéa	baabâ	má baabéa	ṛ baabâ
‘my mother’	ṛdê ~ ijúá ~ eéma	eêm ~ jajá	má ṛdê(a) ~ míijúá ~ méemá	ṛ eêm
‘father’s brother’	tʃáámba	tʃáámba	mát ʃáámba	ṛt ʃáámba

Certain other terms for people can also be marked with **má-/ ṛ(á)**- (3.5, 3.6) as well as livestock (3.7) and certain other animals (3.8).

NoG

(3.5) **má-gáánza** d-úu-ts ká = súúga
 PL-elder AFF-3PL.INTR-go DAT =store
 ‘The elders went to the store.’

³ There exist a variety of suffixal endings for ‘mother’ and ‘father’ in NoG. The examples given in 3.4 have /-é(a)/, /-ú(a)/, and /-mâ/ for 1SG POSS, all of which exhibit a HL tone pattern (which appears to be the main strategy for indicating 1SG POSS). The form [ijúá] for ‘my mother’ is /**eá-úá**/ underlyingly.

SoG
 (3.6) **ṁá-t'isa**
 PL-king
 'kings'

NoG
 (3.7) **má-eák'ó-χosa [mé'ék'óχosa]**
 PL-F:NH-bovine
 'cows'

SoG
 (3.8) ts'iná-dúbáts'egot ka = dúú-gú-míí-má
 story-Dubats'egot COM=child-place-mother's.family-3SG.POSS

ka = **má-gúmba**
 COM-PL-lion
 'The story of Dubats'egot with his mother's family and the lions'

SoG
 (3.9) ts'ñn gúmba ka = wáágana ka = **má-dáája**
 story lion COM=monkey COM=PL-baboon
 'The story of the lion, the monkey, and the baboons'

The **má-** / **ṁ(á)-** plural prefix is marked on the first of two animate singular nouns in a coordinated NP. As the first noun has a singular referent, the scope of the plural prefix is the entire NP and thus may be better analyzed as a pro-clitic. This form can be found attached to the first animate noun, whether a common noun (3.10) or proper noun (3.11, 3.12).

SoG
 (3.10) dá-b-á-á-⁴ǰá-gá **ṁ** = gúmba ka = zaana
 REL.PRO.PL-AFF-3SG.INTR-RECP-die-NFUT PL=lion COM=elephant
 'The ones who are fighting each other are the lion and the elephant.'

SoG
 (3.11) dá'-ṁ-míc-agá k'óá **ṁ** = báciC ka = ǰgafa-má
 REL.PRO.PL-PL-chase-NFUT dog PL=Bacic COM=woman-3SG.POSS
 'The ones chasing the dog are Bacic and his wife.'

NoG

- (3.12) dá-má-míc k'óá m = óó-bácíca ka-ńgafa-má
REL.PRO.PL-PL-chase dog PL=M-Bacic COM=woman-3SG.POSS
'The ones chasing the dog are Bacic and his wife.'

However, in NoG, one can alternatively mark both (singular) nouns as plural to emphasize that both participants are involved in an action (3.13).

- (3.13) m-óó-mígák'wa ka = m-óó-tafará d-úú-lílígít-ók'w
PL-M-Migak'wa COM= PL-M-Tefere AFF-3PL.TR-roll-CL1:head

óó-báámítá ná = nńea.
M-Baamita LOC=ground

'Migak'wa and Tefere rolled Bamita on the ground.'

One can also use the plural **má-/ń(á)-** prefix to refer to animate referents (usually human) associated with the noun being marked and it does not necessarily indicate that the referent of the noun itself is plural. For example, while the **ńá-** prefix in (3.6) is pluralizing the noun **t'isa** 'king', the **má-** plural prefix in (3.14) is referring to people associated with the government (as **t'isa** can refer to 'king' or 'government') and not 'governments' or 'kings'.

- (3.14) ńzíicá taríka = kwê ka = lá = gats'axa lá = **má-t'isa**
four story=CONJ COM=GEN=old.days GEN=PL-government

g-úú-káa úú⁺-kád-ók'w бага
when-3PL.TR-say 3P.IMP-[buy-head] person
sell

'And the fourth story is about in the old days when (the people of) the government said people could be sold.'

Lastly, a few inanimate nouns in NoG can be marked plural with the **má-** prefix in elicitation but these forms are not often used (3.15) and most, like (3.16), are deemed

unacceptable forms.⁴ Indeed there are no examples of this plural prefix on inanimate nouns within natural texts.

	NoG		PLURAL
(3.15)	SINGULAR	máts'á	má-máts'á
		'house'	PL-house
			'houses'
	lí- ⁺ gátʃá		má-lí- ⁺ gátʃá
	CL:belly?-body.of.water		PL-CL:belly?-body.of.water
	'body of water/river'		'bodies of water/rivers'
(3.16)	k'ósa		*má-k'ósa
			PL-tooth
	'tooth / teeth'		

In SoG, there is at least one inanimate noun, **maatííá** 'war', which can be marked plural with the **ín(á)-** prefix (3.17). However, again, most inanimate nouns do not take this prefix.

	SoG				
(3.17)	ác	ná-ma-amên	ín-ma-a-tíí-a	eba	ba
	oh!	LOC-NMLZ-be.nothing	PL-NMLZ-RECP-shoot-NM	country	PDEM
	éaab	ná-m-ot-a			
	how	LOC-NMLZ-EXIST-NM			

'If there had been no wars, oh what this country would have been like!'

Inanimate nouns, however, are sometimes marked for number using certain class morphemes (discussed in Chapter IX). One can also nominalize a verb marked with a pluractional and use it as an attributive noun in order to express a plural referent. Pluractionals are discussed in Chapter VII and nominalized pluractional verbs as attributive nouns are discussed in Chapter VI, "Nonfinite Nominal Modification Constructions".

⁴ With regard to example (3.16), it is possible to use the class morpheme **ca-** to refer to a set of teeth (see Chapter IX for further discussion): **ca-k'ósa**.

3.2.2. The /-á-/ Plurals (Vowel Lengthening)

Another subset of nouns referring to people is marked plural by lengthening of the first /a/ vowel plus H tone.⁵ For example, the plural of **gadua** ‘orphan’ is **gáádúá** (Table 3.1). The lengthened /a/ vowel is usually in the first syllable of the noun stem but is occasionally found in the second syllable. This vowel lengthening process exists in both NoG and SoG.⁶ It is likely that this subset of nouns were historically polymorphemic with the vowel lengthening occurring on the end of the first morpheme of the word; at least two of these words contain two synchronic morphemes: ‘orphan’ **gadua** (sg) /**gáádúá** (pl) appears to contain the morpheme **dua** ‘child’, and **tagoná** ‘young woman’ the morpheme /**da-**/ which means ‘person/people (who)’ in a NN compound. However, /**dá(á)-**/ normally carries H tone (and most often has a long vowel in NoG) and thus more closely resembles the first syllable of the plural form **dáágóná**.⁷

Lastly, it should be noted that use of the vowel lengthening for plural varies with use of the **má-** plural prefix for ‘older brother’ and ‘older sister’. The same NoG speaker who employed vowel lengthening for these lexemes also employed the **má-** plural prefix on a separate occasion for the same lexemes. Innocenti also recorded the **má-** plural prefix for a variation of these lexemes in the Mandura area: *á’ea* ‘older brother’/ *má’ea* (PL) and *o’ea* ‘sister’/ *mo’ea* (PL) (2010:24, 25). This was elicited from the same area where the /-á-/ plural was recorded for ‘older brother’ and ‘older sister’ (see Table 3.1). Innocenti also records an /-á-/ plural for ‘young men’ in NoG: *gashilá* ‘young man’ (SG) vs. *gashilá* (PL) (2010:25).

⁵ The resulting tonal patterns do not appear to be predictable phonologically. However, the H tone tends to spread throughout the word.

⁶ This plural marking is similar to the “internal -a- plurals” of Chadic (cf. Newman 1990:37). However, in Gumuz, it is more likely the result of vowel lengthening which is known to exist as a strategy for marking plural in other N-S languages such as Dinka (Remijsen & Gilley 2008: 324) and the Temein languages (Blench 2007:8). See also footnote 8.

⁷ The length distinction for /**daa-**/ as a plural vs. /**da-**/ singular was attested by Innocenti (2010:25) who describes essentially the same dialect as NoG. However, my own data for NoG do not show a consistent vowel length distinction for plural on /**dá(á)-**/ (see Chapter XII). Innocenti also does not record a consistent addition of H tone for the /-a-/ plurals.

Table 3.1. /-á-/ Plurals in Gumuz⁸

Variety	Singular	Plural
NoG	gadu-a orphan-NM	gáádú-á orphans-NM
NoG	kodóχw-á guest- NM	kwáádóχw-á guests-NM
NoG and SoG	dagon-á young.woman- NM	dáágón-á young.women-NM
SoG	gafal-a young.man- NM	gááfál-á young.men-NM
NoG and SoG	ńgaf-a woman- NM	gááf-a women-NM
NoG	aʔ-á-ma ⁹ older.brother-NM-1SG.POSS	aʔ-áá-ma older.brothers-NM-1SG.POSS
NoG	oʔ-á-ma [oʔóma] older.sister-NM-1SG.POSS	oʔ-áá-ma older.sisters-NM-1SG.POSS

3.2.3. Plurals by Reduplication

A third small subset of nouns can be marked plural via reduplication of the initial consonant plus the addition of /áá/. This may be a combination of strategies:

reduplication of the initial consonant plus /a/ with plural vowel lengthening (resulting in /áá/). Such a combination is only attested in SoG by speakers who live in and around Kamashi town (but may be used elsewhere as well) (see examples 3.18, 3.19).¹⁰

Reduplicated forms indicating plural are also found in derived nouns (see also example (6.28) of section 6.2.3 of Chapter VI).

⁸ The word for ‘guest’ would not be an exception to vowel lengthening if one considers that /k^oa/ [kwə] is realized as [ko] (or [ku]) when a consonant follows. Thus, [kodóχwá] ‘guest’ must be /koadóχwá/ or /k^oadóχwá/ underlyingly. Otherwise, one would expect the /o/ to lengthen (or not be subject to this lengthening process at all, considering that /a/ is the only known vowel to undergo lengthening to mark plural). The other alternative is to assume that /-á-/ is a plural infix for this subset of nouns (similar to Chadic). This analysis has its merits since it explains the addition of H tone. See also the discussion of vowel length contrasts in Chapter II.

⁹ The words for ‘my older brother’ and ‘my older sister’ are multimorphemic with the /-mâ/ 1SG POSS suffix. Also, ‘older brothers’ is an apparent exception to the first /a/ vowel being lengthened. However, if all of these lexemes are polymorphemic historically, it may be that the final /a/ of the first (historical) morpheme is lengthened.

¹⁰ Some speakers of SoG who produce the reduplicated form in 3.18 can also use the **ńá-** plural prefix on the same noun outside of a N-N compound: **ńá-gwinzá** (PL-male) ‘males’.

SoG	SINGULAR	PLURAL
(3.18)	gunzá 'male/man'	g-áá-gunzá REDUP-PL-male 'males/men'
(3.19)	jendá other (person, thing) 'Another (person, thing)'	ɟ-áá-jendá REDUP-PL-other 'Other people'

3.2.4. Suppletive Plurals

There are only two known suppletive plurals in Gumuz (3.20). One might also count **ɲgafa/ gááfa** 'woman/'women' (Table 3.1) as weak suppletion. The weakly suppletive singular/plural pair **baha (baɣa)** 'person' and **ɓaga** 'people' only exists in certain dialects of NoG and SoG. Otherwise, **ɓaga** 'person/people' is used for both singular and plural.

(3.20)

Gloss	Singular		Plural	
	NoG	SoG	NoG	SoG
'child'	dua	dua	diida	iida
'(mother's brother's) wife'	éf (amíá)	--	gááf (máamíá)	--

3.3 Relational Nouns

In Gumuz, there exist two major classes of nouns: relational nouns and absolute nouns. Relational nouns are nouns whose referent has an inherent relationship to the nominal constituents that accompany them. Absolute nouns, on the other hand, are nouns which can appear together with other nouns but the relation of the noun referents is not inherent (Alexiadou et al. 2007: 477, Taylor 2002: 208-210). According to Taylor (2002), relational nouns are a semantic category of nouns which include kinship terms, nouns which indicate professions or social relations (*friend, enemy, neighbor, etc.*), nouns that designate an entity as part of another (relator nouns, e.g. *top, side, inside,*

etc.), nouns which designate a physical representation of another item (e.g. *statue*, *photograph*), and those nouns derived from verbs (e.g. ‘agentive nouns’ like *singer*). Alexiadou et al. (2007) expands this last subcategory of derived nouns to include nominalized verbs which retain verbal arguments. In Gumuz, the class of relational nouns includes ones that indicate: kinship terms, body part terms, any part of a whole, relator nouns, nominalized transitive verbs and nominalized stative verbs. These last two categories will be discussed further in section 3.4.

Relational nouns in Gumuz are either marked with the suffix /-**má**/ indicating inherent possession (IP) which is homophonous with (and related to) the 3SG possessive suffix /-**má**/ or are marked with another possessive pronominal suffix. The suffix is often obligatory when the second noun in the relation is not overt and/or the two nouns are not part of a NN construction (see Chapter VI). Relational nouns in Gumuz exist on a cline from those which are obligatorily marked with the inherent possession suffix (again, outside of a NN construction), to those which are often marked with a possessive suffix but not obligatorily. Table 3.2 demonstrates this cline and the range of possessive suffixal marking on relational nouns in Gumuz.

Table 3.2. Cline Representing Possessive Suffix Marking on “Relational Nouns” in Gumuz

<-----obligatory -----non-obligatory --->

<p>/-má/ 3SG Possessor (Inherent Possession suffix) is obligatory</p> <p>-and no other possessive suffix is allowed or known to co-occur</p>	<p>Possessive suffix (or /-má/) is obligatory</p> <p>- other possessive suffixes besides /-má/ are allowed</p>	<p>Possessive suffix is preferred but not obligatory</p> <p>-and/or there are both absolute and relational senses of the same lexeme in which the relational sense allows full range of possessive suffixes</p>
<p>Examples</p> <ul style="list-style-type: none"> • nominalized stative verbs • nominalized (non-labile) transitive verbs • other describing words that are not deverbal: ‘female’, ‘male’, ‘new’, ‘big’ • plant parts • others: ‘egg’, ‘hem’, ‘strap’, ‘milk’ 	<p>Examples</p> <ul style="list-style-type: none"> • relator nouns • certain kinship terms: ‘wife’, ‘husband’, ‘mother’, ‘father’, ‘sister’, ‘brother’ • others: ‘owner’, ‘all’, ‘footprint’ 	<p>Examples</p> <ul style="list-style-type: none"> • body part terms • certain kinship terms: ‘child’, ‘uncle’,

Section 3.3.1 describes kinship terms, 3.3.2 describes body part terms and other parts of wholes, 3.3.3 describes relator nouns (also covered in chapter V), and section 3.3.4 describes the subset of deverbal nouns in Gumuz which are relational.

3.3.1 Kinship Terms

Kinship terms in both NoG and SoG exhibit unique morpho-syntax which distinguishes these nouns from other non-relational (absolute nouns) in Gumuz. For one, there exists a distinct construction for the genitive noun phrase. In NoG, ‘child’ is marked with the 1SG possessive suffix /-mâ/ in addition to being modified by the 1SG

genitive pronoun (3.21). In contrast, a non-kinship term like ‘cattle’ (3.22) only takes the genitive pronoun or a possessive suffix marking but not both in the same phrase.

- NoG
- (3.21) lá-ma **duá-ma**
 GEN-1SG.POSS child-1SG.POSS
 ‘my child’
-
- NoG
- (3.22) lá-ma **χosa** OR χosá-ma
 GEN-1SG.POSS cattle cattle-3SG.POSS
 ‘my cattle’

In addition, there exists distinct marking for the kinship term itself. For example, ‘mother’ (in both NoG and SoG) is not considered acceptable if uttered in isolation without a possessive suffix marker (3.23) (see also example 3.49). In SoG, only kinship terms and certain other relational nouns can take a possessive suffix. Absolute nouns must use a genitive pronoun instead (3.24).

- (3.23) a. ea-**má** (mother-3SG.POSS) ‘his/her mother’
 b. ?? eá ?? ‘mother’
-
- SoG
- (3.24) a. bab-**ú** (father-2SG.POSS) ‘your father’
 b. múŋwá **al-ú** (spear-2SG.POSS) ‘your spear’

For certain kinship terms such as ‘child’ there exists both a relational sense of the term (3.21) and absolute sense, the latter of which has no inherent relation to another entity (3.25). That is, ‘child’ in Gumuz can refer to a relationship to another regardless of age (relational sense) or can refer to a fixed age, e.g. ‘a young person’ (absolute sense).

- SoG
 (3.25) dua b-á-sá-gá nga
 child AFF-3SG.TR-eat-NFUT porridge
 ‘The child ate porridge.’

3.3.2 Body Part Terms and Other Part/Whole Relations

With body part terms in Gumuz, there exists distinct morpho-syntax in the genitive noun phrase. Similar to kinship terms in NoG, possessed body parts terms take a genitive NP in addition to a possessive suffix (3.26). Again, absolute nouns take the genitive NP without the possessive suffix (3.27).

- NoG
 (3.26) lá-obá-ma lúk’ú-má
 GEN-father-1SG.POSS head-3SG.POSS
 ‘my father’s head’ (lit: my father his head)

- NoG
 (3.27) lá-obá-ma χosa
 GEN-father-1SG.POSS cattle
 ‘my father’s cattle’

Most body part terms in Gumuz are relational and require a possessive suffix (3.28). However, for certain body part terms there also exists a distinct absolute sense of the noun. Compare (3.29) and (3.30).

- SoG
 (3.28) elâ-m
 hand-1SG.POSS
 ‘my hand’

NoG

- Absolute Noun
 (3.29) ják’wá ‘comb’ (for hair, made from horn material)
 comb

Relational Noun

- (3.30) **ják'ó-má** 'its horn' (of an animal)
comb-3SG.POSS

Like body part terms, all other parts of wholes in Gumuz, specifically plant parts, generally require a possessive suffix, most commonly the 3SG possessive suffix /-**má**/ (3.31, 3.32).

SoG

- (3.31) **cá-má** (seed-3SG.POSS) 'its seed'
*cá
- (3.32) **bola-má** (flower-3SG.POSS) 'its flower'
?? bola

Again, if there exists an 'absolute' sense of the lexical item, that particular sense is not inherently possessed, but the 'relational' noun sense is (3.33).

NoG

- (3.33) **já** 'tree' vs. **ják-má** (stalk/trunk-3SG.POSS) 'its stalk, trunk'

3.3.3 Relator Nouns

One special set of nouns in Gumuz, which are metaphorical parts of wholes, are relator nouns. These are body part terms (save one) which have grammaticalized to indicate spatial relations. While body part terms are not always obligatorily possessed, the grammaticalized relator nouns are.¹¹ These relator nouns combine with prepositional proclitics to form complex prepositional phrases. Table 3.3 gives examples of some of these relator noun constructions in combination with the locative preposition /**ná**=/.

¹¹ Like all relational nouns in Gumuz, if relator nouns are part of a NN construction (Chapter VI), the inherent possession suffix /-**má**/ does not occur on the noun. For example, 'in the house' **n=fíl máts'á** (LOC=belly house) is comprised of a locative preposition followed by the relator noun 'belly' which is part of a NN construction with 'house'.

Table 3.3. Relator Noun Constructions Marked for Inherent Possession

ná = k'ó -má LOC=head-3SG.POSS	'on top of it/him'
ná = íílá -má LOC=belly-3SG.POSS	'inside it/him'
ná = boŋgo -má (NoG) LOC=back-3SG.POSS	'behind it/him'
ná = 'já -má LOC=hip/loins-3SG.POSS	'at its base'
ná = sá -má LOC=mouth-3SG.POSS	'at its edge'

These relator nouns can also be marked with non-3rd person possessive suffixes, but not as commonly; the choice of grammatical possessor is restricted by the semantics of the relator noun (3.34, 3.35).

NoG

- (3.34) ná = boŋgó-ma
LOC=back-1SG.POSS
'behind me'

- (3.35) a. ná = sá-ma '*on my edge'
b. ná = sá-ma 'on my mouth'

3.3.4 Deverbal Relational Nouns

Two categories of deverbal nouns obligatorily take the /-má/ inherent possession suffix: nominalized transitive verbs and nominalized stative verbs; no other possessive suffixes are allowed for these nominalized verbs (i.e. 1st person possessors, 2nd person possessors, 3PL possessor). Both are nominalized with the /ma-/ nominalizing prefix (section 3.5.1). One might be tempted functionally to interpret the suffix /-má/ as marking O and S_O; however, the remaining intransitives which do not take the /-má/ inherent possession suffix have both S_O and S_A arguments (see Chapters VI and XI for further discussion of dynamic intransitive verbs).

Nominalized stative and transitive verbs take the grammar of inherent possession for different reasons. Nominalized stative verbs are inherently possessed as they represent an inherent quality of another noun: ‘black’, ‘evil’, ‘short’, ‘good’. These nominalizations must either occur as the first noun in the Attributive Construction or occur with the inherent possession suffix.

FINITE STATIVE VERB	NOMINALIZED STATIVE
NoG	NoG
d-á-χίί	ma-χίί-má
AFF-3SG.INTR-be.black	NMLZ-be.black-IP:MOD
‘It is black / it turned black.’	‘black (person/thing)’
d-á-nas	ma-nas-amá
AFF-3SG.INTR-be.bad	NMLZ-be.bad-IP:MOD
‘S/he is/became evil.’	‘evil (person/thing)’
d-á-p’aa	ma-p’aa-má
AFF-3SG.INTR-be.short	NMLZ-be.short-IP:MOD
‘S/he is short.’	‘short (person/thing)’
SoG	SoG
b-á-gáη-gá	ma-gáη-ámá
AFF-3SG.INTR-be.good-NFUT	NMLZ-be.good-IP:MOD
‘S/he/it is/became good.’	‘good (person/thing)’

ATTRIBUTIVE CONSTRUCTION

NoG	SoG
ma-p’áá-βaga	ma-gáη-á-βaga
NMLZ-be.short-person	NMLZ-be.good-person
‘short person’	‘good person’

Transitive verbs nominalized with the /**ma-**/ prefix, on the other hand, are relational in that they retain reference to their erstwhile O argument, either via a NN construction with the O argument as the second N of the construction or via the inherent possession suffix. Like other relational nouns, the inherent possession suffix does not occur when the nominalized verb is part of a NN (Associative) Construction but is

obligatorily marked when the second noun (the erstwhile O argument) does not follow the nominalized verb (i.e. is outside the Associative Construction) (3.36).

NoG and SoG

- (3.36)
- | | | | |
|----|----------------------|--------|--|
| a. | N | N | |
| | [ma-sá] | -[ŋga] | |
| | NMLZ-eat-porridge | | |
| | ‘to eat porridge’ | | |
| | | | |
| b. | ma-sá-má | | |
| | NMLZ-eat-IP:O | | |
| | ‘to eat (something)’ | | |

3.4 Nominal Derivation

Nominal derivation in Gumuz ranges from deverbal nouns (section 3.4.1) which include verbal nouns and /ga-/ nominalizations to nouns derived from nouns (section 3.4.2) — including feminine, masculine, augmentative, and diminutive. The principle historical source of nouns derived from nouns is the noun-noun collocation found in the Associative Construction which is covered in Chapter VII, “Nonfinite Nominal Modification Constructions”. Non-productive compounding based on this construction is also described in this section.

3.4.1 Deverbal Nominalizations

There are two types of deverbal nominalizations in Gumuz: 1) verbal nouns, or those formed with the /ma-/ prefix, and 2) /ga-/ nominalizations, or those formed with a /ga-/ prefix. Both of these nominalizations pass the basic tests of noun-hood in Gumuz, which are the following:

1. Can function as a verbal argument or complement
2. Can be possessed
3. Can take nominative and/or genitive case-marking
4. Can be the object of a preposition

3.4.1.1 Verbal Nouns

Verbal nouns in Gumuz are nominalized verb forms that are used in certain nominalized clauses/subordinate clauses and also as simple nouns. Their function within nominalized clauses and as complements is covered in Chapter VI, “Nominalization and Deverbal Complements”. Their function within NN collocations (compounds) is covered in Chapter VII, “Nonfinite Nominal Modification Constructions”.

Verbal nouns are formed by adding a /**ma-**/ (L tone) nominalizer to a verb root/stem. If the verb is a dynamic intransitive, the /-**a**/ (toneless) nominal marker is added as well.¹² “Dynamic” intransitive verbs are those which are not “stative” in that they do not depict a quality or attribute of the S argument. Thus, verb stems with meanings such as ‘be good’ or ‘be green’ belong to a class of stative verbs, and verb stems with meanings such as ‘run’ or ‘fall’ belong to a class of dynamic intransitive verbs. As discussed in section 3.3, if the verb stem/root is transitive (3.38) or stative (3.39), a /-**má**/ inherent possession (IP) suffix is added when the nominalization occurs outside a noun-noun construction (see Chapter VII, “Nonfinite Nominal Modification Constructions”).

In example (3.37) the dynamic intransitive verb root **pé?** ‘lie down’ is nominalized and functions as the S argument of the clause.

- NoG
(3.37) ma-pé?-a d-á-gáχ
 NMLZ-lie.down-NM AFF-3SG.INTR-be.good
 ‘Lying down is good.’

Similar to (3.37), the nominalized verb form **mapaŋamá** is the S argument of the verb **dágáχ** ‘It is good’(3.38). In (3.39), the nominalized stative verb **maxíímá** ‘black’ also serves as the S argument.

¹² It may be that this suffix is added to all nominalized verbs, whether, dynamic, stative, or transitive.

- NoG
 (3.38) ma-paŋ-a-má d-á-gáχ
 NMLZ-look.for-NM-IP:O AFF-3SG.INTR-be.good
 ‘To look for (something/it) is good.’

- NoG
 (3.39) ma-χíí-má d-á-ot
 NMLZ-be.black-IP:MOD AFF-3SG.INTR-EXIST
 ‘It is black.’

By contrast, it is important to note that adding the */-má/* inherent possession suffix to nominalized dynamic intransitive verb stems produces a homophonous construction with distinct semantics. On a nominalized dynamic intransitive, the grammatical 3SG possessive suffix refers to a potentially referential agent (3.40) (see Chapter IV, “Pronouns”).

- SoG
 (3.40) ma-parr-a-má ná = nguʒig
 NMLZ-to.fly-NM-3SG.POSS LOC=yesterday
 ‘He flew yesterday.’ (lit: His flying was yesterday.)

If a nominalized stative or transitive verb stem does not have the */-má/* inherent possession suffix (and is not immediately followed by another noun), the nominalization is either ungrammatical (3.41) or, in the case of labile verb stems, the verb stem is interpreted as a dynamic intransitive (3.42).

- NoG
 (3.41) *ma-χíí-á
 NMLZ-be.black-NM
 ‘blackness??’

- NoG
 (3.42) ma-paŋ-a d-á-gáχ vs. ma-paŋ-amá
 NMLZ-desire-NM AFF-3SG.INTR-be.good NMLZ-want-IP:O
 ‘To desire is good.’ ‘to want something’

In addition to taking possessive suffixes (3.40), nominalized dynamic intransitive verb stems can be possessed using a genitive noun (**alá-** GEN + N) or genitive pronoun (**alá-** GEN + POSS PRO) (3.43).¹³

- SoG
 (3.43) ma-ʔíí-a alâ-m ná = kamaaʃí
 NMLZ-be/live-NM GEN-1SG.POSS LOC=Kamashi
 ‘My residence is in Kamashi.’ (lit: ‘My living is ...’)

As a third test of noun-hood, /**ma-**/ nominalizations, like prototypical nouns, can take nominative case marking. Nominative case in Gumuz is only marked when the S/A argument follows the verb or when the S/A argument is emphasized (see further discussion of case in Chapter XIII, “Basic Verbal Clauses and Alignment”).

- SoG
 V
 (3.44) tʔŋ-kʷ biiá má-ʔbatsʹ-a-ʃ-án
 swallow-HEAD medicine PURP-leave-3SG.TR-HIP-DEP

O A
 âm **á-m-ʔdú-ts-a**
 2SG NOM-NMLZ-be.sick-BODY-NM

‘Swallow the medicine in order to get rid of the sickness.’
 (lit: ...in order for the sickness to leave you)

- SoG
 (3.45) ets-a-dú-gá-ts ára **á-ma-tsá**
 REL-3SG.TR-be.sick-NFUT-CL:body 1SG NOM-NMLZ-go

k-ííl-gatʃá ná = cá-gidida
 to-belly-body.of.water LOC=CL1:eye-cold
 ‘What made me sick was going to the river in the cold.’

- SoG
 (3.46) dua b-a-dú-g-áts **á-ma-sá** ʃápa
 child AFF-3SG.TR-be.sick-CL:body NOM-NMLZ-eat sugarcane
 ‘Eating sugarcane made the child sick.’

¹³ The genitive prefix in NoG is simply /lá-/ but /alá-/ in SoG.

The fourth test of noun-hood in Gumuz is that the /**ma-**/ nominalization can function as the object of a preposition. In (3.47) the verbal noun **malea** ‘plowing’ is the object of the dative/benefactive preposition /**ká=**/.¹⁴ Likewise, **maʔíia** ‘living’ in (3.48) is the object of the locative preposition /**ná=**/.

- NoG
 (3.47) d-ó+kó-váχ ló-ko-d **ká=ma-le-a**
 AFF-1PL.INCL.INTR-clear REL-1PL.INCL.INTR-do BEN=NMLZ-plow-NM
 ‘We clear for plowing the land we had used.’
 (lit: ‘We clear that which we did for plowing.’)

- SoG
 (3.48) ná=ma-ʔíi-a ná=lá=zialá ...
 LOC=NMLZ-live-NM LOC=GEN=now
 ‘These days...’ (lit: ‘On the living of now...’)

Lastly, certain deverbal nouns nominalized with the /**ma-**/ prefix are highly lexicalized. For example, **majá** can function as either a verbal noun meaning ‘to die’ (3.49), or as a noun referring to ‘dead person/people’ (3.50). Also, **madútsa** can mean ‘to be sick’ or ‘disease, sickness’ (3.44).¹⁵

- NoG
 (3.49) oba-má m-á-⁴báts’ **ma-ʃá**
 father-3SG.POSS PURP-3SG.TR-leave.behind NMLZ-die

 d-á-t’óo-iʒ dua-má ná= máts’á-tamaría
 AFF-3SG.TR-put-PST.PRF child-3SG.POSS LOC=house-student

 ‘Before his (the child’s) father died, he had put his child in school.’

¹⁴ The combination of /**ká=**/ dative preposition + /**ma-**/ nominalizer has grammaticalized as a purpose clause prefix /**kám`-**/ (see Chapter XIII). However, example (3.47) appears to be a transitional form.

¹⁵ In its more lexicalized form, **madútsa** ‘disease, sickness’ does not take the /**-má**/ inherent possession suffix as the verb stem **dúts** can be transitive or intransitive. As an intransitive verb, the stem takes the /**-á**/ middle voice marker, but it is not required on the infinitival (nominalized) form. On the other hand, the infinitival form for ‘to make sick’ does require the /**-má**/ suffix when an explicit O argument does not immediately follow the nominalized verb.

The word **geʔéá** ‘song’ in (3.52) fulfills the first three tests of noun-hood: it functions as the S argument of the verb ‘say’, it is possessed, and it takes nominative case-marking.

- (3.52) SoG
 é-kál-á-na **á-g-eʔé-á** **alá-¹mám**
 FUT-say-3SG.INTR-LOC NOM-NMLZ2-sing-NM GEN-3PL.POSS
- etá-b-íí-ga-báŋ-gá
 SG.RP-AFF-3PL.TR-INSTR-dance-NFUT
 ‘Their song that they dance to will say...’

Lastly, /ga-/ nominalizations can occur with prepositions compounded with a relational noun within a prepositional phrase (3.53). This fulfills the fourth test of noun-hood in Gumuz. Compare the nominalized form, **gabaxa** ‘hunt (N)’ in (3.53) with the non-derived noun **ʔak’a** ‘river’ in (3.54).

- (3.53) NoG
 ká = líí-ga-ʔax-a d-âr-ts
 DAT=BELLY-NMLZ2-hunt-NM AFF-1SG.INTR-go
 ‘He went hunting’ (lit: ‘He went into the hunt’)
- (3.54) d-á-mbeʔ ká = líí-ʔaak’a
 AFF-3SG.INTR.fall DAT=BELLY-river
 ‘He fell into the river.’

A few /ga-/ nominalizations can be used as attributive nouns (see Chapter VII), in which case the /-má/ suffix is added. Again, this suffix functions as a pronominal and therefore is not present if a noun follows. Thus, **ga-ntsá-má** ‘bad, evil’ is **ga-ntsá** when modifying a following noun: **gantsá-mísá** ‘evil spirit’(SoG).

A major difference between /ma-/ nominalizations and /ga-/ nominalizations is that /ma-/ can be used to nominalize an entire phrase or clause, whereas /ga-/ cannot (see also Chapter VI, and Chapter XI). Lastly, /ma-/ nominalizations are completely productive in Gumuz. There exists no known verb stem that cannot be nominalized with /ma-/. But, there are certain verb stems which cannot be nominalized with /ga-/ (3.55).

SoG
 (3.55) ma-tśá ~ ma-dǎ *ga-tśá * ga-dǎ
 NMLZ-go NMLZ-go
 ‘to go’

3.4.2 Noun >Noun Derivations

Noun>Noun derivations are simply nouns which are derived from noun stems. These include noun-noun compounds, sex-based gender marking, augmentatives, and diminutives.

3.4.2.1 Noun-Noun Compounds

Noun-noun (NN) “compounding” is a highly productive form of nominal derivation in Gumuz. Such productive derivations are formed via the Associative Construction, a nonfinite nominal modification construction (Chapter VI). Instances of the more lexicalized compounding with conventionalized semantics are briefly covered in this section even though the historical source of such compounds is the Associative Construction.

Lexicalized NN compounds exhibit strong phonological, morphological, and syntactic cohesion, as outlined by Haspelmath (2002:157). The differences in morphological and syntactic cohesion of compounds versus phrases in Gumuz is covered in Chapter VII, “Nonfinite Nominal Modification Constructions”. Phonologically, the compounds often exhibit unique tonal patterns, the H tone of the second noun stem is not downstepped as it is in phonologically distinct words (Chapter II, section 2.4.2) and the final /-a/ nominal marker of the first noun stem is often not realized, or is realized as [ə] which happens only word-internally (see further discussion in Chapter VI). Furthermore, the domain for vowel assimilation is the phonological word in Gumuz and this also happens in NN compounds. Thus, when ‘mother’ **eá** and ‘child’ **dua** form the compound meaning ‘mother of a child’, the mid front vowel of ‘mother’ assimilates to the height of the /u/ in ‘child’ (3.56).

- NoG
 (3.56) íí-dua
 mother-child
 ‘mother of a child’

The corresponding semantics of these compounds range from the more transparent (i.e. the meaning of the whole is the sum of its parts) to the more conventionalized (i.e. the meaning of the whole is more than the sum of its parts) (3.57-3.59). Those which exhibit more transparent semantics are similar in this respect to the Associative (N of N) Construction (see Chapter VI) (3.56).

- NoG
 (3.57) jík'wé-⁺é-χos
 horn-F:NH-bovine
 ‘birthing cow’

Lastly, lexicalized compounds can be comprised of more than two stems/roots. This is often true for body part terms (3.58). Some body part terms consist of (as of yet) unknown morphemes (3.59).¹⁶

- SoG
 (3.58) beé-⁺sá-cá
 skin-mouth-eye
 ‘eyebrow’

- SoG
 (3.59) sa-béé-⁺tá-cá
 mouth-skin-??-eye
 ‘eyelid’

3.4.2.2 Gender

Natural sex-based gender is optionally marked on certain animate nouns, mainly non-human mammals. There are no fixed classes of nouns corresponding to grammatical

¹⁶ There is surprisingly little agreement among Gumuz speakers regarding the body part terms for ‘eyebrow’, ‘eyelid’ and ‘eyelash’. For example, for ‘eyebrow’, one speaker of NoG and another speaker of SoG agreed on the form in (3.58) while another speakers of SoG used this same form for ‘eyelash’.

gender in Gumuz (e.g. unlike Romance languages). Table 3.4 below shows the sex-based gender prefixes for human and non-human animates as well as their variants.

Table 3.4. Sex-based Gender Prefixes

	FEM	MASC
human	ée-	óó-
animal	eá- /eák'ó-	oodá-

Sex-based gender is marked on people's names in NoG but only referentially (3.60), and less frequently when a person is addressed directly. Sex-based gender is not marked on anything other than human names and on the name of the creator goddess (3.61).¹⁷ Some speakers of SoG will also accept gender markers on proper names but they do not produce these gender markers on names in the corpus used for this study. It is common for speakers of SoG to address and refer to women in terms of who her first-born child is. Thus, the word 'mother' **eá** is compounded with the child's name in the Associative Construction (see Chapter VI) to create the title 'mother of X' (3.62). This head noun, **eá** is cognate with the feminine prefix used in NoG (discussed further below).

- (3.60) NoG
óó-báámítá oobó-k'ó-má **ée**-kabaaré = acá
 M-Bamita big-head-IP:MOD F-Kebare=but

ma-χá-á-k'ó-má
 NMLZ-be.small-MV-head-IP:MOD

'Bamita is tall but Kebare is short.'

- (3.61) NoG
ée-áá⁺mbá gw-a-t'oo-é m-pá⁺-tsá-má = cá ákwa
 F-creator.god when-3SG.TR-put-TWRD NMLZ-go.out-body-IP:O=CONJ 1.PL

'And when the creator goddess created us...' (lit: 'And when the creator goddess caused us to come out...')

¹⁷ The name **ée-áá⁺mbá** 'creator goddess' is likely related to the NoG terms for 'grandfather' **amp** and 'grandmother' **ep**.

- (3.62) SoG
eá-báámít
 mother-Baamit
 ‘Mother of Baamit’

For animals, male versus female gender is often distinguished using the gender prefix in both NoG and SoG. There exist two forms of the feminine prefix for non-humans, which appear to be used interchangeably: /eá-/ [eé-] and /eák’ó-/ [eék’ó].

NoG and SoG			
(3.63)	Animal Root	Male	Female
	meʔa ‘goat(s)’	oodá-meʔa M:NH-goat ‘billy goat’	eá-meʔa ~ eák’ó-meʔa F:NH-goat ‘she-goat’
	χosa (NoG)	oodá-χosa	eá-χosa
	musa (SoG)	oodá-musa	eá-musa ~ eák’ó-musa
	taŋga (SoG) ‘bovine(s)’	oodá-taŋga M:NH-bovine ‘bull’	eá-taŋga ~ eák’ó-taŋga F:NH-bovine ‘cow’

The Gumuz masculine prefix **oodá-** [wodó-] for animals, closely resembles the proposed lexical source for the masculine prefix in Anywa, a Western Nilotic language. Reh (1996:152) suggests the derivational masculine gender prefix /ō-/ in Anywa (similar to the Gumuz prefix on human names) originated from an irregular modified noun form of /wāḷADó/ ‘son’.¹⁸ The latter form for ‘son’ very closely resembles the masculine prefix for animals in Gumuz, while the former /ō-/ form very closely resembles the /óó-/ masculine form in Gumuz which attaches to human names. Similarly, Heine & Vossen (1983) proposed that the Western Nilotic masculine gender prefix /o-/ comes from a cliticized form of ‘son’ /wad/, found synchronically in Shilluk. Both of these forms are strikingly similar to the masculine prefixes found in Gumuz (see discussion in Chapter I, section 1.5.5).

¹⁸ The form /wāḷAD-/ ‘sons of’ is also the plural form of the noun for ‘son of’ /ō-/ in Anywa compounds (Reh 1996:159).

Another possible source for the masculine prefixes may be found internally to Gumuz. The word **baaba** ‘father’ has the phonetic variant [woba] in NoG.¹⁹ This could be the source for the **óó-** form found on human names (as *b has weakened to /w/ historically in NoG). The masculine prefix for animals might then be a combination of this prefix plus **dá** ‘thing’ which is often used in compounds referring to plural animates (see Chapter XII). Perhaps further support for this source are the pronominal variants **óódá náná** ‘he’ and **éé’dá náná** ‘she’ found in NoG, which combine the gender prefix with **dá** ‘thing’ followed by the distal demonstrative, **náná** (3.64, 3.65).²⁰ Similar forms for the 3SG masculine and feminine pronouns were noted earlier for SoG (Forslund 1969:17): *ola* (3MSG) and *jad* (3FSG).

(3.64) **éé’dá náná** d-á-nas íílá-má
 F-thing DIST AFF-3SG.INTR -be.bad belly-3SG
 ‘She is feeling bad.’

(3.65) **óó-dá náná** d-á-gáχ íílá-má
 M-thing DIST AFF-3SG.INTR -be.good belly-3SG
 ‘He is feeling good.’

The source for the feminine prefix is likely the word for ‘mother’, **eá**.²¹ The **eák’ó-** variant for animals may be a combination of ‘mother’ **eá** plus **k’óá** [k’wá] ‘head’, which is a bound class morpheme commonly found in NN compounds (see Chapter XII). The morpheme **k’óá** [k’wá] ‘head’ follows the same distribution as Greenberg’s ‘movable k’ (1963, 1981) found in words for ‘cow’ in other N-S languages. Example (3.66) below

¹⁹ The attributive noun root **oob-** ‘big, large’ in NoG (**bab-** in SoG) is likely related to this noun form.

²⁰ The 3SG masculine and feminine pronominal variants **óódá náná** 3SGM and **éé’dá náná** 3SGF most likely carry the nominative case marker /á-/. In Gumuz, the short /a/ totally assimilates to the following vowel and the H tone causes the L tone of the feminine marker to delink, which then causes downstep on the H tone of the following morpheme. Thus, /á-eé-dá/ (NOM-F-thing) → /éé-’dá/. Furthermore, all pronouns in Gumuz (see Chapter IV) begin with /á-/, which Ehret (2001:247-248) reconstructs as a topic marker and which may be historically cognate with the /á-/ nominative case marker.

²¹ As can be seen from example (3.62), the word for ‘mother’ in a NN compound (compounded with a child’s name) grammaticalized as a feminine prefix and began to be used with a woman’s given name in NoG.

demonstrates the ‘movable k’ found in the Maa term for ‘cow’ (Payne & Ole-Kotikash 2008), together with a k-less form of ‘bovine’ in the related language, Majang (Pete Unseth, p.c.). These forms are remarkably similar to the SoG variants **eá-taŋga** [eé-taŋga] ~ **eák’ó-taŋga** [eék’ó-taŋga] (3.63).

(3.66)	Maa		Majang (Surmic)
	en-kítén	ɔl-kítén	taŋ ‘bovine’
	FSG-bovine	MSG-bovine	
	‘cow’	‘ox’	

While Gumuz has no noun classes based on gender synchronically, there may be some evidence that a grammatical gender system once existed. There is a set of nouns which all have what appears to be the feminine prefix /eá-/ with its allomorphs: [jáá-], [éé-], [eá-], [jéé-], [jíí-]. Many of these nouns are terms for insects (including ‘spider’), a few are for reptiles (including ‘frog’), three are inanimate, one is human, and the remainder designate various animals. Some of the forms in Table 3.5 may resemble noun forms with a feminine prefix by chance, while others can be internally reconstructed as polymorphemic with a prefix homophonous with the feminine.²² For example, the word for ‘rat’ is **búá** in both NoG and SoG, which closely resembles the word for ‘mouse’: **é’póá** (SoG). Given the gloss, the feminine prefix could be representing a class of feminine nouns or merely functioning as a diminutive in this case. Other forms such as ‘weaver-bird’ **ja-p’óχwa** and ‘crow’ **jáá’p’óŋwá** contain the verb root for ‘fly’: **p’óχ** (NoG) and **p’óŋ** (SoG) respectively.²³ Lastly, the word for ‘white foreigner’ is borrowed from Amharic. Here the /eá-/ prefix has clearly been added. This would have to have been a recent borrowing and thus, the root was most likely not part of a class of (ancient)

²² Beyond determining whether the lexemes in Table 3.3 had a historical prefix, it is also necessary to determine whether this prefix was indeed cognate with the feminine sex-based prefix found synchronically. There exists (synchronically) a near homophonous prefix/proclitic meaning ‘like, similar to’: [éa=] / [éé=]. The feminine prefix is H or LH, while ‘like, similar to’ is HL, which causes following H tones to downstep. However, downstepped H tones also result when an H tone is followed by a morpheme beginning with an LH tone melody; the L and H tones surface as two downstepped H tones.

²³ Innocenti (2010:133) translates this lexeme as “corvo” (crow). Because the cognate form was translated as ‘crow’ in SoG, It may be that the NoG translation that I elicited, ‘weaver-bird’, is incorrect.

feminine nouns. According to Innocenti (2010:133), the lexeme *éefǎháŋzha* means “uomo di razza bianca” (person of the white race) and the translation for another Gumuz lexeme, *éntúzhea* (with a similar prefix), is “uomo di razza agaw”(person of the Agaw race). It is most likely therefore that the prefix/noun in question for ‘white foreigner’ does indeed come from *éá* ‘mother’ but with reference to lineage and not to a feminine class of nouns.

Other forms listed in Table 3.5 have (possible) cognates in the related Koman languages which lack this (presumed) feminine prefix. For example Gumuz ‘spider’ *jántátónwá* is cognate with *t’útóyó* ‘flea’ in Gwama (Lockwood 2006).²⁴ Likewise, Gumuz *één⁴kááraanza* ‘dung beetle’ is *kwáánza* in Gwama (Lockwood 2006) (*aanza* is ‘feces’ in Gumuz). Lastly, Gumuz ‘lizard’ *éékolíá* is *súkúlé* in T’wampa (Uduk) (Beam & Cridland 1979).

Further investigation is needed to determine if Gumuz did indeed have a gender-based (or feminine based) noun class system at one time and/or whether the presumed feminine prefix once functioned as a diminutive (or otherwise). It appears, however, that these perhaps ancient gender prefixes do not mark natural gender synchronically for at least some of these words in Table 3.5. For *éélúngwá* ‘pig’ (SoG), the initial /*éé*/ is maintained when the sex of the animal is specified: ‘boar (male pig)’ is *ood-éélúngwá* and ‘sow (female pig)’ is *eák’w-éélúngwá*. As of yet, there is no known evidence of an ancient masculine noun class other than nouns which merely begin with a labio-velar approximate or a round vowel.

²⁴ Cognicity is assumed between these two lexemes based on the regular sound correspondence of intervocalic *ŋ:y* in SoG and Gwama (Koman, Nilo-Saharan, Ethiopia).

Table 3.5. List of Gumuz Terms of a (Possible) Historical Feminine Gender Class

	NoG		SoG	
insects, etc	eámp'ása	'insect'	jáámp'ésa	'insect'
	jáák'wánk'úχwá	'dung beetle'	éen'káaraanza	'dung beetle'
	jááηááηá	'praying mantis'	jééηááηá	'praying mantis'
	eáántóχwa	'spider'	jáántátóηwá	'spider'
	jáá-damakana	'cricket'	éécáám gokwa	'cricket'
	eááza	'termite'	ééfaáfiákea	'cockroach'
			jáá'méta	'flying ant'
			jááηwá	'locust'
reptiles, etc.	éágoda	'frog'	éégoda	'frog'
	eák'óśátáána	variant for 'frog'		
	jáák'waliá	'lizard'	éékolíá	'lizard'
	jáásaawá	'gecko'	jáá'sááwa	'gecko'
	eemáándáχa	'chameleon'	éemáándiá	'puff adder'
other animals	jáágwéa	'warthog'	éégwéa	'boar'
	jíí'miléa ~ éé'miléa	'hyena'		
	jítiriká ~ éétiriká	'scaly anteater'	éétiriká	'anteater, aardvark'
	jap'óχwa	'weaver bird'	jáá'p'óηwá	'crow'
	eadááηgá	'bat'	é'póá	'mouse'
	eágábá	'mudfish'	jáádúna	species of mouse
			éégaja	'eagle'
			éébáála	species of fish (small and white)
			éélúngwá	'pig'
inanimates	jááua	'shell (musical instrument)'	jááwa	'shell (musical instrument)'
	éemáándálá	'yam'	jááηk'oba	tan mushroom
human	eáfáχáánza	'white foreigner' < <i>firenj</i> Amharic (Semitic, Ethiopia)		

3.4.2.3 Augmentative

A prefix similar in form to the feminine prefix above appears to fulfill an augmentative function in SoG. There are only a few attested instances of this morpheme and it does not appear to be very productive. Table 3.6 provides noun stems and their glosses with and without the augmentative prefix (see also example 12.94 of Chapter XII). In addition, the NoG counterpart is given. In two of the examples, the root for ‘large’ is used in NoG in place of the presumed SoG augmentative prefix.

Table 3.6. Augmentative Forms in SoG

SoG Lexeme	Augmentative Form	NoG Counterpart
aja ‘water’	ee-ája AUG?-water ‘ocean’	oob-áts tila big-body lake ‘ocean’
(íl-)gatǰá (belly?)-body.of.water ‘body of water’	eá- [†] gátǰá AUG?-body.of.water ‘ocean’	
aŋwa ‘clothing’	ee-áŋwa AUG?-clothing ‘large wrap-around cloth’	ʒalá ‘robe’
gí [†] ǰá-ganǰa stone-grinding ‘grinding stone’	eá-gí [†] ǰá-ganǰa AUG?-stone-grinding ‘lower grinding stone’	oob-ílúk’w gí [†] ǰáá-gaxǰa big-head stone-grinding ‘lower grinding stone’

One piece of indirect evidence that indicates this augmentative prefix may have also come from ‘mother’ is that the antonym ‘child’ is used as a familial metaphor indicating something small and has likewise grammaticalized as a diminutive (see section 3.3.2.4). For example, the upper grinding stone in NoG (which is smaller in size) is called **dú-gí[†]ǰá-gaxǰa** (child-stone-grinding).²⁵ Perhaps related to the function of augmentative, ‘mother’ is also used as a prefix (or the first noun in NN compound) to

²⁵ The word ‘child’ **dua** has a LL tone melody and maintains the initial L tone in compounds when the referent is human. However, when the referent is non-human, L tone is dropped and only H tone is used. The form **dú-** has grammaticalized as a diminutive in some cases.

indicate ‘main, principle’ when referring to a road. Thus, ‘main road’ is rendered *ee-cánjha* (mother-road) (Innocenti 2010: 133).

3.4.2.4 Diminutive

Diminutives in Gumuz are formed by adding **dú-** to a noun stem. In (3.67), **dú-** is prefixed to the noun for ‘plowing’ which is a nominalized form of the verb **le?** ‘plow’.

- (3.67) SoG
 ahóo-gá-ár-é-s **dú-ga-le-a**
 finish-BEN-1SG-TWRD-MOUTH DIM-NMLZ2-plow-NM
 ‘Please finish this little work (in the field) for me.’

The diminutive **dú-** can also be marked on an Attributive Noun Construction (see Chapter VII) in SoG. In (3.68), the Attributive Noun Construct ‘short person’ is marked with the diminutive.

- (3.68) SoG
dú-m-p’ál **ɓaga** b-á-faat-agá
 DIM-NMLZ-be.short person AFF-3SG.INTR-fall-NFUT
 ‘The short little person fell.’

The diminutive prefix is also found in NoG, but does not seem to be as productive. It is apparent in lexemes such as ‘upper (small) grinding stone’ **dú-gí’já-gaxafa** mentioned above, and ‘shirt’ **dú-ɟɟba** which appears to be a diminutive form of ‘jacket’ **ɟɟba**. In addition, **dú-k’úfa** is a diminutive form meaning ‘little basket’ and the plural form ‘little baskets’ employs the suppletive plural ‘children’ as the initial noun of the compound: **dídí-k’úfa**.²⁶

This diminutive prefix likely arose from compounding a noun with the lexeme **dua** ‘child’. In forming a NN compound in Gumuz, H tone is added to the final syllable of the first noun (see Chapter VI). Compare the Associative Construction (NN compound) in example (3.69) with the diminutive in example (3.70). The latter diminutive form has a shorter vowel and the initial L tone is lost. Furthermore, there

²⁶ The root noun **k’úfa** ‘basket’ does not exist in the corpus without the diminutive prefix. Gumuz language consultants have translated **dú-k’úfa** as both ‘basket’ and ‘little basket’.

exists no possessum-possessor relationship between the morphemes **dú-** and **duu** which exists with the Associative Construction in example (3.56).²⁷

- (3.69) SoG
 duú-duu-má
 child-child-3SG.POSS
 ‘his child’s child (grandchild)’
- (3.70) dú-duu-má
 DIM-child-IP:MOD
 ‘the little child / the little one’

²⁷ This diminutive form **dúduumá** has been further reanalyzed as part of an Attributive Construction in which the referent is not necessarily a ‘child’ and the erstwhile 3SGPOSS suffix **-má** stands pronominally for the missing modified noun (see section 3.4 and Chapter VI). A further example of this Attributive construct is found in the following: **zaana babók’ómá wolá dúduumá?** ‘Is the elephant large or small?’.

CHAPTER IV

PRONOUNS

In Gumuz there exist systems of both bound and free pronominals. The free pronoun forms (section 4.1) consist of personal pronouns, demonstrative pronouns, genitive pronouns, and interrogative pronouns. Personal pronouns are only used for emphasis when representing the subject of the clause, whether the single argument of an intransitive (S) or the most agent-like argument of a transitive clause (A), as these arguments are also marked as bound pronominals on the verb (section 4.2). In NoG, certain arguments that serve as objects (O) of the verb can also be marked pronominally on the verb, in which case repetition of the free pronominal as the O argument is only used for emphasis.¹ Other bound pronominal forms in Gumuz are suffixes used to mark possession (section 4.2.2). These suffixes are found in both the Possessive Construction as well as the Genitive Construction (discussed more fully in Chapter V). Interrogative pronouns and relative pronouns are only discussed briefly in this chapter. Relative pronouns are discussed more fully in Chapter XII.

4.1 Free Pronominals

Free pronominals in Gumuz include personal pronouns, demonstrative pronouns, interrogative pronouns, and genitive pronouns. Personal pronouns as well as demonstrative pronouns are discussed in depth in this section. Examples of interrogative pronouns are discussed briefly. While genitive pronouns function syntactically as free pronouns, they are discussed in section 4.2 “Bound Pronominals” as the bound pronominal possessive suffixes combine with genitive marking to form genitive pronouns.

¹ In this and all other chapters (save Chapter XIII), I use "S" and "O" to refer to grammatical roles, not macro-semantic categories (cf. Payne, in press). In Chapter XIII, I use "P" to refer to the macro-semantic role of the most patient-like argument of the clause, which may or may not be expressed as the grammatical object "O" of a clause.

4.1.1 Personal Pronouns

Personal pronouns exhibit some degree of variation across Gumuz, most notably for 3rd persons. This variation exists across dialects as well within a single dialect.

Table 4.1 shows all known personal pronouns in both NoG and SoG which exist in my corpus. The forms are listed in terms of frequency where top-most forms in each cell of the table are the most frequent in the corpus.

Table 4.1. Free Personal Pronouns in Gumuz

	Singular		Plural		
	NoG	SoG		NoG	SoG
First	ára	ára	Inclusive	ákwa	ákwa
	áďa	áďa áŋko (> Bertha)	Exclusive	íla	áíla
Second	áma	âm áma		áca	áca
Third	áχámá áχó bááná	áŋ áh á mazáʔá ámá		mááχó áχá+máámá dánná dáá+ná mááχámá mááχamáámá	íŋ+máám á+mám cádaʔá
3 Masculine	ódáá+náná			módáá+náná	
3 Feminine	é+dáá+náná				

Some of the forms from Table 4.1 — e.g. 3SG **áχámá** ~ **áχó** (NoG)— are used interchangeably by the same speaker (4.1), while other forms seem to be peculiar to a particular speaker — e.g. 3SG **ámá**.²

- (4.1) **áχámá** d-a-f ~ **áχó** d-a-f
 3SG AFF-3SG.TR-drink 3SG AFF-3SG.TR-drink
 ‘He drinks/drank.’

² The form **ámá** 3SG only occurs once in my corpus. The Gumuz speaker who used this form is from Kamashi town and usually uses **áŋ** or **áh** for the 3SG pronoun in the corpus. A 3SG form similar to **ámá** 3SG -- **ámé** -- was documented in Yaso Gumuz (Ahland 2004:96).

Despite all the variations, only one personal pronoun is suspected of being borrowed: **áŋk(ʔ)o** 1SG (4.2). A similar bound pronominal is found in Bertha, a neighboring N-S language: **-ŋk'o** 1SG.POSS (Benishangul-Gumuz Language Development Project 2007:212). This pronoun is used only once in SoG as a free form (meaning 1SG) and twice as a bound form (by a different speaker meaning 1SG.POSS) in the present corpus.

- (4.2) b-a-kóó-gá m-u-é-a éé¹ = **áŋko**
 AFF-3SG.TR-abstain-NFUT NMLZ-go.away-TWRD-NM like=1SG
 ‘He keeps from coming like me (unlike me, he stays home).’

Certain pronoun forms from Table 4.1 appear to be more phrasal, combining bound pronominal-like forms with demonstrative adjectives. At least one of these forms is phonologically one word (4.3). That is, there exists no tonal downstep of H tones at the supposed morpheme boundary: **dá-ná** 3PL (NoG).³ However, the speaker translated the pronoun as a phrase: ‘these people’. When asked to produce the same clause using ‘they’, the speaker used the pronoun **áχá¹mááma**.

- NoG
 (4.3) **dá-ná** ká-tsa-¹máámá b-éé-¹t’óó-úá
 PRO.PL-PROX BEN-BODY-3PL.POSS AFF-FUT-do-3PL
 ‘They (these people) will do it by themselves.’

Other personal pronouns that are phrase-like are phonologically two words according to tonal patterns. That is, H tones are downstepped at word boundaries. All but one of these involve the bound pronominal **dáá-** PRO.PL which is an allomorph of the morpheme in (4.3) (see also Chapter XII) and only occurs in NoG as part of a personal pronoun. As **dáá-** PRO.PL does not occur as an independent noun in Gumuz, I will consider these phrase-like pronouns to be equivalent to single words. Example (4.4) has a phrasal pronoun form similar to the form in (4.3) above.

³ The phonemes /n/ and /l/ tend to be in free variation across Gumuz. Thus, it is assumed that **-ná** PROX is the same morpheme as **-lá** PROX (see Table 4.2).

NoG

- (4.4) **dáá-^hná** d-á-pok²-oa
PRO.PL-PROX AFF-3SG.INTR-be.born-GP
'They were born.'

The pronoun form **dáá-** PRO.PL is likely related to the independent noun form **dá** 'thing'. When there is a phonological pause in addition to downstep of H tones between morphemes, **dá** (which is phonetically [dáá]) is translated as 'thing' instead of PRO.PL (4.5).

NoG

- (4.5) ntsá m-úá-j-á á-dá náná?
what PROX-go.away-TWRD-3SG.INTR NOM-thing DIST
'What thing is about to come?'

When a gender prefix is added, it appears to have an individuating effect on the pronominal. Thus, **dáá-** PRO.PL in such instances is interpreted as singular (4.6, 4.7). In order to (re)pluralize these pronominals marked for gender, the **má-** plural prefix is added (see Chapter IV Nouns) (4.8).⁴

NoG

- (4.6) **é^h-dáá-^hnáná** d-á-nas ílá-má
F:HUM-PRO.PL-DIST AFF-3SG.INTR-be.bad belly-3SG.POSS
'She felt bad inside.'

NoG

- (4.7) **ó-dáá-^hnáná** d-á-gáχ ílá-má
M:HUM- PRO.PL-DIST AFF-3SG.INTR-be.good belly-3SG.POSS
'He felt good/happy inside.'

NoG

- (4.8) wír-ʃ dáá-gááχ-á **m-ó-dáá-^hnáná** éé-zaχ-á-ʃá-an
see-HIP PRO.PL-work-NM PL-M- PRO.PL-DIST FUT-know-2S.TR-HIP-DEP?
'Look at the workers so that you know how they did it.'

⁴ There are no examples in the corpus of a pluralized **dáá-** pronoun with a feminine prefix. However, Innocenti (2010: 28) records such a form in the Mandura variety: *m-e-da-nəna* (PL-F-PRO.PL-DIST).

In SoG, there exist two known phrase-like pronouns: **cádaaʔá** 3PL (4.9) and **mazáʔá** 3SG (4.10).⁵ Both of these ‘pronouns’ are phrasal in that the definite marker/mid-distal demonstrative (**ʔá**) can be separated from the ‘noun’ when the pronoun is part of a prepositional phrase (4.11, 4.12, 4.13) (see further discussion of the syntactic behavior of prepositions in Chapter V). The first element of the pronoun in (4.9) is the class morpheme **cá-** ‘eye’ which often refers to a collection (see section 9.3 of Chapter IX). The second element, **daa**, is assumed to be related to the pronoun **dá(á)-** PL PRO (see Chapter XII for examples of this pronoun in SoG). However, the tone is Low instead of High.

SoG
 (4.9) **cá-daa = ʔá** b-íi-tsa-gá ká = mítsa
 CL1:eye-PL.PRO?=MED AFF-3PL.INTR-go-NFUT DAT-garden
 ‘They went to the garden.’

SoG
 (4.10) **mazá = ʔá** b-a-kór-ágá-s já^hsámáts’á
 3SG=MED AFF-3SG.TR-open-NFUT-MOUTH door
 ‘He opened the door.’

SoG
 (4.11) b-íi-cá-gá **ká = é^htá-cá-daa** **ká = á**
 AFF-3PL.TR-give-NFUT DAT=master-CL1:eye-PL.PRO? DAT= MED
 ‘They gave to their master.’

SoG
 (4.12) **ká = cá-daa** **ká = á**
 DAT= CL:eye-people DAT=MED
 ‘to/for them’

SoG
 (4.13) b-a-gá-tíg-agá-ts batʃ’a **ká = mazá** **ká = á**
 AFF-3SG.TR-DAT-send-NFUT-BODY meat DAT=3SG DAT=MED
 ‘He showed the meat to him.’

⁵ Some speakers of SoG who know English translated **mazáʔá** as ‘the guy’; but those who used Amharic translated it as the pronoun, እሱ [isu] ‘he’.

While **mazáʔá** 3SG is often translated with a pronoun, the supposed ‘pronoun’ appears to be less fixed in form than the other phrase-like pronouns mentioned above. That is, **mazá** can also occur with a following numeral (4.14), unlike the other phrase-like pronouns, which only co-occur in this corpus with specific demonstratives.

- SoG
 (4.14) ná-gána = kwâ ɓaga mbáándê [**mazá meetáam**] b-á-tíb-agá
 ABL-there = CONJ person two 3SG one AFF-3SG.INTR-kick-NFUT
- ká-nc’á [**mazá meetáam**] = kwâ b-á-tíb-agá ká = lícá
 DAT-back 3SG one=CONJ AFF-3SG.INTR-kick-NFUT DAT=face
- b-íi-ndár-ágá
 AFF-3P.INTR-cross-NFUT
- ‘After that, the two people crossed (the river), one swimming back and the other forward.’

4.1.2 Demonstrative Pronouns

Demonstrative pronouns in Gumuz, like demonstrative adjectives (see Chapter V), are divided into three types: proximal (PROX), medial (MED), and distal (DIST). In certain dialects of SoG, these three categories exist for demonstrative adjectives but not for demonstrative pronouns.⁶ Some SoG dialects have a two-way distinction between proximal and distal; the medial demonstrative **á/áj** only functions as a 3SG pronoun (see Table 4.1) and thus no longer exists as a demonstrative pronoun. Gumuz speakers of NoG all have a three-way distinction for demonstratives. However, some speakers use **láná** and **látá** forms (Table 4.2) interchangeably for distal, but Innocenti (2010:33-34) also found a three way distinction in demonstratives with *lənà* as a mid-distal demonstrative and *latta* a distal demonstrative.

⁶ Uzar (1997: 54) cites a three-way distinction in demonstratives for the Sirba variety of Gumuz (SoG). However, the three-way distinction he cites are the forms *ala?*, *alət*, and *allət* which involve lengthening of the /l/ of *alət* to distinguish “medium distance” from “far distance”. The only examples given for these are demonstrative adjectives, and there is no mention of **áj/á** used as a medial demonstrative adjective.

One of the main morphological differences between demonstrative pronouns and demonstrative adjectives in Gumuz is that the demonstrative pronouns can take nominal inflection for number. Like other animate noun stems, demonstrative pronouns can take the **má-** /**m-** plural prefix.

Table 4.2 below shows proximal (PROX) and distal (DIST) demonstrative pronouns in the singular as well as plural.

Table 4.2. Demonstrative Pronouns in Gumuz

Gumuz Variety	PROXIMAL		MEDIAL		DISTAL	
	SG	PL	SG	PL	SG	PL
NoG	lá	mlá	láná ~ alán	máláná	látá ~ alát	málátá
SoG						
<i>Sirba</i>	alááʔ	mlááʔ	(none)	(none)	alát	mlát
<i>Kamashi</i>	(a)baaʔ	mbaaʔ	baané	(no data)	baaté	(no data)

Plural marking on demonstratives is not mandatory. Similar to plural marking on simple nouns, the unmarked form can refer to one or more referents (4.15, 4.16).

SoG

- (4.15) **alát** ma-an-dagoná-má
 DIST NMLZ-VBLZ-beautiful-IP:MOD
 ‘That/those is/are beautiful.’

SoG

- (4.16) **aláʔ** iidá-ébâ-m
 PROX children-ethnic.area-1SG.POSS
 ‘Those are my brothers (relatives).’

In addition to plural marking, demonstrative pronouns can also take case inflection for nominative **á-** (NoG, SoG) (4.17) and genitive **alá-** (SoG) **lá-** (NoG) (4.18).

SoG
 (4.17) **kâm-dá-á** **á-alá?** **ká-ma-a-tíi-sa** **ká-áca**
 FUT-become-3SG.INTR NOM-PROX DAT-NMLZ-VD-send-MOUTH BEN-2PL
 ‘This will become a sign for you (pl).’

	NoG		SoG
(4.18) ‘this one’s house’	lá-lá	máts’á	alá-lá máts’á
	GEN-PROX	house	GEN-PROX house
‘that one’s house’	lá-látá	máts’á	alá-lát máts’á
	GEN-DIST	house	GEN-DIST house

Within SoG, speakers of Gumuz who live in the Kamashi area tend to also use variations of **baa(?)** for proximal, medial and distal demonstratives.⁷ In (4.19), the medial and distal demonstratives are used as pronouns.

SoG (Kamashi)
 (4.19) **baaté** b-a-tíi-gá **t’ítíá** **baané** b-a-tíi-gá **t’ítíá**
 DIST AFF-3SG.TR-shoot-NFUT bullet MED AFF-3SG.TR-shoot-NFUT bullet
 ‘That guy shoots a bullet, this guy shoots a bullet...’

4.1.3 Interrogative Pronouns

There exist four interrogative pronominal roots in Gumuz upon which all interrogative words are based (Table 4.3). These pronominals can combine with prepositions and/or other nouns to create other interrogative words/phrases, e.g. **ká** ‘to, for’ + **atsé** ‘what?’ = **káatsé** ‘why?’ (NoG and SoG).

⁷ There is overlap between **baa(?)** and **baané** for the proximal demonstrative. Thus, similar to the problem of overlap in NoG (**láná-látá**), the medial demonstrative **baané** may be merging with the proximal demonstrative. In Kamashi, **baa(?)** and **baané** can function as pronouns or adjectives. At least one speaker used these interchangeably for the proximal when using a demonstrative pronoun and a demonstrative adjective in reference to the same person: **baa?**, **dua baané**, **bátságá** ‘This one, this child went.’

Table 4.3. Gumuz Interrogative Pronouns

	NoG	SoG
who?	ool(é)	oodé / oor(á)
what?	ats(é) / nts(é)	atsé / nts(á)
where?	= nd(é)	= gwáb
which?	ábé	ábá

The variation between **oodé** and **oor(á)** ‘who?’ in SoG is due to dialectal variation within SoG; Gumuz speakers from the Sirba variety tend to use **oodé** while speakers from the Kamashi area tend to use **oor(á)**. On the other hand, the variation between the nasal and vowel in **ats(é) / nts(é)** ‘what?’⁸ exists for a single speaker in NoG (4.5, 4.20 - 4.23).⁹ It is not clear what causes this variation. When comparing constructions in examples (4.5) and (4.20-4.22), it appears as though the **nts** questions a core argument (A, S, or O), while **ats** questions all other (unmarked) arguments. For example, the verb ‘say’ is intransitive. Therefore, when questioning what was said, **ats** must be used (4.22). However, data is sparse.

NoG

- (4.20) **nts** = á-ooka-k’wá
 what=2SG.TR-heat-CL1:HEAD
 ‘What are you heating?’

NoG

- (4.21) lá **ntsé**
 PROX what
 ‘What is this?’

⁸ It is likely that the final /-é/ on these interrogative pronouns is an old copula as the final /-é/ is only found in predicate nominal constructions for ‘what?’.

⁹ Innocenti (2010:54) also notes this variation between **nts** and **ats** in the Mandura variety (NoG). However, Uzar (1989) only recorded the form without the nasal for the Sirba variety (SoG) :**aats(a)**. Certain speakers I interviewed from Sirba Abay *wereda* (county) and Agelo Met’i *wereda* did not use **nts**, only **ats(á) / ats(é)** to mean ‘what?’.

NoG

- (4.22) **ats** = á-káa áχámá
what=3SG.INTR-say 3SG
'What did he say?'

NoG

- (4.23) **ats** = á-ót aja l-é-ook-á-ak'w
what=3SG.INTR-EXIST water REL-FUT-heat-2SG.TR-CL1:HEAD
'What water will you heat?'

In another construction, the same form **ats(é)**= attaches to nouns adding the meaning 'simply, just, only' for emphasis. In this same construction, **nts(é)**= cannot be substituted for **ats(é)**=, and **ats(é)**= no longer functions as an interrogative pronoun (4.24, 4.25). On the other hand, speakers of SoG consistently use **ats(é)** for 'what?' if they are from Sirba Abay or Agelo Met'i *wereda* (county) (4.26, 4.27), while speakers of SoG from Kamashi *wereda* consistently use **nts(é)**= for 'what?' (4.28, 4.29).¹⁰

NoG

- (4.24) d-a-gam-án **atsé** = saŋa
AFF-3SG.TR-find-LOC only=salt
'He only found salt there.'

SoG

- (4.25) ná = gats'aŋa iidá-gúmuz ná = **áts** = máts'á b-é-á-ʔíi-ʃa
LOC=old.days children-Gumuz LOC=only=house AFF-RPST-3SG.INTR-live-HIP
'In the old days, Gumuz children stayed only in the house (only the house).'

SoG (Sirba)

- (4.26) **atsé** á-dá = lá
what NOM-thing=PROX
'What is this thing?'

¹⁰ Unlike NoG, there is no data for SoG in which 'what?' (unaccompanied by a preposition) questions a non-core argument. There may be a way of marking non-core arguments in SoG, but more data is needed.

SoG (Sirba) (Gumuz New Testament 2003:13)¹¹

- (4.27) **ats** kâm-s-ílá
What FUT-eat-1P.EXCL.TR
'What shall we eat?'

SoG (Kamashi)

- (4.28) **á-nts** á-lúngu-gâ ?
NOM-what 3SG.INTR-shout-NFUT
'What shouted (what made that sound)?'

- (4.29) **nts** á-t'o-gá-ts ná-k'w tógwa ?
what 2SG.TR-put-NFUT-BODY LOC-HEAD table
'What did you put on top of the table?'

Similar to demonstrative pronouns, plural marking can be added to interrogative pronouns when the referents are animate. Plural marking tends to be reserved for predicate nominals in both NoG (4.30, 4.31) and SoG (4.32, 4.33).¹² However, it is also possible to pluralize the interrogative pronoun when it is used to question a core argument (4.34). Examples for NoG are from Innocenti (2010:53-54).¹³

NoG

- (4.30) **m-olə-lì** l-u-w-ea?
PL-who-COP REL-3PL.INTR-go.away-TWRD
'Who (pl.) is it that came?'

NoG

- (4.31) **mə-nts-ia** ahəməmə?
PL-what-COP 3PL
'What (pl.) are they?'

¹¹ Example (4.27) is taken from The New Testament in Gumuz (Matthew 6 :31). The original Ethiopic script used in the Gumuz New Testament is transliterated into the semi-phonemic system used in this dissertation. Tone was also added according to my knowledge of similar constructions in SoG.

¹² For the Sirba dialect of SoG, pluralization of the interrogative pronoun, 'who?' is **m-oodéa** (Gumuz New Testament 2003:519).

¹³ The phonemic system of Innocenti (2010) is preserved in these examples including tone marking. However, the parsing and glossing are my own.

SoG (Kamashi)

- (4.32) **m-ó'rá** dá-b-á-áʃ-aga
PL-who PRO.PL-AFF-3SG.INTR-fight
'Who are the ones fighting?'

SoG (Kamashi)

- (4.33) **má-n'tsá** dá-bá-áʃa-gá
PL-what PRO.PL-AFF-3SG.INTR-fight
'What (animals) are the ones fighting?'

SoG (Kamashi)

- (4.34) **m-ó'rá** b-á-ʔi-gá-ʃa
PL-who AFF-3SG.INTR-be-NFUT-HIP
'Who all are sitting?'

The interrogative pronouns for 'who?' and 'what?' can also be inflected for nominative (4.28, 4.35) and genitive case (4.36).

SoG (Kamashi)

- (4.35) **á-ó'rá** b-á-í'-gá-ʃa ?
NOM-who AFF-3SG-be-NFUT-HIP
'Who (emphasis) is sitting?'

- (4.36) **lá-ó'lé** aɣwa
GEN-who clothes
'Whose clothes are those?'

4.2 Bound Pronominals

Bound pronominals in Gumuz consist of relative pronouns, possessive suffixes, and person agreement on verbs. Genitive pronouns are independent pronouns formed with the genitive prefix plus a possessive suffix and are discussed in section 4.2.2 below.

4.2.1 Relative Pronouns¹⁴

There exist three bound relative pronouns in Gumuz: **etá-** PRO.SG, **dá(á)-** PRO.PL, and **gó(a)-** 'where'. Examples of each pronoun are given below for both NoG (4.37, 4.39, 4.41) and SoG (4.38, 4.40, 4.42). In NoG the singular **etá-** and plural **dáá-**

¹⁴ These pronouns also occur as the head noun in participant nominalizations (e.g. ex. 4.37 and 4.39) and thus, are not necessarily relative pronouns in every construction. However, many participant nominalizations could be considered headless relative clauses.

relative pronouns can only co-occur with a nominalized (non-finite) verb, whereas in SoG, these pronouns can co-occur with either a finite or non-finite verb. The examples below exhibit finite relative clauses for SoG. The relative pronoun **gó(a)**- ‘where’, on the other hand, can occur with both finite and nonfinite clauses in both NoG and SoG. The examples in (4.41) and (4.42) happen to be finite. A more detailed explanation of relative pronouns and their functions can be found in Chapter XII.

NoG

- (4.37) éémilea **etá**-ma-ŋgafá píta
 hyen PRO.SG-NMLZ-speak lie
 ‘Hyena is the one who tells lies.’

SoG

- (4.38) **etá**-m-ír-a dua ára
 PRO.SG-FUT-see-3SG.TR child 1SG
 ‘The one who will see the child is me.’

NoG

- (4.39) mbáándá ts’ò **dáá**-m-ʔááko bíra
 two FOC PRO.PL-NMLZ-steal money
 ‘Those two are the ones who stole the money.’

SoG

- (4.40) ée = b-á-faat-agá á-ʔá бага ʔáá-ʔendá
 TEMP=AFF-3SG.INTR-fall-NFUT NOM-tree person REDUP-other

dá-b-ót-ag-é n = íl-gúzá
 PRO.PL-AFF-EXIST-NFUT-TWRD LOC=BELLY-sky

ná = m-but-é-á ná = faazá = ná ká = ʔnéa
 LOC=NMLZ-descend-TWRD-NM LOC=faza.tree=MED DAT=ground

‘When the tree fell, the other people who were in the sky were climbing down this Faza tree to the ground.’

NoG

- (4.41) wir-k’ós tʃagó-ma **gw**-a-k’ân á-dinʃa
 see-CL1:tooth leg-1SG.POSS WHERE-3SG.TR-bite NOM-scorpion
 ‘Look at my leg where the scorpion bit.’

- SoG
 (4.42) **gó**-b-í-pok'o-g-é ára k'ársá ná = warádá ná = ágalóá
 WHERE-AFF-3PL.TR-give.birth-NFUT-TWRD 1SG K'arsa LOC=countyLOC=Agelo
 'The place where I was born is K'arsa in Agelo county.'

4.2.2 Possessive Suffixes

Possession can be expressed via one of three constructions in Gumuz: 1) the Associative Construction 2) the Possessive Construction or 3) the Genitive Construction (GEN NP). The Associative Construction is more fully described in Chapter VI, while the Possessive Construction is detailed below. The Genitive Construction is described later in this section as well as in Chapter V. Another construction related to possession is the External Possession Construction which is described in Chapter VIII.

While any noun can seemingly occur in the Associative (NN) Construction, functioning as either the head noun (first noun) or dependent noun (second noun, a subset of which function as possessors), personal pronouns cannot. To express possession with a personal pronoun, Gumuz uses the Possessive Construction, a construction distinct from, yet seemingly related to, the Associative Construction. The Possessive Construction has a unique set of pronominal forms, some of which are related to the independent personal pronoun forms. These same possessive suffix forms also occur with the genitive prefix **(a)lá-** within the Genitive Construction. Table 4.4 lists the possessive suffixes in both NoG and SoG along with their corresponding tonal melodies.

Table 4.4. Gumuz Possessive Pronoun Suffixes and Their Tonal Melodies

	SG		PL		
	NoG	SoG		NoG	SoG
1	- ma (HL)	- m (HL)	incl.	- kwa (HL)	- kwa (HL)
	- ea (HL)	- aŋko (HL) (> Bertha)	excl.	- mila (HHL)	- mila (HHL) - áíla (HHL)
2	- ua (*H)	- u (H)		- ca (HL)	- ca (HL)
3	- ma (H) - ɣama (HH)	- ma (H)		- maama (HLHH) - ɣamaama (HLHH)	- maam (HLH)

All but two of the possessive suffixes (2SG and 3SG) listed in Table 4.4 begin with a floating H tone. It is possible that this floating H tone is historically related to the

H tone that is added to the final syllable of the first noun in the Associative Construction (see Chapter VI, section 6.1.1).¹⁵ In most instances, this floating H tone of the suffix associates with the final syllable of the noun that is possessed (within the Possessive Construction). For example, ‘hand(s)’ **ea** (NoG) has a LL tonal melody. When expressing ‘my hand(s)’, the H tone of the possessive suffix associates with the final vowel of ‘hand(s)’(4.43). Likewise, in example (4.44), the initial H tone of the 3PL possessive suffix associates with the final vowel of ‘hand(s)’ **ela** in SoG (also bearing an LL tonal melody). With the 3PL suffix, the L tone remains floating, causing downstep of the following H tone(s).¹⁶

NoG
 (4.43) eáá-ma
 hand-1S.POSS
 ‘my hand(s)’

SoG
 (4.44) elá-^hmáám
 hand-3PL.POSS
 ‘Their hands’

In contrast, the 2SG and 3SG possessive suffixes do not have an initial floating H tone. As can be seen in (4.45) and (4.46) below, ‘hand’ maintains its LL tonal melody when the 3SG possessive suffix is added.

NoG
 (4.45) eaa-má
 hand-3SG.POSS
 ‘his/her hand’

¹⁵ Another explanation for the floating H tones in the possessive suffixes may simply be that all personal pronouns have an initial H tone in their melodies. Also, these may simply be a contraction of the Genitive Construction (N + genitive pronoun) in which all segments of the genitive prefix (**a**)lá- were lost with only the H tone remaining.

¹⁶ Because this floating L tone for the 3PL possessive suffix never surfaces phonetically (only its effect of downstep is observed), one might argue that a Mid tone has phonologized for this particular morpheme.

- SoG
 (4.46) *ela-má*
 hand-3SG.POSS
 ‘his/her hand’

The 2SG suffix in SoG carries H tone **-ú**, while in NoG the suffix begins with a toneless syllable (indicated with * in Table 4.4) followed by H tone: **-uá**. In SoG, the H tone of the suffix often spreads left to the final syllable of the possessed noun (and the final /a/ of the noun assimilates to the vowel quality of the suffix) (4.47). However, occasionally, a glottal stop is inserted before the suffix, and when this occurs, it is evident that there is no floating H tone (4.48). In NoG, the final tone of the noun stem spreads to the initial toneless syllable of the possessive suffix. In example (4.49), the tone on the final /a/ of the noun root is H tone, **gíʃá** ‘rock’, while the final tone on **goʃa** ‘fish’ is L tone (4.50). Again, the final short /a/ assimilates to the vowel quality of the initial suffix vowel.

- SoG
 (4.47) *elú-ú*
 hand-2SG.POSS
 ‘your hand’

- SoG
 (4.48) *bia-ʔú*
 neck-2SG.POSS
 ‘your neck’

- NoG
 (4.49) *gíʃú-uá*
 rock-2SG.POSS
 ‘your rock’

- NoG
 (4.50) *goʃu-uá*
 fish-2SG.POSS
 ‘your fish’

In SoG, the Possessive Construction (N + possessive suffix) is limited to nouns which are inalienable/inherently possessed: body parts (e.g. 4.47, 4.48) and kinship terms

(4.51);¹⁷ possession for alienable (or ‘absolute’) nouns is expressed via the Genitive Construction (see also Chapter III for discussion of relational versus absolute nouns).¹⁸ In contrast, the Possessive Construction can be used with any noun in NoG. However, many kinship terms are doubly marked for possession in NoG. That is, the possessed noun is marked with a possessive suffix in addition to a genitive pronoun, but the possessive suffix is not obligatory (4.52). Also certain body part terms must be marked with a possessive suffix when they occur within the Genitive Construction (4.53), while alienable nouns, e.g. cattle, do not take a possessive suffix in the same construction (4.54).¹⁹ Lastly, many kinship terms in NoG often take the 1SG possessive suffix, **-éa** (4.55), in place of the more typical **-ma** (HL) suffix (Table 4.3). Furthermore, kinship terms like ‘mother’ and ‘father’ can also take a third 1SG possessive suffix, **-úá** (4.56). All of the 1SG possessive suffixes exhibit a HL tonal melody.

SoG
 (4.51) ee-má
 mother-3SG.POSS
 ‘his/her mother’

NoG
 (4.52) lá-ma duá-ma ~ lá-ma dua
 GEN-1SG.POSS child-1SG.POSS GEN-1SG.POSS child
 ‘my child’

NoG
 (4.53) lá-obá-ma lúk’ú-má
 GEN-father-1SG.POSS head-3SG.POSS
 ‘my father’s head’ (lit: my father his head)

¹⁷ The word for ‘mother’ in isolation **éá** (SoG, see footnote 18) should have an LL tonal melody(**ea**) given the tonal melody in (4.51). Thus, I suspect that the LH form given in isolation is a back-formation from either the Associative Construction (in which an H tone associates with the final vowel of the first noun) or from the Possessive Construction in which many possessive suffixes begin with a floating H tone.

¹⁸ Not all inherently possessed nouns are obligatorily marked with a possessive suffix. The one exception is ‘mother’ **éá** which was only uttered without a possessive marker when I questioned a SoG Gumuz language consultant during elicitation. There exist a few exceptions to these possessive suffixes being limited to body part terms and kinship terms in SoG, namely **eba** ‘home area’ which can take either the possessive suffix endings or the genitive pronoun.

¹⁹ In NoG, the word for ‘father’ varies between **obá** and **baabá**.

NoG
 (4.54) *lá-obá-ma* *χosa*
 GEN-father-1SG.POSS cattle
 ‘my father’s cattle’

NoG
 (4.55) *maamé-éa*
 father’s.sister-1SG.POSS
 ‘my father’s sister’

NoG
 (4.56) *ea-úa* [ijúa]
 mother-1SG.POSS
 ‘my mother’

Genitive pronouns in Gumuz are formed with the genitive prefix **lá-** (NoG) / **alá-** (SoG) plus a possessive suffix (see Table 4.4 for the suffixes). All possessive suffixes in Table 4.4, save the 1SG possessive variants in NoG, **-éa** and **-úa**, and the 1SG and 1PL possessive variants in SoG **-ánko** and **-áíla**, are known to occur with a genitive prefix **lá-** (NoG) or **alá-** (SoG) as genitive pronouns. Examples (4.52) and (4.57, 4.58) illustrate a few of these pronouns within the Genitive Construction (GEN NP). These pronouns can also be used as independent pronouns outside of the Genitive Construction (4.59, 4.60). Lastly, genitive pronouns can also take nominative case marking (4.59).

NoG
 (4.57) **lú-úa** *goja*
 GEN-2SG.POSS fish
 ‘your fish’

SoG
 (4.58) *túgwa* **alâ-m**
 chair GEN-1SG.POSS
 ‘my chair’

NoG
 (4.59) *meetáa-cá¹-má* = *ngó mísá náná á-lá-¹máámá* *ka = lá-kwa*
 one-CL:eye-ABS=NEG god MED NOM-GEN-3PL.POSS COM=GEN-1PL.INCL
 ‘This god of theirs compared with ours is not the same.’
 (lit: ‘This god is not of one substance, theirs with ours.’)

- (4.60) k'óá = baʔ **alâ-m**
 dog=PROX GEN-1SG.POSS
 'This dog is mine.'

4.2.3 Person Agreement on Verbs

In Gumuz, bound pronominals on verbs vary slightly in form according to tense (future vs. nonfuture) and transitivity (A versus S arguments). In the nonfuture tense, they are prefixes; in the future tense, they are suffixes. For the NoG variety of Gumuz spoken in Mandura, one can also mark the O argument on the verb (in addition to A marking), but only for certain persons. Lastly, objects of prepositions (in both NoG and SoG) can be co-referentially marked on certain verbs if the verb includes an incorporated dative/benefactive or instrumental/applicative preposition and is in the future tense or either the jussive or imperative moods.

4.2.3.1 Subject (A/S) Marking on Nonfuture Verbs

In Gumuz, bound subject pronominals are prefixed to a verb in nonfuture (NFUT) tense (see Chapter VII). The S argument pronominal prefixes for both NoG and SoG are listed in Table 4.5. The A argument pronominal prefixes are listed in Table 4.5. Intransitive (i.e. S argument) marking generally surfaces with a HL tonal melody (4.61), save the 2SG and 3SG pronominals in NoG (4.62, 4.63) and the 3SG in SoG (4.64).

Table 4.5. S Pronominal Marking for NFUT Verbs

	SG			PL	
	NoG	SoG		NoG	SoG
1	ár(a)-	ár(a)-	incl.	áko- / ágo-	áko- / ágo-
			excl.	íla-	íl(a)-
2	a-	áa-		áʒa-	ác(a)-
3	á-	á-		úu-	íi-

NoG	SoG (Sirba) ²⁰
(4.61) ára d- âr -ts 1SG AFF- 1SG.INTR -go 'I went.'	ára b- âra -dǎ-gá 1SG AFF- 1SG.INTR -go-NFUT 'I went.'
(4.62) áma d- a -ts 2SG AFF- 2SG.INTR -go 'You went.'	âm b- âa -dǎ-gá 2SG AFF- 2SG.INTR -go-NFUT 'You went.'
(4.63) áχó d- á -ts 3SG AFF- 3SG.INTR -go 'He went.'	án b- á -dǎ-gá 3SG AFF- 3SG.INTR -go-NFUT 'He went.'

In contrast, transitive A argument pronominals (Table 4.6) generally follow a H(H) tonal melody (4.64), save 3SG (4.65).

Table 4.6. A Pronominal Marking for NFUT Verbs

	SG		PL		
	NoG	SoG		NoG	SoG
1	ár(á)-	ár(á)-	incl.	ákó- / ágó-	ákó- / ágó-
			excl.	ílá-	íl(á)-
2	á-	áá-		ájá-	áj(á)
3	a-	a-		úú-	íí-

NoG	SoG
(4.64) ára d- âr -s nga 1SG AFF- 1SG.TR -eat porridge 'I ate porridge.'	ára b- âr -sá-gá nga 1SG AFF- 1SG.TR -eat-NFUT porridge 'I ate porridge.'
(4.65) áχó d- a -s nga 3SG AFF- 3SG.TR -eat porridge 'He ate porridge.'	án b- a -sá-gá nga 3SG AFF- 3SG.TR -eat-NFUT porridge 'He ate porridge.'

²⁰ In the Sirba *wereda*, the Gumuz say **dǎ** for 'go', whereas in the Kamashi *wereda*, the Gumuz say **tsá**, similar to speakers of NoG.

4.2.3.2 Subject (A/S) Marking on Future Verbs

Pronominal marking in the future tense is similar to that of the nonfuture tense, both segmentally and in terms of tonal patterns. However, pronominals in the future tense are suffixed to the verb stem. These pronominal suffixes are listed in Tables 4.7 and 4.8 below. Despite the similarities with the pronominals of the nonfuture tense, there exist a few differences both segmentally and tonally. For one, the segments of the 1SG pronominal **/-ara/** tends to vary with **/(a)ɗa/** when marked on future tense verbs (4.66).²¹ For S (intransitive) pronominal marking, the underlying vowel /o/ for the 1PL inclusive pronominals is always realized as labialization (4.67). Also, the /a/ vowel in the 3rd person is long in NoG (4.68). Furthermore, speakers of NoG often use the greater plural (GP) suffix **/-óa/** followed by the 3SG bound subject pronominal, which is **/-áá/** for intransitive verbs (S marking) and **/-aa/** for transitive verbs (A marking). The resulting vowel sequence is similar to the 3PL bound subject pronominal and is often used in place of 3PL marking (see also Chapter VII). The greater plural plus the 3SG S pronominal is **/-óáá/**, while the greater plural plus A pronominal is **/-óaa/**. These combined morphemes are listed with an asterisk in Tables 4.7 and 4.8.

Table 4.7. S Pronominal Marking for FUT Verbs

	SG		PL		
	NoG	SoG		NoG	SoG
1	-ára / -áɗa	-ára / -(á)ɗa	incl.	-ágwa	-(á)gwa
			excl.	-íla	-íla
2	-aa	-áa		-ája	-áj(a)
3	-áá	-á		-úa -óáá*	-úa

²¹ The allomorph **/-aɗa/** for the 1SG future occurs when the verb root has a consonant coda which is an alveolar liquid {l, r}. In some cases, the coda of the verb root has an underlying phoneme /ɗ/. Since the underlying morpheme for 1SG is **/-aɗa/**, it seems that there exists a co-occurrence restriction for both of these alveolar implosives to surface, and the speaker must make a choice as to which phoneme (that of the verb root or that of the suffix) should surface as its liquid allophone.

SoG

- (4.66) ára má⁺-fár-**ǰa**-ts má⁺-kól-**ǰa** ká = máts'á-áíla
 1SG FUT-rise-1SG.INTR-BODY FUT-return-1SG.INTR DAT=house-1SG.INCL.POSS
 'I will get up and return to our home.'

SoG

- (4.67) kám-⁺kál-**ǰgwa**
 FUT-say-1PL.INCL.INTR
 'We will say.'

Table 4.8. A Pronominal Marking for FUT Verbs

	SG		PL		
	NoG	SoG		NoG	SoG
1	- ára / - ádá	- ára / - ádá	incl.	- ágó(á)	- ágó(á)
			excl.	- íla	- íla
2	- áá	- áá		- ájá	- áj(á)
3	- aa	- a		- úá - óaa*	- ú(á)

NoG

3SG

- (4.68) d-é-fag-**aa**-k'w
 AFF-FUT-grow-3SG.TR-HEAD
 'S/he will raise (someone).'

GP + 3SG

- d-é-fag-**óaa**-k'w
 AFF-FUT-grow-3PL.TR-HEAD
 'They will raise (someone).'

4.2.3.3 Object Marking on Verbs

Marking the object (O) on the verb appears to be quite rare in Gumuz. Most verbs are only marked for A or S arguments (subjects). In fact, all texts in the corpus, save one, mark verbs with only A or S bound pronominals.

The marking of both subject and object simultaneously on the verb is found in the Mandura dialect of NoG and is restricted to certain combinations of A and O pronominals. Such combinations are discussed in more detail in Chapter VII. The O bound pronominals that are known to exist are similar in form to the S pronominals. However, there are no 2SG and 3PL pronominals marking O on the verb. Table 4.9 lists

the O pronominals that exist in the present corpus and also independently documented by Innocenti (2010:94-95).

Table 4.9. O Pronominal Marking on NFUT Verbs in NoG

	SG	PL	
	NoG		NoG
1	ára-	incl.	ágo-
		excl.	íla-
2	á-	ája-	
3	--	--	

Example (4.69) illustrates one instance of both A and O pronominals marked simultaneously on the verb (here A is labeled ‘ergative’ and O ‘absolutive’)²². The O argument, **ája** 2PL, is highlighted in bold.²³

NoG
 (4.69) d-ára-**ája**-bátʃ
 AFF-1SG.ERG-2PL.ABS-hit
 ‘I hit you all.’

In SoG, there is only one known example of both A and O marking on the verb. Example (4.70) has a 2SG subject and 1SG object marked on the future tense verb. Such simultaneous A and O marking is not possible in the nonfuture tense (in SoG) and seems to be used deontically in the future.

SoG
 (4.70) kám-tiig-á-**ár**-é-s
 FUT-send-2SG.TR-1SG-TWRD-MOUTH
 ‘You *will/should* show me.’

²² I use the terms ‘ergative’ for A and ‘absolutive’ for O as the form of O bound pronominals (namely tone) is similar or identical to that of S bound pronominals. As simultaneous A/O marking on the verb is rare, marking the tonal pattern on the bound pronominal as either ‘transitive’ (TR) or ‘intransitive’ (INTR) suffices for most verbal conjugations.

²³ The tonal pattern of H¹H found in example (4.69) is typical of a HL pattern followed by H tone.

“applied object” and the incorporated preposition as an “applicative”. However, in most instances, the incorporated prepositions do not function as prototypical “applicatives” (Petersen 2007:1, Croft 1994: 95-96) in that the “applied” argument is not marked as an O. Also, there are no instances in the corpus in which the “applied” O argument occurs as a free NP simultaneously with being indexed as an O bound pronominal (see also discussion in Chapter VII, section 7.2.3.1 and Chapter X, section 10.4.1).

CHAPTER V

NOUN PHRASES AND PREPOSITIONAL PHRASES

Both noun phrases (NPs) and prepositional phrases (PPs) in Gumuz are covered in this chapter. As NPs in Gumuz are difficult to describe without mentioning PPs and vice versa, it is not only convenient but necessary to discuss both phrase types together. The Gumuz noun phrase and its possible constituents are discussed in section 5.1, while the Gumuz prepositional phrase is discussed in section 5.2. Furthermore, the marking of case, which is a NP phenomenon, exhibits certain syntactic behavior similar to that of the prepositions. This syntactic behavior is discussed in section 5.3.

5.1 The Noun Phrase

The noun phrase (NP) in Gumuz can be comprised of a head noun, whether independent or part of the Associative or Attributive Constructions (described in Chapter VII), a numeral, a relative clause, a genitive noun/ noun phrase, a prepositional phrase and/or a demonstrative adjective. While the NP tends to be left-headed, the order of constituents within the phrase is fairly free. The only constituents with a fixed word order are those that occur within the Attributive and/or Associative Constructions. This section also describes the respective categories and inflectional/derivational morphology of the various non-head constituents of the NP.

5.1.1 Noun Heads

As mentioned above, the head of the NP can either be an independent (single root) noun (5.1) or a noun-noun (NN) construction which comprises either the Associative (5.2) or Attributive Constructions (5.3). Each of these latter constructions forms a unit which can function as the head of the phrase.

- SoG
 (5.1) [[lorága]_N alâ-m]_{NP} ná = k'wá-túgwa
 book GEN-1SG.POSS LOC=HEAD-table
 'My book is on the table.'
- SoG
 (5.2) [[já-lorága]_N alâ-m]_{NP} meetáam ba
 tree-book GEN-1SG.POSS one PROX
 'My pen is this one.'
- SoG
 (5.3) b-e-e-tʃá [[á¹-má-áŋ-gááz baga]_N
 AFF-RPAST-3SG.TR-have NOM-NMLZ-VBLZ-old.man person
 meetáa]_{NP} dagoná ma-an-dagóná-má
 one young.girl NMLZ-VBLZ-beautiful-IP:MOD
 'One elderly man had a beautiful young girl'
 (i.e. One elderly man had a beautiful young sister)

In turn, the Associative Construction and the Attributive Construction each have a syntactic head. The head noun of the Associative Construction is the first noun of the construction, while the head noun of the Attributive Construction is the second noun. The headship of these constructions is discussed more fully in Chapter VII.

5.1.2 Possible Non-head Constituents of the NP

The next subsections discuss the possible non-head constituents of the NP as well as their respective category membership. Numerals (quantifiers), genitive nouns, and demonstrative adjectives are described. Relative clauses are discussed in detail in Chapter VIII. All non-head constituents can also stand pronominally for the NP. The pronominal uses as well as any relevant morphology (inflectional and/or derivational) are also discussed.

5.1.2.1 Numerals/quantifiers

Numerals and quantifiers in Gumuz are modifiers which express the number or amount of the noun being modified (the head noun). These include cardinal numbers (5.4)

as well as quantifiers such as ‘all’ (5.5). Numerals can function as modifiers of the noun head or as noun heads within the Associative (N of N) Construction (5.6).

NoG

- (5.4) [okáág b́aga] d-úu-ts
 three people AFF-3PL.INTR-go
 ‘Three people went.’

NoG

- (5.5) ká=[⁴kóóá ʔaja] lá ʔaja t́ilá
 BEN= all water PROX water deep
 ‘Of all the water (rivers, lakes) this is the deepest.’

NoG (Innocenti 2010:116)¹

- (5.6) [meta [mə-ŋ-ha-ts məmatsə-mà]]
 one NMLZ-PL-be.small-BODY younger.sibling-1SG.POSS
 ‘one of my small younger siblings’

The term **kooâ** ‘all’, unlike most numerals (see section 5.3), can occur either before or after the head noun as a modifier. Furthermore, ‘all’ seems to partly fit with the category of attributive nouns in that if it follows the head noun or occurs pronominally for the head noun, a /-má/ suffix is added (5.7). However, **kooâ** ‘all’, does not form a constituent with the noun it modifies as do attributive nouns (see section 7.3.4.1 of Chapter VII). Lastly, unlike other attributive nouns, the /-má/ inherent possession (IP)/3SG.POSS suffix can be substituted with the 3PL.POSS suffix when functioning pronominally for plural animate referents (5.8).² Numerals can also take a 3PL possessive suffix when functioning as a pronoun (5.9). Thus, **kooâ** seems to fit partly with the category of numerals and partly with the category of attributive nouns.

¹ I have maintained Innocenti’s transcription in (5.6) but the bracketing and the morpheme-by- morpheme glosses are my own.

² Also possible is that ‘all’ is part of the Associative Construction (N of N) in (5.8), hence the meaning ‘all of them’.

SoG

- (5.7) dá lá **koó-má** pá-k'w
thing PROX all-IP:MOD exit-HEAD
'Get rid of all these things.'
- (5.8) á+mám ká = **koó⁺-mám** n-á-tab-áts á-raba
3PL BEN=all-3PL.POSS JUSS-3SG.INTR-help-BODY NOM-God
'May God help all of them.'
- (5.9) ka-**mbáándá⁺-máám**
COM-two-3PL.POSS
'the two of them'

Another constituent which distributes similar to numerals is the word **jendá** '(an)other'. In NoG, numerals precede the head noun (5.4) and in SoG they follow the head noun (5.3). In a similar fashion, **jendá** often precedes the head noun in NoG (5.10) and follows it in SoG (5.11).

NoG

- (5.10) díʔa ʔaga d-úú-dak'w [**jendá sila**]
few people AFF-3PL.TR-hold another religion
'Few people practice another religion.'

SoG

- (5.11) [**lorága jendá ʔáj**] b-í-íi-gá-na
book other MED AFF-3SG.INTR-be-NFUT-LOC
'That other book is here.'

Numerals in Gumuz can take nominal inflection. When a plural referent is human, the numeral can be used pronominally and take the plural prefix /**má-**/ (5.12). The numeral, like prototypical nouns, can take the genitive prefix (5.13).

SoG

- (5.12) b-íi-a-fantʃ-agá-ts ŋiʃá **má-⁺mbáánd**
AFF-3PL.TR-RCP-fasten-NFUT-BODY speech PL-two
'The two agreed.'

NoG
 (5.13) nágú-ú-a-síá d-á-d **álá-meetáa**
 TEMP-3PL.TR-RECP-play AFF-3SG.INT-become GEN-one

ká = ígafa d-á-d
 DAT=women AFF-3SG.INT-become

‘When they play, one person’s (rocks) become women.’

Numerals in both NoG and SoG can be derived into multiplicative numerals (e.g. ‘once’, ‘twice’, etc), which are NPs that function as adverbials. These are derived by compounding a class term morpheme/body part term with a numeral. In order to express ‘once’, one combines the numeral ‘one’ with the grammaticalized body part term for ‘head’ (which follows the numeral) (5.14). In order to express ‘two times’ (or higher), one uses the body part term for ‘belly’ as the first element of the ‘compound’ with the numeral following (5.15).³ This newly derived multiplicative numeral can be used with or without the word **ooká** ‘time’ in SoG. One can also use ‘belly’ to derive the meaning ‘once’ in SoG.

NoG
 (5.14) dua **meetáa-k’w** d-a-nt’áz-ac baga
 child one-HEAD AFF-3SG-deceive-EYE person
 ‘The child fooled the person once.’

SoG
 (5.15) éé-b-ii-lee-ká tjeŋa **ooká íl-ókáán**
 TEMP-AFF-3PL.TR-plow-NFUT field time BELLY-three

á-gaŋ-kaa-cé b-a-sa-ká á-minda
 3SG.INTR-be.good-NFUT-NEG AFF-3SG.TR-eat-NFUT NOM-plant.disease

‘When they plow the field three times, it’s not good enough; *minda* (a plant disease) eats it.’

³ The grammaticalized body part term /**íl-**/ ‘belly’ in (5.15) is likely related to the relational noun /**íl-**/ meaning ‘inside, within’.

There also exists a third person dual pronoun of sorts in NoG which appears to be a lexicalized compound and is similar in meaning to (5.9) above. The pronoun **dá(á)** combines with **mbáánd(á)** ‘two’ followed again by the pronoun **dá(á)** to derive a new pronoun meaning ‘the two of them’. However, this pronoun is rarely used in the present corpus and this process of compounding is not productive with other numerals.

- (5.16) **dá-báándá-dá** d-úu-ts
 PRO.PL-two-PRO.PL AFF-3PL.INTR-go
 ‘The two of them went.’

5.1.2.2 Genitive Noun Phrase (the Genitive Construction)

The Genitive Construction in Gumuz is a noun phrase which is marked with the genitive prefix/preposition, /lá=/ in NoG (5.17) and /alá=/ in SoG (5.18) (see section 5.2 for further details about case-marking and prepositions) .

NoG

- (5.17) **lá=[dáája ka-wáágana]** táarííka
 GEN-baboon COM-monkey story
 ‘The story of the baboon and the monkey’

SoG

- (5.18) wáágana b-a-jír-aká lorága **alá=[dua ?áj]**
 monkey AFF-3SG.TR-see-NFUT book GEN=child MED
 ‘The monkey saw that child’s book.’

The Genitive Construction is semantically similar to the Associative Construction (Chapter VII). However, the Associative Construction is semantically much broader, including material, contents, and function/purpose in addition to the semantics of possession. Furthermore, the possessor in the Genitive Construction is nearly always a particular or specific referent, whereas this is not always true for the Associative Construction (5.19).

NoG

GENITIVE
CONSTRUCTION

- (5.19) lá-ɓaga eaa d-á-ɓíŋ
GEN-person hand AFF-3SG-be.cold
'The person's hand is cold.'

ASSOCIATIVE
CONSTRUCTION

- eáá-ɓaga d-á-ɓíŋ
hand-person AFF-3SG-be.cold
'The/a hand of a person is
cold.'
(e.g. versus 'the hand of a
monkey')

5.1.2.3 Demonstrative Adjectives

A demonstrative is a “deictic expression...used to focus the hearer’s attention on objects or locations in the speech situation” (Diessel 1999:2). Demonstrative adjectives are demonstratives which modify another noun, and demonstrative pronouns are demonstratives which take the place of a noun phrase. The latter are discussed Chapter IV, “Pronouns”.

In general, Gumuz exhibits a three-way deictic contrast in demonstrative adjectives (similar to demonstrative pronouns): proximal (5.20-5.23), medial (5.24, 5.25), and distal (5.26, 5.27). The proximal demonstrative has the same form in NoG and SoG (Sirba) but there exist subdialectal differences in SoG; in the Kamashi area speakers tend to use **baʔ** and **baané(a)**.⁴ Other demonstrative adjectives differ by dialect as well; the medial is **láná** in NoG and **á(ŋ)** in SoG which is homophonous with the 3SG personal pronoun.⁵

⁴ In reality, these dialectal differences are according to both lineage and geography, which tend to correlate but not always. Recall from Chapter I (section 1.1.2), that the Gumuz are expected to maintain the dialect of their father. Thus, in the event that the family moves to the mother’s home area, the children are expected to maintain the dialect of their father even if it differs from that of the speakers in their new home area.

⁵ The preponderance of forms for the proximal demonstrative adjective in SoG is suspicious. It maybe that **baané** at one time functioned or presently functions as a medial demonstrative adjective (given the medial forms with /n/ in NoG, e.g. **láná**). However, this then creates overlap in the medial forms for speakers of the same dialect. But if one assumes that **á(ŋ)** moved from a medial demonstrative pronoun to become the 3SG personal pronoun, a gap is created in the demonstrative pronoun paradigm. Perhaps this gap was filled by the **baané** form in the Kamashi area and eventually functioned as a medial demonstrative adjective as well. This would render the proximal translation of **baané** as either incorrect or a more recent development in which medial and proximal forms are beginning to merge. Another possibility is that **á(ŋ)** is no longer a

NoG

- (5.20) [kea **lá**] áca d-áca-fá-ʒî-n
beer PROX 2PL AFF-2PL.TR-drink-PERF-LOC
'You all had already drunk this beer.'

SoG (Sirba)

- (5.21) [dagoná **lá**] b-a-tʃáŋ-⁴gá kóna
young.woman PROX AFF-3SG.TR-boil-NFUT sauce
'This young woman prepared the sauce.'

SoG (Kamashi)

- (5.22) [já **baʔ**] b-á-faat-agá
tree PROX AFF-3SG.INTR-fall-NFUT
'This tree fell.'

(5.23) SoG (Kamashi)

- má⁴-sá-gwá [mátá **baané**]
FUT-eat-1PL.INCL.TR chicken PROX
'We will eat this chicken.'

NoG

- (5.24) d-úú-χol [éé⁴míléa **láná**]
AFF-3PL.TR-follow hyena MED
'They followed that hyena.'

SoG

- (5.25) [lorága alâ-m **áŋ**] ná=k'wá túgwa
book GEN-1SG.POSS MED LOC=HEAD table
'That book of mine is on the table.'

NoG

- (5.26) [**látá** dáá-eeba] d-á-ʔíi ka-ma-gáχ-ámá
DIST PEOPLE-home.area AFF-3SG.INTR-live COM-NMLZ-be.good-IP:MOD
'Those villagers get along very well.' (lit: 'Those villagers live well.')

SoG

- (5.27) [dú-lorága alâ-m **alát**] ná=k'wá túgwa
DIM-book GEN-1SG.POSS DIST LOC=HEAD table
'That little book of mine is on the table.'

medial demonstrative synchronically but a definite marker. Indeed, it is often glossed by native speakers of Gumuz as a definite marker in Amharic. However, further analysis at the discourse level is needed to determine whether the medial demonstrative adjective is truly a definite marker.

5.1.3 Constituent Order of the NP

5.1.3.1 “Canonical” Order

As stated above, the NP in Gumuz tends to be left-headed. Nominal heads are either independent nouns with a single root/stem or NN compounds/collocations. In (5.28) the independent nouns for ‘warthog’ and ‘book’ are the first element and syntactic heads of the noun phrase, just as the compound ‘goat meat’ is the first element and syntactic head of the noun phrase in (5.29).

NoG

- (5.28) a. [jáágwéa láná]_{NP} d-úú-ǰá-é-k’w
warthog MED AFF-3PL-kill-TWRD-CL1:HEAD
‘They killed that warthog.’

SoG

- b. [lorága al-âm áŋ]_{NP} nó = k’wá tógwa
book GEN-1SG.POSS MED LOC=HEAD table
‘That book of mine is on the table.’

NoG

- (5.29) [batǰá-meʔa láná]_{NP} é-átǰátǰá-kw-ííl ká = áma
meat-goat MED FUT-divide-1PL.INCL.TR-BELLY BEN=2SG
‘We will divide up that goat meat for you.’

However, in NoG, if a quantifier is used, the quantifier tends to be the first element of the NP. In (5.30), **dogoná gááfa** ‘beautiful women’ functions as a compound head noun in the Attributive Construction with the numeral preceding it. A similar utterance in SoG has the quantifier following the head noun (5.31) similar to the NP in (5.3).

NoG

- (5.30) [[mbáándá] [dagoná gááfa] [láná]]_{NP} d-úú-ts
two beautiful women MED AFF-3PL.INTR-go

ná = cáánɣaxa

LOC=road

‘Those two beautiful women walked down the road.’

SoG

- (5.31) [[dagoná gááfa] [mbáánd] [álá]]_{NP} b-í^t-dǎ-gá
beautiful women two PROX AFF-3PL.INTR-go-NFUT

ná = líc-ndoa

LOC=EYE-road

‘These two beautiful women walked down the road.’

The demonstrative adjective tends to be the final (right-most) element of the NP in Gumuz whether numerals (5.30, 5.31), or other constituents of the NP are introduced: e.g. a genitive pronoun (5.28 b) or a relative clause (5.32, 5.33).

SoG

- (5.32) [dú-ḃəga eetâ-m-w-é áŋ]_{NP} ká = gêla
child-person PRO.SG-FUT-go-TWRD MED DAT=here
‘That person’s_i child_j who_j is coming is coming here.’

NoG

- (5.33) [ga-zaz-a l-âr-dá-dǎ lá]_{NP}
NMLZ2-create.with.clay-NM REL-1SG.TR-do-1SG PROX

l-ílâ-fâ-n

kea

REL-1PL.EXCL.TR-drink-ABL beer

‘This clay product (pot) that I make is what we drink beer out of.’

Lastly, prepositional phrases can modify the head noun. These typically follow the head noun, but, again, if a demonstrative adjective is used, the demonstrative adjective will be the right-most element of the NP (5.34).

SoG

- (5.34) ná = oká = lá káma-a-tǎé-áá-k’w [ga-nááh-a
LOC=time=PROX FUT-VD-decrease-3SG.INTR-HEAD NMLZ2-satisfy-NM

ná = ílâ-m baané?_i]_{NP}

LOC= belly-1SG.POSS MED

‘At this time, that satisfaction in my belly will decrease.’

5.1.3.2 Other Possible Constituent Orders

While the numeral precedes the head noun in most instances in NoG, it is also possible for the numeral to follow the head noun (as it does in SoG) (5.35).

NoG

- (5.35) ka = cá⁴mááŋgwá d-úú-χwants²-ók²w
COM=morrow AFF-3PL.TR-gather-HEAD

[baga tʃíká k'ó-má nzaac]_{NP}
person ten HEAD-IP:MOD four

'The next day, 14 people had a meeting
(lit: ...they gathered 14 people).'

Attributive nouns (i.e. the first noun in the Attributive Construction) can occur outside the Attributive Construction if the /-má/ inherent possession suffix is attached (see detailed discussion in Chapter VI). The inherent possession suffix serves to refer back to the head noun of the NP, whether pronominally in a predicate nominal construction (5.36), or as a post-nominal modifier within the NP (5.37). The attributive noun plus /-má/ can also be used pronominally for the Attributive Construction when the modified noun is not overt (5.38).

NoG

- (5.36) áχó ma-p'aa-má
3SG NMLZ-be.short-IP:MOD
'S/he is short.'

SoG

- (5.37) íí-ám-b-agá = ηgó gíjá babó-k'ó-má
3PL-throw-NFUT=NEG rock big-HEAD-IP:MOD
'One doesn't throw big rock(s).' (Gumuz proverb)

- (5.38) ma-an-dagóná-má
NMLZ-VBLZ-beautiful.(girl)-IP:MOD
'the beautiful one' (in reference to a horse).

This attributive noun form (with /-**má**/) can also occur before the head noun in NoG. However, the semantics of the attributive noun form with /-**má**/ (5.39) can differ slightly from the attributive noun that occurs within the Attributive Construction (5.40).⁶

(5.39) **oobá-^ttsá-má** já tso
 big-BODY-IP:MOD tree COP
 ‘It is a thick tree’ (i.e. a tree with a thick trunk)

(5.40) **oobá-^ttsá** já tso
 big-BODY tree COP
 ‘It is a big tree.’

In SoG, the attributive noun form with /-**má**/ can occasionally occur before the noun it is modifying, most notably when the verb stem is transitive. However, this construction seems to be used to disambiguate the attributive noun plus O argument construction from the infinitive plus O argument construction. For the latter construction, it is not grammatical to use the /-**má**/ suffix if the O argument immediately follows.⁷ These two constructions happen to be homophonous (when the /-**má**/ suffix is not used and the second noun of the construction immediately follows). Such constructions are discussed further in Chapter VI.

⁶ The difference in semantics between the two attributive noun forms may have to do with **tsa** ‘body’ functioning as a classifier or as part of a lexicalized form meaning ‘big’ (5.40) versus a metaphorical body part in an External Possession (EP) construction (5.39) (see further discussion of EP constructions in Chapter X, “Noun Incorporation”). With the latter analysis, one could gloss (5.39) as ‘The tree is body-big’ meaning ‘the body of the tree is big’ with ‘body’ referring to the trunk. This analysis may be further supported by the fact that /-**Vts**/ ‘body’ is added to **takw** ‘climb’ when a tree is the O argument and the incorporated noun/classifier refers to the woody part of the tree (see example (11.178), Chapter XI). Lastly, it is important to note that **já** ‘tree’ also means ‘trunk’ as evidenced in the word ‘tree trunk’ **jájá**. Thus, it refers to both a part and a whole, and /-**Vts**/ ‘body’ likewise may be referring to a part (5.39) versus the whole (5.40).

⁷ Here, my analysis of the infinitive (verb nominalized with /**ma-**/) plus O argument construction differs from my previous implicit analysis (2010:167-168) in which the /-**má**/ suffix was allowed on the nominalized verb (in NoG) if the O argument immediately followed. However, I now assume that the particular example (in Ahland 2010) of the nominalized verb plus /-**má**/ was likely an example of an attributive noun (and not an infinitive) and therefore deemed grammatical by the native speaker.

- SoG
 (5.41) **ma-k'óʃ-a-(má)** **hola** b-ár-gaŋ-g-é-ts ná = gáté
 NMLZ-dig-NM-IP:MOD hole AFF-1SG.TR-know-TWRD-BODY LOC= there
 'I saw a dug hole over there.'

- SoG
 (5.42) b-ár-paŋ-gá **ma-k'óʃ-a** **hola**
 AFF-1SG.TR-want-NFUT NMLZ-dig-NM hole
 'I want to dig a hole.'

As mentioned above, the demonstrative adjective tends to be the final constituent of the NP in Gumuz. However, occasionally in NoG, a demonstrative adjective can serve as the first constituent of the NP, especially in instances where there exist only two constituents (5.26, 5.43).

- NoG
 (5.43) [**láná** gúmba]_{NP} d-á-ʃ
 MED lion AFF-3SG.INTR-die
 'That lion died.'

Relative clauses in Gumuz generally follow the head noun in a NP (5.44, 5.45) or serve as the head noun itself (i.e. are headless) (5.46).

- NoG
 (5.44) [titʃa [**l-úú-f-ân** **aja**]_{RelCL}]_{NP} ná = gá = tso jendá = kwê
 pot REL-3PL-drink-ABL water LOC=here=COP other=CONJ

[titʃa [**l-úú-d-ân** **ŋga**]_{RelCL}]_{NP} ná = gá = tso
 pot REL-3PL-make-LOC food LOC=here=COP

'The pot we drink water out of is here and the pot we make food in is here.'

- SoG
 (5.45) b-á-pa-gá-tsa ká = ílá-[máts'á
 AFF-3SG.INTR-emerge-NFUT-BODY DAT=BELLY-house

[**gwá-b-á-pú-gá**]_{RelCL}]_{NP}
 PLACE-AFF-3SG.INTR-be.white

'S/he went out (and) into the house that is white.'

SoG

- (5.46) [[**et-ár-gaŋ-gá-ts**] _{RelCL}]_{NP} m^átá
PRO.SG-1SG.TR-know-NFUT-BODY bird
'What I see is a bird.'

The relative clause, whether finite or non-finite, can also precede the head noun. In NoG, this is true for clauses relativized on A (5.47), S (5.48) or O (5.49) arguments. However, clauses relativized on the O argument which precede the head noun are limited to auxiliary plus infinitive constructions (or internally headed relative clauses) using the /l-/ relativizer (see further discussion in Chapter XII, section 12.3.1).

NoG

- (5.47) [[**ŋgafa etá-l-á-ʼbátʃ**] _{RelCL} b^aga]_{NP} ná = gá = tso
woman REL.PRO-REL-3SG.TR-hit person LOC=here=COP
'The person who hit the woman is here.'

NoG

- (5.48) [[**etá-ma-dugwa**] _{RelCL} b^aga]_{NP} d-á-ú-é
PRO.SG-NMLZ-run person AFF-3SG.INTR-go.away-TWRD
'The person who ran came.'

NoG

- (5.49) [**l-árá-bats** **ma-gam-amá**] _{RelCL} b^aga]_{NP}
REL-1SG.TR-NEG.AUX NMLZ-know-IP:O person

d-á-ú-é

AFF-3SG.INTR-go.away-TWRD
'The person I didn't know came.'

In SoG, on the other hand, the relative clause can precede the head noun when the clause is relativized on the O argument (5.50).

SoG

- (5.50) [**etá-má-ŋatʃ-ílá**] _{RelCL} ʃooka]_{NP} b-ílá-tʃá-ká
PRO.SG-FUT-plant-1PL.EXCL.TR seed AFF-1PL.EXCL.TR-have-NFUT
'We have the seed(s) that we will plant.'

Nonfinite relative clauses appear to be headless in SoG and thus neither follow nor precede a head noun (5.51).

SoG

- (5.51) oráka **etá-m-ʼtʼóó-tsa-má**
who PRO.SG-NMLZ-put-BODY-IP:O
‘Who put this (here)? (lit: Who is the putting one?)’

5.2 Prepositional Phrases

5.2.1 Prepositions

In Gumuz, there exist three basic prepositional proclitics: /**ká=**/ DATIVE/BENEFACTIVE (5.52), /**ka=**/ COMITATIVE/INSTRUMENTAL (5.53), and /**ná=**/ ABLATIVE/LOCATIVE (5.54). These oblique prepositional phrases typically follow the verb and any O argument.

NoG

- (5.52) **ǰá-norága táá-é ká=ára**
wood-paper take-TWRD DAT=1SG
‘Bring the pencil to me.’

SoG

- (5.53) **b-a-dugu-gá-k’w katʃa ka=ńéa**
AFF-3SG.TR-run-NFUT-HEAD basket INSTR=soil
‘He plastered the basket with mud.’

NoG

- (5.54) **d-á-tók ná=ǰá**
AFF-3SG.INTR-climb LOC=tree
‘S/he climbed on the tree.’

5.2.2 Relator Nouns

In Gumuz, relator nouns are (mostly) grammaticalized body part terms which combine with nouns and prepositional proclitics to form complex prepositional phrases. In (5.55), the relator noun ‘head’ combines with ‘table’ and together the two nouns serve as the object of the preposition /**ná=**/.

SoG

- (5.55) **tʃaaga ná=k’wá túgwa**
knife LOC=HEAD table
‘The knife is on top the table.’

Relator nouns in Gumuz serve as the head noun within an Associative (N of N) Construction (see Chapter VI), forming a part-whole relationship with the dependent noun (second noun) of the construction. Thus, ‘head’ and ‘table’ of example (5.55) fill the two noun slots of the Associative Construction, producing the literal translation ‘head of table’ which refers to the top of the table. ‘Head’ and other nouns that function as relator nouns in Gumuz are listed in Table 5.1 below. These are mostly body part terms but also include the bound root **gó /gwá** meaning ‘place’. Some relator nouns are themselves complex as they include the body part prefix /ííl-/ (SoG) or /líí-/ (NoG) (see Chapter XI). Others are bound like **k’w(á) /k’ó** ‘head’ and/or do not have a synchronic free form as a source, such as ***ʃa** ‘hip/loins’ in NoG (see also Chapter III for further discussion of relator nouns).⁸

Table 5.1. Some Relator Nouns in Gumuz and Their Source Semantics

NoG	SOURCE > TARGET	SoG
k’w(á) /k’ó	head > top	k’w(á) /k’ó
ííl(á)	belly > in /inside	ííl(á)
nz(a)	rear end > under	(ííl-)anz(a)
gónáχá	flank > beside	taganá
boŋgó	back > behind	tʃátʃ(á)
líí-cá	face/eyes > facing / in front of	ííl-c(á)
s(á)	mouth > edge / opening of	s(á)
ʃ(a)	hip/ loins > at base of	ʃ(a)
gó /gwá	place > LOC	gó /gwá

As relator nouns can serve as the first noun in the Associative Construction (Chapter VI), they form a unit with the second noun of the construction, together

⁸ For the bound relator nouns, I do not use a hyphen or a clitic symbol because these are sometimes phonologically bound to the prepositions and at other times phonologically bound to the second noun of the Associative Construction; thus they can function as proclitics or enclitics.

functioning as one constituent of the noun phrase. One test that demonstrates that they form a syntactic unit is that the two nouns are syntactically inseparable (even though they are not always phonologically bound). Prepositions can optionally occur before every constituent of the NP in Gumuz (see section 5.3 below) but do not occur with the relator noun in addition to the second noun of the Associative Construction; the relator noun and its dependent noun are treated as a unit. In (5.56), the locative preposition /ná=/ occurs before the relator noun plus dependent noun construction **íflá-máts'á** and again before the demonstrative adjective **?á**; it does not occur directly before **máts'á** 'house'.

- SoG
 (5.56) b-á-?íi-gá-ʃ **ná = íflá-máts'á** **ná = ?á**
 AFF-3SG.INTR-be-NFUT-HIP LOC=BELLY-house LOC=MED
 'S/he stayed inside that house'

On the other hand, relator nouns do not form a syntactic unit with the preposition. That is, other constituents can come between the preposition and the relator noun. For example, the diminutive /dú-/ attaches to the relator noun plus noun construction in (5.57). Thus, **ʃa** 'base' does not form a syntactic unit with the locative preposition /ná=/ even though it is phonologically bound to the preposition in other instances (5.58).

- SoG
 (5.57) gó-b-íi-?íi-gá-ʃ **ná = dú-ʃa-ʃá**
 PLACE-AFF-3PL.INTR-be-NFUT-HIP LOC=DIM-BASE-tree
 'The place where they sat is a little place under a tree.'

- SoG
 (5.58) b-íi-?íi-gá-ʃ **ná = ʃ** **c'iriza**
 AFF-3PL.INTR-be-NFUT-HIP LOC=BASE mountain
 'They sat at the base of a mountain.'

Lastly, relator nouns in Gumuz form part of the broader category of relational nouns (see Chapter III for a detailed description). Relational nouns have an inherent semantic relation to the nominal constituents that accompany them and traditionally include derived nominals, kinship nouns, and nouns with inherent part-whole relations

the head noun. For example, the nominative case marker /á-/ in (5.60) occurs on both the head noun **ela** ‘hand’ and the numeral **meetáam** ‘one’ of the nominative noun phrase. Likewise, the genitive prefix /lá-/ occurs on every constituent of the dependent noun phrase ‘two Gumuz people’ in example (5.61).

SoG (Gumuz proverb)

- (5.60) a-c’ár-¹gá-ʃa = ŋgó **á-ela** **á-meetáam** já
 3SG.TR-cut-NFUT-BASE=NEG NOM-hand NOM-one tree
 ‘One cannot cut down a tree with one hand.’
 (lit: one hand doesn’t cut down a tree)

NoG

- (5.61) **lá-ɓaga** **lá-ɱbáándá** **lá-gúmíza** taaríka
 GEN-person GEN-two GEN-Gumuz story

d-ê-ŋgiʃ-ár-ts

AFF-FUT-speak-1SG.TR-BODY

‘I will tell a story of two Gumuz people.’

As mentioned above, the prepositions /ná=/, /ká=/ and /ka=/ can also be repeated on every constituent of the noun phrase (5.62-5.64).

SoG

- (5.62) cá-má ... bádala ...b-íí-ɓaŋg-aká
 seed-3SG.POSS millet AFF-3PL.TR-find-NFUT

ná= tʃéŋá **ná= alá-cicá** **ná= áŋa**

LOC=field LOC=GEN-new LOC=MED

‘They find its seed...millet seed... in this new field.’

NoG

- (5.63) **ká= máts’á** **ká= létá** **ká= ɱbáándá** ts’á-kwa
 DAT=house DAT=DIST DAT=two go-1PL.INTR
 ‘Let’s go to those two houses.’

SoG
 (5.64) **ka = ma-n-táb-atsá** **lorága ka = ?áj**
 COM=NMLZ-PL-be.thick-BODY book COM=MED

b-a-taaʔ-ág-éa
 AFF-3SG.TR-take-NFUT-TWRD
 ‘He brought (it) with those thick books.’

It appears as though one marks the constituents of dependent noun phrases in Gumuz in order to clarify which elements are constituents of the particular noun phrase and which are not. This is especially true when the word order is non-canonical. Thus, if each constituent in the dative prepositional phrase ‘to those two houses’ in example (5.63) were not marked with the dative preposition, the numeral ‘two’, which atypically follows the demonstrative adjective in (5.63), would be reinterpreted as the S argument — as in (5.65). Thus, ‘two’ no longer refers to ‘houses’ but stands as the subject of the intransitive clause.

NoG
 (5.65) **ká = máts’á = lát** mbáándá tsá-kwa
 DAT=house=DIST two go-1PL.INTR
 ‘Let’s go the two of us to that house.’

In the same manner, the nominative case marker /á-/ in (5.60) distinguishes both constituents of the A argument NP, **ela meetáam** ‘one hand’, from the O argument **já** ‘tree’.

As mentioned previously, these prepositions (and case-markers) also serve to demarcate which elements are inseparable constituents of the noun phrase and which are not. Therefore, any nominal elements that together serve as a unit within the Associative or Attributive Constructions cannot have a preposition or case marker intervene. For example, ‘beautiful house’ functions as a unit (5.66, 5.67), as does ‘thick books’ (5.64, 5.68).

NoG

- (5.66) wá tsá-kwa **ká = dagoná máts'á**
go.away go-1PL.INTR DAT=beautiful house
'Let's go to the beautiful house.'

NoG

- (5.67) * wá tsá-kwa **ká = dagoná** **ká = máts'á**
go.away go-1PL.INTR DAT = beautiful DAT = house
'Let's go to the beautiful house.'

SoG

- (5.68) ***ka = mantábatsá** **ka = lorága ka = ?án**
COM=NMLZ-PL-be.thick-BODY COM=book COM=MED

b-a-t'aaʔ-ág-éa

AFF-3SG.TR-take-NFUT-TWRD

'He brought (it) with those thick books.'

CHAPTER VI

NONFINITE NOMINAL MODIFICATION CONSTRUCTIONS

In Gumuz, there exist two main constructions for nonfinite nominal modification: the Associative Construction and the Attributive Construction. Both of these constructions are noun-noun (NN) collocations in which one noun modifies the other. Both constructions exhibit characteristics of compounds and phrases; thus, these NN collocations are not clearly one or the other. The Associative Construction is described in section 6.1 and is briefly contrasted with the Genitive Construction. The Attributive Construction is described in 6.2. Each construction is described in terms of semantics, the characteristics of compound versus phrase, and headedness. Section 6.3 describes the historical relationship between the two constructions and section 6.4 discusses other NN collocations involving nominalized verbs. More lexicalized compounds that have historically arisen from the Associative Construction are covered in Chapter III.

6.1 The Associative Construction: $N_H N_D$

The Associative Construction in Gumuz is a NN collocation in which the second nominal of the compound modifies the first nominal. The semantics of this construction convey possession/association of the sort ‘N of N’ but it is distinct from the Genitive Construction (see discussion in section 6.1.1). Similar to the “associative construction” described by Welmers (1973:275-276), mainly for the “Niger-Kordofanian” languages, the range of meanings for the Associative Construction found in Gumuz is much broader than that of the Genitive Construction, covering possession, material, contents, and function/purpose.¹

¹ Similar constructions in Nilo-Saharan have been labeled “anti-genitive” for Pări (Andersen 1988:284) and Bert(h)a (Andersen 1995, Benishangul-Gumuz Language Development Project 2007:207), “modified noun form” for Anywa (Reh 1996:116), and “status constructus” (Tucker and Bryan 1966:83) among others.

6.1.1 Characteristics of Compound Versus Phrase of the Associative Construction

According to Haspelmath, “compounds exhibit greater phonological, morphological, and syntactic cohesion than phrases” (2002:157). While many compounds described in this section (and Chapter III) demonstrate such cohesion, NN collocations that occur within the Associative Construction, at times, exhibit more phrasal characteristics, most notably in terms of semantics, morphology and syntax, but also occasionally in terms of phonology. Despite some of the clearly phrasal characteristics, I will continue to refer to these NN collocations of the Associative Construction as ‘compounds’.

Phonologically, the NN collocation of the Gumuz Associative Construction is distinct from two nouns which happen to be juxtaposed syntactically; thus it appears to be phonologically bound like a compound. For one, as discussed in Chapter II, all nouns in Gumuz end in /a/ which is phonetically the same as /aa/ in a word-final environment: both short and long /a/ are realized as [aa]. However, short /a/ is realized as [ə] word-internally. Further, a labialized consonant followed by /a/ (Cwa) is realized as Co or Cu word-internally, depending on the underlying vowel of the labialized segment. Because [ə] assimilates to an adjacent vowel in a VV sequence, a short underlying /a/ following a vowel is never phonetically realized as [ə] word-internally, and in word-final environment, the short /a/ realizes as [a] (see Chapter II for examples and further discussion). Other evidence for compounding are a change in the otherwise predictable tonal patterns and the lack of automatic downstep of H tones which otherwise exists at word boundaries.

The Associative Construction in Gumuz involves the addition of H tone on the final syllable of the first noun. The addition of H tone is most transparent when two nouns with L tone melodies form a NN compound (6.1).

(6.1)	NoG					
	L tone	+	L tone	>>	NN	
	noun		noun		compound	
	batʃa	‘meat’	χosa	‘bovine’	batʃáχosa	‘cow meat’
	tʃagwa	‘leg,foot’	jaaʃa	‘sheep’	tʃagójaaʃa	‘sheep leg’
	bea	‘skin’	meʔa	‘goat’	beémeʔa	‘goat skin’
	aχwa	‘clothes’	dua	‘child’	aχódua	‘children’s clothing’
	SoG					
	baga	‘person, body’	baga	‘person’	bagábaga	‘a person’s body’
	ela	‘hand, arm’	baga	‘person’	elábaga	‘a person’s hand’
	hola	‘pit, hole’	aja	‘water’	holáája	‘drainage ditch’

If the second noun of the NN compound begins with a H tone, the H tone is still added to the final vowel (TBU) of the first noun. Thus, when **aanza** ‘feces, dung’ and **gúmba** ‘lion’ form a compound, the resulting tonal pattern is LHHL: **aanzágúmba** ‘lion dung’ (NoG and SoG). Similarly, a LH noun following a LL noun adopts a LHLH pattern: **tʃagwa** ‘foot’ and **gwaanjá** ‘bushbuck’ form the compound **tʃagógwaanjá** ‘bushbuck leg’. However, if the following noun begins with a vowel, a LHHH pattern results: ‘leopard food’ **ngííʃá** comprises **nga** ‘food’ and **iifá** ‘leopard’ (SoG).

Other tonal sequences within the Associative Construction follow more general tone rules found within the phonological word in Gumuz (see Chapter II) and do not clearly exhibit the addition of an H tone on the first nominal. Thus, a noun with a HL melody followed by a noun with a LL melody will result in a HLLL pattern: **kóχwa** ‘sauce, stew’ + **goʃa** ‘fish’ = **kóχogogoʃa** ‘fish stew’ (NoG). A HL noun followed by a LH noun will produce a HLLH tonal melody: **kóχwa** ‘sauce, stew’ + **kaanzá** ‘guinea fowl’ = **kóχokaanzá** ‘guinea fowl stew’(NoG). Also, a HL noun followed by a HH noun will

produce the same tonal pattern as one would expect for this sequence of tones (within any phonological word) in Gumuz: the L tone triggers downstep and the resulting tonal pattern is H⁺HHH. Thus, **k'ósa** ‘teeth’ + **k'óá** ‘dog’ is **k'ós'ák'óá** ‘dog teeth’(NoG and SoG). A HL noun followed by a HL noun results in downstep as well: **k'óɣwa** ‘sauce’ + **k'ónwa** ‘cape buffalo’ = **k'ó'χók'ónwa** ‘cape buffalo stew’(NoG). A similar tonal pattern results when the first noun has a HH melody and the second begins with a LH melody: **íflá** ‘belly’ + **meááwa** ‘cat’ = **íflá'meááwa** ‘cat belly, belly of a cat’ (NoG). Lastly, when a noun with a HH melody is followed by a noun with a HH melody, the resulting tones are simply all H tone: **máts'á** ‘house’ + **métá** ‘chicken’ = **máts'ámétá** ‘chicken house’ (NoG).

“Compounding” within this construction ranges from the more lexicalized (with conventionalized semantics) (6.2) (see Chapter III) to less lexicalized productive “compounding” which is the focus of this section.

- (6.2) NoG
 jík'wé-⁺é-χos
 horn-FEM-bovine
 ‘birthing cow (i.e. cow used for procreation)’

The more productive “compounding” in the Associative Construction does not always adhere to the semantic, morphological and syntactic tests for compounding proposed by Haspelmath (2002:156). With regard to semantics of the NN collocation, Haspelmath proposes that the dependent noun in a head-dependent compound should be non-referential. That is, a dependent noun like *piano* in *piano-tuner* in English should not refer to a particular piano. Many dependent nouns in the Gumuz Associative Construction adhere to this criterion. However, unlike prototypical compounding, a particular referent can also be used as the dependent noun within this construction. In such cases, there is little if any difference semantically between the Associative and Genitive Constructions (discussed below) (6.3). Thus, the Associative Construction at times appears to be more phrasal in terms of referentiality of the dependent noun.

- SoG
 (6.3) ga-k'áŋ-a b-á-íí-gâ-n ná = máts'á-báámítá
 NMLZ2-bite-NM AFF-3SG.INTR-live-NFUT-LOC LOC=house-Bamita
 'There is a bite (secret) at Bamita's house.'

Non-referentiality of the dependent noun is most evident when comparing the Associative Construction with the Genitive Construction in Gumuz, the latter of which does not involve “compounding”. The semantics of these two constructions can be quite similar. However, as mentioned previously, the range of meanings for the Associative Construction is much broader. In most instances, the Genitive Construction refers to a particular possessor whereas the dependent noun in the Associative Construction does not (6.4).

	Associative Construction	Genitive Construction
	NoG	
(6.4)	katʃá-ʃaga basket-person 'a basket for people'	katʃa lá-ʃaga basket GEN-person 'the person's basket'

In terms of morphological cohesion, Haspelmath (2002) maintains that inflection should take place at the word level. Thus, a compound should be inflected in the same way as other noun stems. This is true for certain NN compounds in the Associative Construction, but not all. For complex kinship terms, either or both nouns of the Associative Construction can be marked plural. In (6.5) the suppletive plural **diida** 'children' can be used in addition to plural inflection of the dependent noun **maafíá** 'wife's sibling'. If the two nouns formed a compound, in Haspelmath's view, one would expect that the newly formed noun could be only inflected once for plural.

- NoG
 (6.5) diidá-[má-maaʃíá]
 children-PL-wife's.sibling
 'wife's siblings' children'

In terms of syntactic cohesion, one would expect syntactic phrases to be separable, whereas compounds should be inseparable (Haspelmath 2002: 158). The Genitive Construction in Gumuz, for example, is a prototypical example of a phrasal construction as it involves a distinct noun phrase from the noun being modified. In the Associative Construction, the head noun of the compound is marked by tone (H tone, in certain constructs); whereas in the Genitive, the dependent noun is marked with the prefix /**(a)lá-**/ . The former is considered a ‘construct form’ (typical of some East African languages) and the latter, a ‘case’ form (Welmers 1973:285, Creissel 2009: 74,76).² In Gumuz, within the Genitive Construction, the genitive noun can either precede or follow the head noun (in NoG) (6.6), whereas the head-modifier order is fixed in the Associative Construction. Thus, in terms of separability, the Associative Construction is more compound-like than, say, the Genitive Construction.

NoG			
(6.6)	mítsa lá-óó-Báámítá	~ lá-óó-Báámítá	mítsa
	field GEN-M.HUM-Baamita	GEN-M.HUM-Baamita	field
	‘Bamita’s field’	‘Bamita’s field’	

Also related to the notion of syntactic cohesion is the notion of expandability. That is, the dependent noun should not have a modifier if functioning as part of a compound. If the dependent noun in a NN collocation is expandable, this would be indicative of phrasal status (Haspelmath 2002: 158). However, such a test is not definitive in Gumuz as most (stative-like) nominal modification is accomplished via the Attributive Construction (section 6.3) which also exhibits characteristics of a compound. Therefore if the Attributive Construction is truly another NN compound, modification of the dependent noun would simply be an example of embedding of a compound (Attributive Construction) within a compound (Associative Construction). Examples (6.7-6.8) involve modified dependent nouns in the Associative Construction. As numerals

² Welmers distinguishes associatives from construct forms in that, for him, construct forms require that the head noun have a special form whereas in associatives, there is no special marking on nouns; rather, the nouns are linked by an additional morpheme (1973:285). I do not distinguish these in Gumuz as one could feasibly analyze the addition of H tone as a distinct morpheme or as “special marking” on the head noun.

in Gumuz exhibit nominal characteristics, they can serve as a nominal root/stem in Associative and Attributive Constructions. In (6.7), ‘one’ serves as the head noun in the Associative Construction and the NN collocation of the Attributive Construction (if considered a ‘compound’) can serve as the dependent noun. That is, ‘small younger siblings’ is the dependent noun and ‘one’ is the head: ‘one of my small younger siblings’.

- NoG (Innocenti 2010:116)³
 (6.7) [meta [mə-ŋ-ha-ts məmatsə-mà]]
 one NMLZ-PL-be.small-body younger.sibling-1SG.POSS
 ‘one of my small younger siblings’

On the other hand, ‘one’ in (6.8) does indeed expand the dependent noun. As a numeral does not form a syntactic unit with the following noun or share other characteristics of the dependent noun in the Attributive Construction (e.g. numerals do not require the /-má/ inherent possession suffix when the modified noun does not immediately follow, see Chapter V), there is no reason to assume that the numeral is part of the Attributive Construction. Thus, the dependent noun is indeed expandable with a numeral, which is more typical of a phrase rather than a compound.

- NoG
 (6.8) [máts’á-[meetáa-ɓaga]]
 house-one-person
 ‘one person’s house’

Furthermore, in both of these examples, (6.7) and (6.8), the dependent noun of the Associative Construction is referential, as the dependent noun of (6.7) is marked with the 1SG POSS suffix and the dependent noun of (6.8) is referring to one particular person. Lastly, the NN collocation within the Attributive Construction itself in (6.7) is not necessarily phonologically bound (see section 6.3).

³ I have maintained Innocenti’s transcription in (6.8) but the bracketing and the morpheme-by-morpheme gloss are my own.

Therefore, considering all the previous tests involving phonology, semantics, morphology and syntax of compounds versus phrases, it seems the NN collocations within the Associative Construction have properties of both compounds and phrases.

NN compounding within the Associative Construction is very productive in Gumuz. In fact, nearly any noun can form a compound with another noun as long as it makes semantic sense to the speaker. Thus, derived nouns and even proper nouns (as previously mentioned) can participate in NN compounds in the Associative Construction (6.4, 6.9, 6.10).

- SoG
 (6.9) **ma-wé?-a-Negúsé** ga-ʃal-amá = ηgó
 NMLZ-vomit-NM-Negussie NMLZ2-be.good-IP:MOD=NEG
 ‘Negussie’s vomiting is not good.’

- SoG
 (6.10) ga-le-a etí-íʰ-kál-áká **ga-lé-é-tʃééná**
 NMLZ2-plow-NM PRO.SG-3PL.IMP-say-NFUT NMLZ2-plow-NM-farm
 ‘Cultivation/plowing is what they call farm-cultivation’

Compounding is recursive within the Associative Construction; a NN compound can itself form a new compound with another noun, or with another compound noun (6.11).

- NoG
 (6.11) [aχwa [boŋgwa fáχázá]] = aχóboŋgófáχázá
 clothes back horse ‘horse blanket’

- NoG
 [[bea k’wá] [ɓaga ɓaga]] = béék’óʰɓágáɓaga
 skin head body person
 ‘hair’ ‘human body’ ‘body hair’

- SoG
 [já [sa máts’á]] = jáʰsámáts’á
 wood mouth house ‘door’

NN compounds can be embedded not only once (6.11) but up to twice (maybe more) within the Associative Construction, creating fairly long compounds (6.12).⁴ Furthermore, nominalized clauses can serve as a noun within the NN compound. In example (6.13), ‘going-in-the-old-days-to-sky-and-returning-to-ground’ serves as the second “noun” in the NN construction. The lexeme **tsina** ‘story’ normally carries a LL tonal melody. However, since it is part of the Associative Construction, the final vowel carries H tone.

- SoG
- (6.12) má-k’óʃ-ára-ga áca
 FUT-pierce-1SG.TR-INSTR 2.PL
- ka = tʃál-ó¹dá-mátá-mî-m
 INSTR=[[upper.claw]_N-[[M-chicken]_N-[mother’s.brother]_N]_N-1.SG.POSS
- ‘I will stab you all with the upper claw of my mother’s brother’s rooster.’
- SoG
- (6.13) [ts’iná]_N-[ma-ts-á ná = gats’aha ká = íl-gúzá ma-kól-é-á
 story-NMLZ-go-NM LOC=old.days to=belly-sky NMLZ-return-TWRD-NM
- ká = ɲea]_N
 to=ground
- ‘Going-in-the-old-days-to-sky-(and)-returning-to-ground-story’
 (Title of story)

6.1.2 Syntactic Headedness

The Associative Construction is a left-headed NN compound/collocation. As mentioned previously, the semantics of the Gumuz Associative Construction is ‘N of N’, e.g. ‘meat of cow’, and is thus considered an endocentric compound or head-dependent in which the compound is a hyponym for (or exhibits a ‘kind of’ relationship with) one of the nouns in the compound (Haspelmath 2002, Zwicky 1985, Hudson 1987). Beyond

⁴ The gender prefix /**ó¹dá** -/ in (6.12) is technically the first N in a NN Construction (it is uncertain whether this is part of the Attributive or Associative) (see Chapter III Nouns as well as section 6.3 of this chapter). Thus, the derived noun ‘male chicken’ is a compound (in which the first N has somewhat grammaticalized as a derivational prefix), embedded within a compound, which is embedded within yet another compound.

semantics, following are some syntactic head properties which have been explored in the literature. Some researchers maintain that the ‘head’ is the “morphosyntactic locus” (Zwicky 1985, Haspelmath 2002). That is, the head is the constituent on which inflections relevant to the whole phrase (or compound) are located. Others, however have disagreed with this claim, demonstrating there exist ‘head marking’ as well as ‘dependent marking’ languages (Nichols 1986, Hudson 1987). Another formal property of headship proposed is that the head governs the form of its dependents (Zwicky 1985, Nichols 1986, Haspelmath 2002). Lastly, it has been proposed that the head agrees according to various grammatical inflectional features with its dependents (Zwicky 1985, Haspelmath 2002). In Gumuz, inflectional marking (e.g. PL) on ‘compounds’ within the Associative Construction can occur on either noun of the construction. In (6.14) inflection for plural can occur on the semantically dependent noun or on both nouns. Thus, the syntactic criterion for headship could possibly render ‘uncle’ the head of the construction meaning ‘father’s brother’s wife’ rather than ‘wife’ as the head.⁵

NoG

	SING	PLURAL	
(6.14)	êfá-tʃáám̄b-éa	êfá-má-tʃáám̄b-éa	~ gááf-má-tʃáám̄b-éa
	wife-uncle-1SG.POSS	wife-PL-uncle-1SG.POSS	wives-PL-uncle-1SG.POSS
	‘my father’s brother’s wife’	‘my father’s brothers’ wives’	

On the other hand, for the plural of ‘father’s brother’s child’, only the suppletive plural for ‘children’ is used within the compound (6.15). The syntactic test would then agree with the semantics that ‘child’ is the head and thus, the results for this particular test are conflicting for the headship of nouns within the Associative Construction.

⁵ There is no data for the compound/phrase ‘My father’s brother’s wives’ in Gumuz (in which the meaning of ‘brother’ is singular and ‘wife’ is plural)

NoG

	SING	PLURAL
(6.15)	duú-tʃáámb-éa	diidá-tʃáámb-éa
	child-uncle-1SG.POSS	children-uncle-1SG.POSS
	'my father's brother's	'my father's brother's children'
	child'	

Also problematic is the fact that both nouns of this presumed NN compound construction can be inflected for plural. Such inflection is not typical of endocentric (head-dependent) compounds as the dependent noun is not typically inflected (Haspelmath 2002:91). This may suggest these NN collocations are more phrase-like, but in either case, the problem of identifying the nominal head remains.

Alternatively, Payne suggests using classifiers (or other anaphoric devices) to identify the “pragmatic head” of a noun phrase (1990:106-107). Classifiers used anaphorically will nearly always refer back to the head of the NP. As Gumuz has verbal classifiers which exist outside of the NP and categorize the S or O argument of the verb, one could potentially use verbal classifiers to identify the head of a complex NP, as the classifier should categorize only the head of the NP or the head of an endocentric NN compound. The verbal classifier /-Vc/ ‘eye’ classifies wounds, blood, fire and light (among others in the category, see Chapter IX) in Gumuz. When a NN compound appears in the Associative Construction, verbal classifiers clearly classify the first noun of the construction. In (6.16), /-Vc/ ‘eye’ classifies the head noun ‘wound’. If the dependent noun ‘leg’ were to be classified, the classifier /-Vts/ ‘body’ would be used (6.17).

	NoG	
(6.16)	af-ác	[mahabá-tʃagú-úá]
	wash-CL1:eye	wound-leg-2SG
	'Wash your legwound.'	

- (6.17) NoG
 af-áts tʃagú-úá
 wash-CL1:body leg-2SG
 ‘Wash your leg.’

6.2 Attributive Construction N_DN_H

The Attributive construction is a NN collocation/compound in which the first noun of the construction is a nominal (most often a deverbal noun which forms a subset of relational nouns in Gumuz, see Chapter III) which modifies the second noun of the construction. I will refer to the modifying nominal as the ‘attributive noun’. This construction is phonologically similar to the Associative Construction in that an H tone is often added to the final syllable of the first noun. In examples (6.18-6.19), the verbal root of the attributive noun carries L tone (as shown in its finite verbal form), but the same verbal root as part of a deverbal noun in the Attributive Construction carries H tone (also compare with nominalized verbal forms in Chapter III).

	Finite Verbal Form	Attributive Construction
	NoG	
(6.18)	a. d-á-p’aa AFF-3SG.INTR-be.short ‘He is short.’	b. ma-p’áá-ɓaga NMLZ-be.short-person ‘short person’
	SoG	
(6.19)	a. baha b-á-ntsa-gá person AFF-3SG.INTR-be.evil-NFUT ‘The person became evil.’	b. ga-ntsá-baha NMLZ2-be.evil-person ‘evil person’

6.2.1 Characteristics of Compound Versus Phrase of the Attributive Construction

Similar to the Associative Construction, the Attributive Construction exhibits characteristics of both a compound and a phrase. In terms of phonological cohesion, certain derived attributive nouns with incorporated nouns/classifiers (IN/Classifiers) do not appear to be phonologically bound because H tones on the following modified noun

are downstepped as if the attributive noun and modified noun were distinct phonological words in Gumuz. Furthermore, the final vowel of the first noun is not always pronounced as one would for other modifying noun forms of this construction. This is most notable with labialized velars in which the underlying vowel (either /o/ or /u/) is pronounced word-internally, and word-finally, as voiceless labialization. Finally, there sometimes exists a clear phonological pause between the first noun of the construction and the noun being modified which does not exist for other nouns that occupy this initial position in the construction. On the other hand, these forms with IN/classifiers behave like other bound forms in that they must be followed by a noun or the /-má/ inherent possession suffix. In addition, like all compounds in the Attributive Construction in Gumuz, inflection in the form of prefixes, namely plural marking and case-marking, occurs on the first noun of the construction and does not typically occur on the second noun (6.20).

NoG
 (6.20) á-m-óób-áts b́aga
 NOM-PL-big-BODY person
 ‘elders (big people)’

Marking inflection on the edge of the construction might suggest that the construction is a compound or the construction is a phrase and the inflection is more like a phrasal affix. Indeed, the plural prefix sometimes behaves like a phrasal affix (section 3.2.1 of Ch. III). Moreover, this may be an example of the dependent noun agreeing with the head noun in terms of number (see also section 6.2.3). Such instances of agreement are characteristic of phrases rather than compounds (Haspelmath 2002: 90). On the other hand, marking inflection on the edge of a construction might also suggest that the head of the construction is on one edge (see discussion of ‘headedness’ in section 6.2.2).

As with the Associative Construction, elements of the Attributive Construction are syntactically inseparable. That is, the NN order is fixed. If the order changes, so also does the construction. In other words, if the attributive noun follows the noun it is

modifying or stands alone, it must take the /-**má**/ inherent possession suffix (6.21 b-d, see also section 6.3.3). For example, ‘wet’ in (6.21) does not take the inherent possession suffix when a part of the Attributive Construction (6.21a). However, when pulled out of the NN construction, it must have the inherent possession suffix in order to mark its relationship with the second noun of the construction (6.21 b-d).

- (6.21) SoG
- a. ná = ma-anzí-bea
 LOC=NMLZ-be.wet-skin
 ‘on wet skin’
- b. ná = be-má ná = †má-ánzí-má
 LOC= skin-3SG.POSS LOC=NMLZ-be.wet-IP:MOD
 ‘on his wet skin’
- c. ná = bea ná = †má-ánzí-má
 LOC= skin LOC=NMLZ-be.wet-IP:MOD
 ‘on wet skin’
- d. ná = be-má ma-ánzí-má
 LOC= skin-3SG.POSS NMLZ-be.wet-IP:MOD
 ‘It is wet on his skin (but somewhere else, it is dry)’
- e. *ná = maanzí ná = bea
- f. *ná = maanzí na = bemá

Other evidence of inseparability is that case-markers and prepositions can optionally ‘mark’ every element of the noun phrase (see Chapter V), but this cannot happen with the modified noun in the Attributive Construction. That is, ‘skin’ of example (6.21 a, e, f) cannot be marked with the /**ná**=/ locative preposition, thus demonstrating the modified noun cannot be marked with a preposition as a unit distinct from the attributive noun **maanzí**- ‘wet’ in the Attributive Construction. The predicate locative in (6.21 d) is provided for comparison. This suggests that the nouns in the Attributive Construction form a NN compound.

As for “expandability” or modification of the dependent noun, the same constraint exists for the Attributive Construction as for the Associative Construction. That is, if one analyzes these NN collocations as compounds, the construction can have the appearance of being “expanded” (i.e. the dependent noun being modified) when this is simply embedding of a compound within a compound. For example, a NN collocation of the Attributive Construction can be embedded as the second N of a NN Construction.⁶ Thus, in (6.22) below, the NN construct ‘eating thing’ is the head noun which is modified by ‘new’, the initial noun.

- NoG
- (6.22) [cicá]-[[⁺má-sá]-[dá]]
 new-NMLZ-eat-THING
 ‘new thing to eat’ (lit: ‘new eating thing’)

6.2.2 Syntactic Headedness

The main difference between the Associative Construction and the Attributive Construction concerns which N is the head. Again, one can use verbal classifiers as a test; and this shows that the second noun of the Attributive Construction functions as the head (see Chapter X for further discussion of verbal classifiers). In example (6.23) below, the verbal classifier /-Vc/ ‘eye’ classifies ‘fire’, the second noun of the construction, and not the attributive noun form ‘burning’ (comprised of ‘eat’ + CL).

- NoG
- (6.23) d-ár-ampóχ-ác [ma-sá-gó maanʃa]
 AFF-1S-jump.over-CL1:eye NMLZ-eat-PLACE fire
 ‘I jumped over the burning fire.’

Similarly, certain initial nouns of the Attributive Construction require an IN/classifier. This IN/classifier either classifies or exists in an external possession (EP)

⁶ It is not clear whether [[**má-sá**]-[**dá**]] (NMLZ-eat-THING) of example (6.22) is an example of the Attributive Construction or simply a nominalization of a transitive verb (which is most likely analogous to the Associative Construction given that one would expect the nominalized verb to be the head of a V-O nominalization).

construction with the modified noun. For example, **oob-** ‘big’ must co-occur with an IN/classifier (6.20, 6.24).⁷ The noun which ‘big’ modifies delimits the choice of IN/classifier. Thus, **oob-áts** (big-body) is limited to modifying nouns that can have a large girth — people, rocks, etc. — but cannot modify ‘leaf’ which can only co-occur with the IN ‘belly’: **oob-ííl** (big-belly) of [**oob-íílí**]-[**ts’énjǎ**] ([big-belly]-[leaf]). Thus, the second noun of the construction governs the choice of IN/classifier on the descriptive root. Furthermore, if this IN is merely functioning as an IN in an EP construction with the head noun, a verbal classifier on a transitive verb will not necessarily reflect the same class as the IN on the modifying noun if the Attributive Construction serves as the O argument of the verb. That is, the head noun in the Attributive Construction governs the choice of IN on the initial modifying noun while the verbal classifier governs the choice of the head noun of an S or O argument. In (6.24), the head noun **k’wá-gíǎ** ‘rock, boulder’ is a class morpheme compound with the class morpheme, **k’wá-** ‘head’, as the head of the compound. While the IN on the attributive noun **oobáts** ‘big’ is **/-áts/** ‘body’, the classifier on the verb ‘roll’ cannot be **/-áts/** ‘body’ as rocks are members of the **/-Vk’w/** ‘head’ class (which is also reflected in the class term **k’wá-** ‘head’).

- NoG
 (6.24) [oob-áts k’wá-gíǎ] b-ár-liligat-ák’w n = íli-cánǎǎǎ
 big-body CL1:head-rock AFF-1SG.TR-roll-CL1:head LOC=BELLY-road
 ‘I rolled a large rock on the road.’

As mentioned in section 6.2.1, in the Attributive Construction, the first noun is typically marked for number. For example, suppletive plural nouns in the Attributive Construction co-occur with attributive nouns (initial nouns) which agree in number as seemingly dependent nouns (see example 6.27). Thus, the pattern of number marking in the Attributive Construction does not support the analysis that the second noun of the construction is the syntactic head. However, marking of number on the first noun could

⁷ The root **oob-** appears to be part of a burgeoning adjective class in Gumuz along with other bound roots like **cicá-** ‘new’.

be a historical relic from a time when the first noun of the construction was the syntactic head (see section 6.4). Section 6.2.3 describes this pattern of number marking.

6.2.3 Marking of Plural

In Gumuz, there exist at least three strategies for marking number on the first noun of the Attributive Construction: 1) the pluractional (verbal) prefix /N-/(Chapter VII), 2) the /má-/ plural prefix (Chapter III), 3) and vowel lengthening or reduplication (Chapter III).

The most common strategy for marking number on the first noun of the construction is by means of nominalization of a verb that carries the pluractional prefix /N-/. Examples (6.25-6.26) illustrate singular and plural nouns in the Attributive Construction. The examples in (6.25) illustrate noun heads which are underspecified for number (whether singular or plural) while the examples in (6.26) illustrate noun heads which have a suppletive plural form. Even though the head nouns in (6.26) have a plural form, the dependent noun (i.e. the nominalized verb) still carries pluractional marking.⁸

		SINGULAR		PLURAL	
		NoG			
(6.25)	a.	ma-pú	k'ósa	ma-m-pú	k'ósa
		NMLZ-be.white	tooth	NMLZ-PL-be.white	tooth
		'white tooth'		'white teeth'	
		SoG			
	b.	ma-tab-átsa	lorága	ma-n-táb-atsá	lorága
		NMLZ-be.thick-BODY	book	NMLZ-PL-be.thick-BODY	book
		'thick book'		'thick books'	
		NoG			
(6.26)	a.	ma-χáá-ts	tagoná	ma-η-χáá-ts	dáágóná
		NMLZ-be.small-BODY	girl	NMLZ-PL-be.small-BODY	girls
		'small/thin girl'		'small/thin girls'	

⁸ The pluractional prefix can be marked on finite stative verbs: diiduuá **úú-a-η-gáǰál** = **anjó** (3PL-RECP-PL-be.handsome=NEG) 'every one of your children is not handsome' (NoG).

	SoG			
b.	ma-fag-áts	dua	m-ma-fag-áts	iida
	NMLZ-grow-BODY	child	NMLZ-PL-grow-BODY	children
	‘growing child’		‘growing children’	

Secondly, certain initial nouns of the construction which are not synchronically formed from nominalized verb roots can be pluralized with the /**má-**/ plural prefix (Chapter III), especially if the head noun of the construction is animate. Examples (6.20) and (6.27) illustrate plural marking on the initial bound root **oobáts-** ‘big, fat’ in NoG.⁹

	SINGULAR		PLURAL
	NoG		
(6.27)	oob-áts	dua	m-óób- ^l áts
	big-BODY	child	PL-big-BODY
	‘fat child’		children
			‘fat children’

Lastly, a few attributive nouns use a combination of strategies for pluralization. For example, for the verbal root ‘be tall’ **go** (SoG), one can employ the pluractional prefix and reduplicate the final syllable of the verb root in order to express plurality of the construction (6.28). In addition, the noun **tagoná** ‘(beautiful) young girl’ (NoG, SoG) can be derived as a verb using the derivational prefix /**an-**/ (**andagón** ‘be beautiful’). This derived verb can be renominalized with /**ma-**/ and used as an attributive noun meaning ‘beautiful’. Because the nominal root **tagoná** has the suppletive plural form **dáágoná**, the attributive noun form uses the suppletive plural noun in addition to the pluractional prefix /**N(a)-**/ to mark plurality (6.29).

	SINGULAR		PLURAL
	SoG		
(6.28)	ma-goó	ja	ma-n-gó-go
	NMLZ-be.tall	tree	NMLZ-PL-be.tall-REDUP
	‘tall tree’		tree
			‘tall trees’

⁹ The final TBU of the attributive noun in (6.20) should be downstepped as it is in (6.27), as the tonal sequence of HLH generally results in a floating L tone which causes downstep of the final H tone. However, given the conventionalized semantics of the compound in (6.20), ‘elders’, it may be that this compound is more lexicalized/old and therefore regular phonological processes do not apply.

	NoG			
(6.29)	ma-an-dagóná	faxaza	ma-an-n-dáágóná	fáxázá
	NMLZ-VRBLZ-beautiful.SG	horse	NMLZ-VRBLZ-PL-beautiful.PL	horse
	‘beautiful horse’		‘beautiful horses’	

6.3 Other Attributive (i.e. Initial) Noun Forms

6.3.1 Non-derived Attributive Nouns

A few attributive (i.e. initial) nouns in the Attributive Construction are not nominalized verb forms. Of these, some appear to have lexicalized as attributive nouns or modifiers. That is, neither a verbal root nor a nominalizer can be synchronically identified as part of the nominal but the form appears to have a verbal source historically. For example, ‘big’ is the bound root **bab-** (SoG)/**oob-** (NoG). It must combine with a grammaticalized body part term (which is identical to IN/classifiers found on verbs) — hence, the bound root — but, other than that, it is similar to the verb root ‘be small’ **haal** (SoG) /**χaa** (NoG) when functioning as an attributive noun (6.30, see also Table 3.4 of Chapter III). However, no finite verbal forms are known to exist for ‘big’ (6.30 d), while ‘be small’ can take verbal inflection (6.30 c).¹⁰

		SoG		NoG
(6.30)	a.	bab-áts	dua	oob-áts
		big-BODY	child	big-BODY
		‘fat child’		‘fat child’
	b.	ma-haal-áts	tagoná	ma-χáá-ts
		NMLZ-be.small-BODY	girl	NMLZ-be.small-BODY
		‘slender girl’		‘slender girl’
	c.	b-a-haal-ag-áá-ts		d-a-χaa-á-ts
		AFF-3SG.TR-be.small-NFUT-MV-BODY		AFF-3SG.TR-be.small-MV-BODY
		‘S/he became thin.’		‘S/he became thin.’
	d.	*b-a-bab-áá-ts		*d-a-oob-áá-ts
		AFF-3SG.TR-big-MV-BODY		AFF-3SG.TR-big-MV-BODY
		‘S/he got fat’??		‘S/he got fat’??

¹⁰ A nominal source for the bound roots **bab-** (SoG)/**oob-** (NoG) is likely as the word for ‘father’ in SoG is **baba-má** and in NoG is **ooba-má**.

Other initial nouns of the Attributive Construction, like **cicá(-)** ‘new, young’ (NoG and SoG) appear to have a nominal source but also appear to be bound.¹¹ Like other attributive nouns of the construction, ‘new’ must co-occur with either a modified noun (e.g. **cicá-dua** ‘young person’ NoG) within the Attributive Construction or with the inherent possession suffix **/-má/**. However, it is also known to occur with the genitive prefix **/alá-/** for speakers of SoG: **alá-cicá**. Likewise, **kooâ** ‘all, every’ (NoG and SoG) appears to occur in the Attributive Construction. The form **kooâ** is used when a modified noun follows, e.g. **kooâ-¹dá** ‘everything’, and **kooómá** ‘all, every(one), every(thing)’ is used when a modified noun does not follow; that is, **kooómá** is used either pronominally or post-nominally (following the modified noun) (6.32). However, unlike other attributive (initial) nouns of the Attributive Construction (6.21, 6.31), ‘all’ does not form a syntactic unit with the following noun of the construction (6.33). That is, in (6.31), the attributive noun ‘beautiful’ cannot be separated from the head noun ‘house’ whereas ‘all’ is separable from the head noun ‘children’ (6.33).¹² It seems that **kooâ** ‘all’ distributes syntactically like other numerals (in NoG) (see Chapter V, The Noun Phrase) but also shares characteristics of an attributive (initial) noun of the Attributive construction, e.g. the use of the **/-má/** inherent possession suffix (see section 6.2.1 above). Furthermore, ‘all’ does not form a phonological word with the following noun (as do many attributive nouns) in that the final /a/ is pronounced as [a] (and not [ə] when a noun follows).

- NoG
- (6.31) a. uá tsá-kwa **ká = dagoná** **máts’á**
 go.away go-1PL.INCL DAT=beautiful house
 ‘Let’s go to the beautiful house.’
- b. * uá tsákwa **ká = dagoná** **ká = máts’á**
 go.away go-1PL.INCL DAT=beautiful DAT=house
 ‘Let’s go to the beautiful house.’

¹¹ In texts and when eliciting full sentences, I found that **cicá-** ‘new’ patterned like a bound root in both SoG and NoG. However, certain language consultants would produce the form **cicá**, in isolation.

¹² The attributive noun form **dagoná** ‘beautiful’ is homophonous with **dagoná** ‘young girl’.

- (6.32) SoG
 baha b-a-tíʃ-akʷ aŋwa ná = ɓaga-má
 person AFF-3SG.TR-remove-HEAD clothes ABL=body-3SG.POSS
- koóa-má**
 all-IP:MOD

‘The person took off all his clothes from his body.’

- (6.33) a. NoG
ká = kooâ ká = diida
 BEN=all BEN=children
 ‘for all children’
- b. **ká = kooâ diida**
 BEN=all children
 ‘for all children’

6.3.2 Attributive Nouns Derived from Nonstative Verbs

Nominalized nonstative intransitive verbs can occur as the first noun (attributive noun) in the Attributive Construction. For example, the intransitive verb root **tʃé** ‘be afraid’ (SoG and NoG) can be nominalized with the /ma-/ prefix in combination with the noun marker /-a/: **maʔéá** ‘fear, to be afraid’. This verbal noun can also occur in the Attributive Construction: **maʔé-** ‘fearful, afraid, lacking flavor’ (6.34).

- (6.34) a. SoG
 ma-tʃéé-búná
 NMLZ-be.afraid-coffee
 ‘black coffee’ (lit. ‘fearful coffee’ - coffee without sugar or salt)
- b. Báámítá ma-tʃéé-má
 Bamita NMLZ-be.afraid-IP:MOD
 ‘Bamita is afraid.’

In addition, certain nominalized transitive verbs can occur as the first noun in the Attributive Construction. The resulting NN compound is similar in form to the compounding of a nominalized transitive verb and its erstwhile O argument (see section 6.4 below). The main difference is that, in the Attributive Construction, a nominalized transitive verb forms a compound with an erstwhile A argument.¹³ For example, in (6.35) ‘child’ is modified by the attributive noun ‘knowing’ which comes from the transitive verb **gam** ‘know’.¹⁴ Note that the H tone of the Attributive Construction occurs on the epenthesis vowel /a/ (which follows **gam**) as well as on the TBU of the verb root **gam**.

- NoG (Gumuz proverb)
- (6.35) dú-máts’á l-ú⁺-ʔó-a ma-gám-á dua
 child-house REL-3PL.INTR-call-O NMLZ-know-NM child
 ‘A child with a home is called a wise child.’
 (lit: A house-child is one they call a knowing-child)

In (6.35 a), the verb ‘burn, consume’ has a classifier (/V**k’w**/) that refers to an erstwhile O argument which is unstated (that which is being burned, large pieces of something in this example).¹⁵ The erstwhile A argument ‘fire’ is the modified noun in this construction. Compare the Attributive Construction with the transitive clause in (6.36 b).

¹³ This may pose a potential problem for the analysis of the /-**má**/ inherent possession suffix as this suffix should be used in the place of a missing head noun (of the Attributive Construction) which is typically an erstwhile S or O argument. However, there are no known examples of attributive nouns formed from nominalized transitive verbs which also occur with the /-**má**/ suffix, e.g. the deverbal noun of (6.35) would be **magámámá** ‘knowing’. It may be that these erstwhile A arguments are being construed as S arguments or undergoers in this construction (see also footnote 14). Moreover, the fact that the pluractional prefix on a finite verb only refers to S or O arguments (and is the main strategy for plural marking in the Attributive Construction) is further evidence that the modified noun is construed as an erstwhile S or O argument.

¹⁴ It might be that **gam** ‘know’ is a labile verb and is intransitive in the construction found in (6.36). If such is the case, the second noun would not be an erstwhile A argument but an erstwhile S argument.

¹⁵ In NoG, the nominalized verb for the equivalent construction to (6.36a) must take the /-**góá**/ detransitivizer, and thus ‘fire’ is an erstwhile S argument: **ma-sá-gó-maanja**.

- (6.36) a. SoG
 b-ár-apóo-g-ác **ma-só-k'ó** **maanja**
 AFF-1SG.TR-jump-NFUT-CL1:eye NMLZ-eat-CL1:head fire
 'I jumped over the burning fire (with large pieces burning in it)'
 (lit: 'I jumped over the large-piece-eating fire.')
- b. **maanja** b-a-sá-gá-k'w máts'á
 fire AFF-3SG.TR-eat-NFUT-CL1:head house
 'The fire consumed the house.'
 (lit: 'The fire ate the house')

6.4 Historical Relationship between the Associative and Attributive Constructions

Given the structural similarities between the Associative and Attributive Constructions, it is likely that they are historically related. I have argued that the second noun of the Attributive Construction functions as the head noun, while in the Associative Construction the first noun functions as head. The Attributive Construction is thus typologically inconsistent with other East African 'construct forms' described by Creissels (2009:74). That is, the dependent noun of the Attributive Construction is marked instead of the head noun. A similar issue exists with Hausa (Chadic) 'adjectives'.¹⁶ Prenominal attributive adjectives take the genitive marker construct form (head-marking) but as the supposed head noun follows the adjective, the analysis is problematic. Newman proposes that the adjective was historically a noun, i.e. that 'white dog' was 'whiteness of dog' historically (2000:30). The same is likely true for Gumuz as both elements of the Attributive Construction are clearly nominal, and nouns in the attributive slot are mostly nominalized verbs. Thus, the historical source of the Attributive Construction is most likely the Associative (N of N) Construction. Therefore, examples (6.18b) and (6.19b) would be 'shortness [of] person' and 'evil [of] person' historically. Because the first noun/nominalization in the construction describes a quality of the second noun, the second noun was later interpreted as the semantic and syntactic head. As support for this reanalysis, at least one intermediate form exists in

¹⁶ Welmers describes similar "qualificative" nouns/adjectives in Niger-Congo languages in what he calls an "associative construction" (1973: 272-274).

Gumuz in which the initial nominalization is semantically still the head, namely the nominalization of ‘be black’ in (6.37). However, when modifying the word ‘eyeball’, as in (6.38), the resulting phrase does not describe an eyeball which is black. Rather, it describes the black part of the eyeball, the pupil. This reflects the typical ‘N of N’ relationship of the Associative Construction, rendering the translation ‘blackness [of] eyeball’ more felicitous than ‘black eyeball’, the latter of which would be typical of the Attributive Construction.

- SoG
- (6.37) [ma-ŋíí-]_N[aŋwa]_N
 NMLZ-be.black-cloth
 ‘black cloth’
- SoG
- (6.38) [ma-ŋíí-]_N[k’ó-cá]_N
 NMLZ-be.black-CL1:head-eye
 ‘pupil’ (lit: ‘black eyeball’)

Deverbal nominalizations must take the /-má/ inherent possession suffix when they have attributive meaning but occur outside of the Attributive Construction, that is, in the absence of a following modified noun (6.40) (see discussion of “relational nouns” in Chapter III). This suffix happens to be synchronically homophonous with the /-má/ 3SG possessive suffix (6.42). The /-má/ 3SG possessive suffix can take the place of the second noun of the Associative (N of N) Construction. Compare the attributive noun formed with /-má/ in (6.40) with a nominalized intransitive verb formed with a proper noun possessor of the Associative Construction (6.40), and with the same clause expressed in the Possessive Construction (6.41).

- SoG
- ATTRIBUTIVE CONSTRUCTION
- (6.39) [ma-anzíí-cá laarabía] b-â-tíŋ-agá
 NMLZ-be.green-EYE car AFF-3SG.INTR-speed.by-NFUT
 ‘The green car passed by.’

- ATTRIBUTIVE NOUN WITH /-má/
- (6.40) laarabía ?á [ma-anzíí-cá-má]
 car MED NMLZ-be.green-EYE-IP:MOD
 ‘The car is green.’
- ASSOCIATIVE CONSTRUCTION
- (6.41) [ma-tsá-Báámítá] b-ár-paŋ-gá
 NMLZ-go-Bamita AFF-1SG.TR-want-NFUT
 ‘I want Bamita to go (lit: I want Bamita’s going).’
- POSSESSIVE CONSTRUCTION WITH /-má/
- (6.42) [ma-tsá-má] b-ár-paŋ-gá
 NMLZ-go-3SG.POSS AFF-1SG.TR-want-NFUT
 ‘I want him to go (lit: I want his going).’

This suggests that these two /-má/ suffixes (IP and 3SG.POSS) are cognate and the semantics of possession/association were present in the Attributive Construction at least historically. However, synchronically, the /-má/ inherent possession suffix appears to be fixed; no other possessive suffix ending (1SG, 2SG, etc) is known to be used in place of the modified noun (second noun) within the Attributive Construction (6.43). This is most likely due to the fact that attributive nouns (the first noun of the construction) modify (i.e. are compounded with) 3rd person nouns within the Attributive Construction (6.43 b). However, plural attributive nouns, when occurring outside the Attributive Construction, also take the /-má/ inherent possession suffix and cannot take the /-máámá/ 3PL suffix (6.44).

- | | | |
|--------|--|--|
| | SoG | |
| (6.43) | a. já ma-goo-má
tree NMLZ-be.tall-IP:MOD
‘The tree is tall.’ | ma-goó-já
NMLZ-be.tall-tree
‘tall tree’ |
| | b. ára ma-goo-má
1SG NMLZ-be.tall- IP:MOD
‘I am tall.’ | *ma-goó-ma
NMLZ-be.tall-1SG.POSS
‘my tallness??’ |

- (6.44) NoG
 diida láná ma-η-χάá-⁴tsá-má
 children MED NMLZ-PL-be.small-BODY-IP:MOD
 ‘Those children are small.’

Attributive nouns, like head nouns in the Associative Construction, do not carry the final H tone characteristic of compounds when the */-má/* suffix replaces the second noun of the compound (i.e. the Possessive Construction) (see also Chapter IV). While attributive nouns are, for the most part, nominalized intransitive verbs, the resulting deverbal noun stems are bound and do not clearly retain the final */-a/* noun marker.¹⁷ For some nominalized verbs functioning as attributive nouns, a corresponding nominal ending in the */-a/* noun marker is not possible. That is, these particular nominalized verbs must either be followed by another noun in the Attributive Construction or must be followed by the */-má/* inherent possession suffix. For example, the attributive noun */maxíí-/* ‘black’ (NoG) has no corresponding free form with the */-a/* noun marker, **maxíí-á* (NMLZ-be.black-NM), as do nominalized intransitive (dynamic) verbs in Gumuz. It appears as though the more ‘stative’ the verb roots are (e.g. those dealing with age, quality, dimension, value), the more likely the corresponding nominalized forms will require a following noun (in the Attributive Construction) or the */-má/* inherent possession suffix and rarely be in a situation where the nominalized form ending with the */-a/* noun marker suffix would occur.¹⁸ These stative nominalizations have an inherent relationship with the nouns they modify in that they express inherent qualities of another

¹⁷ One might hypothesize that all nominalized stems (ma- + verbal stem) in Gumuz are ‘bound’ since these stems cannot be uttered without a suffix or another noun stem following (whether the */-a/* noun marker, the */-má/* inherent possession suffix, or the second noun of a NN compound). However, this would lead to an analysis that all nouns in Gumuz are bound, as all end with a */-a/* noun marker. It is not clear whether the final */-a/* noun marker is retained for attributive nouns, as this final /a/ would realize as [ə] and assimilate to the vowel quality of adjacent vowels, and thus be difficult to detect. Also, if the verb stem is consonant final, there exists a schwa-like vocalization between the final consonant and the second noun of the construction. As the epenthetic vowel is a central vowel, it is difficult to discern whether the central vowel is epenthetic or the final */-a/* noun marker realized word-internally.

¹⁸ Some of the more ‘stative’ nominalizations indicating value, however, can be free forms when they modify a verb. For example, *gáŋ* ‘be kind, good’ (SoG) means ‘slowly’ when nominalized with */ma-/: magáŋ*. Unlike color terms, these forms can occur with the final */-a/* noun marker, e.g. *magáŋá* ‘to be kind’.

entity. That is, as nominalizations, they are inherently possessed, and so as modifiers they require the /-**má**/ inherent possession suffix (see Chapter III for further details). Other intransitive and even transitive nominalized stems can fit into the Attributive Construction but the other intransitive stems are distinct in that they can optionally occur independently as nouns with the /-**a**/ noun marker. These latter nominalized verb forms are not necessarily qualities (though can be construed as such, i.e. they function as modifiers) and therefore can exist as either ‘absolute’ or ‘relational’ nouns (see also Chapter III and section 6.5 below).

6.5 Ambiguity in NN Collocations with Nominalized Verbs

We have seen that many nominalized verbs in Gumuz can function as attributive nouns in the Attributive Construction or as the first noun (the modified noun) of the Associative Construction. The difference is which noun should be considered the ‘head’ of the construction. For example, when the deverbal noun **madugwa** ‘to run’ occurs as the first noun of a NN collocation, the underlying vowel /u/ of the labialized velar carries H tone as is characteristic of both the Associative and Attributive Constructions. Therefore, the NN collocation in the Gumuz proverb in (6.45) could be interpreted as either ‘a running (growing) pumpkin’ which would be characteristic of the Attributive Construction, or ‘the running (growing) of a pumpkin’ which would be characteristic of the Associative (‘N of N’) Construction.

- (6.45) SoG
 í-gás-agá-k’o = ŋgó **ma-dugú paatúa**
 3PL.IMP-hear-NNFUT-HEAD=NEG NMLZ-run pumpkin
 ‘One does not hear a pumpkin grow.’
 (lit: ‘They do not hear a running (growing) pumpkin’
 or ‘They do not hear the running (growing) of the pumpkin’)

A similar ambiguity exists for the verb **magú k’óá** in (6.46) where it could feasibly be glossed as ‘(the) barking dog’ (Attributive Construction) or ‘(the) barking of the dog/the dog’s barking’ (Associative Construction).

- NoG
- (6.46) gás-ak'w ma-gú k'óá
 hear-HEAD NMLZ-bark dog
 'Listen to the dog barking.'
 (lit: 'Listen to the barking dog' or 'Listen to the dog's barking')

The constructs in examples (6.45-6.46) are structurally ambiguous in terms of syntactic headedness. On the other hand, if a verb includes a verbal classifier (e.g. 'wash' in example 6.47-6.48), it appears as though the second noun must be taken as the head of the construction and are therefore examples of the Attributive Construction. That is, the verbal classifier should "agree" with the head of the NN collocation. However, even though the Gumuz language consultant felt that these sentences were "correct", the semantics of such sentences left the language consultant unsure as to acceptability since these would be quite uncommon expressions.

- SoG
- (6.47) íi-ef-ák'o = ŋgó ma-dugú-paatúa
 3PL.TR-wash-CL1:head=NEG NMLZ-run-pumpkin
 'One doesn't wash a growing pumpkin.'

- SoG
- (6.48) ef-áts magú-k'óá
 wash-CL:BODY NMLZ-bark-dog
 'Wash the barking dog.'

Lastly, when a nominalized transitive verb is part of a complement clause, the nominalization tends to form a compound with its erstwhile O argument, and could be construed as an Associative Construction. For example, in (6.49, 6.50), the verb root 'steal' **?aakw** is a L tone verb. But when nominalized and compounded with **χosa** 'bovine' an H tone (which is typical of NN constructions) is added to the first nominal: **ma?aakó-χosa**.

- NoG
 (6.49) óó-Báámít dápəŋ **ma-ʔaakó** **χósa**
 M-Bamit AFF-3SG.TR-want NMLZ-steal bovine
 ‘Bamit wants to steal cattle.’

- NoG
 (6.50) lá-mááχó **ma-ʔaakó-χosa** χii
 GEN-3PL NMLZ-steal-bovine IDEO:long.time

d-úu-ka-sánz-ats
 AFF-3PL.INTR-COM-think-BODY

‘They were sad for a while about the stealing of their cattle.’

On the other hand, a nominalized transitive verb in Gumuz is an inherently possessed noun (or a relational noun, see Chapter III) and therefore similar to nominalized verbs in the Attributive Construction as both require the */-má/* inherent possession suffix when the first noun occurs outside the NN collocation (6.51).¹⁹

- NoG
- (6.51) a. Nominalized Transitive Verb
 ma-ʔaako-má ‘to steal (something)’
 NMLZ-steal-IP:O
- b. Attributive Noun (nominalized stative verb)
 ma-χíí-má ‘black (thing or person)’
 NMLZ-be.black-IP:MOD

The nominalized transitive verb requires the */-má/* inherent possession suffix as the erstwhile O argument is inherently part of the transitive verb stem. It is common cross-linguistically for derived nominals (including nominalized verbs) to be part of a subset of ‘relational nouns’ (Chapter III) which have an inherent relationship to another noun (Taylor 2002:208-210, Alexiadou et al. 2007:477). With nominalized verbs, the inherent relationship exists with its erstwhile argument(s). Transitive verbs in Gumuz

¹⁹ The */-má/* suffix is only required for nominalized transitive verbs. For labile verbs like ‘steal’, nominalization without */-má/* is possible if referring to the intransitive form.

obligatorily retain the O verbal argument as there exists an inherent relationship between the verb stem and the O argument. Attributive nouns (mostly nominalized statives), in contrast, have an inherent relationship with the noun they are modifying because the nominalized verb represents an inherent quality of the noun being modified.

For another instance of ambiguity, the verb **gam** ‘know’ has been shown to occur in the Attributive Construction modifying an erstwhile A (or S) argument: ‘knowing child’ (6.35).²⁰ At the same time, one would also expect the possible nominalized verb phrase ‘to know a child’. If the constructions are identical, only context can be used to distinguish the two meanings. Furthermore, ‘to dig a hole’ can also be construed as ‘a dug hole’ (6.52, 6.53). Some speakers of SoG can optionally use the **/-má/** for the attributive noun (within the attributive construction) to distinguish between these two otherwise homophonous constructions (6.53 b). However, the **/-má/** suffix is obligatory if the nominalized verb follows what would typically be the second noun in the construction (6.53 c).

- SoG
- (6.52) **ma-k’óʃ** **hola** ‘to dig a hole’ or ‘a dug hole’
 NMLZ-dig hole
- SoG
- (6.53) a. **b-ár-paŋ-gá** **ma-k’óʃ** **hola**
 AFF-1SG.TR-want-NFUT NMLZ-dig hole
 ‘I want to dig a hole.’
- b. **ma-k’óʃ-(amá)** **hola** **b-ár-gaŋ-gé-é-ts**
 NMLZ-dig-IP:MOD hole AFF-1SG.TR-see-NFUT-TWRD-BODY
- ná = gáté
 LOC=there
- ‘I saw a dug hole over there.’

²⁰ A third homophonous construction with distinct semantics is possible for **magamá dua**, meaning ‘known child’. However, considering that nominalized L tone CVC verb roots which form an infinitive often maintain the L tone and insert a H tone on an epenthesized /a/, one would expect the construction to be **magamá dua**. This would also be the expected form for the possible construct in the Attributive Construction meaning ‘known child’. Thus, the difference in a modified erstwhile A argument versus O argument may be distinct in terms of tonal melodies. However, further investigation is needed.

- c. b-ár-paŋ-gá **hola ma-k'óŋ-amá**
 AFF-1SG.TR-want-NFUT hole NMLZ-dig-IP:O
 'I want to dig a hole.'

Similar to (6.53b) above, the Attributive Construction in (6.54) and (6.55) serves as the O argument of a verb and clearly does not exhibit the semantics of an infinitive followed by its O argument. Rather the nominalized verb is modifying its erstwhile O argument. Though, again, the infinitive plus O argument would be identical in form.

- NoG
 (6.54) cím-ác **ma-ŋk'áf** **keeja**
 sew-CL1:EYE NMLZ-tear sack
 'Sew the torn sack.'

- NoG
 (6.55) óó-babá zíl-ac **ma-gúl-ák'w** **ŋdéa**
 M-Abebe scatter-CL1:eye NMLZ-pile.up-HEAD dirt

ée-tóχ-ákwâ-n máts'á
 FUT-build-1PL.INCL.TR-LOC house

'Abebe, spread out the piled up dirt so that we can build a house on it.'

CHAPTER VII

VERBS AND VERB STRUCTURES

Verb roots in NoG and SoG are quite similar. There are relatively few differences and those differences that exist are largely phonological due to historical sound changes (see Chapter II). However, there exist distinct lexical items as well. For example, ‘fall’ in NoG is **(m)beʔ** and in SoG is **faat**. The vast majority of these verbal roots exhibit either a CVC or a CV syllable pattern. Other possible syllable patterns are VC, VCV, VCVC (in which the initial V represents a vowel or syllabic nasal), and CVNC. The possible tonal melodies on verbal roots are H, L, HL, and LH. The last tonal melody (LH) is rare and seems to be restricted to roots that have an initial nasal or /a/.¹

In addition to the tonal melodies listed in the chart below, there may be a third tonal melody, LHL, according to tonal behavior observed across morpheme boundaries. However, the final L tone is not always detectable in the bare root form (imperative form). Verbs in this group include **andâr** ‘cross’ (SoG), **andîŋ** ‘turn around’ (SoG), and **gõχ** ‘snore’ (NoG).

¹ I suspect that the initial low tone nasal and /a/ on many of these verbal roots are historically related to the derivational morphemes /N-/ PLURACTIONAL and /a-/ RECIPROCAL/VALENCE DECREASER, respectively.

	H	L	HL	LH
CVC	ʔís 'cry'	fag 'grow'	k'ân 'bite'	*
CV	sá 'eat'	koo 'abstain'	tíi 'shoot'	*
CVNC	lúngrw 'shout'	gaanz (NoG) 'be old'	fíntj' 'tie'	*
VC	óʃ (NoG) 'sow'	ot 'be, exist'	íir [jír] (SoG) 'see'	*
VCV	ééʔáá (NoG) 'be rotten'	aloo (NoG) 'swim'	*	asíí 'play, chat'
VCVC	*	aʔam (NoG) 'be none'	*	ŋgáʃ 'speak'

While most inflectional and derivational morphology is similar between NoG and SoG, there are a few categories which differ, and the relative order of morphemes on the verb is not always the same. Both dialects have a distinct order for verbal morphology based on whether the verb is future versus nonfuture. Furthermore, though the basic division between 'future' and 'nonfuture' is conceptually the same, the formal marking of tense differs quite dramatically between the two dialects, and there exists a third 'remote past' tense morpheme in SoG (Uzar 1989) which occupies a position distinct from other tense markers. Other differences are found in the marking of person and number. The Mandura dialect of NoG marks both subject and object simultaneously on the verb (see also Chapter IV), whereas SoG does not (however, the object of a preposition can be marked on certain verbs). The category of 'greater plural' exists in NoG but does not seem to exist in SoG. Figures 7.1 through 7.4 present tentative position class charts for Nonfuture and Future verbs in NoG and SoG. Many of the categories cannot be simultaneously marked on the verb and thus the relative order of certain morpheme positions is not attested. Furthermore, Middle Voice /-áá/ must co-occur with an Incorporated Noun/Classifier).

Mood	(-7)
Person (S / A)	(-6)
Person (O or object of preposition)	(-5)
Uncertainty	(-4)
Instrumental & Dative; (-5) for INTR	(-3)
Reciprocal	(-2)
Pluractional	(-1)
Main Verb Root	(0)
Greater Plural	(+1)
Middle Voice	(+2)
Directional	(+3)
Incorporated Noun / Classifier	(+4)
Perfect	(+5)
Locative	(+6)

Figure 7.1. Position Class Chart for NoG Nonfuture Verbs

Mood	(-4)
Tense	(-3)
Reciprocal /Valence Decreaser	(-2)
Pluractional	(-1)
Main Verb Root	(0)
Greater Plural	(+1)
Person (S / A)	(+2)
Person (O)	(+3)
Instrumental & Dative	(+4)
Middle Voice	(+5)
Directional	(+6)
Incorporated noun/ Classifier	(+7)
Perfect	(+8)
Locative	(+9)

Figure 7.2. Position Class Chart for NoG Future Verbs

Mood	Remote Past	Person (S / A)	Instrumental & Dative	Uncertainty	Reciprocal	Pluractional	Main Verb Root	Nonfuture Tense	Middle Voice	Directional	Incorporated Noun / Classifier	Locative / Past Perfect
(-7)	(-6)	(-5)	(-4)	(-3)	(-2)	(-1)	(0)	(+1)	(+2)	(+3)	(+4)	(+5)

Figure 7.3. Position Class Chart for SoG Nonfuture Verbs

Tense	Reciprocal / Valence Decreaser	Pluractional	Main Verb Root	Person (S / A)	Instrumental & Dative	Person (Object of preposition)	Middle Voice	Directional	Incorporated Noun / Classifier	Locative
(-3)	(-2)	(-1)	(0)	(+1)	(+2)	(+3)	(+4)	(+5)	(+6)	(+7)

Figure 7.4. Position Class Chart for SoG Future Verbs

The following categories of morphemes in the position class chart for nonfuture verbs (NoG and SoG) appear to be in the verb stem in Gumuz: Reciprocal (valence decreaser), Pluractional, Directional, and Incorporated Noun/Verbal Classifier. These morphemes can be present in a nominalized form of the verb. They also exhibit fixed positions on the verb relative to each other, regardless of tense. The remaining categories of morphemes are ‘non-stem’ morphemes, marking tense, aspect, mood, voice, person,

number and oblique arguments. While ‘voice’ marking is arguably derivational, it is not found in a nominalized verb form and in this respect patterns with ‘non-stem’ morphemes.

Section 7.1 below discusses the morphology of the verb stem and Section 7.2 discusses the remaining non-stem categories. Lastly, Section 7.3 discusses verbal clitics.

7.1. Morphology of the Verb Stem

7.1.1. Incorporated Nouns / Classifiers (IN/CL)

In Gumuz, there exist verb-noun combinations which are very compound-like in that both morphemes are roots. I analyze some of these verb-noun stems as involving incorporated nouns (IN); these verb-incorporated noun (V-IN) compounds are discussed in detail in Chapter IX. Other compound verbs are verb-classifier (V-CL) compounds which are discussed in Chapter X. Some V-IN/V-CL compounds have lexicalized with idiosyncratic semantics and are comprised of noncontiguous roots, not unlike the bipartite stems found in some Amerindian languages (Jacobsen 1980, DeLancey 1996) in which the semantic sum of the parts does not equal the semantics of the whole. Lastly, some incorporated noun/classifier (IN/CL) morphemes have further grammaticalized as markers of verbal complements and affect valence - i.e. similar to applicatives.

When inflected, verbal compounds are distinct from single root verbs in that inflection can occur between the two roots. The compound verbs were previously labeled *infixing* (Irwin 1966:5), and later *split roots* (Uzar 1989:371). More recently the IN/CL morphemes have been labeled *adverbial suffixes* (Innocenti 2010: 73). Ahland (2010a) analyzed these morphemes as incorporated nouns/classifiers, and they participate in a compounding process that exists both historically and synchronically in the language.

Just about any body part term can be incorporated into certain verbs in Gumuz and these body part morphemes consist of two types: what I label *simple* versus *complex* (see Chapter VIII). The complex body part terms consist of the body part prefix — /**li**-/ (NoG) /**li**-/ (SoG) — plus the (historical) body part root. The simple body part terms

lack this body part prefix: /-(a)kʔ(a)/ ‘head’, /-(a)c(á)/ ‘eye’, /-(a)s(a)/ ‘mouth’, /-ífl(a)/ ‘belly’, /-(a)ts(a)/ ‘body’, /-(a)ʃ(a)/ ‘hip, loins’, /-(a)kʔs(a)/ ‘tooth’, and /-tsʔ(a)/ ‘ear’.²

There also exists a bound historical noun root which is incorporated into verbs but is not a body part term: /-(a)go(a)/ ‘place’. In addition, certain verb roots cannot be compounded with a nominal root, e.g. **bor** ‘carry’ (SoG). The following section describes the lexicalized compounds and some grammaticalized functions of the IN/CL morphemes that are not described in other chapters.

7.1.1.1 Lexicalized (Bipartite) Verb-Noun Compounds

Certain verbal roots combine with the simple (bound) noun roots listed above to create compounds with idiosyncratic semantics. That is, the meaning of the whole is not the sum of the meaning of its parts. Because the relevant noun roots do not have a clear classifier function nor are known to serve another grammatical function, I gloss these morphemes in CAPS to indicate their uncertain and most likely lexicalized status in the various compounds. For example, the verb root **gam** by itself means ‘know, find’ (7.1). However, when combined with /-(a)ʃ(a)/ ‘hip, loins’, the meaning is ‘know how’ (7.2). The semantics are yet more idiosyncratic when combined with /-(a)ts(a)/ ‘body’: **gam** ‘know’ + /-(a)ts(a)/ ‘body’ = **gam-áts** ‘see’ (7.3).

- SoG
- (7.1) dua lá-ébâ-m b-ár-gam-aká
 child GEN-home.area-1SG.POSS AFF-1SG.TR-know-NFUT
 ‘I know my brother.’

² The underlying tone for certain body part morphemes is difficult to determine. The body part morphemes ‘head’ and ‘eye’ most often carry H tone (as do their free noun counterparts). However, in certain verb stems, these carry L tone, e.g. **wíd-akʔw** (see-head) ‘visit’ (NoG), **dáb-ac** (find-eye) ‘find, encounter’. Similarly, the body part morphemes ‘hip’ and ‘body’ most often carry L tone but in certain verb stems, these carry H tone, e.g. **hul-áʃ** (follow-hip) ‘follow’ (SoG) and **gam-áts** (know-body) ‘see’. Also, certain verb and noun roots carry L tone underlyingly but have an extra H tone inserted when forming a verb-noun compound (which is similar to NN compounds, see Chapter VI): **hul** ‘follow’ + **tʃagwa** ‘foot’ = **hul-(á)-tʃagw** ‘follow on foot’ (SoG). This latter pattern may explain the H tone found on some L tone incorporated nouns/classifiers and may mark the difference between a lexicalized verb-noun compound versus a verb-incorporated noun (V-IN) or verb-classifier (V-CL) compound. Lastly, there is also evidence that tone on the IN/CL of imperatives may have a grammatical function (see section 7.2.6.2).

SoG

- (7.2) máts'á ma-dá-má b-ár-gam-aká-**fa**
house NMLZ-work-IP:O AFF-1SG.TR-know-NFUT-HIP
'I know how to build a house.'

SoG

- (7.3) b-ár-gam-aká-**ts** maʒá ʔá ná = súga
AFF-1SG.TR-know-NFUT-BODY guy MED LOC=market
'I saw that guy at the market.'

7.1.1.2 Grammaticalized IN/CL Morphemes

In Chapters VIII and IX, I discuss noun incorporation/incorporated nouns (IN) and possible classifier (CL) incorporation into verbs. In addition, I explore a possible grammaticalization pathway via which these IN/CL morphemes have developed into verbal classifiers via external possession constructions. In some cases, these incorporated nouns/classifying morphemes have further grammaticalized as markers of certain types of verbal arguments. For example, the verb root **ŋgaʃ** 'speak' (7.4, 7.5) often combines with the IN/CL morpheme **/(a)ts(a)/** 'body' to yield the meaning 'tell'; in the process the verbal valence increases from one argument to two arguments (7.6, 7.7). Both the intransitive root **ŋgaʃ** 'speak' and the transitive stem **ŋgaʃ-áts** 'tell' can take an optional oblique argument (recipient) as well. Furthermore, the verbal root (**ŋgaʃ** 'speak') cannot combine with other IN/CL morphemes (aside from a few lexicalized compounds), showing how lexicalized the combination is.

NoG

- (7.4) baab-éa zialá d-ée-ŋgaʃ-á
father-1SG.POSS now AFF-FUT-speak-3SG.INTR
'My father will speak now.'

SoG

- (7.5) ŋgaʃ ká = ára
speak DAT=1SG
'Speak to me.'

- NoG
 (7.6) baab-éa d-a-ŋgaʃ-áts ká = ára ŋgaʃá
 father-1SG.POSS AFF-3SG.TR-speak-BODY DAT=1SG spoken.thing

ma-cácá-má
 NMLZ-be.many-IP:MOD
 ‘My father told me many things.’

- SoG
 (7.7) ŋgaʃ-áts ká = ára
 speak-BODY DAT=1SG
 ‘Tell me something.’

This use of /-(a)ts(a)/ ‘body’ for marking something which is said or spoken as the verbal Theme is found with other verbal roots, including **eeʔé** ‘sing’ (7.8) and ‘ask’ (7.9). With the latter, the complex stem **lák’ó-ts** (NoG and SoG) appears to be lexicalized as there is no known verbal root **lák’w**, and the addressee is marked as an O argument (zero case marking).

- SoG
 (7.8) káma-eeʔé-lá-ts ká = áca
 FUT-sing-1PL.EXCL.TR-BODY BEN=2PL
 ‘We (exclusive) will sing something for you.’

- SoG
 (7.9) ma-lák’o-ǰá-ts = aŋgó ára
 NEG.IMP-ask-2PL.TR-BODY=NEG 1SG
 ‘Don’t ask me about it.’

Another function of certain IN/CL morphemes is that of reducing the valence of a verb. The bound incorporated noun /-(a)go(a)/ ‘place’ functions as a valence reducer for certain transitive verb roots. It is common cross-linguistically for INs to reduce the valence of a verb (Mithun 1984: 848, see also Chapter VIII). However, for synchronic noun incorporation to exist, there must exist a corresponding free noun. But this particular morpheme does not exist as a free noun and is semantically bleached as a valence reducer in certain instances. For example, the verb roots **sá** ‘eat’, **fá** ‘drink’ and **wíd** ‘see’ (NoG) are transitive (7.10a, 7.11a, 7.13a); but when combined with /-(a)go(a)/

‘place’, they become intransitive (7.10b, 7.11b, 7.13b). The semantics of ‘place’ does not seem to add to the meaning of the verb stem as there is no particular reference to a place (save 7.11). Its main function appears to be that of reducing the valence of otherwise transitive verb roots. In (7.12, 7.13a), **fá** ‘drink’ is clearly transitive, while in (7.13b) the verb stem is clearly intransitive as a transitive tonal pattern is ungrammatical (7.14).

NoG

- (7.10) a. áχó d-a-s ŋga
 3SG AFF-3SG.TR-eat porridge
 ‘He ate porridge.’
- b. ée = áχó márra etá-m¹-sá-**gwá**
 like=3SG many REL.PRO:SG-NMLZ-eat-PLACE
- etá-m¹-fá-**gwá** ɓaga bíj
 REL.PRO:SG-NMLZ-drink-PLACE person none
 ‘There weren’t any people like him eating and drinking.’

NoG

- (7.11) a. d-ókó-wíd ɓaga
 AFF-1PL.INCL-see person
 ‘We saw someone.’
- b. d-á-wír-é-**gw** ká = ndea
 AFF-see-TWRD-PLACE DAT=ground
 ‘He looked toward the ground.’

SoG

- (7.12) dá etá-b-a-fá-gâ-n á-ɓaga aja
 thing REL.PRO-AFF-3SG.TR-drink-NFUT-ABL NOM-person water
 ‘the thing that people drink water out of’

SoG

- (7.13) a. ɓaga b-a-fá-gá aja
 person AFF-3SG.TR-drink-NFUT water
 ‘A person drinks water.’
- b. dá etá-b-á-fá-gá-**gô**-n á-ɓaga
 thing REL.PRO-AFF-3SG.INTR-drink-NFUT-PLACE-ABL NOM-person
 ‘the thing that people drink out of’

- SoG
 (7.14) *da etá-b-a-fá-gá-gô-n á-baga
 thing REL.PRO-AFF-3SG.TR-drink-NFUT-PLACE-ABL NOM-person

aja
 water
 *‘the thing that people drink water out of’

All instances of /-(a)go(a)/ ‘place’ as part of the verb stem result in a decrease in valency (no change with intransitive roots) or a change in semantic role of what is the O argument. With transitive/labile verb roots, some instances of /-(a)go(a)/ seem to maintain the semantics of ‘place’ and therefore appear to be examples of Mithun’s (1986) Type I noun incorporation, which involves a resulting decrease in verbal valence. Such is the case for the labile verb root **dáb** ‘find (TR), be ready (INTR)’. When combined with /-(a)go(a)/ ‘place’, the verb stem means ‘arrive’ (7.15, 7.16).³

- NoG
 (7.15) áχámá nágwá-á-ts ká = éba-má
 3SG TEMP-3SG.INTR-go DAT=home-3SG.POSS

d-á-dáb-agw
 AFF-3SG.INTR-find-PLACE
 ‘When he went home, he arrived there.’

- SoG
 (7.16) baga b-á-dáb-aká-gwa b-á-zi-ká
 person AFF-3SG.INTR-find-NFUT-PLACE AFF-3SG.INTR-sleep-NFUT

b-í-‘ká-ʃ
 AFF-be-NFUT-HIP
 ‘The man arrived there, rested and stayed.’

However, the resulting verb stem **dáb-agw** is also labile in that it can be used as a transitive verb in which the O argument (the manipulee) is caused to arrive somewhere

³ The bound root /goa/ ‘place’ has also grammaticalized as a relator noun referring to where someone or something is located. When combined with the locative preposition and used in place of the mood marker on the verb, this has further grammaticalized as the temporal subordinator ‘when’, as in example (7.15) (see section 7.2.1.3 and Chapter XIII for further explanation).

(7.17). The same is true for the intransitive verb root ‘enter’ **koχ** (NoG) (see example 7.78 for intransitive example) in which the manipulee is caused to enter a place (7.18).

NoG
 (7.17) **óó-maηgóza** **d-a-dáb-**agw**** **meʔa ná = máts’a**
 M-Moges AFF-3SG.TR-find-PLACE goat LOC=house
 ‘Moges caused the goat to arrive at the house.’

NoG
 (7.18) **óó-maηgóza** **d-a-kóχ-**ágw**** **meʔa ká = máts’a**
 M-Moges AFF-3SG.TR-enter-PLACE goat DAT=house
 ‘Moges made the goat enter the house.’

7.1.2. Reciprocal/Valence Reducer

Another means of reducing the valence of a verbal root is to add the prefix /a-/ to the verbal stem (Section 7.1.2.2). In some instances, /a-/ merely reduces valence but in most instances it simultaneously functions as a reciprocal marker. Depending on the verb root/stem, the /a-/ prefix may indicate joint action and does not necessarily reduce the valence (Section 7.1.2.1). Finally, this /a-/ prefix can derive an intransitive verb from certain noun roots but this applies to only a limited number of noun roots (Section 7.1.2.3).

7.1.2.1 Reciprocal

The most frequent use of the /a-/ prefix is to indicate reciprocal or joint action. For example, the transitive verb ‘kiss’ **ts’im-ás** lacks this /a-/ prefix (7.19); but in (7.20) /a-/ derives the reciprocal verb **a-ts’im-ás** ‘kiss each other’. The singular subject marking indicates that one person kissed another and the greater plural indicates that many people do this (see section 7.2.2 on Number).

NoG
 (7.19) **áχó áχó** **d-a-ts’im-ás**
 3SG 3SG AFF-3SG.TR-suck-mouth
 ‘She kissed him.’

NoG

- (7.20) máχó d-á-a-ts'ím-óo-s
3PL AFF-3SG.INTR-RECP-suck-GPL-mouth
'They (many people) kissed each other.'

Other transitive verb stems such as 'see' **wídf** 'see' in (7.21, 7.22) can be derived as reciprocals in the same way.

NoG

- (7.21) d-ókó-wídf b́aga
AFF-1PL.INCL.TR-see person
'We (incl.) saw someone.'

NoG

- (7.22) ákwa d-óko-a-wídf
1PL.INCL AFF-1PL.INCL.INTR-RECP-see
'We (incl.) saw each other.'

The reciprocal /a-/ functions similarly in SoG. For example, the verb 'get engaged' is comprised of the discontinuous stem **íír [jír]** 'see' plus /-(a)ts(a)/ 'body' and refers to the process of inspecting one another for scars/imperfections before marriage. This verb is transitive as demonstrated by the tonal marking of the subject in (7.23) (see Chapter IV). However, the reciprocal and hence intransitive stem is derived when /a-/ is added (7.24).

SoG

- (7.23) ká⁴m-íír-íla-ts
FUT-see-1PL.EXCL.TR-BODY
'We (excl) will get engaged (to other people).'

SoG

- (7.24) káma-a-jír-íla-ts
FUT-RECP-see-1PL.EXCL.INTR-BODY
'We will get engaged to each other.'

As mentioned above, the reciprocal also indicates joint action. "Joint action" refers to action done together that is not necessarily done to/on each other, and, in some languages, this is often expressed with the same morpheme as the reciprocal (Givon 2001:

108). For example, the verb ‘have’ **tʃá** in SoG is transitive (7.25). When /a-/ is added, the meaning of the verb changes to ‘have together’ or ‘have with each other’ (7.26). However, unlike the previous examples, the verb remains transitive (see also example 7.27 for joint action).

SoG
 (7.25) b-íi-tʃá-gá anjia
 AFF-3PL.TR-have-NFUT appointment
 ‘They have an appointment.’

SoG
 (7.26) b-íi-a-tʃá-gá anjia
 AFF-3PL.TR-RECP-have-NFUT appointment
 ‘They have an appointment with each other.’

In Gumuz, /a-/ is often expressed along with the pluractional /N-/ prefix (section 7.1.3) in order to indicate joint action. The /a-/ in (7.27) also indicates that each person was involved in the action, but not that they acted on each other.

NoG
 (7.27) baga d-úú-a-ŋ-táá-é k'wósáʃá
 people AFF-3PL.TR-RECP-PL-bring-TWRD firewood

 kám-ʔíi-úú-ʃá-n
 PURP-be-3PL.INTR-HIP-LOC
 ‘The people carried firewood together in order to sit on.’

7.1.2.2 Valence Reducer

As mentioned above, the /a-/ prefix also functions as a valence reducer without necessarily producing a reciprocal meaning. In NoG, for example, the verb root **mokw** means ‘carry a child on one’s back’ (7.28 a, b). When /a-/ is added, the meaning is the same but the verb stem no longer takes an O argument (7.28 c).

- NoG
- (7.28) a. mokw ~ a-mokw ‘Carry a child on your back’
- b. dua mokw ‘Carry a child on your back’
 child carry.on.back
- c. *dua a-mokw

7.1.2.3 Verbalizer

Another function of either the same, or a homophonous /a-/ prefix is to derive an intransitive verb from a noun. The /a-/ verbalizing prefix carries L tone in most instances. Such a verbalizer is not very productive in the corpus used for this study and it is not known whether it occupies a distinct position on the verb from the reciprocal /a-/, but data do not show it to be incompatible with an hypothesis that it is the same morpheme. For these reasons, it is not included on the position class diagrams in Figures 7.1 through 7.4.

The noun ‘lie’ in NoG is **pitá** (7.29), but ‘tell a lie, lie’ is **apít** (7.30). Other noun / intransitive verb pairs in NoG include: **k’o6a** ‘hunger’ and **ak’o6** ‘be hungry’ (7.31), **fidá** ‘lame person’ and **afid** ‘limp’ (7.32), and **tílá** ‘deep (place)’ and **atíl** ‘be deep’.

- NoG
- (7.29) pitá kama-káa-a = ŋgó
 lie IMP.NEG-say-2SG.INTR=NEG
 ‘Don’t say a lie.’

- NoG
- (7.30) d-ê-a-pit-ára
 AFF-FUT-VBLZ-lie-1SG.INTR
 ‘I will lie.’

- NoG
- (7.31) d-á-a-k’o6 á-6aga
 AFF-3SG.INTR-VBLZ-hunger NOM-person
 ‘The person was hungry.’

- NoG
- (7.32) d-ê-a-fid-á á-6aga
 AFF-FUT-VBLZ-lame.person-3SG.INTR NOM-person
 ‘The person will limp.’

In SoG, the /a-/ verbalizing prefix is often followed by an incipient nasal (a nasal which is inserted for unknown reasons) (7.33), whereas in NoG the cognate verbal form lacks the nasal (7.34).⁴ The incipient nasal is present in certain lexical items in NoG such as ‘be beautiful’ (7.35), whose cognate form in SoG happens to be the same (7.36). In example (7.36), there is further derivation of a modifier from the derived verbal form, which in turn is used to modify the original noun root.

SoG

- (7.33) ma-**an**-gááza
 NMLZ-VBLZ-elder
 ‘to grow old’

NoG

- (7.34) oba-má gáánza d-á-a-gáánz
 father-3SG.POSS elder AFF-3SG.INTR-VBLZ-elder
 ‘His father became an old man.’

NoG

- (7.35) d-ára-**an**-dagon
 AFF-1SG.INTR-VBLZ-young.girl
 ‘I am beautiful.’

SoG

- (7.36) b-é-a-tʃá á-ma-an-gááz baga meetáa
 AFF-RPST-3SG.TR-have NOM-NMLZ-VBLZ-elder person one

tagoná ma-an-dagóná-má

young.girl NMLZ-VBLZ-young.girl-IP:MOD
 ‘There was once an elderly man who had a beautiful young girl.’
 lit: One elderly man had a beautiful young girl.

7.1.3. Pluractional /Verbal Plural

The term “pluractional” refers to the encoding of event number, as opposed to entity number, the latter of which is typically encoded on nouns (Corbett 2000).

“Pluractional” is a term suggested by Newman (1980) for verbal plurals and is used

⁴ The incipient nasal that follows the verbalizer /a-/ is distinct from the pluractional morpheme described in Section 7.1.3.

mainly by Africanists (Corbett 2000: 243). According to Corbett, there are two main types of verbal number —event number and participant number (distinct from *entity number* above) —both of which can in some languages be encoded using the same formal device. Event number refers to encoding whether an event took place more than once, or in more than one location. Participant number refers to the number of participants in an event (Corbett 2000: 246-249). Gumuz encodes both event number and participant number with the nasal prefix /N-/. The distinction between these is difficult to tease apart in Gumuz as the pluractional can refer to plural events when multiple participants are involved, as well as to multiple events involving one person.

7.1.3.1 Event Number

Gumuz uses the nasal prefix /N-/ to encode multiple events or an iterative repetition of the same event involving one or more participants. In NoG the verb stem **kwáa-k'w** means ‘return’ or ‘do again’. When /N-/ is added as in (7.87), the meaning changes to ‘do again and again’. Here this derived verb form is used to help express the repetitive action of a cow chewing its cud.

- NoG
 (7.37) χ osa **d-a-ŋ-kwá'-ák'w** ma-sá-gwá
 cow AFF-3SG.TR-PL-return-HEAD NMLZ-eat-VD
 ‘The cow chews its cud.’

In SoG the function of the pluractional is identical. In (7.38), the pluractional indicates the repeated action of the child putting dirt in his mouth. In (7.39), the action of eating is repeated, but over a period of time.

- SoG
 (7.38) dua **b-a-n-t'ó-gá** ŋéa ká = ílsa-má
 child AFF-3SG.TR-PL-put-NFUT dirt DAT=mouth-3SG.POSS
 ‘The child put dirt in his mouth (again and again).’

SoG

(7.39) b-a-zee-gá éégwéa ká = ɓaga
AFF-3SG.TR-watch-NFUT pig DAT=person

b-á-g-íi-gá **b-a-ga-n-sá-gá** iidá-ŋga
AFF-3SG.INTR-CAUS-be-NFUT AFF-3SG.TR-COM-PL-eat-NFUT DIM-food

‘Because he watched the pigs for the man he was able to eat (on several occasions) a little food with them (the pigs).’

7.1.3.2 Pluractional Events with Multiple Participants

The pluractional prefix can also indicate multiple participants involved in an event. It can refer to an action performed by more than one S argument (7.40, 7.41) or an action performed on more than one O argument. In either case, the pluractional is simultaneously denoting multiple events. As there is more than one person returning in (7.40), the pluractional depicts several ‘returning’ events. Unlike ‘chew, ruminate’ in example (7.37), the event is not iterative. Likewise, the pluractional in (7.41) depicts several ‘climbing’ events. However, unlike example (7.40), this could also be interpreted as iterative. In both of these examples, the pluractional marking is structurally optional and seems to be used to distinguish distinct multiple events as opposed to one event done en masse (unmarked), in which case, the pluractional event may be better translated as ‘each’ (referring to the participants).

NoG

(7.40) **ŋ-k^wá^ʔá-ág^wa** éda-f-ágwá aja
PL-return-1PL.INCL.INTR CONJ.IMP2-drink-1PL.INCL.TR water

ná = íl^ʔá-^ʔgát^ʔá

ABL=BELLY-river

‘Let’s (each) return and drink water from the river.’

SoG

(7.41) b-íi-**n**-tákó-gá
AFF-3PL.INTR-PL-climb-NFUT
‘They (each) climbed.’ or ‘They climbed again and again.’

The pluractional is also used if an action is performed on more than one O argument (7.42). Again, it seems to indicate distinct multiple events versus an event performed all at once, both of which could involve more than one O argument. In (7.43a), the pluractional indicates that there were many distinct visits of people at separate locations. The same clause without the pluractional indicates that there was one event involving one or more people being visited (7.43b).⁵

NoG

- (7.42) gáánza d-a-ga-**n**-t'ák'-é-lúk'w diida ka = gat'ák'óá
 elder AFF-3SG.TR-PL-spit-TWRD-head children COM=spit
 'The elder spat on the children's heads over there.'

NoG

- (7.43) a. d-ára-**n**-wídf-é-k'w b́aga
 AFF-1SG.TR-PL-see-TWRD-HEAD person
 'I visited many people (at different locations).'
- b. d-ára-wídf-é-k'w b́aga
 AFF-1SG.TR-see-TWRD- HEAD person
 'I visited one person (or many people) (at the same location).'

The pluractional in SoG similarly can indicate distinct multiple events involving multiple O arguments. The pluractional in (7.44) indicates that the people are not going to be killed all at once but on separate occasions. However, (7.45a) does not clearly indicate separate grinding events and the lack of a pluractional (7.45b) indicates there was a singular O argument. Thus, participant number (versus event number) appears to be more relevant in certain uses.

SoG

- (7.44) b-á-tsa ma-**n**-f-ú-k'w
 AFF-3SG-go NMLZ-PL-kill-3PL.TR-CL1:HEAD
 'They are going to kill many people.'

⁵ It is also likely that (7.43a) could indicate that one person was visited again and again. This was not confirmed, but is inferred from uses of the pluractional on other verbs.

SoG

- (7.45) a. η gafa b-a- η -gáʃ-agá-c opá ká = kóa
 woman AFF-3SG.TR-PL-grind-NFUT-CL1:eye opa.bean BEN=sauce
 ‘The woman ground opa (beans) for the sauce’
- b. η gafa b-a-gáʃ-agá-c opá ká = kóa
 woman AFF-3SG.TR-grind-NFUT-CL1:eye opa.bean BEN=sauce
 ‘The woman ground one opa bean for the sauce.’

Participant number versus event number seems to be most relevant in Gumuz when the pluractional is marked on stative verbs. If there are plural S arguments with a stative verb, the pluractional can occur on the verb. If there is a singular S argument, the pluractional does not occur (7.46). This is more akin to true participant number marking as it is difficult to conceive a stative verb as representing distinct events or situations.

NoG

- | SINGULAR S | PLURAL S |
|---|---|
| (7.46) ára-gáχ = aηgó
1SG.INTR-handsome =NEG
‘I am not handsome.’ | áko- η -gáχ = aηgó
1PL.INCL.INTR-PL-handsome =NEG
‘We are not handsome.’ |
| a-gáχ = aηgó
2SG.INTR-handsome =NEG
‘You (sg) are not handsome.’ | áca- η -gáχ = aηgó
1SG.INTR-handsome =NEG
‘You (pl) are not handsome.’ |
| á-gáχ = aηgó
3SG.INTR-handsome =NEG
‘He is not handsome.’ | úá- η -gáχ = aηgó
3PL.INTR-PL-handsome =NEG
‘They are not handsome.’ |

As most modification in Gumuz is accomplished via noun-noun modification constructions (Chapter VI), verbs expressing qualities are often nominalized and then function as modifiers within noun-noun constructions. If a nominalized verb modifies a plural noun within the Attributive Construction, the pluractional is on the nominalized verb (7.47). Pluractional marking can also be found on nominalized verbs within the Associative Construction but is not (necessarily) related to the plurality of the second noun (7.48). See also section 6.3.3 of Chapter VI.

SoG

(7.47) ka = [ma-**n**-táb-atsá lorága] ka = áŋ
COM=NMLZ-PL-be.thick-body book COM=MED

b-a-t'aaʔ-ág-éa

AFF-3SG.TR-take-NFUT-TWRD

'He brought (me) those thick books.'

NoG

(7.48) ma-**n**-dá-dá gats'aχá
NMLZ-PL-do-thing old.days
'the work of the old days'

7.1.4. Directionals

In Nilo-Saharan languages, directionals appear to be common (Creissels et al. 2007:148), and exist in polar pairs, one referring to motion away from the deictic center, and the other referring to motion towards deictic center. This type of verbal marking has been referred to as 'motion towards' versus 'motion away' (Tucker and Bryan 1966), 'ventive' versus 'andative' (Rottland 1982), 'ventive' versus 'itive' (Dimmendaal 1983), 'movement towards' versus 'movement away' (Nyombe 1987), 'centripetal' versus 'centrifugal' (Andersen 1999), and 'towards' and 'away' (Payne, to appear) in that literal motion is not always indicated in at least some languages.

For the most part, Gumuz only marks motion toward the deictic center with what I label 'towards' (TWRD) /-é/. Unmarked forms of verbs are either neutral with regard to deictic motion, or indicate motion away. Uzar (1989:374) had previously labeled this marker a 'speaker-oriented directional marker' in SoG, reflecting that it can be used for actions which take place at a different location from where the speaker is, or for actions that start at a different location and are directed at the speaker. In addition, I have also found that the 'towards' marker in Gumuz can indicate perfect aspect and distant future.

I use the label 'away' (AW) for motion away. This concept is generally unmarked in Gumuz, but the suffix /-(i)ʒ/ in NoG sometimes indicates direction away from the deictic center. However, evidence from the present corpus is conflicting and needs further investigation.

7.1.4.1 ‘Towards’(TWRD) Indicating ‘Motion Towards the Speaker’

As mentioned above, the ‘towards’ morpheme often indicates that an action is performed in the direction of the speaker. This use of ‘towards’ is reserved for verbs of motion. For example, the unmarked verb root **úá [wá]** ‘go (away)’ (NoG and SoG) indicates motion away from the speaker and the marked form **úá-é [wéé]** ‘come’ indicates motion towards the speaker. This is also demonstrated with the verb ‘run’ in NoG (7.55) and ‘open’ in SoG (7.56).

NoG

- (7.49) ná = gátá ká = gá d-âr-dugw-é
ABL=there DAT=here AFF-1SG.TR-run-TWRD
‘I ran from there to here.’

SoG

- (7.50) b-a-kór-agá-á-é-s jásamáts’á
AFF-3SG-open-NFUT-MV-TWRD-MOUTH door
‘The door opened (towards me).’

At times, ‘towards’ can indicate that the speaker is the recipient of an action (7.51) or has a benefactive role (7.52). In other examples, the speaker can be construed as a patient (7.53). The motion is therefore, metaphorically directed toward the speaker, and not necessarily literally.

SoG

- (7.51) á mâ-tá?-a-é
3SG FUT-take-3SG.TR-TWRD
‘He will bring (it to me).’

SoG

- (7.52) tším-é
sew-TWRD
‘Sew (something for me).’

NoG

- (7.53) áxámá ê-bátš-é-lík’ó = ngó
3SG FUT-hit-TWRD-head=NEG
‘He won’t hit me in the head.’

7.1.4.2 ‘Towards’ Indicating ‘Different Location from the Speaker’

In accordance with Uzar’s (1989) findings regarding SoG, I have found that both SoG and NoG use the ‘towards’ morpheme to indicate that an action (or predication) takes place at a different location from that of the speaker. This use of ‘towards’ is reserved for non-motion verbs and is a semantic shift from the original directional (motion towards) semantics. In (7.54), the speaker is located in Ethiopia and is talking about a child who grew up in North America. The ‘towards’ marker indicates that the child grew up in a location other than where the speaker is located; it does not indicate that the child is drawing near to the speaker as he grows. Similarly, in (7.55), even though the speaker is simultaneously the A argument, the ‘towards’ morpheme occurs because the child (the O argument) is in a different location from the speaker (7.55a). When the location is the same, ‘towards’ cannot occur on the (non-motion) verb (7.55b).⁶

NoG

- (7.54) dua ná = amariká d-a-fag-á-é-k’w
child LOC=north.america AFF-3SG-grow-MV-TWRD-HEAD
‘The child grew up in North America.’

NoG

- (7.55) a. ára d-ár-tj’-ê-n dua meetáa ná = gilgîl bulása
1SG AFF-1SG.TR-have-TWRD-LOC child one LOC=Gilgil Biles
‘I have one child in Gilgil Biles.’
- b. ára d-ár-tj’ dua meetáa
1SG AFF-1SG.TR-have child one
‘I have one child.’

The ‘towards’ morpheme has a similar function in SoG. In (7.56 a) the event took place at a different location from where the speaker is; and in (7.56 b), it took place in the same location.

⁶ Many thanks to Steve Nicolle (p.c.) for pointing out the use of ‘towards’ in motion versus non-motion verbs in Gumuz.

- b. á-tʃ-é kú-χosa
 go?-emit-TWRD milk-bovine
 ‘Milk the cow (the cow is over there but I will stay here)’

7.1.4.3 ‘Towards’ Indicating Perfect Aspect

‘Towards’ can also indicate perfect aspect. In (7.60) and (7.61), the ‘towards’ morpheme indicates that the speaker just finished eating.

- NoG
 (7.60) d-ár-s-é agízealá
 AFF-1SG.TR-eat-TWRD just.now
 ‘I have eaten (something) just now.’

- SoG
 (7.61) b-ár-sá-g-é-á
 AFF-1SG.TR-eat-NFUT-TWRD
 ‘I have eaten (something).’

7.1.4.4 ‘Away’

The term ‘away’ (AW) indicates motion away from the deictic center. As mentioned previously, if there is an ‘away’ concept in a scene, this is usually left unmarked on verbs in Gumuz. However, there exist a few examples in which it appears that the suffix /-(**í**)**ʒ**/ indicates ‘away’ in NoG, but only (clearly) in the imperative (in the present corpus) on verbs of motion. The /-(**í**)**ʒ**/ suffix appears to be related to another suffix /-(**á**)**ʒ**/ which generally functions as a marker of perfect aspect, most often past perfect (see section 7.2.7). In the examples below, /-(**í**)**ʒ**/ appears to indicate motion away from the speaker (7.62-7.64). The use of /-(**í**)**ʒ**/ indicating motion away in (7.62a, 7.63a-c, 7.64a) can be contrasted with /-**é**/ ‘towards’ on the same verb stem in (7.62b, 7.63d, 7.64b).

- NoG
 (7.62) a. dugw-îʒ
 run-AW
 ‘Run (over there)!’

- b. dugw-é
run-TWRD
'Run (to me)!'

NoG

- (7.63) a. kwaasa taa-3-ân
ball take-AW-LOC
'Take the ball away over there.'
- b. bee-má taa-3-ân ná = bartukáán
skin-3SG.POSS take-AW-ABL ABL=orange
'Take the skin off the orange.'
- c. taá-3 ~ taa
take-AW take
'Take (away from me).'
- d. kea taá-é
beer take-TWRD
'Bring me beer.'
- (7.64) a. boo-3
move-AW
'Move (to another place).'
- b. boo-é
move-TWRD
'Move (to where I am).'

7.2. Non-stem Morphology of the Verb

7.2.1. Mood

The first morpheme position on the verb (only the nonfuture verb in SoG) is occupied by the 'affirmative' morpheme: /**d**-/ (NoG) and /**b**-/ (SoG).⁸ Uzar (1989: 383) first labeled this 'affirmative' as it does not occur with interrogatives or negatives. I have maintained this label but 'affirmative' does not fully account for all instances of when this morpheme is used. Notably, most non-initial affirmative verbs in subordinate clauses and clause chains lack the affirmative morpheme.

⁸ Some speakers in the Mandura area (NoG) vary this morpheme between /**b**-/ and /**d**-/.

Other morphemes can occupy the first position on the verb; all but one (the jussive) of these others introduce subordinate clauses: /nágó-/ ‘when, because’, /ká-/ ‘if’ (conditional), the relativizers /l-/ and /et-/, and the jussive /n-/. In this grammar, I refer to all these first-position prefixes as markers of “mood”. Example (7.65) illustrates the affirmative in a simple affirmative clause.

- NoG
 (7.65) d-á-gáχ
 AFF-3SG.INTR-be.good
 ‘It was good.’

7.2.1.1 The Affirmative Marker and Question Constructions

Lack of the affirmative morpheme with a final rise in intonation generally indicates a Yes/No question (7.66). In SoG, one must also add the Yes/No question marker /=ác/ or /=áj/ to the end of the clause (7.67) (see also section 7.3.2).

- NoG
 (7.66) á-gáχ
 3SG.INTR-be.good
 ‘Was it good?’

- SoG
 (7.67) a-tʃʰá-gá dagoná = ác
 3SG.TR-have-NFUT young.woman =YNQ
 ‘Do you have a young woman (to exchange in marriage)?’

However, it is not always obligatory to omit the ‘affirmative’ marker for a question. In example (7.68), the same speaker found the verb with or without the affirmative marker acceptable as a Yes/No question.

- SoG
 (7.68) a. á⁺-tsá-gá = áj
 2SG.INTR-go-NFUT=YNQ
 ‘Did you go?’

- b. b-á¹-tsá-gá = áj
 AFF-2SG.INTR-go-NFUT=YNQ
 ‘Did you go?’

For content questions, a question morpheme often takes the place of the affirmative on the conjugated verb (7.69, 7.70). In SoG, the question words are not bound and the affirmative marker can remain on the verb with all arguments that are questioned. Some examples are given in (7.71) through (7.73). When either the S or O arguments are questioned in SoG, the affirmative marker does not need to occur (7.74, 7.75).

- NoG
 (7.69) nts-á-wok-ak’wá
 what-2SG.TR-heat-CL1:HEAD
 ‘What are you heating?’

- NoG
 (7.70) wolá-a-f kea lá
 who-3SG.TR-drink beer PROX
 ‘Who drank this beer?’

- SoG
 (7.71) orá b-á-gaŋ-g-é ná = ílcá-¹ndóá
 who AFF-3SG.INTR-find-NFUT-TWRD LOC=face-road
 ‘Who did you meet on the road?’

- SoG
 (7.72) á-ó¹rá b-á-íí¹-gá-ʃa
 NOM-who AFF-3SG.INTR-be-NFUT-HIP
 ‘Who is sitting?’

- SoG
 (7.73) â-nts b-a-dú-gá-tsa
 NOM-what AFF-3SG.TR-hurt-NFUT-CL:body
 ‘What made him sick?’

- SoG
 (7.74) nts á-ʔo-gá-ts ná = k’w tógwa
 what 2SG.TR-put-NFUT-BODY LOC=top table
 ‘What did you put on the table?’

SoG

- (7.75) â-nts á-lúngu-gâ
NOM-what 3SG.INTR-shout-NFUT
'What shouted (what made that sound)?'

7.2.1.2 The Affirmative Marker and Negatives

NoG and SoG verbs lack the affirmative marker when the verb is negated. In both NoG and parts of SoG (Kamashi) the negative clitic /=(a)ngó/ attaches to the end of the conjugated verb. In (7.76) affirmative and negative forms of the same verb are used.

NoG

- (7.76) ka=lá-gats'axa=cá ma-a-n-tsóχw-a
COM=GEN-old.days=and NMLZ-RECP-PL-kidnap-NM

b-úú-a-n-ts'óχ zialá = kwê
AFF-3PL.TR-RECP-PL-kidnap now=but

úú-a-n-ts'óχó-na = ngó
3PL.TR-RECP-PL-kidnap-LOC=NEG

'In the old days, they used to kidnap (women) from each other but now they don't kidnap from each other.'

7.2.1.3 Subordinating Prefixes

Certain subordinators in Gumuz occupy the same position on the nonfuture verb as the 'affirmative' prefix. The subordinator 'when, because' / **nágó-**/ (NoG) is mutually exclusive with the affirmative prefix (7.77).

NoG

- (7.77) dua **nágw-á-dú-a** d-á-ka-w-é
child when-3SG.INTR-hurt-? AFF-3SG.INTR-COM-go-TWRD

oba-má
father-3SG.POSS

'When a child is sick, his father comes with him.'

Likewise, the conditional /**k-**/ ‘if’ (NoG) (7.78) and the relativizers /**l-**/ (NoG) (7.79) and /**et(s)-**/ (SoG) (7.80) occupy the first position of the verb and cannot co-occur with the affirmative prefix.

NoG
 (7.78) **k-ágwa-kóχ** ká = máts’á zía mísá
 COND-1PL.INCL.INTR-enter DAT=house now spirit

b-á-ót-an
 AFF-3SG.INTR-EXIST-LOC

‘If we enter a house now, the spirits are there.’

NoG
 (7.79) gam-áts dua **l-á-béʔ-é** ná = já
 know-BODY child REL-3SG.INTR-fall-TWRD ABL=tree
 ‘Look at the child who fell from the tree.’

SoG
 (7.80) beé-ntsá **ets-íí-ga-tjím-agá** tjaapâ?
 skin-what REL-3PL.IMP-INSTR-sew-NFUT shoes
 ‘What skin is it that shoes are sewn with?’

The affirmative prefix is not used on the non-initial (dependent) verbs of a clause chain (7.81).⁹

SoG
 (7.81) b́aga meetáam b-íí-a-mbáá’t-ágá **íí’-t’ó-tsá-ná**
 person one AFF-3PL.TR-RECP-carry-NFUT 3PL.TR-put-body-DEP

ná = ɲéa **íí’-kál-áná** ma-ambán-é-tsa = ɲgó
 LOC=ground 3PL.INTR-say-DEP NEG.IMP-get.up-TWRD-body=NEG

‘Together they carried one person, they put him/her down on the ground, and they said, “Don’t get up!”’.

⁹ The non-initial or dependent (DEP) verbs of clause chains in SoG are marked with /-(á)ná/ in addition to their lack of the affirmative prefix. If the affirmative is added to a non-initial (dependent, non-main) verb, the resulting interpretation is that there is a lag in time between events.

7.2.1.4 Jussive

In Gumuz, the jussive mood relates to commands for third person subjects and is marked by the prefix /n-/. This jussive prefix occupies the same position as the ‘affirmative’ prefix and the two prefixes are mutually exclusive. A verb conjugated in the jussive mood has person marking before the verb root, similar to nonfuture conjugations (see also Chapter XI) (7.82).¹⁰

SoG
(7.82) ef-ájá-c ntára **n-á-zig-ân** dua
wash-2PL.TR-CL1:eye bed JUSS-3SG.INTR-sleep-LOC child
‘Wash the bed (linens) (and) the child shall sleep on it.’

7.2.2. Person / Number

Both person and number are marked on the verb in Gumuz. This is mainly for S and A but can also include O in NoG. All bound pronominals vary in tone according to the valence of the verb stem (see Chapter IV) and indicate person as well as number. The plurals are interpreted as ‘paucal’ (two to four people) in NoG. In order to indicate a larger number of participants in NoG, one must use the ‘greater plural’ suffix in addition to the plural (or singular) form of the bound pronominal. As Chapter IV discusses all the various forms of the bound pronominals, the following sections focus on simultaneous A and O marking in NoG (Section 7.2.2.1), the ‘greater plural’ in NoG (Section 7.2.2.2); and the use of the third person plural form for passive meaning (Section 7.2.2.3).

7.2.2.1 Simultaneous A and O Marking

In NoG it is sometimes possible to mark both the A and the O arguments simultaneously on the verb.¹¹ In SoG this is not possible (see positions in Figures 7.1-7.4).

¹⁰ However, the incorporated dative and the object of the dative follow the verb root in the jussive, which is similar to future tense conjugations (7.124). With first person and second plural imperatives, the person marking is suffixed after the verb root; the verbal construction is thus similar to that of future verbs. The second singular imperative is unmarked for person.

¹¹ Chapter IV “Pronouns” and Section 7.2.3.1 below discuss simultaneous marking of subject with objects of the dative or instrumental prepositions.

Innocenti (2010:94-95) recognized that in Mandura Gumuz, simultaneous marking of A and O was limited to certain combinations, namely 1SG >2SG, 1SG > 2PL, 3SG > 1SG, 3SG > 1PL (inclusive and exclusive), 3SG > 2PL, 1PL EXCL > 2SG, 1PL EXCL > 2PL, 2PL > 1SG, 2PL >1PL EXCL, 3PL > 1SG, 3PL >2SG, 3PL >1PL (inclusive and exclusive), and 3PL > 2PL. I have found the same restrictions in the corpus used for the present study.¹² Clearly, these combinations all involve a speech act participant as either A or O. However, simultaneous addition of A and O bound pronominals to the verb (positions -6 and -5 of Figure 7.1 and positions +2 and +3 of Figure 7.2) appears to be limited to speakers located in Mandura, Dangur and possibly Metemma. Not all Gumuz speakers in the Dibat'e woreda south of Mandura allow simultaneous pronominal marking.¹³

The marking of the O argument on the verb is optional even if it is 1st or 2nd person; and, in fact, is rare in NoG. In the text corpus used for this study, the marking of O is mostly reserved for the third person plural impersonal construction (described in 7.2.2.3 below). Below are some elicited and natural text examples (7.83-7.85). When there is simultaneous A and O marking, I drop the TRANS (transitive) versus INTR (intransitive) glosses, and just label the pronominals 'A' and 'O'. For a full paradigm, refer to Innocenti (2010:94-95).

¹² My findings differ from Innocenti's in one form. One can mark a 1PL INCL A argument acting on the 2PL, even though this should be logically impossible: **dákwaá'jábátʃ** 'We (incl.) hit you all.'. If the 1PL form is inclusive, it should include the 2PL as participants in the action. For this reason, I find my data questionable. However, given that the 'plural' bound pronominals are paucals (2-4 people), perhaps **dákwaá'jábátʃ** could mean 'some of us (incl.) hit some of you'. This issue needs further research.

¹³ Gumuz speakers from the town of Gesas in Dibat'e *wereda* do not allow simultaneous A and O marking on the verb (Travis Williamson, personal communication). My main language consultant from Mandura provided most of the data for simultaneous A and O marking and he has relatives who live in Metemma who speak the same dialect as he does. For this reason, I assume that the dialect spoken in Metemma also has this feature.

NoG

- (7.83) b-ára-6ats'-âz óó-malaakúá nágw-á-káa
AFF-1SG-hide-AW M-malak'u when-3SG.INTR-say

d-éé⁺-ʃ-á-ára-k'w

AFF-FUT-3SG.A-1SG.O-HEAD

'I hid when Melak'u said he would kill me.'¹⁴

NoG

- (7.84) áca nágw-ája-ará⁺-mítʃ-é-k'wá árá⁺-mítʃ = aŋgo
2PL when-2PL.A.1SG.O-defeat-TWRD-HEAD 1SG.INTR-be.angry=NEG

tisák'wá

PAST

'I wasn't angry when you all beat me (at the game).'

NoG

- (7.85) d-íá-á⁺ja-6átʃ
AFF-1PL.EXCL.A-2PL.O-hit
'We (excl.) hit you (pl).'

A number of A > O combinations are not acceptable on the verb in NoG. Most notably absent are combinations with the 2SG and 1PL INCL as A arguments and the third person forms (singular or plural) as O arguments. The 3SG>2SG combination is also unacceptable.¹⁵ The remaining A>O combinations are pragmatically difficult (e.g. 2PL>1PL INCL) and therefore unacceptable as well.

7.2.2.2 Greater Plural

In NoG, the bound plural pronominals are generally interpreted as representing approximately two to four individuals, or 'paucal' (7.86-7.91).¹⁶

¹⁴ For indirect quotations, the verb is conjugated from the perspective of the speaker (similar to English). The verb in (7.83) does not mean 'I will kill' which differs in vowel length and tone from 1SG pronominal of the verb in (7.114).

¹⁵ As 2SG and 3SG bound pronominals are both /a-/ and differ only in tone, this minimal difference would likely be difficult to differentiate if both affixes were juxtaposed on the verb. Also, the reciprocal marker is /a-/ (L tone) and appears to occupy the same position as the O bound pronominal on the NFUT verb. Even though O marking may be mutually exclusive with reciprocal marking, the O clearly occupies a distinct position on the verb, when comparing the NFUT and FUT position class diagrams.

¹⁶ Innocenti (2010: 72-73) concluded that the plural bound pronominals in Mandura are dual. This needs further investigation as two of my Mandura language consultants insisted on a paucal reading and two

NoG

- (7.86) mbáándá бага d-úu-ts
two person AFF-3PL.INTR-go
'Two people went.'

NoG

- (7.87) okáág бага d-úu-ts
three person AFF-3PL.INTR-go
'Three people went.'

NoG

- (7.88) mááχó d-úú-paŋ ma-tsá
3PL AFF-3PL.TR-want NMLZ-go
'They (2-4 people) want to go.'

NoG

- (7.89) tsá-kwa
go-1PL.INCL.INTR
'Let's (incl.) go (few people, usually two).'

NoG

- (7.90) tsá-íla [tsílja]
go-1PL.EXCL.INTR
'Let's (excl.) go (few people, usually two).'

NoG

- (7.91) d-áŋa-ts
AFF-2PL.INTR-go
'You (pl.) went (few people, usually two).'

To indicate a large number of individuals, one must add the 'greater plural' (GP) suffix /-óo/. This suffix can be added to all verbs with plural (subject) pronominals (7.92-7.96), as well as to verbs with the 3SG (subject) pronominal (7.95a). The latter construction is equivalent in meaning to the 3PL + GP person/number marking (7.95b).

others from Mandura insisted on a dual reading. Texts reveal that paucal can represent more than four people (see examples 7.96-7.97). Therefore, 'greater plural' may simply be a semantically relative category. Furthermore, other speakers of NoG have confirmed that what I label as a 3PL bound pronominal does not indicate dual number (Travis Williamson, personal communication).

NoG
 (7.92) d-úú-⁴ts-óo á-ḃaga ká = gááné
 AFF-3PL.INTR-go-GP NOM-person DAT=there
 ‘Many people went there.’

NoG
 (7.93) tsá-óo-kwa
 go-GP-1PL.INCL
 ‘Let’s go (incl., many).’

NoG
 (7.94) tsá-óo-íla [tsúúlja]
 go-GP-1PL.EXCL
 ‘Let’s go (excl., many).’

NoG
 (7.95) d-ája-ts-óo
 AFF-2PL-go-GP
 ‘You (all) went (many).’

NoG
 (7.96) a. mááχó d-a-paŋ-óo ma-tsá
 3PL AFF-3SG.TR-want-GP NMLZ-go
 ‘They (many) want to go.’
 b. mááχó d-úú-paŋ-óo ma-tsá
 3PL AFF-3PL.TR-want-GP NMLZ-go
 ‘They (many) want to go.’

In texts, the 3PL subject marker clearly indicates a ‘paucal’, while the ‘greater plural’ indicates ‘many’. In the text excerpt about a wedding in (7.97), the ‘paucal’ indicates a number much greater than four people,¹⁷ but less than that indicated by the ‘greater plural’, which is used for the invited guests (7.98).¹⁸

¹⁷ If the ‘greater plural’ were used for ‘smear’, the /o/ would be long. The /o/ in **ko-ts** ‘smear’ of (7.96), however, is clearly short and is realized as the allophone of short /o/, [wə], as in [d-úú-gə-**kwə-ts**]. It may be that the ‘paucal’ (meaning two to four individuals) is applicable here if one considers that the red ochre wasn’t smeared on the girl by everyone mentioned all at once.

¹⁸ Another possible reason for using the ‘greater plural’ here may be to distinguish between the two 3PL referents - those fixing the meal as opposed to the guests.

NoG

(7.97) á-mé-éé-má á-mé-é⁺fá-tʃáámba-má
NOM-PL-mother-3SG.POSS NOM-PL-wife-uncle-3SG.POSS

á-mó-ó⁺ʔó-má á-má-maatsá-má
NOM-PL- older.sister-3SG.POSS NOM-PL-younger.sister-3SG.POSS

d-úú-ga-kó-ts ka = dúwéʔá koóó-má
AFF-3PL.TR-INSTR-smear-CL:body INSTR=red.ochre all-3SG.POSS

‘Her mothers, her uncles’ wives, her older sisters, her younger sisters all smeared her with red ochre.’

(7.98) ...d-úú-ká-c ká = ʔaga láná ká = l-úú-⁺χád-é-a
AFF-3PL-DAT-give DAT=person MED DAT=3PL.TR-call-TWRD-?

láná; meʔa = lí χosa = lí d-úú-ká-ʃaχ
MED goat=CONJ bovine= CONJ AFF-DAT-slaughter

d-úú-gá-c d-a-s-óo
AFF-3PL.TR-DAT-give AFF-3SG.TR-eat-GP

‘They gave to these people, to those they invited. They slaughtered both goats and cattle for them, they gave to them and they ate.’

7.2.2.3 Third Person Plural as Passive

Passive voice in Gumuz is generally expressed via the third person plural impersonal (3PL IMP) construction. Cross-linguistically, 3PL IMP subject marking differs from non-impersonal third person plural subject marking in two ways: 1) the impersonal construction lacks an overt antecedent in the preceding discourse; and 2) the impersonal construction is typically a phonologically (or morpho-phonologically) reduced form of the 3PL anaphoric form (Siewierska 2010:75). In Gumuz, any 3PL mention in the 3PL IMP construction is non-referential, but is identical in form to referential 3PL subject marking. That is, the impersonal is not a reduced form of the 3PL; the two can be distinguished only by context.

The 3PL impersonal construction is readily identified in constructs meaning ‘be born’ (7.99), ‘be called’(7.100), ‘be made of’(7.101). In all Gumuz impersonal

- SoG
 (7.103) f-ííl dá etsá-b-íí-fá-gâ-n aja
 drink-BELLY thing REL-AFF-3PL.IMP-drink-NFUT-LOC water
 ‘Drink/suck from the thing that water is drunk from.’

The 3PL IMP construction is also often used with simultaneous A and O pronominal marking on the verb. In example (7.104), it is clear that there is no referential 3PL as the text was taken from describes two people competing at a game of Mancala. When one of them loses, the loser makes the exclamation given. As there is only one other person involved (the winner), the plural A marking on the verb can only be referring to a non-referential ‘they’ which is functionally a passive.

- NoG
 (7.104) nágú-úá-á+rá-mítʃ-ák'wá nts-ée-kiʃ-á
 when-3PL.IMP-1SG.O-defeat-HEAD what-FUT-be.better-3SG.INTR

 ma-sá-ŋga d-ée-kiʃ-á
 NMLZ-eat-food AFF-FUT-be.better-3SG.INTR
 ‘When I am defeated what is better? To eat is better.’

7.2.3. Incorporated Prepositions

There are three incorporable prepositions in Gumuz: **ká** DATIVE/BENEFACTIVE, **ka** INSTRUMENTAL/COMITATIVE, and **/(n(a))/** LOCATIVE. These are (nearly) identical in form to the clitic prepositions (Chapter V). The DATIVE and INSTRUMENTAL occupy the same position on the verb¹⁹, though the position varies according to tense: in the nonfuture tense these are prefixes, and in the future tense, these are suffixes. The LOCATIVE is always a suffix. All three incorporated prepositions index oblique arguments on the verb. This will be defended below.

¹⁹ There exists one known exception in which the verb of a relative clause in SoG is marked for both dative and instrumental/committative incorporated prepositions (see example 10.52 of Chapter X).

7.2.3.1 Incorporated Dative and Instrumental

The incorporated Dative/Benefactive **ká** and Instrumental/Comitative **ka** occupy the same position on the verb: prefixes in the nonfuture tense and suffixes in the future tense. On first glance, one might be tempted to analyze the dative and instrumental incorporated prepositions in Gumuz as “applicatives”. Incorporated prepositions in at least one other Ethiopian language (Amharic, Ethio-Semitic) have been analyzed as such (Mengistu 2000: 321-322). However, applicatives prototypically result in an otherwise peripheral argument of the verb being coded as a core argument (Petersen 2007:1, Croft 1994: 95-96). One cannot label these incorporated prepositions in Gumuz “applicatives”. According to the data at hand, these incorporated prepositions merely index an oblique argument of the verb and there is no change in valency in that the oblique is not “promoted” to that of direct object. In most instances, the oblique argument remains in a prepositional phrase.²⁰ In examples (7.105) and (7.106), the oblique arguments ‘to the child’ and ‘with a megaphone’ remain part of a prepositional phrase and do not have O argument status. These obliques are not overtly required. However, there does exist a definite null instantiation of the participant (see Chapter X for discussion).

- NoG
(7.105) d-a-**ká**-ŋgash-áts **ká = dua**
AFF-3SG.TR-speak-BODY DAT-child
‘He said (something) to the child.’
- NoG
(7.106) d-a-**ka**-ŋgaf-áts **ka = lekarfóna**
AFF-3SG.TR-INSTR-speak-BODY INSTR=megaphone
‘He said (something) through a megaphone.’

The incorporated preposition **ká** can also mark a benefactive oblique on the verb. As seen in (7.107), the imperative verb has the same relative order of morphemes as future tense verbs (Figure 7.4), but lacks tense marking (and person marking for singular). The verb stem ‘get engaged’ in (7.107) is comprised of the verb root **jîr** ‘see’ and the

²⁰ However, if one considers that marking an argument on the verb increases the verbal valence, then, of course, these are valence-increasing operations. See discussion in Chapter X, section 10.4.1)

incorporated noun /-(a)ts/ ‘body’. When **ká** is added, the meaning is benefactive: ‘get engaged for him’ (because the person cannot be present). This can be contrasted with the instrumental **ka** on the same verb stem (7.108). Both obliques cannot be marked simultaneously on the verb.

- (7.107) SoG
 jîr-**gá**-ts
 see-BEN-BODY
 ‘Get engaged for him.’ (because he can’t be present)

- (7.108) SoG
 jîr-**ka**-ts
 see-INSTR-BODY
 ‘Get engaged by using a symbol (like an armband).’

If the object of the dative or instrumental incorporated preposition is understood (as in 7.107, 7.108) or was previously mentioned in a text, there need not be an external free prepositional phrase in addition to the verbal marking within the same clause. In (7.109), the people preparing the feast were previously mentioned, as were the guests. Thus, the identity of the guests for whom the animals were being slaughtered and to whom the meat was being given are understood via context.

- (7.109) NoG
 meʔa=lí ɣosa=lí d-úú-**ká**-ʃaɣ
 goat=CONJ bovine=CONJ AFF-3PL.TR-BEN-slaughter

d-úú-**ká**-c d-a-s-óo
 AFF-3PL.TR-DAT-give AFF-3SG.TR-eat-GPL

‘They slaughtered both goats and cattle **for them**; they gave them **to them** and they ate.’

The incorporated preposition **ka** (low tone) can convey comitative or “accompaniment” meaning. In the story from which (7.110) comes, a boy speared a hippopotamus and the hippopotamus still had the spear in its side when it ran into the

water. The verb ‘arrive’ is marked with **ka-** (7.110) to indicate that the hippo *arrived with the spear* (‘arrive’ is comprised of the verb root **da** ‘do’ and the IN /-ʃ/ ‘hip’).

- SoG
 (7.110) b-á-dǎ-ká ncá b-á-**ka**-da-ká-á-ʃ
 AFF-3SG.INTR-go-NFUT hippo AFF-3SG.INTR-COM-do-NFUT-MV-HIP

ka = múŋwá ká = ílǎ-ája
 COM=spear DAT=BELLY-water
 ‘The hippo went and **arrived with the spear** in the water.’

While the comitative semantics for **ka** is mostly found with intransitive verb stems (7.109), and the instrumental semantics with transitive verb stems, the comitative is also possible for transitive verbs (7.111). Likewise, the instrumental sense of **ka** can surface with intransitive verb stems (7.112). However, this may be a matter of interpretation, as ‘music’ in (7.112) could be construed as an instrument with which to dance or as something which accompanies the dancing (comitative).

- SoG (proverb)
 (7.111) íi-**ga**-fǎ-gá = ŋ¹gó kea **ka = bozana-má**
 3PL.TR-COM-drink-NFUT=NEG beer COM=dregs-3SG.POSS
 ‘One doesn’t drink both the dregs and the beer together.’
 lit: ‘One doesn’t drink beer with its dregs.’

- SoG
 (7.112) b-íi-**ga**-háko-gá-ʃ **ka = ge-ʔé-á**
 AFF-3PL.INTR-INSTR-dance-NFUT-hip INSTR=NMLZ2-sing-NM
 ‘They danced to the music holding the waist of another.’

In the future tense, the dative and instrumental incorporated prepositions are suffixed to the verb stem, after the bound subject pronominal and before the incorporated noun (7.113-7.115).

- SoG
 (7.113) káma-ŋgaʃ-úú-**gá**-ts
 FUT-speak-3PL.TR-DAT-BODY
 ‘They will tell something to someone.’
- NoG
 (7.114) ndê cal-é-k’w aja
 mother.1SG.Poss pour-TWRD-CL1:head water
- ée-ʔaf-ára-**ka**-áts
 FUT-wash-1SG.INTR-INSTR-CL:body
 ‘Mom, pour water and I will bathe with it.’

- SoG
 (7.115) má⁺-k’óʃ-ára-**ga** âm
 FUT-stab-1SG.TR-INSTR 2SG
- ka = tʃál-óó⁺dá-matá-mía-ko
 INSTR=claw-M:NH-chicken-mother’s.brother-1SG.POSS
 ‘I will stab you with my uncle’s rooster’s claw.’

The incorporated dative can indicate reason or cause. As question words/phrases denoting reason or cause are formed with a dative prepositional phrase, the incorporated preposition appears to index these causal obliques. The dative preposition is used as part of a complex word used to express ‘why?’ and ‘because’ **ká-ts(á)** / **kâ-nts(á)** (for what?). Consider the questions (a) and respective responses (b) in (7.116) and (7.117). The dative /**ká**-/ of the question word corresponds to the dative suffix on the verb in both (7.116a) and (7.117a). Likewise, the dative form in the answer, whether as part of the purposive (7.116b) or part of the question word, correlates to the dative affix on the verb of the question. Alternatively, the dative form is part of the repeated “question word” in the answer with the meaning ‘because’ (7.117b).

- NoG
 (7.116)a. **kâ**-nts ée-ts-a-**gá**?
 DAT-what FUT-go-2SG.INTR-DAT
 ‘Why are you going?’

- b. **ká**-gu-m-kod-á norága
 DAT-PLACE-NMLZ-buy-NM notebook
 ‘To buy a notebook.’

NoG

- (7.117)a. d-á-káa bwá ká = méáwa **ká**-nts
 AFF-3SG.INTR-say rat DAT=cat DAT-what

ée-s-á-**ká** ára?
 FUT-eat-2SG.TR-DAT 1SG
 ‘Rat said, «Why are you going to eat me?»’

- b. d-á-káa méáwa **ká**-nts-é d-á-ka-ʃ
 AFF-3SG.INTR-say cat DAT-what-? AFF-3SG.INTR-INSTR-die

íílá-ma ka = k’óba
 belly-1SG.POSS INSTR=hunger
 ‘Cat said, «I’m going to eat you because I’m dying of hunger.»’

Similar use of the dative on both the question word and the verb to denote reason is found in SoG. In (7.118a) /ká-/ [gá-] occurs on the verb and correlates with /ká-/ prepositional element of the question word ‘why?’ Again, the dative prefix occurs on the verb in the answer, indicating ‘because’ (7.118 b, 7.119).

SoG

- (7.118)a. **ká**-n^htsá b-é-á-**gá**-tsá-tsa?
 DAT-what AFF-RPST-2SG.TR-go-BODY
 ‘Why did you go?’ (remote past)

- b. **ká**-ts-e dua b-ár-**gá**-tsá-tsa
 DAT-what-? child AFF-1SG.INTR-DAT-go-BODY
 ‘I went because of the child (he was sick, e.g.)’

SoG

- (7.119) b-ár-**gá**-dú-gá-á-ts **ká**-ats-ê
 AFF-1SG.TR-DAT-sicken-NFUT-MV-CL:body DAT-what-?

b-ár^h-tsá-gá ná = cá-gidida **ká** = íí-ga-tʃá
 AFF-1SG.INTR-go-NFUT LOC=CL1:eye-cold DAT=BELLY-NMLZ2-pour
 ‘I got sick because I went to the river in the cold.’

In some instances, it is possible for the dative/benefactive preposition as well as the object of the dative/benefactive to occur simultaneously on the verb. In (7.120), the intransitive verb stem **pá-ts** ‘go out, emerge’ takes the incorporated dative /ká-/ along with the object of the benefactive /íla-/ 1PL inclusive. The fully inflected verb means ‘it came out well for us’. Similarly, in (7.121) the verb incorporates the dative preposition along with the object of the preposition ‘me’ with the meaning ‘it is heavy for me.’

- NoG
 (7.120) íla d-íla-gááχ-é ná = maŋgwá lá
 1PL.INCL AFF-1PL.INCL-work-TWRD LOC=morrow PROX
 d-á-⁴**k-íla**-pá-ts ka = ma-gáχ-ámá
 AFF-3SG.INTR-DAT-1PL.INCL INSTR=NMLZ-be.good-IP:MOD
 ‘We worked this morning and it came out well for us.’

- NoG
 (7.121) ára ée-kaal-da = ŋgó ma-tsá batʃa
 1SG FUT-be.able-1SG.INTR=NEG NMLZ-go meat
 d-á-**k-áda**-fi?
 AFF-3SG.INTR-DAT-1SG-be.heavy
 ‘I cannot go; the meat is heavy **for me**.’

For transitive verbs (in NoG), if the dative is marked on the verb simultaneously with the object and subject, the dative follows the pronominal marking in both the nonfuture and future tenses (7.122-7.123).²¹

²¹ The intransitive verb forms from (7.120, 7.121) were from a different consultant than the transitive verb forms in (7.122, 7.123). Both consultants are from the Mandura area but the differences could be due to dialect nonetheless. The incorporated dative with object form is yet again slightly different in Innocenti’s Grammar of Mandura, where the incorporated dative is repeated at the end of the future tense verb: *d-e-ç-ə-r-açə-kə-ka* AFF-FUT-give-1SG-2PL-DAT-DAT (parsing is my own) ‘I will give to you all’ (2010: 89). This repeated dative is also found in verbal stems comprised of a verb root and an incorporated noun in which the incorporated noun is found word-finally and not contiguous with the root verifying that the two dative morphemes are indeed part of the verb: *e-ç-’ək-ə-r-açə-kə-ka-s?* FUT-release-1SG-2PL-DAT-DAT-MOUTH (parsing my own) ‘Shall I release for you?’ Innocenti provides another variation of this same verb in which the two incorporated datives exhibit yet another order: *e-c-’ək-’ə-r-k-acə-ka-s?* (2010: 90).

- NoG
 (7.122) d-**árá-ája-gá**-cá-3 = tsô
 AFF-1SG.ERG-2PL.ABS-DAT-give-PERF=FOC
 ‘I have already given to you all.’

- NoG
 (7.123) d-é¹-cá-**rá-ája-gá**
 AFF-FUT-give-1SG.ERG-2PL.ABS-DAT
 ‘I will give to you all.’

In SoG, simultaneous incorporation of the dative and marking of the object of the dative appears to be restricted to the imperative and jussive verb constructions (7.124, 7.125),²² and verbs conjugated in the future tense which function as commands (7.126).²³

- SoG
 (7.124) kór-ája-**gá-ár-é**-s máts’á
 open-2PL.TR-BEN-1SG-TWRD-MOUTH house
 ‘(2P) Please open the house for me.’

- SoG
 (7.125) n-a-kóra-**gá-íla**-s máts’á
 JUSS-3SG.TR-open-BEN-1PL.EXCL-MOUTH house
 ‘Let him open the house for us.’

- SoG
 (7.126) kám-ti-**gá-ár-é**-s
 FUT-order-DAT-1SG-TWRD-MOUTH
 ‘You will/should show me.’

When the dative preposition and the object of the dative are both incorporated into the verb, a prepositional phrase expressing the same dative and object never co-occurs in the same clause. Thus, in terms of expression of free NP or PP “arguments,” incorporation of the dative plus its object does indeed change the valence of the verb. A

²² The jussive construction does not follow the relative order of morphemes for the nonfuture or future tense verbs in that subject (A/S) marking occurs before the verb root but incorporated prepositions occur after the verb root. See Chapter XI for further description of Jussives.

²³ I am assuming that the final /g/ of **tig** ‘order, tell’ in (7.127) has been deleted due to haplology as the final /g/ would be otherwise contiguous with the dative. This assumption is also based on the free variation that exists in a similar imperative form: **tiga-gá-ár-é-s** ~ **ti-gá-ár-é-s** ‘Show me.’

change in valency can also occur when incorporating the instrumental preposition with certain transitive verb roots (7.128-7.130). This results in the backgrounding of what could otherwise be expressed as a free O argument. In other words, a transitive root such as ‘throw’ can have either a THEME (the object in motion) or a GOAL (the affected target of the verb) as the O argument. If no GOAL is expressed, the THEME is the O argument. However, when a GOAL is expressed, the GOAL must be marked as the O argument and the THEME is part of an instrumental prepositional phrase. In (7.127), the O argument, ‘monkey’ (the GOAL), who was the cause of the baboon’s ire in the narrative, is implied. The same verb root without the incorporated instrumental can be used transitively to treat the THEME as an O argument (7.128). This verb root can also be expressed as a simple transitive with no overtly expressed THEME or GOAL (7.129).

NoG

- (7.127) daája d-a-**ka**-fîm **ka = anza-má**
 baboon AFF-3SG.TR-INSTR-throw INSTR=feces-3SG.POSS
 ‘The baboon threw (at the monkey) with feces.’

- (7.128) daája d-a-fîm anza-má
 baboon AFF-3SG.TR-throw feces-3SG.POSS
 ‘The baboon threw his feces.’

- (7.129) d-a-fîm
 AFF-3SG.TR-throw
 ‘S/he threw (something).’

Likewise, in (7.130), the verb **oááj** ‘throw’ takes the GOAL **ŋawá** ‘hyena’ as the O argument and the THEME **ŋéa** ‘dirt’ is part of an instrumental prepositional phrase, which is also indexed on the verb by the incorporated instrumental /**ka-**/ [**ga-**].

SoG

- (7.130) gotaaha b-a-**ga**-oáásh-agá-líc ŋawá **ka = ŋéa**
 hare AFF-3SG.TR-INSTR-throw-NFUT-eye hyena INSTR=dirt
 ‘The hare threw dirt into the hyena’s eyes.’
 lit: ‘The hare eye-threw the hyena with dirt.’

Other transitive roots in Gumuz which can have either a THEME or a GOAL as O arguments incorporate the instrumental in order to express both arguments: the GOAL

marked as an O and the THEME as an instrumental oblique; Consider ‘shoot’, ‘pour’ and ‘spit’(7.131-8-133).

- NoG
 (7.131) **ɓaga d-a-ka-tíi-ʃ ka-dɔgwa**
 person AFF-3SG.TR-INSTR-shoot-HIP INSTR-bow
 éétiriká d-á-ʃ
 anteater AFF-3SG.INTR-die
 ‘The person shot the anteater with a bow and it died.’
- NoG
 (7.132) ...káma-n-taχ-úú-**ga** ná = ɓaga-má **ka = aja**
 PURP-PL-pour-3PL.TR-INSTR LOC=body-3SG.POSS INSTR=water
 ‘...in order for them to pour water on his body’
 lit: ‘...in order for them to pour (him) with water on his body.’
- NoG
 (7.133) gáanza dua d-a-**ga-t’ak’-álúk’w** **ka = gat’ak’óá**
 elder child AFF-3SG.TR-INSTR-spit-head INSTR=saliva
 ‘The elder spat on the child’s head (as a blessing).’
 lit: ‘The elder head-spat the child with saliva.’

7.2.3.2 Incorporated Locative/Ablative

The locative/ablative preposition **ná** is incorporated as a suffix /-(a)n/ in the final position of the verb in Gumuz. In NoG, its function appears to be limited to indexing a location, with a few exceptions. In SoG, on the other hand, it has grammaticalized as a past perfect aspect marker, in addition to its function of marking a location on the verb.

In (7.134), /-(a)n/ indexes the ablative prepositional phrase ‘from the anteater house’. However, indexing of locative/ ablative prepositional phrases on the verb is not obligatory.

NoG
 (7.134) jaχants'á d-úú-pá-tsa-3-an
 porcupine AFF-3PL.TR-emerge-BODY:REFL-AW-ABL

ná = máts'éétaraká
 ABL=house-anteater
 'Porcupine went out from the anteater house.'

SoG
 (7.135) ŋga b-ár-sá-gá-an **ná = sááníá**
 food AFF-1SG.TR-eat-NFUT-ABL ABL=plate
 'I ate food from/on a plate.'

The locative/ablative can also reference an implied or previously mentioned argument. For example, in (7.136) the O argument 'clothes of the dead people' becomes the implied object of the locative preposition when indexed on the verb of the following purpose clause: 'in order to sleep *on*'. Likewise, in (7.137) 'big tree' is the O argument of the verb 'find' and the locative marked on the following verb 'climb (intransitive)' refers back to this argument, not as an O, but as a locative.

NoG
 (7.136) baangá b-a-ŋar-ák`w **axwa lá-dáá-¹má-ǰá**
 monitor.lizard AFF-3SG.TR-take-HEAD clothes GEN-PRO.PL-NMLZ-die

má-3ij-an
 PURP-sleep-LOC

'Monitor lizard took the clothes of the dead people *in order to sleep on them*.'

NoG
 (7.137) d-úú-gam **oob-átsa ǰá** d-á-toko-n
 AFF-3PL.TR-find big-BODY tree AFF-3SG.INTR-climb-LOC

á-baangá
 NOM-monitor.lizard

'They found a big tree and *monitor lizard climbed up on it*.'

A similar use of the locative suffix is found in SoG. In (7.138), both the dative incorporated preposition as well as the locative incorporated preposition refer back to previously mentioned arguments. Both the person to whom they showed the food and the golden bowl on which the food was placed are indexed on the verb ‘show, present’.

- SoG
 (7.138) b-íí-ŋar-ká-é-k’w **lagáda sóŋwá**
 AFF-3PL.TR-take-NFUT-TWRD-HEAD bowl metal

 b-íí-ká-tak-agá-ts-**ân** ŋga
 AFF-3PL.TR-DAT-present-NFUT-BODY-LOC food

‘They took the golden bowl and *they presented the food to him on it.*’

The incorporated locative has also grammaticalized as a perfect aspect marker. This is evidenced in the fact that the translation of certain verbs/clauses out of context is ambiguous. In example (7.139), the translation can either be ‘I drank water from it’ or ‘I have drunk water’.

- SoG
 (7.139) aja b-ár-fá-gá-**an**
 water AFF-1SG.TR-drink-NFUT-ABL/PRF2
 ‘I drank water from it.’ ~ ‘I have drunk water.’

The grammaticalization of the incorporated locative/ablative most likely originates with the marking of past time using a locative/ablative prepositional phrase. A locative entity is eligible to be marked on the verb. While /-(a)n/ does not clearly mark aspect in NoG, it is possible to index on the verb a locative referring to past time. This does not necessarily mean that the locative indicates past time but merely that it can cross-reference an oblique referring to past time, just as it can cross-reference an oblique introduced with the locative/ablative preposition.

NoG
 (7.140) **ná = maak'úsa gizá** ka = lá-gátsáχa kea
 LOC=five year COM=GEN-old.days beer

d-ára-f-an ílá-meetáa-k'w
 AFF-1SG.TR-drink-LOC BELLY-one-HEAD

'Five years ago, I drank (local) beer for the first time.'

7.2.4. Uncertainty

In order to indicate uncertainty about the veracity of an assertion in Gumuz (both NoG and SoG), one uses the prefix /**de-**/ (7.141, 7.142). This prefix is limited to the NFUT verb stem.

NoG
 (7.141) d-á-**de**-ot-ân ná = máts'á
 AFF-3SG.INTR-UNC-EXIST-LOC LOC=house
 'Maybe he's at home.'

SoG
 (7.142) b-á-**de**-kála-gá
 AFF-3SG.INTR-UNC-say-NFUT
 'Maybe he said (that).'

The uncertainty prefix usually occurs before the incorporated prepositions /**ka-**/ and /**ká-**/ in the nonfuture verb form (7.143). However, it is also possible to have the incorporated instrumental precede the uncertainty prefix in NoG (7.144).

NoG
 (7.143) d-á-**de**-ka-ts
 AFF-3SG-.INTR-UNC-INSTR-go
 'Maybe he left with it.'

NoG
 (7.144) d-úú-ka-**de**-ʔóa ár-gam = anǵó
 AFF-3PL.IMP-INSTR-UNC-call 1SG.TR-know=NEG
 'Maybe it is named after...I don't know.'
 (explanation about where one Gumuz clan got their name.)

7.2.5. Tense

Two tenses shared by the NoG and SoG dialects of Gumuz: nonfuture and future. In SoG, there exists a third tense: remote past. The future tense is morphologically marked in both dialects but nonfuture remains unmarked in NoG.

7.2.5.1 Nonfuture

I use the term ‘nonfuture’ for the same morphological form that Uzar (1989) calls ‘present-past’. The ‘nonfuture’ tense represents events that took place in the past (or more recent past for SoG) or that began in the past and are not necessarily completed in the present. The ‘nonfuture’ is marked with /-**gá**/ or /-**ká**/ in SoG and is left unmarked in NoG. This tense mainly indicates past events (7.145, 7.146). However, it is also used with verbs like ‘be’ and ‘have’ to indicate states in the present (7.147, 7.148). In addition, the nonfuture tense is used in proverbs and sayings (7.150) or clauses indicating habitual actions that are true for the present (7.149).

- NoG
(7.145) námágaaziga d-árá-f
yesterday AFF-1SG.TR-drink
‘Yesterday, I drank (something).’

- SoG
(7.146) nán^hgáázig b-ár-fá-**gá** aja
yesterday AFF-1SG.TR-drink-**NFUT** water
‘Yesterday, I drank water.’

- NoG
(7.147) ná = adis ababá d-ár-ot
LOC=Addis.Ababa AFF-1SG.INTR-EXIST
‘I am in Addis Ababa.’

- SoG
(7.148) ára b-ár-tj^há-**gá** norága
1SG AFF-1SG.TR-have-**NFUT** book
‘I have a book.’

- NoG
 (7.149) ka = lá-gatsaxa b-áko-n-ts ka = ɓaga-ákwa ...
 COM=GEN-old.days AFF-1PL.INCL-PL-go COM=body-1PL.INCL.POSS

zialá = kwê b-ókó⁺-ʔís-áts **axwa**
 now=but AFF-1PL.INCL.TR-wear-body clothes

‘In the old days we went around naked... *but now we wear clothes.*’

- SoG (Proverb)
 (7.150) á-dugu-**gá**-c = anjó ája ná = gatjá ká = móá
 3SG-run-NFUT-CL1:eye=NEG water ABL=down DAT=up
 ‘Water doesn’t flow from bottom to top.’

7.2.5.2 Future

The future tense is marked quite distinctly in NoG and SoG. In NoG, it is marked with the prefix /**éé`**-/ or /**éé**-/ (7.151); while in SoG, it is marked with the prefix /**kám`**-/ (7.152).²⁴

- NoG
 (7.151) d-**éé⁺**-f-ára kámáángwá
 AFF-FUT-drink-1SG.TR tomorrow
 ‘I will drink (something) tomorrow.’

- SoG
 (7.152) **kám⁺**-f-ára
 FUT-drink-1SG.TR
 ‘I will drink (something).’

Other allomorphs of the future prefix in SoG are [**má`**-] (7.153) and [**ká`**-] (7.154).

- SoG
 (7.153) ó-ó⁺rá **má⁺**-gás-ak’w ká = ára
 NOM-who FUT-hear-HEAD DAT=1SG
 ‘Who will listen to me?’

²⁴ This prefix is historically a combination of the dative preposition /**ká**=/ and the (deverbal) nominalizing prefix /**ma**-. It is homophonous with the purposive prefix which exists in both NoG and SoG.

- SoG
 (7.154) kamatúk'w nga **ká**⁺-s-ára
 tomorrow porridge FUT-eat-1SG.TR
 'Tomorrow I will eat porridge.'

In NoG, there is a form identical to the SoG future tense prefix; In NoG it indicates immediate future (7.155). For the immediate future, one cannot use the affirmative prefix /**d**-/ as one can with the future tense prefix.

- NoG
 (7.155) **kám**⁺-s-ára nga
 IM.FUT-eat-1SG.TR porridge
 'I'm about to eat porridge.'

7.2.5.3 Remote Past

In SoG, the prefix /**é**-/ is used on verbs for events taking place in the remote past (7.156). This prefix is mutually exclusive with the nonfuture suffix /-**gá**/.

- SoG
 (7.156) ts'íná etsá-b-**é**-é⁺tʃá á-gumûz ná = gátsaŋa
 story REL-AFF-**R.PAST**-3SG.TR-have NOM-Gumuz LOC=old.days
 'A story that the Gumuz had in the old days...'

7.2.6. Middle Voice

The term “middle voice” has been used to describe a variety of constructions in the literature (Kemmer 1993, Klaiman 1991, Dixon and Aikhenvald 2000, Givón 2001). I use the term middle voice to refer to a verbal construction which consists of a single argument that is semantically a PATIENT or THEME, but formally shares properties of both S and O arguments. Following Givón's (2001: 116) definition of middle voice, the semantic focus of the Middle Voice Construction in Gumuz has been shifted away from the AGENT toward a change or resulting state of the PATIENT/THEME.

7.2.6.1 Middle Versus Other Voice Constructions

Middle voice is marked with an /-(**á**)**á**/ suffix in both NoG and SoG. The Middle Voice Construction takes a verb stem with a single argument (S). In addition, the verb

the non-middle construction – the free NP argument is formally ‘nominative’ in that it is coreferenced as an S/A argument by the bound pronominal on the verb (7.161) and can take nominative case marking. The intransitive verb root can combine with an IN/CL to form a transitive stem (7.162). This new stem can then take the Middle Voice suffix which once again renders it intransitive (7.163). The difference between (7.161) and (7.163) appears to be that the IN/CL of the Middle Voice construction emphasizes the extent of the sickness (see Chapter 8).

NoG
 (7.161) ára d-ár⁺-dú
 1SG AFF-1SG.INTR-be.sick
 ‘I am sick.’

NoG
 (7.162) óó-báámítá etá-l-á⁺-dú-tsa ajá = tso
 M-Bamita PRO.SG-REL-3SG.TR-be.sick-body water=FOC
 ‘What made Bamita sick was the water.’

NoG
 (7.163) ára d-ár⁺-dú-áá-ts
 1SG AFF-1SG.INTR-be.sick-MV-body
 ‘I am (very) sick.’

A similar example for SoG is (7.164) with the verb root ‘die’ *ǰá*; the IN /-k⁺w(a)/ ‘head’ is added to create the causative/transitive verb stem ‘kill’ *ǰá-k⁺w* (7.165). When the middle voice marker is added, the resulting meaning is again ‘die’ (7.166). In contrast, to make the transitive verb stem passive, it is necessary to use the 3PL Impersonal Construction (7.167).

ACTIVE-INTRANSITIVE
 SoG
 (7.164) gáánza b-á-ǰá-gá
 elder AFF-3SG.INTR-die-NFUT
 ‘The elder died.’

ACTIVE -TRANSITIVE

SoG

- (7.165) m⁴mám b-íi-ǰá-gá-k'w maǰá ʔá
 3PL AFF-3PL.TR-die-NFUT-HEAD guy MED
 'They killed the guy.'

MIDDLE

SoG

- (7.166) maǰá = áŋ bala-ma-tǰá-gá dua meetáa
 guy=MED AFF-3SG.TR-NEG.REAL -NMLZ-have-NFUT child one

b-é-é-ǰá-á-k'wa

AFF-R.PST-3SG-die-MV-HEAD

'The guy died without having one child.'

3PL IMPERSONAL

SoG

- (7.167) á b-íi-ǰá-gá-k'w
 3SG AFF-3PL.IMP-die-NFUT-HEAD
 'He was killed.'

In most examples of the Gumuz Middle Voice Construction, the middle voice affix indicates that the IN/CL cross-references an S argument instead of an O argument. In some examples, such as with the verb root **nzíí** 'be green, be unripe, be wet' in (7.168-7.170), there exists no known transitive stem. However, the 3SG subject pronominal carries L tone for the Middle Voice Construction, which in active clauses indicates transitivity.

NoG

- (7.168) táák'á d-á-nzíí
 sorghum AFF-3SG. INTR-be.green
 'The sorghum isn't ripe.'

NoG

- (7.169) táák'á d-a-nzíí-áá-líc
 sorghum AFF-3SG.TR-be.green-MV-EYE
 The sorghum seeds aren't ripe.'

- NoG
 (7.170) bartukáana d-a-nzíí-áá-lúk'w
 orange AFF-3SG.TR-be.green-MV-CL2:HEAD
 'The oranges aren't ripe.'

In NoG the free NP S argument of a Middle Voice Construction cannot take nominative case marking (7.171b), unlike other S arguments (7.171a). However, in SoG, the S argument can sometimes take nominative case (7.172).²⁵

- NoG
 (7.171) a. d-á-fag á-maatsá-ma
 AFF-3SG.INTR-grow NOM-younger.brother-1SG.POSS
 'My younger brother grew.'
 b. d-a-fag-áá-k'w maatsá-ma
 AFF-3SG.TR-grow-MV-HEAD younger.brother-1SG.POSS
 'My younger brother grew tall.' (or 'grew up')

- SoG
 (7.172) b-a-gaaʃ-agá-á-k'w á-saŋa
 AFF-3SG.grind-NFUT-MV-CL1:head NOM-salt
 'The salt was easily ground.'

The Middle Voice Construction in Gumuz has characteristics of a non-promotional passive. In most examples, the S argument is marked as an O in that the free NP does not take nominative case when it follows the verb. Also, the S Argument which has the role of PATIENT/THEME maintains this semantic role and often does not share any characteristics of an AGENT, which is characteristic of middle voice constructions in that the semantics of middles are often related to the semantics of reflexives (Kemmer 1993:15, Givon 2001).

- SoG
 (7.173) a. b-a-kod-agá-k'w mátá
 AFF-3SG.TR-buy-NFUT-HEAD chicken
 'He sold a chicken.'

²⁵ It is thus far not clear why certain S arguments with middle voice marking on the verb in SoG can take nominative case and others cannot.

SoG

- b. b-a-kod-agá-á-k'w m'atá
AFF-3SG.TR-buy-NFUT-MV-HEAD chicken
'A chicken was sold.'

7.2.6.2 Middle Versus Reflexive Constructions

In Gumuz, the Reflexive and Middle Voice constructions are distinct. To express a reflexive, one can use a transitive clause with the word 'body' or a particular body part term with a possessive suffix coreferential with the A argument (7.174a); or with certain verbs (e.g. body-grooming verbs) one can simply use an intransitive clause construction (7.174b, 7.175b). Both reflexive construction types often involve an incorporated noun.

SoG

- (7.174) a. b-a-ʔef-agá-ts ela-má
AFF-3SG.TR-wash-NFUT-CL:body hand-3SG.POSS
'S/He washed his hands.'
- b. b-á-ʔef-agá-ts
AFF-3SG.INTR-wash-NFUT- CL:body
'S/He bathed (self).'

SoG

- (7.175) a. b-a-c'ad-agá béé-sa-má
AFF-3SG.TR-shave-NFUT hair-mouth-3SG.POSS
'He shaved his beard.'
- b. b-á-c'ad-agá
AFF-3SG.INTR-shave-NFUT
'S/He shaved (self).'

Some middle voice constructs in Gumuz appear to have some overlap in form and meaning with reflexive forms. Compare the various forms of the verb **mân** 'be sweet, be pleasing, be expensive' in SoG and NoG. The simple verb root is given in (7.176).

When the simple root combines with an IN/CL, it becomes a transitive stem meaning 'like' in SoG and can be used in a transitive reflexive construction meaning 'selfish'(7.177). In NoG, on the other hand, 'selfish' is expressed with the verb root **mân**

SoG
 (7.180) zíg-áts ká = ɓagú-ú
 be.strong-body DAT=body-2SG.POSS
 ‘Be strong.’

SoG
 (7.181) zíg-á-áts
 be.strong-MV-body
 ‘Be strong (command for the body).’

(7.182) zíg-ats
 be.strong-body
 ‘Make (something) strong.’

7.2.7. Perfect Aspect

In NoG, one can indicate perfect aspect with the /((á)-3/ suffix on the verb. Perfect aspect can be marked in both the future and nonfuture tenses. Example (7.183) demonstrates perfect aspect in the nonfuture tense.

NoG
 (7.183) oba-má má-bats’ ma-ǰá
 father-3SG.POSS PURP-leave.behind NMLZ-die

d-a-tʰó-ê-3 duu-má ná = máts’á-tamaaría
 AFF-3SG.TR-put-TWRD-PRF child-3SG.POSS LOC=house-student

 ‘The child’s father had put him in school before dying.’

The future perfect is illustrated in a story in which a woman steals and hides a beaded necklace from a young girl. The woman tells the young girl that she hid her beads in the bottom of a lake and when the elephant comes and drinks all the water from it, she will find her beads there. Perfect aspect occurs on the future tense verb ‘when it (the elephant) will have drunk everything’ to indicate the moment when the girl will find her beads (7.184).

- NoG
- (7.184) d-ée-gam-á míinzá-úá ná = ílǎ-aja
 AFF-FUT-find-2SG.TR beads-2SG.POSS LOC=belly-water
- nágw-ée-f-a-é-ɜ** ná = gǎné
 when-FUT-drink-3SG.TR-TWRD-PRF LOC=there
- nágw-ée-f-a-é-lí-ɜ-án** á-zaana
 when-FUT-drink-3SG.TR-TWRD-BELLY-PRF-LOC NOM-elephant

‘You will find your beads in the water when the elephant will have drunk ...will have drunk everything from there.’

7.3. Clitics

There are at least four enclitics found on fully inflected verb forms in Gumuz, two of which are only found in SoG: the Yes/No question clitic and the clitic indicating perfect aspect. Both dialects have the negative clitic /=**ngó**/ but the Sirba Abay subdialect (SoG) has a distinct form /=**cê**/. A hearsay clitic is present in both dialects as well. Clitics in Gumuz are phonologically bound in that tonal downstep of H tones does not occur between the verb (or noun) and the enclitic, and there exists no phonological pause between morphemes. However, the final /a/ on the word to which it attaches is pronounced [a] instead of [ə] as though the vowel were in word-final position (see Chapter II). All known clitics, with the exception of the aspectual clitic in SoG, occur on nouns as well as verbs in Gumuz. The Yes/No question particle is a clause final clitic while the remaining enclitics are word-final.

7.3.1. Negative Clitics

There exist two negative clitics: /=**ngó**/, which is used in both NoG and SoG and /=**cê**/, which is used by Gumuz speakers living in and around Sirba Abay wereda (county) as well as parts of Wenbera and Agelo Met’i weredas. These clitics are restricted to attaching to main clause verbs (7.185-7.187); when negating a subordinate clause, one must use (with some exceptions) a negative auxiliary (see Chapter XI,

examples 11.64, 11.65). Also, as stated previously in section 7.2.1.2, the negative clitic does not normally co-occur with the affirmative prefix.

- NoG
- (7.185) ára éé^ʔ-s-á-na = ηgó
 1SG FUT-eat-2SG-LOC=NEG
 ‘You won’t eat me.’
- SoG
- (7.186) á-a-ηár-agá-k’o = ηgó á-ʃaaʃa ka = meʔa
 3SG.INTR-RECP-take-NFUT-HEAD=NEG NOM-sheep COM=goat
 ‘A sheep and a goat don’t marry.’
- SoG (Sirba Abay)
- (7.187) íi-a-k’ór-aká = cê
 3PL.INTR-RECP-argue-NFUT=NEG
 ‘They don’t argue.’

7.3.2. Yes/No Question Clitic (SoG)

The Yes/No question particle / = **ác**/ occurs in the Sirba Abay subdialect of SoG (7.188, 7.190) and a related form, / = **áj**/ is used in Kamashi (7.189).

- SoG (Sirba Abay)
- (7.188) á-cér-gá-ʃ-ân ííl-ú kâm-tsa = ác?
 2SG.TR-cut-NFUT-HIP-PRF BELLY-2SG.POSS PURP-go=YNQ
 ‘Have you decided (lit. ‘cut belly’) to go?’
- SoG (Kamashi)
- (7.189) k’abalíá a-paŋ-gá = áj?
 township 3SG.TR-want-NFUT=YNQ
 ‘Does she want (information about) the township?’
- SoG (Sirba Abay)
- (7.190) á-tʃá-gá dogoná = ác ?
 2.SG.TR-have-NFUT young.girl=YNQ
 Do you have a young girl (for exchange)?

7.3.3. Aspectual Clitic (SoG)

In addition to the incorporated locative indicating (present) perfect aspect (section 7.2.3.2), there also exists an enclitic (or possibly a phonologically distinct word) that indicates perfect aspect: **nʒígán(á)**. Uzar (1989:377) identified a similar morpheme in the Sirba subdialect of SoG, **nʒiina**, and labeled it a “perfective/completive” aspect marker. While the locative functioning as perfect aspect seems to be restricted to nonfuture, the **nʒígán(á)** clitic can be used for nonfuture or future tenses.²⁶

- SoG
 (7.191) ná = zialá b-ár-fá-gá = nʒígân
 ABL=now AFF-1SG.TR-drink-NFUT=PRF
 ‘I had drunk (something) already.’

- SoG (Sirba, Uzar 1989:377)²⁷
 (7.192) бага kamaatúk’w anjin-ééla **ma-aŋoo-ú-s = nʒín**
 person tomorrow time-like.this FUT-finish-3PL.TR-MOUTH=PRF

 ma-dó-k’w méts’á
 NMLZ-do-HEAD house

‘Tomorrow, about this time, the people will have finished building the house.’

7.3.4. Hearsay Clitic

In both NoG and SoG dialects, there exists a hearsay clitic that is often suffixed on a conjugated verb but can also attach to other parts of speech, namely nouns (7.194). The clitic is used to indicate that the information given is known because someone had told the speaker. In NoG the hearsay clitic is /-íʒ/ (7.193, 7.194) and in SoG, it is /-ís/ (7.195).

- NoG
 (7.193) ára l-ée-ts-á = iz
 1SG REL-FUT-go-3SG.INTR=HRSY
 ‘I heard that I will be the one who will go.’

²⁶ This clitic **nʒígán(á)** may be historically related to the /-(íʒ)/ suffix in NoG.

²⁷ The transcription for example (7.192) is taken from Uzar 1989 but the parsing and glossing are my own.

NoG

- (7.194) ka = naanufá = íz b-úú-ko-ʔóo
INSTR=wood.gnat=HRSY AFF-3PL.IMP-INSTR-call
'I heard they were named after wood gnats.' (said of another tribe)

SoG

- (7.195) nagúsé má⁴-ts-á = ís ká = junivársítííá
Negussie FUT-go-3SG.INTR=HRSY DAT=university
'I heard that Negussie will go to university.'

One can also combine the uncertainty prefix (section 7.2.4) with the hearsay marker in order to indicate that the person that the speaker heard the information from was not certain it was true (7.196).

SoG

- (7.196) b-á-de-kál-agá = ís
AFF-3SG.INTR-UNC-say-NFUT=HRSY
'I heard (from someone else) that maybe he said (that).'

CHAPTER VIII
NOUN INCORPORATION

As mentioned in Chapter VII, verb stems in Gumuz can contain verb roots in addition to elements that look more like noun roots. Some of these incorporated elements are clearly synchronic noun roots/stems while others appear to be class morphemes which classify free nouns and, when incorporated, classify the S/O argument of the verb (to be discussed in chapter IX). Thus, there appear to exist two types of incorporation in Gumuz: class morpheme incorporation and noun incorporation. This chapter treats just noun incorporation.

Previous analyses of Gumuz assumed that it had a class of verbs which were *infixing* (Irwin 1966:5), which were later labeled *split roots* (Uzar 1989:371). According to Uzar (1997:27), these *split type* verbs are to be analyzed as given in example (8.1) and (8.2). That is, **fərts** ‘get up’,¹ was analyzed as a single root in the imperative form (8.1), but this same root was *split* in the non-future tense (8.2). Examples below are from the “Sese” variety of Gumuz which is similar to that of the southern Gumuz (SoG) varieties spoken in Sirba Abay and Kamashi.

- Sese (Uzar 1997)
- (8.1) fərts
get.up
‘Get up!’
- (8.2) b-aa-fə-r-k-ə-ts-a
AFF-2SG-get.up (root 1)-tense-optional vowel-root 2-tense suffix 2
‘You got up.’

However, in my analysis, no roots are *split*; what we rather have are complex verbal stems that have come about via noun (or possibly *class morpheme*) incorporation. In nearly all cases, the simple verb root is also possible without the incorporated element

¹Uzar did not indicate tone in certain examples and this particular example should have H tone. Also, this example was not phonemicized in his description (Uzar 1997), even though according to his (1989:361) and my own findings, [ə] is an allophone of /a/ and thus, ‘get up’ should be /fárts/.

(8.3). Thus, in this type of word, the verb stem comprises both a verb root and another distinct root of nominal origin. In some cases, the incorporated element has grammaticalized to such a degree that it should be considered a derivational suffix, as in example (8.5) where the erstwhile noun ‘head’ /-(V)**k’w**/ appears to function as a causative. In either case, these putative *split* verb stems should be analyzed as comprising two morphemes, as in (8.4) through (8.6). Due to phonological reduction and a certain degree of grammaticalization of these morphemes, it is understandable that such incorporated nouns (IN)/class morphemes (CL) were not readily identified as such in previous descriptions of the language.

- SoG
- (8.3) **b-áa-fár-aká**
 AFF-2SG.INTR-rise-NFUT
 ‘You rose.’
- (8.4) **b-áa-fár-a-ká-tsa**
 AFF-2SG.intrans-rise-a-NFUT-CL:body
 ‘You got up.’
- (8.5) **b-áa-fár-a-ká-k’w**
 AFF-2SG.trans-rise-a-NFUT-head
 ‘You lifted (something).’
- (8.6) **fár-ts**
 rise-CL:body
 ‘Get up!’

In NoG varieties, the complexity of the verbal morphology is not readily apparent in the nonfuture tense as this tense is unmarked (8.7). However, the complexity of certain stems becomes apparent in the 2PL imperative. Thus, near minimal pairs like ‘Breathe!’(8.8) and ‘Kill!’ (8.9) are quite different in the 2PL imperative as ‘Breathe! (2PL)’ (8.10) consists of a single root while ‘Kill!’ surfaces as a complex verbal form

interrupted by the 2PL marker (8.11).² The verb stems are in bold for examples (8.7)-(8.11).³

- NoG
- (8.7) **d-á-fáǎ-áts**
AFF-3SG.INTR-rise-CL:body
'He got up.'
- (8.8) **ʃókw**
breathe
'Breathe!'
- (8.9) **ʃá-kʷ** [ʃó-kʷ]
die-CL1:head
'Kill!'
- (8.10) **ʃókw-áca**
breathe-2PL.INTR
'Breathe!(2PL)'
- (8.11) **ʃá-cá-kʷ**
die-2PL- CL1:head
'Kill!(2PL)'

8.1 Noun Incorporation in Africa

Noun incorporation is not unknown to languages of Africa but “systematic incorporation of non-referential objects is not common in African languages” (Creissels et al. 2008:97). Such a process has been documented in the West African Mande languages, putatively of the Niger-Congo family (Hutchison 2003), and exists across Bantu in complex verb stems meaning ‘sit’ (Botne 1993). Furthermore, there is a set of reconstructed verbs in Proto-Bantu which have incorporated nominal roots – more precisely locative nominals – meaning ‘on the head’ or ‘in the earth’, for example

² These two roots in ‘kill’ are also interrupted by person agreement in the future tense.

³Note that only the incorporated body part terms that are known to be classifiers are labeled as classifiers. Others, that are merely part of the verb stem, which have either co-lexicalized with the verb root, or are functioning in an external possession relationship with the O argument, are labeled merely by the source body part term. Other body part terms whose status as a classifier or otherwise is uncertain are glossed in caps, e.g. BODY

(Meeussen 1967:88). As for East Africa, the Cushitic languages of Somali (Tosco 2004), Iraqw (Mous 1993), Alagwa (Kiessling 2007) and Boni (Sasse 1984) have noun incorporation. Within Ethiopia, noun incorporation has been documented in the Eastern Cushitic languages Dullay and Daasanach (Sasse 1984). In addition, Berta, a Nilo-Saharan language which is not deemed to be closely related to Gumuz (see Chapter I) but is spoken in the same geographic area, appears to have a process of noun incorporation that functions in a way similar to that of Gumuz. However, the “incorporated” nouns are not tightly integrated with the verb root as other constituents of the predicate can intervene (Neudorf 2008). Thus, more research is needed before one can definitively label the process in Berta *noun incorporation*. As for languages closely related to Gumuz, there is no known literature describing either noun or class morpheme incorporation. However, Uduk of the Koman subgroup (possibly among the most closely related languages to Gumuz, see Chapter I), appears to have a process of noun incorporation similar to Berta. These presumed incorporated elements (both nouns and prepositions) have been labeled “postpositions” to the verb in Uduk (Killian and Hammarström 2009).

8.2 Incorporation in Gumuz

8.2.1 Incorporated Nouns

The body part roots /-(a)k’ó(a)/ ‘head’, /-(a)c(á)/ ‘eye’, /-(a)s(a)/ ‘mouth’, /-(a)k’ôs(a)/ ‘tooth’, and /-íí(a)/ ‘belly’ (and their allomorphs) are regularly found in (certain) complex verbal stems in Gumuz. This is not surprising as body part terms are some of the most commonly incorporated nouns (INs) (Mithun 1986:383). These body part roots occur in both noun *stems* within noun words as well as in complex verbal stems. In particular, the first three aforementioned body part roots are expressed with the prefix /lí-/ (NoG) or /íí-/ (SoG) (to be discussed in more detail later in this section) when they occur as unincorporated nouns and are not expressed as the simple noun root alone⁴

⁴The prefix lí-/íí- could possibly be the remnant of an old class morpheme prefix for body parts (to be discussed in Chapter IX). If so, it is not surprising that these prefixes are not incorporated into the verb as dropping of affixes from an incorporated nominal is quite common cross-linguistically (Mithun 1984).

(hence the term *noun stem*). However, when found in complex verbs, these body part roots are commonly expressed without this prefix. Examples (8.12) through (8.16) from the NoG variety demonstrate these body part terms occurring in free nouns (a), and their corresponding incorporated forms (b).⁵

NoG

(8.12) a. áχámá obá-tsá-má lí-**k'ó**-má d-á-ót-an
 3SG big-body-IP:MOD pre-**head**-3SG.POSS AFF-3SG.INTR-EXIST-LOC
 'S/he has a big head.'

b. d-é-⁺wídf-ára-**k'w** b́aga
 AFF-FUT-see-1SG.TR-**head** person
 'I will visit someone.'

(8.13) a. jendá b́aga lí-**cá**-ma d-a-bátʃ
 other person pre-**eye**-1SG.POSS AFF-3SG.TR-hit
 'Another person hit me in the eye (lit: '...hit my eye').'

b. d-é-⁺pá-rá-**c**
 AFF-FUT-go.out-1SG.INTR-**eye**
 'I will escape.'

(8.14) a. ná-lí-**sá**-ma d-ár-t'óó-ts ɲá
 LOC-pre-**mouth**-1SG.POSS AFF-1SG.TR-put-body food
 'I put the food in my mouth.'

b. d-é-ɲgaʃ-ára-**s**
 AFF-FUT-speak-1SG.INTR-**mouth**
 'I will whisper.'

(8.15) a. **k'ós**-áma d-á-dú
tooth-1SG.POSS AFF-3SG.INTR-be.sick
 'My tooth hurts.'

⁵ Example (8.16b) may be an example of Mithun's Type II noun incorporation (i.e. NI which promotes peripheral arguments) (1984:856); the metaphorical 'belly (of the house)' was likely incorporated promoting 'house' to O argument status, e.g. 'I will wash the belly of the house' → 'I belly-washed the house'. Another possibility is that 'belly' grammaticalized to mean 'inside' before it was incorporated. A third possibility is that *íil* 'belly' could have existed as a class morpheme before it was incorporated, classifying entities that are belly-like or that have an inside.

- b. d-é-ʼʃíl-ára-**k'ós**
 AFF-FUT-pick-1SG.TR-**tooth**
 'I will choose (something).'
- (8.16) a. **ííl**-áma d-á-dú
 belly-1SG AFF-3SG-be.sick
 'My belly hurts.'
- b. d-é-ʼaf-ár-**ííl** máts'á
 AFF-FUT-wash-1SG-**belly** house
 'I will wash inside/mop the house.'

The most frequently incorporated body part terms are those so far introduced in this chapter. However, many other body part nouns, such as **ts'éa** 'ear', **tʃagwa** 'foot/leg', **éʔa** (NoG)/**éla** (SoG) 'hand/arm', **k'útsitséla** 'fingers'(SoG), and **bia** 'neck' can also be incorporated into the verb stem.⁶ Examples (8.17-8.21) demonstrate these body part morphemes as nouns (a) and as incorporated nouns (b).

- NoG
- (8.17) a. íjgafa d-a-t'ó anc'ía ná-**ts'é**-ʼmá
 woman AFF-3SG.TR-put gold LOC-ear-3SG.POSS
 'The woman put gold (jewelry) in her ears.'
- b. d-ée-t'ó-ára-ka-**ts'ê**
 AFF-FUT-put-1SG.INTR-INSTR-ear
 'I will be quiet.'
- (8.18) a. d-a-**batʃ** ná = **tʃago**-má
 AFF-3SG-hit LOC=foot-3SG.POSS
 'He hit (him) in the foot.'
- b. d-ée-t'ó-ára-**tʃagw**
 AFF-FUT-put-1SG.TR-foot
 'I will drive away (someone).'
- (8.19) a. lí-duwa ʔea-má d-a-**batʃ**
 GEN-child hand/arm-3SG.POSS AFF-3SG.TR-hit
 'I hit the child's arm.'

⁶ It may be that any body part noun in Gumuz is eligible for incorporation.

- b. d-úú-t'o-ʔea gááncá
 AFF-3PL.TR-put-hand bride
 'They led the bride around putting her hands on her new work.'

SoG

- (8.20) a. ee-b-a-duk-ká-k'w k'útsítséla n-óka = ná
 SUB-AFF-3SG.TR-polish-NFUT-head finger LOC-time=PROX

b-a-sá-ká ŋga
 AFF-3SG.TR-eat-NFUT porridge

'After she polished her nails at that time, she ate.'

- b. b-á-kal-agá "u-é , duk-k'útsítsel ára."
 AFF-3SG.INTR-say-NFUT go-TWRD polish-finger 1SG
 'She said, "Come here. Polish my nails."'

- (8.21) a. b-a-tóo-gá-s mínzá ná-**fi**-má
 AFF-3SG.TR-fasten-NFUT-mouth bead(s) LOC-neck-3SG.POSS
 'He fastened the beaded necklace around her neck'

- b. ʃá-**fi** musa
 die-neck cow
 'Slaughter the cow (by cutting its throat).'

One other (historically) incorporated noun-like element, the morpheme /-(V)**ts(a)**/ 'body', no longer exists as an independent noun stem in the language.⁷ However, native speakers still recognize this morpheme as meaning 'body' when incorporated into a verb (as in 'clean', the first word of example 8.24). A relic of this presumed noun stem remains in expressions denoting 'oneself' as in examples (8.22-8.23) below (see also example 9.217 of Chapter IX). It also occurs optionally in certain nominal compounds (the second word in 8.24, see also example 9.162 of Chapter IX).

NoG

- (8.22) duwa d-a-ɗamb ma-n-tsá ka-**tsá**-má
 child AFF-3SG.TR-try NMLZ-PL-go with-**body**-3SG.POSS
 'The child tried to crawl by himself.'

⁷ The free word for 'body' is **ɓaga** which is also the word for 'person'. I presume that 'body' **tsá** underwent lexical replacement historically.

(8.23) áma-lí ka-**ts**-úá a-gáχ-aŋgó
 2SG-EMPH with-**body**-2SG 2SG.INTR-be.good=NEG
 ‘You yourself are not beautiful.’

(8.24) χókwa-ka-**ts** baǵá-**tsá**-‘máts’á ka-tǵéraka
 clean-INSTR-body body-body-house INSTR-cloth
 ‘Clean the wall with a cloth.’

Lastly, the morpheme /-(**a**)**f**(**a**)/ exists in both dialects of Gumuz but it does not exist as a free morpheme in NoG nor is it identifiable by these speakers as a nominal root (body part or otherwise) within a verbal compound. However, speakers of Kamashi Gumuz (and Yaso Gumuz) readily identify this morpheme as the body part **fa** ‘hip, pelvic region’. This morpheme functions in much the same way as the other body part morphemes which have been incorporated into the verb and occupies the same position structurally within the verb stem.

SoG
 (8.25) f’oo-**f** kodonwa
 put-hip guest
 ‘Seat the guest(s).’

Beyond verbal stems, /-(**a**)**f**(**a**)/ can be found as the bound object of a preposition in an associative expression (8.26) as well as in a locative expression (8.27) in Gumuz. Thus, it is assumed to be of nominal origin.

NoG
 (8.26) ka-**f** áma
 with-**hip** 2SG
 ‘with you’
 (8.27) ná-**f** poχwa d-ár-íi-**f**
 at-**hip** mountain AFF-1SG.INTR-be-**hip**
 ‘I sat at the base of the mountain.’

In Gumuz, a select number of body part nouns can be not only incorporated as simple roots but also as noun stems carrying the body part prefix **í**- (Kamashi) and **lí**-

(NoG).⁸ While only a few body parts are expressed with the body part prefix in their unincorporated forms (**lí-k'wá** ‘head’, **lí-cá** ‘eye’, **lí-tá** ‘nose’, **lí-sa** ‘mouth’). Three other body part nouns can have this prefix when incorporated but not when unincorporated: **k'ósa** ‘tooth’, **ts'éa** ‘ear’ and **bongwa** ‘back’(NoG).⁹ Lastly, in Mandura, there exists at least one body part term which always occurs with the /lí-/ prefix, whether incorporated or not: **lí-ta** ‘nose’.¹⁰ In the Kamashi variety, the unincorporated form is **ííta**.

Table 8.1 provides the noun root forms which exhibit a complex incorporated form. The simple incorporated forms are listed in the second column, the complex forms in the third column, and their corresponding unincorporated nominal forms in the fourth column.

Table 8.1. Simple and Complex Incorporated Nouns with Corresponding Unincorporated Forms

Gloss	Simple IN	Complex IN	Noun Form	
			NoG	SoG
‘head’	-(V)k'w	-ílik'w	lí-k'wá	íl-k'wá
‘eye’	-(V)c	-ílic	lí-cá	íl-cá
‘mouth’	-(V)s	-ílis	lí-sa	íl-sa
‘tooth’	-(V)k'wós	-ílik'wós	k'wósa	k'wósa
‘ear’	-(V)ts'ê	-ílit's'ê	ts'éa	ts'éa
‘back’	-(V)bongw	-ílibongw	bongwa	--
‘nose’	--	-ílit	lí-ta	ííta

⁸ The body part prefix **íl-** and **lí-** occurs as **íl-** for both varieties when incorporated, as demonstrated in Table 8.1. The prefix **lí-** in NoG undergoes anticipatory rounding harmony when affixed to a labialized consonant such as **k'w**. Thus, surface forms like [lí-k'wá] (NoG) or [-ílik'w] are realized when incorporated into the verb. Also noteworthy is that this prefix is found on a few other nouns that do not denote body parts **íl-gítjá** (**lí-gítjá**) ‘river’, **íl-gúzá** (**lí-gúzá**) ‘sky’, **lí-síá** (NoG) ‘jungle’ and **lí-gizía** (**íl-gizía**) ‘grassland/forest.’ But these may be class morpheme compounds (see Chapter IX) with **lí-/íl-** ‘belly’, or it may be the case that the two forms (body part prefix and class morpheme) are historically related, arising from the source noun ‘belly’ **ííla**.

⁹ There are two words for ‘back’ in Kamashi Zone: **ts'átjá** and **bongwa**; it is not known whether either noun can be incorporated in the Southern Gumuz variety.

¹⁰ There is no data in the Kamashi variety with ‘nose’ as an incorporated noun. However, the unincorporated form does not have the body part prefix **íl-**.

Finally, there is also evidence that Gumuz can incorporate into verb stems at least one nominal form whose source is not a body part: **go(a)** ‘place’. When not incorporated, this nominal is only found as a bound root. For this reason, incorporation of this noun root (similar to the body part morphemes ‘body’ and ‘hip’) is not considered a synchronic process, but merely historical. Example 8.28 demonstrates this as bound nominal root (a, b) and as an incorporated noun (b-c).

- SoG
- (8.28) a. átsa-ḃaga alá-**gwá** b-íí-dá-gá ḃga
 only-person GEN-**place** AFF-3PL.TR-do-NFUT food
 ‘Only the people of that place prepare the food.’
- b. b-á-ḃig-agá ná-**gwá**
 AFF-3SG.INTR-sleep-NFUT LOC-place
- dá etá-b-á-sá-ká-**gô**-n á-lamáána.
 thing PRO.SG-AFF-3SG.TR-eat-NFUT-**place**-LOC NOM-cattle
 ‘He slept in the trough.’
 (Lit.: ‘He slept in the thing that the cattle eat out of.’)
- c. ná-ádiis ababá b-ár¹-t’ée-gó-gw
 LOC-Addis.Ababa AFF-1SG.INTR-be.afraid-NFUT-place
 ‘I was afraid in Addis Ababa.’

8.2.2 Evidence for Incorporation

According to Mithun (1986:379), “Noun incorporation is a lexical process whereby a noun stem and verb stem are compounded to form a derived verb stem” but once these nouns are incorporated, “they have no syntactic roles as arguments of the clause.” As AVO word order is quite common in Gumuz and incorporated noun roots/stems are incorporated following the verb root, it is necessary to demonstrate that what I have presented as an IN is not an argument of the verb. This is necessary, especially as the O argument in Gumuz remains unmarked for case (Chapter X), thus potentially making it difficult to distinguish an IN from an O argument. It must also be demonstrated that other incorporated elements such as class morphemes do not form part

of the O argument. Following are six arguments for incorporation using both phonological and syntactic evidence.

Phonological evidence for incorporation in Gumuz is that, in most cases, the incorporated element is phonologically reduced. This is one indication that the incorporated element forms a phonological unit with the verb. For example, in (8.12b) above, the incorporated element **k'óá** 'head' has been phonologically reduced to **-k'w**, which is unpronounceable in isolation. In addition, Gumuz exhibits anticipatory harmony (also known as regressive harmony or left spread) in which the vowel previous to the IN/affix must agree in rounding with the consonant/vowel of the IN/affix; vowel harmony in Gumuz does not operate across word boundaries. Thus, when **k'óá** 'head' is incorporated, an epenthesized /a/ or [ə] is rounded to harmonize with the labialization (underlying round vowel) on the consonant. The epenthesized central vowel must also agree in height with the vowel previous to it. As there are only back rounded vowels in Gumuz, the choice of vowel must be [o] in the case of (8.12b) as it also agrees in height with schwa. The resulting phonetic realization of (8.12b) is: [dé⁴wídǎrók'].¹¹ Additional phonological evidence is the loss of the final nominal marker /-a/ when the noun is incorporated. This is true for all body part nouns except 'hand/arm' (in Northern Gumuz). In fact, because nearly all nouns in Gumuz end in /-a/, it could be argued that this final vowel does not necessarily derive but marks a word as a noun. When incorporated, the body part morpheme loses its syntactic status as noun and therefore also loses this /-a/ marker.¹²

Further evidence for incorporation comes from syntactic argument structure. In example (8.16b), if 'belly' were counted as a core argument, the verb stem 'wash' would need to be ditransitive with 'belly' and 'house' as its objects, a semantic unlikelihood given the overall meaning of the sentence. Moreover, Gumuz verbs cannot normally take

¹¹ Another possible explanation for the phonetic realization is metathesis of the round vowel (labialization) of **k'wá** when incorporated into the verb.

¹² For certain finite subordinate clauses, the final /-a/ marker is realized on the IN/CL (see Chapters XII and XIII).

two bare objects. Indirect objects are marked with the prepositional proclitic **ka=**. However, it could be the case that ‘belly’ and ‘house’ form a nominal compound which functions as the O argument and that ‘belly’ is not incorporated into the verb. Indeed there exists a nominal compound: **líí-máts’á** (belly-house) ‘floor’. However, one can see that ‘belly’ forms a phonological unit with ‘house’ in this NN compound as the vowel and the consonant metathesize. In contrast, when forming a phonological unit with the verb, ‘belly’ maintains its vowel-consonant structure: **-ííí**.¹³ In Southern Gumuz, however, such a metathesis does not occur as the initial vowel-consonant structure is often found in the noun stem as well as in the IN. Thus, other (syntactic) evidence would be necessary for this dialect to demonstrate that the noun root contiguous with the verb root and the following O argument do not actually form a NN compound. Indeed, both incorporation and compounding are possible in Gumuz for clauses with (nearly) identical translations. But there are clear differences between the structures as shown both by phonology and negative placement. In (8.29a), the noun **ííúk’wá** ‘head’ is incorporated into the verb stem. However, in (8.29b) **ííúk’wá** ‘head’ forms a compound with **hosa** ‘cow’¹⁴ and this compound functions as the O argument. Both clauses can propositionally mean ‘Skin the cow’s head’. In Gumuz, the negative **=ngó** is an enclitic that attaches to both nouns and verbs. Examples (8.30 a-b) provide the negative forms of the commands in (8.29 a-b), demonstrating that there is a word boundary between ‘head’ and ‘cow’ in example (8.29a). On the other hand, the word boundary in (8.29b) is after the verb root **kóó** ‘skin’ as demonstrated with its negative form in (8.30b). Thus, (8.29a) and (8.30a) must have INs in the verb stem as the negative enclitic should not separate the two noun roots of a NN compound.

¹³ This particular argument only works for the NoG variety. In Kamashi, the vowel-consonant structure of ‘belly’ is maintained in NN compounds as well as in verbal compounds: **ííí-máts’á** ‘floor’ vs **ííí-ef-ár-ííí máts’á** ‘I will wash the inside of the house’.

¹⁴ As Gumuz varieties form a dialect chain, certain lexical items will vary gradually according to geography. Examples (8.29-8.30), come from Kamashi town where speakers have lexical items similar to NoG but the grammar is more similar to SoG (Kamashi Zone). Thus, **hosa** ‘cow’ is similar to Northern Gumuz **χosa** ‘cow’ versus the Southern Gumuz form **musa**.

SoG

- (8.29) a. kwóǀ-ílúk'w hosa
skin-head cow
'Skin (the/a) cow's head'
- b. kóǀ ílúk'-ósa
skin head-cow
'Skin the cow's head'
- (8.30) a. ma-kóǀ-ílúk'o = ǀngó hosa
NMLZ-skin-head=NEG cow
'Don't skin (the/a) cow's head'
- b. ma-kóǀ-ǀngó ílúk'-ósa
NMLZ-skin-NEG head-cow
'Don't skin the cow's head.'

Other syntactic evidence for incorporation in Gumuz can be found in both word order and nominalization. As demonstrated in Chapter X, various word orders are attested in Gumuz. That is, the O argument is not required to follow the verb. However, the IN must follow the verb root (and be phonologically reduced, if applicable) in order for each clause to convey the same meaning. In (8.31) versus (8.32) below, the meaning of the sentence changes if the noun is uttered before the verb or if it is uttered in its non-reduced form.

- (8.31) ǀamb-ác
try-eye/seed
'Try a little (water).'

- (8.32) cá-má ǀamb ~ ǀamb cá-má
seed-3SG.POSS¹⁵ try try seed-3SG.POSS
'Try/taste the seed(s).'

¹⁵ The lexical item **cá** 'seed' requires an inherent possession marker in northern Gumuz dialects when used as an independent noun (see Chapter III). However, in the southern dialects, **cá** 'seed, eye' can be uttered as an independent noun without the possessive marker.

When a verb is nominalized, /**ma-**/ is prefixed to the verb and if the nominalized verb is transitive, an additional /-**má**/ inherent possession suffix is required.¹⁶ An incorporated element, in such cases, should therefore be followed by the inherent possession suffix /-**má**/ if it is truly part of the verb stem. In NoG, O arguments do not always form part of a NN compound with the nominalized verb, and when they do, the /-**má**/ suffix does not occur. As shown in examples (8.33) and (8.34), the O argument ‘hole’, does not form part of the derived verbal noun.

NoG

(8.33) k'óʃ χwa
 dig hole
 ‘Dig a hole!’

(8.34) d-ár-paŋ ma-k'óʃ-ámá χwa
 AFF-1SG-want NMLZ-dig-IP hole
 ‘I want to dig a hole.’

On the other hand, when a noun is truly incorporated, it remains within the nominalized verb. In (8.35), the noun root /-(**V**)k'ó/ ‘head’ remains part of the derived stem after it has been nominalized.

NoG

(8.35) bambájá ma-k'óʃ-**ák'ó**-má d-ár-paŋ
 sweet.potato NMLZ-dig-**head**-IP:O AFF-1SG.TR-want
 ‘I want to dig sweet potatoes.’

For intransitive verbs, an IN is clearly not the O argument of the verb. In such cases an IN is semantically more like an instrument or location as in ‘stand up’ of example (8.36) or ‘sit down’ (8.38). However, instruments in Gumuz are typically expressed in oblique phrases with the preposition /**ka=**/ ‘by, with’, as shown in example (8.37), and locations are expressed with the preposition /**ná=**/ ‘in, on’ (8.18a). The fact that a bare noun (without a preposition) does not typically denote an instrument or

¹⁶In Kamashi Gumuz, the final /-**má**/ suffix is only required if the O argument of the nominalized verb precedes the verb. In fact, it is ungrammatical for the /-**má**/ suffix to co-occur with a postverbal O argument (see Chapters III and VI).

location coupled with phonological reduction of the noun supports an incorporation analysis. Furthermore, the IN ‘foot’ in (8.36) occupies the same position in the verb as the bound morpheme /-(a)ʃ(a)/ ‘hip, loins’ in (8.38) which is also assumed to be an IN historically (if not synchronically in SoG).

NoG

(8.36) ʔíi-**tʃagw**
 be-foot
 ‘Stand up!’

(8.37) ka-**tʃagó**-ma d-ára-ʔíi-**tʃagw**
 by-**foot**-1SG.POSS AFF-1SG.INTR-be-**foot**
 ‘I stood on my feet.’

(8.38) ʔíi-ʃ
 be-**hip**
 ‘Sit down!’

Lastly, subject pronominal marking on the verb is possibly the most compelling piece of evidence that an incorporated element is not an argument of the verb. Bound pronominals in S intransitive role carry tonal marking that is distinct from those in A role. Thus, the HH pattern on the pronominal in (8.39) indicates that ‘I (1SG)’ is an A argument of a transitive clause but the distinct HL tone indicates that it is an S argument an intransitive clause (see 8.37 above). In examples (8.40) and (8.41), the first person form has the HL marking of an intransitive S, the first of which (8.40) involves tonal downstep.

NoG

(8.39) d-ée-ʔaf-**ára**-ts **líca**-ma
 AFF-FUT-wash-1SG.TR-body face-1SG.POSS
 ‘I will wash my face.’

(8.40) d-ée-ʔaf-**ár-ʔálic**
 AFF-FUT-wash-1SG.INTR-face
 ‘I will face-wash.’

- (8.41) d-ée-ʔaf-ára-ts
AFF-FUT-wash-1SG.INTR-body
'I will bathe.'

8.2.3 Types of Noun Incorporation

Mithun (1984) identifies four types of noun incorporation. Gumuz exhibits her Type I (lexical compounding), Type II (manipulation of case) and Type IV (classificatory) noun incorporation. Types I and II will be discussed in this section while the last type (Type IV) will be discussed in Chapter IX. In addition, I have broadened Mithun's Type II to the more general phenomenon of external possession. As for Mithun's Type III NI (the manipulation of discourse structure), it remains to be seen if this exists in Gumuz as further analysis at the discourse level is needed. Possible examples of Mithun's Type III NI are discussed in Chapter IX, section 9.6.

8.2.3.1 Lexical Compounding

Lexical compounding is the derivation of a complex lexical item from a combination of two or more stems (which can be from almost any grammatical class). With noun incorporation, lexical compounding involves the incorporation of a noun into a verb stem to create a new verb. According to Mithun, this new verb is intransitive and the IN has a specific semantic relationship to its host (patient, location, or instrument). The IN thus qualifies the verbal root (Mithun 1984:848). Examples (8.13b), (8.14b), (8.17b) and (8.42) demonstrate lexical compounding. In most instances of lexical compounding in Gumuz, the verb root is intransitive and the verb stem remains intransitive after the noun is incorporated. The derived lexical compounds typically take on meanings that are not completely equivalent to the sum of their parts (Mithun 1984:852) and can be idiomatic (Mithun 1984:853).

There is one example in Southern Gumuz in which the IN is a location/instrument which qualifies the verb root. In (8.43), the verb root ʔíís 'cry' is qualified by the IN /-bi/ 'neck' producing the meaning 'cry from the neck' or 'crow (as in a rooster)'. Again, the resulting verb stem remains intransitive. A few examples exist such as (8.17b) in which

the transitive verb ‘put’ becomes intransitive after incorporating ‘ear’. Also, one can create an intransitive verb by incorporating a body part term into a verb stem like ‘wash’ (8.50 c). The resulting verb stem is not necessarily intransitive but can take an intransitive tonal pattern in order to convey a reflexive meaning (see also 8.39-8.41).

- SoG
- (8.42) a. b-á-ŋgáʃ-agá
 AFF-3SG.INTR-speak-NFUT
 ‘S/he spoke.’
- b. má-ŋgəʃ-íl-ílíts’è
 FUT-speak-1P.EXCL.INTR-ear
 ‘We will whisper.’

- (8.43) ʔíís-ʔi
 cry-neck
 ‘Crow!’

8.2.3.2 Manipulation of Case / External Possession

One common pattern of noun incorporation cross-linguistically is that of incorporating a body part noun which results in promotion of the possessor of the body part to a core argument. This is what Mithun has labeled *Type II incorporation* (1984:856). I will refer to this phenomenon with the more general term, *external possession* (EP), which does not necessarily imply or require the ‘promotion’ of arguments. In sum, “EP constructions have an extra participant” in which “the possessor is treated as an additional argument of the clause” (Payne and Barshi 1999:5). Such constructions “can... result from the type of noun incorporation that leaves the [possessor] of an incorporated noun external to the verb as an object or intransitive subject” (Payne and Barshi 1999:6). Many instances of EP in Gumuz could arguably be considered “possessor raising”. However, there are certain “rare” constructions (in terms of the world’s languages) in which the possessor in an EP construction is the subject of a transitive clause (Payne and Barshi 1999:10), in which case, there appears to be no “raising” involved. As Gumuz exhibits both the typical possessor “raising” as the result

of NI as well as possessors as transitive subjects, *external possession* (EP) is preferable as a cover term for these constructions.

With traditional notions of possessor raising, it is assumed that in addition to the EP construction there should also be an *internal possession* construction counterpart. An internal possession construction is one that expresses possession within the NP. In (8.44), the internal possession construction ‘the child’s mouth’ is expressed as a NN compound which functions as the O argument of the verb **fwítʃ** ‘blow’. With NI, the body part term ‘mouth’ is incorporated into the verb and **dua** ‘child’ becomes the O argument (8.45). Hence, the possessor has been “raised” to core argument status.

- NoG
 (8.44) fwítʃ lísa-dua
 blow mouth-child
 ‘Blow on the child’s mouth.’
- (8.45) fwítʃ-ílís dua d-a-k’áŋ-‘ílís á-faxaaʒa
 blow-mouth child AFF-3SG.TR-bite-mouth NOM-hot.pepper
 ‘Blow on the child’s mouth; the hot pepper is burning him.’

Beyond mere NN compounds, internal possessors in Gumuz can be part of genitive constructions (see Chapter V) as shown in (8.19a) above in which the genitive prefix **lá-** (**alá-** in SoG) attaches to the possessor, **dua** ‘child’.¹⁷ The possessor is followed by the possessum ‘arm’ which has a possessive suffix **/-má/** (3SG.POSS) conveying person and number of the possessor.

In Southern Gumuz, there are at least four ways of expressing the meaning ‘He hit me in the eye’: two with internal possession constructions (8.46-8.47) and two with EP constructions (8.48-8.49). The most common and accepted way of expressing this statement (according to native speakers) is by means of the EP construction in example (8.49).

¹⁷ The genitive prefix **lá-** assimilates in height with the high vowel /u/ of **dua**, resulting in **lí-dua** ‘child’s’. It is unclear why the vowel does not assimilate in terms of rounding as well (see Chapter II).

SoG

(8.46) á b-a-ʔótʃ-agá ára ná = ílíc-âm
3SG AFF-3SG.TR-hit-NFUT 1SG LOC=eye-1SG.POSS
'He hit me in the eye' (lit: 'He hit me on my eye')

(8.47) á b-a-ʔótʃ-agá c-âm
3SG AFF-3SG.TR-hit-NFUT eye-1SG.POSS
'He hit me in the eye' (lit: 'He hit my eye')

(8.48) á b-a-ʔótʃ-agá-c ára
3SG AFF-3SG.TR-NFUT-eye 1SG
'He hit me in the eye' (lit: 'He eye-hit me')

(8.49) á b-a-ʔótʃ-ag-ílíc ára
3SG AFF-3SG.TR-NFUT-eye 1SG
'He hit me in the eye' (lit: 'He eye-hit me')

EP constructions in Gumuz can also be used for reflexives in which the possessor of the IN is co-referential with the subject of an intransitive clause. Such a difference between a reflexive and a simple transitive reading is demonstrated in the following excerpt from a text about women's work among the Gumuz (8.50 a-c). With the first mention of 'wash', the understood possessor of 'face' is the O argument **diida** 'children' of the verb 'take' in line (a.) while the IN /-ílíc/ 'eye/face' is the possessum in line (b.). With the second mention of 'wash' in line (c.), the possessor is the subject and the IN 'face' again is the possessum. The difference in transitivity is marked tonally on the bound pronominal of the verb.

NoG

(8.50) a. ka = lía d-ákó-ta = kwê **diida**
LOC=early.evening AFF-1P.INCL.TR-take=CONJ children

b. **d-ókwá-ʔaf-ílíc** ka = ʔaja ákwa = kwê
AFF-1PL.INCL.TR-wash-face with=water 1P.INCL=CONJ

c. **d-ókwá-ʔaf-ilíc**
AFF-1PL.INCL.INTR-wash-face

'In the early evening, we take the children and wash their faces with water and we also wash our own faces.'

A third type of EP construction found in Gumuz is considered to be “rare” among the world’s languages (Payne and Barshi 1999:10). In this EP construction, the possessor is (or is co-referential with) a transitive subject and the possessum again is the IN. This construction is best demonstrated with the verb root *ʔis* ‘wear’.¹⁸ The process of NI with this verb root is very productive allowing apparently any body part term to be incorporated, including body part terms that are NN compounds as shown in example (8.52): *ǰá-éʔa* (tree-arm/hand) ‘forearm’. In each instance below, the possessor is the 3SG transitive subject.

- NoG
- (8.51) *d-a-ʔis-ílít* *sóχwá*
 AFF-3SG.TR-wear-nose metal
 ‘She wore a nosering.’
- (8.52) *d-a-ʔis-ájéʔa* *bea*
 AFF-3SG.TR-forearm skin
 ‘She wore animal skin on her forearm.’
- (8.53) *d-a-ʔis-ágwánáχ* *labínda*
 AFF-3SG.TR-wear-side (of body) gun
 ‘He wore a gun at his side.’

8.2.4 Noun Incorporation and Totality of Action

In some languages, there exists a slight difference in semantics of an incorporated construction versus a propositionally equivalent unincorporated construction. For example in Panare (Caribam, Venezuela), when an object is incorporated into a verb that involves severing or removing parts of things, the resulting implication is that the item was totally removed (8.55). This is contrasted with the unincorporated form in which the item is not totally removed (8.54) (Payne 2002:199)

¹⁸ One could feasibly argue that examples (8.51-8.53) are not examples of External Possession but rather the IN is indexing a location on the verb. The difference is demonstrated by whether the possessor of a corresponding internal possession construction must occur in a locative prepositional phrase. For example, the 1SG external possessor of (8.48) can be expressed in an internal possession construction that functions as the O argument (8.47). The example of the possessor in (8.46), however, occurs in a locative PP. With (8.51-8.53), I do not believe the internal possessor can occur as part of an A argument as in ‘Her nose wore a ring’ (internal possession construction) corresponding to ‘She wore a nose ring’ in (8.51).

Panare

(8.54) y-ipu-n yï-kïti-ñe amën
3-head-POSS TRNS-cut-NONPERF:TR 2SG
'You cut its head.'

(8.55) y-u'-kïti-ñe amën
3-head-cut-NONPERF:TR 2SG
'You cut off its head.'

A very similar example exists in Gumuz. As in the Panare example above (8.55), the incorporated construction can imply the totality of the action. In (8.57), the incorporated (EP) construction implies that the entire chicken's head is to be cut off, while in the unincorporated (internal possession) constructions (8.56), the command is only to make a small cut on the chicken's head.

SoG

(8.56) c'êr ïlk'ó-métá
cut head-chicken
'Cut the chicken's head (perhaps a small cut).'

(8.57) c'ér-ok'w métá
cut-head chicken
'Cut off the head of the chicken.'

A similar result obtains when the bound nominal /-(V)ts/ 'body' is incorporated into a verb stem. With the verb **dú** 'hurt, be sick' (8.58), the meaning of the verb stem changes to 'very sick' when /-(V)ts/ 'body' is incorporated (8.59).

NoG

(8.58) d-ár-^hdú
AFF-1SG.INTR-be.sick
'I am sick.'

(8.59) d-ár-^hdú-áá-ts
AFF-1SG-be.sick-MV-body
'I am very sick.'

CHAPTER IX

VERBAL (PREDICATE) CLASSIFIERS AND NOUN CATEGORIZATION

Body part terms in Gumuz have grammaticalized to represent certain classes/categories of nouns in Gumuz. These classifying morphemes function as both verbal classifiers, and what I call “class morphemes” which are morphemes that function as the nominal head in a Noun-Noun (Associative) Construction (Chapter VI). While verbal classifiers and class morphemes arose from the same source body part terms, there exist subtle differences in noun categorization, and in some cases, the classifying morpheme (either the verbal classifier or the class morpheme) has further grammaticalized beyond mere noun categorization. This chapter describes these systems of noun categorization and their historical development in Gumuz.

Verbal classifiers (or predicate classifiers) are classifiers found in the verb stem. These classifiers do not classify the verb itself but rather an argument of the verb (Grinevald 2000:67). While classification systems are widely known to exist in Africa, a system of classification in which an incorporated noun/verbal affix classifies an argument of the predicate is virtually unknown on the continent. Recent literature on verbal classifiers only mentions languages of the Americas and Australia (Mithun 1984, 1986, Grinevald 2000). In fact, Aikhenvald asserts that “there are no verbal classifiers in the languages of Africa or Eurasia or in the Austronesian family” (2000:171). Thus, such a system is not documented and is at best rare in Africa, let alone Ethiopia.

According to Mithun, verbal (predicate) classifiers arise from incorporation of generic nouns, usually body parts (1986:383).¹ The body part nouns ‘head’, ‘eye’, ‘tooth’, ‘ear’, and ‘belly’, mentioned in Chapter VIII, are often incorporated into Gumuz

¹ Aikhenvald has identified cases where certain verbal classifiers have arisen from verbs (2000:152).

verbs to form new verbal compounds.² In some instances, these incorporated nouns function as classifiers. In the genesis of verbal classifier systems, incorporated nouns move from merely qualifying external noun phrases to representing a basic level category in which the incorporated noun and the external noun phrase are functioning within a hypernym-hyponym relationship (Mithun 1986:387). For example, one might be tempted to consider (9.183-9.186) of this chapter examples of verbal classifiers. While the incorporated nouns may narrow the scope of the verb and therefore limit the type of S argument, they do not function as hypernyms for the S arguments. On the other hand, in the examples of verbal classifiers that follow in this chapter, the incorporated nouns do indeed function as hypernyms for the S/O argument and, at times, for the peripheral arguments of the clause.

Gumuz also appears to exhibit a related system of noun categorization which involves class morphemes as heads of (erstwhile?) NN compounds. A subset of the same morphemes that function as verbal classifiers also function as categorizing roots on certain nouns. These appear to be similar to “class terms” which “are morphemes which occur as the head of...noun compounds which are exemplars of the category labeled by the class term” (DeLancey 1986: 438). In English, an example of a class term would be *man* as in *mailman*, *policeman*, etc.

The following body part morphemes function both as verbal classifiers and as class morphemes (on nouns): **k'wá-** ‘head’, **cá-** ‘eye/seed’, **k'ós-** ‘tooth’, **ts'ê-** ‘ear’. Two other body part morphemes may be class morphemes but are less clearly so: **ííl-** ‘belly’ and **tsá-** ‘body’.

9.1 Verbal (Predicate) Classifiers

In Gumuz, incorporated noun forms can be either simple or complex (Chapter VIII). The above-mentioned body part nouns are simple roots but these are also

² As mentioned in Chapter VIII, it is not entirely clear that the body part terms were/are nouns at the time of incorporation into the verb. It is possible that these were already class morphemes (to be discussed later in this chapter) at the time of incorporation. Thus, it may be premature to assume that these classifiers arose from noun incorporation in Gumuz.

incorporated with the body part prefix **íl-** (SoG) and **lí-** as described in section 8.2.1 of chapter VIII. For example, the simple (erstwhile nominal) root for ‘head’ forms part of the verb stem for ‘swell’ (9.1). The complex form of ‘head’ (with the /lí-/ body part prefix) can also combine with the same verb root ‘swell’ resulting in a distinct meaning of the verb (9.2). While neither of the body part terms in (9.1, 9.2) are classificatory, this section will demonstrate how both the simple (in both NoG and SoG) and complex forms of body part terms (in NoG) have developed into verbal classifiers. It is important to keep in mind that not all Gumuz verbs can take a verbal classifier (or even an incorporated noun) as part of its stem, and not all body part morphemes found in verb stems function as classifiers.

NoG
 (9.1) **dua** **ɓaga-má** **d-a-bakw-á-k’w**
 child body-3SG.POSS AFF-3SG.TR-swell-MV-head
 ‘The child’s body swelled.’

NoG
 (9.2) **dua** **d-a-bakw-á-lúk’w**
 child AFF-3SG.TR-swell-MV-head
 ‘The child’s head swelled.’

As mentioned in the previous chapter (section 8.2.1), only a few body parts are expressed with a body part prefix in their unincorporated forms: **lúk’wá/ílk’wá** ‘head’, **líká/ílcá** ‘eye’, **líta** ‘nose’, **lísa/ílsa** ‘mouth’. There exist at least three other body parts which can have this prefix when incorporated but which do not normally take the prefix as unincorporated nouns: **k’ósa** ‘tooth’, **ts’éa** ‘ear’ and **bongwa** ‘back’. The following terms which include the body part prefix have grammaticalized as verbal classifiers as well (in NoG): **/-ílúk’w/** ‘head’, **/-ílic/** ‘eye’, **/-ílik’ós/** ‘tooth’, and **/-ílíts’è/** ‘ear’. Table 9.1 provides the incorporated noun forms/classifiers in the second and third columns and their corresponding free nominal forms in the fourth column.

Table 9.1. Incorporated Nouns/Classifiers (IN/CL) with Corresponding Free Forms

Gloss	Simple IN/CL	Complex IN/CL	Noun Form	
			NoG	SoG
‘head’	-(V)k’w	-íúk’w	lú-k’wá	íl-k’wá
‘eye’	-(V)c	-ílic	lí-cá	íl-cá
‘tooth’	-(V)k’ós	-ílik’ós	k ^w ósa	k ^w ósa
‘ear’	-(V)ts’ê	-ííts’ê	ts’éa	ts’éa
‘belly’	-ííl	*	íílá	íílá
‘body’	-(V)ts	*	*	*

9.1.1 Evidence for a Classifier System

The incorporated nouns introduced in section 9.1 classify the O (and occasionally the S) arguments of certain verbs in Gumuz. For example, in order to talk about washing a cup in NoG, one must use the verb root **?af** plus the classifier /-ííl/ ‘belly’; for washing clothes, one would use the verb stem **?af-ác** (wash-eye), and for washing oneself or another person, **?af-áts**, (wash-body) etc., (see also examples 9.5-9.24). The semantics of the verbal classifiers is presented in Table 9.2. Nouns incorporated as simple roots and nouns incorporated as complex stems can relate to distinct classes when affixed to certain verbs. However, for other verbs, these classes have merged and there appears to be no distinction in class membership related to a simple/complex classifier form. As can be seen in Table 9.2, a synchronically simple generalization for members of each class is difficult as the groups have become somewhat opaque (at least for simple noun roots). Classifiers that are comprised of a simple noun root I label “CL1”, classifiers comprised of a complex stem (body part prefix plus noun root), I label “CL2” and classifiers which only exist as simple roots I label “CL”.

Table 9.2. Semantics of Verbal Classification for S/O Arguments

Predicate Classifier	Semantics of Classified Nouns	Examples of Nouns
-(V)k'w 'head' (CL1:head)	<i>entities that are head-like in shape and/or function, or closely associated with such objects</i>	<ul style="list-style-type: none"> • fingers, toes • water, sauce, beer, lotion, soap (in a container) • ears of corn • eggs • pots, pans, cans • people, animals
-(V)c 'eye/seed' (CL1:eye)	<i>entities associated with wounds, fire, liquids, small seed-like objects, and outer coverings (may represent mass nouns in general)</i>	<ul style="list-style-type: none"> • knives, needles, spears • clothes, tree bark, orange peel • wounds, blood, water, coffee, tea, sauce • fire, light • beans, seeds • soil, rope
-(V)k'ós 'tooth' (CL1:tooth)	<i>entities tooth-like in size and/or shape and/or which form groups of identical objects; metal objects</i>	<ul style="list-style-type: none"> • beads, firewood • pins, metal spoons, needles • animal bite/sting
-fil 'belly' (CL:belly)	<i>entities that have a concave surface or encompass a large area</i>	<ul style="list-style-type: none"> • bowls, pits, fields
-(V)ts 'body' (CL:body)	<i>the human body, entities associated with the human body or that are functionally or physically body-like (objects longer than they are wide)³</i>	<ul style="list-style-type: none"> • people, hands, feet, face, head • walls, shoes, yams, cars, wooden spoons
-filúk^w 'head' (CL2:head)	<i>fruits, vegetables and other objects that are head-like in shape and function</i>	<ul style="list-style-type: none"> • pumpkins, oranges, rocks
-filc 'eye/seed' (CL2:eye)	<i>seeds, beans, objects which bear the word for 'seed/eye' within the name</i>	<ul style="list-style-type: none"> • sorghum, millet, beans
-filúk^wós 'tooth' (CL2:tooth)	<i>small tooth-like entities that come in quantities or groups of identical objects and are part of another object; metal objects</i>	<ul style="list-style-type: none"> • buttons, beads, seeds • knives
-ts'ê / -filts'ê 'ear' / 'ear' (CL1:ear / CL2:ear)	<i>flat, thin, flexible objects</i>	<ul style="list-style-type: none"> • mushrooms, paper, leaves

While all of the body part terms in Table 9.1 (plus many others) can combine with many if not all verb roots in Gumuz, these body part terms do not always function as classifiers. Verbal classifiers co-occur with a subset of at least 50 verb roots in Gumuz.

³ The material of the object seems to play some role in the classification as metal spoons and wooden spoons are classified separately; but it could alternatively be due to the larger size of the wooden spoon.

Such a confined set is not atypical as “the use of verbal classifiers is often limited to certain semantic groups of verbs” in languages generally (Aikhenvald 2000:149).⁴ However, not all classifiers are equally employed with each verb root. Thus, the result is a limited use of verbal classifiers in Gumuz. The table in Appendix C gives a sample of what is currently known regarding co-occurrence of verb roots and verbal classifiers in Gumuz.

Some body part terms known to function as classifiers on certain verb roots do not function as such on other verb roots. For example, **wid-ok’w** (see-head) means ‘visit’⁵ but other incorporated nouns in combination with **wid** ‘see’ function as classifiers, changing the meaning to ‘check’.⁶ At times, only one incorporated noun combined with a specific verb root appears to have a classifying function, while the other incorporated nouns do not. In other instances, an incorporated body part term combined with a specific verb root may or may not have a classifying function depending on the context. Also, some verb-noun combinations are simply not possible. For example, ***ce?-ok’w** (dry-head) is not a possible verb stem in NoG. Lastly, the complex incorporated nouns do not appear to have fully grammaticalized as classifiers in SoG. .

Of these complex verbal stems, the majority are transitive and the incorporated body part classifies the O argument. In some instances, an S argument is classified. Thus,

⁴ Aikhenvald (2000:165) states that verbal classification is often realized with *telic* verbs. For example, ‘see’ being *atelic* is less likely to use classifiers than say ‘look’. In Gumuz, the verb root ‘see’ changes in meaning to the more *telic* verb ‘check’ when classifiers are incorporated. This is likely the result of verbal classifiers being used for more affected O/S arguments. That is, the O argument of ‘check’ is more patient-like than the O argument of ‘see’.

⁵ The tone for /-(**V**)k’w/ ‘head’ on most complex verb stems appears to be H tone. However, for certain the verbs like ‘visit’, the tone is not clear. In some environments, it appears to be H, in others, it appears as a downstepped H and yet other environments it is realized as L. For this reason, the tone for /-**V**k’w/ ‘head’ will remain unmarked in citation form.

⁶ One might assume that ‘head’ is classifying people in (see-head) ‘visit’. However, with the meaning ‘check’, people are classified with the morpheme /-(**V**)ts/. Ultimately, it is difficult to determine whether /-(**V**)k’w/ ‘head’ is classifying the O argument of ‘visit’ as the complex verb stem only takes people as O arguments. On the other hand, there is one known instance of /-(**V**)k’w/ ‘head’ for the verb ‘check’.

as a whole, verbal classification operates on an absolutive basis. In some instances, a peripheral participant (instrument or location) can be classified.

9.1.1.1 Classification of O Arguments

The verb with possibly the most elaborate system of verbal classifiers is **ʔaf-** ‘wash’ of NoG. This verb root is bound in the variety of Gumuz spoken in Mandura (NoG) and requires a verbal classifier. However, in the Dangur NoG variety, such a verb root need not carry a classifier (9.3). The same is true for **ʔef** ‘wash’ in SoG (9.4). The fact that the verb is bound in NoG is not surprising, considering that in the development of a classificatory system, “certain verbs of wide scope occur less and less frequently by themselves, and more frequently with particular incorporated nouns” (Mithun 1986:384).

- | | | |
|-------|-----------------------------|------------------|
| | NoG | |
| (9.3) | ára d-ára- ʔaf | líca-ma |
| | 1SG AFF-1SG.TR- wash | face/eye-1SGPoss |
| | ‘I washed my face.’ | |
| | SoG | |
| (9.4) | b-ár- ʔef -agá | elá-dua |
| | AFF-1SG.TR-wash-NFUT | hand-child |
| | ‘I wash the child’s hands’ | |

For this verb root, the classifier /-(**V**)c/ ‘eye/seed’ is used for a seemingly arbitrary class of clothes, sharp metal objects, wounds, and blood (9.5, 9.6). But the complex counterpart in NoG, /-**ílic**/, classifies all seeds and grains, fairly consistently (9.7a).⁷ In addition, ‘arrow’ is part of this latter class as the ‘arrow’ is the ‘eye’ or ‘seed’ of the bow as per the compound name for ‘arrow’ (eye-bow) (9.8a) (see section 9.2.6 for further discussion). In SoG, in contrast, the simple classifier /-(**V**)c/ is used to classify all of these types of O arguments (9.5b-9.8b).

⁷ As /-**ílic**/ also means ‘seed’, example (9.7) could be considered an example of external possession (Chapter VIII) which might also explain its co-occurrence with **cá-dogwa** ‘arrow’ (9.8a). However, a true example of external possession for the latter would simply have **dogwa** ‘bow’ as the O argument and not repeat ‘seed’ in both the verb and the O argument noun.

- | | | | |
|-------|--|--|---|
| | NoG | | SoG |
| (9.5) | a. áχwa ʔaf-ác
clothes wash-CL1:eye
'Wash the clothes!' | | b. ʔef-ác aŋwa
wash-CL:eye
'Wash the clothes!' |
| (9.6) | a. ʔaf-ác maxá
wash- CL1:eye blood
'Wash off the blood!' | | b. ʔef-ác mahá
wash- CL:eye blood
'Wash off the blood!' |
| (9.7) | a. ʃimbirá ʔaf-ilíc
chickpea wash-CL2:eye
'Wash the chickpeas!' | | b. ʔef-ác táaŋk'a
wash-CL:eye millet
'Wash the millet!' |
| (9.8) | a. d-ára-ʔaf-ilíc cá-dog ^w a
AFF-1SG.TR-wash-CL2:eye eye-bow
'I washed the arrow.' | | b. ʔef-ác cá-jaŋgwa
wash-CL:eye eye-bow
'Wash the arrow!' |

The incorporated simple noun root /-(V)k'w/ 'head' classifies extremities of the human body (or body parts that function like a head). Thus, it is incorporated when the O is one's face, toes, fingers, etc., as exemplified in (9.9) and (9.10). The complex form of the noun /-**ilúk'w**/ (CL2:head), however, classifies non-body parts that are head-like in shape, size and function, mainly fruits and vegetables, as in (9.11) and (9.12).⁸ Therefore, it should be noted that one's own head cannot be classified with this incorporated noun, as shown in (9.13), even though the free form of this noun literally refers to one's head.⁹

- | | |
|-------|---|
| | NoG |
| (9.9) | ʔaf -ók'w lic-úá
wash-CL1:head eye/face-2SG.POSS
'Wash your face!' |

⁸ It may be that fruits and vegetables are classified as 'head' because they are metaphorical heads of the plant.

⁹ The utterance in (9.13) is only grammatical as an intransitive with an intransitive tonal melody: **dárafilúk'w** 'I washed my head'.

- NoG
 (9.10) ?af-ók'w k'wá-tʃag-uá¹⁰
 wash- CL1:head head-foot-2S
 'Wash your toes!'
- NoG
 (9.11) ?af-ilúk'w bartukána
 wash- CL2:head orange
 'Wash the oranges!'
- NoG
 (9.12) patúa d-a-?af-ilúk'w
 pumpkin AFF-3SG-CL2:head
 'S/he washed the pumpkins.'
- NoG
 (9.13) *lik'ú-ma d-ár-?af-ilúk'w
 head-1SG AFF-1SG-wash-CL2:head
 'I washed my head.'

'Tooth' incorporated as a simple noun root /-(V)k'ós/ (9.14) classifies a distinct category of items from its complex counterpart /-ílik'ós/ (9.15-9.16). In (9.14), however, only sharp objects and utensils such as 'spoon' belong to this class in NoG, while in SoG both categories of nouns — sharp objects and/or utensils as well as objects that come in groups of identical members (buttons, beads) — belong to the class marked by the simple noun root form /-(V)k'ós/ (9.17).

- NoG
 (9.14) ?af-ok'ós mankia
 wash-CL1:tooth metal.spoon
 'Wash the spoon(s)!'
- NoG
 (9.15) ?af-ilík'ós minza
 wash- CL2:tooth bead
 'Wash the beads!'

¹⁰ This is much like Mithun's Type II noun incorporation (1986:383) which is not considered a classifier system but leads to such a system historically. However, it is unlike Type II incorporation in that the body part 'head' is marked both on the verb and the possessor 'foot.'

NoG
 (9.16) ?af-ilík'ós k'walif
 wash-CL2:tooth button
 'Wash the buttons!'

SoG
 (9.17) ?ef-ok'ós tʃaaga (antíla, múá, minza)
 wash-CL:tooth knife (needle, spear, beads)
 'Wash the knife (needle, spear, beads).'

Another noun found incorporated into the verb for 'wash' which functions as a classifier is **ts'éa** 'ear'. This noun does not appear to be as productive in incorporation. Nonetheless, it serves as a classifier when incorporated into five of the verb roots given in Appendix C. Both the simple root /-(V)ts'é/ 'ear' and its complex counterpart /-ííts'é/ (CL2:ear) classify flexible, ear-like objects such as mushrooms (9.18, 9.19) and other thin, flat, flexible objects such as paper or leaves (see section 9.2.1).

NoG
 (9.18) ?af-áts'é waagá
 wash- CL1:ear white.mushroom
 'Wash the white mushrooms!'

NoG
 (9.19) ?af-ííts'é ámidadê
 wash- CL2:ear black.mushroom
 'Wash the black mushrooms.'

The incorporated noun (IN) /-ííl/ 'belly' only marginally functions as a verbal classifier and exists only in its simple root form.¹¹ When used with the verb root 'wash', it can classify O arguments that have a concave surface, a large surface area, or an 'inside'. Quite often, this IN refers to the inside of something, in which case it is not functioning as a classifier (see example 8.16b of Chapter VIII). In a few instances,

¹¹ Two possible reasons for this classifier existing only in its simple form are: 1) this body part term is the historical source for the prefix found in the complex forms and 2) haplology; Gumuz does not normally allow two like contiguous syllables. However, I believe the first to be more likely.

though, it refers to the whole object, not simply the concave surface, as in ‘dish’(9.20) or the inside surface as in ‘cup’, and then does function as a classifier.

- SoG
 (9.20) ʔef-ár-ííl sánéá baʔ má-¹s-árâ-n ŋga
 wash-1SG.TR-CL:belly plate PROX PURP-eat-1SG.TR-LOC food
 ‘I will wash the (whole) plate in order to eat food on it.’

Lastly, /-Vts/ ‘body’ only exists in its simple root form and no longer exists as a free noun in the language. As a classifier, /-Vts/ refers to the human body (including body parts) and entities that are body-like in shape (longer than they are wide) and function. In (9.21), the verb is intransitive and therefore the S argument is classified.

- NoG
 (9.21) ára d-ár-ʔaf-áts
 1SG AFF-1SG.INTR-wash-CL:body
 ‘I bathed.’

- NoG
 (9.22) ára d-ár-ʔáf-áts eʔâ-m
 1SG AFF-1SG.TR-wash-CL:body hand-1SG.POSS
 ‘I washed my hands.’

- NoG
 (9.23) ʔaf -áts tʃaampá
 wash-CL:body shoe
 ‘Wash the shoes!’

- NoG
 (9.24) ʔaf-áts ɓagá-máts’á
 wash-CL:body body-house
 ‘Wash the walls!’

With the verb, ‘wash’, ‘head’ classifies extremities of the human body (in NoG); but this same classifier classifies a quite distinct set of objects for the verb ‘heat’. In (9.25) through (9.27) below, /-(V)k^w/ classifies liquids that are typically contained.

Here, ‘head’ classifies the container that these liquids are placed in (as such a container is implied for the verb ‘heat’). This is true for both SoG and NoG varieties.

NoG
 (9.25) ook-ák’w aja
 heat-CL1:head water
 ‘Heat the water’

NoG
 (9.26) ook-ák’w kóχwa
 heat- CL1:head sauce
 ‘Heat the sauce.’

NoG
 (9.27) ook-ák’w kea
 heat- CL:head local.beer
 Heat the beer.’

With the root ‘heat’ the complex counterpart /-**ilúk’w**/ ‘head (CL2:head)’ more closely mirrors the categorization set found with ‘wash’ above. This classifier classifies any non-body part head-like in shape, size, and/or function (9.28).¹²

NoG
 (9.28) ook-ilúk’w k’wá-gíǰá éé-ʔaf-ára-ka-ts
 heat- CL2:head head-rock FUT-wash-1SG.INTR-INSTR-CL:body
 ‘Heat the rock and put it in the water for me to bathe with.’
 (The rock will heat the water.)

The simple noun root /-(**V**)c/ ‘eye’ classifies liquids. ‘Head’ cannot classify ‘coffee’ or ‘tea’ while /-(**V**)c/ ‘eye’ can.¹³ The difference is that ‘eye’ classifies liquids

¹² As for example (9.28), it appears as though an old system of class morphemes still exists to some extent in Gumuz (e.g. head-rock). See section 9.2.6 for further discussion.

¹³ It is assumed that ‘coffee’ and ‘tea’ do not fit the category because these were introduced later in Gumuz culture. The class of contained liquids appears to be closed and reflects traditional Gumuz consumable liquids: water, sauce, local beer, etc. That said, there exist some speakers who allow ‘tea’ to co-occur with /-(**V**)k’w/ ‘head’.

regardless of their containers while /-(V)k'w/ 'head' classifies liquids in terms of their container or liquids that are contained (see section 9.1.2 for further discussion).

- NoG
 (9.29) ook-ác kóχwa
 heat-CL1:eye sauce
 'Heat the sauce.'

- NoG
 (9.30) ook-ác ʃaja
 heat-CL1:eye tea
 'Heat the tea.'

The complex form /-fílɨc/ classifies the O argument of 'heat' in the same manner as it does for the O of 'wash' above. This classifier is used for any type of seed or grain, and appears to be limited to NoG.¹⁴

- NoG
 (9.31) ook-ilíc cá-ófókwaʒá
 heat-CL2:eye seed-corn
 'Heat the corn kernels.'

- NoG
 (9.32) ook-ilíc c-ó'pá
 heat- CL2:eye seed-butter.bean
 'Heat the butter beans.'

Lastly, the classifier /-(V)ts/ 'body' classifies items that are associated with the human body or are body-like/flesh-like, as in (9.33) and (9.34).

- NoG and SoG
 (9.33) ook-áts batʃ'a
 heat-CL:body meat
 'Heat the meat.'

¹⁴ One SoG speaker allowed the construction: ook-fílɨc cá-bafókwaçá (heat-CL2:eye seed-corn). However, he preferred the external possession construction: ook-fílɨc bafókwaçá (heat-eye/seed corn).

- NoG and SoG
 (9.34) ook-áts uná
 heat- CL:body cassava
 ‘Heat the cassava.’

9.1.1.2 Classification of S Arguments

Verbal classifiers can also classify S arguments in Gumuz. In my corpus, the most frequent classifier in this function /-(**V**)ts/ ‘body’, as mentioned previously, is employed in reflexive and reciprocal constructions. See also example (9.35).

- NoG
 (9.35) ákwa a-ók-ókwa-ts
 1SG.INCL RECP-heat-1PL.INCL.INTR-CL:body
 ‘Let’s make each other warm’ (lit: ‘Let’s body-heat each other’)

In (9.36) ‘water’ as an S is classified with /-(**V**)c/ ‘eye’ on the verb, ‘run’.

- SoG
 (9.36) á-dugu-gá-ca = ngó á-aja ná-gitfá ká-móá
 3SG.INTR-run-NFUT-CL:eye=NEG NOM-water LOC-low to-above
 ‘Water does not flow from bottom to top.’ (Gumuz proverb)

One most often encounters verbal classifiers referring to S arguments in Middle Voice constructions. Thus, there appears to be a preference for the classified S/O argument to have the role of undergoer (refer to section 7.2.6 of Chapter VII for further discussion of voice).

- SoG
 (9.37) ifá-mátá n-íí-gâ-m-sâ-n
 egg-chicken HYP-3PL.TR-NEG.HYP-NMLZ-eat-DEP

 b-a-ciŋ-gá-áá-k’w
 AFF-3S-smell-NFUT-MV-CL:head
 ‘If the egg is not eaten, it will smell.’

9.1.1.3 Classification of Instruments

While it is most common for Gumuz verbal classifiers to classify the S/O argument, it is also possible to classify oblique instruments. Classifying peripheral participants is not so unusual among languages with verbal classifiers (Aikhenvald 2000: 162). With the verb **tʃim** ‘sew’, for example, if one sews by machine, the CL /-(**V**)ts/ ‘body’ is required (9.38). But, if one sews by hand, the CL /-(**V**)c/ ‘eye’ is necessary as this classifies sharp objects such as needles (9.39). This latter CL happens to also classify clothes (which is the O in 9.39) but in this example it classifies the instrument.¹⁵ The same is true for SoG, but the verb root is **k’of** ‘pierce’. When this verb root is used in conjunction with these two classifiers, the new stem means ‘sew’ and the instrument of the verb is classified (9.40-9.41). One can substitute the classifier /-(**V**)k’ós/ ‘tooth’ for the meaning ‘sew by hand’, as this classifier also classifies sharp metal objects (9.39).

NoG
 (9.38) aχwa tʃim-áts
 clothes sew-CL:body
 ‘Sew the clothes by machine.’

NoG
 (9.39) aχwa tʃim-ác
 clothes sew-CL:eye
 ‘Sew the clothes by needle (by hand).’

SoG
 (9.40) k’of-áts aηwa
 pierce-CL:body clothes
 ‘Sew the clothes by machine.’

SoG
 (9.41) k’of-ác aηwa ~ k’of-ák’ós aηwa
 pierce-CL:eye clothes pierce-CL:tooth clothes
 ‘Sew the clothes by needle.’

¹⁵ For examples (9.38, 9.39), it is also possible that the classifiers are referring to the size of the sewing job. That is, when one sews by hand, small stitches are made over a smaller area (‘eye’ classifier) and when sewing by machine, one sews a large area of the cloth (‘body’ classifier).

Lastly, while the verb stem **ʔótʃ** ‘hit’ + CL (SoG) generally classifies O arguments (9.42-9.43), it can also classify the instrument of the verb.¹⁶ In example (9.44), **/-(V)kʷ/** ‘head’ is not classifying the O argument ‘corn kernels’, but rather an unspecified instrument — a stone.

- (9.42) SoG
 b-a-tʰakʰ-agá gatʰakʰóá n-éla-má é-bané
 AFF-3SG.TR-spit-NFUT saliva LOC-hand-3SG.POSS like-MED
- b-a-ʔótʃ-ʰágá-cá
 AFF-3SG.TR-hit-NFUT-CL:eye

‘He spits saliva in his hand like this and he hits it (the saliva).’

- (9.43) SoG
 á-ʔótʃ-ats mátsʰá
 go-hit-CL:body house
 ‘Go and knock on the house.’

- (9.44) SoG
 ʔótʃ-okʷ cá-bafokwáca ká-ŋga
 hit- CL:head seed-corn for-food
 ‘Pound corn with a stone for food’

9.1.2 Merging and Overlap of Categories/Classes

There appears to be some overlap (even potential merging) of classes relative to which verbal classifier is used in Gumuz. Such is typical to any system of classifiers, including verbal ones (Aikhenvald 2000: 149). This section will describe some of these category overlaps in Gumuz verbal classifiers.

9.1.2.1 Simple vs. Complex Forms

There does not always seem to be a strong distinction in category membership between the complex as opposed to the simple root classifiers in NoG; for many verbs

¹⁶ In (9.43) it is unclear whether ‘body’ is classifying ‘house’ or a body part (i.e. ‘hand’) which is used to knock on the door. If the latter, this is another example of a CL classifying an instrument.

these two are interchangeable. For example, with the verb ‘burn/roast’ below, the choice between /-**ílik’ós**/ and /-(**V**)**k’ós**/ seems to make no difference in meaning (9.38).¹⁷

- NoG
 (9.45) gis-ílik’ós ófkwaǰa ~ gis-k’ós ófkwaǰa
 burn-CL2:tooth corn burn- CL1:tooth corn
 ‘Roast the corn.’ ‘Roast the corn.’

However, certain verb roots allow only simple or only complex forms, and not both. For example, the verb root **ɲar** ‘take’ can co-occur with the simple root form of the ‘tooth’ classifier /-(**V**)**k’ós**/ (9.46), but not with the complex form /-**ílik’ós**/ (9.47).

- NoG
 (9.46) ɲar-**k’w’ós** k’w’ósa-ǰá
 take-CL1:tooth tooth-tree/wood
 ‘Take the firewood.’

- NoG
 (9.47) *ɲar-ílik’ós

The verb, **k’orak’** means ‘remove an outer layer from something’ or ‘peel’.¹⁸ The complex and simple forms of ‘head’ are both incorporated into this verb and are often used interchangeably for the same items (9.48-9.50).

- NoG
 (9.48) k’orak’-ók’w (~k’orak’-ílúk’w) bartukána
 peel-CL1:head (~peel-CL2:head) orange
 ‘Peel the orange.’

¹⁷ ‘Corn’ usually does not fall into the class marked by either the complex or simple form of the incorporated noun ‘tooth.’ Because corn (on the cob) is normally roasted in rows, it falls in the class of ‘groups of identical objects’. It is possible that neither of the examples in (9.45) involves a classifying function but both are merely expressions of external possession (e.g. ‘Roast the teeth of the corn’ or ‘Roast the edge of the corn’).

¹⁸ At least one speaker of NoG preferred to use a different verb root for ‘peel’, **ts’erek’**. His choice of classifiers was the same as the simple root forms in (9.46-9.48). The O argument of this verb can either be what something is peeled from, or the outer covering that is being removed.

- NoG
 (9.49) k'orak'-ók'w (~k'orak'- ílúk'w) gíǰá-ek'weŋkúχwá
 peel-CL1:head (~peel-CL2:head) rock-radio
 'Remove the batteries from the package.'

- NoG
 (9.50) k'orak'-ók'w (~k'orak'- ílúk'w) íǰ-métá
 peel-CL1:head (~peel-CL2:head) egg-chicken
 'Peel the hard-boiled egg.'

There is some overlap between the simple and complex forms of 'eye' in NoG. The complex form of the classifier 'eye' /-ílic/ fairly consistently classifies seeds, grains and seed-like objects while the simple root form /-(V)c/ classifies a much broader and diverse category. For verbs whose simple root classifier /-(V)c/ classifies both seeds and other items, the complex form of 'eye' /-ílic/ is only used when the S/O argument is a seed.¹⁹ This is made clear with the verbs 'wash' and 'heat' above.

Both simple and complex forms of **ts'éa** 'ear', regardless of the verb root, classify flat, flexible objects. See (9.18-9.19) above and (9.51) and (9.52).

- NoG
 (9.51) ʔaf-áts'ê ámidadê
 wash- CL1:ear black.mushroom
 'Wash the black mushrooms.'

- NoG
 (9.52) ʔaf -ílíts'ê waagá
 wash- CL2:ear white.mushroom
 'Wash the white mushrooms!'

However, with some verb roots, the simple classifier form of 'ear' is either not attested, as demonstrated with the root **nt'** 'twist' (9.53-9.54); or is not grammatical as **íǰ-**

¹⁹ The complex classifier /-ílic/, for these verbs, is also used for S/O arguments with **cá-** as the initial morpheme in a nominal compound.

‘soak’ (9.56).²⁰ However, one speaker of NoG allowed the simple form when ‘paper’ was the O argument of **ńǰ-** ‘soak’ (9.57).

NoG
 (9.53) nt’-**ńlīts’ê** norága ~ ?? nt’-**áts’ê** norága ??
 twist-CL2:ear paper/book twist-CL1:ear paper/book
 ‘Twist the paper.’

NoG
 (9.54) nt’-**ńlīts’ê** ts’ín¹ǰá ~ ?? nt’-**áts’ê** ts’ín¹ǰá ??
 twist-CL2:ear leaf twist-CL1:ear leaf
 ‘Twist the leaf.’

NoG
 (9.55) **ńǰ-’ńlīts’ê** waagá
 soak-CL2:ear white.mushroom
 ‘Soak the mushrooms.’

NoG
 (9.56) ***ńǰ-’áts’ê** waagá
 soak-CL1:ear white.mushroom
 ‘Soak the mushrooms.’

NoG
 (9.57) d-a-**ńǰ-ats’ê** norága
 AFF-3SG.TR-soak-CL1:ear paper
 ‘He soaked the paper.’

9.1.2.2 ‘Seed’ and ‘Tooth’ Classes

In addition to overlap of items classified by simple and complex forms of the same IN, there is sometimes overlap in the items that two different classifiers can classify. For example, there is not always a strong distinction between the classes delimited by the complex forms of ‘tooth’ /-**ńlǰ’ós/** and ‘eye/seed’ /-**ńlǰ’.**²¹

²⁰ Both of these verb roots begin with a syllabic nasal. It is therefore possible that the restriction to the complex form ‘ear’ is phonologically motivated (at least for certain speakers).

²¹ Again, there is a fine distinction between external possession (Type II NI, see Chapter VIII) and verbal classifiers. One could feasibly interpret (52) as ‘Soak the teeth of the millet plant’.

NoG
 (9.58) ńǰ-⁴ílk'ós tááŋk'á
 soak-CL2:tooth millet
 'Soak the millet seeds.'

NoG
 (9.59) ńǰ-⁴ílic cá-tááŋk'á
 soak-CL2:eye seed-millet
 'Soak the millet seeds.'

The fact that the complex form of 'tooth' /-**ílk'ós**/ classifies items that form groups of identical objects may explain the overlap with the class for 'eye/seed'. However, /-**ílic**/ 'eye/seed' demarcates a group that is broader than the group marked by /-**ílk'ós**/ 'tooth', in that beads and firewood in addition to seeds are also included in the set classified by /-**ílk'ós**/.

NoG
 (9.60) wíd-**ílk'ós** tááŋk'á
 see-CL2:tooth millet
 'Check the millet.'

NoG
 (9.61) wíd-**ílk'ós** mínzá
 see-CL2:tooth beads
 'Check the beads.'

NoG
 (9.62) wíd-**ílk'ós** k^wós-já
 see-CL2:tooth tooth-wood/tree
 'Check the firewood.'

The complex INs in SoG variety do not appear to function as verbal classifiers. But overlap does exist between groups classified by some simple root classifier forms. In SoG, seeds and sharp metal objects can be classified by either /-(**V**)c/ 'eye' or /-(**V**)k'ós/ 'tooth' (9.63-9.65), but beads, firewood, and metal spoons are only classified by /-(**V**)k'ós/ 'tooth' (9.66-9.68).

- (9.63) SoG
 jír⁺-íc táánk'á ~ jír-ik'ós táánk'á
 see-CL:eye millet see-CL:tooth millet
 'Check the millet.'
- (9.64) SoG
 b-ár-ʔef-agá-c múá
 AFF-1SG.TR-wash-NFUT-CL:eye spear
 'I washed the spear.'
- (9.65) SoG
 b-ár-ʔef-agó-k'ós múá
 AFF-1SG.TR-wash-NFUT-CL:tooth spear
 'I washed the spear.'
- (9.66) SoG
 jír-ik'ós mínzá * jír⁺-íc mínzá
 see-CL:tooth bead(s)
 'Check the beads.'
- (9.67) SoG
 jír-ik'ós k'ósa-maanja * jír⁺-íc k'ósa-maanja
 see-CL:tooth tooth-fire
 'Check the firewood.'
- (9.68) SoG
 b-ár-ʔef-agó-k'ós maankiá * b-ár-ʔef-agá-c maankiá
 AFF-1SG.TR-wash-NFUT-CL:tooth spoon
 'I washed the spoon.'

A similar overlap exists between groups demarcated by the simple root forms of /-(V)c/ 'eye' and /-(V)k'ós/ 'tooth' in NoG. If a verb root can combine with both simple and complex forms of the 'eye' and 'tooth', only the complex form (of either of these CLs) classifies seeds. In NoG, the simple forms of 'eye' and 'tooth' both cover sharp metal objects .

- (9.69) NoG
 antíla d-ára-ʔaf-ác ~ antíla d-ára-ʔaf-ok'ós
 needle AFF-1SG.TR-wash-CL1:eye needle AFF-1SG.TR-wash-CL1:tooth
 'I washed the needle.'

- NoG
 (9.70) muχwá d-ára-ʔaf-ác ~ muχwá d-ára-ʔaf-ok'ós
 spear AFF-1SG.TR-wash-CL1:eye spear AFF-1SG.TR-wash-CL1:tooth
 'I washed the spear.'

9.1.2.3 'Head' and 'Eye' Classes

The classifier /-(V)k'w/ 'head' classifies entities that are head-like in shape and/or function. The one seeming exception is the inclusion of liquids in this class. However, if one considers that liquids are commonly contained and the traditional drinking vessel was made from a gourd (a type of fruit), the class as a whole remains cohesive (via metonymy). Evidence that liquids are classified by their container is as follows. In (9.71), if one jumps over a stream (in which the water is not contained) the classifier /-(V)c/ 'eye' is used. However, when water is in a container, the classifier /-(V)k'w/ 'head' is used (9.72).²² Such a distinction is true for both NoG and SoG varieties.

- NoG
 (9.71) aja d-ár-ampóχ-ác
 water AFF-1SG.TR-jump-CL1:eye
 'I jumped over the stream.'

- NoG
 (9.72) aja lá-belí d-ár-ampóχ-ók'w
 water LOC-bucket AFF-1SG.TR-jump-CL1:head
 'I jumped over a bucket of water (lit. 'water in a bucket').'

Regarding the verb 'give', if one gives water to another, the classifier /-(V)k'w/ 'head' must be used, presumably because liquid must be given via a container (9.73).

- SoG
 (9.73) dua b-a-cá-gó-k'w aja ká = bab-ámá
 child AFF-3SG.TR-give-NFUT-CL:head water to=father-3SG.POSS
 'The child gave water to his father.'

²² The locative marker ná= is often realized as lá= for certain speakers of NoG (example 9.72).

9.1.3 Semantic Breadth of Simple Classifiers

The simple root forms of body part classifiers demarcate more diverse sets of referents than do the complex root classifiers. In this section, examples are given to demonstrate the breadth of each class (as the ‘ear’ /-ts’ê/ class is not as diverse in its membership as are the other simple roots, no further examples are given).

9.1.3.1 The Classifiers /-(V)k’w/ ‘Head’ and /-(V)ts/ ‘Body’

Beyond classifying head-like entities and contained liquids, /-(V)k’w/ ‘head’ appears to classify animate S/O arguments as well. As mentioned previously, the verb *wíɗ* ‘see’ (*jíɾ* in SoG) comes to mean ‘visit’ when uttered in conjunction with the IN /-(V)k’w/ ‘head’ and when used in conjunction with other classifiers, it means ‘check’. As ‘visiting’ is confined to people in Gumuz (another verb is used for places), it is difficult to determine if /-(V)k’w/ is indeed functioning as a classifier with this verb root. However, there are other verb roots which appear to use /-(V)k’w/ ‘head’ to classify animate S/O arguments. For one, the verb root *ʃá* ‘die’ in combination with certain simple classifiers comes to mean ‘kill’ for animate O arguments, or ‘extinguish’ for inanimate O arguments. Animate O arguments take the /-(V)k’w/ ‘head’ classifier (9.74), while inanimates like ‘fire’ and other objects associated with light take the /-(V)c/ ‘eye’ classifier (9.75).

- SoG
(9.74) b-íí-ʃá-gó-k’w (ʔííʃá/ʃaga)
AFF-3PL.TR-die-CL:head leopard/person
‘They killed it (a leopard/person).’

- SoG
(9.75) ʃá-c (maanʒa/ mííʒúgwá)
die-CL:eye fire/light
‘Put it out (the fire/light).’

The verb root *lííligít* ‘roll’ (or *ligít* in Dangur) of NoG can co-occur with both /-(V)k’w/ ‘head’ and /-(V)ts/ ‘body’, either of which can classify humans. However,

with this verb root, /-(V)ts/ ‘body’ can only classify human S arguments (9.76). That is, it functions as a reflexive marker in conjunction with intransitive tonal marking.²³ When body-like inanimate entities serve as O arguments in a transitive construction /-(V)ts/ ‘body’ is used to classify these (9.77), whereas /-(V)k’w/ ‘head’ classifies human (animate?) O arguments (9.78) in addition to other head-like (inanimate) O arguments (9.79).

- NoG
 (9.76) óó-Báámítá d-á-lílígít-áts lá = n?ea
 M-Bamita AFF-3SG.INTR-roll-CL:body LOC=ground
 ‘Baamita rolled on the ground.’
- NoG
 (9.77) lílígít-áts gizíá
 roll-CL:body grass
 ‘Roll the (bundled) grass.’
- NoG
 (9.78) m-óó-mígaákwa ka-m-óó-tifaará d-ú-lílígít-ók’w
 PL-M-Migakwa COM-PL-M-Tefere AFF-3PL.TR-roll-CL1:head
 wó-báámítá ná-n?ea
 M-Bamita LOC-ground
 ‘Migakwa and Tefere rolled Baamita on the ground.’
- NoG
 (9.79) lílígít-ók’w k’wá-gíjǎ
 roll-CL1:head head-rock
 ‘Roll the rock.’

²³ It may be that in this case these incorporated body part terms are not classifying but are qualifying the type of ‘rolling’. That is, ‘head-rolling’ could be indicating ‘rolling head over heels’ while ‘body-rolling’ could indicate ‘rolling on the side’. There is at least one other verb root **angál** ‘turn’ which changes its semantics in this way: **angál-ók’w** (turn-head) ‘turn over’, **angál-ác** (turn-eye) ‘turn around’, **angál-ííl** (turn-belly) ‘capsize’. However, this would not explain (9.79) nor the fact that /-(V)ts/ ‘body’ cannot be used on **lílígít** ‘roll’ when a person is the O argument.

9.1.3.2 The Classifier /-(V)c/ ‘Eye’

The classifier /-(V)c/ ‘eye’ classifies the most varied range of items. Previous sections gave examples of this classifier used with clothes (9.5), blood (9.6), seeds (9.61), liquids (9.29, 9.30, 9.40, 9.71), sharp objects like needles and spears (9.37, 9.39, 9.64, 9.69, 9.70) and fire/light (9.75). Similar to ‘clothes’ which is an outer covering, the outer skin/peel of fruits, vegetables, and plants is also included in this class. In (9.46-9.48) above, with the verb ‘peel’, it classified the object being peeled. However, if /-(V)c/ ‘eye’ is on the verb, it can either refer to small seed-like objects being peeled (9.80) or to the outer covering itself (9.81). This distinction is made clear when the action involves peeling sugarcane. Because **jámpa** ‘sugarcane’ belongs to a different class than its outer covering, the verb takes a distinct classifier depending on whether the O argument is the outer skin (9.82) or the cane itself (9.83).²⁴

NoG
(9.80) k’orak²-ác batfola
peel-CL1:eye peanut
‘Shell the peanut (lit: Remove the peanut from its shell).’

NoG
(9.81) k’orak²-ác béé-batfola
peel-CL1:eye skin-peanut
‘Remove the peanut shell.’

NoG
(9.82) k’orak²-ác béé-jámpa
peel- CL1:eye skin-sugarcane
‘Remove the sugarcane skin.’

NoG
(9.83) k’orak²-áts jámpa
peel-CL:body sugarcane
‘Peel the sugarcane.’

²⁴ The verb **ts’erk** ‘peel’ in SoG cannot take ‘the skin of X’ as an O argument.

Also a member of the ‘eye’ class, and perhaps related to sharp objects or blood are wounds.²⁵ In (9.84) below, ‘leg wound’ requires the /-(V)c/ ‘eye’ classifier.

- NoG
 (9.84) *maxábá-tʃogú-ma* *d-ár-ʔaf-ác*
 wound-leg-1SG.POSS AFF-1SG.TR-wash-eye
 ‘I washed my leg wound.’

The morpheme /-(V)c/ ‘eye’ also classifies soil/ground. The verb *bátʃ* ‘hit’ can mean ‘hoe (the ground)’ when combined with /-(V)c/ ‘eye’ (9.85) (see also example 9.107). A parallel classification of soil/ground with the class morpheme *ca-* is more clearly established (see section 9.2).

- NoG
 (9.85) *d-a-bátʃ⁺-ác* *ndéa*
 AFF-3SG.TR-hit-eye ground
 ‘He hoed.’ (lit: ‘He eye-hit the ground’)

One final object that fits the /-(V)c/ ‘eye’ classification is ‘rope’. At least two verbs use /-(V)c/ ‘eye’ when ‘rope’ is the O argument: *gat* ‘coil, wrap’ and *tôx* ‘break’ (9.86-9.87). However, when no contact is made on the rope or when it does not change its state, /-(V)kʷ/ ‘head’ is used (9.88).²⁶ It appears that both instances of the classifier /-(V)kʷ/ ‘head’ refer back to the O argument ‘rope’.²⁷

²⁵ The word for ‘wound’ *maxaba* in NoG is likely related to the word for ‘blood’ *maxá*. In SoG, the same classifier is used for ‘wound’ yet ‘wound’ (*maadá-*) does not appear to be lexically related to ‘blood’ *mahá* (at least not synchronically).

²⁶ However, if one ‘jumps over’ water as in example (9.71), the state of the water has not changed (nor has it been contacted) yet the classifier /-(V)c/ ‘eye’ is still used. Furthermore, when the IN /-(V)c/ ‘eye’ co-occurs with *beʔ* ‘fall’, the meaning changes to ‘cause to fall (to the ground)’ instead of ‘lower’ and can take both animate and inanimate O arguments. Thus, the verb root *beʔ* ‘fall’ combined with classifiers/INs may be lexicalized to some degree.

²⁷ The IN /-(V)kʷ/ ‘head’ in (9.86) may be referring to the ‘top’ of something, in which case it would not be serving a classificatory function.

- (9.86) NoG
 d-a-gat-ée-c síá
 AFF-3SG.TR-coil-TWRD-CL1:eye rope
 ‘He coiled the rope.’
- (9.87) NoG
 d-a-t’óχ-‘óc éé-malia síá
 AFF-3SG.TR-break-CL1:eye F-hyena rope
 ‘The hyena broke the rope.’
- (9.88) NoG
 beʔ-ók’w síá dí é-ampóχ-ár-ók’w
 fall-CL1:head rope little FUT-jump-1SG.TR-CL1:head
 ‘Lower the rope a little and I will jump over it.’

9.1.3.3 The Classifier /-(V)k’ós / ‘Tooth’

In addition to items that typically form groups of identical objects (seeds, beads, firewood, etc.) and metal objects (mainly utensils and weapons), the classifier /-(V)k’ós / ‘tooth’ can be used for animal bites. The inclusion of ‘bite’ appears to be related to the nominal compound expressing the O argument in (9.89) (see section 9.1.6 for further discussion). However, one can also classify ‘bite/sting’ without a nominal compound (9.90).

- (9.89) SoG
 k’ós-ɖakínjá b-ár-ʔef-ag-ók’ós
 tooth-scorpion AFF-1SG.TR-wash-NFUT-CL:tooth
 ‘I washed the scorpion bite/sting.’
- (9.90) SoG
 b-ár-ʔef-ag-ók’ós ɖakínjá gwá-b-a-k’án-‘gá
 AFF-1SG.TR-wash-NFUT-CL:tooth scorpion place-AFF-3SG.TR-bite-NFUT
 I washed the place where the scorpion bit (me).’

9.1.3.4 The Classifier /-íí/ ‘Belly’

As mentioned previously, the classifier /-íí/ (CL:belly) classifies entities with a concave surface such as ‘plates’ (9.20) and ‘cups’. Further examples of this categorization are found with ‘river’/ ‘water’ (9.91-9.93) and ‘hole/pit’ (9.94).

- (9.91) NoG
 ampóχ-ók-w-ííl baak'a
 jump-1PL.INCL.TR-CL:belly river
 'Let's jump over the river.'
- (9.92) NoG
 ára d-ár-gam-áts lamaadía d-a-n-dér-ííl aja
 1SG AFF-1SG.TR-know-body canoe AFF-3SG.TR-PL-cross-CL:belly water
 'I see canoes crossing the water (river).'
- (9.93) SoG
 b-a-háat-agá-á-ííl aja
 AFF-3SG.TR-be.far-MV-CL:belly water
 'The water (river) is deep.'
- (9.94) NoG
 d-ár-ampóχw-ííl χwa
 AFF-1SG.TR-jump-CL:belly hole/pit
 'I jumped over the hole.'

The classifier /-ííl/ (CL:belly) can also classify entities that encompass large areas or that have a large surface area (an area that is delimited?). One such example is the reference to 'field' as an O argument in (9.95). One must use /-ííl/ (CL:belly) in conjunction with the verb **gam** 'know, see' when referring to knowledge of a place (9.96). However, this latter use of /-ííl/ may be lexicalized to some extent as other IN's used in conjunction with **gam** 'know, see' also appear to be lexicalized, not demonstrating a classificatory function (9.97-9.98). The one seeming exception is with the IN /-(V)c/ 'eye' (9.99), especially when compared with the sense of 'see' used in conjunction with /-(V)ts/ 'body in (9.98). As the moon is a source of light (as are 'sun' and 'fire') such a classification seems reasonable.

- (9.95) SoG
 ára b-ár-lee-k-ííl tǵéǵá al-âm
 1SG AFF-1SG.TR-plow-NFUT-CL:belly field GEN-1SG.POSS
 'I plowed my field.'

- SoG
 (9.96) mandí b-ár-gam-ak-íílá
 Mendi AFF-1SG.TR-know-NFUT-CL:belly
 ‘I know Mendi (the town).’
- SoG
 (9.97) máts’á ma-dá-má b-ár-gam-aká-ǰa
 house NMLZ-do-TR AFF-1SG-know-NFUT-hip
 ‘I know how to build a house.’
- SoG
 (9.98) b-a-gam-ag-áts ǰaga
 AFF-3SG.TR-know-NFUT-body person
 ‘S/he saw someone.’
- SoG
 (9.99) b-a-gam-ag-ác ǰíǰa
 AFF-3SG.TR-know-NFUT-CL:eye moon
 ‘S/he saw the moon.’

9.1.4 Classifiers as Indicators of the Shape/State of the S/O Argument

Much overlap in class membership in Gumuz can be explained by the classifier referring to the shape and/or state of the verbal argument. This shows that Gumuz classifiers are linked to cognitive-world referents or precepts and are not necessarily linked to a specific noun. A concept/referent coming in various states or shapes will have a different classifier depending on the shape or state of the real-world referent (Beckwith 2007:105). In (9.100-9.101) **ǰá** ‘tree/wood’ is referred to in different states. In (9.100), the wood is cut into pieces, while in (9.101) the wood is kept in one piece (which could refer to the original tree itself).

- NoG
 (9.100) ńǰ-ok^w ǰá
 soak-CL1:head wood
 ‘Soak the pieces of wood.’
- NoG
 (9.101) ńǰ-ats ǰá
 soak-CL:body wood
 ‘Soak the uncut wood (the entire log/tree).’

This variability in the use of classifiers is also evident with coffee; liquid versus seed-form can be distinguished depending on which classifier is employed. In (9.102) below, the liquid form of coffee is the O argument, so /-(V)c/ is used. But in (9.103), the bean form of coffee is the O argument, so the classifier /-fíc/ is used.²⁸

NoG
 (9.102) fún-ac búná
 smell-CL1:eye coffee
 ‘Smell the liquid coffee.’

NoG
 (9.103) fún-ílic búná
 smell-CL2:eye coffee
 ‘Smell the coffee beans.’

In some instances, the verb root will consistently take the same classifier for a certain verbal argument but a nominalized verb modifying the same argument will use different classifiers indicating the state of that verbal argument. For example, ‘fire’ is normally classified by /-(V)c/ ‘eye’. However, if the fire has large pieces of log burning within it, the classifier /-(V)k’w/ ‘head’ is used with (9.104), whereas if the fire only consists of embers, /-(V)c/ ‘eye’ again is used with (9.105).²⁹

SoG
 (9.104) b-ár-apóo-g-ác ma-só-k’ó maanʒa
 AFF-1SG.TR-jump-NFUT-CL:eye NMLZ-eat-CL:head fire
 ‘I jumped over the burning fire (with large pieces burning in it)’

SoG
 (9.105) b-ár-apóo-g-ác ma-sá-c maanʒa
 AFF-1SG.TR-jump-NFUT-CL:eye NMLZ- eat-CL:eye fire
 ‘I jumped over the burning fire (only embers remain).’

²⁸ As ‘eye’ and ‘seed’ are the same word in Gumuz, example (9.103) could arguably be an external possession construction (Mithun’s Type II NI). However, one would then need to argue that **buna** ‘coffee’ (without reference to the verb) refers only to the plant in (9.103) and the drink in (9.102).

²⁹ In these examples, the classifiers could also be analyzed as classifying an embedded (unstated) O argument of the nominalized verb **sá** ‘eat (burn)’, an argument other than ‘fire’.

9.1.5 Verbal Classifiers with Applicative Function?

Verbal classifiers are sometimes used to foreground participants for certain verbs that can take both an O argument (of various semantic roles) and a peripheral argument with the semantic role of either instrument or location. For example, the verb root ‘run’ combines with a classifier to derive the new stem ‘plaster, cause to flow’. The classifier in this verb stem can foreground either the O argument ‘basket’ in (9.106) or the peripheral participant ‘ground/soil’ (9.107).

- SoG
- (9.106) b-a-dugu-gó-k’w katʃa ka-nnéa
 AFF-3SG.TR-run-NFUT-CL:head basket INSTR-ground
 ‘S/he plastered *the basket* with mud.’
- (9.107) b-a-dugu-gá-c katʃa ka-nnéa
 AFF-3SG.TR-run-NFUT-CL:eye basket INSTR-ground
 S/he plastered the basket with *mud*.’

Further consider what happens with the verb stem **ʔaf** ‘wash’+ CL. With the sense of ‘washing something off of something else’, the argument with the semantic role of LOCATION from which something is removed can be classified on the verb, even though the participant appears to be peripheral (i.e. appears in an oblique phrase). In (9.108), the LOCATION of ‘wall’ is classified on the verb, and not ‘blood’ which is the THEME and O argument.

- NoG
- (9.108) ʔaf-áts maχá lá-ʃagá-máts’á
 wash-CL:body blood LOC-body-house
 ‘Wash the blood off the wall.’

Similarly, one can grammatically promote a location with an erstwhile intransitive verb root by adding a verbal classifier and thus making the stem transitive. In (9.109), the location where the action of urinating is done is in a PP, whereas in (9.110), the verbal classifier /-(V)c/ is added. This increases the valence and promotes the location, ‘water’ to object status.

NoG
 (9.109) d-ár¹-fág n = íl-aja
 AFF-1SG.INTR-urinate LOC=belly-water
 ‘I urinated in the water.’

NoG
 (9.110) wol = á-¹fág-ác aja // ára tsô
 who?=3SG.TR-urinate-CL1:eye water 1SG FOC
 ‘Who urinated (in) the *water*? I did!’

The verb ‘plow/till’ can be intransitive (9.111) or transitive (9.112). However, when transitive, a CL is not required (contrary to ‘urinate’ above). A CL is used when the speaker wishes to express the THEME as an O argument. In (9.113) ‘sorghum’ is the THEME which is classified by /-(**V**)ts / (CL:body) (classifying the plant, not the seed), and in (9.95) above, ‘field’ is the THEME with the classifier /-**í**l / (CL:belly).

SoG
 (9.111) ára b-âr-lee-ká ná = tʃeɲá al-âm
 1SG AFF-1SG.INTR-plow-NFUT LOC=field GEN-1SG.POSS
 ‘I plowed on/in my field.’

SoG
 (9.112) ee-b-á-pá-ká b-íí-lee-ká
 COMP-AFF-3SG.INTR-sprout-NFUT AFF-3PL.TR-plow-NFUT
 ga-lee-a
 NMLZ2-plow-NM (crop)
 ‘When it sprouts, they plow the crop.’

SoG
 (9.113) b-íí-lee-ká-ts bádala etá-¹-ɲác²-áká
 AFF-3PL.TR-plow-NFUT-CL:body sorghum PRO.SG-3SG.TR-plant-NFUT
 ‘They plow the sorghum which s/he planted.’

9.1.6 Nominal Compounds and Verbal Classifiers

In Gumuz, noun-noun (NN) compounds are quite common (Chapter VI). When one of these compounds serves as an S/O argument, the first noun root of the compound

seems to have special influence in the choice of verbal classifier, especially if the first noun is of the same nominal origin as one of the classifiers.

For example, in NoG one can use the NN compound for ‘cow head’ as an O argument of the verb ‘skin’ and the corresponding classifier /-**íúk’w**/ (CL2:head) is repeated on the verb. The resulting sentence, translated literally, is: ‘Head-skin the cow’s head’ (9.114).

- NoG
 (9.114) k’od-íúk’w lúk’ó-χosa
 skin-CL2:head head-cow/ox
 ‘Skin the cow’s head.’

In (9.115) below, the object of the verb ‘smell’ is a NN compound meaning ‘fruit’; the first noun root ‘seed’, the head of the compound, is compounded with the noun root ‘thing’ (‘seed of thing’). Because the first root of the compound is ‘seed/eye’, the classifier must be the complex form of ‘eye’ /-**ííc**/. On the other hand, when a specific type of fruit is mentioned, especially one that is somewhat large and round, the classifier /-**íúk’w**/ ‘head’ is used (9.116). Both of the commands in (9.115, 9.116) can be used in reference to an orange. Thus, while classifiers generally refer to real-world referents, there seems to be some degree of agreement involved in the choice of classifier when the argument classified is a NN compound.

- NoG
 (9.115) fún-**ííc** cá-dá
 smell-CL2:eye seed-thing
 ‘Smell the fruit.’

- NoG
 (9.116) fún-**íúk’w** bartukáána
 smell-CL2:head orange
 ‘Smell the orange.’

In (9.117) the initial noun root of the O argument contains a nominal that corresponds to a noun categorization device (see section 9.2). That same nominal must be marked on the verb in this case, in the form of a verbal classifier.³⁰

- NoG
 (9.117) abé **k'ósá-**⁴dá l-a-ʔaf-**ok'ós**
 which tooth-thing REL-2SG.INTR-wash-CL1:tooth
 'What thing are you washing?'
 (lit: 'What tooth of a thing is it that you are washing?')

In (9.118), 'seed/eye' forms a compound with 'millet' and therefore the classifier /-(**V**)c / 'eye' occurs on the verb.³¹ The same is true for the word for 'arrow' which is expressed as the compound 'eye-bow' in Gumuz (9.8). However, in that instance, the complex form of the 'eye' classifier is used.

- NoG
 (9.118) wíɗ-ác **cá-tánk'á** k-a-ʔíí-áá-cá ée-gaaf-ákwá
 see-CL1:eye seed-millet COND-3SG.TR-be-MV-eye FUT-grind-1PL.INCL.TR
 'Check the millet seeds; if there are many, we will grind them.'

The noun root 'tooth' is often found in NN compounds (9.119). When the verb classifies such an O compound, the classifier /-(**V**)**k'ós** / 'tooth' must be used.

- SoG
 (9.119) ɲar-**k'ós** **k'ósa-já**
 take-CL:tooth tooth-tree/wood
 'Take the firewood.'

While many of the head nouns of NN compounds mentioned above may be prototypical nouns, others appear to represent a class or category of nouns, as explained in the following section.

³⁰ Example (9.117) may be an example of a class morpheme compound (to be discussed in section 9.2).

³¹ With regard to the verb stem 'be many' (9.118), /-**V**c/ 'eye, can be used to indicate (large) amounts. This is perhaps related to the grammaticalization pathway *eye*>*seed*>*things that come in large numbers*.

9.2 Class Morphemes

One distinct category of nominal compounds in Gumuz, which may hold the key to the origins of verbal classifiers in Gumuz, is that of class morpheme compounds. These are often found within nominal compounds, similar to those found in English, e.g. *man: mailman, policeman* etc. This use of class morphemes in Gumuz appears to be related to emphasis or focus, but also may be used for quantifying nouns (to some extent).

In Gumuz the class morphemes appear to be historically related to the simple root forms of the verbal classifiers. Having the same (or similar) class morpheme on verbs as well as on nouns is similar to what Aikhenvald (2000:204) labels ‘multiple classifier systems’ in which the same set of classifying morphemes can be used in more than one classifier environment. The main difference is that the Gumuz class morphemes may not be “prototypical” classifiers per the extant linguistic literature on classifiers. Nonetheless, the few class morphemes that have been documented in Gumuz have many of the properties of noun classifiers, both ‘definitional’ (i-iii) and ‘contingent’ (iv-vi) as outlined by Aikhenvald (2000:81):

- i) their presence in a noun phrase is independent of other constituents inside or outside it.
- ii) their scope is a noun phrase.
- iii) they are a type of non-agreeing noun categorization device whose choice is determined by lexical selection and not by matching any inflection properties of nouns with any other constituents of a noun phrase.
- iv) the choice of classifier is based on semantics.
- v) one noun can be used with different classifiers, with a change in meaning.

vi) the size of the inventory of noun classifiers can vary, from a fairly small closed set to a fairly large open set; as a consequence, they can be grammaticalized to varying extents.

Because these noun categorization devices appear to be somewhat limited in productivity in Gumuz, I will continue to refer to them as “class morphemes”. Table 9.3 below summarizes the known class morphemes in Gumuz and the categories represented.

Table 9.3. Class Morphemes in Gumuz

Gloss/Nominal Source	Class morpheme	Semantics of Classified Nouns
‘head’	k’wá-	(large) countable entities, containers
‘eye’	cá-	mass nouns, small innumerable entities, seeds, offspring, time
‘tooth’	k’ós-	entities that are divided into sets of identical members
‘ear’	ts’ê-	flat, flexible entities
‘belly’	ííl-/líí-	a delimited area or an entity with a concave surface
‘body’	-ts(V)-	entities that are body-like

9.2.1 Class Morphemes and Verbal Classifiers

Class morphemes are classifying morphemes which form compounds with certain nouns. These compounds are structurally similar to NN compounds (of the Associative Construction, Chapter VI) with the class morpheme functioning as the initial noun head. They differ from NN compounds in that the class morpheme compound can have the same referent with or without the class morpheme. In (9.120), one can say ‘tomorrow’

either with or without the class morpheme **cá-** ‘eye’ which classifies units of time in addition to mass nouns, etc.³²

NoG
 (9.120) d-éé⁴-f-ará **ka = mangwa** ~ **ka = cá-mangwa**
 AFF-FUT-drink-1SG.TR COM=morrow COM=CL:EYE-morrow
 ‘I will drink (something) tomorrow.’

Class morphemes in Gumuz differ from “prototypical” noun classifiers in that they are not very productive. Gumuz verbal classifiers, in contrast, arose from the same source body part nouns as class morphemes but are more productive as noun categorization devices. There is also evidence of a synchronic (syntactic) relationship between the two.

As we have seen, class morphemes in NN compounds appear to affect the choice of verbal classifier on the verb.³³ This is analogous to the syntactic behavior of class term compounds in Tai languages (DeLancey 1986) in that both class term compounds of Tai languages and class morpheme compounds in Gumuz tend to co-occur with their classifier counterparts. The main difference, however, is that the classifiers in Tai languages are numeral classifiers whereas the classifiers in Gumuz are verbal classifiers. In example (9.28) of section 9.1.1.1, the nominal compound with the class morpheme /**k’wá-**/ ‘head’ combined with the noun root ‘rock’ appeared as the O argument of the verb ‘heat’. The choice of verbal classifier on the verb, therefore, was /-**ílúk’w**/ ‘head’ in accordance with the class morpheme.

Likewise, ‘bone’ can be expressed either as a compound with a class morpheme or as the simple root **zák’wá** ‘bone’ without the class morpheme /**k’wá-**/ ‘head’.³⁴ With the

³² While the language consultant could not see any semantic difference between the two forms of ‘tomorrow’ in (9.120), I suspect that the phrase involving the class morpheme may indicate a more punctual or exact point in time.

³³ The co-existence of, in addition to the agreement between, these two systems of classification is likely significant in the historic development of verbal classifiers in Gumuz. In Tai, it has been documented that classifiers originated as class terms (DeLancey 1986) which could be the case for Gumuz.

³⁴ **k’wá-zák’wá** ‘head-bone’ is a class morpheme compound and does not refer to ‘skull’ as one might suspect. The word for ‘skull’ requires what could be called an associative construction with ‘bone’ as the head of the compound and ‘head’ following: **zák’wá-lúk’wá** ‘bone-head’.

class morpheme compound, the verbal classifier /-**ilúk'w**/ is used in the NoG variety (9.121). The same class morpheme compound exists in SoG but the simple root classifier /-(**V**)**k'w**/ is used on the verb (9.122). In both varieties of Gumuz, the class morpheme in these examples is optional.

NoG
 (9.121) gis-**ilúk'w** **k'wá**-zákwa
 burn-CL2:head head-bone
 'Roast the bone(s).'

SoG
 (9.122) gis-**ók'w** **k'wá**-zákwa
 burn-CL:head head-bone
 'Roast the bone(s).'

In the case of 'finger', what is suspected to be a class morpheme, /**k'wá**-/ 'head', appears to affect the choice of verbal classifier (/-(**V**)**k'w**/ 'head') on the verb (9.123). However, the class morpheme in this noun is not optional as the second part does not exist as a free nominal form.³⁵ The word for 'finger' is nonetheless suspected of being a nominal compound at some earlier point (class morpheme compound or otherwise).

NoG
 (9.123) ?af -**ók'w** **k'wátsats**-uá
 wash-CL1:head finger-2SG.POSS
 'Wash your finger(s).'

Another example of a class morpheme co-occurring with a corresponding verbal classifier is in (9.124). One can either say **páxák'a** 'cowrie shell' or **k'ós-páxák'a** 'tooth-cowrie shell' in NoG. Again, choice of classifier in the verb is related to the class morpheme in the NN compound (9.124).³⁶

³⁵ Innocenti (2010: 157), however, records the form **tsitsa** 'dito medio' (middle finger) which is likely the same nominal root as found in the compound for 'finger' **k'wátsatsa** which Innocenti (2010: 186) transcribes as **k'wátsitsa**. Thus, what I consider a bound form (**tsatsa**) might be a free nominal form.

³⁶ In SoG, different variations of this clause result in variation in quantification ('few' vs. 'all') or reference to only the 'edge' of the cowrie shells (see section 9.2.3 for further discussion).

- NoG
 (9.124) **k'ós**-páχák'a d-ár-af-**ak'ós**
 tooth-cowrie.shell AFF-1SG.TR-wash-CL1:tooth
 'I'm washing cowrie shells.'

However, class morphemes in NN compounds can co-occur with non-cognate verbal classifiers as shown in (9.125). Thus, the class morpheme does not rigidly determine the choice of verbal classifier on the verb.

- NoG
 (9.125) fwítʃ'-**ilik'ós** **cá**-ófókwaǰá
 blow-CL2:tooth seed-corn
 'Blow on the corn kernels.'

9.2.2 Varying Class Morphemes with the Same Nominal Root

One way that the class morphemes in Gumuz resemble noun classifiers in other languages (as per the criteria given at the start of section 9.2) and like verbal classifiers in Gumuz (see section 9.1.2 above) is that when two distinct class morphemes are used with the same nominal root, the semantics of the noun changes. For example, the class morpheme compound for 'bone' **k'wá-zák'wá** was given in section 9.2.1 above (9.121-122). Such a compound can be used in reference to one bone or many. However, if **cá**- 'eye' is used with 'bone', the meaning of the nominal compound changes to 'skeleton' (9.126). Here, then **cá**- seems to denote a collection or a set. Likewise, **cá**- is used with 'tooth' to indicate 'teeth' or 'set of teeth' (9.127). We have seen that **k'wá**- 'head' can be used in a nominal compound with 'rock' to indicate an individual rock. But, when **cá**- 'eye' is used with 'rock', the meaning is a collection of sorts, with the added semantic component that the rocks are small in size (9.128).

- NoG and SoG
 (9.126) **cá**-zák'wá
 eye-bone
 'skeleton'

NoG and SoG
 (9.127) **cá**-k'ósa
 eye-tooth
 'teeth' or 'set of teeth'

NoG and SoG
 (9.128) **cá**-gíjǎ
 eye-rock
 'pebbles, gravel'

Perhaps underscoring this opposition between **k'wá**- denoting an individual (countable) entity and **cá**- for a set is the use of **k'wá**- in the compound for 'eyeball' (9.129). The compound in (9.129) can be contrasted with the complex form of the word for 'eye' in (9.130). The complex form in (9.130) can either refer to 'eye(s)' or 'face' and may be class morpheme compound. The mysterious body part prefix **lí**-/ **íl**- (previously mentioned in Chapter VIII) may be related to another class morpheme which is used to categorize a general delimited area, **líí**-/ **íí**- 'belly'.

NoG and SoG
 (9.129) k'wá-cá
 head-eye
 'eyeball'

	NoG	SoG
(9.130)	lí -cá	íí -cá
	belly?-eye	belly?-eye
	'eye(s)/face'	'eye(s)/face'

The class morpheme **líí**-/ **íí**- 'belly' is found in the nominal compounds for 'river' and 'sky' in (9.131-9.132). When compounded with **gizíá** 'grass', the meaning is 'forest' or 'bush area' (9.133). This can be contrasted with the morphemes **cá**- 'eye' and **ts'ê**- 'ear', which also form compounds with 'grass' (9.134-9.135). While one might expect **líí-gizíá** / **íí-gizíá** (belly-grass) to mean 'grassland' (recall that **líí**-/ **íí**- 'belly' categorizes a delimited area), **cá**- 'eye' is instead used for 'grassland' as this denotes a collection of grass, having the secondary meaning of 'pure grass'. If an individual blade of grass is

referred to, **ts'ê-** 'ear' must be used (9.135). This, again, demonstrates that a particular noun can co-occur with more than one class morpheme.

	NoG	SoG
(9.131)	lí- ¹ gítjá belly-body.of.water 'river'	íí- ¹ gítjá belly-body.of.water 'river'
(9.132)	lí- gúz á belly-sky 'sky'	íí- gúz á belly-sky 'sky'
(9.133)	lí- giz í á belly-grass 'bush area'	íí- giz í á belly-grass 'bush area'
(9.134)	cá- giz í á eye-grass 'grassland'	--same as NoG--
(9.135)	ts'ê- giz í á ear-grass 'blade of grass'	--same as NoG--

9.2.3 Compounds and Quantification

In section 9.2.2 it was mentioned that **k'wá-** 'head' and **cá-** 'eye' appear to have a singulative versus collective meaning in certain compounds. For the mass noun 'clothes', however, **cá-** 'eye' and **k'ós-** 'tooth' can be used to individuate or express the form of the real-world referent. Thus, 'a piece of cloth' is expressed with the class morpheme **cá-** 'eye' (9.136) and 'lint' is expressed with the class morpheme **k'ós-** 'tooth' (9.137).³⁷

	SoG
(9.136)	cá- án wa eye-clothes 'cloth/a piece of cloth'

³⁷ The Yaso variety of Gumuz does not use a compound for 'lint'; only the word 'clothes/cloth' is used: **íí-****its oa la-bée-k'wá** (pick-body clothes LOC-skin-head) 'Remove lint from (your) hair'.

- NoG
 (9.137) **k'ós**-aχwa ná-béé-k'ó-ma d-á-wát-ân
 tooth-clothes LOC-skin-head-1SG.POSS AFF-3SG.INTR-exist-LOC
 'I have lint in my hair.'

Beyond this, the presence versus the absence of a (class morpheme) compound in the SoG variety can sometimes indicate a difference in quantification of the O argument. In (9.138), if both the morpheme **k'ós**- 'tooth' and verbal classifier /-(**V**)**k'ós**/ (CL:tooth) are used in reference to the same argument, the notion of 'some' (vs. 'all') is conveyed. If the class morpheme is not present, the notion 'all' is conveyed (9.139).

- SoG
 (9.138) **k'ós**-páák'a b-ár-ʔaf-agó-**k'ós**
 tooth-cowrie.shell AFF-1SG.TR-wash-NFUT-CL:tooth
 'I washed some of the cowrie shells.'

- SoG
 (9.139) páák'a b-ár-ʔaf-agó-**k'ós**
 cowrie.shell AFF-1SG.TR-wash-NFUT-CL:tooth
 'I washed all of the cowrie shells.'

If the 'class morpheme' is less classifier-like in that the second root of the compound is not part of the class indicated by the class morpheme but only the real-world referent of the compound itself is, the notion of 'some' vs. 'all' is not maintained using the same constructions. In other words, "endocentric" (see Chapter VI, section 6.1.2) class morpheme compounds behave differently in terms of syntax. For example, 'cowrie shell' is in the class of **k'ós** 'tooth' as shown by both class morphemes and verbal classifiers. The concept of 'fire', on the other hand, is not a member of this same class. However, the compound **k'ós-maanja** (tooth-fire) 'firewood' is, and the compound is therefore endocentric. As a result, the use of the verbal classifier /-(**V**)**k'ós**/ in conjunction with the class morpheme **k'ós**- (of an endocentric class morpheme compound) does not introduce the notion of 'some' (9.140). Moreover, the absence of the class morpheme in (9.141) changes the O argument to 'fire' and the verbal classifier thus

makes reference to ‘firewood’.³⁸ This entity is then semantically quantified, having the notion ‘a piece of’ (9.141). The construction in (9.141) appears to involve an erstwhile class morpheme in an EP construction (i.e. ‘Take the tooth of the fire,’).

- SoG
- (9.140) **taá-k’ós** **k’ósa**-maanja
 take-CL:tooth tooth-fire
 ‘Take the firewood.’
- (9.141) **taá-k’ós** maanja
 take-CL:tooth fire
 ‘Take a piece of the wood from the fire.’

In a similar fashion, if the verbal classifier /-(V)**k’w**/ ‘head’ is used in conjunction with a compound that has **k’wá-** ‘head’, a singulative meaning is conveyed. This is true for both NoG and Yaso Gumuz. In NoG ‘tire (N)’ can be stated with or without the **k’wá-** ‘head’ class morpheme. When the class morpheme is present, it seems to emphasize that the action is done to a single tire (9.139). I have suggested that **k’wá-** ‘head’ appears to be lexicalized as part of an old compound for ‘finger’; but it still seems to be interpreted as singular when unmodified. In order to express the plural ‘fingers’, the word **diida** ‘children’ is added before the compound (9.143).³⁹ In Yaso Gumuz, on the other hand, the word for ‘finger’ is **k’wé-ʔéla** (head-hand/arm). In this compound, **k’wá-** ‘head’ is not a hypernym of the dependent noun ‘hand’ and thus could not be functioning as a singulative. Rather it functions as part of a NN compound with ‘N of N’ semantics (i.e. ‘head of hand’). When used in combination with the verbal classifier /-(V)**k’w**/ ‘head’, a singular meaning for the O argument is conveyed (9.144).

- NoG
- (9.142) **far-ók’w** **k’wá-**ʔfogu-makíná
 rise-CL1:head head-foot-vehicle
 ‘Lift the tire.’

³⁸ This appears to fill a similar function as the anaphora mentioned in section 9.6 (9.213-9.214).

³⁹ ‘Children’ **diida** is also used to form the plural for ‘arrow’ in NoG, which includes the class morpheme **cá-** ‘eye’: **didí-cá-dogwa** (children-eye-bow).

NoG
 (9.143) didu-**k'wá**tsats-áma d-ára-ʔaf-ók'w
 children-finger-1SG.POSS AFF-1SG.TR-wash-CL1:head
 'I washed my fingers.'

Yaso
 (9.144) ʔef-ók'w **k'wé**-ʔél-u
 wash-CL:head head-hand-2SG.POSS
 'Wash your finger (only one).'

9.2.4 Other Class Morpheme Compounds

There appear to be two main types of class morpheme compounds in Gumuz : 1) those in which the dependent noun (second noun) of the compound is classified by the initial class morpheme and 2) those in which only the referent of the whole compound is classified by the initial class morpheme (endocentric class morpheme compound). There is also a third type of class morpheme compound involving the morpheme /-ts(V)-/ 'body'. This morpheme appears between two nouns in a nominal compound, either classifying the noun that follows or the whole nominal compound.

9.2.5 Class Morphemes that Classify the Dependent (Second) Noun

An example of the first category of (class morpheme) compound is found in the word for 'tongue' and 'lip'. In many Gumuz varieties, the nouns **t'átá** 'tongue' or **béé-sa** (skin-mouth) 'lip(s)' are used interchangeably with class morpheme compounds formed with **k'wá-** 'head' (9.145-9.147).⁴⁰ It appears that **k'wá-** may be used not only to classify the body part, but also sometimes acts as a singulative marker (9.146) as with 'eyeball' above (9.129). The same variation occurs with the word for 'adam's apple' (9.147).⁴¹

SoG
 (9.145) **k'ó**-t'átá ~ t'átá
 head-tongue tongue
 'tongue'

⁴⁰ Short round vowels in Gumuz tend to vary with labialization (e.g. **k'wá** ~ **k'ó**, **k'u**) (see Chapter II).

⁴¹ The class morpheme in (9.145-9.147) may be related to Greenberg's (1981) 'movable k' phenomenon in which an often semantically empty k- prefix appears on some nominals, yet not others. This phenomenon is ubiquitous throughout the N-S family.

SoG
 (9.146) **k'ó**-béé-sa ~ béé-sa
 head-skin-mouth skin-mouth
 'lip' 'lip(s)'

SoG
 (9.147) **k'ó**-bárókwa ~ bárókwa
 head-adam's.apple adam's.apple
 'adam's apple'

The class morphemes **ííl**- 'belly', **k'ós**- 'tooth', and **k'wá**- 'head' can be used in compounds with the dependent noun **eeba** 'home/ethnic area'. However, there is not always agreement between NoG and SoG on which class morpheme to use. In NoG, 'village' is expressed with the class morpheme **k'wá**- 'head'; whereas in SoG, it is expressed with the class morpheme **ííl**- 'belly' (9.148). Speakers of both varieties of Gumuz agree that 'rural area' should be expressed with the class morpheme **k'ós**- 'tooth' (9.149), perhaps as a loan calque from the Amharic ክፍለ ሀገር (lit: divided country) 'region, province, rural area' which is in line with the notion of something divided up into equal parts.

	NoG	SoG
(9.148)	k'w -ééba	ííl -ééba
	head-ethnic.area	belly-ethnic.area
	'village'	'village'

NoG and SoG
 (9.149) **k'ós**-eeba
 tooth-ethnic.area
 'rural area'

The class morpheme **cá**- 'eye', is often compounded with a dependent (second) noun but its co-occurrence with the "dependent" noun is optional (see also example 9.120). When it occurs with the dependent noun, it seems to add emphasis. In example (9.150), the class morpheme seems to express contrast between the 'water' and the 'ground, soil'. Similarly, when contrasting examples (9.151) with (9.152), the class morpheme **cá**- 'eye' appears to bring special emphasis to what made the speaker sick.

- SoG
- (9.150) tsé-ets dua n-ííl aja ká = **cá-ḡnéa**
 pull-CL:body child LOC-belly water to=eye-ground
 ‘Take the child out of the water to the ground.’
- (9.151) ets-a-dú-gá-ts ára á-ma-tsá
 REL-3SG.TR-sick-NFUT-CL:body 1SG NOM-NMLZ-go
- k-ííl-gatǰá ná = **cá-gidida**
 to-belly-body.of.water LOC=eye-cold
 ‘What made me sick is that I went to the river in the cold.’
- (9.152) **gidida** b-a-dú-gá-á-tsa ára
 cold AFF-3SG.TR-sick-NFUT-MV-CL:body 1SG
 ‘The cold made me sick.’

This same class morpheme optionally occurs with the word ‘water’ (9.153) and ground/soil’ (9.154), both carrying the same secondary meaning of ‘pure’.⁴²

- NoG
- (9.153) **cá-ʔaja** d-á-ot
 eye-water AFF-3SG.INTR.EXIST
 ‘There’s (pure) water.’
- SoG
- (9.154) b-a-kúŋ-ká ná-ája ʔaja ká-gít ká-gít
 AFF-3SG.TR-enter-NFUT LOC-water water to-here to-here
- k-íílá-má **cá-nnea**
 to-belly-3SG.POSS eye-ground
 ‘They entered the water here -- all the way in -- pure dirt (no water).’

Lastly, the class morpheme **k’wá-** ‘head’ is optional in NoG for nouns denoting different types of gourds. The class morpheme in this case is used to classify containers and refers to the gourds as vessels rather than plants (9.155-156).

⁴² This use of the **cá-** class morpheme (meaning ‘pure’) may be functioning in the same way as **áts-** ‘only’ which likely arose historically from the morpheme **tsa** ‘body’ e.g. **áts-éemalía** ‘only hyenas’.

- NoG
 (9.155) **k'wá-**ʼbáχágá
 head-(specific type of)gourd
 'gourd for drinking'

- NoG
 (9.156) **k'wá-**nakwá
 head-(specific type of)gourd
 'gourd for urine (chamber pot)'

9.2.6 Endocentric Class Morpheme Compounds

As demonstrated with **k'ós-maanja** 'firewood' in SoG (9.137), in certain class morpheme compounds, the dependent noun of the compound does not appear to be classified by the class morpheme. Rather, the referent of the entire compound belongs to the class designated by the class morpheme.⁴³ For example, 'arrow' is expressed by the nominal compound 'eye-bow' (9.6), but 'bow' is not a part of the **cá-** 'eye' class, nor is 'arrow' somehow a state or form in which the 'bow' is found. On the other hand, the class morpheme in compounds such as **k'ós-ja** (tooth-wood) 'firewood' of NoG expresses the state of the dependent noun and is thus an example the first type of class morpheme compound (even though **ja** 'tree' by itself is not part of the **k'ós-** 'tooth' class). In endocentric class morpheme compounds, the class morpheme and the dependent noun often have a 'noun of noun' relationship with the class morpheme used pronominally for the category it represents. For example, 'guts, stomach contents' is comprised of the class morpheme **cá-** 'eye' and the noun **íílá** 'belly' or literally, 'the eye of the belly' (9.157). The class morpheme **cá-** 'eye' categorizes mass nouns and thus stands pronominally for the contents of the belly but does not classify 'belly'.

- NoG and SoG
 (9.157) **c-**íílá
 eye-belly
 'guts, stomach contents'

⁴³ Such a difference between the two types of class morpheme compounds is difficult to tease apart semantically as one could easily argue that (9.148-9.149) were examples of the second type in that 'ethnic area' is not a member of any one of the classes represented by **k'wá-** 'head', **ííl-** 'belly' or **k'wós-** 'tooth'.

two nominal compounds: the word for ‘wall’ (9.161) and the compound ‘body wound’ (9.162).⁴⁴ As noted, the class morpheme compound is optional with the word for ‘wall’ (9.24, 9.108). In (9.162) the class morpheme is referring to the physical body or body part where the wound is located.⁴⁵ When the verbal classifier classifies the wound itself, however, the /-(V)c/ ‘eye’ classifier is used and the class morpheme /-ts(V)-/ ‘body’ is not present in the nominal compound (9.84).

- NoG
- (9.161) χókwa-ka-**ts** ɓagá-**tsá**-máts’á ka-tʃéraka
 clean-INSTR-CL:body body-body-house INSTR-cloth
 ‘Clean (without water) the walls with a cloth.’
- (9.162) wíɗ-**áts** maχabá-**ts**-ɓagá-ma
 see-CL:body wound-body-body-1SG.POSS
 ‘Look at my (body) wound.’

9.2.8 Other Possible Class Morphemes

While the set of class morphemes in Gumuz seems to be limited to the simple root forms of the specific (erstwhile) body part terms mentioned in the previous section, there may exist at least one class morpheme (in NoG) which is related to a complex body part term: **lúk’wá** ‘head’. This ‘noun’ is found in regular NN compounds which can co-occur with the corresponding verbal classifier /-**ílúk’w**/ ‘head’ (9.163). The term **lúk’wá** ‘head’ is also found in the nominal compound with ‘mango’ in which it unmistakably functions as a class morpheme (9.164). However, these two are the only known instances of this complex body part term functioning as a class morpheme.

⁴⁴ However, Innocenti (2010:127) refers to other compounds with **ɓagá’tsá**.

⁴⁵ Most likely, /-**ts(V)-**/ was historically the term for ‘body’ in Gumuz and was eventually replaced with **ɓaga** ‘person, body’. The forms in compounds may be relics from a transitional period of lexical replacement. As class morphemes are more noun-like than their verbal classifier counterparts, ‘body’ as a class morpheme /-**ts(V)-**/ began to be dropped as it was replaced lexically by **ɓaga**, while /-(V)**ts**/ was maintained as a grammatical affix on the verb.

NoG
 (9.163) k'od-ilúk'w **lúk'ú**-χosa
 skin-head head-cow
 'Skin a cow's head.'

NoG
 (9.164) wó-báámátá l-a-k-ác k-éé-⁺kábaréa **lúk'ú**-maŋgóa
 M-Bamita REL-3SG.TR-BEN-give for-F-Kabare head-mango
 'Bamita is the one who gave the mango to Kabare.'

9.3 The Genesis of Verbal Classifiers

Verbal classifiers in Gumuz generally occur on the same verb roots that other incorporated nouns/class morphemes do. Furthermore, incorporated nouns/class morphemes are often share the same form, but functionally are not classifiers. This suggests that the system of verbal classifiers in Gumuz has not been fully established, and that grammaticalization may still be in progress. In any case, the incorporated nouns/class morphemes provide some clues as to how verbal classifiers come about. The function and semantics of the incorporated elements suggest that both metonymy and metaphor play a major role in the genesis of verbal classifiers.

9.3.1 Metonymy and Part-Whole Relationships

In language, it is quite common for a term for one referent to be used for another referent simply because one is associated with the other. Gumuz has used this process of metonymy to create new verbal classifiers. The most commonly used type of metonymy in this process of grammaticalization in Gumuz is synecdoche, in which part of the referent stands for the whole.

9.3.1.1 Synecdoche and the Classification of Part-Whole Relationships

As demonstrated in the previous chapter, many incorporated nouns in Gumuz form part of an external possession construction. The possessed item is the incorporated noun (IN) and can range from the very literal to the metaphorical. It generally represents a part of the S/O argument (which is the whole). Example (9.165), taken from a folktale,

SoG
 (9.170) tíb-**uk'w** gazíá
 kick-head grass
 'Stomp on the top of the grass (to flatten it).'

SoG
 (9.171) ga-wéʔ-á-dua b-ár-bítʃ-ag-ífl
 NMLZ2-vomit-INT-child AFF-1SG.TR-step-NFUT-belly
 'I stepped in the child's vomit.'

In much the same way, /-(V)**ts**/ 'body' can represent the 'side' or 'outside' of a participant (9.172-9.173), /-(V)**k'ós**/ (-íflk'ós) 'tooth' can represent the 'tip' or 'edge' of a participant (9.174-9.175), and /-(V)**ts'ê**/ (-íflts'ê) 'ear' can represent the flat, flexible ear-like *part* of a participant (9.176).

NoG
 (9.172) d-ú-⁺t'óó-ts wantʃá ná-kwat'á
 AFF-3PL.TR-put-body cup LOC-bench
 'They put the cup on the bench (on its side)'

NoG
 (9.173) ítʃa d-a-s-áts já
 worm AFF-3SG.TR-eat-body tree
 'The worm ate the outside of the tree.'

NoG
 (9.174) ook-á**k'ós** tʃaaga
 heat-tooth knife
 'Heat the edge/tip of the knife!'

NoG
 (9.175) nt'-í**flk'ós** daa
 twist-tooth axe
 'Twist the edge of the axe.' (i.e. hit the axe against a rock until the blade is twisted.)

NoG
 (9.176) c'éf-⁺í**flts'ê** waagá
 cut-ear white.mushroom
 'Cut the top off of the mushroom.'

Some incorporated nouns have moved from an external possession construction in which the nouns represent *part* of the participant, to classifiers which represent the *whole* participant. This type of metonymy occurs mainly for parts that are ‘inalienably’ possessed in Gumuz, i.e. not separable from the whole. Thus, entities which literally have heads -- people and animals -- fall under the classification ‘head’; even though fruit is a metaphorical ‘head’ of the plant, the ‘head’ classifier never refers to the whole tree itself, only to the fruit, as the fruit is separable from the whole. Also, entities whose most prominent (‘inalienable’) feature is the ‘belly’ or interior become part of the set classified by ‘belly’ (e.g. dishes, cups), and entities whose ‘body’ is a prominent feature (such as people) can become part of the class of ‘body’; entities whose ‘edge’ is a prominent feature (such as knives) become part of the ‘tooth’ class; and lastly entities which have a prominent part that resembles an ‘ear’ (such as mushrooms) become part of the ‘ear’ class. On the other hand, as leaves and paper are ‘alienable’ parts of a whole (leaf/tree, paper/book), the wholes that they are part of are not classified by ‘ear’, only the parts are (9.178-9.180). Compare these with the external possession construction which literally refers to a child’s ear (9.178). The constructions in (9.178) and (9.179) could be interpreted either as external possession or verbal classifier constructions. However, the construction in (9.180) cannot; it can only be considered a verbal classifier construction with ‘ear’ classifying ‘leaf’.⁴⁶

NoG

Part Whole

- (9.177) nt’-ílíts’ê dua
twist-ear child
‘Twist the child’s ear.’

NoG

Part Whole

- (9.178) c’ef’-’ílíts’ê norága
tear-ear paper/book
‘Tear a piece of paper from the notebook.’

⁴⁶ The word for ‘leaf’ appears to be a compound historically comprising ‘ear’ ts’éa and ‘tree’ já.

- NoG
 (9.179) ɲt'-ílíts'ê norága
 twist-ear paper/book
 'Twist the paper.'

- NoG

	Part	Part-Whole
(9.180)	ɲt'-ílíts'ê	ts'ín'já
	twist-CL2:ear	leaf
	'Twist the leaf.'	

In the same way, select members of the 'eye' class, namely seeds and 'arrow', are *alienable* parts of the whole. The 'eye' of the plant is the seed of the plant (e.g. 9.31, 9.32) and the 'eye' of the bow is the arrow (9.8).

Example (9.181) demonstrates how the verbal classifiers /-(**V**)ts/ 'body' and /-(**V**)k'w/ 'head' classify different parts of the mango tree. The O argument 'mango' is shared by both the verbs 'climb' and 'put' (9.181). As the word **mángóá** in Gumuz refers to both the tree and the fruit, it is necessary for the speaker to classify 'mango' in order to indicate whether s/he is referring to the tree or the fruit.

- SoG
 (9.181) takw-áts mángóá t'oo-ée-k'w k-ára
 climb-CL:body mango put-TWRD-CL:head to-1SG
 'Climb the mango tree and bring the fruit to me.'

The same issue exists for the word **norága** (**lorága** in SoG): the word can mean both 'paper' or 'book/notebook' depending on the context. Thus, (9.178-9.179) above might better be analyzed as classifier constructions due to the underspecificity of the O argument term.

In much the same way, other verbs have IN's which are (metaphorical) body part terms and comprise part of an external possession construction for *inalienable* parts. These seem much less classifier like in that the parts themselves cannot be construed as wholes as with 'fruit', 'seed' and 'paper'. For example, some intransitive verbs in Gumuz, such as **ɣa** 'be small' (middle voice/decausative in 9.183-9.186), have incorporated nouns which, in most cases, function as metaphorical parts externally

possessed by the S argument. In (9.183) below, if ‘eye/seed’ is incorporated, the meaning changes to ‘be small in number’ (or lit: ‘The eye/seed of the people is small.’). If ‘head’ is incorporated, the verb will mean ‘be small in stature’ (or lit: ‘The head/top of my brother is small.’) (9.184) and if ‘body’ is suffixed to the verb, the verb will mean ‘small in girth’ (or lit: ‘The body of my child is small.’) (9.185). Lastly, when ‘belly’ is incorporated (9.186), the verb will mean ‘be small in breadth.’ (or lit: ‘The belly of the ground is small...’).⁴⁷ All of these verbs can take S arguments which are merely limited due to the types of arguments which can be ‘small in girth’ or ‘small in number/amount’, e.g. a seed cannot be ‘thin’, and a mango cannot ‘be short’, etc...⁴⁸ These are not limited due to noun categorization but can lead to a system of categorization.

NoG
 (9.182) máts’á d-á-**χa**
 house AFF-3SG.INTR-be.small
 ‘The house is small.’

NoG
 (9.183) b́aga d-a-**χa-á-c** ná-gú-malea
 person AFF-3SG.TR-be.small-MV-eye LOC-place-crop
 ‘There are only a few people in the field.’

NoG
 (9.184) matsá-ma d-a-**χa-á-k’w**
 brother-1SG.POSS AFF-3SG.TR-be.short-MV-head
 ‘My brother is short.’

⁴⁷ The complex verb ‘be short’ **χa-Vk’w** (be.small-head) arguably has a more lexicalized meaning than the other complex verbs with the **χa** ‘be small’ verb root. As for ‘be narrow’, the IN **-ífl** could feasibly be classifying the S argument ‘ground’, as this fits the categorization of a delimited area.

⁴⁸ In SoG the cognate verb root for **χa** ‘be small’ is **hal**, which means ‘be small, be few’. The simple root can only refer to amounts and is not be used to describe the size of a house. However, one uses the same (cognate) complex verb roots for ‘be small in number’ **hal-Vc**, ‘be small in stature’ **hal-Vk’w**, ‘be small in girth’ **hal-Vts** and ‘be narrow’ **hal-ífl**. One other difference between the varieties is that the SoG speakers prefer the nominalized (attributive) form of the stative verb for these attributive meanings and the fully inflected verb form is reserved for an inchoative sense ‘become/grow short, thin, etc.’

NoG
 (9.185) l-áma dua d-a-**χa-á-ts**
 GEN-1SG.POSS child AFF-3SG.TR-be.small-MV-body
 ‘My child is thin.’

NoG
 (9.186) ndéa l-ú-k-á-c k-ára ká-m-tuχo máts’á
 ground REL-3PL.TR-BEN-give to-1SG for-NMLZ-build house

d-a-**χa-á-íł**
 AFF-3S-be.small-MV-belly
 ‘The land that they gave me is narrow (too small) for building a house.’

9.3.1.2 Other Metonymies

Beyond synecdoche, other metonymies in Gumuz have produced new members of classifier categories. We have seen that liquids fall can be classified by /-(**V**)k’w/ ‘head’ merely because they are typically contained. Gourds are traditionally used as vessels for liquids and gourds are a type of fruit, which is the ‘head’ of the plant; thus, many contained liquids fall under the category ‘head’. Also, an animal or insect bite falls under the category of /-(**V**)kwós/ ‘tooth’ as the bite wound itself is associated with the ‘tooth’ that caused it.

9.3.2 Metaphor

Many members of the established classes/categories have come about via simple metaphor. Rocks are members of the ‘head’ category as rocks resemble heads in terms of size and shape. The same is true for eggs. As a result of IN’s synchronically marking both part-whole relationships and classifying verbal arguments via metaphor, the same verb root + IN/CL can refer to a part of the verbal argument (9.187), or it can classify the verbal argument (9.188), depending on the context.

NoG
 (9.187) d-a-t’o-ók’w sóχwá
 AFF-3SG.TR-put-head iron (tin can)
 ‘S/he placed the can on its head’

- NoG
 (9.188) d-a-t'ó-ók'w íŋ-ámá
 AFF-3S-put-CL1:head egg-3SG.POSS
 'It (the chicken) laid its eggs'

At times, it is difficult to determine if the verbal affix (IN/classifier) is referring to a part of the whole or is classifying the whole. In (9.189) below, one could interpret this as 'open the can' or 'open the top of the can' (compare to 9.187 above). Likewise, when removing a lid from a pot, it is not clear whether the IN is referring to the lid, the pot, or to the top of the pot (9.190).

- NoG
 (9.189) k'worak'-ók'^w sóχwá
 peel-head iron (tin can)
 'Open the canned food.'

- NoG
 (9.190) ma-χánk'-ás ánt'ará-sóχwá k'od'-ók'w
 NMLZ- close-mouth pot-iron skin-head
 'Take the lid off the pot.'

Other times, it seems that the speaker may conflate these two interpretations (9.191).

- SoG
 (9.191) k'òŋ-k'w
 bite-head
 'Bite the top of a piece of fruit.'

As mentioned in section 9.3.1.1, the class of 'tooth' includes certain members via the 'edge' metaphor / metonymy: members such as knives have this prominent tooth-like feature. Beads and shells are included in this category due to their similarity to teeth as they are small pieces that form sets of identical objects. However, the 'edge' metaphor can be extended to these latter members of the category as well. In (9.192), /-(V)k'ós/ 'tooth' can be interpreted as denoting either the edge of the beads or as a classifier for the beads themselves.

- SoG
- (9.192) jír-ik'ós mínzá
 see-tooth bead
 'Check (the edge of) the beads'(e.g. on a necklace)

It is likely that some members of the category /-(V)c/ 'eye' such as 'sun', 'knife', 'needle', 'offspring', 'beads', 'pebbles' and mass nouns, became members of the 'eye' category via metaphor alone. For example, the sun, like an eye, is a source of light. Sharp objects with a point, such as knives and needles, on the other hand, came about via similarity with arrows, which is the 'eye of the bow'.⁴⁹ Via metaphor with 'eye' and then 'seed', offspring became a (marginal) member of the 'eye' category. Continuing with the 'eye'/'seed' metaphor, pebbles and beads became part of the category as well. Likewise, as seeds come in masses, mass nouns such as water and soil became members of the 'eye' category as well. While 'fire', like 'sun' is a source of light, it is possible that 'fire' became a member of the 'eye' category via metonymy (as well as metaphor) considering that 'embers' are the 'eye of the fire' (9.155).

9.4 Instances of Marginal Verbal Classification Functions

Certain metaphorical part-whole relationships involve alienable parts for which it remains uncertain whether the incorporated term for the part is classificatory. The IN/CLs involved in these part-whole relationships are similar to endocentric class morphemes in that the part (IN/CL morpheme) represents a class but the S/O argument appears to be a possessor in an EP construction (similar to the possessor in an internal possessor construction for endocentric class morphemes). The IN/CLs 'mouth' and 'place' in Gumuz have marginal classification functions.

⁴⁹ The other possibility is that arrows are considered the 'eye of the bow' because they come to a point just as needles and knives do. Thus these sharp objects might have become members of the 'eye' class via metonymy if the point/tip of these objects were considered the 'eye'.

9.4.1 ‘Mouth’ Morpheme with Marginal Classifier Function

It is often unclear whether /-(V)s / ‘mouth’ functions as a metaphorical part of the whole or as a classifier for the whole. The word ‘door’, for example, is a type of ‘mouth’ in Gumuz. Sometimes, it is rendered as a part of the house in an external possession construction (9.193). But another speaker of the same Gumuz variety may express ‘door’ via a class morpheme compound, making the IN ‘mouth’ appear to classify ‘door’ (9.194). Furthermore, other verb roots can take ‘mouth’ as an incorporated noun which co-occurs with ‘door’ as a possible class morpheme compound (9.195-9.196).⁵⁰

- SoG
 (9.193) n-a-kóǀ-as máts’á
 JUSS-3SG.TR-skin-mouth house
 ‘Let him open the door.’
- SoG
 (9.194) b-a-kóǀ-agá-á-s já-‘sá-máts’á
 AFF-3SG.TR-skin-NFUT-MV-mouth wood-mouth-house (door)
 ‘The door opened.’
- SoG
 (9.195) áŋ b-a-hanc’-agá-s já-‘sá-máts’a
 3SG AFF-3SG.TR-close-NFUT-mouth wood-mouth-house (door)
 ‘He closed the door.’
- NoG
 (9.196) d-a-dǎǎ-ás á-‘gwíjá bǎga n-ílsá-máts’a
 AFF-3SG.TR-block-mouth NOM-bandit person LOC-mouth-house
 ‘The bandit is waiting for the person at the door (blocking the door).’

Other incorporated nouns besides ‘mouth’ that co-occur with the verb root ‘skin, open’ do not seem to have a classifying function. Rather, the incorporated noun seems to be chosen based on what part of the object is opened or how the object is opened. For

⁵⁰ Speakers of both SoG and NoG use the complex form of ‘mouth’ as the head noun in the NN compound for ‘door’ (9.187). This might be considered a class morpheme compound but the category for ‘mouth’ is not well-established as a hypernym, only as a metaphorical part of a whole.

other hand, if seeds are soaked *en masse*, the classifier /-**ńí**/ (CL2:eye) is used (9.60). In addition, the cotton fiber produced from the cotton plant may be considered something that can open like a ‘mouth’ via metonymy, as the boll from which the cotton fiber is plucked is mouth-like (9.201-202). However, this is most likely a part-whole relationship and is not clearly a hypernym-hyponym relationship.

NoG
 (9.200) ńí-as toko-na
 soak-mouth climb-LOC?
 ‘Put the seed in the water so that it sprouts.’

NoG
 (9.201) p’á-s gaaba
 pluck-mouth cotton
 ‘Pick cotton.’

NoG
 (9.202) ńíl-is gaaba
 glean-mouth cotton
 ‘Glean cotton.’

As with the examples for the class morpheme compound ‘door’ above (9.191-193), there are a few other compounds in Gumuz for which **sa** ‘mouth’ is the head and may represent a class or hypernym for the compound (i.e. it is forms part of an endocentric class morpheme compound).⁵²

SoG
 (9.203) a. sá-mpokwa mouth-birth ‘womb’
 b. sa-ńza mouth-buttocks ‘anus’
 c. sá-gatiya mouth-message ‘messenger’

⁵² If all of these are class morpheme compounds, then some have class morpheme compounds embedded within the class morpheme compound. For instance, **ńíí-’gítśá** (belly-body.of.water) is the class morpheme compound for ‘river’. The noun **gítśá** also means ‘low’ or ‘lowland’ (hence the meaning ‘valley’ with **ńí-ńíí-’gítśá**), but it is assumed that this noun has its origin in the product nominalization of the verb ‘rain’ **ga-tśá** (NMLZ2-rain) meaning ‘product of rain’ or ‘rain water’. The morpheme /eé-/ of ‘beach’ may be another class morpheme or old gender prefix which functions as an augmentative (see Chapter III for further discussion). Thus **eé-’gítśá** means ‘lake’ or ‘ocean’ whereas **ńíí-’gítśá** means ‘river’. It is also worth noting that one can substitute **sá-gítśá** for ‘beach’ but with reference to any body of water, not just lakes or oceans.

d.	sá-ája	mouth-water	'river bank'
e.	sí-líi- ¹ gítǵá	mouth-belly-body.of.water	'valley'
f.	s-eé- ¹ gítǵá	mouth-AUG-body.of.water	'beach (on a lake)'

9.4.2 'Place' Morpheme with Marginal Classifier Function

Similar to **sa** 'mouth', **gwá** 'place' seems to marginally function as a verbal classifier, and is found in many NN compounds where it functions as the head. As a verbal classifier, it seems to classify or mark oblique arguments that fill the role of LOCATION or GOAL. It is not uncommon for African languages to express location as a core notion from a syntactic point of view (Dimmendaal 2003) and the two main varieties of Gumuz incorporate **gwá** 'place' into the verb to serve this function. In Gumuz, the verb 'be afraid' is intransitive (9.204). While most verbal classifiers in Gumuz increase the valence of an intransitive verb by simply adding an O argument, /-(V)gw(a)/ 'place' maintains the verb's syntactic intransitivity but adds a required (at least semantically required) location (9.205-206). As /-(V)gw(a)/ 'place' only references a LOCATION or GOAL and cannot mark other peripheral participants, it seems to fill the same function as other verbal classifiers in Gumuz.

SoG
 (9.204) ma-t'éé-ǵa = ǵó
 NMLZ- be.afraid-2PL.INTR = NEG
 'Don't (2PL) be afraid.'

SoG
 (9.205) dua b-á-t'éé-gó-gw n-ííl ma-híi-gwá
 child AFF-3SG.INTR-be.afraid- NFUT-place LOC-belly NMLZ-black-place
 'The child was afraid in the dark.'

SoG
 (9.206) n-ííl máts'á b-ár¹-t'éé-gó-gwa
 LOC-belly house AFF-1SG.INTR-be.afraid-NFUT-place
 'I was afraid in the house.'

In NoG (and possibly also SoG), the transitivity of the verb can change when /-(V)gw(a)/ ‘place’ is incorporated, but only for verb roots which require or imply a location before /-(V)gw(a)/ is incorporated and/or before an O argument has been added. Thus, while verbal classifiers generally increase the valence by classifying and adding an O argument, /-(V)gw(a)/ ‘place’ can increase the valence of the verb but the Locative argument is classified instead of the Patient/Theme argument (9.207-9.208). This is similar to classifiers on other verbs that can take both locative and O arguments such as example (9.109) in which ‘wall’ is a locative argument (in a prepositional phrase) yet is classified by /-(V)ts/ ‘body’. The reason why ‘wall’ is not classified by /-(V)gw(a)/ is likely due to that fact that it is more *body*-like than *place*-like in that it is part of a whole: house.⁵³

- NoG
- (9.207) wó-mangóza d-a-kóχ-ógw mé?á ká-máts’á
 M-Moges AFF-3SG.TR-enter-place goat to-house
 ‘Moges made the goat enter the house.’
- (9.208) wó-mangóza d-a-dáb-ogw mé?á ná-máts’á
 M-Moges AFF-3SG.TR-find-place goat to-house
 ‘Moges brought the goat into the house.’
 (lit: Moges made the goat arrive in the house)

The morpheme **gwá-** ‘place’ is used pronominally in participant nominalizations and relative clauses (Chapter XII). It is also used in a relator noun construction (see Chapters III and V). All of these constructions involve NN compounds and may be related to endocentric class morpheme compounds in Gumuz which have been shown to have a syntactic relationship with cognate verbal classifiers. The ‘allomorph’ **gó-** is used

⁵³ The cognate forms in Komo and T’wampa (Koman) are **gubí** and **gub** (respectively) both of which mean ‘house’ (Burns 1947:12, Beam and Cridland 1979: 64). Thus, it is not surprising that in nearly all (but one) of the examples above in Gumuz ‘house’ is the location or goal that is being classified by /-(V)gw(a)/ ‘place’. However, the classification has definitely expanded beyond merely houses as it can classify not only abstract places (9.202), but cities as well: **n-áádiis ababá b-ár¹-t’ée-gó-gw** ‘I was afraid in Addis Ababa.’

if the dependent noun of the compound begins with a consonant.⁵⁴ Such pronominal use of **gwá-** ‘place’ at times could be interpreted as classificatory.

- (9.209) a. NoG
gwá-aja
 place-water
 ‘place with water’
- b. **gó-**ma-dák’w-a
 place-NMLZ-hold-N
 ‘wedding place’
- c. ná-**gó-**ma-lee-a
 LOC-place- NMLZ-plow-N
 ‘at the farm/field’
- d. kú-**gó-**ma-t’ak’-ác-ke
 to-place-spit-CL1:eye-beer
 ‘to beer-spitting place’

The class morpheme **gwá-** is also found in a class morpheme compound which comprises part of another nominal compound (9.207).

- (9.210) SoG
 ka-da-**gw-**éebo-kwa
 INSTR-PRO.PL-place-ethnic.area-1PL.INCL
 ‘with our people’

9.5 Continuum of Semantic and Syntactic Behaviors

Much like the classifier and class morphemes of the Tai languages of Southeast Asia (DeLancey 1986: 439), there exists a continuum of syntactic behaviors from pure noun to pure classifier in Gumuz. Many classifying morphemes in Gumuz have moved beyond verbal classifiers to verbal affixes denoting number and transitivity which have less of a classifying function. We have a grammaticalization continuum from the more

⁵⁴ The morpheme **gwá-/gó-** ‘place’ is also used as the (bound) head noun of a finite relative clause (see chapter XII for further discussion of relative clauses).

lexical to more grammatical, with free nouns on the lexical end of the continuum and verbal affixes on the grammatical end. Table 9.4 outlines this range of syntactic behaviors. The one problem between this table and a grammaticalization continuum is the location of ‘class morpheme’ on the continuum. Nominal class morphemes are possibly more toward the lexical end of the continuum than are verbal classifiers but placed in Table 9.4 based on the range of syntactic behaviors found.

The NoG variety was chosen for the data in this table as this variety includes both complex and simple noun stems as classifiers and class morphemes. Thus, the range of syntactic behaviors is the most extensive. All verbal classifier forms are included in Table 9.4, while only representative forms for other morphemes are included. For example, **waagá**, a species of mushroom, is merely representative of all nouns which exhibit no classifier syntax or classifying function nor can function as a head root in a NN compound.⁵⁵ In the same way, ‘bone’ represents all nouns which can act as a head noun in NN compound but do not form a strong class or category in the language (nor co-occur with a verbal classifier of the same nominal origin). The ‘mouth’ and ‘place’ morphemes are included in this table as they questionably form classes in the language. Finally, morphemes such as **cá** ‘eye’, **k’wá** ‘head’, **-(V)ts** ‘body’ (and possibly **gwá** ‘place’) have grammaticalized beyond their noun classifying functions to verbal affixes which mark various abstract and clausal arguments and have developed other syntactic functions (discussed further in Chapters VII and X).

⁵⁵ When I refer to “NN compounds” in this context, I am referring to NN collocations which are not phrase-like. It is likely that nouns like **waagá** could form a more phrase-like NN collocation using a proper noun, e.g. ‘Bamita’s mushroom’. See Chapter VI for further discussion of compound versus phrase.

Table 9.4. Range of Syntactic/Semantic Behaviors of Morphemes in NoG

	Free Noun	Head N in NN Compound	Incorporated Noun	Verbal Classifier	Class morpheme	Verbal Affix
waagá (mushroom species)	+	-	-	-	-	-
zákwa 'bone'	+	+	-	-	-	-
lísa 'mouth'	+	+	+	-	-	-
líca 'eyes/face'	+	+	+	+	-	-
lúk'wá 'head'	+	+	+	+	+	-
íflá 'belly'	+	+	+	+	+	-
k'ósa 'tooth'	+	+	+	+	+	-
ts'éa 'ear'	+	+	+	+	+	-
sa 'mouth'	-	+	+	?	?	-
gwá 'place'	-	+	+	?	?	?
cá 'eye'	-	+	+	+	+	+
k'wá 'head'	-	+	+	+	+	+
-(V)ts 'body'	-	-	-	+	+	+

9.6 Anaphora

One typical function of classifiers is their ability to be used anaphorically in discourse (Aikhenvald 2000:81). Such anaphora has been documented in both Gumuz varieties and seems to be limited to verbal classifiers, as class morphemes in Gumuz are rarely used outside of a class morpheme compound.

There are surprisingly few instances of verbal classifiers being used anaphorically in Gumuz texts. Out of the 30+ texts I collected, the clearest uses of classifiers in anaphora were limited to the simple root forms in both varieties of Gumuz. In the folk tale from which excerpts are taken below, a monkey tricks the lion into attacking his reflection in the water. The word for 'image' *fááts* is classified with the verbal classifier /-(V)ts/ 'body', which is used anaphorically on the verb for 'jump' (9.211).

SoG
 (9.211) éé-b-a-gaŋ-gá-ts fǎáts-amá n-ííl aja
 TEMP2-AFF-3SG.TR-know-body image-3SG.POSS LOC-belly water

b-a-k'ól-agá-ts kám-dák'ó-ʃa-má
 AFF-3SG.TR-jump-NFUT-CL:body PURP-hold-hip-IP:O

‘When he (the lion) saw his image in the water, he jumped after it to grab it.’

In another folktale, a Gumuz boy comes across an old woman with a leg wound. In (9.212) the reference to ‘leg wound’ is established. Later in the story, the narrator refers back to the wound using the verbal classifier /-(V)c / (CL: eye). However, the reference to ‘leg’ is retained with ‘leg’ as the O argument which results in an EP construction referring to ‘the eye of the leg’ (9.213-9.214) (see also example 9.42 for an example of ‘eye’ being used anaphorically).

SoG
 (9.212) b-á-dǎ-gá b-a-dǎb-agó-k'w jirtíá
 AFF-3SG.INTR-go-NFUT AFF-3SG.TR-find-NFUT-CL:head old.woman

etá-tʃagwa-bisa
 owner-leg-wound

‘He went and found an old woman with a leg wound.’

SoG
 (9.213) baabú u-éé tʃar-ác-mé tʃagó-míla
 father go-TWRD lick-CL:eye-2SG.EMPH leg-1PL.EXCL.POSS
 ‘Father, come, lick my (our) leg wound.’ (lit: ‘...eye-lick our leg’)

SoG
 (9.214) b-a-ʔef-ag-ác tʃagwa jirtíán
 AFF-3SG.TR-wash-NFUT-CL:eye leg old.woman

b-á-kal-agá baabú ʒɪʃ
 AFF-3SG.INTR-say-NFUT father sleep

‘After he washed the old woman’s leg (wound), she said, “Father, sleep!”’

relationship between the incorporated NP and the external NP which accompanies it. (Aikhenvald 2000:149-150). Aikhenvald's second type of verbal classifiers are classifiers which are affixes and not nominal roots. These affixes might have arisen from noun roots or verb roots and thus, such classifiers could have developed (historically) from classificatory noun incorporation (2000:152). With her third type of verbal classifier, suppletive classificatory verbs, the choice of verb is conditioned by some inherent properties of the S/O argument or their orientation/stance in space. As the name suggests, these verbs are suppletive and therefore classifiers per se are not analyzable synchronically (2000:153). One of the major differences between Aikhenvald's types 1 and 2 is that in classificatory noun incorporation, the classifier cannot be used in other classifier environments. But, in some "multiple classifier languages", the same classifying morphemes that are used in complex verbal stems may also be used in nominal compounds.⁵⁶ If such is the case, Aikhenvald suggests this is characteristic of *verbal classifiers as affixes* rather than *classificatory noun incorporation*. Furthermore, with this latter type of verbal classifier, verbs retain their same argument structure and the incorporated noun categorizes an overtly expressed argument (2000:160).

Grinevald's typology of verbal classifiers is similar to that of Aikhenvald's except Grinevald only recognizes two subtypes: 1) incorporated classifier construction and 2) verbal classifying affixes. Grinevald dismisses Aikhenvald's third type as it is "a covert lexical means of nominal classification" which "can be found in any language" (2000:68). Similar to Aikhenvald's *classificatory noun incorporation*, she describes the classifier morpheme in an *incorporated classifier construction* as still recognizable as a generic noun. On the other hand, her *verbal classifying affixes* are phonologically very eroded much like Aikhenvald's *verbal classifiers as affixes*. Her first type is akin to noun classifiers while her second type is semantically akin to numeral classifier types (2000:67). Grinevald describes numeral classifiers (those typically found in

⁵⁶ Aikhenvald (2000) considers what are labeled 'class terms' in this paper to be classifiers while Grinevald (2000:59) does not.

quantification expressions) as classifying physical categories: round, long, flat/flexible, etc. Noun classifiers, on the other hand, tend to classify according to material essence: animal, rock, man, etc. (2000:72).

Gumuz appears to have characteristics of both Aikhenvald's and Grinevald's types 1 and 2. It is unclear whether the classifiers in Gumuz arose from noun incorporation or whether these nouns had already grammaticalized as class morphemes before they were incorporated. If the latter is true, one would expect the Gumuz classifiers to be highly grammaticalized which appears to be true in some instances. Both authors acknowledge that the difference between their types can be merely degrees of grammaticalization with incorporated nouns towards the lexical end of the continuum and the classifying affixes toward the grammatical end.

CHAPTER X

BASIC CLAUSE TYPES AND ALIGNMENT

Many aspects of simple clauses have already been discussed in chapters on nouns, pronouns, and verbs. In this chapter, I present the basic simple clause types as well as an overview of case marking alignment in Gumuz.

10.1. Copular Clauses

“Copular clauses” are simple clauses which either link a noun phrase (NP) with another NP (predicate nominal constructions), or which link a NP with a location (predicate locative constructions). As very few lexical items could be considered lexical adjectives in Gumuz, predicate adjectives will not be considered in this chapter. All “copular” clauses in Gumuz can be expressed either with or without an overt copula (hence the scare quotes).

10.1.1 Predicate Nominal Constructions

Predicate nominal constructions in Gumuz are frequently expressed without an overt copula. Thus the clause structure generally involves NP-NP juxtaposition (10.1 - 10.4).

- (10.1) NoG
baga lá etá-ma-zé-gwá
person PROX PRO.SG-NMLZ-watch-PLACE
‘This person is a guard.’

- (10.2) NoG
lá tjaaga
PROX knife
‘This is a knife.’

- SoG
 (10.3) báámítá etá-ga-le-a
 Bamita PRO.SG-NMLZ2-plow-NM
 ‘Bamita is a farmer.’

- SoG
 (10.4) duá-áŋk’o duu-gunzá
 child-1SG.POSS child-male
 ‘My child is a boy.’

However, what may be an overt copula can be used in NoG in the nonfuture tense, but the particle appears to be more akin to a focus marker (synchronically) than to a copula. The form /=tso/ is a fixed form which is not conjugated as a verbal form and is added to the right edge of a constituent which is to be emphasized or placed in focus. If placed at the end of a clause as in (10.5), the whole proposition is placed in focus. The fact that this focus marker only appears in copular constructions suggests that it is at least an old copula.

- NoG
 (10.5) diida láná ma-ŋ-χá-á⁺-tsá-má = tso
 children MED NMLZ-PL-be.small-MV-BODY-IP:MOD=FOC
 ‘These children *are* small.’

- NoG
 (10.6) atsá = lá odáá³⁺-ámá = tso ka = lá-gatsaxa
 simply=PROX friend-IP:MOD=FOC COM=GEN-old.days
 ‘*Friendship (ritual agemates)* was simply this in the old days.’

Beyond the nonfuture tense context, an overt copular verb is used in the future tenses of both NoG (10.7) and SoG (10.8), as well as in the remote past tense of SoG (10.9). The verb is a fully conjugated form of the existential verb root, **ot** [wət].

- NoG
 (10.7) ástamaaríá d-ée-ot-ára
 teacher AFF-FUT-EXIST-1SG.INTR
 ‘I will be a teacher.’

SoG
 (10.8) báámítá etá-ga-le-a rím-ot-á
 Bamita PRO.SG-NMLZ2-NM FUT-EXIST-3SG.INTR
 ‘Bamita will be a farmer.’

SoG
 (10.9) báámítá etá-ga-le-a b-é-á-ot
 Bamita PRO.SG-NMLZ2-plow-NM AFF-RPST-3SG.INTR-EXIST

ná = ótsagáda
 LOC=old.days

‘Bamita was a farmer in the old days.’

10.1.2 Predicate Locative Constructions

Similar to predicate nominals, predicate locative constructions in Gumuz are generally formed via juxtaposition of phrasal elements. With predicate locatives, this takes the form of NP-PP juxtaposition (10.10, 10.11).

NoG
 (10.10) tʃaaga ná = k’ó-tugwa
 knife LOC=head-table
 ‘The knife is on top the table.’

SoG
 (10.11) ára ná = ádisáábá
 1SG LOC=Addis.Ababa
 ‘I’m in Addis Ababa.’

Predicate locatives in Gumuz can also be expressed with an overt copula. In NoG, the copula is again the existential *ot* (10.12). In SoG, both the verbs *ʔi* ‘be, be at’ and the existential *ot* can optionally be used in a predicate locative construction (10.13, 10.14).

- NoG
 (10.12) d-á-káa ga-afé-á “d-á-ot
 AFF-3SG.INTR-say NMLZ2-do.witchcraft-NM AFF-3SG.INT-EXIST

mísá ná = máts’á”
 spirit LOC=house

‘The witchdoctor said, “A spirit is in the house.”’

- SoG
 (10.13) ára ná = ádisáábá b-á⁺r-ʔíi-gá
 1SG LOC=Addis.Ababa AFF-1SG.INTR-be-NFUT
 ‘I’m in Addis Ababa.’

- SoG
 (10.14) b-é-éro-ot-é ná = ámériká
 AFF-R.PAST-1SG.INTR-EXIST-TWRD LOC=North.America
 ‘I was in North America.’

In subsequent sections, I turn to non-copular clauses which contain verbs as the primary lexical predicate.

10.2. Intransitive Clauses

An intransitive clause is a clause with an intransitive predicate and a single core argument in an intransitive subject function (S) (Comrie 1989). What I refer to as an intransitive clause in Gumuz contains a conjugated verb stem with an intransitive tonal melody on the bound subject pronominal (10.15-10.16). The clause may or may not include oblique participants (10.17). The verb may be comprised of an intransitive or labile verbal root (10.15, 10.16), or the verb may be a derived intransitive construction (10.18, 10.19). The transitivity of verbal roots in Gumuz is covered in Chapter VII, and the marking of transitivity on the bound subject pronominal of the verb is discussed in Chapters IV (section 4.2.3).

- NoG
 (10.15) d-âr-⁺lúŋgw
 AFF-1SG.INTR-shout
 ‘I shouted.’

SoG
 (10.16) má-lok-óra
 FUT-steal-1SG.INTR
 ‘I will be a thief.’

NoG
 (10.17) ob-éa d-á-ts ká = íl-á-mítsa
 father-1SG.POSS AFF-3SG.INTR-go DAT=BELLY-field
 ‘My father went to the field.’

NoG
 (10.18) áχamá d-á-sá-gw mar
 3SG AFF-3SG.INTR-eat-PLACE IDEO:much
 ‘S/he ate a lot.’

SoG
 (10.19) b-á-ʔef-agá-ts
 AFF-3SG.INTR-wash-NFUT-CL:BODY
 ‘S/he bathed.’

There also exist intransitives that include a non-argumental predicate complement together with the verb. For example, the labile verb **dá** as an intransitive means ‘become’, which requires a prepositional phrase complement with the preposition **ká** in NoG (10.20). In SoG the comparable verbal construction requires a NP predicate complement (10.21).¹

NoG
 (10.20) ká = ástamaaría d-éé⁺-dá-ra
 DAT=teacher AFF-FUT-become-1SG.INTR
 ‘I will become a teacher.’

SoG
 (10.21) báámítá etá-ga-le-a má⁺-dá-á
 Bamita PRO.SG-NMLZ2-plow-NM FUT-become-3SG.INTR
 ‘Bamita will become a farmer.’

¹ These may be considered *extended intransitives* according to Dixon and Aikhenvald (2000).

10.3. Transitive Clauses

Transitive clauses are clauses with two core arguments which function as A (the argument of a transitive clause that correlates most closely with the notion of *Agent*) and P (the argument of a transitive clause that correlates most closely with the notion of *Patient*) (Comrie 1989).² Again, in Gumuz, transitivity is marked via tone on the bound subject pronominal of the verb (section 4.2.3.1 of Chapter IV). When a conjugated verb is marked as transitive (whether the lexical root itself is a labile or transitive root), it is unacceptable to utter the clause without an overt P argument (10.22, 10.23, 10.25, 10.26) or without some context producing a “definite null instantiation”.³ If an Incorporated noun/Classifier (IN/CL) is part of the verb stem and is coreferential with a P argument, the P argument need not be overtly expressed (10.24, 10.27).

NoG
(10.22) óó-báámítá d-a-ɗaak’w dagoná ŋgafa
M-Bamita AFF-3SG.TR-grab beautiful woman
‘Bamita married (lit: grabbed) a beautiful woman.’

NoG
(10.23) *óó-báámítá d-a-ɗaak’w
‘Bamita grabbed/married...’

NoG
(10.24) óó-báámítá d-a-ɗaak’w-áj
M-Bamita AFF-3SG.TR-grab-HIP
‘Bamita grabbed (something).’

SoG
(10.25) b-íí-sá-gá ŋga
AFF-3PL.TR-eat-NFUT food
‘They ate food.’

² In other chapters I refer to “O” arguments as a syntactic designation, whereas “P” is a macro-semantic role (c.f. Payne 2012).

³ According to Fillmore et al. (2003), a definite null instantiation is the absence of a frame element that is unambiguously recoverable from the context.

SoG
 (10.26) *b-íí-sá-gá
 AFF-3PL.TR-eat-NFUT
 ‘They ate.’

SoG
 (10.27) b-íí-sá-gá-tsa
 AFF-3PL.TR-eat-NFUT-BODY
 ‘They ate it all.’

10.4. Ditransitive Clauses and Beyond

10.4.1 Ditransitive Clauses

In Gumuz, it is not possible to have three simple NPs in a clause that has ditransitive semantics,⁴ though it is possible to have two NPs plus a prepositional phrase. The major question is whether there are any verbs, either simple or derived, that require three participants syntactically. At this point, the evidence is not yet clear.

A ditransitive clause is a clause with three arguments, one functioning as subject, one functioning as primary/direct object and the third functioning as a secondary/indirect object, depending on the language. The three arguments are overtly required or at least must have a definite null interpretation to be considered ditransitive (Fillmore et al. 2003). In Gumuz, there are no known clear examples of ditransitive verbal roots. Even with the verb **cá** ‘give’ (NoG and SoG), which can be part of what might be considered a ditransitive clause (10.28), to have a required third argument, the verb must carry an incorporated preposition (10.31, 10.32). Without an incorporated preposition, either the theme (10.29) or the recipient (10.30) is structurally optional. This is true for both SoG and NoG dialects. In (10.28-10.30), the tone on the bound pronominal suggests that a grammatical object is present, but in (10.29) any additional PP coding the recipient is not required. There is no clear evidence in Gumuz that ditransitive verbal roots exist.

⁴ There are certain external possession constructions in which there is a third argument, e.g. ‘We won’t do (put) blood on a child’s ear’ **maxámá éédogoguts’éangó dua** (lit: ‘His blood we will not ear-do child’).

SoG
 (10.28) b-íí-cá-g-é mbaďá ká = ɓaga
 AFF-3PL.TR-give-NFUT-TWRD gourd DAT=person
 ‘They gave the gourd to the person.’

SoG
 (10.29) b-íí-cá-g-é mbaďá
 AFF-3PL.TR-give-NFUT-TWRD gourd
 ‘They gave the gourd.’

SoG
 (10.30) b-íí-cá-g-é ká = ɓaga
 AFF-3PL.TR-give-NFUT-TWRD DAT=person
 ‘They gave to the person.’

As mentioned above, verbs in Gumuz can carry incorporated prepositions (see Chapter VII) to “coreference” an argument that occurs as part of a dative/benefactive, instrumental/comitative or locative/ablative prepositional phrase (10.31, 10.32, 10.33). Because the incorporated preposition either requires or at least suggests a definite null instantiation of an additional participant, one could argue that the additional participant is part of the valence of a derived verb stem (i.e. is an argument of the verb). Using the criterion of “coreference” on the verb, the additional argument in Gumuz would then be a “prepositional argument” with the semantic roles of Instrument/Comitative, Recipient/Beneficiary, or Locative/Ablative (see also examples in Chapter VII, section 7.2.3).

SoG
 (10.31) b-íí-**gá**-cá-g-é mbaďá **ká = ɓaga**
 AFF-3PL.TR-DAT-give-NFUT-TWRD gourd DAT=person
 ‘They gave the gourd to the person.’

SoG
 (10.32) b-íí-**ga**-cá-gá mbaďá **ka = ʔaja** ká = ɓaga
 AFF-3PL.TR-COM-give-NFUT gourd COM=water DAT=person
 ‘They gave the gourd with water to the person.’

- SoG
 (10.33) b-ára-lee-ká-k'ô-n gízíá ná = k'ó-má
 AFF-1SG.INTR-plow- NFUT -head-LOC grass LOC=head-IP
 'I plowed the weeds on top.'

One piece of formal evidence that these objects of prepositions become arguments of the verb when the verb incorporates a preposition is that in certain instances, the new derived verb stem with an incorporated preposition is not acceptable without the overt prepositional phrase as well. For example, the clause in (10.33) is not acceptable to native speakers without the locative prepositional phrase (10.34). On the other hand, prepositional marking on the verb is not required for the sentence in (10.33) to be considered acceptable (10.35).

- SoG
 (10.34) *b-ára-lee-ká-k'ô-n gízíá
 AFF-1SG.INTR-plow-head-LOC grass

- SoG
 (10.35) b-ára-lee-ká-k'w gízíá ná = k'ó-má
 AFF-1SG.INTR-plow-NFUT-head grass LOC=head-IP
 'I plowed the weeds on top.'

Furthermore, regardless of whether a third overt phrase is syntactically required for verbs marked with incorporated prepositions, the third argument is at least a definite null instantiation. That is, the argument is recoverable from context (i.e. definite null instantiation) or the derived verb evokes a frame involving three participants, one of which is not formally overt (or marked on the verb) but is semantically part of the frame (i.e. indefinite null instantiation, c.f. Fillmore et al. 2003). Consider the verb root 'speak' **ngáŋ** (NoG and SoG). This simple verb root has a single S argument (10.36, 10.37).⁵ When the IN/CL /-(a)ts/ 'body' is incorporated, the new derived verb means 'tell' (10.38, 10.39) which semantically evokes a frame involving three participants, but formally

⁵ However, the verb 'speak' can have two arguments when the second argument is a language, e.g. **díladambáts sagúmíza mangafámá** (we.tried Gumuz.language to.speak.it) 'We tried to speak Gumuz.'

marks only two participants on the verb: 1) the speaker and 2) the information conveyed.

SoG

- (10.36) b-á-ŋgaʃ-aga
 person AFF-3SG.INTR-speak-NFUT
 ‘The person talked.’

NoG

- (10.37) baab-éa zialá d-ée-ŋgaʃ-á
 father-1SG.POSS now AFF-FUT-speak-3SG.INTR
 ‘My father will speak now.’

NoG

- (10.38) lá-gúmiza lá-baga taaríka d-ée-ŋgaʃ-ár-ts
 GEN-Gumuz GEN-people story AFF-FUT-speak-1SG.TR-BODY
 ‘I will tell a story of the Gumuz people.’

SoG

- (10.39) b-íí-ŋgaʃ-áts kám¹-ú-û-ê-n
 AFF-3PL-speak-BODY PURP-go-3PL.INTR-TWRD-DEP
 ‘They told them to go.’

One can also formally index on either the verb root **ŋgáʃ** ‘speak’ or the verb stem **ŋgaʃáts** ‘tell’ a third participant using the dative/benefactive incorporated preposition. The former construction means ‘speak to someone’ (10.40) and the latter means ‘tell something to someone’ (10.41). However, in general the existence of a dative prepositional phrase within a clause does not mean the verb is obligatorily marked for this oblique (10.42).

SoG

- (10.40) b-íl-gá-ŋgaʃa-gá ká = maʒá ká = á
 AFF-1PL.TR-DAT-speak-NFUT DAT=guy DAT=MED
 ‘We spoke to the guy.’

NoG

- (10.41) d-a-ká-ŋgaʃ-áts ká = dua
 AFF-3SG.TR-DAT-speak-BODY DAT=child
 ‘S/he told something to the child.’

NoG

- (10.42) $\acute{\alpha}\chi\acute{o}$ **ká=** $\acute{\alpha}\chi\acute{o}$ d-a- $\eta\gamma\acute{\alpha}\lambda$ - $\acute{\alpha}\tau\varsigma$
3SG DAT=3SG AFF-3SG.TR-speak-BODY
'He told her something.'

One can also index an instrumental or comitative prepositional argument on the verb with the incorporated instrumental/comitative preposition /**ka=**/. Again, the incorporated preposition can be marked on either the verb root $\eta\gamma\acute{\alpha}\lambda$ 'speak' or the verb stem $\eta\gamma\acute{\alpha}\lambda\acute{\alpha}\tau\varsigma$ 'tell' and adds an additional prepositional argument to each verb (10.43, 10.44).

SoG

- (10.43) b- $\acute{\iota}\lambda$ -**ga-** $\eta\gamma\acute{\alpha}\lambda$ - $\acute{\alpha}\gamma\acute{\alpha}$ **ka=** $\acute{\sigma}\acute{\iota}\lambda\kappa\alpha$
AFF-1PL.EXCL.INTR-INSTR-speak-NFUT INSTR=phone

ka = $\mu\alpha\zeta\acute{\alpha}$ $\text{?}\acute{\alpha}$
COM=guy MED

'He and I talked by phone.'
lit: 'We talked by phone with him.'⁶

- (10.44) d-a-**ka-** $\eta\gamma\acute{\alpha}\lambda$ - $\acute{\alpha}\tau\varsigma$ **ka=** $\lambda\epsilon\kappa\alpha\text{r}\acute{\phi}\acute{o}\nu\alpha$
AFF-3SG.TR-INSTR-speak-BODY INSTR=megaphone
'S/he said something through a megaphone.'

When there exist two participants in a clause that have the semantic roles of recipient and beneficiary, only the beneficiary is formally expressed as a prepositional argument (introduced with the preposition /**ká=**/). The semantic role of recipient is expressed as a direct object, whereas in other constructions, the recipient would be part of a PP introduced with /**ká=**/ (see examples 10.40, 10.41). Thus it appears as though the incorporated preposition not only adds a prepositional argument to the verb but can also

⁶ The instrumental prepositional phrase occurs on the verb in (10.43), not the comitative. In this example, the comitative functions as a conjunction and forms part of the S argument, i.e. 'he and I'. However, comitative prepositional phrases can elsewhere be indexed on the verb (see Chapter VII). Such oblique arguments may be examples of Dixon and Aikhenvald's notion of "extended argument" (E) found in "extended intransitives" (2000).

reassign particular semantic roles to the grammatical relation of direct object, which are not typical of direct object in monotransitive clauses.

- SoG
- (10.45) b-ár-gá-ŋgaʃ-agá dagoná ká = ábaabé
 AFF-1SG.TR-BEN-speak-NFUT girl BEN=Abebe
 ‘I spoke to the girl for Abebe.’

There also exists a clausal construction in Gumuz which involves three verbal arguments with the semantic roles of agent, patient/goal, and instrument (see Chapter VII, section 7.2.3.1). In (10.46) the verb has three arguments: the person shooting as A, the ant eater as P, and the bow functioning as a prepositional argument. These clauses typically involve predications of trajectories involving movement of a semantic theme, such as ‘send’, ‘throw’, ‘shoot’, ‘spit’.

- NoG
- (10.46) b́aga d-a-ka-tíi-ʃ ka = d́ogwa éétiriká
 person AFF-3SG.TR-INSTR-shoot-HIP INSTR=bow ant eater
- d-á-ʃ
 AFF-3SG.INTR-die
 ‘The person shot the ant eater with a bow (and) the ant eater died.’

The agent and theme arguments of these verbs can also form part of a transitive construction. In the transitive counterpart, either the semantic goal ‘ant eater’ (10.47) or the semantic theme ‘bow’ (10.48) can be treated as the object argument.⁷

- NoG
- (10.47) b́aga d-a-tíi-ʃ éétiriká
 person AFF-3SG.TR-shoot-HIP ant eater
 ‘The person shot the ant eater.’

⁷The IN/CL ‘hip’ on the verb ‘shoot’ in (10.47) cross-references the more patient-like P argument ‘ant eater’. The P argument ‘bow’ which is less affected by the action is not cross-referenced with an IN/CL. Another potential argument in this trajectory construction is the theme which traverses the trajectory: an arrow, a bullet, a ball, spit. Because these are more affected P arguments than those with the semantic role of instrument, they too are cross-referenced with an IN/CL (see also examples 10.36-10.38).

- NoG
 (10.48) b̩aga d-a-tíi d̩ogwa
 person AFF-3SG.TR-shoot bow
 ‘The person shot the bow (i.e. shot the arrow with the bow).’

Similar to ‘shoot’, ‘spit’ involves a trajectory. With ‘spit’, the saliva or anything which is spat, i.e. the theme, is the prepositional argument and the goal (that which is spat upon) is the grammatical object argument. Again, similar to ‘shoot’ above, the verb can also occur in a transitive construction in which the theme (the item that moves) is coded as the grammatical object of the transitive construction. Thus, similar to example (10.45), it appears as though the incorporated instrumental preposition /ka-/ not only indexes a prepositional argument on the verb but also assigns participants with the semantic role of goal to that of grammatical object.

- NoG
 (10.49) dua tak'-akã-ts ka-gaantak'óá
 child spit-INSTR-CL:body INSTR-saliva
 ‘Spit on the child with saliva (as a blessing)!’

- NoG
 (10.50) tak'-aka-k'w gija ka-gaantak'óá
 spit-INSTR-CL1:head rock INSTR-saliva
 ‘Spit saliva on the rock.’

- NoG
 (10.51) tak'-ác gaantak'óá
 spit-CL1:eye saliva
 ‘Spit saliva!’

10.4.2 Possible Tritransitive Clauses

For certain verbal constructions in Gumuz, it is possible to mark more than one incorporated preposition on the verb. Thus, the number of participants in the frame can be increased to four: two core arguments and two prepositional arguments.⁸ In (10.52),

⁸ There is a logical potential for five participants in a frame in Gumuz as three incorporated prepositions can occur on verbs. However, there are no known examples of all three oblique arguments indexed simultaneously on a single verb.

both the dative and the comitative occur on the verb, indexing via the dative incorporated preposition a definite null instantiation of ‘to the ground’ and with the comitative incorporated preposition, the overt prepositional argument ‘with saliva’.

- SoG
- (10.52) k’óá b-a-sá-gá nga
 dog AFF-3SG.TR-eat-NFUT food
- et-íi-gá-ga-t’ak’-agá-ts ka = gaat’ak’óá
 REL-3PL.IMP-DAT-COM-spit-NFUT-CL:body COM=saliva

‘The dog eats food that is spat to the ground with saliva.’

One can also simultaneously index a dative prepositional phrase and a locative prepositional phrase on certain verbs in Gumuz. The resulting frame involves four elements: two core arguments and two prepositional arguments. In (10.47), the dative prepositional phrase ‘to him’ is a definite null instantiation in the frame of the verb ‘present’, as the participant was previously mentioned in the text. Likewise, the locative prepositional phrase ‘on it’ or ‘on the golden bowl’ is a definite null instantiation in the frame of the verb ‘present’ as ‘the golden bowl’ functions as the P argument in the previous clause.

- SoG
- (10.53) b-íi-ŋar-ká-é-k’w lagáda sóŋwá
 AFF-3PL.TR-take-NFUT-TWRD-HEAD bowl metal
- b-íi-ká-tak-agá-ts-ân nga
 AFF-3PL.TR-DAT-present-NFUT-BODY-LOC food

‘They took the golden bowl and they presented the food to him on it.’

10.5. Possessive Clauses

There are two ways to express clausal possession in Gumuz: 1) via the transitive verb **tʃá** ‘have’ and 2) via an intransitive construction involving the existential verb root **ot**. The latter construction is found only in NoG.

10.5.1 Transitive Possessive Clauses

Transitive possessive clauses exist in both NoG (10.39, 10.40) and SoG (10.41, 10.42) and employ the verbal root **tʃá** ‘have’.

- NoG
 (10.54) gíʃá = gwê ná = máts’á-míla d-íla-tʃ
 rock=CONJ LOC=house-1PL.EXCL.POSS AFF-1PL.EXCL.TR-have
 ‘And we have (grinding) stones in our homes.’

- NoG
 (10.55) k’ós’-áca áca-tʃá = ŋgo
 teeth-2PL.POSS 2PL.TR-have=NEG
 ‘You all don’t have any teeth.’

- SoG (Gumuz proverb)⁹
 (10.56) a-tʃá-gá = ŋgó ílcá mbáánd
 3SG.TR-have-NFUT=NEG eyes two
 ‘He doesn’t have two eyes.’

- SoG
 (10.57) áh babá-ts ílk’wá b-a-tʃá-gá
 3SG big-BODY head AFF-3SG.TR-have-NFUT
 ‘S/he has a big head.’

10.5.2 Intransitive Possessive Clauses

Possessive clauses formed with the existential verb **ot** are only found in NoG. This intransitive possessive construction is formed with a Genitive NP (or an NP marked with a possessive suffix) and the intransitive verb **ot** (10.58, 10.59). The existential verb is optionally marked with 3PL bound subject pronominal if the item possessed is clearly plural (10.59).

⁹ The word **ílcá** of the proverb in (10.56) was translated by the language consultant as ‘eyes’. However, this can also mean ‘face’ in Gumuz. In Gumuz culture, if a person has ‘two eyes’, he’s a bad person; he has two spirits. This is interesting in light of the highland Christian culture of Ethiopia in which religious paintings of people with two eyes indicate that the person is good/trustworthy and paintings of people with one eye indicate that the person is evil or devious.

- NoG
 (10.58) [lá-áχá'máámá meetáa mátá]_{NP} d-á-ot
 GEN-3PL one chicken AFF-3SG.INTR-EXIST
 'They have one chicken.'
 lit: 'Their one chicken exists.'

- NoG
 (10.59) [lá-áχámá mbáándá mátá]_{NP} d-úu-ot
 GEN-3SG two chicken AFF-3PL.INTR-EXIST
 'S/he has two chickens.'
 lit: 'His/her two chickens exist.'

The existential verb can be optionally marked with the locative suffix /-(a)n /
 (10.60). However, the locative can be marked on the transitive possessive verb as well
 (10.61). In fact, the locative suffix is common on many verbs in Gumuz (see Chapter
 VII).

- NoG
 (10.60) lá-ma warakát d-á-ot-**an**
 GEN-1SG.POSS paper AFF-3SG.exist-LOC
 'I have paper.'
- NoG
 (10.61) ára d-ár-tʃ-é-**an** dua meetáa ná = gilgîl bulása
 1SG AFF-1SG.TR-have-TWRD-LOC child one LOC=Gilgil.Biles
 'I have one child in Gilgil Beles.'

When an inherently possessed or relational noun (see Chapters III and VI) is part
 of a possessive clause, a special construction is often used in NoG. The possessor is
 expressed as a formally unmarked pronoun and the possessum is marked with a
 possessive suffix in combination with the existential verb **ot**.

- NoG
 (10.62) áχámá obá-tsa-má lík'ú-má d-á-ot-**an**
 3SG big-body-IP:MOD head-3SG.POSS AFF-3SG-EXIST-LOC
 'S/he has a big head.' (lit: her big head exists-at)

- NoG
 (10.63) ára duú-ma meetáa d-á-ot-**an**
 1SG child-1SG.POSS one AFF-3SG.INTR-EXIST-LOC
 'I have one child.'

- NoG
 (10.64) ára d-ár-tʃ̣ dua meetáa
 1SG AFF-1SG.TR-have child one
 ‘I have one child.’

Lastly, the intransitive possessive construction is often interchangeable with the transitive possessive construction in NoG. Compare example (10.63) with examples (10.61) and (10.64).

10.6. Comparative and Superlative Constructions

Gumuz has both comparative and superlative constructions. A comparative construction is one in which two items are compared according to a certain quality, e.g. *this is smaller than that*. A superlative construction is similar to a comparative but compares one item to many and asserts that an item is an extreme example of a particular quality relative to the items being compared.

10.6.1 The Comparative Construction

In some languages comparative constructions are comprised of a *standard*, a *marker*, and a *quality*. The *standard* is something against which an item is being compared, the *marker* marks the construction as a comparative construction, and the *quality* is the attribute by which the item is being compared (Payne 1997:88-89). In NoG, the order of these three components within the comparative construction is *marker-standard-quality* (10.65, 10.66). In SoG the order is *quality-marker-standard* (10.67). The comparative marker in Gumuz is the preposition /ká=/. Also distinctive is the order of the demonstrative adjective (where applicable) and head noun within the NP expressing the standard in the NoG. In (10.66), the demonstrative adjective precedes the noun, whereas in typical NP's in Gumuz, the demonstrative adjective follows the noun (see section 5.1.2.3 of Chapter V).

NoG

marker-standard quality

- (10.65) ára ká = áχo ma-zam-amá
1SG DAT=3SG NMLZ-be.tall-IP:MOD
'I am taller than he is.'

NoG

marker-standard quality

- (10.66) [ká = lá aja] [lá aja] tílá
DAT=PROX water PROX water deep
'The water (in this river) is deeper than that one.'

SoG

quality marker-standard

- (10.67) ára ma-goo-má ká = ?á
1SG NMLZ-be.tall-IP:MOD DAT=3SG
'I am taller than s/he is.'

In order to express the notion of 'do/be better' a distinct construction is used. The verb stem **pá-s** 'excel, exceed' is used in a transitive clause with the A and the P arguments functioning as the two entities being compared (10.68).

SoG

- (10.68) á b-a-pá-gá-s ára ná = malák'w k'únza
3SG AFF-3SG.TR-emerge-NFUT-MOUTH 1SG LOC=test
'He did better than I on the test.'
(lit: 'he emerged me on the test')¹⁰

10.6.2 The Superlative Construction

The superlative construction in NoG is identical to the comparative construction but the *standard* is the word 'all' plus the category of items being compared. For example, in (10.69), the standard is 'all (bodies of) water'.

¹⁰ Example (10.68) is likely a malefactive construction in which a transitive verb stem consisting of a verb root and an IN/CL has an animate direct object which is negatively affected by the action. Cross-linguistically, it is common to use a verb meaning 'exceed' in comparative constructions in which the standard is expressed as the object of the verb 'exceed' (Stassen 1984).

- NoG
 (10.69) ká = 'kóóá aja lá aja tílá
 DAT=all water PROX water deep
 'Of all the water (rivers, lakes) this water is deep' (i.e. is the deepest).

In SoG, on the other hand, the superlative is often expressed using a stative verb for the *quality* and the *standard* is expressed in a prepositional phrase with the locative preposition **ná** = followed by **gúŋámá** 'all of them/it'.

- SoG
 (10.70) b-á-an-dagona-gá gó-m⁺-ŋí-a ba
 AFF-3SG.INTR-VBLZ-beautiful-NFUT PLACE-NMLZ-live-NM PROX

 ná = gúŋ-ámá
 LOC=all-IP
 'This place to live is the prettiest of all.'

10.7. Case Marking Alignment in Simple Clauses

Transitive constituent order in Gumuz tends to vary between AVP and APV. However, other constituent orders are also possible depending on the discourse context. Likewise, constituent order in intransitives varies between SV and VS.

Core arguments in Gumuz remain unmarked for case unless the A/S argument follows the verb, in which situation the A/S is marked with a nominative case marker /á-/ and the P remains unmarked. According to König (2006: 658), such a pattern of alignment is a *type I marked nominative language* with a *split* system. A language is considered to have a marked nominative system if it exhibits a nominative-accusative pattern (the coding of A and S is the same) and the nominative (A/S) is marked for case while the accusative (P) remains unmarked (Comrie 1989). The Gumuz marked nominative system is 'split' in that the nominative is marked only under special circumstances (i.e. postverbal A/S but not preverbal A/S, and for emphasis). Examples (10.71)-(10.83) below demonstrate various attested constituent orders in both NoG and SoG. The transitive orders are: AVP, APV, PVA, VAP, and VPA. The intransitive orders are SV and VS. Case marking is obligatory when the A/S argument is post-verbal.

- NoG
A V P
(10.71) dua d-a-lígít tʃogwá-arabía
child AFF-3SG.TR-roll foot-Arab
'The child rolled the tire ('Arab foot').'
- SoG
A V P
(10.72) dogwaanjá b-a-sa-gá gazía
donkey AFF-3SG.TR-eat-NFUT grass
'The donkey ate the grass.'
- NoG
A P V
(10.73) áχó sánjá d-a-gam
3SG salt AFF-3SG.TR-find
'He found salt.'
- SoG
A P V
(10.74) ńgafa duu-má b-a-fag-agá-k'w
woman child-3SG.POSS AFF-3SG.TR-rise-NFUT-HEAD
'The woman raised her child.'
- NoG
P V A
(10.75) máts'á d-a-sá-k'^w á-manja
house AFF-3SG.TR-eat-CL1:HEAD NOM-fire
'The fire consumed the house.'
- SoG
P V A
(10.76) já b-a-ts'ii-gá-k'w á-ziba
tree AFF-3SG.TR-break-NFUT-HEAD NOM-wind
'The wind broke the tree.'
- NoG
V A P
(10.77) d-a-ɲar-ák'w = gwê á-mááχó duú-ma
AFF-3SG.TR-CL1:HEAD=CONJ NOM-3PL child-1SG.POSS
'And he took my child.'

- SoG
V A P
(10.78) b-a-ɲar-agá á-duu-má lamáána
AFF-3SG.TR-take-NFUT NOM-child-3SG.POSS wealth
'His child took the money.'
- SoG
V P A
(10.79) b-a-tʃá-gá-ts gúmba á-damá ba
AFF-3SG.TR-emit-NFUT-CL:BODY lion NOM-rain PROX
'This rain rained on the lion.'
- NoG
S V
(10.80) bəga d-á-dú
person AFF-3SG.INTR-be.sick
'The person is sick.'
- SoG
S V
(10.81) ʃá b-á-ʰtsʰí-gá
tree AFF-3SG.INTR-break-NFUT
'The tree broke.'
- NoG
V S
(10.82) d-á-dú á-baga
AFF-3S.INTR-be.sick NOM-person
'The person is sick.'
- SoG
V S
(10.83) b-á-c'á-gá á-béé-k'wá Báámítá
AFF-3SG.INTR-fall.out-NFUT NOM-skin-head Bamita
'Bamita's hair is falling out.'

Nominative case is also marked on the A/S argument in order to add emphasis (10.84). In a similar manner, case is often marked on the preverbal A/S argument when the clause is a response to a question. The response in (10.85) is in answer to the question 'Who ate the sheep?'

NoG

- (10.84) **á-dáájá** **d-á-ts** // **d-á-χól** **á-wáágana**
NOM-baboon AFF-3SG.INTR-go AFF-3SG.INTR-follow NOM-monkey
'The *baboon* went; the *vervet monkey* followed.'

SoG

- (10.85) **á-iiśá** **b-a-sa-gá** **jaaja**
NOM-leopard AFF-3SG.TR-eat-NFUT sheep
'The *leopard* ate the *sheep*.'

CHAPTER XI

THE *MA*- CONSTRUCTION

The *ma*- construction in Gumuz is simply a verb stem nominalized with the /**ma**-/ prefix. The resulting verbal noun exhibits the following structure: /**ma**-/ + verb stem + /-**a**/ (the last item is discussed further in Chapter III, section 3.3.1.1). However, the final /-**a**/ nominal marker is not always present in the *ma*- construction. For this reason, I consider the *ma*- construction to be comprised of only the nominalizing prefix followed by the verb stem. This construction forms the basis for many other verbal constructions in Gumuz, namely complement clauses, the complements of auxiliaries, the progressive construction, and negative imperatives. Adverbial clauses are also formed with the *ma*- construction and are discussed in Chapter X. Nominal constructions which can be formed with the *ma*- construction are discussed in Chapter VI and Chapter XII.

11.1. Complement Clauses

A complement clause is a clause used as an argument of a higher clause. The *ma*- construction forms the basis of many types of subordinate clauses in Gumuz including both subject and object complements. Subject complements in Gumuz take the form of the *ma*- construction with the final /-**a**/ nominal marker (plus an inherent possession suffix for nominalized transitives) or a participant nominalization/nominalized headless relative clause formed with the *ma*- construction;¹ other headless relative clauses that serve as complements are discussed in Chapter XII. Object complements in Gumuz take the form of the *ma*- construction with the final /-**a**/ nominal marker (plus an inherent possession suffix for nominalized transitives) or, depending on the matrix verb, the complement can be introduced with the dative preposition /**ká**-/ followed by the *ma*-

¹ Some participant nominalizations might be considered “headless” relative clauses. By “headless” relative clause, I mean that the clause is lacking a lexical head. The pronoun which is used in both participant nominalizations and relative clauses could feasibly be considered a “head”.

construction. This latter object complement form varies in finiteness depending on the matrix verb and on whether the verb of the complement clause has the same subject or different subject from the matrix verb. By “finite” I mean that the verb can be inflected with bound subject pronominals (found in finite verbs), and the relative order of verbal morphemes (both inflectional and derivational) follows that of finite main clause verbs (Chapter VII).

11.1.1. Subject Complements

The *ma-* construction can serve as a subject complement as part of a bare verb nominalization (/ma-/ + verb stem/root + /-a/) or as part of a participant nominalization/nominalized headless relative clause. Nominalizations of dynamic intransitive verb stems/roots (Chapter III, section 3.4.1) can be simply formed with the *ma-* construction plus the /-a/ nominal marker (i.e. a “bare verb nominalization”). In (11.1) and (11.2) such nominalized constructions serve as subject complements. All subject complements in the corpus are non-finite. By non-finite, I mean that the *ma-* construction is simply a nominalization with no verbal inflection for person or number of the subject (as well as no tense/aspect marking).

- NoG
- (11.1) **ma-péʔ-a** d-á-gáχ
 NMLZ-lie.down-NM AFF-3SG.INTR-be.good
 ‘Lying down is good.’

- SoG
- (11.2) **ma-dugw-a** ga-fál-amá
 NMLZ-run-NM NMLZ2-be.good-IP:MOD
 ‘Running is good.’

Nominalized dynamic intransitive verbs can optionally mark an erstwhile S argument by a possessive suffix. This grammatically possessed nominalized verb can serve as a subject complement (11.3). As the S is marked with nominal morphology (possessive suffix) and is not marked with a verbal bound subject pronominal, the nominalized complement remains “non-finite”.

- NoG
 (11.3) áma ná = fataná **ma-mbeʔ-uá** d-a-nas-áts
 2SG LOC=test NMLZ-fail-2SG.POSS AFF-3SG.TR.be.bad-CL:body

ííl-úá
 belly-2SG.POSS

‘Your failing of the test made you feel bad.’
 lit: ‘Your failing on the test made your belly bad.’

Nominalized transitive verbs can also serve as subject complements. Such nominalizations obligatorily retain an indication of their erstwhile O argument, either by an overt noun, e.g. ‘sugarcane’ (11.4), or by the inherent possession pronominal suffix /-**má**/ (11.5).

- SoG
 (11.4) dua b-a-dú-g-áts **á-ma-s-á-jápa**
 child AFF-3SG.TR-be.sick-CL:body NOM-NMLZ-eat-NM-cane
 ‘Eating sugarcane made the child sick.’

- NoG
 (11.5) **ma-paŋ-a-má** d-á-gáχ
 NMLZ-want-NM-IP:O AFF-3SG.INTR-be.good
 ‘To want (something) is good.’

Lastly, it is possible for a participant nominalization/headless relative clause formed with the *ma-* construction to serve as a subject complement (11.6) (see also Chapter XII).

- NoG
 (11.6) **dá-m-paŋ-a-má** ma-kod-amá meáwa nágá = tso
 REL.PRO.PL-NMLZ-want-NM-IP:O NMLZ-buy-IP:O cat here=FOC
 ‘Those wanting to buy a cat are here.’

11.1.2. Object Complements

The *ma-* construction forms the basis of nearly all object complements. The complement form varies in structure according to both the verb to which it is a complement and according to whether the object complement has a different subject than

the matrix verb. The follow subsections are organized according to the structure of the complement clause.

11.1.2.1. Nonfinite *ma-* Complements as Objects

The matrix verbs ‘want’, ‘try’, ‘begin’, ‘finish’, ‘do again’, ‘be able to’ and ‘like’ (to name a few) all take an object complement formed with the *ma-* construction plus the nominal suffixes /-a/ or /-má/ inherent possession suffix.² These verbs roughly coincide with what Givon (2001:40) calls *modality* verbs, which he predicts take a clausal complement that is more integrated with the matrix clause than clausal complements of Perception-Cognition-Utterance (PCU) verb types, e.g. ‘say’ and ‘know’. Examples (11.7-11.11) demonstrate clausal complements of ‘want’ in both NoG and SoG where the subject of the complement clause is the same as that of the matrix clause.

NoG
 (11.7) **ma-dúgw-á** d-ár-paŋ
 NMLZ-run-NM AFF-1SG.TR-want
 ‘I want to run.’

SoG
 (11.8) b-ár-paŋ-gá **ma-u-é-á**
 AFF-1SG.TR-want-NFUT NMLZ-go-TWRD-NM
 ‘I want to come.’

NoG
 (11.9) d-ár-paŋ **ma-ts’ib-ák’ó** **já-anzabííla**
 AFF-1SG.TR-want NMLZ-suck-HEAD wood-ginger
 ‘I want to suck on ginger root.’

SoG
 (11.10) b-a-paŋ-gá **ma-ʔiin-z-á** **émáándálá**
 AFF-3SG.TR-want-NFUT NMLZ-cook-NM sweet.potatoes
 ‘He wants to cook the sweet potatoes.’

² As of yet it is not entirely clear whether /-a/ and /-má/ are mutually exclusive morphemes, the former used with nominalized intransitives and the latter used with nominalized transitives (as well as nominalized statives, see Chapter III). If one assumes they are mutually exclusive, an epenthetic /a/ [ə] is added before /-má/. On the other hand, the /a/ (as analyzed in example 11.11) could be the toneless /-a/ nominal marker suffix, in which case these would not be mutually exclusive.

- NoG
 (11.11) ára gadaχá-cá-dá **ma-s-á-má** d-ár-paŋ
 1SG fruit-seed-thing NMLZ-eat-NM-IP:O AFF-1SG.TR-want
 ‘I want to eat fruit.’

Other verbs which take the same type of clausal complement as ‘want’ are: ‘begin’ (11.12, 11.13), ‘finish’ (11.14), ‘do again’(11.15, 11.16), ‘like’(11.17), ‘try’(11.18, 11.19), ‘be able to’(11.20, 11.21), and ‘do only a little’(11.22).

- NoG
 (11.12) damá d-a-at’óó-ʃ **ma-tʃá** ná = maaká
 rain AFF-3SG.TR-begin-HIP NMLZ-rain LOC=day
 ‘The rain started to rain early.’

- SoG
 (11.13) íí-at’óó-ʃá m’ máám **m-ḃáŋ-a**
 3PL.TR.begin-HIP 3PL NMLZ-dance-NM
 ‘They began to dance with each other.’

- NoG
 (11.14) aχó-ma **ma-af-cá-má**
 clothes-1SG.POSS NMLZ-wash-CL1:EYE-IP:O

d-ár-kár-ak’w
 AFF-1SG.TR-finish-HEAD

‘I finished washing my clothes.’

- NoG
 (11.15) ká = boŋgwá b-ée-a-ŋ-kwáa-kó-ʃ
 DAT=back AFF-FUT-RECP-PL-return-1PL.TR-HIP

ma-a-síí-a
 NMLZ-RECP-play-NM

‘In the future, we will play/chat again.’

- SoG
 (11.16) b-íí-táḃ-aká **ma-lee-íílá-má**
 AFF-3PL.TR-do.again-NFUT NMLZ-plow-BELLY-IP:O
 ‘They tilled it (the land) again.’

- SoG
 (11.17) **ts'ina ma-ŋgaʃ-amá** b-ár-hee-gá-ʃa
 story NMLZ-speak-IP:O AFF-1SG.TR-like-NFUT-HIP
 'I would like to tell a story.'
- NoG
 (11.18) d-úú-daamb **ma-fwintʃ-asa-má**
 AFF-3PL.TR-try NMLZ-tie.up-MOUTH-IP:O
 'They tried to tie him up.'
- SoG
 (11.19) b-ár-ɗaamb-agá-ts **ma-u-é-á**
 AFF-1PL.TR-try-NFUT-BODY NMLZ-go-TWRD-NM
 'I tried to come.'
- NoG
 (11.20) ákwá-kaal = aŋgó = ákw á-má-gunzá **ma-dá-má**
 1PL.INCL-be.able=NEG=1PL.INCL NOM-PL-men NMLZ-work-IP:O
 'We men weren't able to make it.'
- SoG
 (11.21) b-ár-háál-agá-ʃ **ma-tíí** **ambogwa**
 AFF-1.SG.TR-be.unable-NFUT-HIP NMLZ-shoot bushbuck
 'I was not able to shoot a bushbuck.'
- SoG
 (11.22) b-a-haal-agá-ts **ma-dá-ŋga**
 AFF-3SG.TR-be.little-NFUT-BODY NMLZ-do-food
 'She only made a little food.'

In SoG, clausal complements of 'know how' and 'think about, consider' have the same structure as complements of 'want'.³

- SoG
 (11.23) **máts'á ma-dá-má** b-ár-gam-aká-ʃa
 house NMLZ-make-IP:O AFF-1SG.TR-know-NFUT-HIP
 'I know how to build a house.'

³ The grammaticalized incorporated noun /-(a)ʃ(a)/ 'hip' tends to cross-reference clausal complements (11.23). This is also true for the IN/Classifier /-áts(a)/ 'body'.

- SoG
 (11.24) b-a-sáanz-agá-ts **ma-tsá**
 AFF-3SG.TR-think-NFUT-BODY NMLZ-go
 ‘He thought about going.’

We now turn to complements of what Givon (2001:41) calls perception/cognition/utterance (PCU) matrix verbs. In Gumuz, **ngafáts** ‘say, tell’, introduces indirect speech. When the verbal complement of ‘say, tell’ shares the same subject as the matrix clause, the structure of the complement is a simple nominalization formed with the *ma-* construction (11.25, 11.26).

- NoG
 (11.25) **norága ma-kód-a-má** d-a-ηgaf-áts
 book NMLZ-buy-NM-IP:O AFF-3SG.TR-speak-BODY
 ‘He said that he bought a book.’

- NoG
 (11.26) **sía ma-t’óχw¹-ífl-â = ηgó** d-a-ηgaf-áts
 rope NMLZ-break-BELLY-NM=NEG AFF-3SG.TR-speak-BODY
 ‘He said that he didn’t break the rope.’

11.1.2.2. Object Complements Formed with the *ma-* Construction and an Argument Coded as a Possessor

In NoG, an intransitive complement of ‘say, tell’ can be formed with the *ma-* construction plus a possessive suffix on the nominalization referencing the erstwhile S argument of the nominalized verb. If a 3SG subject of the complement clause refers to a different referent than the 3SG subject of the matrix verb, an additional 3SG pronoun (or full NP) marked with the genitive prefix is optionally added before the nominalized verb (11.27).

- NoG
 (11.27) **áχó lá-áχó ma-u-é-má** d-a-ηgaf-áts
 3SG GEN-3SG NMLZ-go-TWRD-3SG.POSS AFF-3SG.TR-speak-BODY
 ‘She said that he would come.’

In SoG, the same structure is used under similar circumstances. When the clausal complement of ‘want’ is a nominalized dynamic intransitive and has a different subject from the matrix clause, the erstwhile S argument of the nominalized verb is encoded by a possessive suffix (11.28).

- SoG
- (11.28) **ma-tsá-má** b-ár-paŋ-gá
 NMLZ-go-3SG.POSS AFF-1SG.TR-want-NFUT
 ‘I want him to go.’

The clausal complement of **gaŋ** ‘know’ in SoG is a clause nominalized with the *ma-* construction. Any erstwhile O argument of the nominalized verb is either expressed as an overt NP and/or by the */-má/* inherent possession suffix. The erstwhile A/S argument is expressed by a genitive pronoun which immediately follows the nominalized verb. The full NP referent of the genitive pronoun can be optionally mentioned immediately before the *ma-* construction and the entire nominalized clause, e.g. ‘the guy to come’, is possessed by the genitive pronoun (11.30). This clausal complement has the same structure regardless of whether the subject of the complement is the same as (11.29) or different from (11.28, 11.30) that of the matrix verb.

- SoG
- (11.29) ára b-ár-gaŋ-gá **ma-ʔíí-a** **alâ-m** **nágá**
 1SG AFF-1SG.TR-know-NFUT NMLZ-be-NM GEN-1SG.POSS here
 ‘I know that I am here.’

- SoG
- (11.30) **mazá ʔá** **ma-u-é-á** **alá-má** b-ár-gaŋ-gá
 guy MED NMLZ-go-TWRD-NM GEN-3SG.POSS AFF-1SG.TR-know-NFUT
 ‘I knew that the guy would come.’
 lit: ‘I knew the guy’s coming.’

For negative complements, embedded clauses cannot normally be negated with the negative clitic, so a negative auxiliary must be used (see section 11.2.2 below).⁴ As a

⁴ There exist a few exceptions in which the negative clitic can be used in a complement clause, namely the more nominal complements like that found in (11.25).

result, there exist two instances of *ma-* constructions in (11.31): the complement (‘to finish it’) of the negative auxiliary **ko** and the (possessed) clausal complement of the verb ‘know’ (‘to not finish it’).

- (11.31) SoG
 b-a-gaŋ-gá = ŋgó [ma-ko-ó
 AFF-3SG.TR-know-NFUT=NEG NMLZ-NEG.AUX2-NM:ASSOC
 [ma-kâr-k’o-má]] al-âm
 NMLZ-finish-HEAD-IP:O GEN-1SG.POSS

‘He doesn’t know that I didn’t finish it.’
 lit: ‘He doesn’t know my not finishing it.’

11.1.2.3. Finite *ma-* Complements as Objects

In SoG, a finite form of the *ma-* construction is used for different-subject complement clauses. These complements are finite in that they take bound subject pronominals which indicate transitivity by their tonal melodies. The relative order of morphemes following the verb root in this construction (both inflectional and derivational) is the same as for future tense main clause verbs (see Chapter VII). This complement construction may be limited to complements of the verb ‘want’. The majority of examples of different subject complements in the corpus include a /ká-/ prefix as part of the construction.

- (11.32) SoG
 b-ár-paŋ-gá ma-kór-á?á-s gásamáts’á ?á
 AFF-1SG.TR-want-NFUT NMLZ-open-2SG.TR-MOUTH door MED
 ‘I want you to open the door.’
- (11.33) SoG
 b-ár-paŋ-gá ma-kór-ílá-s gásamáts’á ?á
 AFF-1SG.TR-want-NFUT NMLZ-open-1PL.EXCL.TR-MOUTH door MED
 ‘I want us (exclusive) to open the door.’

11.1.2.4. Object Complements Formed with /ká-/ Plus *ma-*

Many of the same verbs in NoG that take a bare nominalized verb form as a clausal complement (section 11.1.2.1) can also take a complement comprised of the dative /ká-/ plus a bare nominalized verb (plus any erstwhile O arguments). These two complement clause types appear to be interchangeable for matrix verbs like ‘want’ (11.34) and ‘try’ (11.35) when the subject of the complement clause is the same as that of the matrix.

- NoG
 (11.34) **ɓaga ná = gó-janda-gwá ká-ma-wíɗ-ak’ó-má**
 person ABL=PLACE-other-PLACE DAT-NMLZ-see-HEAD-IP:O
 d-ár-paŋ
 AFF-1SG.TR-want

‘I want to visit someone from another place’

- NoG
 (11.35) **kóχ-batʃ’a ká-ma-ok-ak’ó-má d-ár-ɗaamb**
 sauce-meat DAT-NMLZ-heat-HEAD-IP:O AFF-1SG.TR-try
 ‘I tried to heat the meat sauce.’

In addition, the causative verb **t’oo** ‘do, put’ in NoG takes a non-finite form of the /ká-/ plus *ma-* construction as its complement. The causee of the complement construction is expressed as a pronoun or full NP but it is not marked on the complement verb (thus, the clause is somewhat finite while the verb itself is not) (11.36).⁵

- NoG
 (11.36) **ká-m¹-éé-k’ó-má b-a-t’oo ára**
 DAT-NMLZ-refuse-HEAD-IP:O AFF-3SG.TR-do 1SG
 ‘He made me refuse.’

⁵ The causative verb can also take a participant nominalization with the *ma-* construction (discussed more fully in Chapter XII) as its complement; the complement is then introduced with /éé-/ ‘like’ (discussed further in section 11.1.2.5). The causee in this second construction is again expressed as either an independent pronoun or full NP: **áχó ára éé-etá-m-dugw-a d-a-t’oo** (3SG 1SG like-PRO.SG-NMLZ-run-NM AFF-3SG.TR-do) ‘He made me run.’ (lit: ‘He made me like a runner.’).

However, for both NoG and SoG, a complement clause comprised of /ká-/ plus the *ma-* construction is more commonly inflected. That is, the nominalized verb resembles the structure of a finite verb in that it takes bound subject pronominals and tonal marking for transitivity identical to that of main clause verbs. These bound subject pronominals do not resemble the possessive pronoun suffixes found on nouns and they occur on the complement verb regardless of whether the complement subject is the same as or different from that of the matrix. If the subject of the matrix is different than that of the complement, the bound subject pronominal is required on the complement; the verb of the complement clause is thus finite, following the order of morphemes for future tense verbs (Chapter VII). In fact, the verb in this type of complement clause is identical in structure to SoG future tense verbs and to NoG immediate future verbs. The following PCU matrix verbs take an inflected form of /ká-/ plus the *ma-* construction as their clausal complement: ‘want’ (11.37-11.40), ‘think’ (11.41), ‘tell’ (11.42), and **zax** ‘know’ (11.43).

SAME SUBJECT

- NoG
 (11.37) **axó-ma** **ká-ma-af-ará-cá** d-ár-paŋ
 clothes-1SG.POSS DAT-NMLZ-wash-1SG.TR-CL1:eye:O AFF-1SG.TR-want
 ‘I want to wash my clothes.’

DIFFERENT SUBJECT

- NoG
 (11.38) **kágá óó-báámítá** **ká-m¹-ú-á-j** d-ár-paŋ
 here M.HUM-Bamita DAT-NMLZ-go-3SG.INTR-TWRD AFF-1SG.TR-want
 ‘I want Bamita to come here.’

- SoG
 (11.39) b-ár-paŋ-gá **mazá ?á** **ká-ma-ú-é-é**
 AFF-1SG.TR-want-NFUT guy MED DAT-NMLZ-go-3SG.INTR-TWRD
 ‘I want him (the guy) to come.’

(11.40) SoG
 norága et-á-paŋ-gá **ká-m-kod-ára**
 book REL.PRO.SG-3SG.INTR-want-NFUT DAT-NMLZ-buy-1SG.INTR

ma-oé-tsa-má
 NMLZ-be.red-BODY-IP:MOD
 ‘The book he wants me to buy is the red one.’

(11.41) NoG
 ŋga **ká-ma-s-a** d-ár-sáánz-ats
 porridge DAT-NMLZ-eat-3SG.TR AFF-1.SG.TR-think-BODY
 ‘I thought he would eat porridge.’

(11.42) SoG
 ŋgaʃ-agá-ts **ká-m¹-ú-û-é-n**
 speak-DAT-BODY DAT-NMLZ-go-3PL.INTR-TWRD-DEP
 ‘Tell them to come.’

(11.43) NoG
 áχámá **ká-m-bats-ʔá**
 3PL DAT-NMLZ-NEG.AUX-enter-3SG.INTR

ma-kóhw-á d-a-zaχ
 NMLZ-enter-NM AFF-3SG.TR-know

‘He_i knows that he_j didn’t enter.’

In SoG and NoG, the periphrastic causative construction involves the causative verb **ʔoo** ‘do, put’ with the causee expressed as an independent pronoun or full NP. Unlike the NoG complement, the complement in SoG is inflected with bound subject pronominals (**/ká-/** plus the *ma-* construction) (11.44-11.46). While many direct causative readings in Gumuz are achieved by adding an IN/CL on the verb (see Chapter VIII), this periphrastic causative generally implies indirect causation. The fact that the periphrastic causative is less direct than the morphological one is in agreement with Haiman’s (1983) claim that linguistic distance correlates with conceptual distance.⁶

⁶ There exists no designated morphological causative in Gumuz but IN/CLs can add an argument to a verb and thus evoke a direct causative reading. Compare **faat-ákʷ** (fall-HEAD) ‘drop’, a direct causative interpretation, with the indirect periphrastic causative in (11.44), which means ‘cause to fall (e.g. by leaving water on the floor).’

SoG
 (11.44) b-a-t'oo-gá ára ká-m-faat-ára
 AFF-3SG.TR-put-NFUT 1SG DAT-NMLZ-fall-1SG.INTR
 'She made me fall (e.g. by leaving water on the floor).'

SoG
 (11.45) maʒa ʔá b-a-t'oo-gá á ká-m'-p-á-ts
 guy MED AFF-3SG.TR-put-NFUT 3SG DAT-NMLZ-emerge-3SG.INTR-BODY
 'The guy made him leave.'

SoG
 (11.46) ára ká-m-s-a á ŋga b-ár-t'oo-gá
 1SG DAT-NMLZ-eat-3SG.TR 3SG food AFF-1SG.TR-put-NFUT
 'I made her eat the food.'

In SoG, there exists a third type of different subject complement for verbs such as 'want', 'tell' and the causative verb *t'oo*. One can add an /á-/ prefix to the /ká-/ plus *ma-* construction if the subject of the complement clause is 3rd person singular. This appears to be an optional marker indicating that the 3SG complement subject is different from the matrix subject. This /á-/ prefix co-occurs with nominative marking on the NP subject of the complement clause. For example, in (11.46) there is no nominative case marking on the 3SG pronoun subject of the complement clause. However, if one adds the /á-/ prefix to the complement verb, one must also mark nominative case (which is homophonous with the /á-/ verbal prefix) on the subject of the complement clause. This is illustrated in (11.47).

SoG
 (11.47) ára á-ká-m-s-a á-ʔá ŋga b-ár-t'oo-gá
 1SG 3SG-DAT-NMLZ-eat-3SG.TR NOM-3SG food AFF-1SG.TR-put-NFUT
 'I made her eat the food.'

Likewise, complement clauses of 'want' (11.49) and 'tell' can mark overt NP subjects with the nominative case marker /á-/ along with the /á-/ prefix on their verb.

- SoG
 (11.48) **b-ár-paŋ-gá á-ká-m⁺-c²-á**
 AFF-1SG.TR-want-NFUT 3SG-DAT-NMLZ-fall.out-3SG.INTR

á-béé-k'wá-báámítá
 NOM-hair-head-Bamita

‘I want Bamita’s hair to fall out.’

- SoG
 (11.49) **á-ká-m-bats'-a á-mazá á ma-tsá**
 3SG-DAT-NMLZ-NEG.AUX-3SG.TR NOM-guy MED NMLZ-go

b-ár-gá-ŋgaŋ-agá-ts ká = dagoná á
 AFF-1SG.TR-DAT-speak-NFUT-BODY DAT=girl MED

‘I told the girl that he wouldn’t go.’

11.1.2.5. Object Complements Formed with /éé-/ Plus *ma-*

In NoG, complements of ‘suggest’, ‘say, tell’ and **gam** ‘know’ are formed with /éé-/ plus a non-finite form of the *ma-* construction. In (11.50), the matrix predication meaning ‘suggest’ is formed with the verb **taaé** ‘bring’ plus **ŋgaŋá** ‘spoken thing’. The clausal complement of ‘suggest’ is /éé-/ followed by a nominalized form of the verb **kór-as** ‘open’ which is transitive and thus requires the inherent possession suffix.⁷

- NoG
 (11.50) **máts'á-ma-kod-ak'wá-dá ná = cá-adogwá ná = cá-adogwá**
 house-NMLZ-buy-HEAD-thing LOC=CL:eye-Sunday LOC=CL:eye-Sunday

éé-ma-kór-asa-má wáádáyá ŋgaŋá d-úú-'táá-é
 COMP-NMLZ-open-IP:O workers speech AFF-3PL.TR-take-TWRD

‘The workers suggested opening the shop every Sunday.’

⁷ The translation of the matrix verb plus its complement in (11.50) could be either ‘...suggested opening it...’ or ‘...suggested that it be open...’ as the nominalized transitive verb can be interpreted to be a VO nominalization (Associative Construction) or as a nominalized transitive verb in the Attributive Construction (see Chapter VI). That is, **makórasamá** can be translated as ‘to open it’ or ‘to be open’, the latter of which behaves as a predicate nominal.

Same-subject complements of verbs like ‘say, tell’ and ‘know’ with dynamic intransitive verb roots mark their understood S argument with a possessive suffix. In (11.51), the erstwhile S argument of **ú-é** ‘come’ is marked by a 1SG possessive suffix on the nominalized verb. Likewise, the S argument ‘Bertukan’ in the nominalized complement of (11.52) is encoded by a 3SG possessive suffix.

- NoG
 (11.51) **ára ée-ma-ú-é-ma** d-ár-ηgaʃ-áts
 1SG COMP-NMLZ-go-TWRD-1SG.POSS AFF-1SG.TR-speak-BODY
 ‘I said that I would come.’
- NoG
 (11.52) **bardukwána ée-ma-aʔám-á-má** ár-gam = aηgó
 Bertukan COMP-NMLZ-NEG.EXIST-NM-3SG.POSS 1SG-know=NEG
 ‘I didn’t know that Bertukan wasn’t (here).’

Different-subject complements of **gam** ‘know’ in NoG take as a complement a finite form of the *ma-* construction introduced with /**é-**/ (11.53). Again, by “finite”, I am referring to person/number marking of the subject on the verb (bound subject pronominals) which carries tonal patterns of transitivity.⁸

- NoG
 (11.53) **ée-ma-ʔé-ára-k’wá** d-a-gam-óo
 COMP-NMLZ-refuse-1SG.TR-head:O AFF-3SG.TR-know-GPL
 ‘They know I will refuse (something).’

One can also form a ‘how’ complement in NoG with **é¹lá** (< **éé lá** ‘like this’) prefixed to a nonfinite form of the *ma-* construction.⁹ The verb **ηgaʃ-áts** ‘tell’ can take a complement clause introduced with **é¹lá** ‘how’ (11.54).

⁸ Note that in (11.53), the final IN/CL of the subordinate clause verb carries H tone similar to that found on other subordinate clause verbs as well as relative clause verbs which make reference to an S/O argument of the relative clause verb. This form of the IN/CL (versus the typical reduced form on main clause verbs) references an S/O argument of the relative clause which does not immediately follow the verb (or which is not overt). As noted in Chapter XII, for IN/CLs like ‘head’, this is a final /a/ plus the underlying tone of the IN/CL. In the case of ‘head’, the underlying tone happens to be H tone.

⁹ Complements introduced with **é¹lá** are most often finite and do not involve the *ma-* construction.

- NoG
 (11.54) é⁴lá-ŋgaʃ-ár-ts é⁴lá-mâ-fá-k'ó gwaanjá
 how-speak-1SG.TR-BODY how-NMLZ-die-HEAD dikdik
 'I will tell (you) how to kill dikdik.'

11.2. Complements of Auxiliaries

There are at least four known auxiliaries in Gumuz: 'go', 'be' and two negative auxiliaries **bats'** and **ko**.¹⁰ All four of these auxiliaries precede their verbal complements. The following subsections describe the complements of the 'go' auxiliary and the two negative auxiliaries. The 'be' auxiliary can optionally form part of the progressive construction (section 11.4).

11.2.1. Complement of the 'Go' Auxiliary

11.2.1.1. The Fully Inflected 'Go' Auxiliary and its Complement

In both NoG and SoG, the verb 'go' has grammaticalized to some degree as an auxiliary meaning 'be about to' or 'be going to'. In NoG the complement of the 'go' auxiliary is structurally similar to the different-subject complements of verbs like 'want', 'think', and 'tell' (section 11.1.2.4) and is also structurally similar to different-subject purpose clauses (Chapter XIII); the complement takes the form of /ká-/ plus an inflected form of the *ma-* construction (11.55, 11.56). However, the 'go' auxiliary and its complement always share the same subject. Also, the 'go' auxiliary is marked tonally as intransitive (regardless of the transitivity of its complement) and thus the 'go' plus complement construction resembles a main verb plus a purpose clause (which is the likely source of this construction), rather than a transitive matrix verb plus object complement construction.

¹⁰ There exist other morphemes in Gumuz which could potentially be analyzed as 'auxiliaries' but which are structurally different from those described in this section in that they follow a fully inflected verb form and they themselves remain uninflected. One particular frozen 'auxiliary' is an aspectual enclitic described in Chapter VII (section 7.3.3).

NoG
 (11.55) d-á-ts ká-ma-fá-á-ga-ts
 AFF-3SG.INTR-go DAT-NMLZ-die-3SG.INTR-INSTR-BODY

ka = k'oba
 INSTR=hunger

'He is going to die of hunger.'

In SoG, the complement of the (fully inflected) 'go' auxiliary is structurally similar to same-subject complements of verbs like 'want', 'try', 'begin', etc. (section 11.1.2.1). The complement is a non-finite form of the *ma-* construction and only the 'go' auxiliary is inflected for person and number.

SoG
 (11.56) ga-ḥur-a b-á-tsá-gá ma-fá-k'w ára
 NMLZ2-carry-NM AFF-3SG.INTR-go-NFUT NMLZ-die-HEAD 1SG
 'Carrying (things) is going to kill me.'

11.2.1.2. The Uninflected 'Go' Auxiliary

In SoG, a frozen uninflected form of the verb 'go' **bátsá** (< **b-á-tsá** AFF-3SG.INTR-go) also functions as an auxiliary meaning 'be about to', which I label 'prospective aspect'. Its complement is an inflected form of the *ma-* construction with the same order of morphemes in the verb as in future tense verbs (see Chapter VII). In this particular construction, the /a/ vowel of the /**ma-**/ nominalizing prefix is often deleted and the nasal becomes syllabic (11.57). For some speakers of SoG, the bilabial nasal assimilates to the place features of the following consonant and, as a result, the *ma-* construction is not easily detected (11.58).

SoG
 (11.57) bátsá m-sá-rá
 PROSP NMLZ-eat-1SG.TR
 'I'm about to eat.'

- SoG
 (11.58) dua bátsá ŋ-káǎ-ak'w ŋga
 child PROSP NMLZ-finish-CL1:HEAD food
 'The child is about to finish the food.'

11.2.2. Complements of Negative Auxiliaries

To negate a subordinate clause verb in Gumuz (save a few exceptions), one must use a negative auxiliary in place of the negative enclitics =**ŋgó** (NoG, SoG-Kamashi) or =**cê** (SoG-Sirba Abay) that are used for main clause verbs (see Chapter VII for further discussion of negative enclitics). There exist two negative auxiliaries **ko** and **bats'(-áǎ)**, both of which are used in SoG (11.49, 11.60, 11.61), while only **bats'** is used in NoG (11.43, 11.59). For most subordinate clauses, the complement of these negative auxiliaries is a non-finite form of the *ma-* construction.¹¹

- NoG
 (11.59) **etá-1-á-bats'** **ma-uá-é-á** бага
 REL.PRO-REL-3SG.INTR-NEG.AUX NMLZ-go-TWRD-NM person

 nágátá = tso
 here=FOC

 'The person who hadn't come is here.'

- SoG
 (11.60) **ká-m-bats'-úâ-n** **ma-dáb-amá**
 DAT-NMLZ-NEG.AUX-3PL.TR-DEP NMLZ-find-IP:O

 b-á-kál-agá b-á-baats'-agá-ts
 AFF-3SG.INTR-say-NFUT AFF-3SG.INTR-hide-NFUT-BODY

 'He hid himself so that they wouldn't find him.'
 lit: '...saying they won't find him.'

¹¹ Example (11.60) is translated directly from Amharic. As the construction in Amharic uses 'say' in a clause chain, I believe the consultant translated the sentence literally and the sentence can be said without a 'say' construction in Gumuz. However, 'say' in Gumuz (as in Amharic) often indicates intent.

- SoG
 (11.61) **ɖak'ó-ʃ** **dua** **má-ko-â-n** **ma-ts-á**
 hold-HIP child PURP-NEG.AUX2-3SG.INTR-DEP NMLZ-go-NM

ná = tʃagw-éé-má
 ABL=foot-mother-3SG.POSS

‘Hold the child so that he doesn’t leave his mother.’

When part of a purpose clause, in NoG both the negative auxiliary **bats’** and its complement are expressed with the *ma-* construction (although the *ma-* on the negative auxiliary forms part of the purposive prefix; see Chapter XIII). Unlike other negative subordinate clauses, the negative auxiliary of the purpose clause remains uninflected for person and number and its complement carries all inflection (11.62). The form of the negative auxiliary in this construction, similar to the ‘go’ auxiliary in section 11.2.1.2, appears to be a frozen 3SG form of the verb in the *ma-* construction: **m-bats’-á** (NMLZ-NEG.AUX-3SG.INTR).

- NoG
 (11.62) **kám-bats’á** **ma-t’é-úa** **norága**
 PURP-NEG.AUX NMLZ-be afraid-3PL.INTR letter

d-éé⁴-c-ár-ká-ʃ
 AFF-FUT-give-1SG.TR-DAT-HIP

‘I will send a letter so they will not be afraid.’

While both negative auxiliaries are found in SoG, **ko** is used more frequently. Compare examples (11.63) and (11.64): NoG uses **bats’** while SoG translates the same utterance with **ko**.

- (11.63) NoG
biiá k-á-bats' ma-f-á
 medicine COND-2SG.TR-NEG.AUX NMLZ-drink-NM

ée-bid-a = ηgó
 FUT-get.well-2SG.INTR=NEG

‘If you don’t drink this medicine, you will not get well.’

- (11.64) SoG
ée-ma-ko-á?á ma-f-á biiá ba
 COND-NMLZ-NEG.AUX2-2SG.TR NMLZ-drink-NM medicine PROX

kám-bid-á?a = ηgó
 PURP-get.well-2SG.INTR=NEG

‘If you don’t drink this medicine, you will not get well.’

These roots also exist as main lexical verbs in both dialects. As lexical verbs, **ko** means ‘fast, abstain from’ (11.65), and **bats’(-áʃ)** means ‘leave behind’(11.66).¹²

- (11.65) SoG
ko nga
 abstain porridge
 ‘Abstain from porridge.’ (Imperative)

- (11.66) SoG
tâŋ-k’w biiá má-bats’a-ʃ-án
 swallow-HEAD medicine PURP-leave.behind-3SG.TR-HIP-DEP

á-m¹-dú-ts-a âm
 NOM-NMLZ-be.sick-BODY-NM 2SG

‘Swallow the medicine so that the sickness will leave you.’

¹² The verb/auxiliary **bats’-áʃ** in SoG often surfaces as [bətʃ-áʃ], as the alveolar affricate of the root assimilates to the palatal fricative of the incorporated noun/classifier.

11.3. Progressive Aspect

Progressive aspect expresses an action in progress. The Gumuz construction which expresses progressive aspect is structurally an NP PP juxtaposition, much akin to the predicate locatives described in Chapter X. In both dialects, the progressive construction employs a non-finite form of the *ma-* construction as the object of the locative preposition /ná=/ (see Chapter V for discussion of prepositions). The subject of a progressive aspect clause is often overtly expressed as an NP or free pronoun. In SoG, the subject is expressed in combination with the locative preposition /ná=/ followed by the nominalized *ma-* construction (11.67). In NoG, the only difference is that the locative preposition is followed by /gó-/ ‘place’ (see Chapters III and XII) plus the nominalized VP (11.68). The resulting /ná-/ plus /gó-/ prefix is homophonous with the temporal/causal prefix /nágó-/ that occurs on (finite) verbs of adverbial clauses meaning ‘when’ or ‘because’ (see Chapter XIII). I gloss both the locative /ná-/ and the complex prefix /nágó-/ as PROG (progressive aspect) even though it is actually the entire construction which conveys progressive aspect.

- SoG
(11.67) ára ná-má⁺-ts-á
1SG PROG-NMLZ-go-NM
‘I am going.’ (lit: ‘I at going’)

- NoG
(11.68) ára nágó-m⁺-s-á-gwá
1SG PROG-NMLZ-eat-NM-PLACE
‘I am eating.’ (lit: I at eating’)

Similar to predicate locatives, the progressive construction can optionally co-occur with an overt copula which takes a bound subject pronominal. When the inflected copula is present, a free NP subject is no longer required. In NoG, the existential verb *ot* is used as a copula (11.69), and in SoG the verb *ʔfi* ‘be, live’ is used as the copula (11.70).

NoG
 (11.69) nágó-m[†]-sá-gwá d-ár-ot
 PROG-NMLZ-eat-PLACE AFF-1SG.INTR-EXIST
 ‘I am eating.’

SoG
 (11.70) b-íí[†]-gá ná-ma-dá kóa
 AFF-be-NFUT PROG-NMLZ-make sauce
 ‘She is making sauce.’

When expressing a progressive in the future tense, the copula must be inflected for future tense in both dialects (11.71, 11.72). In the remote past, an adverb/prepositional phrase of time is required in NoG (11.73) and the copula must be inflected for remote past in SoG (11.74).

NoG
 (11.71) nágó-m[†]-dók’ máts’á d-ée-ot-ára
 PROG-NMLZ-build house AFF-FUT-EXIST-1SG.INTR
 ‘I will be building a house.’

SoG
 (11.72) má[†]-ʔíí-á ná-ma-d-á kóa
 FUT-be-3SG.INTR PROG-NMLZ-make- NM:ASSOC sauce
 ‘She will be making sauce.’

NoG
 (11.73) áχó ká-lá-gats’axa nágó-m[†]-fá kea
 3SG DAT-GEN-old.days PROG-NMLZ-drink beer
 ‘He was drinking beer in the old days.’

SoG
 (11.74) b-é-á-ʔíí ná-ma-dá kóa
 AFF-RPST-3SG.INTR-be PROG-NMLZ-make sauce
 ‘He was making sauce.’

To negate the progressive construction, the negative enclitic =**ngó** occurs at the end of the *ma*- construction. When a copula is used, the enclitic occurs at the end of the copular verb.

- SoG
 (11.75) ára ná-má¹-tsá = ηgó
 1SG PROG-NMLZ-go=NEG
 ‘I’m not in the process of going.’

- SoG
 (11.76) ára ná-má¹-tsá é-rá¹-ŋí = ηgó
 1SG PROG-NMLZ-go RPST-1SG.INTR.be=NEG
 ‘I was not in the process of going.’

Lastly, in SoG, the progressive construction can function as an adverbial clause meaning ‘while Xing...’ (11.77) as well as a complement clause (11.78). When functioning as an adverbial, it is structurally similar to a prepositional phrase; the preposition **ná=** occurs on all elements of the NP (see Chapter V). For the adverbial clause meaning ‘while we sat’ in (11.79), **ná=** occurs on both ‘sitting’ and ‘our (exclusive)’ (literally ‘at our sitting’).

- SoG
 (11.77) b-a-zee-gá-k’w ná-m-pok’w-a
 AFF-3SG.TR-watch-NFUT-HEAD PROG-NMLZ-give.birth-NM
 ‘She stood and waited while giving birth.’

- SoG
 (11.78) b-a-gaŋ-gá-ts ɓaga ná-ma-lók’w batʃa
 AFF-3SG.TR-know-NFUT-BODY person PROG-NMLZ-steal meat
 ‘He saw the person stealing meat.’

- SoG
 (11.79) ná-m-ŋí-ʃ-a ná-lá-míla
 PROG-NMLZ.be-HIP-NM PROG-GEN-1PL.EXCL.POSS

 b-íla-sá-ká nga
 AFF-1PL.EXCL.TR-eat-NFUT porridge
 ‘While sitting, we (exclusive) ate porridge.’

11.4. Negative Commands

What I label a ‘negative command’ in Gumuz includes both the negative of imperative forms as well as the negative of jussive forms. Negative imperative and jussive forms are structurally the same: /**ka-**/ INSTR + *ma-* construction + bound subject pronominal + negative enclitic in NoG and *ma-* construction + bound subject pronominal + negative enclitic in SoG. The 2SG form is often unmarked in SoG (11.80).¹³ I gloss the resulting /**kama-**/ (NoG) and corresponding /**ma-**/ (SoG) prefixes as NEG.IMP (negative imperative).

- NoG
- (11.80) b-a-ŋgaʃ-áts ká = ára á-baab-éa ŋgaʃá,
 AFF-3SG.TR-speak-BODY DAT=1SG NOM-father-1SG.POSS thing
- b-á-káa **kama-gaakw-a = ŋgó**
 AFF-3SG.INTR-say NEG.IMP-steal-=NEG
- ‘My father told me, ‘don’t steal.’

- SoG (Kamashi)
- (11.81) k’óá b-á-kál-agá “láki **ma-lúŋgû = ŋgó**”
 dog AFF-3SG.INTR-say-NFUT please NEG.IMP-cry=NEG
 ‘Dog said, “Please don’t cry.”’

In the dialect of SoG spoken in and around Sirba Abay *wereda*, the negative enclitic is =**cê** (11.82). Otherwise, the structure of the negative command is the same as in and around Kamashi *wereda*.

- SoG (Sirba Abay)
- (11.82) ma-lok-áʃa = **cê**
 NEG.IMP-steal-2PL.INTR=NEG
 ‘Don’t steal (2P).’

¹³ The 2SG subject marking (as well as 3SG subject marking) is often difficult to detect as it consists of only /a/, which is realized as [ə] or [i].

Table 11.1 displays the negative command forms of ‘go’ conjugated for all persons in NoG. Table 11.2 displays conjugations of the same verb in SoG.

Table 11.1. Negative Command Form of **tsá** ‘Go’ in NoG

	Sing	Plural	
		Inclusive	Exclusive
1	kam-ts-ára = ηgó	kam-ts-ákwa = ηgó	kam-ts-íla = ηgó
2	kam-ts-a = ηgó	kam-ts-áca = ηgó	
3	kam-ts-â = ηgó	kam-ts-úa = ηgó	

Table 11.2. Negative Command Form of **tsá** ‘Go’ in SoG (Kamashi)

	Sing	Plural	
		Inclusive	Exclusive
1	ma-ts-ára = ηgó	ma-ts-ágw = aηgó	ma-ts-íla = ηgó
2	ma-ts-áʔa = ηgó	ma-ts-áʔa = ηgó	
3	ma-tsá-a = ηgó	ma-ts-úa = ηgó	

Affirmative commands do not use any form of the *ma-* construction. Furthermore, the affirmative commands use two distinct constructions. The first and second persons follow what I call an ‘imperative’ form and third person follows a ‘jussive’ form. The imperative is formed with the verb root followed by a bound subject pronominal plus other possible stem morphology (e.g. directional, IN/Classifier). The jussive is formed with the prefix /n-/ or /l-/ (for some speakers of NoG) followed by a bound third person subject pronominal plus the verb stem (see also Example 8.124 of Chapter VII). For comparison with negative commands, Tables 11.3 and 11.4 provide imperative and jussive forms of ‘go’ in NoG and SoG respectively.

Table 11.3. Affirmative Imperative and Jussive Forms of ‘Go’ in NoG

		Sing	Plural	
			Inclusive	Exclusive
IMPERATIVE	1	ts-ára go-1SG.INTR ‘I shall go’	ts-ákwa go-1PL.INCL.INTR ‘let’s go’	ts-íla go-1PL.EXCL.INTR ‘let’s go’
	2	tsá go ‘go!’	ts-áca go-2PL.INCL.INTR ‘go (2PL)!’	
JUSSIVE	3	l-á-ts JUSS-3SG.INTR-go ‘S/he shall go’	l-úu-ts JUSS-3PL.INTR-go ‘They shall go’	

Table 11.4. Affirmative Imperative and Jussive Forms of ‘Go’ in SoG (Kamashi)

		Sing	Plural	
			Inclusive	Exclusive
IMPERATIVE	1	ts-ára go-1SG.INTR ‘I shall go’	ts-ákwa go-1PL.INCL.INTR ‘let’s go’	ts-íla go-1PL.EXCL.INTR ‘let’s go’
	2	tsá go ‘go!’	ts-ája go-2PL.INCL.INTR ‘go (2PL)!’	
JUSSIVE	3	n-á-ts JUSS-3SG.INTR-go ‘S/he shall go’	n-íi-ts JUSS-3PL.INTR-go ‘They shall go’	

Lastly, the negative command in SoG varies according to politeness (11.83). Below are the variations from one Kamashi speaker in polite versus impolite negative forms of CV H tone verb roots in SoG. In the affirmative, the 2SG imperative counterparts are : **tsá** ‘go!’, **sá** ‘eat!’, and **fá** ‘drink!’.¹⁴

¹⁴ One explanation for the variation in tone for the Strong vs. Polite conjugation of CV verb roots is that these roots may be toneless with a H tone added in the 2SG imperative form. That is, the roots **tsa** ‘go’ and **sa** ‘eat’ may not be assigned tone but H tone is added for the 2SG imperative form. It is also possible that

(11.83)	STRONG	Gloss	POLITE
	matsáṅgóa	‘don’t go (2SG)’	matsaṅgó
	masáṅgóa	‘don’t eat (2SG)’	masaṅgó
	mafáṅgóa	‘don’t drink (2SG)’	mafanaṅgó

they consist of only a C, with a V added in the imperative in order to be pronounceable. Note that these imperatives carry H tone regardless of root transitivity.

CHAPTER XII

PARTICIPANT NOMINALIZATION AND RELATIVE CLAUSES

In Gumuz there are a range of possible clause-like structures that can modify head nouns within NPs. A subset of these modifiers are simply nominalizations, some of which maintain some of the participants of the nominalized verb. At the other extreme, other clausal modifiers to a head noun can be fully finite (i.e. non-nominalized). Since both nominalized and non-nominalized structures can be used to restrict the reference of nouns, in this chapter I first discuss the structure of participant nominalizations, and then describe the use of both these and other clausal structures to restrict reference. Most of these clause-like modifiers combine with a pronominal element, save the most finite forms in NoG. The role of these left-edge pronominal elements in participant nominalizations and in relative clauses will also be discussed, their singular-plural concord, as well as their respective source constructions within Gumuz.

Nonfinite participant nominalizations/relative clauses are quite similar in form between NoG and SoG, while the more finite relative clause constructions tend to differ somewhat between the two dialects. NoG and SoG have relative pronouns and relativizers all of which are identical in form to pronominal elements used in participant nominalizations. Section 12.1 below describes participant nominalizations and the pronominal elements found in relative clause constructions. Section 12.2 discusses the historical sources for the pronominal elements as well as the source constructions for participant nominalizations. Section 12.3 then discusses the more finite relative clauses.

12.1 Participant Nominalizations and Nonfinite Relative Clauses

Participant nominalizations in Gumuz are comprised of a pronominal element followed by a nominalized verb or verb phrase. To nominalize a verb in Gumuz, one can use the /**ma-**/ nominalizer or the /**ga-**/ nominalizer. A verb nominalized with /**ma-**/ obligatorily retains an erstwhile O argument and can optionally retain an erstwhile S

- NoG
 (12.2) mbáándá бага гúmíза **dáá-ga-nay-a**
 two people Gumuz PRO.PL-NMLZ2-be.satisfied-NM
 d-á-dugw
 AFF-3SG.INTR.run
 ‘Two clever Gumuz people ran.’
- SoG
 (12.3) á-**etá-ga-lakw-a** b-a-dá-gá
 NOM-PRO.SG-NMLZ2-steal-NM AFF-3SG.TR-do-NFUT
 ‘The *thief* did it.’ (lit: ‘The stealer did it.’)
- SoG
 (12.4) á-**dá-ga-lakw-a** b-íí-dá-gá
 NOM-PRO.PL-NMLZ2-steal-NM AFF-3PL.TR-do-NFUT
 ‘The *thieves* did it.’ (lit: ‘The stealers did it.’)
- NoG
 (12.5) b-úú-gá-χád-é бага ká = koó-m **dá-m⁺-fá-má**
 AFF-3PL.TR-DAT-call-TWRD people DAT=all-IP PRO.PL-NMLZ-drink-IP:O
 ‘They invited all the people who drink.’
- SoG
 (12.6) ná = oká ná = lâ? ná = eêb Dawít
 LOC=day LOC=PROX LOC=home David
 b-íí-pok’o-gá **etá-m-bid-ák’ó-má**
 AFF-3PL.IMP-give.birth-NFUT PRO.SG-NMLZ-get.well-HEAD-IP:O
 ‘On this day, in the city of David a **savior** is born.’
 (Luke 2:11, Gumuz New Testament, as read by native speaker)¹

Some animate participant nominalizations can be embedded within the Associative Construction (which can be interpreted as a NN compound, see Chapter VI). For example, a participant nominalization with the /**dá(á)**-/ animate plural pronoun can

¹ The Gumuz New Testament translated into SoG (Sirba Abay) Gumuz is written using a modified Ethiopic syllabic alphabet with no representation for tonal contrasts. Example (12.5) is not a transliteration of the text but a transcription of the text being read.

serve as the dependent noun within the NN collocation. Such instances of embedding seem to be restricted to those that do not maintain erstwhile verbal arguments (12.7, 12.8).

- SoG
 (12.7) ná-ma-ko á-bafokwacá ma-dá-é-á-ʃa
 PROG-NMLZ-NEG.AUX2 NOM-maize NMLZ-arrive-TWRD-MV-HIP

iidá-dá-ga-le-a ka = k'oba ná-ma-káɸ-a
 children-PRO.PL-NMLZ2-plow-NM INSTR=hunger PROG-NMLZ-finish-NM

‘If the corn hadn’t been ready, **the farmers’ children** would have died from hunger.’
 (lit: ‘The corn not arriving, **the children of the ones of the crop** would be finishing off with hunger.’)

- NoG
 (12.8) ʃaʒga = cá b-a-ŋaar-ók'ó-ʒ-ân
 monitor.lizard=CONJ AFF-3SG.TR-take-CL1:HEAD-PST.PRF-ABL

aɣó-dáá-ʼmá-ʃá
 clothes-PRO.PL-NMLZ-die

‘...but monitor lizard had taken **the clothes of dead people.**’

Many animate participant nominalizations appear to function as nominalized relative clauses. In (12.9), **ʃaga** ‘person’ functions as the head noun which is modified by **etá-m-paŋ-á-meáwa** ‘one looking for a cat’. As **etá-** shares some characteristics of the head noun (animacy, number), it is essentially functioning as a relative pronoun which introduces the nominalized clause ‘looking for a cat’.

- NoG
Head [Rel. Clause]
 (12.9) ʃaga etá-m-paŋ-á-meáwa nágá = tso
 person PRO.SG-NMLZ-want-cat here=FOC
 ‘The person looking for a cat is here.’

Tables 12.1 and 12.2 demonstrate nominalized constructions in NoG and SoG which are formed with the animate singular pronominal /**etá**-/ and the animate plural pronominal /**dá(á)**-/. Many of these could function as either nominalized relative clauses or participant nominalizations.

Table 12.1. Singular Versus Plural Nominalized Relative Clauses Formed with Animate Relative Pronouns (NoG)

SINGULAR	PLURAL
etá-ma-le-a PRO.SG-NMLZ-plow-NM 'farmer'	dáá-ma-le-a PRO.PL-NMLZ-plow-NM 'farmers'
etá-ga-dayat-a PRO.SG-NMLZ2-tire-NM 'tired one'	dá-ga-dayat-a PRO.PL-NMLZ2-tire-NM 'tired ones'
etá-ma-šá PRO.SG-NMLZ-die 'dead one'	dáá-ma-šá PRO.PL-NMLZ-die 'dead ones'
etá-ga-zaz-a PRO.SG-NMLZ2-create-NM 'potter'	dáá-ga-zaz-a PRO.PL-NMLZ2-create-NM 'potters'
etá-má-t'ak'-amá PRO.SG-NMLZ-spit-IP:O 'one who spits'	dáá-ma-t'ak'-amá PRO.PL-NMLZ-spit-IP:O 'ones who spit'

Table 12.2. Singular Versus Plural Nominalized Relative Clauses Formed with Animate Relative Pronouns (SoG)

SINGULAR	PLURAL
etá-ga-le-a PRO.SG-NMLZ2-plow-NM 'farmer'	dá-ga-le-a PRO.PL-NMLZ2-plow-NM 'farmers'
etá-ga-lokw-a PRO.SG-NMLZ2-steal-NM 'thief'	dá-ga-lokw-a PRO.PL-NMLZ2-steal-NM 'thieves'
etá-ma-tig-áts-amá PRO.SG-NMLZ-show-BODY-IP:O 'teacher'	dá-ma-tig-áts-amá PRO.PL-NMLZ-show-BODY-IP:O 'teachers'
etá- ¹ m-dá-dá PRO.SG-NMLZ-prepare-thing 'servant/employee'	dá- ¹ m-dá-dá PRO.PL-NMLZ-prepare-thing 'servants/employees'

12.1.2 Inanimate Participant Nominalizations

Participant nominalizations with **dá(á)-** as the head can refer to inanimate objects which could be construed as instruments. For example, 'food' in SoG is expressed as the participant nominalization **dá-m(a)sá(á)** 'thing to eat' or 'eating thing' (12.10), and 'bed' (SoG and NoG) can be referred to as a 'sleeping thing' (12.11, 12.12).

- SoG
 (12.10) **dá-m-sáá-s** ár-dab-agá = ngó
 PRO.INAN-NMLZ-eat-FOC 1SG.TR-find-NFUT=NEG
 'I can't find *anything* to eat.'

- SoG
 (12.11) t'ó-óc **dá-má-zij-a**
 put-CL1:eye PRO.INAN-NMLZ?-sleep-NM
 'Prepare the bed'

- NoG
 (12.12) dua d-á-fár-áts ná = **dá-ma-zig-a**
 child AFF-3SG.INTR-rise-CL:BODY ABL=PRO.INAN-NMLZ-sleep-NM
 'The child rose from the bed.'

The participant nominalizations in (12.10) and (12.11, 12.12) are very similar in form to the participant nominalizations referring to animate plural A/S arguments. A participant nominalization similar to (12.10) exists in NoG as well (12.13a). The main difference in this particular example is that the */-má/* suffix is added to mark an erstwhile O argument and **dá** is repeated as the predicate nominal. When negated with the negative clitic =**ηgó**, the inherent possession suffix referencing the O argument, */-má/*, is not used (12.13b).²

NoG

- (12.13) a. [N]-[N]
 dáá-má-¹sá-má dá
 PRO.INAN-NMLZ-eat-IP:O thing
 ‘The thing is something to eat.’
- b. [N]-[N-N]
 dáá-má¹-sá-dá=**ηgó**
 PRO.INAN-NMLZ-eat-thing=NEG
 ‘(It) is not something to eat.’

The NN collocation in (12.13a) is similar to that in (12.14). However, in (12.14) the referent is a plural human A argument, whereas in (12.13), the referent is an inanimate patient argument of the verb **sá** ‘eat’. Thus, it appears as though sentential context is required to distinguish the ambiguity between **dáá** PRO.INAN (‘thing’) and **dáá** PRO.PL (animate).³ In (12.13 a), **dá** ‘thing’, of the predicate nominal makes it clear

² One can determine that the noun **dá** ‘thing’ is part of the NN collocation in (12.13b) in that the H tone on **dá** does not undergo downstep as it does when it is a distinct noun functioning as the head of a NP. Also, the register for tone is reset for the second NP in an NP NP juxtaposition. Thus, tone height indicates whether the noun is incorporated into a verb or forms a distinct word/phrase (from the previous word).

³ The Gumuz dialect spoken in Gesas (south of the Mandura area), however, distinguishes animacy via vowel length: **dáá-** for animate and **dá-** for inanimate (Travis Williamson, personal communication). Also, a nominalized transitive verb can, in some cases, refer to the O argument modified by the verb (see examples 6.53-6.54 of Chapter VI) and not the event itself. For example, the nominalized VP ‘to tear a sack’ can also mean ‘a torn sack’. Thus some Gumuz speakers use **ma-sa-dá** (NMLZ-eat-thing) for ‘thing to eat’ (which also means ‘to eat something’) instead of the forms given in (12.10) and (12.13).

that the referent of **dáá-má¹sá-má** is not animate which distinguishes it from (12.14) below.

- NoG
 (12.14) **dáá-má¹-sá-má** **nzáác**
 PRO.PL-NMLZ-eat-IP:O four
 ‘There are four people eating’ (lit: ‘The eating ones (are) four’)

Another difference in structure is that there exists a resumptive pronoun /-**má**/ in NoG on the nominalized verb referring to its erstwhile inanimate O argument. That is, **dáámá¹sámá** in (12.13 a) literally means ‘something to eat it’.⁴ That is, both /**dáá**-/ and /-**má**/ refer to the erstwhile O argument. The /-**má**/ pronoun in (12.14) also refers to the understood O argument.⁵ In the SoG example (12.10), no O argument is marked on the participant nominalization in that there is no /-**má**/ suffix. Thus, one can distinguish an erstwhile O argument from an erstwhile A argument.⁶

Likewise ‘sleeping ones / those who sleep’ in NoG (12.15) is quite similar in form to ‘bed’ (sleeping thing) (12.12). Again, the ambiguity appears to be resolved in context by the predicate nominal, **ɓaga** ‘person’, in example (12.15).

- NoG
 (12.15) **dá-ma-zig-a** **ɓaga**
 PRO.PL-NMLZ-sleep-NM person
 ‘Those who sleep are people.’ (also can be ‘people who sleep’)

⁴ If ‘eat’ is being construed as a quality, it is feasible that /-**má**/ is marking an inherently possessed quality of the predicate nominal ‘thing’ and is not referencing an erstwhile O argument (see Chapters III and VI for further discussion of inherent possession and the Attributive Construction).

⁵ There also exists in NoG the lexical item **dá¹msá** ‘grain’. It may be the case that ‘thing to eat’ was lexicalized as ‘grain’ and in order to say the more general ‘thing to eat’ a resumptive pronoun was later added: **dá¹msámá**. However, Table 12.3 shows that instrumental nominalizations also require a resumptive pronoun in NoG.

⁶ Of course, this strategy for distinguishing erstwhile verbal arguments is similar to a gap strategy if this construction were considered a RC. Furthermore the verbal root **sá** ‘eat’ is transitive and must always be marked with an O argument when nominalized outside of this participant nominalization construction.

Also, another difference is that the /**ma-**/ nominalizing prefix of ‘bed’ in SoG (12.11) carries H tone rather than L tone. This could be due to dialect differences in tone rules or it could be that the dependent element of the NN construction in which the head noun **dá(á)-** has an inanimate referent usually refers to arguments with the semantic role of instrument. Some of these instrumental nominalizations may be formed with a purpose clause construction rather than the simple verbal noun. Purpose clauses (discussed further in Chapter XIII) are formed with the dative preposition **ká=** followed by the verbal noun (/ma-/ nominalization, or *ma-* construction). This creates the purposive prefix /**kám`-**/ (with a floating L tone) which can be shortened to /**má`-**/. This tonal difference is not found in the nominalized constructions with ‘eat’ in (12.10) and (12.13) above, as ‘eating thing’ does not reference an instrument. The purposive prefix may explain the H tone which occurs with the presumed nominalizing prefix /**ma-**/ on other nominalized instrumental relative clauses in NoG (Table 12.3).

An instrumental participant nominalization, like any other noun, can also function as an object of a preposition. In (12.16), the compound **dáá-muué** ‘coming thing’ is the object of the ablative/locative preposition **ná=**, producing the meaning ‘thing on which to come’.

(12.16)	SoG dá-b-íi-íi-gá PRO.PL-AFF-3PL.INTR-live-NFUT	n = íil-gózá LOC=belly-sky
	ná = dáá-m-uu-é LOC=PRO.INAN-NMLZ-go-TWRD	n = íil-gózá = ná ABL=belly-sky=LOC
	ká = ɲéa ká = gáné? m̄en DAT=ground DAT=here none	

‘For the ones who live in the sky, there is no means by which to come from the sky to the earth.’

Transitive instrumental relative clauses in NoG often incorporate /-**dá**/ into the dependent nominalized verb in addition to having /**dá(á)-**/ as the head noun. The incorporated noun /-**dá**/ ‘thing’ in most instances is the erstwhile O argument.

Occasionally, ‘place’ can be incorporated as a suffix when a location can be involved in the nominalized action, e.g. ‘sweeper (broom)’. For instrumental nominalizations in SoG, a specific O argument is often incorporated when /**dá-**/ is the head, e.g. **aja** ‘water’. Also, the /-**má**/ inherent possession suffix can be used in place of a specific O argument in SoG (Sirba). Lastly, erstwhile O arguments are not always incorporated (phonologically) into the nominalized instrumental constructions. For example, ‘house’ **máts’á** in the word for ‘door’ is a phonologically distinct word from the compound **dámaanc’ás** (**dágáanc’ás**).⁷ Table 12.3 provides examples of instrumental nominalizations in both NoG and SoG.

One notable difference between nominalized instrumental relative clauses in NoG and SoG is that some dependent (deverbal) nouns in SoG (Kamashi District) are formed with a /**gá-**/ prefix (e.g. ‘water boiler’, ‘water heater’, and ‘doorway cover’). This prefix could, like /**má-**/, be an allomorph of the purposive prefix /**kám`-**/. For one, /**ká`-**/ is a possible allomorph of /**kám`-**/ in the related future tense construction of SoG (see Chapter VII). However, this is difficult to determine for, in each example of this prefix in Table 12.3, the initial tone of the verb root is L tone and thus the floating L tone of the purposive prefix has no opportunity to cause downstep on a following H tone. On the other hand, the prefix is not likely to be the dative preposition **ká=** as the object of this preposition must be a nominal form. Neither can it be the applicative /**ká-**/ on the verb as such a prefix does not occur on an uninflected verb form (unless nominalized). Lastly, if one assumes this prefix is the product nominalizer /**ga-**/, it would be necessary to explain the H tone on the prefix as well as the incorporation of an erstwhile O argument which is not normally possible for product nominalizations (see Chapter III). Thus, I assume that the /**gá-**/ prefix here is an allomorph of the purposive /**kám`-**/.

⁷ Of course, ‘mouth’ is a noun incorporated into the verb ‘open’ (as part of an EP construction). When the verb stem is nominalized and juxtaposed with the erstwhile O argument ‘door’, the resulting NN collocation is not phonologically one word like the noun forms in ‘water heater’ (SoG, Table 12.3). Perhaps this is a distinction between verbal classifiers (/–**Vk’w**/ of ‘heat’) and incorporated nouns in an EP construction (/–**Vs**/ of ‘open’).

Table 12.3. Instrumental Nominalizations

NoG	SoG
dá-má-kór ⁺ -sá-dá PRO.INAN-PURP?-open-mouth-thing 'opener'	dá-gá-tʃaŋ-aaja (Kamashi District) PRO.INAN-PURP-boil-water 'water boiler (kettle)'
dá-má-tá ⁺ χá-dá PRO.INAN-PURP?-pour-thing 'pitcher'	dá-gá-oko-k'w-áaja (Kamashi District) PRO.INAN-PURP-heat-CL:head-water 'water heater (kettle)'
dá-m-ɖak'ó-dá PRO.INAN-NMLZ?-hold-thing 'holder'	dá-ma-anc'-ás ⁺ á-má (Sirba District) PRO.INAN-NMLZ-close-mouth-IP:O 'stopper, plug'
dá- ⁺ má-χókó-k'ó ⁺ sá-dá PRO.INAN-PURP?-be.sharp-tooth-thing '(pencil) sharpener.'	dá-ma-anc'-ás máts'á (Sirba District) PRO.INAN-NMLZ-close-mouth house 'door, doorway cover'
dá-m ⁺ -bátʃa-dá PRO.INAN-NMLZ?-hit-thing 'instrument for hitting'	dá-gá-anc'-ás máts'á (Kamashi District) PRO.INAN-PURP-close-mouth house 'door, doorway cover'
dá-m-tsaχ-ák'wá-dá PRO.INAN-NMLZ-hang-CL1:head-thing '(clothes) hanger'	dá-m-f-áaja (Agelo Met'i District) PRO.INAN-NMLZ-drink-water 'cup'
dá-m-kaxaat-ógwá PRO.INAN-NMLZ-sweep-place 'broom'	

12.1.3 'Place' Nominalizations

The pronoun /**góá**-/ 'where, place which' can combine with a nominalized verb to form a participant nominalization referring to a location. Simliar to the animate participant nominalizations, the dependent /**ma**-/ nominal of a participant nominalization construction with /**góá**-/ functioning as the head can have verbal characteristics, such as maintaining erstwhile S/O arguments (12.17, 12.18). The S and O arguments could structurally be interpreted as nominals that are part of a more recursive compound (e.g.

nominalization as the dependent noun in SoG; only one such example is known for NoG (12.20).

- NoG
 (12.20) d-úu-ts ma-χáát-ák'ó-dá ndéa
 AFF-3PL.INTR-go NMLZ-be.far-head-thing ground
 ká = **gó-ga-ḃax-a**
 to=place-NMLZ2-hunt-NM
 'They go far away to go hunting (lit: ...to the hunting place).'

On the other hand, constructions with /**góá-**/ as the head and a /**ma-**/ nominalization as the dependent noun are quite common and could feasibly be analyzed as either participant nominalizations or a headless nominalized relative clause (12.21-12.24).⁹

- NoG
 (12.21) ka-bongwa á-ḃaga d-á-fár-ts
 with-back NOM-person AFF-3SG.INTR-rise-CL:body
 ká = **gó-m⁺-ḃáñ-á**
 to=place-NMLZ-dance-NM
 'Afterwards, the person rose and went to the place where people dance (dancing place).'

- NoG
 (12.22) d-a-dǎχ-as **gó-m⁺-pá-ts-a**
 AFF-3SG.TR-block-mouth place-NMLZ-emerge-CL:body-NM
 'He blocked the exit.'
 (lit: 'He mouth-blocked the going-out-place')

- SoG
 (12.23) ma-t'óó-já = ηgó **gó-má-zig-a**
 NEG.IMP-put-2PL=NEG place-NMLZ-sleep-NM
 'Don't prepare a place to sleep (sleeping place).'

⁹ Considering the tonal pattern of the dependent nominal in (12.23), some of these dependent nominals may be formed with the purposive prefix, /má`-/. See discussion of instrumental nominalizations.

PLURAL REFERENTS (NoG)

- (12.29) íla = tso dáá-ma-ʔaakó bíra
 1PL.EXCL=FOC PRO.PL-NMLZ-steal money
 ‘It was we (exclus.) who stole the money.’
- (12.30) áca = tso dáá-ma-ʔaakó bíra
 2PL=FOC PRO.PL-NMLZ-steal money
 ‘It was you (pl.) who stole the money.’
- (12.31) mbáándá = tso dáá-má-ʔaakó bíra
 two=FOC PRO.PL-NMLZ-steal money
 ‘It was the two (of them) who stole the money.’

12.2 Historical Sources for Participant Nominalizations in Gumuz

Participant nominalizations in Gumuz arise from the Associative Construction, a left-headed nonfinite nominal modification construction (see Chapter VI). The animate and inanimate pronouns in Gumuz arose from the head nouns **etá** ‘master’ and **dá(á)** ‘thing’ to refer to people, animals, and things. In a similar manner, **góá** [gwá] ‘place’ comes from a nominal of the same meaning, ‘place’. While these three nominal roots are most often found in NN constructions, they also exist as independent nouns in Gumuz. The noun **etá** means ‘master’ or ‘owner’ and is most often uttered with a possessive suffix (12.32).¹⁰ The noun **góá** ‘place’ likewise is not often uttered in isolation but is found in the prepositional phrase meaning ‘there’: **ná = góá** [nógwá] (at=place). The noun **góá** ‘place’ is also found with the genitive proclitic **(a)lá =** (12.33). This noun appears to be cognate with ‘house’ of the Koman languages (*gub* Komo, *gub* Uduk, *ku* Opuo).

SoG

- (12.32) ká = **éta**-má b-a-ká-cá-gá á-baga meetáam
 to=master-3SG.POSS AFF-3SG.TR-BEN-give-NFUT NOM-person one

‘One person gives (her) to her master.’

¹⁰ The tonal behavior for this noun suggests that the noun root should have a LL melody: **eta**. When speakers are asked to produce this root in isolation (which is not found in natural speech as it is inherently possessed), they may be producing a back-formation from a NN compound in which a H tone is added to the final syllable of the first L tone noun.

- SoG
 (12.33) áts-ɓaga alá = gwá b-íí-dá-gá ɲga
 only-person GEN=place AFF-3PL.TR-make-NFUT food
 ‘Only the people of (that) place prepare food.’

On the other hand, **dá** ‘thing’ regularly occurs as an independent noun.

- SoG
 (12.34) **dá** áɲa b-á-ko-ka
 thing MED AFF-3SG.INTR-resemble-NFUT
 ‘That thing resembles it.’

- NoG
 (12.35) **dá** náné á-zizic’-é-k’w ká = ndea
 thing PROX 3SG.TR-shake-TWRD-CL1:head to=ground
 ‘He shook this thing (fruit) to the ground.’

These nouns, with a few exceptions, are heads of NN collocations with nominalized verbs as the second noun. The head noun has grammaticalized as a pronoun. These ‘pronouns’ exist on a cline in which the more nominal the dependent noun is, the less these head nouns seem like relative pronouns. In turn, the more verbal the dependent ‘noun’, the more the head nouns do resemble relative pronouns. The noun **etá** has also further grammaticalized as a relativizer (to be discussed in Section 10.2).

While **etá** mainly occurs in NN collocations with a deverbal noun as the second N, there are a few instances in SoG in which it forms collocations with non-derived noun roots, in which case it maintains its original lexical semantics of ‘owner’ (12.36-12.39).¹¹

¹¹ The example in (12.38) is somewhat anomalous in that the dependent noun is itself a compound which does not fit the Associative Construction, as the first noun, **tʃagwa** ‘leg’, appears to modify the second **bisa** ‘wound’. This is like the Attributive Construction (Chapter VI) in which the second noun is the head. However, the first noun of the Attributive Construction is typically derived from a verb while **tʃagwa** ‘leg’ is clearly not.

- SoG
- (12.36) **etá-tʃééǵá** b-a-aŋgaŋ-ká-á-ííl
owner-farm AFF-3SG.TR-be.happy-NFUT-DC-BELLY
- b-á-ŋar-k-é-kʷw méʔa ká = ɓaga ká = áŋ
AFF-3SG.TR-take-NFUT-TWRD-CL1:head goat BEN=person BEN=DEF
'The landowner was happy (and) brought a goat to the people.'
- (12.37) b-á-kál-agá **á-etá-tʃaraambíina** "c-é = mê lamáána"
AFF-3SG.INT-say-NFUT NOM-owner-car give-TWRD=2SG money
- 'The driver (car owner) said "Give me the money."'
- (12.38) b-á-dǎb-agá-kʷw jirtíá **etá-tʃágú-bisa**
AFF-3SG.TR-find-NFUT-CL:head old.woman owner-leg-wound
'He came across an old woman with a leg wound.'
- (12.39) báámítá **etá-mátá**
Bamita owner-chicken
'Bamita is a chicken owner (owns chickens).'

Similar to **etá**, **góá** 'place' forms compounds with both basic and deverbal nouns. Constructions with /**góá**-/ as the head also follow a cline from more nominal to less nominal; if the dependent noun is a non-derived noun, the whole construction is on the nominal end. If the second dependent noun is a nominalization, the whole construction is on the verbal end of the cline. Example (12.40) is a more nominal NN collocation. As numerals in Gumuz are somewhat noun-like (see Chapter V), the instance in example (12.41) is considered more nominal as well. In contrast, examples (12.17-12.24) are towards the verbal end of the cline.

- NoG
- (12.40) d-úú-ka-paŋ **gwá-ája** káma-ntax-úu-ga
AFF-3PL.TR-INSTR-want place-water PURP-pour-3PL.INTR-INSTR
- ná = ɓaga-má ka = aja
LOC=person-3SG.POSS INSTR=water
- 'They looked for a place with water (lit: water place) in order to pour it on his body.'

- SoG
 (12.41) má-ʒíʃ-ʒa **gó-meetáa**
 FUT-sleep-2PL.INTR place-one
 ‘You (pl) will sleep together.’ (lit: ‘You will sleep (in) one place’)

The nominal **dá(á)** ‘thing’ serves as a head noun in similar NN (Associative) constructions in which dependent nouns are on a cline from more nominal to more verbal. As mentioned previously, as an independent noun, **dá(á)** nearly always means ‘thing’. However, certain speakers of NoG combine **dáá** with **ná** (a variation of the proximal demonstrative **láná**) for the 3PL pronoun which is alternatively translated ‘these people’ (12.42) (discussed further in Chapter IV). Like **etá** and **góá-**, **dá(á)** can be found in compounds with non-derived dependent nouns. The referent of **dá(á)** in such compounds can vary between ‘person/people’ and ‘animal(s)’ depending on the compound. Curiously, there exist no known compounds with **dá(á)** plus a non-derived noun in which the referent is an inanimate object.

- NoG
 (12.42) **dááná** ka-tsá-¹máámá d-é-t’oo-wá
 3PL INSTR-body-3PL.POSS AFF-FUT-do-3PL.TR
 ‘They will do it by themselves.’

ANIMATES (PLURAL)

- NoG
 (12.43) d-úu-ʒááŋ **á-dáá-máts’á** ʒiii ká = líi-cánʒaxa
 AFF-3PL.INTR-take NOM-PRO.PL-house IDEO:long.way to=belly-road
 ‘The family (house-people) take (her) a long way along the road.’

- SoG
 (12.44) **á-dá-ŋéa** b-íi-¹tsá-gá b-íi-ó-¹g-é
 NOM-PRO.PL-ground AFF-3PL.INTR-go-NFUT AFF-3PL.TR.-call-NFUT-TWRD

 n = ííl-gúzá
 LOC=belly-sky

‘The ground people went and called (the people) in the sky.’

ANIMATES (SINGULAR)

SoG

- (12.45) b-é-á-kál **dá-gwá-ééb-dogoná**
 AFF-RPAST-3SG.INT-say person?-place-home.area-young.girl

“á-tʃʰá-gá dogoná = ác ?”
 2SG.TR-have-NFUT young.girl=YNQ
 ‘The young girl’s relative said, “Do you have a young girl?”’

SoG

- (12.46) ábá **dá-gazíá** et-a-kʰáj-ʰgá áma
 which thing-grass REL-3SG.TR-bite-NFUT 2SG
 ‘Which wild animal bit you?’

Also curious is the fact that the referent in examples (12.43-12.46) can be either singular or plural regardless of vowel length (**dá** vs. **dáá**). According to Innocenti (2010:25), certain compounds (in NoG) beginning with **dá** use vowel length to distinguish number. He provides similar examples to the singular forms in (12.45) and (12.46) with long vowel correlates referring to plural (12.47).

Innocenti 2010 (Mandura Gumuz, author’s transcription)

- | | SINGULAR | PLURAL |
|---------|------------------|---------|
| (12.47) | dəgizia ‘beast’ | dagizia |
| | dəeba ‘villager’ | daeba |

However, in my own data, I have found that **dágazíá** [dígizíá] ‘wild animal(s)’ can have a singular (12.46) or plural/general referent (12.48, 12.49).¹²

SoG

- (12.48) gúmba ná = dá-gazíá ná = koó-má etá-ga-fáále-a
 lion LOC=PRO.PL-grass LOC=all-IP PRO.SG-NMLZ2-be.able-NM
 ‘The lion is the fiercest of all the animals.’

¹² Long versus short vowels can be difficult to distinguish in Gumuz. However, the short /a/ [ə] is distinct from long /aa/ [a] in terms of both vowel quality and the fact that short /a/ participates in vowel harmony (see Chapter 2). Note that **líí-gazíá** (BELLY-grass) ‘bush area’ regularly varies with **gazíá** ‘grass’ in compounds referring to wild uninhabited areas.

- SoG
 (12.49) dá-líi-gaziá dá-ma-n-tsa ná = magákwa
 PRO.INAN(S)-BELLY-grass PRO.PL-NMLZ-PL-go LOC=night
 ‘Wild animals are ones that roam at night.’

Lastly, NN Associative constructs formed with /dá(á)-/ as the head noun are often used in Gumuz clan names, indicating ‘people’. Table 12.4 gives a sample of these Gumuz clan names, one of which is a participant nominalization: **dáá⁺mátʃá⁺ts’éa** ‘people who have ears’.

Table 12.4. Gumuz Clan Names Formed with /dá(á)-/

dáá-bóχwa PRO.PL-(tree species) ‘people of the bóχwa tree’	dá-goχo-já ¹³ PRO.PL-palm-tree ‘palm tree people’
dá-filá PRO.PL-wood.gnat ‘wood gnat people’	dá-tʃía PRO.PL-weaver.bird ‘weaver bird people’
dáá- ⁺ má-tʃá ⁺ ts’éa PRO.PL-NMLZ-have-ear ‘people who have ears’	dá-sá-ája PRO.PL-mouth-water ‘shore people’
dá-wída PRO.PL-grasshopper ‘grasshopper people’	dá-book’á PRO.PL-cassava? ‘cassava people’
dáá- ⁺ χwáá PRO.PL-snake ‘snake people’	dá-káɬea PRO.PL-lowland ‘lowland people’

12.3 Finite Relative Clauses

Finite relative clauses (RCs) in Gumuz are clauses which modify an NP head and whose verbs can be fully inflected, much like the inflection patterns of main clause verbs. Gumuz finite clauses can have a lexical head or can be headless in the sense that no lexical noun is being modified. If the RC has a head, the RC can be postnominal or prenominal. RCs in Gumuz can be relativized with either a relative pronoun or a

¹³ The embedded nominal compound, **goχo-já**, of this compound appears to be right-headed when NN compounds of the Associative Construction should be left-headed. If it is indeed left-headed, the translation ‘palm tree’, which implies ‘tree’ as the head is questionable.

relativizer. These strategies differ according to dialect. Lastly, one can relativize on the A, S, O or oblique arguments/participants of a clause. The following sections are organized first by dialect and second by strategies for relativizing on various core and non-core arguments/participants of a clause.

When relativizing on an S argument in either dialect, the tonal pattern on the bound subject pronominal of the RC verb is intransitive. When relativizing on an A, the tonal pattern on the bound subject pronominal is transitive in SoG with an additional H tone in NoG. When relativizing on an O argument (with the exception of internally headed RCs), the tonal pattern is again intransitive and thus mirrors the structure used for relativizing on an S argument.

In NoG, there exist two main finite clause strategies for relativizing on core arguments: 1) using the relativizer /l-/ or 2) using the (relative) pronoun /etá-/ plus the relativizer /l-/. For non-core participants, such as objects of the dative, instrumental, or locative prepositions, one uses the /l-/ relativizer and infrequently /etá-/ plus the relativizer /l-/ for locatives. For ‘where’ relativization, one uses the /gw-/ ‘place, place where’ relative pronoun.

In SoG, one also utilizes both relative pronouns and relativizers. The relativizer in SoG is /et-/ and the relative pronouns are the singular pronoun /etá-/, the plural pronoun /dá-/ and /gó-/ ‘place, place where’. Most RCs in SoG are post-nominal if a lexical head noun is overt. For relativizing on core arguments, one can use the relativizer or relative pronoun. For non-core participants that are objects of a preposition, one can use the relativizer /et-/. Similar to NoG, one can also use the relative pronoun /gó-/ ‘place, place where’ for relativizing on locations regardless of whether the referent is part of a prepositional phrase.

12.3.1 NoG Relative Clauses

12.3.1.1 Bare Relativizer Strategy

In NoG, it appears as though there exist both internally headed and externally headed RCs (see section 12.3.1.3 below). For internally headed RCs, only the bare

relativizer strategy is used (/l-/) and the word order must be AVO or VS. When the RC is externally headed using the bare relativizer strategy, one marks the S/O external head with an /-á/ suffix on the RC verb and the bound subject pronominal carries an intransitive tonal pattern (12.62, 12.73). For relativizing on an A argument, the bound subject pronominal carries an H tone followed by a transitive tonal pattern (12.50 b). If the O argument of the RC precedes the verb of the RC (or is not overt), the verb is marked with an /-a/ suffix (12.51). All known externally headed RCs using the bare relativizer are postnominal.

For headless RCs using the bare relativizer strategy and relativizing on an O, the RC verb carries intransitive tone on the bound subject pronominal. If the A argument of the headless RC (relativizing on O) precedes the verb, an /-á/ suffix is added to the verb (12.74). Lastly, using the /l-/ relativizer strategy, it is not possible to have a headless RC which relativizes on an S argument if the S argument functions as an argument of a non-copular matrix clause (12.68). These various constructions involving the bare relativizer /l-/ in NoG are summarized with example numbers in Table 12.5.

Table 12.5. The Bare Relativizer Strategy for Relative Clauses in NoG

	Rel. on A	Rel. on S	Rel. on O
Internally Headed	[A + {l- + V} + O] (H + transitive tone) (ex.12.50 b)	[[l- + V] + S] (intrans. tone) (ex. 12.61)	[[l- + V] + O] (transitive tone) (ex. 12.71, 12.72)
Externally Headed	no data	S [[l- + V]-á] (intrans. tone) (ex. 12.62, 12.63)	O [[l- + V]-á] (intrans. tone) (ex. 12.73)
Headless (Copular clauses only)	[O + {l- + H + V}-a] (H + transitive tone) (ex. 12.51)	[[l- + V]-á] (intrans. tone) (ex. 12.64)	[A + {l- + V}-á] (intrans. tone) (ex. 12.74)
	[[l- + H + V] + O] (H + transitive tone) (ex. 12.52)		

12.3.1.2 Relative Pronoun Plus Relativizer Strategy

In NoG, one can also use the relative pronoun /**etá-**/ followed by the /**l-**/ relativizer for RCs. The “relative pronoun” does not reflect the animacy or number of its referent, as with nominalized RCs. Because the pronoun does not reflect any features (e.g. case, animacy, number) of the lexical head of the RC, it is not a prototypical relative pronoun. With finite RCs, it refers to both animates and inanimates, plural and singular referents. Thus, the main reason I retain the term “relative pronoun” for /**etá-**/ in this particular construction in NoG is because the pronoun is unique to RCs and related constructions. Also, the pronoun does appear to maintain case in that it can syntactically stand for S/A argument heads of RCs introduced with the bare relativizer (compare example 12.57, 12.67, and 12.68) but never O. The /**etá-**/ pronoun also appears to refer to an external lexical head (whether or not overtly expressed) and is thus never part of an internally headed RC construction.

Table 12.6. The Relative Pronoun + Bare Relativizer Strategy for RCs in NoG

	Rel. on A	Rel. on S	Rel. on O
Externally Headed	[O + {etá + l- + V}] A (H + transitive tone) (ex. 12.54)	[{etá +l- + V}] á-S (intrans. tone) (ex. 12.66)	[{ etá +l- + V}-á] O (intrans. tone) (ex. 12.60)
Headless	[etá + {l- + V} + O] (H + transitive tone) (exs. 12.56, 12.58, 12.59)	[etá +[{l- + V}-á] (intrans. tone) (ex.12.67)	[etá +{l- + V}-á] (intrans. tone) (ex. 12.76)
	[etá +{l- + V}-a] (H + transitive tone) (ex. 12.57)		

12.3.1.3 Internally Headed Versus Externally Headed Relative Clauses

The preceding two sections introduced relativization strategies for NoG but did not discuss headedness. We now turn to the question of whether a RC has an internal versus an external lexical head.

I hypothesize that there are both internally headed and externally headed constructions in NoG based on two distinct constructions in which RCs are found. The relativized verb in the first RC construction is identical to that of main clause verbs (save tonal melody when relativizing on an A). In the second RC construction, the relativized verb carries distinct tonal melodies for relativizing on A and O arguments from that of main clause verbs. But more notable is an additional /-a/ suffix on the RC verb which carries H tone when relativizing on an S/O argument and L tone when relativizing on an A argument. I consider the first RC construction to be internally-headed. The second construction is externally-headed with a final verb suffix cross-referencing an external lexical head. Internally-headed RCs only use the bare relativizer strategy and follow a rigid word order: AVO for relativizing on A, VS for relativizing on S, and VO for relativizing on O. RCs can be “externally-headed” whether the lexical head occurs within the same NP as the RC (12.59, 12.60) or the lexical head occurs as the predicate nominal of a copular clause with a “headless” RC (12.51). For both clause types, the /-a/ suffix (whether H tone or L tone) of the RC verb indicates that the lexical head is external to the RC.

With the relative pronoun plus relativizer strategy, the order of RC and lexical head is fixed: the RC is prenominal. This strategy differs from the bare relativizer strategy in that the /-á/ suffix for O argument heads is marked on the verb of the RC even though the O argument follows the verb. Here, the verb of the RC is structurally identical to the verb of the bare relativizer strategy in which the S/O precedes the RC. I believe this is due to the fact that with the relative pronoun plus relativizer strategy, the lexical head is external to the RC. However, further evidence is needed in order to substantiate this hypothesis. In any case, for what I have labeled externally-headed RCs (for either RC strategy), the following can be observed. If the lexical head of the RC is co-referential with an S argument of the RC verb and no argument overtly follows the verb of the RC, then an /-á/ suffix is marked on the verb of the RC. If a lexical head is co-referential with an O argument of the RC verb, then an /-á/ suffix occurs on the verb (regardless of whether an overt argument follows the verb). If the lexical head is not co-

[Rel. Clause]

- (12.51) k'wat'a l-á⁺-bátʃ-a óó-bámítá = tso
 chair AFF-3SG.TR:A.REL-hit-A:EXT.H M-Bamita=FOC
 'The one who hit the chair is Bamita.'

Example (12.52) also demonstrates the HL tonal pattern on the bound subject pronominal. The final /-a/ suffix on the verb of the RC is not necessary as the O argument of the RC verb follows it. The final /-a/ and the addition of H tone on the verb of the RC allow for case recoverability while allowing for variable word orders.

- (12.52) l-á⁺gááχ gááχá obá-ma = tso
 REL-3SG.TR:A.REL-work work father-1SG.POSS=FOC
 'The one who did work is my father.'

In (12.53), the verb stem contains an IN/CL. In such instances, the IN/CL is expressed with its underlying tone. In (12.53), the underlying tone of /-k'wá/ is H tone and the final /-a/ suffix with L tone is not added.¹⁴ The tone of the bound subject pronominal is H followed by a transitive tonal melody; in (12.53), the 3SG subject pronominal is therefore realized with a HL tonal melody.

- (12.53) dua l-â-fag-ák'wá óó-bámítá
 child REL-3SG:A.REL-grow-HEAD M-Bamita
 'The one who raised the child is Bamita.'

One difference between the relative pronoun plus relativizer strategy and the bare relativizer strategy is that with the pronominal strategy, the final /-a/ suffix (for externally headed RCs relativizing on an A) is not added when the O argument of the RC precedes the verb. However, this final /-a/ shows up on headless RCs that lack an overt O argument (12.57). Like the RCs with a bare relativizer, the pronominal RC can either have a lexical head (12.54) or be headless (12.55, 12.56). When there exists an overt lexical head, the pronominal RC occurs before the head.

¹⁴ It should be noted that H tone is often inserted on the syllable preceding an IN/CL morpheme (see also Chapters VIII and IX). This seems to mirror the process of compounding found in NN collocations in which an H tone is also added to the syllable before the second noun (see Chapter VI).

The the relative pronoun plus relativizer strategy is similar to the bare relativizer strategy (for externally headed RCs) in that the HL tonal pattern on the 3SG subject pronominal is maintained, indicating that the clause is relativizing on an A argument. The HL pattern is expressed in both the nonfuture (12.54, 12.56, 12.57) and future tenses (12.55).

- | | [Rel.Clause] | Head |
|---------|---|---|
| (12.54) | [ɨ́gafa etá-l-á ⁺ -bátʃ] | ɓaga ná = gá = tso
woman REL.PRO-REL-3SG.TR:A.REL-hit person LOC=here=FOC
'The person who hit the woman is here.' |
| (12.55) | etá-l-ée-dák'w-áa-ʃa | óó-báámítá = tso
REL.PRO-REL-FUT-hold-3SG.TR:A.REL-HIP M-Bamita=FOC
'The one who will hold (her) is Bamita.' |
| (12.56) | d-á-gáχ nágó-ʃá-ʃá-é-k'w
AFF-3SG.INTR-be.good when-2PL.TR-die-TWRD-HEAD | |
| | etá-ga-naχ-a //
PRO.SG-NMLZ2-be.satisfied-NM | |
| | etá-l-â-ŋ-k'âŋ | ɓaga ná = ndéa
REL.PRO-REL-PL-3SG.TR:A.REL-bite person LOC=land |
| | 'It is good when you all kill an arrogant one, one who bites people in the land.' (said of killing a hyena) | |
| (12.57) | etá-l-â-míc-a | óó-báámítá = tso
REL.PRO-REL-3SG.TR:A.REL-chase-A:EXT.H M-Bamita=FOC
'The one who chased (something) is Bamita.' |

When relativizing on an inanimate O which is also an O argument of the matrix clause, native speakers will often relativize on the A argument instead using the relative pronoun plus relativizer strategy (12.58, 12.59). Thus instead of stating 'He sold the clothes he bought', the sentence is translated 'The one who bought the clothes sold them.' This pattern is distinct from O argument heads in that the tonal pattern on the bound subject pronominal of the RC is H tone plus a transitive tonal pattern and there exists no

final /-á/ on the verb of the RC which refers to an external O argument head. This lies in contrast with a true O argument head (12.60) (see also section 12.3.1.6).

- (12.58) **etá-l-â-kod** **aɣwa** d-a-kod-ák'w
REL.PRO-REL-3SG-buy clothes AFF-3SG.TR-buy-HEAD

'He sold the clothes he bought.'
lit: 'The one who bought the clothes sold them.'

- (12.59) **etá-l-â-paŋ-óa** **dá** a-adáb-óo-ca = ŋgó
REL.PRO-REL-3SG-look.for-GPL thing 3SG.TR-find-GPL-CL1:EYE=NEG

'They did not find the thing that they looked for.'
lit: 'They who looked for the thing didn't find it.'

- | | | | |
|---------|------------------------------------|----------|-------------|
| | [Rel. Clause |] | Head |
| (12.60) | etá-l-ára-paŋ-á | | ɓaga |
| | REL.PRO-REL-1SG.INTR.-want-O:EXT.H | | person |

d-á-nté?
AFF-3SG.INTR-disappear

'The person I looked for disappeared.'

12.3.1.5 Relativizing on S Arguments

In NoG strategies for relativizing on S are distinct from relativizing on A. First, tonal melody on the bound subject pronominal of the RC verb is identical to main clause intransitive verbs. Second, externally-headed RCs carry an additional /-á/ H tone suffix whereas when relativizing on A, this suffix carries L tone.

NoG uses both the bare relativizer strategy /l-/ and the relative pronoun /etá-/ plus relativizer strategy /l-/ to relativize on S arguments. With the bare relativizer strategy, RCs can be internally headed (12.61), have external lexical heads (12.62, 12.63) or be

vowel is consistent with all verb stems that contain an IN/CL. A similar pattern obtains for relativizing on O arguments as well; see section 12.3.1.6 below.

- (12.65) l-á-ʒíʃ-áá-tsa ʒá = tso
 REL-3SG-be.hard-MV-BODY tree=FOC
 ‘That which is strong is the tree.’

One can also relativize on an S argument using the relative pronoun plus relativizer strategy. Again, the RC can have a head (12.66) or be headless (12.67) and the RC is pronominal if there exists an overt head (12.66). Similar to the bare relativizer strategy, a final /-á/ suffix is added to the verb of the RC (12.67). However, where there exists an overt head, no final /-á/ is added (12.66).¹⁸ Example (12.67) is taken from a procedural text explaining how to play the Mancala game. One difference between the bare relativizer and relative pronoun plus relativizer strategies is that the latter can be headless in both copular and non-copular clauses. Note that the bare relativizer cannot be substituted for the relative pronoun plus relativizer in the RC meaning ‘one who died’ of example (12.67) as the matrix clause is a non-copular clause (12.68).

- | | | |
|---------|--------------------------------|---------------|
| | [Rel. Clause |] Head |
| (12.66) | [etá-l-á-sá-gw |] á-baga |
| | REL.PRO-REL-3SG.INTR-eat-PLACE | NOM-person |

ná = máts'á lá = tso
 LOC=house PROX=FOC
 ‘The people who ate are in this house.’

- | | | |
|---------|----------------------------------|-----------------------------------|
| (12.67) | [etá-l-á-ʃ-á |] jendá d-a-kwáá-é-ts |
| | REL.PRO-REL-3SG.INTR-die-S:EXT.H | again AFF-3SG.TR-return-TWRD-BODY |

ma-n-dúgú-má ná = k'ó-má // jendá d-á-ʃ
 NMLZ-PL-run-IP:O LOC=HEAD-3SG.POSS again AFF-3SG.INTR-die

‘The one who died takes another turn distributing his pieces (lit: running them on top)... and again he dies.’

¹⁸ Given that the nominative case marker /á-/ appears on the following head of the S argument, it may be reasonable to assume that the case marker is historical source of the final /-á/ suffix on the verb of the RC. However, the same final suffix would then be expected for relativizing on A arguments as well.

(12.79) [Rel. Clause ...
etá-l-á-bats' **ma-kwáa-é-ak'w**
 REL.PRO-REL-3SG.INTR-NEG.AUX NMLZ-return-TWRD-HEAD

] **Head**
norága b́aga nágátá = tso
 book person there=FOC

‘The person who didn’t return the book is over there.’

12.3.1.7 Relativizing on Objects of Prepositions

When relativizing on the object of an instrumental/comitative preposition /**ka** =/ or a dative/benefactive preposition /**ká** =/, one can use the bare relativizer strategy and the corresponding incorporated preposition in the verb of the RC (see Chapter VII for further discussion of incorporated prepositions). For relativizing on all objects of prepositions (including the object of a locative), the tonal pattern of the RC verb bound subject pronominal is identical to that of main clause verbs in terms of transitivity. Examples (12.80 -12.82) demonstrate relativization on the instrumental/committative participant. In such instances, the head must precede the RC.¹⁹

(12.80) b-a-ʔis-áʃ b́aga tʃáʃá
 AFF-3SG.TR-wear-hip people bark.loincloth

[l-úú-ka-anzí-ak'w gááfa]
 REL-3PL.IMP-COM-exchange-HEAD women

‘Women were exchanged wearing bark loincloths.’
 lit: ‘People wore bark loincloths with which they exchanged women.’

(12.81) gúmba [l-á-ga-t'é dua]
 lion REL-3SG.INTR-COM-be.afraid child
 ‘The lion is what the child is afraid of.’

¹⁹ The text from which (12.82) comes was given while the speaker was in the process of making a clay pot. Thus, the referent of the RC was known via context and was not lexically expressed.

Lastly, one can also relativize on the object of a locative preposition using either the bare relativizer strategy or the relative pronoun plus relativizer strategy. The incorporated locative suffix is added to the verb of the RC and the object of the locative is the head of a postnominal RC. The RC in (12.84) is transitive while the one in (12.85) is intransitive.

(12.84) ábé lagída l-éé⁴-ʃ-á-k'ô-n ára?
 where wooden.bowl REL-FUT-die-2SG.TR-HEAD-LOC 1SG
 ‘Where is the wooden bowl which you will kill me in?’

(12.85) d-á-ʒig dá etá-l-á-sá-gô-n
 AFF-3SG.INTR-sleep thing REL.PRO-REL-3SG.INTR-eat-PLACE-LOC
 á-χosa
 NOM-bovine
 ‘He sleeps in a thing which cattle eat out of.’

12.3.1.8 ‘Where’/‘Place’ Relativization

The relative pronoun /**gw-**/ ‘where, place where’ may be the only true relative pronoun in NoG if one assumes that a relative pronoun is a relativizer which reflects one or more features of its co-referent. The other relative pronouns /**dá(á)-**/ and /**etá-**/ only maintain features of their co-referents (number, animacy) in nominalized RCs (and /**dá(á)-**/ is not used in finite RCs). The relative pronoun /**gw-**/, on the other hand, maintains the features of ‘place’ or location in both finite and non-finite RCs.

RCs introduced with /**gw-**/ can have a head or be headless (12.89). If there exists an overt head, the RC is often postnominal (12.86, 12.87). However, the RC can also be prenominal (12.88). The tonal pattern on the bound subject pronominal of the verb follows that of main clause verbs. Lastly, the headless RC can also function as a complement clause. In (12.89), the RCs ‘where he lay down’ and ‘where he died’ are functioning as O arguments of the matrix verb ‘find’.²⁰

²⁰ The classifier /-ats/ CL:BODY on ‘find’ in (12.89) suggests that the O argument is body-like or has a body. Thus, it may be that ‘hyena’ is the implied O argument and not the locations ‘where he lay down’ and ‘where he died’.

pronouns used to relativize on core arguments of a finite RC (where NoG has just one of these): /**etá**-/ PRO.SG and /**dá**-/ PRO.PL. The relative pronoun /**etá**-/ can be used to relativize on non-core participants, namely objects of prepositions. Lastly, the relative pronoun /**gó**-/ ‘where’ relativizes on locations. All relative pronouns can either occur with the affirmative prefix /**b**-/ of nonfuture verbs or without the prefix. When /**etá**-/ PRO.SG introduces a clause which lacks the affirmative prefix, the pronoun is phonologically reduced in that the final /**á**/ is lost. Along with phonological reduction, there is some degree of semantic bleaching in that the ‘relative pronoun’ no longer (necessarily) refers to animate singular referents. Thus, /**et**-/ begins to resemble a relativizer in such constructions.

12.3.2.1 Relativizing on A Arguments

When relativizing on A arguments, one can use either the /**etá**-/ (/etsá-/ in Kamashi *wereda*) PRO.SG or the /**dá**-/ PRO.PL relative pronouns. In general, one cannot use the relative pronouns with the /**b**-/ affirmative prefix when relativizing on an A argument but there exist a few exceptions (12.90, 12.91). Also, when using the plural relative pronoun for relativizing on an A argument, the bound subject pronominal remains 3SG in form even when the referent is 3PL (12.91, 12.93).

(12.90) nga etsá-b-a-dá-gá
 food PRO.SG-AFF-3SG.TR-do-NFUT
 ‘The one who prepared the food’

(12.91) dá-b-é-e-míc k’óá
 PRO.PL-AFF-RPST-3SG.TR-chase dog

m-báácíc ká = ŋgafa-má
 PL-Bacic COM=wife-3SG.POSS
 ‘The ones who chased (remote past) the dog are Bacic and his wife.’

In the present corpus, these pronouns more frequently introduce a RC which lacks the affirmative prefix when relativizing on the A argument. Without the affirmative prefix, the PRO.SG relative pronoun also lacks the final /**á**/ which carries H tone: /**et**-/ (/ets-

- (12.95) etá-ma-míc-a k'óá á-báácíc
 PRO.SG-NMLZ-chase-3SG.TR dog NOM-Bacic
 'The one who will chase the dog is Bacic.'
- (12.96) dá-ma-míc-a k'óá m-báácíc ká = ígafa-má
 PRO.PL-NMLZ-chase-3SG.TR dog PL-Bacic COM=woman-3SG.POSS
 'The ones who will chase the dog are Bacic and his wife.'

12.3.2.2 Relativizing on S Arguments

When relativizing on an S argument in SoG, the RC often has a head, in which case the RC is postnominal (12.97, 12.98). However, prenominal RCs are also possible (12.99) as well as headless RCs (12.100). The RC retains the /b-/ affirmative prefix and the tonal pattern of the verb in the RC is identical to that of intransitive main clause verbs (when expressed in Active Voice).

- (12.97) **Head [Rel. Clause]**
 b́aga etá-b-á-íí-gá ná = ííl-gúzá
 person PRO.SG-AFF-3SG.INTR-live-NFUT LOC=BELLY-sky
 b-á-tsa-gá
 AFF-3SG.INTR-go-NFUT
 'The person who lives in the sky goes (to the ground).'
- (12.98) **Head**
 éé-b-á-faat-agá á-já b́aga j́áá-jendá
 TEMP-AFF-3SG.INTR-fall-NFUT NOM-tree people REDUP:PL-other
[Rel. Clause ...]
 dá-b-á-ot-ag-é n = ííl-gúzá
 PRO.PL-AFF-3SG.INTR-be-NFUT-TWRD ABL=BELLY-sky
 ...]
 nám-but-éá ná = faazá = ná ká = nnéa
 PROG-descend-TWRD LOC=tree.species=PROX DAT=ground
 b-a-anjirt-agá-k'w
 AFF-3SG.TR-fall.over-NFUT-HEAD

'When the tree fell, it caused the other people from the sky who were going down this Faza tree to the ground to fall over.'

(12.102) tʃɛ́ná etá-b-á-ŋgats’-áká b-a-tʃ’á-ká
 field REL-AFF-3SG.INTR-lie.fallow-NFUT AFF-3SG.TR-have-NFUT

gizá mbáánd okááŋ
 year two three

‘The field lies fallow for two to three years.’
 lit: ‘The field that lies fallow has two, three years.’

Lastly, if the S argument is part of a Middle Voice Construction, the /b-/ affirmative prefix is not used and the tonal pattern associated with the bound subject pronominal of the verb reflects the tonal pattern of main clause Middle Voice Constructions (12.103).

(12.103) ná = máts’á ná = ba ets-a-dú-gá-á-ts
 LOC=house LOC=PROX REL-3SG.TR-be.sick-NFUT-MV-BODY

á-dua
 NOM-child

‘The one who is sick in this house is the child.’

12.3.2.3 Relativizing on O Arguments

When relativizing on O arguments in SoG, the O head is nearly always lexically overt, whether as part of a predicate nominal, or frequently appearing before the RC (12.104). The verb of the RC can be expressed with or without the affirmative prefix /b-/ in the nonfuture tense in which case the relative pronoun/relativizer /etá-/ is phonologically reduced to /et-/ when the affirmative prefix is not expressed (12.105) (similar to relativizing on A arguments). Also, clauses relativized on an O argument can be part of the 3PL Impersonal Construction; all examples of such a type demonstrate an intransitive tonal melody on the bound subject pronominal on the RC verb (12.105, 12.106).

Head [Rel. Clause]

- (12.104) *baga etá-b-íi-óó-gá b-á-tako-gá*
 person REL-AFF-3PL.INTR-call-NFUT AFF-3SG.INTR-ascend-NFUT

ná = já = ná ná = faazá b-a-dá-gá-á-ʃ
 LOC=tree=PROX LOC=tree.species AFF-3SG.TR-do-NFUT-MV-HIP

ká = ííl-gúzá b-a-fá-g-é kea
 DAT=BELLY-sky AFF-3SG.drink-NFUT-TWRD beer

‘The person whom they invited climbed this Faza tree, reached the sky, and drank beer.’

Head [Rel. Clause]

- (12.105) *k’óá dá-b-íí⁺-míc-agá okááŋg*
 dog PRO.PL-chase-NFUT three
 ‘The dogs being chased are three.’

- (12.106) *et-íí⁺-míc-agá k’óá*
 REL-3PL.INTR-chase-NFUT dog
 ‘The one being chased is the dog.’

Again, the number of the head referent can be expressed with the plural relative pronoun /**dá-**/ (12.107, 12.109) but one can also use /**et-**/ or /**etá-**/ to refer to an animate plural co-referent (12.108). One can also use /**et-**/ or /**etá-**/ for inanimate (plural or singular) co-referents (12.109-12.111).

ANIMATE PLURAL O ARGUMENTS

- (12.107) *dá-b-íí⁺-míc-agá k’óá*
 PRO.PL-AFF-3PL.INTR- chase-NFUT dog
 ‘The ones being chased are dogs.’

- (12.108) *et-íí⁺-míc-agá dá-ga-lokw-a*
 REL-3PL.INTR-chase-NFUT PRO.PL-NMLZ2-steal-NM
 ‘The ones being chased are the thieves.’

INANIMATE O ARGUMENTS

- (12.109) b-íi-lee-ká-ts bádala
AFF-3PL.TR-plow-NFUT-BODY sorghum

et-íi-ŋac'-áká
REL.SG-3PL.TR-plant-NFUT
'They plow the sorghum which they planted.'

- (12.110) ts'ina etá-ma-ŋíi-ra ńma-ŋgaŋ-ár-ts
story REL-NMLZ-be-1SG.INTR FUT-speak-1SG-BODY

ts'iná-gaŋat'á n = íl-éeba
story-fool LOC=BELLY-neighborhood

'The story that I will be telling is about a fool in the neighborhood.'

- (12.111) a-tsée-gá-tsa = ŋgó á-biangwa
3SG.TR-drag-NFUT-BODY=NEG NOM-raptor

dá etá-b-íi-t'ó-gá-ts ká = kwakoḃá
thing REL-AFF-3PL.IMP-put-NFUT-BODY BEN=turtle

'The raptor doesn't take that which is set out for the turtle.'

Clauses that relativize on an O argument can be prenominal in SoG (12.112). However, when relativizing on O arguments, postnominal RCs are more frequent in the present corpus.

- | | | |
|----------|---|--------------------------------|
| | [Rel. Clause |] Head |
| (12.112) | etá-má-ŋatŋ'íla | ŋoka b-íla-tŋ'á-ká |
| | REL-FUT-plant-1PL.EXCL.INTR | seed AFF-1PL.EXCL.TR-have-NFUT |
| | 'We have the seeds that we will plant.' | |

Lastly, the tone of the bound subject pronominal on the verb of the RC demonstrates a transitive tonal pattern when an IN/CL is part of the the verb stem and the IN/CL is coreferential with the O argument head (12.111, 12.113). In (12.113) the tone on the bound subject pronominal is H which is the transitive tonal melody on bound

CHAPTER XIII

ADVERBIAL CLAUSES

This chapter describes various types of functional adverbial clauses found in Gumuz. Some adverbial clauses utilize the *ma-* construction which was introduced in Chapter XI, but others do not. Temporal and conditional (and some causal) adverbial clauses are simply introduced with an erstwhile preposition followed by a finite verbal form. Some temporal and conditional clauses involve the morpheme /**gó-**/ found in relator noun constructions (Chapter III) as well as ‘where’/‘place’ relative clauses (Chapter XII). Adverbial clauses involving hypothetical and/or counterfactual events are formed with a finite form of the *ma-* construction combined with the affirmative prefix and other possible erstwhile prepositions. Yet other adverbial clauses can be introduced with a distinct phonological words/phrases (or clitics) meaning ‘at the time of’ and ‘because’, and ‘without’. Lastly, purpose adverbial clauses are introduced with the prefix /**kám`-**/, whether nonfinite or finite. This last prefix is a combination of the dative/benefactive /**ká=**/ preposition plus the *ma-* nominalizing prefix (of the *ma-* construction). Purposive clauses in NoG can also be formed with the /**ká=**/ prefix followed by /**gó-**/ plus the *ma-* construction.

The following sections are organized by function and not by structure. Section 13.1 describes temporal adverbial clauses, section 13.2 describes conditional adverbial clauses, section 13.3 describes concessive adverbial clauses, section 13.4 describes negative circumstantial adverbial clauses, section 13.5 covers causal adverbial clauses, and section 13.6 describes purpose clauses.

13.1. Temporal Adverbial Clauses

Temporal adverbial clauses in NoG are introduced with the prefix /**gó-**/ or /**nágó-**/ on an otherwise finite clause. The historical source of this adverbial clause is the ‘where’ relative clause (see Chapter XII). This prefix moved metaphorically from representing a

spatial predication to a temporal one meaning ‘when’. Example (13.1) uses /nágó-/ in the hypothetical temporal sense, while (13.2) uses the same prefix to indicate the time of a specific event. One can also use the /go-/ prefix to indicate a specific point in time (13.3).

- NoG (proverb)
- (13.1) ká'já nágw-a-s paatúú-ḡaga ná = já
 porcupine TEMP-3SG.TR-eat pumpkin-person LOC=tree
- á-ka-ʒig = aṅgó
 3SG.INTR-COM-sleep=NEG
- ‘When a porcupine eats a person’s pumpkin, he doesn’t sleep with it in a tree.’

- NoG
- (13.2) ma-sá-gwá nágú-ú-ḡaamb-átsa
 NMLZ-eat-PLACE TEMP-3PL-try-BODY
- d-ár⁺-ḡáb-é-gw
 AFF-1SG.INTR-find-TWRD-PLACE
- ‘I arrived when they started to eat.’

- NoG
- (13.3) ára nágá gó-ór⁺-ḡáb-é-gwá máts’á ka = maanʒa
 1SG here TEMP2-1SG.INTR-find-TWRD-PLACE house INSTR=fire
- d-úú-ga-sá-k’w
 AFF-3PL.IMP-INSTR-eat-CL1:HEAD
- ‘When I arrived here, the house had been consumed by fire.’

In SoG, temporal adverbial clauses are commonly introduced with the clitic /nó'ká=/ ‘at the time that’. This morpheme is a combination of the locative preposition /ná=/ and ooká ‘sun, day, time’ and is used for both hypothetical situations (13.4) and

specific (non-hypothetical) points in time (13.5).¹ The clitic /**nó⁴ká=**/ can also be expressed as a separate phonological word/phrase if the temporal adverbial clause is introduced with the prefix /**go-**/ (13.6).

- (13.4) SoG
 ára **nó⁴ká** = b-ár⁴-tsá-gá ká = máts'á-ma-gaŋ-ácá
 1SG **TEMP**=AFF-1SGINTR-go-NFUT DAT=house-NMLZ-know-EYE

b-ár-taa-gá ŋgííló⁴k-áram
 AFF-1SG.TR-bring-NFUT midday.food-1SG.POSS

b-âr-ga-tsá-gá
 AFF-1SG.INTR.COM-go-NFUT
 'When I go to school, I bring my lunch with me.'

- (13.5) SoG
nó⁴ká = b-é-á-ŋ á-mpâ-m
TEMP=AFF-RPST-3SG.INTR-die NOM-grandmother-1SG.POSS

ára b-ár-é-⁴dá-á-ŋ ká = konó
 1SG AFF-1SG.INTR-RPST-do-MV-HIP DAT=Kono

'When my grandmother passed away, I had arrived (was) in Kono.'

- (13.6) SoG
 бага meetáa **go**-b-a-tʃ⁴á-ká dua //
 person one **when**-AFF-3SG.TR-have-NFUT child

n = ó⁴ká **n = áŋ** // b-á-gaŋ-ká
LOC=time **LOC=MED** AFF-3SG.INTR-be.good-NFUT
 'When a person has a child, at that time, it is good.'

A third means of introducing a temporal clause in SoG is with the prefix /**éé-**/ (13.7). This prefix likely arose historically from the prepositional similative morpheme

¹ The verb 'I arrived' in (13.5) exhibits a reversal in the order of the remote past morpheme /**é-**/ and the bound subject pronominal /**ára-**/ 1SG. This appears to be a metathesis peculiar to the language consultant who provided the clause. The fact that this is a metathesis involving vowels only is clear with the downstep that is induced on the verb root **dá**. This downstep would normally arise from the HL pattern of the bound subject pronominal; the remote past morpheme /**é-**/ does not bear a L tone which would induce downstep on the following H tone.

counterfactual, a special verbal construction is used comprised of the past tense auxiliary **tisák'wá** following a 'future tense' form of the main verb (13.11, 13.12). If the matrix clause is an affirmative counterfactual, the negative form of the 'future tense' verb is used (13.12). If the matrix verb is introducing a counterfactual event, the hypothetical prefix /**dega-**/ is used on the 'future tense' main verb (13.11).³

- (13.9) NoG (Gumuz saying)
 k'óá **k-a-fá-k'w** **mátá** **a-ŋz-áts = aŋgó**
 dog **COND-3SG.TR-die-HEAD** chicken 3SG.TR-fry-CL:BODY=NEG
 'If a dog kills a chicken, he doesn't fry it.'
 (used for people without manners or culture)
- (13.10) NoG
k-á-tʃ-á **d-éé⁺-tsá-gwa**
COND-3SG.INTR-rain-S **AFF-FUT-1SG.INCL.INTR**
 'If it rains, we will go.'
- (13.11) NoG
mítsa k-á-gáχ-á = lía **gó-m⁺-sá-gwá**
 crop **COND-3SG.INTR-be.good-S=CONJ** **PLACE-NMLZ-eat-PLACE**

dega-ot-á-n **tisák'wá**
HYP-EXIST-3SG.INTR-LOC PAST
 'There would have been a festival if the harvest had been good.'
- (13.12) **tʃókwa ma-ʒíj-ámá** **k-á-⁺ót-á**
 fence **NMLZ-be.strong-IP:MOD** **COND-3SG-EXIST-S**

mé-ek'o-χosa **éé-ŋ-ts'ár-ac = aŋgó** **tisák'wá**
 PL-F.NHUM-bovine **FUT-PL-break-EYE=NEG PAST**
 'If the fence had been strong, the cows wouldn't have knocked it down.'

the subordinate clause is different than that of the matrix, but further investigation is needed (see example 12.76 of Chapter XII).

³ It is possible that /**dega-**/ can be broken down further as there exists a related hypothetical prefix /**daga-**/. See example (12.88) of section 12.2.1 in Chapter XII.

SoG
 (13.16) **n-á-ma-d** á-tʃókwa ma-ʒíg-áʃa-má
 HYP-3SG-NMLZ-become NOM-fence NMLZ-be.strong-HIP-IP:MOD

n-a-ma-n-tsʻí-íl = anǵó á-χosa
 HYP-3SG.TR-NMLZ-PL-break-BELLY=NEG NOM-bovine

‘If the fence had been strong, the cows wouldn’t have knocked it down.’

One can also form a past hypothetical condition using the affirmative prefix /b-/ followed by a bound subject pronominal and the *ma-* construction. If the consequent clause is semantically negative, both the conditional clause and the consequent clause use the verbal construction with /b-/ (13.17). If the consequent clause is semantically positive, the conditional clause will be introduced with /éé-/ (13.13). However, as shown in (13.16) a negative hypothetical event in which the verb of the conditional clause is affirmative and the verb of the consequent clause is negative is also possible with the hypothetical *n-* construction.

SoG
 (13.17) **b-a-ma-tʃ** k’óbíítsá-má-râ
 AFF-3SG.TR-NMLZ-have heart-3SG.POSS-EMPH

b-á-ma-lúŋw-á
 AFF-3SG.INTR-NMLZ-cry-S

‘If she had a heart, she wouldn’t cry.’

If the conditional clause is semantically negative in SoG, the verb of the conditional clause exhibits the following structure: the /n-/ prefix + a bound subject pronominal + /gá-/ + the *ma-* construction + the /-n/ locative suffix (13.18). This latter construction is also used to express the notion ‘before/without X-ing’ (13.19) and is often used with 3PL impersonal subject marking (Chapter VII).⁴

⁴ The /-n/ locative suffix appears to mark a subordinate adverbial clause in SoG. However, temporal and many conditional clauses are not marked with this suffix. It appears to be related to the /-ná/ found on non-initial verbs of clause chains in SoG.

- (13.18) SoG
 dabóá **n-íí-gâ-m-sâ-n**
 bread HYP-3PL.TR-NEG.HYP-NMLZ-eat-DEP

b-a-ciŋ-gá-á-k'w
 AFF-3SG.TR-NFUT-MV-HEAD

‘If the bread is not eaten, it will smell.’
 lit: ‘if they do not eat the bread...’

- (13.19) SoG
 dua b-á-ǰá-gá **n-íí-gá-m-ťô-n**
 child AFF-3SG.INTR-die-NFUT HYP-3PL.TR-NEG.HYP-NMLZ-put-LOC

ká = máts'á-tamaría
 DAT = house-student

‘The child died before entering school.’
 lit: ‘...before they put him in school’

Lastly, one can also express a negative conditional clause in SoG with the same negative hypothetical construction as above (*n-* plus *gá-*) but with the /*b-*/ prefix instead of the /*n-*/ prefix (13.20).

- (13.20) SoG (proverb)
 á'-ǰíí'-gá-ťago = ŋgó á-máts'á
 3SG.INTR-be-NFUT-foot=NEG NOM-house

b-a-gá-ma-ťâ-n mitšana
 AFF-3SG.TR-NEG.HYP-NMLZ-have-LOC centerpole

‘A house doesn’t stand if it doesn’t have a centerpole.’
 (A family needs a father)

13.3. Concessive Adverbial Clauses

Concessive adverbial clauses are conditional clauses with the meaning ‘even if’ or ‘even though’. In NoG, these are formed with the conditional prefix /*k-*/ on the verb of the conditional clause but with an additional /*-na*/ suffix at the end of the verb. Comparing

(13.21) with (13.10), the only difference between the conditional clause and a concessive clause in NoG is the additional /-na/ suffix on the latter construction.

- NoG
 (13.21) **k-á-tʃ-á-na** d-éé⁺-tsá-gwa
 COND-3SG.INTR-rain-S-LOC AFF-FUT-1SG.INCL.INTR
 ‘Even if it rains, we will go.’

In SoG, there are two constructions for concessive clauses. The first has the following structure: /b-/ + bound subject pronominal + /ga-/ (<ka= instrumental preposition) + ma- construction + /-n/ (13.22). The second has the same structure but instead of the /b-/ prefix, the /n-/ hypothetical prefix is used (13.23).

- SoG
 (13.22) **b-á-ga-m-ʔfi-n** bab-ácá ma-dá-dá
 AFF-3SG.INTR-AFF.HYP-NMLZ-be-LOC big-EYE NMLZ-do-thing

 m-u-é-á n̄-batʃ[̃]-a-ʃ = angó
 NMLZ-go-TWRD-NM FUT-NEG.AUX-3SG.TR-HIP=NEG

 ‘Even if there is a lot of work, he won’t keep from coming.’

- SoG
 (13.23) **n-á-ga-ma-tʃ-ân** má⁺-ts-ágwa
 HYP-3SG.INTR-AFF.HYP-NMLZ-rain-LOC FUT-go-1PL.INCL.INTR
 ‘Even if it rains, we will go.’

13.4. Negative Circumstantial Adverbial Clauses

A negative circumstantial adverbial clause is a dependent clause expressing an event that did not or will not happen before the event of the matrix clause. These are often translated into English as ‘without X-ing, ...’ In NoG, the construction for negative adverbials is as follows: /kaziigá=/ + /mâ-/ (an abbreviated form of the purpose prefix) + the verb root + any applicable morphemes ordered according to the future tense (13.24). The /kaziigá=/ clitic appears to be comprised of the instrumental preposition /ka=/ followed by the verb root **ziig** ‘be poor, be without’. The final /á/ in this clitic complex is

likely a remnant from the dative proclitic /ká=/ which forms the purposive prefix /káma-/ or /kám`-/ (see Chapter 11). The /kaziigá=/ clitic is also found with NPs meaning ‘without’ or ‘except’ (13.25).

- NoG
 (13.24) **kaziigá = má'-gááχ-úá** d-úu-ts
 without=PURP-work-3PL AFF-3PL.INTR-go
 ‘They left without working.’

- NoG
 (13.25) **koó-má kaziigá = ára** d-úu-ts
 all-IP.MOD without=1SG AFF-3PL.INTR-go
 ‘Everyone but me left.’

To express a negative adverbial clause in SoG, one can use a similar construction to that of the negative conditional and concessive clauses which are formed with the /b-/ prefix. However, the third slot of the construction has the morpheme /la-/ in the negative adverbial clause (13.26). The structure is as follows: /b-/ + bound subject pronominal + /la-/ + *ma-* construction + /-n/.

- SoG
 (13.26) **ababé b-a-la-m-kól-é-k'wâ-n**
 Abebe AFF-3SG.TR-NEG.REAL-NMLZ-return-TWRD-HEAD-LOC

 baríá al-âm b-á-ka-dâ-ká-tsa
 pen GEN-1SG.POSS AFF-3SG.INTR-COM-go-NFUT-BODY

 ‘Abebe left with my pen without returning it to me.’

13.5. Causal Adverbial Clauses

Chapter VII discusses the incorporated preposition **ká** and its various functions, one of which is marking reason or cause on the verb. Another way to indicate reason or

cause is via a causal adverbial clause.⁵ In NoG, one can introduce a causal adverbial clause with the prefix /**nágó-**/ (13.27) or /**gó-**/ (13.28). These prefixes have the same source as the temporal prefixes in NoG; /**nágó-**/ is a temporal predication meaning ‘where’ or literally ‘at place’ with /**gó-**/ by itself meaning ‘place’. The prefix /**nágó-**/ moved metaphorically from representing a spatial predication to one indicating time and then later to one indicating cause (PLACE > TIME > CAUSE).

NoG
 (13.27) d-á-apóχ óó-dízaana c-íílá-má
 AFF-3SG.INTR-jump M.HUM-Dizhana EYE-belly-3SG.POSS

nágú-ú-⁺śáχ-é-iz-á d-á-mbe ká = ííl-6aak’a
 CAUS-3PL.TR-cut-TWRD-PRF-O AFF-3SG.INTR-fall DAT=BELLY-river

‘Dizana jumped. Because his insides had been cut, he fell into the river.’

NoG
 (13.28) **gw-ár-ťo** maanja ká = nd-éé⁺-ts-ára = cá
 CAUS2-1SG.TR-put fire DAT=where-FUT-go-1SG.INTR=CONJ2
 ‘Because I caused this problem, where can I go then?’

In SoG, one simply uses the word **káátse** ‘because’ to introduce a causal adverbial clause. This word is related to the word for ‘why?’ which is comprised of the dative/benefactive preposition **ká** ‘to, for’ plus the interrogative pronoun **ats(é)** ‘what?’ (13.29) (see Chapter IV, section 4.1.2).

⁵ To express that someone or something is the cause in NoG, one can use either **ťjagwa** ‘foot’ or **maanja** ‘fire’ as the first noun in the Associative Construction (Chapter VI) with the second noun functioning as the cause. With **ťjagwa**, one must also use the locative preposition **ná=** and the cause is semantically neutral (not negative). With **maanja**, the dative preposition **ká=** is used and the cause is negative (see also example 13.28 for the metaphor ‘fire’ being used to indicate a ‘problem’). Both of these constructions roughly translate as ‘because of X’.

- SoG
 (13.29) *ńtara al-âṃ aspânɟ káátse b-á-dá-gá*
 bed GEN-1SG.POSS foam because AFF-3SG.INTR-become-NFUT
b-á-fítʃ-agá ná = tigin-âṃ
 AFF-3SG.INTR-be.comfortable-NFUT LOC=ribs-1SG.POSS
 ‘Because my bed is foam, it is comfortable for my ribs.’

13.6. Purpose Clauses

Purpose clauses in Gumuz are formed with the dative **ká** followed by either a nonfinite or finite form of the *ma-* construction. In many cases, these two morphemes appear to be fused as the prefix /**kám`-**/, but the /a/ vowel of the nominalizer /**ma-**/ deletes and a floating L tone remains. This floating L tone causes downstep of a following H tone. An allomorph of this purposive prefix in SoG is [**má`-**] in which the /k/ and /a/ segments of the dative prefix delete and the H plus floating L tone melody remains. The /**kám`-**/ prefix and its allomorph(s) are identical in structure to the future tense prefix of SoG (and the immediate future prefix of NoG). In NoG, a purpose clause can also be formed with **ká** plus **gó** (<góá ‘place’) followed by the *ma-* construction.

13.6.1 Same-Subject Purpose Clauses

Same-subject purpose clauses are formed in much the same way as the complement clauses described in Chapter XI, section 11.1.2.4. The purpose clause can be either nonfinite (with only nominal suffixes, i.e. nominal marker and/or possessive suffixes) or finite following the inflection pattern of future tense verbs. Examples (13.30) and (13.31) are non-finite same-subject purpose clauses.

- NoG
 (13.30) *d-úú-^htáá-é kwáántʃa kámá^h-sá-má*
 AFF-3PL.TR-take-TWRD sorghum PURP-eat-IP:O
 ‘They brought sorghum in order to eat it.’

- SoG
 (13.31) b-ár-ʼó-g-é **kám-ʼír-atsa-má**
 AFF-1SG.INTR-go-NFUT-TWRD PURP-see-CL:body-IP:O
 ‘I came to see her.’

It is also possible to express a same-subject purpose clause in NoG using the construction /ká-/ plus /gó-/ ‘place’ plus a nonfinite form of the *ma-* construction (13.32). The purposive /káma-/ prefix can be used in place of the /ká-/ + /gó-/ construction in the same clause (13.33).

- NoG
 (13.32) ká = súk’a **ká-gó-ma-kod-ó** **dabúa**
 DAT=store DAT-PLACE-NMLZ-buy-ASSOC:O bread

d-á-ts
 AFF-3SG.INTR-go

‘He went to the store to buy bread’
 lit: ‘He went to the store to the bread-buying-place’

- NoG
 (13.33) dabúa **káma-kod-amá ká = súk’a** **d-á-ts**
 bread PURP-buy-IP:O DAT=store AFF-3SG.INTR-go
 ‘He went to the store to buy bread.’

As mentioned above, same-subject purpose clauses can be finite in both NoG (13.34, 13.35) and SoG (13.36).⁶ In SoG, the finite purpose clause is often marked as a dependent clause with the /-ân/ Locative suffix. When the cognate suffix occurs on the verb of the purpose clause in NoG, it appears to cross-reference a locative or ablative prepositional phrase (13.34) (see also Chapters VII and X).

⁶ Innocenti (2010) records finite same-subject purpose clauses formed with the /ká-/ + /gó-/ + *ma-* construction. However, in my data, finite purpose clauses only occur with the /ká-/ + *ma-* construction (**kám** -).

- (13.34) NoG
 baga d-úú-a-n-táá-é k'ósá-já
 people AFF-3PL.TR-RECP-PL-bring-TWRD CL:tooth-tree

kám⁺-ʔí-úu-ʃ-ân
 PURP-be-3PL.INTR-HIP-LOC

‘The people each brought a log in order to sit on.’

- (13.35) NoG
 d-ára-ampoχ-áts meʔa **kám-ɖak⁺-órá-ʃ**
 AFF-1SG.TR-jump-BODY goat PURP-catch-1SG.TR-HIP
 ‘I jumped the goat in order to catch it.’

- (13.36) SoG
 má⁺-d-ára madáda **má⁺-tʃ⁺-ára-n** lamáána
 PURP-do-1SG.TR work PURP-have-1SG.TR-DEP money
 ‘I will work in order to have money.’

However, there exist a few examples in NoG in which the same-subject purpose clause is marked with the suffix /-(â)n/. In these instances, the O argument of the purpose clause must follow the verb of the purpose clause; no other order is acceptable regardless of the presence or non-presence of the /-(â)n/ suffix (13.37). Furthermore, the same-subject complement can also be expressed as a non-finite complement (13.38).

- (13.37) NoG
 a. d-úú-η-kááχ-⁺ák⁺w
 AFF-3PL.INTR-PL-encircle-HEAD

kámá⁺-ʃ-úú-k⁺w-ân **gwaanjá**
 PURP-kill-3PL.TR-HEAD-SS? dikdik

‘They formed a circle in order to kill the dikdik.’
 (i.e. they surrounded the dikdik in order to kill it.)

- b. * dúúηkááχ⁺ák⁺w gwaanjá kámá⁺ʃúúk⁺wân
 c. * dúúηkááχ⁺ák⁺w kámá⁺ʃúúk⁺w gwaanjá

- NoG
 (13.38) d-úú-ŋ-káá⁺χ-ák'w kámá⁺-fá-k'ó-má gwaanjá
 AFF-3PL.INTR-PL-encircle-HEAD PURP-die-HEAD-IP:O dikdik
 'They formed a circle in order to kill the dikdik.'
 (i.e. they surrounded the dikdik in order to kill it.)

Lastly, two finite transitive same-subject purpose clauses can share an object if the order of the clauses is V Object V. Again the same-subject finite purpose clauses must be marked with the /-(â)n/ suffix (13.39).

- NoG
 (13.39) d-úú-ŋ-káá⁺χ-ák'w kámá⁺-f-úú-k'w-ân
 AFF-3PL.INTR-PL-encircle-HEAD PURP-kill-3PL.TR-HEAD-SS?

 gwaanjá kám-6aar-úú-ân
 dikdik PURP-get-3PL.TR-SS?

 'They formed a circle in order to kill and get the dikdik.'

13.6.2 Different-Subject Purpose Clauses

Different-subject purpose clauses in Gumuz have the same structure as finite same-subject purpose clauses. The finite purpose clause in SoG is marked as a 'dependent' clause (13.41). When the object of the matrix verb is the same as that of the purpose clause in NoG, the /-(â)n/ suffix is not marked on the purpose clause regardless of whether the subject of the matrix is the same as (13.35), or different from (13.40), the purpose clause.

- NoG
 (13.40) d-úú-⁺táá-é dá lá kámá-⁺sá-gwá
 AFF-3PL.TR-take-TWRD thing PROX PURP-eat-1PL.TR
 'They brought this thing for us to eat.'

SoG
(13.41) **káma-d-ára-an** **ŋga** b-íí-ef-agá-ts
PURP-make-1SG.TR-DEP food AFF-3PL.TR-wash-NFUT-CL:body

elâ-m
hand-1SG.POSS

‘They washed my hands in order for me to prepare the food.’

APPENDIX A
ABBREVIATIONS

1PL	First person Plural
1SG	First person Singular
2PL	Second person Plural
2SG	Second person Singular
3PL	Third person Plural
3PL.IMP	Third person Plural, Impersonal
3SG	Third person Singular
A	Most Agent-like argument of a verb
A:EXT.H	A argument in a relative clause, External Head
A.REL	tonal melody of RC verb when relativizing on an A argument
AFF	Affirmative mood
AFF.HYP	Affirmative hypothetical
AW	Away, action directed away from speaker
BEN	Benefactive
CL	Classifier, either verbal or the head of a class morpheme compound
CL1	Classifier, simple (nominal) form
CL2	Classifier, complex (nominal) form
COM	Comitative
COMP	Complementizer
COND	Conditional
CONJ	Conjunction
CONJ.IMP	Conjoined Imperative, marked on second verb following and imperative in coordinated clauses
CONJ.IMP2	Conjoined Imperative, marked on second verb following and imperative in coordinated clauses
DAT	Dative
DEP	Dependent clause
DIST	Distal demonstrative
EXCL	Exclusive

EXIST	Existential verb
EYE	body part morpheme meaning ‘eye’ but of unknown grammatical status
F	Feminine (sex-based gender)
F:NH	Feminine, Nonhuman (sex-based gender)
FUT	Future Tense
GP	Greater Plural
HEAD	body part morpheme meaning ‘head’ but of unknown grammatical status
HIP	body part morpheme meaning ‘hip’ but of unknown grammatical status
HRSY	Hearsay
HYP	Hypothetical
IN	Incorporated Noun
INCL	Inclusive
INSTR	Instrumental
INTR	Intransitive
IP:MOD	Inherent Possession, modifier
IP:O	Inherent Possession, O argument
MED	Medial demonstrative
M	Masculine (sex-based gender)
M:NH	Masculine Nonhuman (sex-based gender)
MOUTH	body part morpheme meaning ‘mouth’ but of unknown grammatical status
MV	Middle Voice
NEG.HYP	Negative Hypothetical
NEG.REAL	Negative Realis
NEG.AUX	Negative Auxiliary (one of two types)
NEG.AUX2	Negative Auxiliary (second of two types)
NFUT	NonFuture tense
NI	Noun Incorporation
NM	Nominal marker
NMLZ	Nominalizer, verbal noun
NMLZ2	(Product) Nominalizer, derives nominals which retain no verbal arguments
NN	Noun-Noun (compound)
NoG	Northern Gumuz

NP	Noun Phrase
O	Object of a verb (grammatical relation)
O:EXT.H	O argument in a relative clause, External Head
P	The most Patient-like argument of a verb
PLACE	incorporated noun meaning ‘place’ but of unknown grammatical status
PP	Prepositional Phrase
pre	Body part prefix
PRF	Perfect aspect (all tenses)
PRF2	Perfect aspect (past?)
PRO.INAN	Inanimate pronoun
PRO.SG	Singular pronoun (in participant nominalizations and relative clauses)
PRO.PL	Plural pronoun (in participant nominalizations and relative clauses)
PROG	Progressive
PROX	Proximal demonstrative
PROSP	Prospective aspect
PURP	Purposive
RC	Relative Clause
RECP	Reciprocal
REFL	Reflexive
Rel. Clause	Relative Clause
REL.PRO	Relative Pronoun
RP	Resumptive Pronoun
RPST	Remote Past
S	Single argument of a verb
S:EXT.H	S argument in a relative clause, External Head
SoG	Southern Gumuz
SS	Same Subject (as matrix clause)
TEMP	Temporal Clause prefix
TEMP2	Temporal Clause prefix (second of two types)
TR	Transitive
TWRD	Action directed towards speaker, also used for an action taking place in a different location from the speaker

UNC	Uncertain
V-CL	Verb-Classifier (compound)
VD	Valence Decreaser
V-IN	Verb-Incorporated Noun (compound)
VP	Verb Phrase

APPENDIX B
EVIDENCE FOR PHONEMIC CONTRASTS

Abbreviations: WI (word-initially), WM (word-medially), WF (word-finally)

phonemes contrasted		NoG		SoG	
p:b	WI	pok'w 'give birth'	book'á (type of tuber)	pííza 'catfish'	bííza 'star'
	WM	ampóχ 'jump'	ambúχ 'pierce (ears)'	ǰáápa 'sugar cane'	baabá 'father'
	WF	ʔámp 'grandfather'	ʔámb 'throw'	n-á-p 'let him go out'	tab 'be thick'
p:p'	WI	pa-ts 'go out'	p'a-ts 'pluck'	pápá 'reed'	p'áp'a 'wing'
	WM	opá 'fava bean'	p'áp'a 'wing'	pápá 'reed'	p'áp'a 'wing'
	WF	n-á-p 'let it sprout'	n-a-p' 'let her pluck'	n-á-p 'let him go out'	n-a-p' 'let her pluck'
p':b	WI	p'áp'a 'wing'	ǰáǰá 'bark'	p'áp'a 'wing'	ǰáǰá 'bark'
	WM	p'áp'a 'wing'	ǰáǰá 'bark'	p'áp'a 'wing'	ǰáǰá 'bark'
	WF	n-úu-p 'let them go out'	ak'óǰ 'be hungry'	n-á-p 'let him go out'	táǰ 'do again'

phonemes contrasted		NoG		SoG	
p:f	WI	pá 'sprout, emerge'	fá 'drink'	pá 'sprout, emerge'	fá 'drink'
	WM	opá 'species of bean'	ufáána 'young man'	b-á-pá-gá 'it sprouted'	b-a-fá-gá 's/he drank'
	WF	d-á-p 'it sprouted'	d-a-f 's/he drank'	n-á-p 'let it sprout'	n-a-f 'let him/her drink'
f:v	WI	fáχátsa 'spirit/ghost'	váχ 'clear land (V.)'	fá 'drink'	váη 'cut grass (v.)'
	WM	ufáána 'young man'	wúvára 'spitting cobra'	b-a-fá-gá 's/he drank'	b-a-váη-ágá 's/he cut grass'
	WF		no occurrence		no occurrence
b:v	WI	baχa 'person, sg.'	váχ 'clear land (V.)'	baná 'price'	váη 'cut grass (v.)'
	WM	anbúba 'pimple'	wúvára 'spitting cobra'	kábára 'shoulder blade'	b-a-váη-ágá 's/he cut grass'
	WF		no occurrence		no occurrence
b:6	WI	biá 'medicine'	bia 'neck'	biá 'medicine'	bia 'neck'
	WM	gába 'cotton'	6ábá 'bark'	gabába 'cotton'	6ábá 'bark'
	WF	kób 'be proud'	ak'ó6 'be hungry'	táb 'do again'	tab 'be thick'

phonemes contrasted		NoG		SoG	
t:d	WI	taa 'take, bring'	dá 'work, become'	taa 'take, bring'	dá 'work, become'
	WM	gańída 'north'	ga-nit-a 'sleepiness'	ííta 'nose'	iida 'children'
	WF	bit 'descend'	bid 'heal, cure'	k'ót 'carve'	kod 'buy'
t:t'	WI	te? 'lose'	t'éé 'fear'	tee 'lose, be lost'	t'éé 'fear'
	WM	ííta 'nose'	ma-3ít'-á 'abscess,swelling'	k'waant'á 'chair'	ńíta 'bamboo'
	WF	zit 'sprinkle'	3ít 'swell'? ¹	tit 'be enough'	tít 'melt'
d:d'	WI	dá 'thing'	dáa 'axe'	dua 'child'	dú 'be sick' (Kamashi)
				dá 'thing'	dá 'go' (Sirba)
	WM	madédámá 'to hatch'	madadá 'to do' or 'work (n.)'	b-a-kod-agá 'S/he bought'	b-a-kód-agá-ts 'S/heskinning something'
	WF	kod 'buy'	kód 'skin (v)'	kod 'buy'	kód 'skin (v)'
c:ʃ	WI	cá 'give'	já 'tree'	cá 'give'	já 'tree'
	WM	gwaanjá 'dikdik'	gááncá 'bride'	áca 2PL	kája 'porcupine'
	WF	dá-líc 'wink, blink'	tij 'order'	jíc 'pierce (ears)'	tij 'order'
c:c'	WI	cíca 'thorn'	c'íi 'belch (v.)'	cíca 'thorn'	c'ih 'belch (v.)'
	WM	cíca 'thorn'	jíc'á 'mosquito'	cíca 'thorn'	jíc'á 'mosquito'
	WF	--	--	--	círc' 'hiccough (v.)'

¹ The form given for word-final /t'/ is merely inferred from the verbal noun form and not attested. If this form is correct, it is the only attested example of /t'/ in word-final position in NoG.

phonemes contrasted		NoG		SoG	
c:t	WI	cá 'give'	taa 'take'	cá 'give'	taa 'take'
	WM	lícá 'eye, face'	líta 'nose'	áca 2PL	gaata 'curse (n.)'
	WF	nzáác 'four'	hát 'curse (v.)'	nzíic 'four'	zít 'sprinkle'
c:tʃ	WI	cá 'give'	tʃá 'rain'	cá 'give'	tʃá 'rain'
	WM	cíca 'thorn'	íitʃa 'worm'	cicá 'new'	tʃítʃí 'mother's sister'
	WF	d-á-c 's/he gave'	d-á-tʃ 'It rained'	aʔáác 'be confused'	ʔátʃ 'hit, strike'
c:k	WI	cá 'give'	kaa 'say'	cá 'give'	kááʃa 'porcupinē'
	WM	áca 2PL	maaká 'day, hour'	áca 2PL	sááka 'bone marrow'
	WF	nzáác 'four'	gák 'push'	kó-c 'pretend'	ook 'be hot'
c':tʃ	WI	c'êr 'decide'	tʃ'aŋ 'boil'	c'á 'become bald'	tʃ'á 'have'
	WM	titʃ'a 'cooking stone, pot'	ʃíc'á 'mosquito'	ac'ía 'gold'	báfitʃ'ía 'species of mouse that lives in the house'
	WF	d-á-c' 'his hair fell out'	d-a-tʃ' 's/he married'	círíc' 'hiccough'	bwítʃ' 'pound'

phonemes contrasted		NoG		SoG	
ts: t	WI	tsá 'go'	taa 'take'	tsáká 'guinea fowl'	táŋk'á 'millet'
	WM	mítsa 'field'	pitá 'lie (n.)'	k'óbíítsá 'heart'	ííta 'nose'
	WF	χíi-ts 'despise'	ciit 'pay'	kó-ts 'imitate'	k'ót 'carve'
ts:tʃ	WI	tsá 'go'	tʃá 'rain (v.)'	tsáká 'guinea fowl'	tʃág-ás 'untie'
	WM	mítsa 'field'	íitʃa 'worm'	k'óbíítsá 'heart'	íitʃa 'worm'
	WF	pá-ts 'go out'	ʃátʃ 'hit (v.)'	ŋas-áá-ts 'be sick'	?atʃ 'hit (v.)'
ts: ts'	WI	tsía 'tail'	ts'íná 'story, account'	tsée-ts 'take away'	ts'éa 'ear'
	WM	ma-tsá 'to go'	máts'á 'house'	ma-tsá 'to go'	ma-ts'ala 'to swim'
	WF	táb-áts 'help'	ʃats' 'hide'	ŋas-áá-ts 'be sick'	baats' 'hide'
ts: s	WI	tsá 'go'	sá 'eat'	tsáká 'guinea fowl'	sááka 'bone marrow'
	WM	mítsa 'field'	mísá 'spirit'	k'óbíítsá 'heart'	bisa 'wound'
	WF	d-á-ts 's/he went'	d-a-s 's/he ate'	pá-ts 'go out'	pá-s 'exceed'

phonemes contrasted		NoG		SoG	
s:ʃ	WI	ʃá 'die'	sá 'eat'	ʃá 'die'	sá 'eat'
	WM	gíʃá 'rock'	mísá 'spirit'	biʃá 'tears'	bisa 'wound'
	WF	d-á-ʃ 's/he died'	d-a-s 's/he ate'	ʔíís 'cry, weep'	ʔíi-ʃ 'sit'
s:z	WI	sá 'eat'	zaɣ 'know'	ságálá 'zebra'	zakísa 'chin'
	WM	k'ósa 'tooth'	gózá 'sky'	boosa 'intestines'	búza 'owl'
	WF	atátás 'continue'	taz 'stumble'	gás 'listen'	aŋ-gááz 'become old'
ʃ:ʒ	WI	ʃá 'die'	ʒá 'baby sling'	ʃá 'die'	ʒaana 'elephant'
	WM	gíʃá 'rock'	giʒá 'year'	biʃá 'tears'	bíʒa 'star'
	WF	dá-á-ʃ 'arrive'	odáaʒ 'age-mate'		no occurrence
z:ʒ	WI	zaaɣa 'relative, kin'	ʒaana 'elephant'	ʒít 'sprinkle'	ʒít 'swell'
	WM	ga-zaz-a 'clay pot'	jááʒa 'termite'	bisa 'wound'	bíʒa 'star'
	WF	zaz 'make with clay'	odáaʒ 'age-mate'		no occurrence
ʒ:ʃ	WI	ʒaana 'elephant'	ʃáámpa 'sugar cane'	ʒít 'swell'	ʃîr 'pull'
	WM	jááʒa 'termite'	ʃaja 'sheep'	hááʒa 'termite'	ʒaaɣa 'sheep'
	WF	dugw-îʒ 'run over there'	ʒiʃ 'sleep'	no occurrence	

phonemes contrasted		NoG		SoG	
k:g	WI	kaanzá 'guinea fowl'	gáanza 'elder'	káája 'porcupine'	gááza 'elder'
	WM	báka 'shoes'	bage 'person'	sáaka 'bone marrow'	tjaaga 'knife'
	WF	bák 'burst'	fag 'grow up'	asásak 'whisper'	fag 'grow up'
k:k'	WI	kúá 'breast, milk'	k'ulá 'water pot'	kujwa 'granary, silo'	k'ujwííl 'stir'
	WM	ooká 'sun'	book'á 'cassava'	ooká 'sun'	ángók'á 'toad'
	WF	bák 'burst'	bák 'cultivate, farm'	asásak 'whisper'	t'ak 'spit'
kw: gw	WI	kwáa 'return'	gwaanjá 'dikdik'	kwaakujwá 'soup, broth'	gwaahííá 'witchcraft'
	WM	tjákwa 'fence'	tjagwa 'foot/leg'	ákwa 'we INCL'	saagwa 'fat'
	WF	jakw 'breathe'	?íi-tjagw 'stand'	jakw 'breathe'	?íi-tjagw 'stand'
kw: k'w	WI	kwáa 'return, go back'	k'wá-?ea 'shoulder'	kwaakujwá 'soup, broth'	k'waafá 'canoe'
	WM	tjákwa 'fence'	ták'wa 'mud'	béé-k'wá 'hair'	féékwa 'moth'
	WF	?aakw 'steal'	k'wáa-k'w 'answer, reply'	sanáakw 'eight'	ak'ót-áá-k'w 'coagulate'
k: kw	WI	káa 'say'	kwáa 'return'	káája 'porcupine'	kwaakujwá 'soup, broth'
	WM	baká 'vulture'	tjákwa 'fence'	peká 'snail'	féékwa 'moth'
	WF	χáákw 'remain'	gák 'push'	asásak 'whisper'	jakw 'breathe'
j:g	WI	jaχ-áá-s 'be singed'	gaχ 'be good'	jába 'shirt'	gabába 'cotton'
	WM	fága 'urine'	jaja 'sheep'	ságálá 'zebra'	kája 'porcupine'
	WF	ziɿ sleep'	anziig poor' 'be	ziɿ 'sleep'	anziig 'be poor'

phonemes contrasted		NoG		SoG	
ʔ:∅	WI	ʔaf-áts 'wash body'	asíi 'play'	ʔef-áts 'wash body'	eʔé 'sing'
	WM	míʔá 'dew'	biiá 'medicine'	meʔa 'goat'	k'ómea 'music'
	WF	wéʔ 'vomit'	úá-é 'come'	léʔ 'be tired'	le 'plow'
h:ʔ	WI	N/A	N/A	heé-ʃ 'like, accept'	ʔeé-ʃ 'leave behind'
	WM	N/A	N/A	mahá 'blood'	eáʔá 'be rotten
	WF	N/A	N/A	c'ih 'belch'	wéʔ 'vomit' ²
χ:χ ^w	WI	χα-á-c 'be scarce'	χwaá 'snake'	N/A	N/A
	WM	tamaχwá 'mad person'	maxá 'blood'	N/A	N/A
	WF	fíiaχw 'rest'	gáχ 'be good'	N/A	N/A

² /ʔ/ appears to only follow /e/ and /a/ word-finally whereas /h/ follows /o/ and /i/ word-finally. Neither /ʔ/ or /h/ is known to follow /u/ word-finally

phonemes contrasted		NoG		SoG	
d: r	WI		no occurrence	dáb 'find'	rába 'God'
	WM	kábádá 'shoulder blade'	χobáára 'loincloth'	jáádúná (species of mouse)	karuma 'lake'
	WF	fád 'rise'	c'êr 'cut, decide'	kód 'skin (v.)'	bur 'carry, haul'
d: l	WI	dú 'be sick'	lúngw 'shout'	dáamb 'try'	laabáaba 'fan (n.)'
	WM	áda 1SG	kiláála 'python'	jáádúná (species of mouse)	alálú 'roll'
	WF	kôd 'skin (v.)'	χol 'follow'	kód 'skin (v.)'	kól 'inherit'
r: l	WI	no occurrence		lak'aanzía 'bile'	rak'a 'thorn tree'
	WM	sara 'bush'	k'ála 'horn (musical instrument)'	saría 'barren woman'	balía 'onion'
	WF	at'at'ár 'complain'	ntál 'float (v.)'	kâr 'run out'	kâl 'say'
r: n	WI	no occurrence		rambá 'baby sling'	nan 'be sated'
	WM	χobáára 'loincloth'	ufáána 'young man'	tjáara 'head of arrown'	zaana 'elephant'
	WF	c'êr 'cut'	k'ón 'beg'	kâr 'run out'	k'ón 'beg'
n: l	WI	náχ 'stop up'	lááχot 'curse'	náánúá 'donkey'	laabáaba 'fan (n.)'
	WM	kiláána 'hollow'	kiláála 'python'	badana 'mudfish'	dála 'axe'
	WF	k'ón 'beg'	χol 'follow'	k'ón 'beg'	kól 'inherit'

phonemes contrasted		NoG		SoG	
ŋ:ŋw	WI		no occurrence		no occurrence
	WM	saja ‘salt’	zanwá ‘bee hive’	áŋa 3SG	aŋwa ‘clothes’
	WF		no occurrence		no occurrence
ŋ: h	WI		N/A	ŋawá ‘hyena’	háa ‘yawn’
	WM		N/A	baabaŋa ‘palm tree’	mahá ‘blood’
	WF		N/A	c’ih ‘belch’	tʃ’iŋ ‘wail, ululate’
ŋ: n	WI	ŋaar ‘take’	náánúá ‘donkey’	ŋaar ‘take’	náánúá ‘donkey’
	WM	baabuŋa ‘mud wasp’	sakúná ‘head lice’	muŋa ‘partridge’	muna ‘shrew’
	WF	fûŋ ‘smell’	k’ón ‘beg’	bâŋ ‘dance’	mân ‘be expensive’
ŋ: m	WI	ŋáj ‘soak’	ma-ǰá ‘corpse’	ŋi ‘insult’	míʔá ‘dew’
	WM	cííŋá ‘hail’	sííma ‘garlic’	áŋa 3SG	maamá ‘father’s sister’
	WF	tʃiŋ ‘smell’	ǰîm ‘throw’	gáŋ ‘be good’	gam ‘know, find’ ³
m:n	WI	maǰá ‘blood’	náǰ ‘stop up’	máf ‘copulate’	n-á-f ‘let him/her drink’
	WM	áma 2SG	ufáána ‘young man’	súma ‘garlic’	jáádúná (species of mouse)
	WF	maats’an ‘condole, comfort’	zam ‘be long’	hom ‘be angry’	k’ón ‘beg’

³ In SoG, /gam/ varies with /ga ŋ/ for ‘know’. Thus, this is a very weak contrast as there exist no better data showing contrast between /ŋ/ and /m/ word-finally in analogous environments.

phonemes contrasted		NoG		SoG	
w:u	WI	walíá ‘gazelle’	úá ‘go away’	wáɲa ‘mud wasp’	úá ‘go away’
	WM	tʃiááwa ‘mother’s sister’	χwaá-úá ‘your (sg.) snake’	jááwa ‘shell’	laúa ‘civet cat’
	WF	no occurrence other than as an allophone of [u]		no known occurrence	
w:o	WI	walíá ‘gazelle’	oáátáátéa ‘black ant’	no unambiguous contrast	
	WM	no unambiguous contrast		no unambiguous contrast	
	WF	no occurrence other than as an allophone of [u]		no known occurrence	
j:i	WI	no unambiguous contrast		no unambiguous contrast	
	WM	no unambiguous contrast		aja ‘water’	daía ‘baboon’
	WF	no unambiguous contrast		no unambiguous contrast	
j:e	WI	jááua ‘shell’	eaawá ‘bleeding heart baboon’	jááɲwa ‘locust’	ee-áɲwa ‘large piece of cloth’
	WM	no unambiguous contrast		no unambiguous contrast	
	WF	aáj	úá-é ‘come’	aáj	úá-é ‘come’

APPENDIX C
VERBAL CLASSIFIERS AND VERBAL ROOTS

Below is a table of verbal roots in Gumuz and their co-occurrence with verbal classifiers. Where verb root cognates in NoG and SoG exist, these are given in the same quadrant, NoG first and SoG just below. If both the simple and complex form of the verbal classifier are known to occur on a verb root (in NoG), this is indicated by X/X instead of merely X. This list is not exhaustive.

Co-occurrence of Verbal Classifiers and Verbal Roots

Verbal Roots	Simple/Complex Verbal Classifiers					
	-(V)k'w 'head' -fík ^w	-(V)c 'eye' -fíc	-(V)k'wos 'tooth' -fík ^w ós	-(V)ts'ê 'ear' -fíts'ê	-(V)ts 'body'	-fíl 'belly'
(NoG) ?af (SoG) ?ef 'wash'	X / X	X / X	X / X	X / X	X	X
k'of 'penetrate' k'of	X	X / X	X / X		X	
fíj- 'soak' fáf- ~ fíj-	X	X / X	X / X		X	
ook 'heat' ook	X / X	X / X	X		X	X
fíl 'glean/gather' fíl	X	X	X		X	
fûŋ 'smell' fâŋ	X / X	X / X	/ X		X	
wíd 'see/check' jír	X / X	X / X	X / X	X / X	X	

Verbal Roots	Simple/Complex Verbal Classifiers					
	-(V)k'w 'head' -ílúk ^w	-(V)c 'eye' -ílic	-(V)k'wos 'tooth' -ílk ^w ós	-(V)ts'ê 'ear' -ílits'ê	-(V)ts 'body'	-ífl 'belly'
fwic 'blow' fitʃ	/ X X	X / X X	X / X		X	
ceʔ 'dry' céʔ	/ X X /	X / X	/ X X /		X X	X
korak 'peel' ts'erak	X / X X /	X X			X X	
(NoG) k'orak 'gnaw'	X/				X	
(SoG) c'ej 'cut'				X		
tak 'spit' tak	X X	X X			X X	
ampóχ 'jump' apóo	X X	X X			X	X
cá 'give' cá	X X					
ʃá 'die/extinguish' ʃá	X X	X X	X		X X	
nt 'twist' nt	X X	X X	X / X X	/ X / X		
gis 'fry/grill/roast' gis	/ X X		X / X		X	

Verbal Roots	Simple/Complex Verbal Classifiers					
	-(V)k'w 'head' -ílúk ^w	-(V)c 'eye' -ílíc	-(V)k'wos 'tooth' -íl ^w ós	-(V)ts'ê 'ear' -ílíts'ê	-(V)ts 'body'	-íl 'belly',
(SoG) nz 'roast'	X		X			
(NoG) ko d 'skin/strip'	X / X	X		/ X		
ɲar 'take,bring' ɲar	X / X		X			
(NoG) ta ? 'take, bring'	X /		X /		X	
(NoG) tʃim 'sew'		X			X	
(NoG) tʃé? 'remove, pull'	X	X			X	
(SoG) tsé					X	
ɓátʃ 'hit' ʔótʃ ~ ʔátʃ	X	X			X	
k'aŋ 'bite' k'aŋ	X	X			X	
(SoG) tib 'kick'		X				
sim 'boil down, melt'	X				X	
(SoG) tab 'be thick'		X			X	
(SoG) bal 'be bright'		X				
tax 'hang' nta?		X				

Verbal Roots	Simple/Complex Verbal Classifiers					
	-(V)k'w 'head' -ílúk ^w	-(V)c 'eye' -ílíc	-(V)k'wos 'tooth' -íl ^w ós	-(V)ts'ê 'ear' -ílíts'ê	-(V)ts 'body'	-íl 'belly',
t'oo 'put, do'	X					
t'oo	X				X	
dugw 'run, smear'	X	X			X	
tʃaŋ 'boil'	X	X			X	
tʃaŋ	X	X			X	
damb 'try, taste'		X			X	X
damb		X			X	
gam 'know'	X					X
dáb 'find'	X	X			X	
dáb	X	X			X	
(SoG) mán 'be good, valuable'	X	X			X	
(NoG) gaa ʃ 'grind'	X	X				
(SoG) dugw 'run, plaster, spread'	X	X			X	
βín 'be cold'	X	X			X	
zee 'watch, wait for'	X	X				
t'oo 'put, place, lay'	X					
aŋo 'put together'	X	X				
faat 'fall'	X	X			X	
fá 'drink'	X	X				X
βats' 'hide'	X	X				
ciŋ 'smell'	X				X	

Verbal Roots	Simple/Complex Verbal Classifiers					
	-(V)k'w 'head'	-(V)c 'eye'	-(V)k'wos 'tooth'	-(V)ts'ê 'ear'	-(V)ts 'body'	-íl 'belly'
	-ílúk ^w	-ílíc	-íl ^w ós	-ílíts'ê		
fâg 'urinate'		X				
ḡáts' 'press'		X				
kád' 'finish, run out'	X	X				

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