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## A grammar of Nchane

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## A grammar of Nchane

## A Bantoid (Beboid) language of Cameroon

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ter verkrijging van
de graad van Doctor aan de Universiteit Leiden, op gezag van Rector Magnificus prof.mr. C.J.J.M. Stolker, volgens besluit van het College voor Promoties te verdedigen op dinsdag 30 juni 2020
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Mbeгysะ nyume f£ Nyo le! (To God be the glory!)

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## List of abbreviations

| $1,2,3$ | first, second, third |
| :--- | :--- |
| AM | associative marker |
| ANA1 | anaphoric demonstrative 1 |
| ANA2 | anaphoric demonstrative 2 |
| APPL | applicative |
| CAUS | causative |
| CE | counter-expectation |
| COM | comitative |
| COMP | complementizer |
| COMP(K) | ki complementizer |
| COMPL | completive |
| COND | conditional |
| COP | copula |
| PCOP | past copula |
| COP(N) | n-copula |
| DIST | distal |
| DISTR | distributive |
| EXCL | exclusive |
| FOC | focus particle |
| FUT | future |
| GEST | quotable gesture marker |
| HAB | habitual |
| HORT | hortative |
| IDEO | ideophone |
| IMP | imperative |
| INTERJ | interjection |
| ITER | iterative |
| LOC | locative |
| NEG1 | negative 1 particle |
| NEG2 | negative 2 particle |
|  |  |


| NMZR | nominalizer |
| :--- | :--- |
| P1 | near past |
| P2 | medial past |
| P3 | remote past |
| PL or pl | plural |
| POSS | possessive |
| PRO | pronoun |
| PROG | progressive |
| PROX | proximal |
| Q | question particle |
| QP | polar question tonal clitic |
| REL | relativizer |
| RES | resultative |
| SET | setting |
| SG or sg | singular |
| SIT | situative |
| VET | vetitive |

## List of symbols

| / / | phonemic representation |
| :---: | :---: |
| [ ] | phonetic representation |
| ] | right edge phrase boundary |
| C | consonant |
| V | vowel |
| N | nasal consonant or noun |
|  | half-long vowel |
| : | long vowel |
| - | morpheme break |
| ~ | alternative form (usually indicating free variation) |
| G | glide |
| (v) | verb |
| F | fricative |
|  | syllable boundary |
| $\sigma$ | syllable |
| $\downarrow$ | tonal downstep or downdrift |
| $\downarrow$ | lowered tonal register associated with reduplicated forms |
| $\uparrow$ | raised tonal register associated with some conditional constructions and some topics |
| ${ }^{0}$ | partially lowered tone |
| ${ }^{\mathrm{H}}=$ | high tone clitic |
| * | protoform or ungrammatical form |
| ?? | unanalyzed or unknown |
| \# | semantically unacceptable |

## Lists of affixes and particles

## Affixes:

| -é/V-V́ | PROG | progressive suffix |
| :---: | :---: | :---: |
| -sć | CAUS | causative suffix |
| -yغ̀ | DISTR | distributive suffix |
| kī- | c7 | class 7 nominal and agreement prefix |
| bī- | c8 | class 8 nominal and agreement prefix |
| fì(N)- | c19 | class 19 nominal and agreement prefix |
| mū(N)- | c18a | class 18a nominal and agreement prefix |
| bvū- | c14 | class 14 nominal and agreement prefix |
| $\mathrm{ma}(\mathrm{N})-/ \mathrm{N}-$ | c6a | class 6a nominal and agreement prefix |
| bā- | c2 | class 2 nominal and agreement prefix |
| f $\overline{\text { ¢ }}$ | c16 | class 16 nominal and agreement prefix |
| $\overline{\mathrm{a}}$ - | c6, c18 | class 6 and class 18 nominal and agreement prefix |
| chī- | c13 | class 13 nominal and agreement prefix |
| Ø- | c1, c4, c5 | classes 1, 4 and 5 nominal prefix |
| -w- | c3 | class 3 nominal infix |
| wu- | c1, c3 | class 1 and class 3 agreement prefix |
| N - | NMZR | nominalizer prefix |
| N - | 1SG | first-person singular agreement prefix |

## Particles:

| á | NEG1 | clause-initial negation particle in non-past and/or progressive clausal negation constructions |
| :---: | :---: | :---: |
| à | 'in' | preposition expressing bounded location |
| bå bạ́: | 'still' | expresses ongoing action or condition; also present in certain clausal negation constructions |
| bé | P1, ${ }^{\text {P }}$ COP | near past, past copula |
| bé | 'with' | coordinating conjunction; comitative preposition |
| ché | P2 | medial past |
| dó | SIT | situative particle, marks support clauses expressing backgrounded situational information |
| f ¢̀ | 'at' | preposition expressing movement |
| g ¢́ | EXCL | exclusive marker |
| $\mathrm{g} \bar{\varepsilon}$ | NEG2 | negation particle; clause-final in all negative constructions, immediately precedes negated clausal constituents |
| $\mathrm{g} \bar{\varepsilon}$ | P3 | remote past, narrative past |
| ká | ITER | iterative marker, expresses repetition of action |
| kì | COMP(K) | complementizer, complement always has same subject as main clause |
| là | CE | counter-expectation particle |
| lé | COP | copula |
| lē | APPL | applicative postposition |
| $1 \bar{\varepsilon}$ | SET | setting particle, introduces support clauses expressing general background information |
| $1 \bar{\varepsilon}$ | COMP | complementizer |
| lo | FOC | verb focus particle |
| m | RES | resultative particle, expresses resultative relationship between its clause and a previous clause; also functions as a scalar focus particle |
| né | 'if' | conditional particle, introduces protases of conditional constructions |
| né | GEST | quotable gesture particle |
| nù | COP(N) | n-copula; also functions as marker of counter expectation focus |
| tı́ | 'also' | additive particle |
| to | HAB | habitual marker |
| tú | 'return' | durative marker, sequential marker |
| yè | 'on' | preposition expressing unbounded location |

## Chapter 1

## Introduction

This descriptive grammar represents research carried out over a period of fifteen years, much of that time while I was residing in the Nchane-speaking village of Nfume. Numerous aspects of the grammar proved challenging to puzzle out, and they reveal a Bantoid language with valuable things to add to the discussion of languages in the area. As befitting an introduction, the current chapter provides an overview of the language of study and the people who use it in $\S 1.1$. Previous research is presented in $\S 1.2$, including important works in nearby languages. Details regarding the methods of research utilized in this work are given in $\S 1.3$, providing the orientation needed by the reader to properly interpret the analyses and conclusions. A general orientation to the study appears in §1.4.

### 1.1 Language ecology

The cultural milieu of a people is critical to understand how they express themselves through language. This section provides a snapshot into the way Nchane people live and how they are oriented in their environment. I begin with some general facts about the geographical location, tribal makeup, economic activities, etc. Language use and contact is discussed next, followed by details regarding Nchane's place in the linguistic setting. The final section considers the questionable classification of the Mungong speech variety.

### 1.1.1 Ethnography

Nchane is a Beboid language spoken in the North West Region of Cameroon, DongaMantung Division, Misaje-Subdivision. The Atlas Linguistique du Cameroun (ALCAM) lists the language as: Ncane [873] (Dieu \& Renaud 1983). The autonym Nchane is used as the primary entry by the Ethnologue, which also lists the following as language name variations: Cane, Ncane, Nchaney, Nchanti, and Ntshanti, (ISO 639-3 language code: ncr) (Eberhard, Simons \& Fennig 2020). The number of local speakers is estimated to be $13,000-15,000$, with perhaps 1,000 or more Nchane people in the diaspora.

The Nchane kingdom is comprised of five distinct chiefdoms, each of which have separate villages which are often further divided into village quarters: Nkanchi, Chunge, Nfume, Bem and Kibbo. Each chiefdom is naturally headed by its own chief (or nfon) and usually one or more subchiefs. These villages and village quarters are mostly situated in a valley running largely northwest to southeast, with the subdivisional head Misaje at the northern end and the Nfume quarter Kamala at the southeastern end.

The Nchane language area is illustrated in Figure 1.1. Primary access to the area is via the Ring Road, which forms a ring covering much of the Northwest Region, with Misaje situated along the northernmost stretch. The road is approximately 350 km long and consists of both paved and graded dirt sections. The elevation of the valley is approximately 500 meters, with the peaks of the surrounding mountains at 700-800 meters. The two Kibbo quarters are located just outside of the valley in what could be described as a mountain pass, which leads to the Noni language area. The two Bem quarters are situated on a plateau formed on the western side of a ridge separating them from the valley-side Nchane villages. The Nkanchi quarter Chako also sits on this plateau, but at a lower elevation. The Nfume quarter Abeng is located on a plateau belonging to the opposite (eastern) ridge. As the map shows, these "outer" villages are accessible only by footpath. It should be noted that the map shows only some of the more well-traveled footpaths. The entire area has a well-developed system of footpaths, providing a more or less direct route to the various markets and access to the numerous garden plots farmed by the people.


Figure 1.1 Map of the Nchane language area.

The most common historical accounts claim that the Nchane people migrated to the area from Tikar, roughly 100 km to the southeast. A less common account reports the migration as being from Kano in Nigeria, a distance of 700 km to the north. In truth, the accuracy of such accounts is difficult if not impossible to verify. See

Pelican (2006) for further discussion of Nchane history and the problems associated with verification.

The language and culture of the people are similar to those of the neighboring peoples. There is some level of multilingualism, particularly with Noni, and lesser with the other Beboid varieties. Intermarriage between the Nchane people and other Beboid languages is fairly common, and in some cases institutionalized. For example, the chiefs of certain Nchane villages traditionally take a wife from certain villages outside of the Nchane kingdom. This practice results in regular, ongoing language contact and the ensuing multilingualism.

The people are mostly subsistence farmers, growing diverse crops of corn, pumpkins, peppers, cassava, yams, peanuts (called "groundnuts" in Cameroon Pidgin English), sugar cane, tomatoes and onions. Huckleberry (solanum scabrum) is grown year-round for its green leaves from which njama is made. This dish is referred to as "soup" and is the favorite accompaniment for fufu, the primary meal item in the local area, which is made from corn flour. (Note that fufu is made from other starchy vegetables such as cassava in other parts of Cameroon.) Meals may include meat, fish or chicken when available, and certainly for special occasions.

The above vegetables are often taken to the local markets to be sold, an economic activity carried out primarily by women. Mangoes and papayas are common to the area, as are African plums (dacryodes edulis). Some people grow these items specifically to be sold in the markets. Men also have "cash crops", such as palm oil and palm wine.

Domestication of animals among the Nchane people includes chickens, pigs and goats. The raising of goats serves as a type of savings account, with wealth accumulated and stored through the herd. When special financial needs arise such as school fees or medical bills, one or more goats can be sold for the required money. Cattle are common in the area as well, but ranching is mostly an activity carried out by the semi-transitory Fulani, who are spread throughout the region.

African traditional religion is widely practiced by the Nchane people and elements are infused into much of the culture (e.g., behavior deemed as respectful of elders, eating rituals, dances, adherence to local societal rules, taboos, etc.). A local Christian presence has been in the area since at least the 1920's and its influence appears to be growing. Many people claim membership with one of the several Christian churches in the area, although their attendance of services might be rare and they often continue traditional religious practices. The presence of the largely Muslim Fulani population also means that the Nchane people are exposed to and influenced by Islam. But the number of Nchane adherents appears to remain small.

### 1.1.2 Sociolinguistic picture

The status of Nchane language vitality is consistent with level 5 "developing" on the EGIDS scale ${ }^{1}$. The language is used as the primary means of communication in Nchane homes, among young and old people, in local markets and in village council meetings. Local Christian churches use Nchane and Cameroon Pidgin English, depending on the makeup of attendees and whether or not the preacher is fluent in Nchane. (Pastors from outside the language area are often assigned to Nchane churches). Songs during services are also a mix of Nchane and Cameroon Pidgin English, with Nchane songs less common, but appearing to be growing in use. Community-wide events are also often characterized by Nchane language use, except in Misaje, which has a mixture of people groups.

As mentioned above, contact with other languages is fairly common through intermarriage, as well as at local markets and special events focused around Misaje. Cameroon Pidgin English use is moderate, particularly among men, and English is the language of instruction in local schools. Nchane people also have a good chance of exposure to Fulfulde, spoken by the Fulani living nearby, and limited exposure to Hausa through traders coming from Nigeria.

### 1.1.3 Language context

The Ethnologue gives Nchane the following genetic affiliation: Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Beboid (Eberhard, Simons \& Fennig 2020), with Mungong listed as an Nchane variety. Nchane's place in the Bantoid family is illustrated in Figure 1.2, which reflects classifications proposed by the Ethnologue, Williamson and Blench (2000: 18) and my own fieldwork.

The presentation of the Beboid languages in this figure deserves a few comments. First, the dashed line connecting Mashi and Naki indicates that Mashi is considered a variety of Naki by Good et al. (2011). A second remark pertains to the language "Chungmboko", which is a compound designation comprised of the two speech varieties spoken in Chung (Kimbi) and Mbuk respectively. These two varieties are currently working together in language development facilitated by SIL, but could later prove to represent separate languages. Lastly, as stated above, the Ethnologue lists Mungong as a variety of Nchane. However, I believe this designation to be unsupportable for reasons laid out in the following section.

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Figure 1.2 Nchane genetic affiliation tree.

The map in Figure 1.3 shows how the Beboid languages are situated.


Figure 1.3 Map of Beboid speech forms (adapted from Hamm et al. 2002: 28).

The Nchane language area is insulated from influence from non-Beboid languages on the north and south by other Beboid languages. It is bordered by Bum (Grassfields, Central Ring) on the west and Limbum (Grassfields, Mbam-Nkam) on the east. The Yemne-Kimbi language area is provided in the map as well, since it is geographically close, and prior to 2014 those languages were classified as Western Beboid, while the current Beboid languages (including Nchane) were designated as Eastern Beboid at that time.

### 1.1.4 The Mungong question

The Mungong speech variety, spoken in a single village to the northwest of the Nchane area (see Figure 1.3), was unclassified prior to 2005, with Eastern Beboid membership considered a possibility. Classification as an Nchane variety was largely predicated on language survey results (Brye \& Brye 2001), with study of lexical similarity carried out in 1999 followed by intelligibility testing later that same year. The lexical comparison showed a similarity close to $90 \%$ for Mungong and both Nchane and Noni. My own comparisons of lexical items from Mungong and Nchane varieties result in lower similarity numbers, but only modestly so.

The intelligibility testing carried out by Brye and Brye also supported Mungong and Nchane as a single language. However, the research method used did not measure mutual intelligibility, with only Mungong speakers' comprehension of Nchane tested. Nchane speakers routinely report that they do not understand Mungong, and certainly do not think of it as a form of Nchane. Regardless, the two studies engendered a view of Nchane and Mungong as a single language.

With the recently adopted notion of Mungong as an Nchane dialect, a language development project then began in 2003, utilizing a language cluster approach targeting the Beboid languages in the Misaje area. The Mungong and Nchane communities were asked to work together, treating their distinct varieties as dialects of a single language. This request was met with tentative openness on one side and aggressive refusal on the other. This disparate reaction is reflective of what I later saw as a characteristic of the Mungong people-that they are positively disposed towards language acquisition. In effect, the Mungong people appear to be active "collectors" of the languages surrounding them. ${ }^{2}$

In part, the pursuit of polyglossia among the Mungong people surely has to do with their relatively small population, which is estimated to be between 1,200 and 1,500 . This is compared, for example, to Nchane $(15,000)$, Kemedzung $(4,500)$, Bum $(21,000)$ or Lamnso $(240,000)$. Each of these languages has a much larger population and fluency in each is positively viewed and pursued by the Mungong people. Having fluency in these "more powerful" languages allows the Mungong people flexibility in aligning themselves with whichever sociolinguistic identity best serves their purposes

[^1]in any given social interaction. (Di Carlo (2018) speaks of the complexities of multilingualism in this area of Cameroon, including language choice as it relates to matters of spirituality, viewed as the source of power disparities realized in social encounters.)

Setting aside for the moment the perceived value given to multilingualism, linguistic differences between Mungong and Nchane varieties are somewhat modest. However, the two sound systems are notably different; Nchane has only 18 consonants and 7 vowels, while Mungong has 21 consonants and 9 vowels. Furthermore, significant differences between the grammars are observed as well, some of which are listed in Table 1.1.

| Element | Nchane | Mungong |
| :--- | :--- | :--- |
| Demonstratives | two-distance system <br> (proximal/distal) | three-distance system <br> (proximal/medial/distal) |
| Anaphoric | two dedicated anaphoric <br> demonstratives, with emotional <br> Reference | one dedicated anaphoric <br> demonstrative, no emotional deixis <br> apparent |
| Noun Classes | 15 non-locative classes |  |

Table 1.1 Some contrasting elements of Nchane and Mungong grammar.

Perhaps even more substantial distinctions between the two language varieties are observed when considered from a sociolinguistic perspective. There is no shared
history between the two peoples as far as I am aware of. Indeed, Pelican, whose dissertation on interethnic relationships (2006) and follow-up study on identity politics (2015) in the Misaje area, makes no mention whatsoever of Mungong. These works include a thorough account of Nchane history from multiple sources, and yet there is no reference to Mungong.

Pelican points out that historical accounts in the area are subject to "production" and closely aligned with identity (2006: 105). In other words, history is formulated to accommodate the current socio-political realities in an ongoing effort to best situate one's people for advantage. But, for there to be no mention of Mungong in any of the Nchane historical accounts is telling. In fact, some sources (e.g., Chilver 1993; Glauning 1906) suggest that Mungong is more closely associated historically with the Bum people (Grassfields), at least in the more recent past. This is supported by the fact that Mungong belongs to the Bum subdivision (along with the village Bum), while Nchane belongs to the Misaje subdivision.

Significant differences between the Nchane and Mungong speech varieties have been outlined above, including grammatical structures and sociolinguistic characteristics. In addition, language development activities are ongoing in both language communities, with a growing body of literature unique to each speech variety. ${ }^{3}$ These factors support the recognition of Nchane and Mungong as distinct from one another, the view taken in this dissertation. I have attempted to provide details of Mungong grammar for contrast and comparison whenever appropriate and when such details are available, to further support this conclusion.

### 1.2 Previous research and relevant literature

The earliest substantial linguistic work on Nchane was in the form of a cross-linguistic study of the noun class systems of the Beboid languages, excluding Chungmboko and Mungong (Hombert 1980). Many of Hombert's initial findings are substantiated in this current analysis. A dissertation phonology was also done, describing the sound systems of Nchane, Noni and Sari (Richards 1991).

More recently, another dissertation on the Beboid languages was completed in (2010). This work was carried out by Nathan Kimbi, a native Nchane speaker, and sought to establish a theoretical basis for a unifying orthography to serve the Nchane, Sari, Kemedzung, Naami, Mungong, Chungmboko and Naki language communities. It includes some phonological and grammatical details of the languages of study, as well as a practical plan and materials for implementing the pan-Beboid writing system. Interestingly, Nchane serves as the basis for the proposed orthography. This

[^2]is argued for as Nchane is viewed as geographically and linguistically central to the language cluster and therefore, the most widely accessible to all the speech varieties.

As Kimbi's work was being finalized, an SIL sponsored project involving most of these languages was just beginning, which resulted in a number of preliminary works by my colleagues and myself. Those works concerned with Nchane include an orthography proposal (Boutwell \& Boutwell 2008), a sketch grammar (Boutwell 2010), a preliminary phonology (Boutwell 2014a), and a description of tone in the noun phrase (Boutwell 2015). The most recent work is an analysis of the demonstrative system, with particular attention given to the anaphoric demonstratives (Boutwell 2018).

Studies involving Mungong generally occurred in parallel with those of Nchane. These include a phonology sketch (Boutwell 2011), orthography proposal (Boutwell \& Boutwell 2011) and sketch grammar (Boutwell 2014b). The sketch grammars of Nchane and Mungong demonstrate many similarities between the two speech varieties. However, a number of differences are also apparent, as pointed out in §1.1.4.

In addition to Hombert's research on Beboid noun classes, three other works stand out as particularly important to my analysis of Nchane grammar. First is a 121-page grammar of Noni produced by Hyman (1981). Because of the linguistic nearness of Noni and Nchane, this work provided a helpful start in understanding many of Nchane's grammatical structures. Second and third are two recent dissertations on Yemne-Kimbi languages: Mungbam (Lovegren 2013) and Mundabli (Voll 2017). The importance of these three works is revealed through the many references to them employed throughout this grammar.

### 1.3 Research situation

Data for this descriptive work come from several sources and were collected over a period extending between 2004 and 2018. The work commenced upon my assignment to the Misaje Cluster project, sponsored by SIL, along with two other families. My family moved to the Nchane village of Nfume in 2004 and lived among the people until 2014, with year-long "sabbaticals" in the States about every fourth year.

### 1.3.1 Nature of the data corpus

The recording of cultural observations was the first formal activity, coupled with attempts at learning to speak and understand the language (with only very modest initial success). The collection of a wordlist ${ }^{4}$ also was accomplished during the first year of our stay in Nfume, with an Nfume resident serving as my primary language consultant. The wordlist was inputted into SIL's Toolbox and Flex databases. Initial

[^3]phonological analysis utilized data from this wordlist, leading to a proposed alphabet, orthography guide and phonology sketch.

A sketch grammar followed, based on a small number of texts that I collected, and elicited materials to fill in some of the gaps, including some paradigms. Tone analysis was a real challenge, with tone frames collected to reveal underlying tones and tonal behavior. Noun phrase tone was studied first, followed by verb tone. At about the same time, the Misaje Cluster project translators (discussed more in $\S 1.3 .2$ ) collected several texts as part of their training, some of which they then transcribed and interlinearized. With their assistance, these texts were then checked and reanalyzed by myself.

The data collected prior to the formal commencement of my doctoral studies in 2016 proved insufficient in a number of areas. Once unanswered research questions were identified, I traveled back to Cameroon for a 3-week fieldtrip in July 2018 to supplement the data. Working with Kilese Raphael Ngong (member of the Nchane translation team) and Elijah Kwawe (the Nchane literacy coordinator), I elicited data targeting numerous areas of the grammar such as locative constructions, compound pronouns, copula selection, etc. A selection of verbs was also sorted into tone groups and tense-aspect-modality frames were elicited utilizing representative verbs from each tone group. Furthermore, I was in contact with members of the Nchane translation team during the period of my doctoral studies (2016-2020) via texting media through which confirmations and/or clarifications for certain analyses were accomplished as well as eliciting a small amount of additional data.

All of these activities combined to form the data corpus serving as the basis for the description presented in this work, including a lexicon, texts and several sets of paradigms. The lexicon database contains about 1,600 items. The text corpus includes 23 texts with almost 8,000 words. Well over half of these texts are fully interlinearized. The text corpus contains a variety of text types, including Narrative (historical as well as folk tales), Hortatory, Procedural and Expository.

### 1.3.2 Language consultants

It will come as no surprise that many individual speakers have impacted this study. Accounting for all of them is an impossible task, since even passing interactions with friends and neighbors certainly affected the way I understood the language. However, it is fitting that certain individuals are recognized for their contributions to this effort. Therefore, the following list is provided (in no particular order) of speakers who contributed in a formal way, usually by giving of their time with the specific purpose of data collection or fielding my questions regarding interpretations and analyses. Following each name, the gender and approximate age (at the time of interaction) of the speaker is given, as well as his or her birth village.

Key language consultants: Shey Tamfu Ephriam (male 30-40 from Nfume), Emmanuel Chambang (male 20-30 from Bem), Nji Enock Tanjong (male 30-40 from Nkanchi), Tata Andreas Tawong (male 40-50 from Nfume), Bekwa Oscar (male 50-

60 from Nkanchi), Hilda Ayaba (female 20-30 from Nfume), Muabong Fon Michael (male 30-40 from Nkanchi), Sjinkwe Thomas (male 60-70 from Nfume), Elijah Kwawe (male 30-40 from Nkanchi).

In 2010, the Misaje Cluster project began the arduous task of Bible translation. Several Nchane speakers submitted themselves to an application process, with the following candidates accepted to serve as translators: Chila Frederick Kilese (male 30-40 from Kamala), Kilese Raphael Ngong (male 30-40 from Nkanchi), Kilese Samuel Nfonkwa (male 30-40 from Kamala) and Soka Sylverius Dosi (male 30-40 from Nkanchi).

These four (along with their counterparts from the other Beboid languages involved in the cluster project) received training in many different aspects of translation work, including limited instruction in linguistic analysis. Their almost daily struggles with translation issues coupled with exposure to linguistic concepts meant that their assistance was particularly insightful. My data corpus also grew as a result of their linguistics training, which sometimes involved the collection and analysis of texts, as mentioned earlier.

### 1.3.3 Presentation of the data

Most of the data presented in this description is given as numbered examples. The general format of these consists of three lines, with line one giving the vernacular usually analyzed for morphology, line two providing morpheme glosses, and the English translation appearing in line three. For text examples, a reference designation usually appears at the far right of the last line. The vernacular is presented utilizing a practical orthography, the details of which are provided below. Particular structures illustrated by the examples are usually bolded or set apart by brackets. Grammatical glosses appear in small caps and are guided by the Leipzig Glossing Rules (Comrie, Haspelmath \& Bickel 2008). The English translations are italicized and enclosed in single quotation marks (double quotation marks are used to set off quoted speech).

The orthography used in this description is generally comparable to the practical orthography adopted by the Nchane community, but with three exceptions. The first involves the palatal nasal, which is represented with the International Phonetic Alphabet (IPA) form to allow for transparent portrayal of instances of $/ \mathbf{n} /-/ \mathbf{j} /$ sequences, since [ $\mathbf{n}$ ] can be ambiguous as to its underlying form. In other words, ny is reserved for a nasal-approximant sequence (see §2.1.1 for more details). The description's consonant orthography is given in Table 1.2, along with the Nchane practical orthography (Boutwell \& Boutwell 2008), IPA and the comparable Cameroon alphabet letters (Tadadjeu \& Sadembouo 1984).

| Description orthography | Practical orthography | IPA | Cameroon alphabet |
| :---: | :---: | :---: | :---: |
| b | b | b | b |
| ch | ch | t 5 | c |
| d | d | d | d |
| f | f | f | f |
| g | g | g | g |
| gh | gh | 8 | gh |
| j | j | d3 | j |
| k | k | k | k |
| 1 | 1 | 1 | 1 |
| m | m | m | m |
| n | n | n | n |
| n | ny | n | ny |
| y | y | y | y |
| s | S | s | s |
| sh | sh | S | sh |
| t | t | t | t |
| w | w | w | w |
| v | v | v | v |
| y | y | j | y |

Table 1.2 Consonant graphemes compared with the practical orthography, the Cameroon alphabet and IPA.

Note that the voiced velar fricative is a recent addition to the Nchane orthography and does not appear in the 2008 edition of the orthography guide.

The second departure from the Nchane practical orthography involves the mid back rounded vowel. The 2008 orthography guide called for the use of the graphemes $\mathbf{u}, \mathbf{o}$, and $\boldsymbol{\jmath}$ to represent high, near high and mid back vowels respectively. However, implementation of these graphemes proved problematic. Upon further study, it was clear that the high-near high distinction had largely been neutralized for the back vowels. The community very quickly abandoned the use of the grapheme $\mathbf{\rho}$, preferring to represent the mid back vowel with the less exotic grapheme $\mathbf{o}$. The $\mathbf{u}$ grapheme was maintained, but put to use in representing the near high back vowel, as well as the fricative vowel "Fu", which is always written following either $\mathbf{f}$ or $\mathbf{v}$.

The $\boldsymbol{\jmath}$ grapheme is chosen for the description's orthography in an attempt to alleviate possible confusion that $\mathbf{o}$ might bring, since in the practical orthography, $\mathbf{o}$ represents $/ \mathbf{J} /$ and $\mathbf{u}$ represents $/ \mathbf{o} /$. The grapheme $\mathbf{u}$ is maintained, since there is no $/ \mathbf{u} /$ with which it could be confused, $/ \mathbf{u} /$ being synchronically represented as $/{ }^{F} \mathbf{u} /$. To illustrate the point further, jú represents /dzo/ 'sun', while jvū represents $/ \mathbf{d} \mathbf{3}^{\mathbf{F}} \mathbf{u}$ / 'cobra'. In addition, phonetically / $\mathbf{0} /$ is realized higher than [ $\mathbf{0}$ ] anyway, and it behaves phonologically as a high back vowel. See $\S 2.2$ for more details.

The vowel graphemes are listed in Table 1.3.

| Description <br> orthography | Practical <br> orthography | IPA | Cameroon <br> alphabet |
| :--- | :--- | :--- | :--- |
| a | a | a | a |
| e | e | I | - |
| $\varepsilon$ | $\varepsilon$ | $\varepsilon$ | $\varepsilon$ |
| i | i | i | i |
| 0 | o | 0 | 0 |
| u | u | o | o |
| Fu | Fu | Fu | - |

Table 1.3 Vowel graphemes compared with the practical orthography, the Cameroon alphabet and IPA.

The third difference is the regular representation of nasal vowels with a tilde ~ placed underneath the vowel (e.g., kā̃ $)$. There is no phonemic difference between CV and CVN, allowing for the use of CVN in the practical orthography. But the distinction is maintained in this presentation to better reflect the phonetic characteristics of the utterances, as well as to point out the process of syllable reduction observed in the language, which sometimes results in free variation between CV and CVN. Placement of the tilde under the vowel rather than above (which is the IPA convention) is a practical choice, avoiding the occurrence of two diacritics (nasalization and tone) in a single space.

Note that, for the most part, IPA is used for chapters 2,3 and 4 , since they are concerned with the phonology of the language. Most of the time, examples in these chapters utilize brackets to indicate phonetic forms.

### 1.4 Organization of description

The overall order of presentation follows in part a smaller to bigger pattern, dealing with discrete units, such as phones, in chapters 2-4. Progressing to larger units, chapters 5-10 are largely concerned with various word classes, beginning with Nouns and Pronouns in Chapters 5 and 7 respectively. Other word classes are covered in chapter 8, verbs in chapter 9 and copulas in chapter 10. Chapters 11-15 describe the language at the clause level and chapter 16 looks at discourse level issues such as Topic and Focus. The description concludes with an interlinearized text presented in chapter 17.

## Chapter 2

## Phonology

The phonological system of Nchane represents a language undergoing syllable reduction, with resulting vowel nasalization and lengthening processes. While the phonology of verbs is relatively simple, the analysis of noun phonology is challenging, in part due to the presence of nasals, characteristic of other languages in the area, and documented to be associated with lowering of tones (see Good and Lovegren (2017) and Hyman (1980)).

This chapter is divided into three main sections. Consonants and vowels are described in $\S \S 2.1$ and 2.2 respectively. A description of syllable structure and observations regarding the distribution of consonants and vowels appears in §2.3. Note that example transcriptions in this chapter are usually placed in brackets, indicating that they represent phonetic, rather than phonemic, realizations. Furthermore, the transcriptions are generally given utilizing IPA characters rather than the description orthography which is used for most of the chapters.

### 2.1 Consonants

Nchane has 18 consonant phonemes, a somewhat modest inventory when compared to neighboring languages. The Beboid languages Kemedzung, Chungmboko and Sari
have 19, 21 and 21 consonants respectively (Cox 2005; Tabah 2010; Langhout 2015) ${ }^{5}$, while the Yemne-Kimbi language Mungbam is observed to have 24 (Lovegren 2013).

The Nchane consonant phonemes are displayed in Table 2.1, each of which can occur in root-initial position. Note that all unvoiced plosives are aspirated when followed by a vowel. While all consonants occur word initially, only nasals are found in the coda position and only the velar nasal is found word finally. See $\S 2.3 .2$ for more on distributional restrictions.

|  | Labial | Alveolar | Palatal | Velar |
| :--- | :--- | :--- | :--- | :--- |
| Plosives |  | t | ch | k |
|  | b | d | j | g |
| Fricatives | f | s | sh | $(\mathrm{gh})$ |
| Nasals | m | n | n | y |
| Approximants |  | l | y | w |

Table 2.1 Nchane consonant phoneme inventory.

As with many languages in the area, there is no voiceless counterpart to the voiced labial plosive $\mathbf{b}$, leaving a gap in the inventory where $\mathbf{p}$ is usually found. Speakers are able to pronounce [p] with little difficulty, as evidenced by the occurrence of the Cameroon Pidgin English loanword [pjā] 'pear', referring to 'avocado', which is prevalent in the area. However, other loanwords like [bā] 'pa', which is often used as an honorific in place of the Nchane word [ $\mathbf{t} \mathbf{I} \mathbf{i}$ ] 'father', as well as western names like [b̄̄l] 'Paul' and [bítà] 'Peter' show that [b] is preferable as a substitute for [p].

### 2.1.1 Consonants with difficult analyses

Most of the Nchane consonants are analyzed with little difficulty. However, the alveopalatal affricates, the velar fricative and the palatal nasal each present challenges to a proper assignment in the consonant system. These are discussed in turn in this section.

The consonants ch and $\mathbf{j} \quad$ The alveopalatal affricates have been analyzed as palatal plosives ([c] and [y] respectively), but this is not without questions. The primary complication comes from the fact that the neighboring Beboid languages Sari, Chungmboko, Kemedzung and Mungong, each have an alveolar affricate set (i.e., /ts/ and /dz/) in addition to the alveopalatal affricate set. Richards (1991) includes the Sari alveopalatal affricates with the palatalized consonant inventory and treats the alveolar affricates as palatal plosives, thus dispensing with the affricate class altogether. A

[^4]similar approach is used by Cox (2005) for Kemedzung, where he suggests that they are palatalized allophones of their alveolar affricate counterparts, although he also argues for the maintenance of the affricate class.

However, this analysis is untenable for Mungong, where the occurrences of the alveopalatal affricates outnumber their alveolar counterparts by almost $2: 1$. Meanwhile, the number of $/ \mathbf{b j} /$ and $/ \mathbf{k j} /$ tokens is extremely small compared to the $/ \mathbf{b} /$ and $/ \mathbf{k} /$ varieties, suggesting that Cy as a sequence type is not very productive and so, not supportive of viewing the alveopalatal affricates as being palatalized versions of some other consonants.

A similar problem exists for Nchane, since Cy sequences are somewhat rare, but the occurrences of /t/f/ and $/ \mathbf{d} \mathbf{3} /$ are significantly high, slightly higher than those of /t/ and /d/. Furthermore, there are no significant differences in distribution between the alveopalatal affricates and the plosives. Meanwhile, the palatal series includes fricative, nasal and approximant members, with an available opening in the plosive series. Therefore, it makes sense to treat the alveopalatal affricates phonologically as palatal plosives, ${ }^{6}$ although the affricate transcriptions are maintained to acknowledge their comparability to consonants of other Beboid language varieties.

The consonant gh The velar fricative gh appears in parentheses in Table 2.1 to indicate that its status as a phoneme is in question, since it occurs only a few times in the data. In addition to its paucity, it never precedes back vowels when root-initial and when it is root-internal an argument could be made that [ y ] is simply a product of spirantization of $/ \mathbf{g} /$. An additional complication is that it never occurs in $\mathrm{Cj}, \mathrm{Cw}$ or NC sequences, although this could simply be due to the small numbers in the data.

Richards (1991) treated this phoneme as an oral sonorant, in the same series as $\mathbf{w}, \mathbf{l}$ and $\mathbf{y}$, and without giving reasons for analyzing it as belonging to the set of approximants rather than to the set of fricatives. ${ }^{7}$ It appears to have been rare in his data set as well, and he mentions the complete lack of the prenasalized form [ny]. Neighboring Noni lists 39 occurrences [ y ] out of 4544 entries in its online dictionary (Lux 2016). All of these occurrences are root-initial, hinting at neutralization of contrast in other environments. When Nchane cognates are identified for these Noni words, there is usually a $[\mathrm{y}]:[\mathrm{j}]$ or $[\mathrm{y}]:[\mathrm{d} 3]$ correspondence.

Consultants were asked to provide more words with this consonant, which resulted in nine additional words. Each of these words are gh-initial with a distinct preference for a following a and never with a following back vowel. The synchronic

[^5]evidence for this phoneme is therefore tenuous and its support as a phoneme is flagging．All words with this consonant are given in Table 2．2．${ }^{8}$ Note that the examples provided by the consultants appear without tone indicated．Note also that the word for＇jeer at＇ghay violates the coda restrictions adopted in the current analysis，namely that the velar nasal $\boldsymbol{\eta}$ is the only consonant observed as a coda．

| Via wordlist elicitation |  | Via y elicitation session |  |
| :---: | :---: | :---: | :---: |
| ［mjæ̀yó］ | ＇blink＇ | ［уа：］ | ＇enthrone＇ |
| ［fìnk＇⿹̀龴⿱亠乂口阝 | ＇wrist＇${ }^{\text {¢ }}$ | ［yali］ | ＇name＇ |
| ［ 又á］$^{\text {a }}$ | ＇surpass＇ | ［yanc］ | ＇be insane＇ |
|  |  | ［yalc］ | ＇improvise＇ |
|  |  | ［уİ］ | ＇attach with glue＇ |
|  |  | ［yaj］ | ＇jeer at＇ |
|  |  | ［уع］ | ＇be jealous＇ |
|  |  | ［yasi］ | ＇mistreat＇ |
|  |  | ［yamı］ | ＇braid a calabash＇ |

Table 2．2 Exhaustive list of words with the consonant gh．

The consonant $\mathbf{n} \quad$ The problem faced in analyzing the palatal nasal $\mathbf{n}$ has less to do with its phonemic status and series assignment，than with the interpretation of ［ $\mathbf{n}$ ］in any given occurrence．The phone［ $\mathbf{n}$ ］has four possible underlying representations：$/ \mathbf{j} /, / \mathbf{j} \mathbf{j} /, / \mathbf{n}^{\mathbf{j}} /, / \mathbf{n} \mathbf{j} /$ ．The first option，a palatal nasal，is an expected member of the consonant system，since it completes the series of nasal consonants．I assume that a large number of $[\mathbf{n}]$ occurrences are in fact realizations of $/ \mathbf{n} /$ ．

The third and fourth options，a palatalized alveolar nasal and a prenasalized palatal approximant respectively，are discounted based on analytical interpretation． The analysis of palatalization as a consonant feature is rejected in favor of consonant－ glide sequences（see §2．1．4）．And possible instances of prenasalization are interpreted as nasal－consonant sequences（see §2．1．5）．

Evidence for the second option，a jy sequence，is not easy to find，since there is a general constraint requiring NC sequences to have the same place features． Therefore，determining the underlying form of the nasal in NC sequences at morpheme boundaries is speculative at best，particularly as vowel initial stems do not exist．Positive evidence might be found in looking at class 19 nouns，where more than

[^6]half of the nouns are marked unambiguously with a fiN- prefix, while the remaining nouns have a fi- prefix. Yet, the number of class 19 nouns with a [ $\mathbf{j}$ ] at the prefix-root boundary is relatively high, suggesting that at least some of these are underlyingly $\mathbf{j}$ $\mathbf{y}$. This is illustrated in Table 2.3, where it can be seen that $13 \%$ of the nouns have a fij... shape versus, for example, $10 \%$ having figk... and only $3 \%$ having fim....

| fiN-C... | fi-C... | fiN-C.../fi-C... |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{m - b}$ | 2 | $\mathbf{b}$ | 2 | $\mathbf{n}-\mathbf{y} / \mathbf{j}$ | 4 |
| $\mathbf{n - t}$ | 4 | $\mathbf{k}$ | 2 |  |  |
| $\mathbf{n - d}$ | 1 | $\mathbf{l}$ | 1 |  |  |
| $\mathbf{n - c h}$ | 4 | $\mathbf{m}$ | 1 |  |  |
| $\mathbf{y - k}$ | 3 | $\mathbf{s}$ | 2 |  |  |
| $\mathbf{y - g}$ | 1 | $\mathbf{j}$ | 1 |  |  |
| $\mathbf{n - s}$ | 1 |  |  |  |  |
| $\mathbf{n - s h}$ | 1 |  |  |  |  |

Table 2.3 Summary of (N)C sequences at morpheme boundaries of c19 nouns, illustrating likelihood of underlying fijn-y... forms ( $\mathrm{n}=30$ ).

Perhaps the strongest evidence can be found in words like nū 'light', which appears to be a nominalization of the verb $\mathbf{y} \overline{\mathbf{u}}$ 'clean'. The underlying form of this noun therefore is $\mathbf{N} \mathbf{-} \mathbf{y u}$ (NMZR- clean). In light of the above evidence, it is justifiable to assume that at least some non-morpheme boundary occurrences of [ $\boldsymbol{\mu}]$ are in fact underlyingly / $\mathbf{j} \mathbf{j} /$.

### 2.1.2 Phonetic descriptions of consonants

Descriptions of the phonetic characteristics of the various consonants are given in this section. The descriptions are organized around the different types of articulation and include representative examples.

### 2.1.2.1 Plosives

Nchane has seven plosive consonants consisting of voiceless and voiced varieties of the alveolar, palatal and velar series, and the voiced labial $\mathbf{b}$. As mentioned above, all voiceless plosives are slightly aspirated when followed by a vowel.

The consonant $\mathbf{t}$ The voiceless alveolar plosive $\mathbf{t}$ is realized as [ $\mathbf{t}$ ]. When followed by a vowel, it is slightly aspirated. Examples are [fīnthínć] 'middle', [thā] 'kick' and [ $\mathbf{t} \overline{\mathbf{h}} \mathbf{e} \mathbf{d} \mathbf{\overline { I }}]$ 'stone'. The aspiration is greater in words like [ $\left.\mathbf{t}^{\mathbf{h}} \mathbf{i}:\right]$ 'abdomen' and [ $\mathbf{t}^{\text {tu }}$ ] 'return', where the following vowel is high, but not significantly so.

The consonant ch The voiceless alveopalatal affricate $\mathbf{c h}$ is realized as [t]], and fits into the consonant system as a voiceless palatal plosive. Because it is realized as an affricate, it is not prone to aspiration as observed in the voiceless plosives. Examples are [tfín] 'dig', [tfézè̀] 'termite hill', [fīntfā] 'ring' and [khījtfónē] 'bush'.

The consonant $\mathbf{k} \quad$ The voiceless velar plosive $\mathbf{k}$ is realized as [ $\mathbf{k}$ ]. Again, as with $\mathbf{t}$, this consonant is slightly aspirated when followed by a vowel, with the aspiration being somewhat greater when the following vowel is high. In fast speech, it can be slightly spirantized, particularly in VCV sequences, where the vowels are
 'papaya' and [bā̄kk $\left.{ }^{\text {h }} \mathbf{~}\right]$ 'box (pl)'.

The consonant $\mathbf{b} \quad$ The voiced bilabial plosive $\mathbf{b}$ is realized as [b]. Examples are [b̄̄] 'goat', [lábغ̀] 'spider web', [báq] 'shut', [b̄̄nè] 'prayer' and [ $\overline{\mathbf{m}} \mathbf{b} \bar{f}$ fá] 'cat'.

The consonant $\mathbf{d}$ The voiced alveolar plosive $\mathbf{d}$ is realized as [d]. While it is observed to occur before high vowels, these sequences are rare, particularly the sequence di. An example is [n̄dī̀źz] 'omen'. It is possible that this sequence more often triggers spirantization of the $\mathbf{d}$, resulting in the sequence $\mathbf{j i}$. This hypothesis is supported by the fact that the word for 'omen' in Mungong and Noni is [ $\overline{\mathbf{j}} \mathbf{d} \mathbf{3} \dot{\varepsilon}]$ and [jJdì̀nsén] respectively, both showing a [d]:[d3] correspondence. See $\S 3.6$ for more details of the spirantization process.

This consonant has an allophone realized as the alveolar flap [r], which is relatively rare and occurs only when the consonant intervenes between identical high vowels. It usually does not occur in careful speech. Examples are [fīnthírí] 'story' and
 'palm branch', [fīndэ̄ŋ] 'throat' and [fīnt ${ }^{\text {thódõ] }] ~ ' a n t ' . ~}$

The consonant $\mathbf{j} \quad$ The voiced alveopalatal affricate $\mathbf{j}$ is realized as [d3], and functions as a voiced palatal plosive in the consonant system. Examples are [d3īś́c]
 [ $\bar{j} d \mathbf{z o}$ ] 'cloth'.

The consonant $\mathbf{g} \quad$ The voiced velar plosive $\mathbf{g}$ is realized as [g]. As with $\mathbf{k}$, it can be slightly spirantized in fast speech in VCV sequences where the vowels are identical. Examples are [gī:] 'hundred (pl)', [kī̄qgè̀] 'island', [ $\mathbf{m} w a ́ \eta g a ̄] ~ ' h a r e ', ~$ [ḡ́y] 'spear' and [gó] 'buy'.

### 2.1.2.2 Fricatives

The Nchane fricative series includes three voiceless fricatives and one voiced fricative. The voiced velar fricative is a minor phoneme, with limited distribution and low occurrence. Phonetic descriptions are given below.

The consonant $\mathbf{f}$ The voiceless labiodental fricative $\mathbf{f}$ is realized as [ $\mathbf{f}$ ]. Examples of $\mathbf{f}$ are [ $\mathbf{f}$ '] 'kidney', [ $\mathbf{f}$ ह́:] 'two', [ $\mathbf{k}^{\text {hīfā:] }}$ 'mahogany tree', [ $\left.\mathbf{f} \bar{\sim}\right]$ 'sharpen' and [ $\mathbf{k}^{\text {hīifōfó }}$ 'lung'.

The consonant $\mathbf{s} \quad$ The voiceless alveolar fricative $\mathbf{s}$ is realized as [s]. It never precedes $\mathbf{i}$, hinting at [ [] as a palatalized allophonic variant. However, the number of $\left[\int\right]$ occurrences is too high for it to fit the profile of a palatalized allophone of $\mathbf{s}$. In addition, multiple minimal pairs between the two phones exist. Therefore, I do not
adopt the view that they are in allophonic relationship. Examples of $\mathbf{s}$ are [ $\left.\mathbf{k}^{\mathbf{h}} \overline{\mathbf{i}} \mathbf{j} \mathbf{k}^{\mathbf{h}} \mathbf{s} \mathbf{s i}\right]$


The consonant sh The voiceless postalveolar fricative sh is realized as [J]. Its place of articulation is comparable to the place of release for the two alveopalatal
 wasp' and [ [J̄̄njè̀] 'hum'.

The consonant gh The voiced velar fricative $\mathbf{g h}$ is realized as [ $\mathbf{y}$ ]. Its status as a phoneme is questionable and discussed at length in $\S 2.1 .1$ above.

### 2.1.2.3 Nasals

Nchane has a complete series of nasal consonants, including $\mathbf{m}, \mathbf{n}, \mathbf{j}$ and $\mathbf{y}$. Nasal consonants occurring in word final position often are elided, accompanied by the preceding vowel taking on a nasal quality. This elision is less likely when the preceding vowel is short. In both cases, with preceding short and long vowels, there is a degree of free variation between $\underset{\sim}{\mathbf{V}} \sim \mathbf{V} \mathbf{y}$. Note that only the velar nasal $\mathbf{\eta}$ is observed in word final position.

For the most part, NC sequences are restricted to consonants with the same place of articulation. Each of these nasals occur in NC sequences where they are observed to often carry tone, although the duration of the nasal's realization is generally shorter than one would expect with a typical syllabic nasal. The reader is referred to $\S 2.1 .5$ for an in-depth discussion of the nature of these sequences.

The consonant $\mathbf{m} \quad$ The bilabial nasal $\mathbf{m}$ is usually realized as [ $\mathbf{m}$ ]. Before the labiodental fricative $\mathbf{f}$, it is usually realized as a labiodental nasal $[\mathbf{m}] .{ }^{10}$ Examples are
 'maggot', [bāmfā] 'eagle (pl)' and [ $\overline{\mathbf{m}} \mathbf{f} \overline{0}]$.

The consonant $\mathbf{n}$ The alveolar nasal $\mathbf{n}$ is realized as [ $\mathbf{n}$ ]. Examples are [biní] 'dance (n)', [fìnt $\mathbf{5} \mathbf{n} \bar{\varepsilon}]$ 'groundnut', [nā] 'cow' and [n̄̄̄] 'throw'.

The consonant $\mathbf{j} \quad$ The palatal nasal $\mathbf{j}$ is realized as [ $\mathbf{n}$ ]. See §2.1.1 above for a discussion of its interpretation. Examples are [ $\mathbf{\mu} \overline{1}]$ 'bee', $\left[\mathbf{k}^{\mathrm{h}} \mathbf{n} \mathbf{n} \overline{\boldsymbol{\varepsilon}} \boldsymbol{\jmath} \bar{\varepsilon}\right]$ 'cockroach', [ $\mathbf{n a ̄} \boldsymbol{y}]$ 'animal' and [ $\mathbf{n} \overline{\mathrm{n}}$ ] 'cutlass'.

The consonant $\boldsymbol{\eta} \quad$ The velar nasal $\boldsymbol{\eta}$ is realized as $[\boldsymbol{\eta}]$. Examples are $[\overline{\mathbf{m}} \mathbf{b j} \overline{\mathbf{\varepsilon}} \mathbf{\eta} \overline{\boldsymbol{\varepsilon}}]$


### 2.1.2.4 Approximants

Nchane has three approximants: one lateral approximant and two glides. Each is described in this section.

[^7]The consonant 1 The alveolar lateral approximant $\mathbf{l}$ is realized as [I]. In most environments, it is pronounced with a certain amount of closure by the dorsum, similar to the so-called "dark l" in many English dialects, but with much less closure. This is particularly the case when it is adjacent to high back vowels and when it is word initial. The dorsum involvement is much less when it is adjacent to front vowels. Examples are [lílī] 'dragonfly', [khīlę́:] 'bat', [lábè] 'spiderweb', [l̄̄mé] 'hasten' and [knīlōn] 'agama lizard'. ${ }^{11}$

The consonant $\mathbf{y} \quad$ The palatal approximant $\mathbf{y}$ is usually realized as [j]. Other times it is realized with a light fricative quality best represented by the voiced palatal fricative [j]. This variant appears to be in free variation with [j] in all environments and is often corrected to the approximant variant in careful speech. Examples are



The consonant $\mathbf{w} \quad$ The labiovelar approximant $\mathbf{w}$ is realized as [ $\mathbf{w}$ ]. Examples
 'ditch'.

### 2.1.3 Consonant minimal pairs

Contrasts for all consonants are given in Table 2.4-Table 2.7 (established by near-minimal pairs when strict-minimal pairs are not available). In most cases, contrasts are given for consonants that share all but one feature. When a consonant has multiple possible analyses, then contrasts are given for that consonant to account for alternative analyses. For example, w could be analyzed as a labial or a velar approximant. Therefore, minimal pairs involving $\mathbf{w}$ are given with consonants from the labial and velar series. All examples in the minimal pairs show the contrasting consonants in root-initial position, with the exception of those involving $\mathbf{y}$, for which root-initial examples are relatively rare. Also, both members of a minimal pair belong to the same word class whenever possible. Finally, verb forms in the examples appear in the unmarked P 0 form unless otherwise noted.

[^8]| Consonants | Example | Gloss | Example | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| t |  |  |  |  |
| ／d | ［ ${ }^{\text {hāà }}$ ］ | ＇count＇ | ［dáy］ | ＇jump＇ |
| ／ch | ［ ${ }^{\mathbf{t}} \overline{\mathbf{w}}$ ］ | ＇hit＇ | ［tfō：］ | ＇feces＇ |
| ／s | ［ $\mathbf{t}^{\text {h }} \bar{O} \eta$ ］ | ＇shoot＇ | ［sōy］ | ＇beat＇ |
| ch［to |  |  |  |  |
| ／t | ［tfō：］ | ＇feces＇ | ［ ${ }^{\text {h }} \overline{\bar{\omega}}$ ］ | ＇hit＇ |
| ／k | ［ttá］ | ＇chew＇ | ［ $\mathrm{k}^{\mathrm{h}}$ ］$]$ | ＇swear＇ |
| ／j | ［tfō：］ | ＇feces＇ | ［d3ò］ | ＇penis＇ |
| ／sh | ［ t ¢ $]$ | ＇carve＇ | ［J］ | ＇wipe off＇ |
| k |  |  |  |  |
| ／ch | ［ $\left.\mathrm{k}^{\mathrm{h}}{ }_{\text {a }}\right]$ | ＇swear＇ | ［țá］ | ＇chew＇ |
| ／g | ［ $\mathbf{k}^{\mathbf{h}} \boldsymbol{\sim}$ | $\begin{gathered} \text { 'play' (e.g., a } \\ \text { drum) } \end{gathered}$ | ［g⿹勹龴］ | ＇play＇（intr．） |
| b |  |  |  |  |
| ／d | ［bāq］ | ＇shine＇ | ［dáy］ | ＇jump＇ |
| ／g | ［bá］ | ＇choose＇ | ［gā］ | ＇divide＇ |
| ／m | ［bī］ | ＇follow＇ | ［mí］ | ＇swallow＇ |
| ／w | ［bō］ | ＇escape＇ | ［wó］ | ＇whistle＇（v） |
| d |  |  |  |  |
| ／t | ［dáy］ | ＇jump＇ | ［ ${ }^{\text {hāàp］}}$ | ＇count＇ |
| ／j | ［dáy］ | ＇jump＇ | ［dзāŋ］ | ＇announce＇ |
| ／n | ［ $\mathbf{k}^{\text {hīdāq］}}$ | ＇table＇ | ［ $\mathrm{k}^{\text {T}}$ náy］ | ＇chin＇ |
| ／I | ［dè：］ | ＇cook＇ | ［lé：］ | ＇deceive＇ |
| j |  |  |  |  |
| ／ch | ［d3す̀］ | ＇penis＇ | ［tfō：］ | ＇feces＇ |
| ／d | ［dзāp］ | ＇announce＇ | ［dáy］ | ＇jump＇ |
| ／n | ［d3i］ | ＇hoe＇ | ［ ni ］ | ＇bee＇ |
| ／y | ［djēnē］ | ＇swing＇ | ［jéné］ | ＇breathe＇ |
| g |  |  |  |  |
| ／ $\boldsymbol{J}$ | ［gānè］ | ＇greet＇ | ［〕āň́］ | ＇crawl＇ |
| ／gh | ［gā］ | ＇divide＇ | ［уá］ | ＇overpower＇ |
| ／w | ［gā］ | ＇divide＇ | ［wā］ | ＇argue＇ |

Table 2．4 Minimal pairs for plosives．

| Consonants | Example | Gloss | Example | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| m |  |  |  |  |
| /b | [mí] | 'swallow' | [bī] | 'follow' |
| /n | [mā] | 'be alone' | [nā] | 'cow' |
| /w | [mā] | 'be alone' | [wà:] | 'argue' |
| n |  |  |  |  |
| /d | [ $\mathrm{k}^{\text {hīnáy }}$ ] | 'chin' | [ $\mathbf{k}^{\text {hīdāp] }}$ | 'table' |
| /m | [nā] | 'cow' | [mà:] | 'decorative scar' |
| /n | [nà] | 'cow' | [nā] | 'gift' |
| /I | [ $\mathrm{k}^{\text {Tīnáy] }}$ | 'chin' | [fīláy] | 'clay pipe' |
| j |  |  |  |  |
| /j | [ ${ }^{1}$ ] $]$ | 'bee' | [d3i] | 'hoe' |
| /n | [ ${ }^{\text {a }}$ ] | 'gift' | [ na ] | 'cow' |
| /] |  | 'feed' | [ $\dagger$ āné] | 'crawl' |
| /y | [ n へ̃:] | 'knee' | [jōn] | 'thatch' (n) |
| y |  |  |  |  |
| /g | [ $\dagger$ ānć] | 'crawl' | [gānè] | 'greet' |
| /n | [ $\dagger$ ānć] | 'crawl' | [ n \} \overline {  c  }  ]  | 'feed' |
| /gh | [ $\dagger$ ān ${ }^{\text {c }}$ ] | 'crawl' | [Yá] | 'overpower' |
| /w | [ $\left.\mathbf{h}^{\mathrm{h}} \boldsymbol{\square} \boldsymbol{1} \bar{\varepsilon}\right]$ | 'crow' (v) | [tfōwè] | 'latrine' |

Table 2.5 Minimal pairs for nasals.

| Consonants | Example | Gloss | Example | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{f}$ |  |  |  |  |
| /b | [bī] | 'cry' | [fī] | 'blow' |
| /m | [m】] | 'taste' | [ $\mathbf{¢}$ ] | 'sharpen' |
| /s | [fã̀] | 'deny' | [sāy] | 'draw' |
| s |  |  |  |  |
| /t | [ssōy] | 'beat' | [ ${ }^{\text {h }} \overline{\mathbf{O}} \boldsymbol{y}$ ] | 'fry' |
| /n | [ssōy] | 'beat' | [nò̀n] | 'throw' |
| /f | [sāp] | 'draw' | [fā̀] | 'deny' |
| /sh | [sā] | 'mask' | [ $\int \bar{a}$ ] | 'pot' |
| /l | [sā!ć] | 'scatter' | [ 1 āy $\bar{\varepsilon}]$ | 'pay' |
| sh |  |  |  |  |
| /ch | [ 5 ] | 'wipe off' | [t¢5] | 'carve' |
| /n | [ $\left.\int \bar{a}\right]$ | 'pot' | [ $\dagger$ āp] | 'animal' |
| /s | [ $\left.\int \bar{a}\right]$ | 'pot' | [sā] | 'mask' |
| /gh | [ 5 ā] | 'pot' | [ ¢á] $^{\text {d }}$ | 'overpower' |
| /y | [ $\int$ a $]$ | 'pot' | [jā̃] | 'suck' |
| gh |  |  |  |  |
| /g | [ ¢á] $^{\text {a }}$ | 'overpower' | [gā] | 'divide' |
| / J | [ ¢á] $^{\text {a }}$ | 'overpower' | [ $\dagger$ ānć] | 'crawl' |
| /sh | [ ¢á] $^{\text {a }}$ | 'overpower' | [ $5 \bar{a}$ ] | 'pot' |
| /w | [ $\mathrm{y}^{\text {á] }}$ | 'overpower' | [wà:] | 'argue' |

Table 2.6 Minimal pairs for fricatives.

| Consonants | Example | Gloss | Example | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |
| /d | [1é:] | 'deceive' | [dē:] | 'cook' |
| /n | [fīláy] | 'clay pipe' | [ $\mathrm{k}^{\text {hīnáy }}$ ] | 'chin' |
| /s | [lāy $\bar{\varepsilon}]$ | 'pay' | [sā ${ }^{\text {ćc }}$ ] | 'scatter' |
| /y | [ $[\overline{\varepsilon ̌} \mathrm{~s}$ ¢́] | 'disappear' | [jésē] | 'be empty' |
| /w | [lō] | 'stop' | [wó] | 'whistle' (v) |
| y |  |  |  |  |
| /j | [jénć] | 'breathe' | [djēn $\bar{\varepsilon}$ ] | 'swing' |
| /n | [jōn] | 'thatch' (n) | [^บِّ:] | 'knee' |
| /sh | [jā] | 'suck' | [ $\int \overline{2}$ ] | 'pot' |
| /I | [jésē] | 'be empty' | [ $[\overline{\varepsilon ̌} \mathrm{~s}$ ¢ $]$ | 'disappear' |
| /w | [jā] | 'suck' | [wà:] | 'argue' |
| w |  |  |  |  |
| /b | [wó] | 'whistle' (v) | [b̄̄] | 'escape' |
| /g | [wà:] | 'argue' | [gā] | 'divide' |
| /m | [wà:] | 'argue' | [mā] | 'be alone' |
| /n | [ $\mathbf{k}^{\text {hiōwádè] }}$ | 'corn husk' | [kī¢āf̄] | 'ringworm' |
| /f | [wà:] | 'argue' | [fā] | 'peel' (v) |
| /gh | [wà:] | 'argue' | [ ¢á] $^{\text {a }}$ | 'overpower' |
| /l | [wó] | 'whistle' (v) | [lō] | 'stop' |
| /y | [wà:] | 'argue' | [jā] | 'suck' |

Table 2.7 Minimal pairs for approximants.

### 2.1.4 Consonant-glide sequences

Occurrences of some consonant followed by either the labial-velar approximant $\mathbf{w}$ or the palatal approximant $\mathbf{y}$ are described in this section. Consonant-glide clusters are analyzed as sequences rather than as labialization and palatalization, but with some reservation. As pointed out by Parker (2012: 121-122), proper analysis of CG sequences is notoriously problematic for a number of reasons. In the case of Nchane, one difficulty is the variety of sources for such sequences. For example, while there are numerous examples of apparently monomorphemic Cw sequences, there are also many examples of Cw sequences resulting from noun class marking (e.g., [bw $\bar{\varepsilon} \boldsymbol{\eta}] /[\mathbf{b} \overline{\boldsymbol{\varepsilon}} \boldsymbol{\eta}]$ 'mosquito ( $\mathrm{sg} / \mathrm{pl}$ )' and $[\mathbf{t} \mathbf{f w} \mathbf{w}] /[\mathbf{b a ̀ t} \mathbf{f} \check{\varepsilon}]$ 'witch ( $\mathrm{sg} / \mathrm{pl}$ ), genders $3 / 4$ and $1 / 2$ respectively). The $\mathbf{w}$ found in such noun class marking comes historically from a CVprefix. Therefore, the $\mathbf{w}$ in Cw sequences representing noun class marking might not be comparable to the $\mathbf{w}$ in Cw sequences occurring in monomorphemic words. It is clear, for example, that in such cases, the $\mathbf{w}$ segment should be considered unbound to the preceding consonant, at least lexically, making a labialization analysis less tenable.

However, support for a labialization analysis comes from looking at neighboring languages and how gender $3 / 4$ noun marking is handled. While class 3 Nchane nouns are marked with a $\mathbf{w}$ following the initial consonant of the root, several neighboring languages show this same marking through a labial-velar alternation. For
example, the singular and plural forms of the Nchane word 'root' are [gw $\bar{\varepsilon} \boldsymbol{\eta}]$ and [ $\mathbf{g} \overline{\mathbf{c}} \mathbf{y}$ ], while the Mungong forms are [gb̄̄] and [gā]. Instances of Cw sequences in Mungong are attested elsewhere, as are instances of $\mathbf{g b}$ as a unique phoneme. The simplest way to capture the essence of class 3 noun marking across the Beboid language group is to analyze it as labialization.

Ultimately, with a clear interpretation difficult or impossible, a Cw sequence analysis is preferable to $\mathrm{C}^{\mathrm{w}}$ due to the desirability of decreasing the consonant phoneme inventory. This interpretation is then extended to Cy sequences recognizing both clusters as categorically similar, capturing the generalization that both clusters are consonant-glide sequences.

### 2.1.4.1 $C w$ sequences

Consonant clusters $\mathrm{C}_{1} \mathrm{C}_{2}$, where $\mathrm{C}_{2}$ is a labial-velar approximant /w/ are attested when $\mathrm{C}_{1}$ is a plosive, fricative or nasal. The consonant cluster is observed at morphological boundaries as well as within basic words in root-initial position. The majority of occurrences are observed in nouns, although they occur in verbs as well. The Cw sequence occurs in about $11 \%$ of nouns, which is slightly more than double the rate of the sequence in verbs. This difference in proportion is largely erased when nouns from classes 1 and 3 are removed from the count to control for the -w- infix, which represents class marking.

The phonetic realization is [Cw]. When the preceding consonant is a plosive, the $\mathbf{w}$ often has a slight fricative quality as a result of the release of the preceding plosive. In all cases, there is a degree of lip rounding at or near the onset of the initial consonant.

Table 2.8 shows which consonants are observed in $\mathbf{C w}$ clusters. The sequence dw appears in parentheses to indicate that it occurs only in the class 3 nouns [dзw $\bar{\varepsilon}]$ 'mouth', [dзw $\bar{\imath}]$ 'calabash used in tapping palm wine' and [dзw $\bar{\varepsilon} \bar{\varepsilon} \bar{\varepsilon}]$ 'edge'. The phonetic realization of the initial consonant is therefore usually spirantized such that it sounds more like [d3w] than [dw]. The underlying onset consonant for these words is clearly /d/ (as evidenced by their plural forms) and in careful speech the spirantization can be lessened, but never completely absent. It is likely that/dw/ is always realized as [d3w], although the small number of tokens and lack of contexts other than class 3 does not allow for certainty. Similarly, the sequence sw occurs only
 the alveolar consonant is spirantized when followed by $\mathbf{w}$. (See $\S 3.6$ for a description of spirantization.)

|  |  | Labial | Alveolar | Palatal | Velar |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Plosives | vl |  |  | chw | kw |
|  | vd | bw | (dw) | jw | gw |
| Fricatives |  | fw | $\mathrm{csw})$ | shw |  |
| Nasals |  | mw |  |  | yw |

Table 2.8 Cw sequence types.

The number of occurrences of each $\mathbf{C w}$ sequence is given in Table 2.9 , which clearly shows that velar consonants are the most numerous in the $\mathrm{C}_{1}$ position, with the labial consonants the next most common.

| Sequences | Examples (in phonetic form) \# | \# of tokens |
| :---: | :---: | :---: |
| chw | [tfwě] 'witch', [tfw̄] 'shrew' | 2 |
| kw | [ $\mathrm{kwi} \mathbf{1}$ :] 'moon', [kwād\}ć] 'think', [kwēsé] 'woman' | , 13 |
| bw | [bwī] 'dew', [bwēd ${ }^{\text {c/] }}$ 'break' | - 8 |
| (dw) | [d3w $\bar{\varepsilon}]$ 'mouth', [d3w $\bar{\varepsilon} \bar{\varepsilon}]$ 'edge' |  |
| jw | [d3wĩ] 'husband', [kīd3wî] 'boundary | 2 |
| gw | [gwí] 'net', [gwī 'fall', gwīn] 'bamboo' | 17 |
| fw |  | 6 |
| (sw) | [ $\overline{\mathrm{j}}$ [w $\bar{\sim}]$ 'palm needle' |  |
| shw | [bvūs⿹̄jwī] 'seven', [ $\mathbf{j w a ̄ ] ~ ' s h u c k ~ c o r n ' ~}$ |  |
| mw | [mw̄̄] 'farm', [mwà] 'child', [mwāpgā] 'hare' |  |
| yw ${ }^{13}$ |  |  |

Table 2.9 Examples of Cw sequences and their prevalence $(\mathrm{n}=62)$.

The sequence $\boldsymbol{\eta \mathbf { w }}$ is ambiguous as it could represent either an $\mathbf{N w}$ cluster belonging to the same syllable (similar in nature to mw, bw or gw), or it could represent an N.w sequence, where the two segments belong to different syllables. The word for 'granary', for example, clearly has tone on the initial nasal, while both instances of $\mathbf{\eta \mathbf { w }}$ in the reduplicated form for 'sugarcane' are pronounced with the segments acting as a unit, the nasal being of shorter duration and minimal observable tonal presence. The reader is directed to $\S 2.1 .5$, where some of the challenges related to analyzing nasal-consonant sequences are discussed.

An additional question is prompted by the fact that $\mathbf{N C}$ sequences usually are observed to share place of articulation, so the occurrence of $\mathbf{\eta} \mathbf{w}$ and $\mathbf{m w}$ suggests that the two sequences are not comparable. It is possible that these $\mathbf{\eta} \mathbf{w}$ tokens are derived

[^9]from verbs, which take a homorganic nasal prefix $\mathbf{N}$-, with the nasal assimilating to the velar place of articulation. Both of the words [ $\overline{\mathfrak{j} w a ̄} \boldsymbol{\eta}$ ] 'granary' and [ $\bar{\jmath} \mathbf{w a ̄}]$ 'book' are class 1 nouns, which is the class to which most nominalized verbs belong and are credible as nominalized forms in terms of semantics, although their nominalized status cannot be confirmed. The fourth token, [ $\overline{\mathfrak{j}} \mathbf{w \eta w a ́ ]}$ 'smell (v)' is likely an ideophone, to which normal rules of phonology do not necessarily apply.

Meanwhile, two of the mw tokens are class 1 nouns and the third token is a class 3 noun. Two of these tokens clearly derive the $\mathbf{w}$ from noun class affixation. (The word for 'hare' has the variant wāpgá and so the nature of the mw sequence is not clear.) Thus, an argument can be made that nasal place assimilation does not apply in cases of NC sequences resulting from infixation. On the one hand, the nasal of an $\mathbf{N}$ - prefix undergoes place assimilation when prefixed to words with a $\mathbf{w}$ onset, with an [ $\mathbf{y w} \mathbf{w}$ ] realization. On the other hand, a word initial nasal maintains its place features when taking a-w- infix. (See $\S 3.1$ for a description of nasal place assimilation.)

Leaving aside the likelihood that the sequences mw and yw have different sources, I nevertheless present both of these sequences as Cw clusters and leave the question regarding their possible differing phonological character for future study.

### 2.1.4.2 Cy sequences

Consonant clusters $\mathrm{C}_{1} \mathrm{C}_{2}$, where $\mathrm{C}_{2}$ is a palatal approximant $/ \mathrm{j} /$, are attested when the initial consonant is a plosive, fricative or nasal, and are nearly restricted to the labial series. As with Cw sequences, Cy sequences are observed at morphological boundaries, as well as in root-initial position of basic words. The sequence is rare, occurring uniquely only 19 times in the data and is pronounced as $[\mathbf{C j}]$.

The different consonants observed in Cy clusters are given in Table 2.10. The consonants $\mathbf{t}, \mathbf{d}, \mathbf{c h}$ and $\mathbf{s h}$ are placed in parentheses, since they are attested only rarely in the data. Richards (1991: 338) also observed chy and jy sequences (and no dy sequence). However, no mention of frequency of these sequences is offered. Given the similar acoustic properties of a palatal consonant alone and a palatal consonant followed by the palatal approximant $\mathbf{y}$, it is possible that some tokens of shy, chy and jy have been mistakenly transcribed without the glide. But it is just as likely that Cy sequences with a palatal initial consonant are in decline. The consonant $\mathbf{n}$ is omitted from the Cy sequence inventory due to the unclear interpretation of the phone [ $\mathbf{n}$ ] as a realization of $/ \mathbf{n j} /$. See $\S 2.1 .1$ above for details. ${ }^{14}$

[^10]|  |  | Labial | Alveolar | Palatal | Velar |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Plosives | vl |  | (ty) | (t.y) |  |
|  | vd | by | (dy) |  |  |
| Fricatives |  | fy |  | $\left(\int y\right)$ |  |
| Nasals |  | my |  |  |  |

Table 2.10 Cy sequence types.

A complete list of root-initial $\mathbf{C y}$ tokens is given in Table 2.11.

| Sequences | Examples (in phonetic form) \# | \# of tokens |
| :---: | :---: | :---: |
| (ty) | [ $\mathbf{h}^{\text {hinntjêy] 'diarrhea' }}$ | 1 |
| by | [bjằ] 'gall bladder', [bjāŋ] ‘fish', [bjē̃̌] 'nail', <br> [bjā] 'banana', [bjāŋ]] 'palm nut', <br> [bjo] 'raffia palm', <br> [m̀jbis̄n̄̄] 'bell', [fīmbjān] 'hunting bow' | , $\quad 8$ |
| dy | [djā] 'testicle', [bvēdjē̆] 'bridge' | 2 |
| fy | [ $\mathbf{f j} \mathbf{\varepsilon}]$ 'mouse', [ $\mathbf{f j} \overline{\mathrm{y}} \mathrm{\eta} \mathbf{\varepsilon} \bar{\varepsilon}]$ 'resemble', [fjì] 'debt', [fjí] 'burn' | 4 |
| shy | [ $\overline{\text { a j jāp] 'stomach (internal)' }}$ | 1 |
| chy | [tJjā:] 'hand' | 1 |
| my | [mjāē̄] 'blink', [mjı̄] 'squeeze' | 2 |

Table 2.11 Examples of root-initial Cy sequences and their prevalence (exhaustive) ( $\mathrm{n}=19$ ).

### 2.1.5 Nasal-consonant sequences

A proper interpretation of nasal-consonant sequences is difficult for a number of languages in the area. The same is true for Nchane, where the nasal of NC sequences is observed to always be pronounced with a certain degree of pitch, due to the nasal's sonorance quality. But the characteristics of the nasal in one word versus a second word are not always the same, and are sometimes different in separate utterances of the same word. While interpretation of such sequences is debatable, I consider them as involving a syllabic nasal rather than prenasalization. However, there is much variation, with the NC onsets of verbs particularly showing more prenasalization-like characteristics.

In §2.1.5.1 I present the general phonetic properties and distribution patterning of NC sequences. I attempt to limit my discussion here to NC sequences in monomorphemic environments. I do this, however, with a recognition that it is likely impossible to rule out all instances of nominalization (which involves a homorganic nasal prefix) and that the question regarding a correct synchronic analysis of the nasal of NC sequences at the morpheme boundary in at least some of the noun classes is not yet answered with certainty. In §2.1.5.2 I present the various sources of NC sequences and discuss briefly how this complicates the analysis. Recognizing the potential sources of NC sequences is critical to understanding their behavior, since the
realization of many of them is variable, suggesting that processes resulting in NC sequences, such as syllable reduction and root incorporation of prefix nasals, have not yet fully regularized.

### 2.1.5.1 General phonetic properties and distribution of nasal-consonant sequences

Nasals followed by non-nasal consonants are very common in the data, with the nasal almost always matching the place of articulation of the following consonant. This sequence type is particularly prevalent among nouns, which account for more than $75 \%$ of tokens. Slightly more than $50 \%$ of these sequences occur in word-initial position and another $35 \%$ are stem-initial, with both contexts accounting for more than $85 \%$ of total occurrences.

Some of these nasal-consonant sequences show characteristics consistent with both syllabic nasal-consonant sequences and prenasalized consonants. In wordinitial position, the duration of the nasal is usually comparable to that of a vowel in a word-initial vowel-consonant sequence and carries tone. However, the duration can be significantly shorter, almost to the point of being unheard by the inattentive listener, particularly in commonly used words like proper nouns. ${ }^{15}$ The tone realized on the nasal often matches the preceding tone. When there is no preceding tone, or when the NC sequence occurs at a phrasal boundary, the nasal is almost always realized with a mid tone. (Note that observations regarding the phonetic characteristics of NC sequences in this section are substantiated through the use of Speech Analyzer, an acoustic analysis application.)

The nasal is usually resyllabified, forming a syllable coda, when preceded by a vowel, and usually with no apparent tone implications. In other words, there appears to be no lexical tone associated with most of these nasals. The duration of the resyllabified nasal in the coda position is relatively shorter compared to the wordinitial variety and there is a clear reduction in intensity (i.e., a hiatus) marking the nasal-consonant boundary when the consonant is a voiced plosive like $\mathbf{b}$ or $\mathbf{g}$. When the consonant is a voiceless plosive or fricative there is a smaller reduction in intensity at the nasal-consonant boundary and a large reduction between the consonant and the following vowel.

Rarely, reduced intensity has been observed instead occurring at the vowelnasal boundary suggesting that the nasal has not been completely resyllabified and the nasal-consonant sequence showing characteristics more in line with a prenasalization analysis. Multiple utterances of the same word sometimes yield varying degrees of apparent resyllabification, possibly related to differences in careful and natural speech. These rare cases might be limited to nominalizations. However, examples of known nominalized forms are observed with the nasal being characteristically resyllabified.

[^11]The inventory of $\mathrm{NC}(\mathrm{G})$ sequences occurring in the data appears in Table 2.12. The glides are given in parentheses when they are attested with a particular NC sequence. The table shows that any consonant can be preceded by a nasal, with the exception of $\mathbf{g h}$. There is no evidence to suggest that a $\mathbf{\eta g h}$ sequence is impossible; its absence is likely due to the scarcity in the data of gh itself.

|  | Labial | Alveolar | Palatal | Velar |
| :--- | :--- | :--- | :--- | :--- |
| Plosives |  | $\mathrm{nt}(\mathrm{y})$ | nch | $\mathrm{yk}(\mathrm{w})$ |
|  | $\mathrm{mb}(\mathrm{w} / \mathrm{y})$ | nd | nj | $\mathrm{g}(\mathrm{w})$ |
| Fricatives | mfw | ns | $\mathrm{nsh}(\mathrm{w})$ | - |
| Approximants |  | yl | ny | yw |

Table $2.12 \mathrm{NC}(\mathrm{G})$ sequence types.

Examples of NC sequences in nouns are given in Table 2.13, along with the prevalence of the different NC sequence types. Note that the distribution of glides following the various NC sequence varieties is largely consistent with that of the glides without the preceding nasal.

Some important observations regarding this data set can be made. First, nasal-consonant sequences occuring inside the root and not at a morpheme boundary are rare. In most cases, these appear to be nominalized forms with the NC sequence a result of a verb suffix. Two apparent exceptions are [mwāngá] 'hare' (c1) and [sēplì] 'okra' (c1). Second, the voiced velar nasal-plosive sequence $\mathbf{\eta g}$ rarely occurs before front vowels, with [ $\mathbf{k}^{\mathbf{h}} \mathbf{I} \eta \mathrm{g}$ è $]$ 'island' being the only occurrence in the data. Lastly, while the distribution of NCG sequences is modestly wide, their prevalence is very low.

| NC | Examples (in phonetic form) \# of token |
| :---: | :---: |
| nt |  |
| jch |  |
| Øk |  <br>  |
| mb | [ $\overline{\mathbf{m}} \mathrm{b} \overline{\mathrm{i}}:]$ 'grasshopper' (c9), [ $\overline{\mathbf{m}} \mathrm{bà:]} \mathrm{'bait'} \mathrm{(c9)}$, [ $\overline{\mathbf{m}} \mathbf{b} \mathbf{n}$ nà] 'sweet potato' (c1) |
| nd | [ $\mathbf{n}$ dī̀nć] 'omen' (c1), [n̄dáy] 'thread' (c1), [n̄dòn] 'hawk' (c1) |
| nj | [ $\mathbf{j} \mathbf{d} \mathbf{3} \mathbf{i}]$ 'venom' (c1), [ $\mathbf{j} \mathbf{d} \mathbf{3}$ à $]$ 'balafon' (c1), <br> [j̄130̄:] 'mortar' (c5) |
| ng |  <br>  |
| mf |  [ $\overline{\mathbf{m}} \mathbf{f} \hat{\mathbf{o}}$ ] 'ladle' (c3) |
| ns | [fīnsésè] 'louse' (c19), [n̄sà̀] 'friend' (c9), [n̄sō:] 'pepper' (c1) |
| jnsh |  <br> [fiñ $\mathfrak{y}$ :] 'mud wasp' (c19) |
| ygh | - |
| \1~nl | [sē̄lì] ‘okra’ (c1), [khīllà:] 'kingfisher' (c7), <br> [n̄15] 'poison' (c1) |
| jy ${ }^{16}$ |  |
| \w | [ $\mathrm{\eta} \mathbf{W} \mathbf{a} \mathrm{n}]$ ] 'granary' (c1) |
| mbw | [ $\mathbf{m} \mathbf{b w}$ ćík ${ }^{\mathbf{h}} \mathbf{\overline { o l } \mathrm { l }}$ ] 'chameleon' $(\mathrm{c} 1)^{17}$ |
| ngw | [ $\mathfrak{y}$ gwàn] 'whip' (c1) ${ }^{18}$ |
| mfw | [ $\overline{\mathbf{m}} \mathbf{f w a ̄} \mathbf{d}$ 'slave' (c1) |
| nshw |  |
| nty | [ $\mathbf{k}^{\text {hīntjồl] 'diarrhea' }}$ |
| mby | [ $\overline{\mathbf{m}} \mathrm{bj} \bar{\varepsilon} \mathrm{q} \boldsymbol{\overline { \varepsilon }}$ ] 'bell', [fìmbjē q ] 'hunting bow' |

Table 2.13 Examples of NC sequences in nouns and their prevalence ( $n=170$ ).

The few examples of NC onsets occurring in verbs show that the duration of the nasal is closer to that of coda nasals. In addition, there is very little or no decrease in intensity at the nasal-consonant boundary. This NC variety shows characteristics of a prenasalized consonant. However, only seven examples of NC word-initial verbs

[^12]are found in the data, which are given in Table 2.14. Furthermore, some verbs which were originally transcribed with an NC onset showed that the nasal was not present in recordings, suggesting that the status of this variety of NC sequence is tenuous.

| Sequences | Examples (in phonetic form) \# of tok | \# of tokens |
| :---: | :---: | :---: |
| nt | - |  |
| nch | - |  |
| „k | [ ${ }^{\overline{1}} \mathrm{~K}^{\mathbf{h}} \mathbf{\text { oे] }}$ 'clap' | 1 |
| mb |  <br>  | 5 |
| ng |  | 1 |

Table 2.14 Examples of NC sequences in verbs (exhaustive) and their prevalence ( $\mathrm{n}=7$ ).

Considering the phonetic characteristics of NC sequences observed above, an argument can be made for syllabic nasals as well as prenasalized consonants, with a range of realization patterns consistent with either interpretation. This variability is consistent with diachronic change, the end result of which is difficult to predict, and is explained to a degree by looking at the different sources of NC sequences in the language, which are presented in the following section.

The realization of NC onsets of verbs is particularly more consistent with a prenasalization analysis than NC sequences in other contexts. But even this NC variety is prone to speaker/utterance variability. A more accurate analysis is one which views all NC sequences of the language as a single variety, but with realization tendencies associated with specific contexts (e.g., word class, consonant type, etc.). Most occurrences of NC sequences show characteristics inconsistent with a prenasalization analysis. Therefore, I consider a syllabic nasal analysis preferable.

### 2.1.5.2 Sources of nasal-consonant sequences

Analysis of nasal-consonant sequences is complicated due in part to their multiple sources, with some NC sequences difficult to categorize in terms their morphological status. Five primary contexts are observed:

1. The first-person singular subject agreement prefix $\mathbf{N}$-, which affixes to the left side of the verb and often various elements of the verb core (e.g., tense and aspect markers). For example, mē $\mathbf{\eta}$-g $\bar{\varepsilon} \mathbf{n}$-dú $[1 \mathrm{SG} . \mathrm{PRO} 1 \mathrm{SG}-\mathrm{P} 3$ 1SG-say] 'I said...'.
2. Consonant initial suffixes added to verb roots with nasal consonant codas. For example, bī̀-ś́ [dance-CAUS] 'roll'.
3. Nominalization is usually accomplished through adding a homorganic nasal prefix $\mathbf{N}$ - to a verb. All verb roots have consonant onsets. The result then is a NC sequence. For example, kì-n-tèn $\bar{\varepsilon}$ [c7-NMZR-argue] 'argument'.
4. Noun class prefixes added to nominal roots and nominal modifiers. For example, mān-ḱs [c6a-ladder] 'ladders' and mw- $\bar{\varepsilon}$ : mùn-dùdē [c18a-thing c18a-many] 'many things'.
5. Monomorphemic, root internal NC sequences. For example, ḿbénè [c5.breast] 'breast', mwāngā [c1.hare] 'hare' and $\overline{\mathbf{m}} \mathbf{b u ̄ ̃}$ : [foam] 'foam (v) ${ }^{20}$.

The first two contexts are easily dealt with, since it is usually obvious when a verb has been marked with subject agreement or a causative suffix, although many verbs are observed which have an apparent historical causative suffix lexicalized as part of the verb root (see $\S 9.1 .4$ for more details). Contexts 3 and 4 represent environments which are not always easily analyzed. For instance, it is almost certainly the case that some nouns in the data are nominalizations, but without a corresponding source verb identified. This difficulty is particularly troublesome for class 1 nouns, since many of these have root-initial NC sequences, where the homorganic nasal represents either a nominalization prefix or a lexicalized class prefix. Therefore, it is not always apparent if the nasal present at the morpheme boundary in nouns is a part of the root or has been affixed to the root.

The morpheme boundary presented by class agreement marking on nominal modifiers is usually easily identifiable and brings no questions to the status of the resulting NC clusters. But certain genders (particularly $1 / 2$ and 19/18a) are observed to have subgroups involving a homorganic nasal at the morpheme boundary. The question then is whether the nasal belongs to the root or to the prefix. See §5.2.1 for more discussion on noun classes with a prevalence of such NC sequences.

The various sources of NC sequences in the language and the accompanying ambiguity as to their morphological status should be kept in mind when considering the phonetic description offered in the above section. The variability of the phonetic realization of some NC sequences reflects an indistinct morpheme boundary, where a historical nasal prefix element is in the process of being lexicalized onto the root.

### 2.2 Vowels

Nchane has a seven-vowel system, which is in contrast to the neighboring Grassfields languages, which most often have nine vowel systems. However, within the Beboid group, Sari and Noni also have seven vowel systems (Richards 1991). The basic vowel phonemes of Nchane are displayed in Figure 2.1.

[^13]front central back


Figure 2.1 Inventory of Nchane vowels (short, oral varieties).

The figure above shows a symmetrical vowel system, with three height distinctions represented in front and back series. However, the vowel system is phonetically asymmetrical, as the high back fricative vowel (represented as Fu) is realized as a near-high central vowel $[\underset{\sim}{\boldsymbol{u}}]$ with associated frication. Issues related to the fricative vowel analysis and this apparent discrepancy are discussed in §2.2.1, followed by sections describing the phonetic characteristics of vowels and support for their phonemic status. These sections are then followed by presentations of nasal vowels and long vowels. (While these vowels are represented in this chapter in their IPA form, see $\S 1.3 .3$ for an explanation as to how they are represented in the description's orthography.)

### 2.2.1 Fricative vowel

The vowel $\mathbf{F u}$, appearing in the high back position in Figure 2.1 above, has a severely restricted distribution, following a limited number of consonants and always accompanied phonetically by a fricative. The fricative, either [f] or [v], matches the voicing of the preceding consonant. For example, it is $\mathbf{f}$ following $\mathbf{k}$ and $\mathbf{c h}$, but $\mathbf{v}$ following $\mathbf{b}, \mathbf{g}$ and $\mathbf{j}$. Table 2.15 presents the CFu sequence types with illustrative examples and their prevalence in the data. Note that long and nasal varieties of the vowel in question are also observed. Due to the overall small number of tokens, all varieties of this vowel are treated together.

| Preceding consonant | Examples (in phonetic form) \# of | \# of tokens |
| :---: | :---: | :---: |
| b | [bvǔ] 'dog', [bvúlì] 'lion', [bvūgá] 'nine' |  |
| k |  | or' |
| g |  |  |
| ch | [ $\mathbf{f f f u ̈ ] ~ ' r e p l y ' , ~ [ \overline { j } t f f u ̀ g e ̀ ] ~ ' t h o u s a n d ' ~}$ |  |
| j | [d3vī] 'cobra' |  |

Table 2.15 Examples of CFu sequences and their prevalence $(\mathrm{n}=33)$.

Previous analyses of the Nchane sound system (see Boutwell 2014a; and Richards 1991) ${ }^{21}$ have treated these phonetic CF sequences as allophonic variants of Cw sequences when preceding /u/. However, recent attention to similar phenomena in other languages suggests a better analysis is to view this frication as being associated, if only as a trigger, with the vowel itself (see for example Connell 2007; and Faytak 2014).

Figure 2.2 presents the various vowels according to their average formant values and shows that the high, back position normally filled by [u] is empty. The phonetic vowel representing the phoneme $/ \mathbf{u}$ /, which at one time filled this position, is now realized as a near-high central vowel associated with labiodental frication of the preceding consonant (i.e., the fricative vowel $\mathbf{F u}$ ).


Figure 2.2 General zones of Nchane vowel realization reflecting F1 and F2 measurements. ${ }^{22}$

[^14]Faytak (2014: 56) suggests that such fricative vowels are associated with vowel systems with high vowels being encroached upon by lower vowels. This appears to be consistent with the Nchane vowel system. While no such encroachment is observed for the back vowels, the high front vowel is being crowded by the nearhigh front vowel and there is no high back vowel in opposition to the high front vowel.

In the past, $/ \mathbf{o} /$ is assumed to have placed upward pressure on $/ \mathbf{u} /$ resulting in a growing degree of closure and frication. The frication was also accompanied by centralization of the vowel. Speculation is that /u/ is being reanalyzed as a near-high central vowel, relieving the pressure on the high back position and allowing $/ \mathbf{0} /$ to move to a slightly higher position. Indeed, the $/ \mathbf{o} /$ often sounds like [u] to me, as a native American English speaker. In addition, both of these vowels (/u/ and /o/) exhibit behavior commonly associated with a high back vowel, as is shown in $\S \S 3.3$ and 3.4.

### 2.2.2 Phonetic descriptions of short oral vowels

As stated in the introduction to the section on vowels, the vowel system is phonetically asymmetrical. This is demonstrated in Figure 2.2 above which shows that there is no high back vowel counterpart to the high front vowel. Further descriptions of each vowel are given below. Note that these descriptions can for the most part be extended to the long and nasal vowel varieties, only differing in duration and nasal quality respectively. Therefore, no phonetic descriptions will be given for the individual long and nasal vowels.

The vowel $\mathbf{i} \quad$ The high front unrounded vowel $\mathbf{i}$ is realized as [ $\mathbf{i}]$, as in [ $\mathbf{b} \overline{\mathbf{l}}]$ 'goat' and [bā-ntfī] 'laws'. It is normally laxed when followed by a nasal, resulting in the realization of [ $\mathbf{r}]$, as seen in [ $\left.\mathbf{k}^{\mathbf{h}} \mathbf{i}-\mathbf{m b a ̈ a}\right]$ 'walking stick'. In this environment, contrast between $\mathbf{i}$ and $\mathbf{e}$ is therefore neutralized, and it is highly probable that some instances of transcribed $\mathbf{e}$ should be considered as i. Following a palatal consonant such as $\mathbf{c h}$ or $\mathbf{n}$, laxing usually does not occur, as in [ $\mathbf{t} \mathbf{I} \mathbf{I} n d$ зú:] 'mortar'. See $\S 3.2$ for a treatment of high front vowel laxing.

The vowel e The realization of the near-high front unrounded vowel e may best be characterized as [r]. Some instances are a bit lower, possibly represented as [e]. Some examples are [fî-sï] 'larynx', [bílí] 'hail' and [lẹ̀ḡ̄] 'run'. There is also a degree of free variation between the realizations of [I] and [i], particularly in word final position. Thus, alternative pronunciations are observed for certain words like /ā-


The vowel $\boldsymbol{\varepsilon} \quad$ The vowel $\boldsymbol{\varepsilon}$ is a mid front unrounded vowel [e̦]. In normal speech, this vowel often laxes when adjacent to a velar consonant, being realized as the mid central vowel [ə]. Sometimes, this laxing also occurs when the vowel is utterance final. The laxing is less likely to occur if the vowel is in a position associated with stress (as indicated by an apparent increase in intensity), such as root initial, and is often "corrected" in careful speech. Note that stress as a feature of the sound system has not been studied beyond the observances made here. These allophones are
 [lēmə́] 'tongue'.

The vowel a The low unrounded vowel a is realized as [a], although it is not as low as a standard low vowel and might be more accurately described as the near-high central vowel [ $\mathbf{b}]$. This vowel is illustrated in words like [lábè̀] 'spider web', [ $\left.\mathbf{\eta} \mathbf{k}^{h a ̄}\right]$ 'basket' and [bā-ndáy] 'thread'. Note that rarely this vowel is pronounced as [æ]. No specific environment for this alternative pronunciation has been identified, and it is analyzed as being in free variation with [a]. ${ }^{23}$

The vowel $\boldsymbol{s} \quad$ The mid back rounded vowel $\boldsymbol{\rho}$ has the most widely scattered formant plotting area, with a height spanning from $450-650 \mathrm{~Hz}$. However, most instances are realized as [ $\mathbf{0}$ ]. There is a tendency for higher realizations to follow palatal consonants such as $/ \mathbf{t} / /$ and $/ \mathbf{j} /$. But the incidence is inconsistent, with some lower realizations observed after palatal consonants and some higher realizations after



The vowel $\mathbf{u}$ The vowel $\mathbf{u}$ is realized as a near-high back rounded vowel [ $\mathbf{\sigma}$ ], which is slightly higher than the American English [v]. Its higher realization often makes it sound like $[\mathbf{u}]$. This vowel is illustrated by the words [ $\left.\mathbf{k}^{\mathbf{h}} \mathbf{I}-\boldsymbol{\eta} \mathbf{k}^{\mathbf{h}} \mathbf{\overline { \mathbf { w } }} \overline{\bar{\varepsilon}}\right]$ 'bone' and [ $\left.\mathbf{k}^{\mathrm{h}} \mathbf{i ̄} \mathbf{j} \mathbf{j} \underset{\sim}{\text { ond }}\right]$ 'fool'.

The vowel $\mathbf{F u} \quad$ The vowel $\mathbf{F u}$ is realized as a near-high central rounded vowel [ $\mathbf{\psi}]$, which is associated with labiodental frication. Some examples are [ $\left.\mathbf{k}^{\mathbf{h}} \mathbf{I}-\mathbf{\eta g} \mathbf{g v i ̀ ̀}\right]$ 'duck', [bvựì] 'lion', [bī-kfụ̄nè] 'rats' and [tffú] 'reply (v)'.

### 2.2.3 Contrastive sets for short oral vowels

The phonemic status of the seven Nchane vowels is illustrated in Table 2.16, which provides two contrastive sets. The first set establishes contrasts for all the vowels but the back series, with each vowel following the palatal plosive [d3]. Contrast for back vowels is observed in the set of words appearing below the dashed line, with the three back vowels following the velar plosive [g].

[^15]| Underlying form | Surface form | Gloss |
| :---: | :---: | :---: |
| /d3i/ | [d3i] | 'hoe' (c9) |
| /djè/ | [dзī] | 'animal skin' (c9) |
| /d3è/ | [dзè] | 'word' (c9) |
| /dзá/ | [dJá] | 'stand' (v) |
| /d3ū/ | [d3vì] | 'cobra' (c9) |
| /d3ó/ | [d3ó] | 'sun' (c5) |
| /gù/ | [gvè] | 'chest' (c9) |
| /gò/ | [gò] | 'buy' (v) |
| /ḡ̄/ | [g⿹勹] | 'spear' (c5) |

Table 2.16 Contrastive sets for short oral vowels.

### 2.2.4 Nasal vowels

Nasal vowels, which are summarized in Figure 2.3, occur in Nchane and are analyzed as the product of syllable reduction processes. Therefore, the issue of their synchronic phonemic status is somewhat complicated. While minimal pairs which contrast oral and nasal vowels are readily available, the practical orthography represents nasal vowels as VN sequences, reflecting the lack of contrast between nasal vowels and their corresponding VN sequences. Accordingly, it is perhaps more accurate to consider these nasal vowels as the phonetic realization of an oral vowel followed by a nasal consonant in coda position.


Figure 2.3 Nchane nasal vowel inventory.

Occurrences of nasal vowels are restricted to coda position and a moderate amount of free variation between $\underset{\sim}{V}$ and $V N$ is observed. ${ }^{24}$ This free variation appears to be less frequent for long nasal vowels than for short nasal vowels. Language

[^16]internal evidence for the treatment of these vowels as underlying VN sequences comes from verbs like gè: 'go', which has the progressive form of gēné. Considering cognates with neighboring languages in which a nasal consonant is present also supports the hypothesis that these vowels are a result of syllable reduction. Table 2.17 provides a partial list of cognate evidence of syllable reduction.

| Nchane | Noni | Sari | Kemedzung | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| kī-ggヘ̂ | kò-ıgū:n | fi-ygomu | ki-gombs | 'bedbug' |
| ȳgv ${ }_{\text {d }}$ | wvún | wu:y | wunshi | 'tail' |
| tà: | tā:n | $\operatorname{tay} \varepsilon$ | - | 'ashes’ |
| chā | chān | tsa:y | tsandi | 'monkey' |
| kī-jkâ | kè̀-ŋkā:y | ki-ta:y | ki-ykoŋko | 'insect, beetle' |
| kī-lė́: | kē-lé:m | ki-leme | ki-lingbə | 'bat' |
| by $\bar{\varepsilon}^{\text {: }}$ | byēn | byeni | byandi | 'nail' |

Table 2.17 Selected cognates of Nchane and three other Beboid languages supporting syllable reduction as source of Nchane nasal vowels.

Near-minimal pairs contrasting nasal and oral vowels are given in Table 2.18.

| Vowels | Underlying form | Surface form | Gloss |
| :---: | :---: | :---: | :---: |
| i/i | //ī1/ | [ [1] | 'be silent' |
|  | / $1 /$ | [ i ] | 'sit' |
| e/e | /kī-Jēp/ | [ $\mathrm{k}^{\mathrm{h}}$ - $-\frac{\mathrm{I}}{\mathrm{I}}$ ] | 'palm tree flower' |
|  | /kī-ntjè/ | [ $k^{\mathrm{h}} \mathrm{I}-\mathrm{n}$ t $\mathrm{I}_{1}$ ] | 'sleeping room' |
| ¢/ع | /dјèn/ | [d3ż] | 'grave' |
|  | /dろ¢̀/ | [dзè] | 'word' |
| a/a | /̄̄gàn/ | [ $\overline{\text { gad }}$ ] | 'proverb' |
|  | /n̄gá/ | [ n gá] | 'rust' |
| / $/ \mathbf{}$ | /kì-mb̄̄̀/ | [ $\mathrm{k}^{\mathbf{h}} \mathbf{i}-\mathrm{mb}{ }_{\sim}^{\text {a }}$ ] | 'door' |
|  | /kī-bó/ | [ $\mathrm{k}^{\mathrm{h}} \mathrm{i}$-bó] | 'arm' |
| \%/0 | /kī-kón/ |  | 'shirt' |
|  | /kī-kô/ | [ $\mathbf{k}^{\text {hi}}$-k $k \hat{\hat{o}}$ ] | 'yam' |
| Fu/Fu | /̄̄gúy/ | [̄̄gvú] | 'tail' |
|  | /\̄̆gù/ | [gvè] | 'chest' |

Table 2.18 Contrastive pairs for nasal vowels.

### 2.2.5 Vowel length

Contrastive vowel length is observed in a small number of words, most of which have monosyllabic roots, with long varieties of all seven short vowels. The long vowels inventory is provided in Figure 2.4. ${ }^{25}$


Figure 2.4 Nchane long vowel inventory.

The analysis is somewhat complicated by the occurrence of two types of long vowels, one being the so-called "half-long" variety. Short vowels usually have a duration of about 100 ms and long vowels are about $220-250 \mathrm{~ms}$. Half-long vowels measure about $180-190 \mathrm{~ms}$ in duration. Some examples are kīntî' 'bowl' (c7) and fı̀tā̀ 'fireside' (c16). The actual duration of a vowel can be affected by a number of factors. Contour tones and nasalization are particularly associated with longer vowels in Nchane.

Although difficult to substantiate, it is likely that these half-long vowels are a product of syllable reduction, similar to what has been posited for nasal vowels (see $\S 2.2 .4)$. The same has been argued for as the source of long vowels in nearby Mungbam (Lovegren 2013: 96). Because of the relative difficulty in differentiating three length values by the researcher as well as by many native speakers, the current analysis considers half-long vowels as short varieties.

[^17]Examples of contrast for long vowels are given below.

| Vowels | Example | Gloss | Example | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| i:/i | [fì] | 'wind' | [fí] | 'kidney' |
| e:/e | [t5İ:] | 'mole' | [ t IT] | 'palm kernel' |
| $\varepsilon: / \varepsilon$ | [f̌́:] | 'two' | [f $\bar{\varepsilon}$ ] | 'make' |
| a:/a | [bī-ndzá:] | 'clouds' | [bā-nd3à] | 'balafon' |
| 3:/0 |  | 'elephant' | [ $\mathbf{k}^{\mathbf{h}} \mathbf{- 1} \mathbf{j} \mathbf{j} \mathbf{j}$ ] | 'spirit' |
| 0:/v | [ŋ̄gò:] | 'canoe' | [ท̄gó] | 'fire' |
| Fu:/Fu | [bvù:gā] | 'nine' | [bvúli] | 'lion' |

Table 2.19 Contrastive pairs for long vowels.

### 2.3 Phonotactics

### 2.3.1 Syllable structure

Six types of syllables are observed in Nchane words: V, N, CV, CGV, CVN, and CGVN. The V syllable type is rare, with most occurrences accounted for by class marking for classes 6 and 18 and the preposition à 'in'. The CV syllable type is by far the most prevalent and is observed involving all consonants and vowels.

The N syllable type is listed here in spite of the fact that the characteristics of the N in NC sequences do not always support its analysis as syllabic. The strongest candidates for such an analysis are the first-person singular subject agreement prefix and the nasal prefix of some class 6 a nouns. See $\S 2.1 .5$ for further discussion.

Examples of each of the syllable types are given in Table 2.20.

| Syllable type | Example | Gloss |
| :---: | :---: | :---: |
| V | [ā] | 'in' |
|  | [ā.dā] | 'testicles' |
| N | $\left[\overline{\mathrm{j}} \cdot \mathrm{k}^{\mathrm{h}} \overline{\mathrm{v}}:\right]$ | 'palm kernel oil' |
| CV | [dā] | 'testicle' |
|  | [ $\mathrm{t}^{\text {i }}$ ] | 'abdomen' |
|  | [fi] | 'kidney' |
|  | [jō] | 'hear' |
| CGV | [bwī] | 'dew' |
|  | [gwō] | 'cut down' |
|  | [kwì] | 'moon' |
|  | [ j gw ì] | 'fishing pole' |
|  | [fjè] | 'mouse' |
|  | [fjó] | 'debt' |
|  | [bjō] | 'raffia palm' |
| CVN | [jég] | 'thigh' |
|  | [dáy] | 'jump' |
|  | [bēn] | 'frighten' |
| CGVN | [kwēp] | 'firewood' |
|  | [ $\mathfrak{n}$ wāp] | 'granary' |
|  | [bjég] | 'fish' |
|  | [ $\overline{\mathrm{a}} . \mathrm{C}$ ] $\mathrm{j} \overline{\mathrm{I}}$ ] | 'stomach' |

Table 2.20 Examples of different syllable types.

## Nouns

Nchane shows a slight preference for monosyllabic noun roots. The phonological structure of roots is dominated by CV and CV.CV structures, although other combinations are not uncommon. Noun roots with more than two syllables are relatively rare. The different syllable patterns of noun roots are summarized in Table 2.21, along with representative examples.

| Pattern | Example | Gloss |
| :---: | :---: | :---: |
| $\sigma$ | [bī] | 'goat' |
|  | [ fj j ] | 'mouse' |
|  | [t¢́n)] | 'thief' |
| $\boldsymbol{\sigma . \sigma}$ | [gá.n̄̄] | 'grass' |
|  | [śs.yś] | 'oil palm' |
|  | [kwè.sí] | 'woman' |
|  | [sēr.lì] | 'okra' |
|  | [mwàn.gá] | 'rabbit' |
| $\boldsymbol{\sigma . \sigma . \sigma}$ | [bì.lì.k ${ }^{\text {háy }}$ ] | 'papaya' |
|  | [bó.ȳā.İ] | 'tortoise' |
| б.б.б.б | [tfā.là.gú.gō] | 'spider' |

Table 2.21 Syllable patterns of noun roots.

## Verbs

The majority of Nchane verbs have monosyllabic roots with the shape CV. Disyllabic roots most often have the shape CV.CV. Other syllable types, such as CVN and CGV, are relatively uncommon in verb root structures. Table 2.22 summarizes the different patterns observed and gives some examples.

| Pattern | Example | Gloss |
| :---: | :---: | :---: |
| $\sigma$ | [wā] | 'argue' |
|  | [jà ] | 'vomit' |
|  | [bín] | 'dance' |
|  | [fjí] | 'burn' |
|  | [gwī] | 'fall' |
| $\boldsymbol{\sigma . \sigma}$ | [ $\mathrm{nī} .1$ ¢ ${ }^{\text {c }}$ ] | 'hide' |
|  | [lī.gè] | 'run' |
|  | [kwā.d3¢̀] | 'think' |
|  | [mjá.gé] | 'blink', |
|  | [ńgó.mé] | 'bow down' |

Table 2.22 Syllable patterns of verb roots.

### 2.3.2 Distributional Restrictions

This section discusses observed restrictions on the distribution of consonants and vowels. Table 2.23 shows which CV sequences are attested, considering simple onsets only. Unattested sequences are represented by a minus sign and shaded.

|  | i | e | $\varepsilon$ | a | o | U | $\mathrm{F}_{\mathrm{u}}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| b | + | + | + | + | + | + | + |
| t | + | + | + | + | + | + | - |
| d | + | + | + | + | + | + | - |
| ch | + | + | + | + | + | + | + |
| j | + | + | + | + | + | + | + |
| k | + | + | + | + | + | + | + |
| g | + | + | + | + | + | + | + |
| f | + | + | + | + | + | + | - |
| s | - | + | + | + | + | + | - |
| sh | + | + | + | + | + | + | - |
| gh | - | + | + | + | + | - | - |
| m | + | + | + | + | + | + | - |
| n | + | + | + | + | + | - | - |
| n | + | + | + | + | + | + | - |
| y | - | - | + | + | + | + | - |
| l | - | + | + | + | + | + | - |
| y | + | + | + | + | + | + | - |
| w | - | + | + | + | + | + | - |

Table 2.23 Attested consonant-vowel sequences in Nchane (simple onsets only).

## Restrictions on consonants

All consonants in the inventory are attested as onsets, although $\mathbf{\eta}$ is rare in this position. Conversely, $\mathbf{y}$ is the only consonant allowed in word final position. Additionally, only nasals are allowed in coda position. As was stated in §2.1.2.3, nasals in word final position are often elided and a nasal quality realized on the preceding vowel. This provides evidence of a preference for CV syllable types, with CVN the only type of closed syllable allowed, and that type of syllable often realized as the open syllable CV.

Table 2.24 summarizes the consonants which can occur stem-internally. While most consonants are observed in this position, the voiceless palatal plosive is notably unattested. Furthermore, the voiceless alveolar plosive appears only once in the data in a stem-internal environment as indicated by the brackets, in the word tūtū 'potato', which is possibly a loanword from English and/or perhaps a reduplicated stem. The voiceless velar plosive is also significantly rare in this environment, in spite of it being the most frequent of all but nasal consonants. This suggests that the language prefers voiced and sonorant consonants in stem-internal position. The velar fricative $\mathbf{g h}$ also appears in brackets, indicating that the total number of tokens of this consonant is small, and the two occurrences of stem-internal gh possibly represent an allophonic variety of $/ \mathrm{g} /$ rather than the phoneme $/ \mathrm{y} /$.

|  |  | Labial | Alveolar | Palatal | Velar |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Plosives | vl |  | $[\mathrm{t}]$ |  | k |
|  | vd | b | d | j | g |
| Fricatives |  | f | s | sh | $[\mathrm{gh}]$ |
| Nasals |  | m | n | n | y |
| Approximants |  |  | l | y | w |

Table 2.24 Stem-internal consonants in Nchane.

## Restrictions on vowels

While all vowels may occur in word final position, only $\mathbf{a}, \boldsymbol{\varepsilon}$ and $\boldsymbol{\jmath}$ occur in word initial position, with $\boldsymbol{\varepsilon}$ and $\boldsymbol{\jmath}$ only attested in this position in interjections. The low occurrence of the fricative vowel has already been discussed in $\S 2.2 .1$. Because of the small number of tokens, it is difficult to establish any firm conclusions regarding its distribution patterning, beyond the fact that it occurs most often following $\mathbf{b}, \mathbf{k}$ and $\mathbf{g}$.

The front high vowel $\mathbf{i}$ often follows the palatal plosives $\mathbf{c h}$ and $\mathbf{j}$, but rarely follows the alveolar plosives $\mathbf{t}$ and $\mathbf{d}$. It is also rarely observed following $\mathbf{n}$, but only in word final position, and never follows the alveolar consonants $\mathbf{s}$ or $\mathbf{l}$. These apparent restrictions are suggestive of a spirantization process, although it does not appear to be applied strictly.

## Chapter 3

## Phonological processes

A number of phonological alternations are observed, some of which occur due to contact between certain phonemes, and others which are likely fundamentally morphophonological in nature. The alternations due to adjacency of certain segments include nasal place assimilation, presented in §3.1, and high front vowel laxing, described in $\S 3.2$. Both of these alternations are illustrated by monomorphemic examples, with additional examples of occurrences at morpheme boundaries providing transparent evidence. Glide formation, which is covered in $\S 3.3$, is also likely a strictly phonological phenomenon. Section 3.4 describes the process of compensatory vowel lengthening, observed only in the Anaphoric 1 demonstrative. Vowel copying is a process clearly involving morpheme-morpheme interactions and is also limited to certain word classes. This process is described in §3.5. The chapter concludes with a presentation of spirantization in $\S 3.6$, which is observed in a small number of monomorphemic contexts as well as two cases conditioned by affixation.

### 3.1 Nasal place assimilation

As was stated in §2.1.5.1, the nasal of NC sequences usually matches the place features of the following consonant. This assimilation is seen in root internal NC sequences, as well as in NC sequences resulting from prefixation, with the process not applying in other types of affixation. Assimilation in root-internal NC sequences is illustrated in (3.1), by verbs as well as nouns.

| (3.1) | [ $\overline{\mathbf{m}} \mathbf{b}$ ¢́] | 'melt' |
| :---: | :---: | :---: |
|  | [戸̄kù] | 'clap' |
|  | [fî̀nk ${ }^{\text {¢ }}$ ] | 'cup' (c19) |
|  | [d3wīnsé] | 'man' (cl) |
|  | [mwàngá] | 'rabbit' (cl) |

The examples in (3.2) illustrate nasal assimilation across prefix-stem morpheme boundaries. Example (3.2)a shows assimilation of the first-person singular subject agreement prefix, (3.2)b of the nominalizer and (3.2)c of the nasal coda of the class 6a prefix.
(3.2)

[ $\overline{\mathbf{\eta}}-\mathbf{g} \bar{\varepsilon}:]$ 'I go'
b. [ $\overline{\mathbf{m}}-\mathrm{b} \mathbf{1} \mathbf{l} \grave{\mathrm{c}}] \quad$ 'question'
[ $\overline{\mathbf{m}}-\mathrm{fi}:] \quad$ 'help'
[kī-n-tēnē] 'argument'


Selected examples to illustrate place assimilation of nasals followed by each of the non-nasal consonants are given in Table 3.1.

| [m] | [m] | [ n ] | [ n ] | [ n ] |
| :---: | :---: | :---: | :---: | :---: |
| [ $\overline{\mathbf{m}} \mathbf{}$ à $]$ | [ $\overline{\mathbf{m}} \mathbf{f a ̄}] \sim[\overline{\mathbf{n}} \mathbf{f} \mathbf{a}]$ | [n̄tò̀] | [ $\overline{\mathbf{n}} \mathrm{f}$ ¢̄̄¢] | [mā̀-k'́] |
| 'soup' (c9) | 'eagle' (c1) | 'cane rat' (c9) | 'insult' | 'ladder' (c6a) |
|  |  | [kī-ndòy] | [ ${ }^{\mathbf{n}} \mathbf{d} \mathbf{3} \overline{0}$ ] | [kī-ıgvì] |
|  |  | 'neck' (c7) | 'cloth' | 'duck' (c7) |
|  |  | [fī-nsésè] | [ $\overline{\mathbf{j}}$ jáņ] | [ $\grave{\mathrm{j}}$-wīn c ] |
|  |  | 'louse' (c19) | 'soil' | 'I open' |
|  |  |  | [ $\overline{\mathbf{n}}$-jény] |  |
|  |  | 'poison' (c1) | 'I see' |  |

Table 3.1 Selected examples of Nchane word forms with NC sequences, illustrating nasal place assimilation.

The example given to illustrate the yw sequence is a verb with a $\mathbf{w}$ onset in order to clearly show which place features are assimilated by the preceding nasal. Otherwise, the $\boldsymbol{\eta} \mathbf{w}$ sequence is ambiguous as to whether it represents a case of infixation, in which case the nasal is not expected to assimilate to the place of articulation of the w. See §§2.1.4.1 and 2.1.5 for details regarding the challenges of interpreting Nw sequences.

As indicated in the table, free variation is observed in NC sequences involving [ $\mathbf{f}]$ and [I]. Nasals before [ $\mathbf{f}]$ are realized as [ $\mathbf{m}$ ] or [ $\mathbf{n}]$. Careful speech shows a preference for [ $\mathbf{n}$ ]. Nasals before [I] are realized as [ $\mathbf{n}$ ] or [ $\mathbf{n}]$, with a preference for [ $\mathbf{n}$ ] in onset position and [ $\mathbf{\eta}$ ] in coda position, although either realization can be observed in either environment. Similar variation is observed in Mungong in NC sequences at syllable boundaries where [ $\boldsymbol{\eta}$ ] is sometimes observed in non-homorganic NC sequences (e.g., [bān.j $\grave{\varepsilon}]$ 'gather' and [kāns̀̀̀] 'be alert').

Additionally, other CC types are also observed in the same syllabic context in Mungong, as illustrated in (3.3).

| (3.3) | $[$ kānnı̀ $]$ | 'squeeze' | (Mungong) |
| :--- | :--- | :--- | :--- |
|  | $[$ gāmtì $]$ | 'protect' |  |
|  | $[$ kūks $\grave{]}]$ | 'alter' |  |
|  | $[$ tsànn̄̄ $]$ | 'headpad' |  |

Otherwise, CC sequence restrictions and nasal place assimilation in Mungong is comparable to that of Nchane. See Boutwell (2011) for more details.

Besides the non-homorganic nasals in the alternative NC variants [nf] and [ $\mathbf{\eta l} \mathbf{l}$ g given in Table 3.1, nasal place assimilation is otherwise strictly applied across the language. One regular exception is observed in cases of verb stems with nasal codas followed by the Causative suffix -sर́, as in (3.4). The nasal in these verbs is usually [ $\mathbf{n}$ ], but [ $\mathbf{n}$ ] is also attested.

| [ $\mathrm{bī} \mathrm{l}$ - s ćc] | 'roll' |
| :---: | :---: |
|  | 'awaken' |
|  | 'send' |
| [fĭn-sć] | 'mix' |

This demonstrates that place assimilation does not apply to NC sequences resulting from suffixation. Furthermore, §2.1.4.1 provides evidence suggesting that place assimilation does not apply in cases of infixation. Thus, nasal place assimilation is limited to root internal NC sequences and those resulting from prefixation.

### 3.2 Front high vowel laxing

The front high vowel /i/ consistently laxes to [r] when preceding any NC sequence. This process occurs root-internally, as evidenced by the overall lack of [iNC] sequences in the language, with example (3.5) being representative.
[fīnsé] 'mix'

Laxing is best illustrated in noun class prefixes with an underlying /i/ and noun roots with nasal onsets, as in (3.6).

| /kī-/+/ntâ/ | $\rightarrow$ | [kī-ntâ] | 'chair' (c7) |
| :---: | :---: | :---: | :---: |
| /bī-/+/nt5ô:/ | $\rightarrow$ | [bī-nt $\int 0$ :] | 'horns' (c8) |
| /fî-/+/\kō/ | $\rightarrow$ | [fī̀-gkō] | 'cup' (c19) |

Laxing can sometimes be blocked when the vowel is preceded by a palatal
 リgó] 'gun'(c13)). The nonlaxed alternative in this context is especially seen when the nasal is $\mathbf{y}$. Laxing may also occur when the nasal is an onset, particularly in fast speech, but usually it does not (e.g., [kī-múgè] 'maggot').

### 3.3 Glide formation

High vowels are realized as glides when preceding other vowels. This is seen in possessive pronouns and the anaphoric demonstrative ANA1, both of which have a vowel onset in the root. Example (3.7) illustrates glide formation observed in possessive pronouns. A high front vowel /i/ in a prefix is realized as [ $\mathbf{j}$ ], while a near-high back vowel $/ \mathbf{0} /$ is realized as [ $\mathbf{w}$ ]. Note that the fricative vowel in the class 14 agreement prefix behaves in the same way as the non-fricative vowel in the class 18a agreement prefix.

| /bī-/+/òn/ | $\rightarrow$ | [bjū̀] | '2SG.POSS'(c8) |
| :---: | :---: | :---: | :---: |
| /fî-/+/è/ | $\rightarrow$ | [fjī] | '3SG.POSS' (c19) |
| /mō-/+/è/ | $\rightarrow$ | [mwì] | '3SG.POSS' (c18a) |
| /bū-/+/ày/ | $\rightarrow$ | [bwày] | '1SG.POSS'(c14) |

Similarly, the high vowels of agreement prefixes on the anaphoric 1 demonstrative are realized as glides, as in (3.8). Again, the fricative vowel in the class 14 agreement prefix is realized as [w], mirroring the behavior of the non-fricative vowel in the class 18a agreement prefix.

|  | $\rightarrow$ | $[\mathrm{t}(\mathrm{j}) \overline{\mathrm{c}}:]$ | 'ANAI' (c4) |
| :---: | :---: | :---: | :---: |
| /kī-/+/غ̀/ | $\rightarrow$ | [ $\mathrm{k}(\mathrm{j}) \stackrel{\varepsilon}{\mathrm{E}}$ ] | 'ANAl' (c7) |
| /bī-/+/غ̀/ | $\rightarrow$ | [bje c :] | 'ANAl' (c8) |
| /mō/+/غ̀/ | $\rightarrow$ | [mwè:] | 'ANAl' (cl8a) |
| $/ \mathrm{ku}-/+/ \bar{\varepsilon} /$ | $\rightarrow$ | [kwè:] | 'ANAl' (c3) |
| /bū/+/غ̀/ | $\rightarrow$ | [bwè:] | 'ANAl' (cl4) |

As indicated by the parentheses, the palatal glide is sometimes either not present at all or is only slightly perceptible. This is particularly the case when the
preceding consonant is the palatal obstruent /tf/ or the velar obstruent $/ \mathbf{k} /$. See $\S 3.4$ for an explanation of these alternative realizations, as well as of the long vowel in these forms.

### 3.4 Compensatory vowel lengthening

While long vowels are observed in Nchane, VV sequences involving different vowels are not allowed. This restriction is violated when the Anaphoric 1 demonstrative, which has a root consisting of the vowel $\boldsymbol{\varepsilon}$ takes a noun class agreement prefix. Therefore, one of the vowels is either deleted or is transformed into a glide (see §3.3). In either case, the result is the loss of a tone bearing unit and the development of an unassociated tone. Vowel lengthening ensues to compensate for the vowel loss and accommodate the unassociated tone.

The vowel prone to deletion (or glide formation) is the weaker of the prefix vowel and the root vowel. When the vowel of the noun class agreement prefix is relatively weak (i.e., $/ \mathbf{i} /, / \mathbf{o} /$ or $/ \mathbf{u} /$ ), the $\boldsymbol{\varepsilon}$ of the root is maintained, but lengthened, as illustrated in (3.9).

| / $\mathrm{j} 1 \mathrm{~T}-1+/ \mathrm{l}^{\prime}$ | $\rightarrow$ | [jè:] | 'ANAI' (c9) |
| :---: | :---: | :---: | :---: |
| /wō-/+/غ̀/ | $\rightarrow$ | [wà:] | 'ANAI' (cl) |
| /bī-/+/غ/ | $\rightarrow$ | [bjè:] | 'ANAI' (c8) |
| /fî- + / $/ \mathrm{z} /$ | $\rightarrow$ | [fjè:] | 'ANAI' (c19) |
| $/ \mathrm{t} 51-1+/ \hat{\varepsilon} /$ | $\rightarrow$ | [tf(j) $\overline{\mathrm{e}}$ :] | 'ANAI' (c4) |
| /kī-/+/غ/ | $\rightarrow$ | $[k(j) \stackrel{\varepsilon}{\mathrm{e}}$ ] | 'ANAI' (c7) |
| /kū-/+/غ/ | $\rightarrow$ | [kwè:] | 'ANAI' (c3) |
| /bū-/+/غ̀/ | $\rightarrow$ | [bwè:] | 'ANAl' (c14) |

The example set demonstrates four different realizations of this process, based on the type of consonant and prefix vowel. When the prefix consonant is a glide, the resulting word form has the shape GV:. When the prefix vowel is /i/ and the consonant is a weak obstruent (e.g., /b/ or /f/), then the prefix vowel undergoes glide formation and the root vowel is lengthened. A strong consonant followed by $/ \mathbf{i} /$ results in the optional realization of a glide, which is often not heard during normal speech. Finally, when the prefix vowel is the fricative vowel, then the vowel undergoes glide formation in addition to the root vowel being lengthened.

When the prefix vowel is $/ \mathbf{a} /$, which is stronger than the root vowel $/ \varepsilon /$, then the root vowel is deleted and the prefix vowel is lengthened to compensate.

| (3.10) | /bā-/+/غ̀/ | $\rightarrow$ | [bà:] | 'ANAI' ( $c 2$ ) |
| :---: | :---: | :---: | :---: | :---: |
|  | /kā-/+/غ̀/ | $\rightarrow$ | [kà:] | 'ANAI' (c6) |
|  | /mā-/+/̇̀/ | $\rightarrow$ | [mà:] | 'ANAI' ( $c 6 a)$ |
|  | /jā-/+/غ̀/ | $\rightarrow$ | [jā:] | 'ANAl' (c18) |

### 3.5 Vowel copying

The phenomenon of vowel copying is observed in a limited number of contexts, each involving the copying of a prefix vowel, and insertion of the copied vowel into the stem. Two contexts involve the copying of a prefix $/ \mathbf{a} /$, the first of which is the distal demonstrative gè illustrated in (3.11). The /a/ of the prefixes for classes $2,6,6 \mathrm{a}$ and 18 is copied and the vowel of the demonstrative root is deleted.

| /bā-/+/gè/ | $\rightarrow$ | [bà-gā] | 'those' (c2) |
| :---: | :---: | :---: | :---: |
| /kā-/+/gè/ | $\rightarrow$ | [kà-gà] | 'those' (c6) |
| /mā-/+/gè/ | $\rightarrow$ | [mà-gà] | 'that' (c6a) |
| /jā-/+/gè/ | $\rightarrow$ | [jà-gā] | 'that' (c18) |

Note that the agreement prefixes for the other classes do not trigger vowel copying, with the vowel of the demonstrative remaining unaltered (e.g., [wù-gì] 'that' (c1) and [bī-gì] 'those' (c8)).

The second case involves the numbers 'two', 'three' and 'four' when they are marked with class 6 agreement. The vowel $/ \varepsilon /$ in each of the numbers is replaced with /a/, which is a copy of the agreement prefix for class $6 .{ }^{26}$

| /ā-/+/fé:/ | $\rightarrow$ | [ā-fá:] | 'two' (c6) |
| :---: | :---: | :---: | :---: |
| /ā-/+/t̄̄dē/ | $\rightarrow$ | [ā-tādī] | 'three' (c6) |
| /ā-/+/nē/ | $\rightarrow$ | [ā-nà] | 'four' (c6) |

This phenomenon could be a phonological one, since words with the sequences age and age are very rare. The word [ā-gī] 'sole of foot'(c17) is one example. An alternation showing the same kind of process is seen with the word for stone (gender 5/6). The singular form is [Ø-t $\bar{\varepsilon} \mathbf{d} \overline{\mathbf{I}}]$ and the plural form is [ $\overline{\mathbf{a}}-\mathbf{t} \overline{\mathbf{a}}]$. However, another gender $5 / 6$ word 'axe' does not show the alternation ([Ø-t $\bar{\varepsilon} m \bar{\varepsilon}]$ and [ $\overline{\mathrm{a}}-\mathrm{t} \bar{\varepsilon} \mathrm{m} \bar{\varepsilon}]$ ).

An alternative analysis of this phenomenon is to treat it as vowel assimilation. So instead of copying the first vowel, inserting it into the root and then deleting the second vowel, the second vowel assimilates properties of the first vowel. However, as will be seen in the next case involving the number 'one', it is apparent that two vowel elements are realized in the final syllable of the root, supporting the copying-insertion analysis.

Vowel copying is also observed in the root of the number 'one' when taking an agreement prefix with a high vowel (including the near-high back vowel). ${ }^{27}$ When

[^18]the agreement prefix has the high front vowel /i/, this vowel is copied and the $/ \mathrm{e} /$ of the number is deleted. When the prefix has the high back vowel /u/ or the near-high back vowel $/ \mathbf{o} /$, the vowel is copied and the $/ \mathbf{e} /$ of the number is deleted. Both of these cases are illustrated in (3.13). Note that the copied vowel is also inserted into the second syllable of the root. However, in this case, the /a/ of the root is maintained, and the copied vowel then undergoes glide formation (see $\S 3.3$ for an account of glide formation).

| /t $\mathrm{s}_{\text {íl-}} /+/ \mathrm{mē}$ mà $/$ | $\rightarrow$ | [t¢ī-mīmjā] | 'one' (c5) |
| :---: | :---: | :---: | :---: |
| /kī-/+/mēmà/ | $\rightarrow$ | [ ki -mīmjā] | 'one' (c7) |
| /jī-/+/mēmà/ | $\rightarrow$ | [jī-mīmjà] | 'one' (c9) |
| /fî-/+/mēmà/ | $\rightarrow$ | [fī-mīmjā] | 'one' (c19) |
| /wō-/+/mēmà/ | $\rightarrow$ | [wō-mōmwā] | 'one' (cl) |
| /wō-/+/mēmà/ | $\rightarrow$ | [wō-mōmwà] | 'one' (c3) |
| /bū-/+/mēmà/ | $\rightarrow$ | [bvū-mōmwà] | 'one' (c14) |

A similar process is observed when the class 10 agreement marker / $/ \mathbf{j} \mathbf{T} / /$ is prefixed to roots of the numbers two, three, four and five. The high front vowel of the agreement prefix is copied and inserted to the right of the initial consonant of the number root, as illustrated in (3.14). The root vowels are maintained, and as in the case of vowel copying involving the number one presented above, the copied vowel undergoes glide formation. Note that this process is not triggered in the case of class 4 agreement, even though the class 4 agreement marker for numbers is the same as that for class 10 .

| (3.14) | /jī-/+/f f :/ | $\rightarrow$ | [jī-fjé:] | 'two' (c10) |
| :---: | :---: | :---: | :---: | :---: |
|  | / $\mathrm{j} \overline{\mathrm{T}}$-/+/tē c dē/ | $\rightarrow$ | [jī-- $\overline{\mathrm{c}} \mathrm{d} \overline{\mathrm{I}}$ ] | 'three' (c10) |
|  | /jī-/+/n $\bar{\varepsilon} /$ | $\rightarrow$ | [jī-njè ] | 'four' (c10) |
|  | /jī-/+/tè ${ }^{\text {¢ }}$ / | $\rightarrow$ | [jī-Jว̄n] | 'five' (c10) |

In the case of roots with a $/ \mathbf{t} /$ onset, the copied high front vowel results in spirantization of the $/ \mathbf{t} /$, which is discussed in the next section.

### 3.6 Spirantization

The process of an obstruent becoming a fricative is referred to as spirantization. This is observed in Nchane in a small number of contexts, sometimes in association with the copying and insertion of a high front vowel (described in $\S 3.5$ above). Spirantization occurs to a small degree with the consonants $\mathbf{k}$ and $\mathbf{g}$ in monomorphemic contexts, particularly when intervening between identical non-high vowels. For example, /sákā/ 'news' is sometimes pronounced as [sáxā], although the frication is usually not very strong.

As was stated in §2.1.2, $\mathbf{d}$ before $\mathbf{i}$ is probably usually spirantized. Thus, for example, /dī/ 'name' is realized as [d3í]. Also, the palatal glide $\mathbf{y}$ is often spirantized
when not preceded by another consonant, with free variation of the two different realizations. This is especially the case when word-initial. For example, $[\mathbf{j} \overline{\mathbf{o}}] \sim[j \bar{j} \overline{]}]$


Morphophonemic occurrences of spirantization are also attested. The root-initial consonants $\mathbf{d}$ and $\mathbf{s}$ of class 3 nouns are realized as fricatives, presumably conditioned by the class 3 infix -w-. Example (3.15) gives derivations to demonstrate the process.

$$
\begin{array}{llllll}
/-\mathrm{w}-/+/ \mathrm{d} \bar{\varepsilon} / & \rightarrow & \mathrm{dw} \bar{\varepsilon} & \rightarrow & {[\mathrm{~d} 3 \mathrm{w} \bar{\varepsilon}]} & \text { 'mouth' }  \tag{3.15}\\
/-\mathrm{w}-/+/ \mathrm{ss} \bar{\varepsilon} / & \rightarrow & \mathrm{nsw} \overline{\tilde{\varepsilon}} & \rightarrow & {\left[\mathrm{n} \int \mathrm{w} \bar{\varepsilon}\right]} & \text { 'palm needle' }
\end{array}
$$

While clear examples of class 3 nouns with a tw onset are unattested, the fact that class 3 spirantization is not realized with non-alveolar initial consonants implies that the feature + alveolar conditions the process (at least as it is realized with class 3 nouns). The mid front vowel could likewise be a necessary element, since $\boldsymbol{\varepsilon}$ follows the $\mathbf{C w}$ sequence in both of the above words.

The previous section also showed that spirantization follows the insertion of a high front vowel to the right of the root-initial $\mathbf{t}$ of the numbers three and five, when marked with class 10 agreement. This is illustrated by the derivations in example (3.16).

## Chapter 4

## Tone

Nchane is a tonal language with a tonal system comprising three level tones and several contour tones. This distinguishes it from the two-tone systems commonly associated with Narrow Bantu languages, although many Bantoid languages of the area also report more than two level tones (cf. Mundabli (Voll 2017), Mungbam (Lovegren 2013), Noni (Hyman 1981), and Limbum (Fransen 1995)). Tone functions in marking lexical items as well as in making some grammatical distinctions. Nouns display the largest variety of tones. Therefore, the analysis here gives more attention to nominal tone as compared to other word classes. Some differences in behavior between nominal and verbal tone are observed and will be pointed out below.

The tone inventory, including a lengthy proofing exercise, is given in $\S 4.1$ followed by a description of the functions of tone in $\S 4.2$. Section 4.3 presents how the various tones are distributed and their general phonetic characteristics are discussed in $\S 4.4$. The nouns of gender $9 / 10$ are differentiated by tone only and display tonal behavior that is not clearly understood. Therefore, the tone of these nouns is given special attention in $\S 4.5$. Finally, $\S 4.6$ is devoted to describing tone processes which have been identified.

An overview of the different representative elements of tone used in this chapter are given in Table 4.1.

| Tone letters | Diacritic | Interpretation |
| :--- | :--- | :--- |
| H | $\dot{\varepsilon}$ | high |
| M | $\bar{\varepsilon}$ | mid |
| L | $\dot{\varepsilon}$ | low |
| SH | $\check{\varepsilon}$ | super high |
| SL | $\check{\varepsilon}$ | super low |
| HM | $\bar{\varepsilon}$ | high-mid fall |
| HL | $\hat{\varepsilon}$ | high-low fall |
| ML | $\bar{\varepsilon}$ | mid-low fall |
| MH | $\bar{\varepsilon}$ | low-high rise |

Table 4.1 Summary of tone orthography.

### 4.1 Tone inventory

Vowels serve as tone-bearing units, with the roots of word forms characterized by single or multiple tones forming tone melodies. The behavior of the various tone melodies as observed in tone frames indicates that Nchane has three contrastive level tones: High (H), Mid (M) and Low (L). Three falling contour tones are attested, while MH is the only rising contour tone observed.

Richards (1991) attests to three level tones (H, M, L) and five contour tones (HM, HL, ML, LM and LH) on monosyllabic words for Nchane. The current analysis differs in that the LM melody does not appear in this data. The LM examples offered by Richards are all class 9 nouns which are interpreted as M in this work. Additionally, I treat Richard's LH melody as MH, although it often behaves as LH with the M being slightly lowered and triggering downdrift in the appropriate contexts. It should be noted that class 9 nouns present some challenges to identifying underlying tones. This is discussed further in $\S 4.5$.

The seven phonemic tone melodies are summarized in Table 4.2, where they are illustrated by nouns with no segmental prefix. ${ }^{28}$ A reduced tone inventory is observed in verbs, which is briefly discussed at the end of this section.

[^19]| Tone melody | Example | Gloss |
| :---: | :---: | :---: |
| H | Ø-lú | 'marriage' (c5) |
| M | Ø-n̄sū | 'pepper' (c1) |
| L | Ø-йkù | 'box' (c1) |
| HM | Ø-mư | 'razor' (c5) |
| HL | $\overline{\mathrm{m}} \mathrm{f}-\hat{\mathrm{u}}$ | 'stirring stick' (c3) |
| ML | Ø-mù | 'person' (cl) |
| MH | Ø-ȳgūlú | 'vulture' (cl) |

Table 4.2 Phonemic Nchane tone melodies illustrated on noun roots in isolation form.

Super high (SH) and super low (SL) tones are also observed in the data. However, their occurrence is usually attributable to specific tonal or grammatical contexts and are not considered to be phonemic (see $\S \S 4.6 .4$ and 4.6.5 for an account of SL and SH respectively). As stated in §2.1.5.1, the nasals of NC sequences do not have their own lexical tone, but derive their tone from the preceding tonal context or take an apparent default $M$ tone. When a floating $L$ tone is available, the $L$ tone is usually realized on the nasal rather than the default $M$ tone. However, these nasals are often resyllabified when preceded by an open syllable morpheme. When this is the case, as it is for many of the examples in this chapter, this explains why they are not marked with surface tone.

For the purpose of illustrating the phonemic nature of the seven tone melodies given in Table 4.2, disyllabic class 1 nouns in different tone frames are presented below. Class 1 nouns are chosen for the demonstration because all seven melodies may be accounted for. Finding suitable frames for studying the various tones is challenging, since no single noun class displays tonal patterns in which surface tone is easily mapped to the underlying tone. Furthermore, at times, multiple frames need to be examined in order for distinct tonal patterns to be observed. Therefore, the following exercise should be viewed as a process in which the individual "proofs" at times depend on previous "proofs", with the sets of data eventually accumulating to elaborate the full system. Where appropriate, the reader is directed to other sections for the finer details of associated processes.

The demonstration begins by showing the tonal behavior of class 1 nouns with different underlying tones in H tone frames. The H frames consist of a conjoined noun phrase with the class 10 noun $\boldsymbol{f} \mathbf{i}$ 'chickens' and the conjunction/preposition bé 'with'. The data sets are presented with a header and three lines. The header provides the underlying tone of the noun under investigation. The first line gives the frames, with ' $\mathbf{x}$ and chickens' on the left and 'chickens and $\mathbf{x}$ ' on the right. The tone diacritics on the examples represent surface tone. The second line gives the underlying tone. The third line gives the glosses. The various melodies are presented in the same order as in Table 4.2, with the exception of the HM melody, for which the tonal behavior is odd. Consequently, it will be treated after the other melodies.

Examples (4.1)-(4.3) show that there are no tonal changes associated with the level tone melodies in a H tone frame, except for downstepping of the H in example (4.1). (See $\S 4.6 .2$ for a description of this process.) Otherwise, the H's are realized as H's, the M's are realized as M's and the L's are realized as L's. The downstepped H in (4.1) results in a loss of contrast between H and M , but contrast is evident when the word in focus is in the initial position of the frame, establishing phonemic H and M melodies. These frames also provide evidence that is supportive of phonemic M and L melodies, although the pitch difference between the M and L nouns in the frames could be generalized for both nouns as simply lower relative to the H noun in the same frames. More definitive evidence for phonemic M and L melodies is found in a $L$ tone frame, which is given later in this section.

| H |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ø-kfúlá | bé | Ji | Jí | bé | Ø- ${ }^{+}$kfúlá |
| ${ }^{\text {L- }}$ H | H | ${ }_{H}$ | ${ }_{H}$ | H | ${ }_{\text {L }-\mathrm{HH}}$ |
| c1-hyena | with | c10.chicken | c10.chicken | with | c1-hyena |


| $\underline{\mathrm{M}}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ø-mbeèg $\bar{\varepsilon}$ | bé | Jí | Jí | bé | Ø-mbēg $\bar{\varepsilon}$ |
| ${ }^{\text {L- M }}$ | H | ${ }^{H} \mathrm{H}$ | ${ }^{H} \mathrm{H}$ | H | ${ }^{\text {L- MM }}$ |
| c1-hill | with | c10.chicken | c10.chicken | with | c1-hill |


| $\underline{L}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\underline{\text { Ø}}$-ǹsàlà | bé | $\int_{1}$ | $\int_{1}$ | bé | Ø-nsàlà |
| $\mathrm{L}_{-}$ | H | $\mathrm{H}_{\mathrm{H}}$ | $\mathrm{H}_{\mathrm{H}}$ | H | $\mathrm{L}_{\text {- }}$ |
| c1-needle | with | c 10. chicken | c 10. chicken | with | c1-needle |

The HL melody illustrated in (4.4) also presents no difficulties for analysis, with no changes of the melody itself, but downdrift is observed when a HLH sequence occurs, as in the "lion and chickens" phrase. (See $\S 4.6 .1$ for an account of this phenomenon.)

| HL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ø-bvúlè | ${ }^{\downarrow} \mathrm{b}$ ¢́ | Jí | Jí | bé | Ø-bvúlè |
| ${ }^{\text {L- }}$ HL | H | ${ }^{H}$ | ${ }^{H}$ | H | ${ }^{\text {L }}$ - HL |
| c1-lion | with | c10.chicken | c10.chicken | with | c1-lion |

ML roots in utterance-final position are realized with a falling tone. Thus, for example, nā 'cow' and m̄būnà 'sweet potato' are both realizations of the ML melody. The fall of the contour is usually unrealized when in non utterance-final position or when preceded by a H tone. When there is no fall, as seen in (4.5), the contrast between L and ML is neutralized (cf. example (4.3)). However, evidence for a ML melody is provided in a $L$ frame, which will be given later in this section. Note
that the class 1 ML noun in the example is realized with a phonetic L tone. This phenomenon is explained in §4.6.3.

| (4.5) | ML |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ø-ìgvùlè | bé | Jí | Jí | bé | Ø-ngvùlè |
|  | ${ }_{\text {L- ML }}$ | H | ${ }_{H}$ | ${ }^{H} \mathrm{H}$ | H | ${ }_{\text {L- ML }}$ |
|  | c1-worm | with | c10.chicken | c10.chicken | with | c1-worm |

As seen in (4.6), MH is realized as MH, with the H being pronounced at a lower pitch due to downdrift when the MH sequence is preceded by an additional H (see §4.6.1). While the M lowering observed above in the ML root appears to be blocked by the following H , downdrift nevertheless occurs and it is likely that the M of both H frames is slightly lowered as described in $\S 4.4$.


The H frames clearly establish H, HL and MH melodies. As stated earlier, there appears to be a M melody, which is realized at a higher pitch level than the L melody. However, contrast between these melodies is better established in a L frame, which is presented below.

The $L$ frame used in the analysis places the nouns in the first position of the associative noun phrase ' $x$ of goat'. This presentation is limited to c 1 nouns; therefore, the associative marker is a constant and has a $L$ tone. The word for 'goat' is $\mathbf{b i}\left({ }^{L} \mathbf{M}\right)$ and belongs to class 9 . It has a floating L in the prefix position and a M on the root. The tone on 'goat' is realized as either M or L depending on the tonal context.

Examples (4.7), (4.8) and (4.9) illustrate $\mathrm{H}, \mathrm{M}$ and L nouns respectively. Two distinct patterns may be observed. First, the associative markers of the H and M nouns are realized at the same pitch level as 'goat', and the H and M nouns are realized with a tone higher than that of the associative marker. Second, the L noun and its associative marker are both realized at the same pitch level, which is lower than that of 'goat'. The behavior of the tone on 'goat' is explained in §§4.6.3 and 4.6.4. The important observation for the purposes of this proofing exercise is that a contrast is established for the L and non- L melodies.

| $\underline{\text { H }}$ |  |  |
| :---: | :---: | :---: |
| Ø-kfúlá | wù | bì |
| ${ }^{\text {L- H }}$ | L | ${ }^{\text {L }}$ M |
| c1-hyena | c1am | c9.goat |

4.8) $\quad \underline{M}$

| $\overline{\text { П}}$-mbēg $\bar{\varepsilon}$ | wù | bì |
| :--- | :--- | :--- |
| $\mathrm{L}_{-\mathrm{M}}$ | L | ${ }^{\mathrm{L}_{\mathrm{M}}}$ |
| c1-hill | c 1 AM | c9.goat |

(4.9) $\underline{\mathrm{L}}$

| Ø-ǹsàlà | wù | $b_{\overline{1}}$ |
| :--- | :--- | :--- |
| $\mathrm{~L}_{-\mathrm{L}}$ | L | $\mathrm{L}_{\mathrm{M}}$ |
| c1-needle | c 1 AM | c 9. goat |

Examples (4.10), (4.11) and (4.12) each illustrate melodies on the noun involving a $L$ as part of a contour tone melody. In each case, the associative marker is realized at a pitch level which is lower than the following noun 'goat'. (Again, there is no contrast between the L and ML melodies in this frame. But contrast is observed in examples (4.13) and (4.14) below, where the order of the L frame is reversed.)
(4.10) $\quad \mathrm{HL}$

| Ø-bvúlè | wù | $b^{1}$ |
| :--- | :--- | :--- |
| $\mathrm{~L}_{\text {- } \mathrm{HL}}$ | L | ${ }^{\mathrm{L}_{\mathrm{M}}}$ |
| c1-lion | c 1 AM | c 9. goat |

(4.11) $\quad$ ML

| Ø-̀̀gvìlè | wù | bī |
| :--- | :--- | :--- |
| $\mathrm{L}_{-}$ML | L | ${ }^{\mathrm{L}_{\mathrm{M}}}$ |
| c1-worm | c 1 AM | c 9. goat |

The rising MH tone in (4.12) shows that there are no changes of the tone on the noun associated with the tone frame. (As observed in example (4.6) above, the M lowering rule is blocked because of the H following the floating L-M sequence.)

| (4.12) | MH |  |  |
| :---: | :---: | :---: | :---: |
|  | Ø--mbvūfá | wù | bī |
|  | ${ }^{\text {L- MH }}$ | L | ${ }^{L} M$ |
|  | c1-cat | c1am | c9.goat |

Up to this point, the H and L frames have not established a contrast between the $L$ and ML melodies, with identical surface realizations of both. A second $L$ frame, consisting of an associative noun phrase with the noun in question in the $\mathrm{N}_{2}$ position, demonstrates the phonemic status of the two melodies. Example (4.13) shows a L noun, which is realized with a falling $L$ on the final syllable. The final " $a$ " is placed in parentheses to indicate nonphonemic vowel length (only slightly longer than a vowel of normal length), which allows for the realization of the falling $L$ on a single syllable. The ML noun in example (4.14) shows a L.SL pattern and indicates an earlier commencement of the falling $L$. Thus, the difference between these two melodies is the point at which the fall from L to SL begins.

| (4.13) | $\underline{L}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Ø-kfù | wù | Ø-nsàlà (ä) |
|  | $L_{\text {- ML }}$ |  | ${ }^{\text {L }}$ L |
|  | c1-rope | c1AM | c1-needle |
| (4.14) | ML |  |  |
|  | Ø-kfù | wù | Ø-ngvìlè |
|  | L- ML | L | ${ }_{\text {L }}$ ML |
|  | c1-rope | c1AM | c1-worm |

Again, the purpose of this section is not to describe the various tonological processes of the language, but rather to establish phonemic contrasts. The reader is directed to §4.6.4 for an explanation of the processes motivating the falling L and L.SL patterns in these examples.

As mentioned above, the HM melody presents some peculiarities which have not yet been accounted for. There are only two class 1 nouns in the data representing this melody, one monosyllabic ( $\mathbf{\jmath} k \bar{u}$ 'scabbard') and one disyllabic (j̀tf̄ $\mathbf{\jmath}: \eta \bar{\varepsilon}$ 'praying mantis'). In utterance-final position, the nouns are realized with a HM fall realized on the final syllable. The same pattern is observed in the H frame presented in example (4.15). When the word is not utterance-final, then the tone on the final syllable is realized as a downstepped H rather than as a falling tone.

| (4.15) | HM |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ø-jı̀tfó: ${ }^{\dagger} \mathrm{y}$ ¢́ | bé | Ji | Ji | bé | Ø-jtjó: y ¢ |
|  | ${ }^{\text {L- HM }}$ | H | $\mathrm{H}_{\mathrm{H}}$ | ${ }^{H} \mathrm{H}$ | H | ${ }_{\text {L- HM }}$ |
|  | c1-praying. | with | c10.chicken | c10.chicken | with | c1-praying |

Note that certain other noun classes have numerous members with a HM melody, but the tones are realized as level tones on disyllabic forms (e.g., tyîlélē 'dragonflies'(c13)). Nevertheless, in each case, downstepping is observed in the H
 bé fí ('egg and chickens').

There is no apparent downstep in the HM melody when placed in a L frame, as demonstrated in (4.16). Both syllables of the noun root are realized with a H tone, presenting the same pattern as that of the H melody presented in example (4.7). One possible analysis is that there is a floating L tone (e.g., ${ }^{\mathrm{L}}-\mathrm{H}^{\mathrm{L}} \mathrm{H}$ ), with an accompanying rule dictating when downstep is triggered.

| $\underline{\text { HM }}$ |  |  |
| :--- | :--- | :--- |
| Ø-j̀̀tfóý́ | wù | bì |
| $\mathrm{L}_{-}$HM | L | ${ }^{\mathrm{L}_{\mathrm{M}}}$ |
| c1-praying.mantis | c1AM | c9.goat |

Although the HM melody is not completely understood, it is clear that it represents a separate phonemic melody type.

Verbs display only four phonemic tone melodies, which are summarized in Table 4.3, illustrated by bare verbs.

| Tone | Example | Gloss |
| :--- | :--- | :--- |
| H | bíy | 'dance' |
| M | bē | 'cry' |
| L | bì | 'follow' |
| ML | tfīnè | 'abandon' |

Table 4.3 Attested Nchane tones in verbs (non-Progressive form).

The tones of M and L verbs are realized as falling when utterance final. All verbs from the M group in the corpus are monosyllabic. The difference between M and ML verbs is neutralized in utterance final position. Therefore, it is possible that these two melodies represent the same underlying melody when realized on verbs.

### 4.2 Functions of tone

As mentioned in the introduction, Nchane tone functions in marking lexical items and in making grammatical distinctions. Distinctions by tone only are not overly common, such that the practical orthography utilizes minimal tone marking (rather than exhaustive marking) for the purpose of disambiguating lexical items for which clausal context is insufficient (see Boutwell \& Boutwell 2008). Lexical tone may differentiate items of the same word class, as in (4.17), or of different word classes, as in 0.

| (4.17) | $\overline{\mathrm{y}} \mathrm{g} \bar{\square}$ | 'termite' (c9) | y̆gò | 'grinding stone' (cl) |
| :---: | :---: | :---: | :---: | :---: |
|  | kfü | 'rope'(cl) | kfú | 'family' (c5) |
| (4.18) | $\begin{aligned} & \text { kómè } \\ & \text { dз̄̄1 } \end{aligned}$ | $\begin{aligned} & \text { 'harp' (c5) } \\ & \text { 'hoe' (c9) } \end{aligned}$ | kómé dzí | $\begin{aligned} & \text { 'scratch) (v.) } \\ & \text { 'eat'(v.) } \end{aligned}$ |

While lexical tone represents an essential element of a lexical item, grammatical tone serves to indicate some kind of grammatical meaning. For example, grammatical tone distinguishes gender $9 / 10$ nouns, expressing number. This distinction is thought to be accomplished through the presence of floating tones, L for class 9 and H for class 10 . These grammatical tones are realized as a relative tonal difference, with class 9 nouns having a lower tone and c10 nouns having a higher tone. See $\S 4.5$ for a description of the tone of this gender.

$$
\begin{array}{llll}
\text { nàn } & \text { 'animal' }(c 9) & \text { nà } & \text { 'animals'(c10) }  \tag{4.19}\\
\text { bjè } & \text { 'fish' }(c 9) & \text { bjén } & \text { 'fish'(c10) }
\end{array}
$$

Grammatical tone is also observed in the TAM system. Example (4.20) consists of a clausal minimal pair which illustrates a grammatical H tone indicating Hortative mood. In the first clause, which is in Indicative mood and immediate past tense, the subject pronoun is realized with a M tone. In the second clause, the subject pronoun is realized with a H tone, expressing a desire or softened command.

| (4.20) | w̄̄ | fō:s $\bar{\varepsilon}$ | bī-gè | 'You borrowed money.' (just now) |
| :--- | :--- | :--- | :--- | :--- |
|  | 2 SG | borrow | c8-teeth |  |
|  |  |  |  |  |
|  | wó | fō:s $\bar{\varepsilon}$ | bī-gè | 'You should borrow money.' |
|  | 2SG.HORT | borrow | c8-teeth |  |

### 4.3 Tone distribution patterning

The distribution of the various tone melodies as realized on nouns is given in Table 4.4. ${ }^{29}$ The prevalence of each tone melody is given, as well as their occurrence on monosyllabic versus disyllabic noun roots.

[^20]| Tone | Tokens | \% of Total | \% monosyl | \% disyl |
| :--- | :--- | :--- | :--- | :--- |
| H | 72 | $14 \%$ | $10 \%$ | $5 \%$ |
| M | 90 | $18 \%$ | $13 \%$ | $4 \%$ |
| L | 52 | $10 \%$ | $10 \%$ | $0 \%$ |
| HM | 54 | $11 \%$ | $7 \%$ | $4 \%$ |
| HL | 78 | $15 \%$ | $5 \%$ | $11 \%$ |
| ML | 90 | $18 \%$ | $11 \%$ | $7 \%$ |
| MH | 26 | $5 \%$ | $0 \%$ | $5 \%$ |
| unassigned | 43 | $9 \%$ | $5 \%$ | $4 \%$ |
| Total | $\mathbf{5 0 5}$ | $\mathbf{1 0 0 \%}$ | $\mathbf{6 1 \%}$ | $\mathbf{3 9 \%}$ |

Table 4.4 Distribution patterns of nominal tone (gender 9/10 nouns excluded).

The shaded boxes in the table indicate distribution peculiarities. First, L nouns are limited to those with monosyllabic roots. This melody is further restricted to certain noun classes: $1,2,7,8,9,10,19,18 a$. Furthermore, nouns having NC sequences at the prefix-stem boundary are the majority of the L noun group ( 44 of 52 nouns or $85 \%$ ). This apparent relationship between $L$ tone and $N C$ sequences has been observed particularly in the Eastern Grassfields languages (see Akumbu \& Hyman 2017; and Hyman 1980). See $\S 4.4$ for details regarding the phonetic realization of tone as related to these NC sequences.

Second, MH nouns are limited to those with disyllabic roots. As it is the only rising melody observed in the data, it suggests that a single tone bearing unit cannot support rising melodies. And so, when disyllabic nouns with a rising melody are reduced to a single syllable, the rising melody is presumably changed into a melody that is acceptable to a single tone bearing unit.

The unassigned forms represent eight different noun classes, approximately half being gender $7 / 8$ nouns. Some of these forms appear to present an interaction between prefix and root tones, with the prefix tone different than expected. Therefore, in those cases, the unassigned nouns might reflect a subclass marked by a different class prefix from the prevailing one. About one quarter of unassigned forms belong to class 6 , with some of these involving a suppletive stem (discussed in §5.2.1). Perhaps the difficulty with assignment in this case has to do with an unstable tone environment reflecting this suppletion. Ultimately, the tonal behavior of these unassigned forms does not clearly follow the observed patterns associated with any of the seven identified tone groups and are therefore, left unassigned.

The distribution of tone on verbs constitutes close to a three-way split when the M and ML groups are combined: $\mathrm{H}=31 \%, \mathrm{M}$ and $\mathrm{ML}=42 \%, \mathrm{~L}=28 \%$. The slight predominance of the combined M and ML groups is consistent with what is seen in noun tone distribution patterns summarized in Table 4.4.

### 4.4 Phonetic realization of tone

The actual pitch realization of tone varies greatly depending on a number of factors, including intonational effects and speaker age and gender. However, the differences in pitch between the various tones are generally consistent. As a point of reference, Table 4.5 gives the approximate pitch measurements of the tones as realized by a male speaker aged 30-40 years.

| Tone | Pitch $(\mathbf{H z})$ |
| :--- | :--- |
| H | 155 |
| M | 140 |
| L | 125 |
| HM | 155.130 |
| HL | 155.115 |
| ML | 125.105 |
| MH | 140.155 |

Table 4.5 Approximate pitch realizations of tone for a male speaker aged 30-40 years.

Downstepped high tones $\left({ }^{\downarrow} \mathrm{H}\right)$ usually measure about $10-15 \mathrm{~Hz}$ lower in pitch compared to the normal H , similar if not identical to the pitch realization of a normal M. Super low tones (SL) are usually lower than a normal L by about 10 Hz . Super high tones (SH) are usually higher than a normal H by about 10 Hz , although the difference can be as high as 30 Hz in some instances.

Declination, or the gradual reduction in pitch over the course of an utterance (see Snider \& van der Hulst 2012: 8), is modest in its realization and most apparent in long utterances. For example, in the sentence
 $m \bar{\varepsilon} \overline{\mathrm{~g}} \mathrm{~g}$ : à màn-kàlà mā-ā lé.
'As that woman said so, I went and brought medicine that kills rats and put it in that cassava puff.'

What-goes-around.9.14
the beginning and ending H tones represent a decline of about 45 Hz , with the initial H tone at 181 Hz and the final H tone at 136 Hz .

As mentioned above, nouns with NC sequences at the prefix-stem boundary appear to have some association with a $L$ tone. In fact, a $M$-toned class prefix of such a noun is often slightly lowered, as illustrated in (4.21), which compares classes 2 and 7. In isolation, no lowering is evident in the H forms in (4.21) a. ${ }^{30}$ In the M forms in (4.21)b, the class 2 prefix is lowered slightly (indicated by the superscript 0 ), while

[^21]no lowering is observed of the class 7 prefix. Lowering is observed in both $L$ nouns, as demonstrated in (4.21)c.


While the lowering of the prefixes of the M nouns is only slight for class 2 and not apparent at all for class 7, the tone associated with them nevertheless behaves as a L in tonological processes such as downdrift (described in §4.6.1). This is true even for the H nouns, where no lowering of the prefix M is perceived for either class. It should also be noted that the same tonal behavior (seemingly associated with the prefix nasal here) is observed in the few class 2 nouns which do not have a nasal onset, just as is seen with the class 7 example in (4.21)b. Indeed, the same kind of lowering phenomenon is observed in class 9 nouns, where the number of roots with a nasal onset is only about $25 \%$. Thus, a case can be made for the diachronic existence of socalled "nasal classes", some of which synchronically have no nasal (see Akumbu \& Hyman 2017; Good \& Lovegren 2017; and Hyman 1980).

A final observation to be made regarding the phonetics of tone involves vowel length. There is a tendency for contour tones to be associated with long vowels or socalled "half" long vowels. This length is likely a byproduct of syllable reduction, as suggested in §2.2.5.

### 4.5 Tone of gender $9 / 10$ nouns

The singular/plural distinction of gender $9 / 10$ nouns is indicated by tone alone. Generally, class 9 nouns have a relatively low tone, while class 10 nouns have a relatively high tone. The class markings consist of floating tone prefixes in both classes, a floating L for class 9 and a floating H for class 10. However, a workable analysis for these tone markers has been elusive. (The class 9 prefix could be a floating M that behaves like a L , as was described in the previous section.) Table 4.6 provides examples of gender $9 / 10$ nouns with different tonal patterns and an initial hypothesis regarding their underlying tones. Note that the tone of class 9 ML nouns usually surfaces as a LSL fall in isolation.

| Underlying tone | Surface tone |  | Gloss |
| :---: | :---: | :---: | :---: |
|  | Class 9 | Class 10 |  |
| H | d3óy | dzóy | 'star' |
| M | bī | bī | 'goat' |
| L | d3ì | djī | 'hoe' |
| ML | d3và" | d3vū | 'cobra' |
| MH | bvū | bvú | 'dog' |

Table 4.6 Different tonal groups for gender 9/10 nouns (in isolation) with proposed underlying tone group assignment.

In some cases, for example nouns in the H and M groups, the tonal difference between singular and plural forms is difficult for the non-native speaker to perceive, and is possibly neutralized in certain contexts. However, the different underlying tones may be observed in tone frames which place the nouns in contrasting tonal environments. For example, the realizations of the class 9 and class 10 forms of the H noun dyóy 'star' in the H frame 'chickens of X' are [shí bé ḑōท!] and [shí bé ḑón] respectively, with the H of the class 9 noun presumably downstepped. Likewise, the underlying differences between singular and plural forms of the $\mathbf{M}$ noun $\mathbf{b i} \mathbf{i}$ 'goat' are seen in the same frame: [shí bé bì] and [shí bé bī]. Native speakers are clearly aware of the L-H grammatical distinction, even when the tones of a singular-plural pairing are realized at the same level. This sometimes results in the speaker pronouncing the plural noun with an extraordinarily high tone in order to make disambiguation certain.

As mentioned above, an analysis of the underlying tones and their behaviors has not been successfully obtained. It is possible that a contributing factor is nasal depression, which is briefly discussed in $\S 4.4$. Only about $25 \%$ of gender $9 / 10$ nouns have an NC onset. However, nasal prefixes are observed for this gender in a number of nearby languages and are posited for the reconstructed Proto-Eastern Grassfields, representing languages located south and east from Nchane (Hyman 1980: 182).

### 4.6 Tonal processes

Several tonological processes are observed in Nchane, resulting in different tonal realizations. Some of these processes are challenging to identify and understand due to the apparent interaction between tone and root-initial nasals as described in §4.4. An additional complication is the occasional variability of tone in utterances experienced in the elicitation process. In some cases, the same phrase can be uttered by the same speaker with two different tonal patterns one after the other. Nevertheless, this section endeavors to describe some of the details of tonal behavior.

The various tone processes described in this section are summarized in Table 4.7. The first three processes, which are grouped together in the table by a dashed line, are those which apply broadly and without phrase position conditions, although rule 3 may not occur after rule 4 . To avoid confusion over the terms downdrift and
downstep, they are defined here as the lowering of the tonal register due to the presence of a surface L (for downdrift), or a floating L (for downstep) (see Snider \& van der Hulst 2012 for a full treatment of these processes).

The next five processes are those which occur at a phrase boundary Generally, they may be considered as involving ordered rules (particularly processes $4-7$ ). The "stray erasure" process is proposed out of necessity. It is not illustrated by examples as the other processes are, but is apparent as an intervening process in deriving the proper environment for L lowering. The final process, H raising, primarily involves the realization of grammatical tone.

| Process | Rule | Description |
| :---: | :---: | :---: |
| 1. Downdrift | $\mathrm{HLH} \rightarrow \mathrm{HL}^{\downarrow} \mathrm{H}$ | second H of HLH sequence |
| 2. Downstep | $\mathrm{H}^{\mathrm{L}} \mathrm{H} \rightarrow \mathrm{H}^{\downarrow} \mathrm{H}$ | lowers tonal register second H of HH sequence with certain intervening floating L's lowers tonal register |
| 3. M lowering | ${ }^{L} \mathrm{M} \rightarrow \mathrm{L}^{\mathrm{M}}$ | M preceded by floating L is realized as L and floating M |
| 4. Floating M re-association | $\left.L^{\text {L }}{ }^{\mathrm{M}}\right] \rightarrow \mathrm{LL}^{\mathrm{L}} \mathrm{M}$ | phrase-final floating M takes place of preceding L when preceded by three or more L's |
| 5. Stray erasure | ${ }^{\mathrm{M}} \rightarrow 0$ | floating M is deleted |
| 6. L lowering | $\begin{aligned} & \text { LLL] } \rightarrow \text { LLSL } \\ & \text { LHL] } \rightarrow \text { LHSL } \end{aligned}$ | phrase-final L lowered to SL when preceded by two or more other L's or a LH sequence |
| 7. Partial M lowering | HMM $] \rightarrow \mathrm{HMM}^{0}$ | phrase-final $M$ is slightly lowered when preceded by sequence of $H(M) M$ |
| 8. M raising | $\mathrm{LM}(\mathrm{M}) \mathrm{M}] \mathrm{H} \rightarrow \mathrm{LM}(\mathrm{M}) \mathrm{H}] \mathrm{H}$ | phrase-final M preceded by L M (M) and followed by H is realized as H |
| 9. H raising | $\mathrm{H}=\mathrm{H} \rightarrow \mathrm{SH}$ | lexical $H$ cliticized by grammatical H realized as SH |

Table 4.7 Summary of Nchane tone processes.

In addition to the tone letters and diacritics given in Table 4.1, this section makes use of the following symbols: ${ }^{H}$ (floating H tone), ${ }^{\mathrm{L}}$ (floating L tone), $\bar{\varepsilon}^{0}$ (partially lowered M tone), ${ }^{\downarrow}$ (lowered register due to downdrift or downstep), ] (right phrase boundary).

### 4.6.1 Downdrift

Downdrift (also known as automatic downstep) occurs in HLH and certain HMH sequences, with the second H being lowered and ensuing tones likewise lowered, as is illustrated in (4.22). Its presence in Nchane is particularly notable since the process
is distinctly observed as absent in the neighboring languages Noni and Mundabli (Hyman 1981: 6; and Voll 2017: 15 respectively).

| Ø-lábè | ${ }^{\downarrow}$ bé | Jí |
| :---: | :---: | :--- |
| H L | H | ${ }^{\text {H }}$. H |
| c5-web | with | c10.chicken |

'web and chickens'

Example (4.23) shows that downdrift occurs multiple times within a single phrase when multiple HLH sequences are present.

| Ø-1̄gán | wù | Ø- ${ }^{\downarrow}$ tfón | wù | Ø- ${ }^{\downarrow}$ lú |
| :---: | :---: | :---: | :---: | :---: |
| H | L | H | L | H |
| c1-scorpion | c1AM | c1-thief | c1AM | c5-marriage |

'scorpion of thief of marriage'

This final example illustrates downdrift involving constituents other than noun phrases, with the register lowering on the postverbal adverb bá:y.

| (4.24) | fī | yá | wù | ${ }^{\downarrow}$ bá:y |
| :--- | :--- | :--- | :--- | :--- |
|  | M | H | L | H |
|  | c19 | surpass | 3sG | much |
|  | '...he was very surprised...' (lit. it surpassed him much) |  |  |  |

As mentioned above, certain HMH sequences can result in downdrift. In these cases, the apparent surface M behaves like a L. The M's characterized by this behavior are those associated with the nasal classes as stated in $\S 4.4$. This behavior is demonstrated in example (4.25) with a class 2 H noun. Note that, while this noun root does not have a nasal onset, it patterns with other class 2 nouns which do (as stated in $\S 4.4$ ), indicating that class 2 should be designated as a nasal class in spite of having members lacking the segmental nasal. The downdrift in this example is comparable to that seen in the class 1 form of the same noun, which has the underlying form ${ }^{\mathrm{L}_{-}}$ kfúlá. The analysis of the class 2 prefix as M rather than L is supported by evidence from the $L$ frames, as well as numerous occurrences in the text data.

| (4.25) | $\int^{\text {¹ }}$ | bé | bā- $^{\downarrow}$ kfúlá |
| :--- | :--- | :--- | :--- |
|  | ${ }^{{ }_{H}}$ H | H | M- H |
|  | c10.chicken | with | c2-hyena |

Example (4.26) illustrates that this same phenomenon occurs with class 7 nouns as well. The M of the c7 prefix causes the H root of 'fool' to downstep. This is
followed by a second HMH sequence resulting in the H of 'marriage' to be downstepped.

| (4.26) | fí | b | kī- ${ }^{\dagger} \mathrm{júg}$ | kī | $\emptyset$ - ${ }^{\downarrow}$ n |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\text {H. }}$ H | H | M- H | M | H |
|  | c10.chicken | with | c7-fool | c7Am | c5-marriage |

'chickens and fool of marriage'

The lowering observed in these HMH sequences might be better described as a non-automatic process. The phenomenon is not well understood and calls for more study. Regarding tone transcription in this description, the examples presented in chapters following this one are unmarked for downdrift, since the downdrift of HLH sequences is highly regular and therefore predictable. The particular context of a nasal class noun with a lowering M prefix and a H root following another H is not all that common and does not appear in any of the text examples in this description. Therefore, tone diacritics (with no accompanying downdrift/downstep arrow) are to be understood as indicating surface tone for the most part, other than the downdrifted H of HLH sequences.

### 4.6.2 Downstep

Tonal register may be lowered in HH sequences where a floating L is postulated to intervene. This phenomenon is observed in Nchane, as illustrated in example (4.27). It should be noted that class 1 is probably a nasal class, with a large majority of class 1 nouns having a nasal onset. As mentioned in $\S 4.4$, the nasals of nouns belonging to a nasal class appear to have a lowering effect on a M prefix, which then is observed to behave like a L. Thus, it is somewhat ambiguous as to what is triggering the downstep: a floating L or a tonal effect associated with the nasal of the nasal class noun.

| (4.27) | shí | bé | ${ }^{\downarrow}$ t $t$ '́n |
| :---: | :--- | :---: | :--- |
|  | ${ }^{{ }_{H}}$ | H | $\mathrm{L}_{-H}$ |
|  | c10.chicken | with | c1-thief |

Downstep (also known as non-automatic downstep) also appears to be observed in some HM nouns, as in (4.28), although it is not clear how the M is involved in the process. It is evident, however, that the two following H's are pronounced at a pitch lower than the H of 'fly'. Note that downstep does not occur with class 7 HM disyllabic roots in this particular H frame.

| (4.28) | kī-d $\mathrm{d} \hat{\varepsilon}$ | ${ }^{\downarrow}$ bé | $\int_{\mathrm{i}}$ |
| :--- | :--- | :---: | :--- |
|  | $\mathrm{M}-\mathrm{HM}$ | H | ${ }_{\mathrm{H}}^{\mathrm{H}}$ |
|  | c 7 -fly | with | c10.chicken |

Differing realization patterns for monosyllabic versus disyllabic roots are also observed for class 5 HM nouns, illustrated in (4.29). In this case, it appears that the roots of nouns with both syllable patterns are involved in downstep. However, with the monosyllabic root in (4.29)a, the downstep occurs at the H of the conjunction, consistent with the pattern observed with the monosyllabic class 7 root in example (4.28), while the downstep is realized at the final syllable of the disyllabic root in (4.29)b.

| Ø-tí:нмc5-stomach | ${ }^{+} \mathrm{b}$ ¢́ | Jí |
| :---: | :---: | :---: |
|  | H | ${ }^{H} \mathrm{H}$ |
|  | with | c10.chicken |
| b. Ø-gvá ${ }^{\text {ní }}$ | bé | Jí |
| нм | H | ${ }^{H}$ |
| c5-corpse | with | c10.chicken |

No clear evidence is observed of downstep involving a floating $M$ rather than a floating L .

### 4.6.3 M tone lowering

A floating $L$ preceding a $M$ often results in the realization of the $M$ as a $L$, as shown in (4.30) and (4.31). (The M realization on "goat" is due to phrase-final rules described in §4.6.4.)

| (4.30) | jò | jì | bî |
| :--- | :--- | :--- | :--- |
|  | ${ }^{L_{M}}$ | L | ${ }^{\mathrm{L}_{\mathrm{M}}}$ |
|  | c 9. snake | c 9 AM | c 9. goat |

This process is apparently blocked when the floating L-M sequence is followed by a H , as demonstrated in examples (4.6) and (4.12) above. Furthermore, as mentioned in the introduction to Table 4.7, this rule may not apply following the floating M re-association rule.

### 4.6.4 Phrase-final boundary rules

Four different tonological phenomena are observed at phrase boundaries: floating M re-association, L lowering, partial M lowering, and M raising. Each of these processes is described below in turn.

## Floating M re-association

Example (4.32) demonstrates a phrase-final floating M preceded by three L's. Presumably, the lexical M of "goat" is disassociated and replaced by the preceding floating L (according to the process described in §4.6.3). This leaves the M tone floating, which then must re-associate due to the presence of the preceding three L's.

| (4.32) | $\emptyset$-lì | wù |
| :---: | :---: | :---: |
|  | ${ }^{\text {L }-1}$ | L |
|  | c1-oath | c1am |

Example (4.33) shows that a floating M can disrupt the required LLL sequence (with the sequence instead being $L^{M} L L$ ). This sequence then provides the necessary context for phrase-final L lowering, which is presented next.

| (4.33) | jèy | jì | bì |
| :--- | :--- | :--- | :--- |
|  | ${ }^{{ }^{2}} \mathrm{M}$ | L | ${ }^{\mathrm{L}_{\mathrm{M}}}$ |
|  | c9.thigh | c9AM | c9.goat |

## L lowering

In phrases with three or more consecutive L's, the phrase-final $L$ is realized as a SL, as in (4.34) and (4.35). In the case of the ML noun in (4.35), the contour is realized as a LSL fall.

| (4.34) | Ø-kù | wù | bï |
| :---: | :---: | :---: | :---: |
|  |  | L |  |
|  | c1-python | c1AM | c9.goat |
| (4.35) | Ø-kfù | wù | Ø-kà(ä) |
|  | L- ML | L | L- ML |
|  | c1-python | c1AM | c1-rattle |

Likewise, a phrase-final L is realized as SL when preceded by a LH sequence, as in (4.36).

| Ø-kfù | wù | Ø-kómë |
| :--- | :--- | :---: |
| L- ML | L | HL |
| c1-rope | of | c5-harp |

Returning to example (4.33), it was demonstrated that a $\left.L^{M} L^{M}\right]$ did not provide the necessary context for the phrase-final M to be re-associated. However, this sequence does not provide the context for the phrase-final L lowering either. Therefore, the floating M's are either deleted by a stray erasure rule before this phrase-final lowering rule is applied or the floating M's are ignored.

Example (4.37) represents a case where a breath pause is present outside of a phrase boundary (presumably the pause here is due to the speaker gathering his thoughts). Just as in the examples above, the final $L$ of the LLL sequence is realized as a SL.

| (4.37) | bā | $\mathrm{g} \bar{\varepsilon}$ | j $\overline{\mathrm{c}} \mathrm{j}$ ¢̀ | kòně, | bā-nt $\mathrm{j}_{\text {İ }}$ | bā | kī-jō |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | M | M L | L L | M- M | M | M- H |
|  | they | P3 | teach | about | c2-law | c2Am | c7-spirit |

'...they taught about the [four] spiritual laws...' Training.1.7

## Partial M lowering

As mentioned in $\S 4.1$, the tones of M and L verbs are realized as a falling tone (ML and LSL respectively) when utterance-final. A similar effect is observed in nouns with M tone. However, in this case, the M is usually only slightly lowered in pitch as compared to a normal M , and usually only if it is preceded by a H , as in (4.38). This lowering is observed even when the M has another (non-lowered) M intervening between it and the H , as illustrated in (4.38)b and c .
$\begin{array}{cll}\text { a. } \varnothing \text { Ø-b } \bar{\varepsilon} \eta & b \dot{\varepsilon} & \mathrm{kw} \bar{\varepsilon}^{0} \mathrm{y} \\ \mathrm{M} & \mathrm{H} & \mathrm{M} \\ \text { c4-mosquito } & \text { with } & \mathrm{c} 3 . \text { firewood }\end{array}$
'mosquitoes and firewood'

| b. | bé | kī-te ${ }^{0}$ |
| :---: | :---: | :---: |
| M- M | H | M- M |
| c7-w | and | c7-tr |

'wing and tree'

| c. gwí | wū | Ø- ${ }^{\downarrow}$ lú | t $\sqrt{1}$ | kī-tē ${ }^{0}$ |
| :---: | :---: | :---: | :---: | :---: |
| H | M | H | M | M- M |
| c3.net | c3AM | c5-marriage | c5am | c7-tree |

When the phrase is long and there are more than two M's intervening, the phrase-final M does not lower.

## M raising

The final phrase boundary process raises a phrase-final M to H when preceded by a LMM sequence and followed by a H . This process is illustrated in (4.39), where the M of the applicative marker lē is realized as H . Note that this process might be limited to clause-final M , with the following H belonging to a new clause.

```
m\overline{\varepsilon}}\overline{\textrm{y}}-\textrm{g}\overline{\varepsilon}: à mày-kàlà mā-a lé lé
1SG.PRO 1SG-put in c6a-cassava.puff c6a-ANA1 APPL COP
```

'...I put [rat poison] in that cassava puff. [It] is...'
What-goes-around.9.14

### 4.6.5 H raising

The source of a SH tone is not always clear. But most instances appear to be the result of a grammatical H realized on a word with a lexical H . This is illustrated in the examples below. Example (4.40) demonstrates a grammatical H (indicating Habitual aspect) on top of the lexical H of the verb t' 'come', resulting in a SH.

| (4.40) | j̀d3ì | to' | wù | kj̀: | ỳg $\bar{\square}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | L | ${ }^{\mathrm{H}=} \mathrm{H}$ | L | ML | ${ }^{H} \mathrm{M}$ |
|  | N. | HAB=come | 3SG | catch | c10.termite |

'Nji always catches termites.'

Similarly, a SH is realized on the 3PL subject marker by when the grammatical H indicating Future is also present. This is illustrated in (4.41).

| (4.41) | bó | lé | bふ̋ | gù | fìm-bï |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | H | H | ${ }_{\mathrm{H}=\mathrm{H}}$ | L | $\mathrm{L}-\mathrm{L}$ |
|  | 3PL | COP | FUT=3PL | buy | c19-cola.nut |

'They will buy a cola nut.'

It might be that the consecutive preceding H's and the following L also contribute to the SH realization.

The example set in (4.42) involves H verbs in the progressive form. The progressive suffix is normally marked with a H tone as well. It is possible that the SH on the progressive suffixes here is a strategy to obtain contrast, since SH on the progressive suffix is not observed in non-H verbs.

| a. bī-dádè | bī | b | sáy-e" | jé | jú |
| :---: | :---: | :---: | :---: | :---: | :---: |
| M- H L | M | M | H $\quad-{ }^{\mathrm{H}} \mathrm{H}$ | ${ }^{H} \mathrm{M}$ | H |
| c8-palm.branch | c8REL | they | thatch-PROG | c10.house | on.it |

'...palm branches, that they thatch houses with.' King of Trees.1.3


What-goes-around.9.14

However, the realization of SH is not always apparent in these contexts. Furthermore, some SH's are observed in other cases where there is no grammatical H present. Perhaps these SH's are part of a strategy of "correction" for declension or downdrift, so that the pitch does not go lower than desirable.

As a reminder, with the conclusion of the chapters dealing with the language's sound system, the remainder of the book utilizes the description orthography presented in §1.3.3.

## Chapter 5

## Nouns

The characteristics of Nchane nouns are presented in this chapter. Like most of the other languages in the area, Nchane exhibits a robust noun class system, which encourages comparison to the noun class systems of Bantu languages. As the realization of this system is of utmost importance to noun morphology and noun phrase syntax, a large portion of this chapter is dedicated to a description of the noun class system.

I begin in $\S 5.1$ with a survey of former treatments of the Nchane noun class system, followed by $\S 5.2$, which describes the various noun classes and associated morphology. Singular-plural pairings and semantic characteristics possibly motivating noun class assignment are presented in this section as well. Compound nouns are briefly discussed in $\S 5.3$ and borrowed nouns in $\S 5.4$. The chapter ends with a presentation of nominalization in $\S 5.5$. Note that a closed class of kinship terms fused with a possessive pronoun is described in §6.4.1. Also, a detailed description of Pronouns, a word class sometimes considered a noun subtype, is given in Chapter 7.

### 5.1 Previous analyses of the Nchane noun class system

Hombert's (1980) comparative study of Beboid noun classes is the earliest systematic description of Nchane noun classes. This work provided a basis for my own preliminary description (Boutwell 2010) and the current analysis continues to largely
follow Hombert's numbering assignments, which are designed to align with ProtoBantu reconstructions. Some departures are made from these analyses and are pointed out in the relevant sections below.

One other work that should be mentioned is that of Kimbi (2010). This manuscript offers some limited details of the Nchane noun class system, particularly as it is realized through agreement patterns in certain noun modifiers.

### 5.2 Noun classes

This section is concerned with the Nchane noun class system. A brief introduction is given here, followed by a presentation of the different noun classes and nominal class marking. Next, I describe singular/plural class pairings or "genders" and semantic criterion observed associated with the various noun classes. Details regarding the sample size and distribution of the noun classes is given as well. The section concludes with a look at derivational classes.

Nchane nouns are grouped into 17 distinct noun classes, which are summarized in Table 5.1. The approach used in this work for noun class designations begins with the Bantuist convention of assigning numbers to nouns based on nominal prefixes, but relies on agreement patterns with associated words in a sentence for making final judgements on noun class analyses. The current analysis is largely comparable to that of Hombert's (1980), which utilized the numbering system devised by early Bantuists (Meinhof 1932; Welmers 1973). Note that the classes appear in the table with primary singular and plural pairings on the same line when applicable. Class 13 is a plural class that pairs with classes 3 and 5 . Classes 16 and 18 , which are described in $\S 5.2 .3$, usually do not have a plural class pairing.

| Class | Nominal marking | Agreement marking ${ }^{31}$ | Class | Nominal marking | Agreement marking ${ }^{31}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Ø- | wu | 2 | bā- | ba |
| 3 | -w-, Ø- | wu/kfu | 4 | $\emptyset$ - | yi/che |
| 5 | Ø- | chi | 6 | ā- | $\mathrm{a} / \mathrm{ka}$ |
| 7 | kī- | ki | 8 | bī- | bi |
| 9 | $\dot{\sigma}$ - | yi | 10 | б́- | yi/che |
| 14 | $\mathrm{b}(\mathrm{v}) \overline{\mathrm{u}}^{-}$ | $\mathrm{b}(\mathrm{v}) \mathrm{u}$ | 6a | māN-, $\overline{\mathrm{N}}$ - | $\mathrm{maN} / \mathrm{ma} / \mathrm{mu}$ |
| 19 | fī-/fĩN- | fi | $\begin{aligned} & 18 \mathrm{a} \\ & 13 \end{aligned}$ | mū-/mūN-chī- | $\mathrm{muN} / \mathrm{mu}$ <br> chi/yi |
| 16 | f $\bar{\varepsilon}$ - | f $ع$ /fo |  |  |  |
| 18 | ā- | a/ya |  |  |  |

Table 5.1 Summary of Nchane noun classes.

[^22]The current analysis diverges slightly from Hombert's, resulting in a closer correspondence with the Proto-Bantu system. One of the most important differences is the merging of Hombert's class 25 with class 6 a . These differing elements of analysis are discussed in greater detail in the relevant sections below.

Regarding tone, most classes have prefixes with a mid tone. However, several classes have no tone associated with them other than lexical tone assigned to the stem. Class 9 has a floating low tone, while classes 2, 6, 7, 8, 19 and 18a are observed to have some members with a mid tone associated with the noun class prefix in isolation, but realized with a low tone in certain contexts. Noun classes with subgroupings reflecting different tone characteristics is not unique to Nchane. For example, this has been observed for class 7 nouns in Sari (Langhout 2012: 11). For Nchane, it is likely that these tone alternations are a result of tone lowering processes realized in some nouns with stem-initial NC sequences (sometimes only diachronically), as pointed out in §4.4. Note that evidence was given in Chapter 4 for class 1 having a floating L prefix as well.

As mentioned above, noun class assignment is based on agreement patterning observed in other words associated with the noun. These words include most word classes that modify the noun, as well as nominal anaphors like subject and object pronouns and relativizers. Agreement, commonly referred to as concord in the Bantu tradition, is realized through morphological marking that is distinct to a particular set of nouns. ${ }^{32}$ Consequently, two nouns might have the same nominal marking, but are considered as belonging to different classes because the agreement paradigms of the two nouns are different (e.g., classes 1 and 5 or 6 and 18) Sometimes, the agreement marking of two noun classes is the same for all but a few modifiers. Nevertheless, any difference in concordant word classes results in different noun class designations (e.g., classes 1 and 3).

Examples (5.1) and (5.2) illustrate agreement marking for classes 1 and 6, where it can be seen that the possessive pronoun and the distal demonstrative agree with their head nouns. The agreement elements have been bolded to make them more easily identifiable.

| (5.1) | lē | Ø-nà: | $\mathbf{w - \overline { e }}$ |
| :--- | :--- | :--- | :--- |
|  | cOP | c1-cow | c1-3SG.POSS |

'It is his cow.'

[^23]| (5.2) | jó | ā-gīy | kà-gā |
| :--- | :--- | :--- | :--- |
|  | take.IMP | c6-egg | c6-dIST |

'Take those eggs.'

Note that the agreement element associated with the noun classes is often morphologically similar, if not identical, to the noun class prefixes. This is illustrated in (5.3), where the class 7 nominal class prefix kī̀-, is morphologically the same as the subject, object and relativizers, as well as the agreement prefix of the anaphoric demonstrative.

| (5.3) | bó | béy, | l $\bar{\varepsilon}$ | lé | kī, | kī-kfūnè | kī | kùgè |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3PL | agree | COMP | COP | c7 | c7-rat | c7REL | big |

'They agreed that it is him, the fat, black rat, who will tie that bell.'
Cat and Rats.1.6

### 5.2.1 Noun class nominal marking

Prefix noun class marking is prevalent in Bantu languages and is maintained in Nchane in eleven of seventeen classes. The remaining classes show a reduction of the prefix observed in Proto-Bantu reconstructions, with zero marking in classes 1, 4, and 5 , a tonal element for classes 9 and 10 and a labial glide infix in class 3 .

The marking associated with each of the noun classes is described below. Presentation of the noun classes closely follows the organization of the noun classes in Table 5.1, with an orientation around singular/plural pairings when relevant.

Classes 1 and 2
Table 5.2 gives selected examples of classes 1 and 2, which are marked with $\boldsymbol{\emptyset}$ - and bā- respectively.

| Class 1 | Class 2 | Gloss |
| :---: | :---: | :---: |
| Ø-chóy | bā-chóy | 'thief' |
| Ø-kfúlá | bā-kfúlá | 'hyena' |
| Ø-n̄sū | bā-n̄sū | 'pepper' |
| Ø-m̀mēg $\bar{\varepsilon}$ | bà-mbēg $\bar{\varepsilon}$ | 'hill' |
| Ø-kùn | bā-kùn | 'python' |
| $\emptyset$-ǹsàlà | bā-nsālà | 'needle' |
| Ø-n̄kú | bā-ŋkú | 'scabbard' |
| Ø-bvúlè | bā-bvúlè | 'lion' |
| Ø-kfū | bā-kfū | 'rope' |
| $\emptyset$-sēŋlè | bā-sçylè | 'okra' |
| Ø-m̄būshá | bā-mbūshá | 'cat' |

Table 5.2 Selected examples of class 1 and class 2 nouns.

The zero prefix of class 1 is characteristic of the Beboid languages and also quite common among the other Bantoid languages of the area. However, $80 \%$ of nouns in this class possess a root initial syllabic nasal reminiscent of class 1 marking seen in the neighboring Eastern Grassfields language Limbum (Fransen 1995: 100). Oku and Lamnso have also reported nasal prefix variants of class 1 (Blood 1999: 2; Grebe 1984: 66-74 respectively).

It might be argued, therefore, that this nasal represents a class 1 prefix, with class 1 nouns lacking the nasal corresponding to what researchers have designated as class 1a in some Bantu languages (see Maho 1999: 74). This analysis would have two class 1 subgroups with different nominal marking: $\mathbf{N}$ - for class 1 and $\boldsymbol{\emptyset}$ - for class 1a. One semantic category commonly selected for class 1 a in these Bantu languages is "kinship". Nchane kinship terms do in fact tend to lack a nasal onset, giving support to a class 1/1a distinction. However, the class 1 homorganic nasal prefix has become lexicalized onto the noun root, appearing in the class 2 forms as well. Ultimately, I adopt a single class 1 analysis with a single pattern of agreement, with class 1 nouns marked with a zero prefix and nasals (when present) belonging to the stem. Meanwhile, recognition of the two subgroups is maintained as having explanatory value when addressing issues of tone. More on this homorganic nasal is presented in §4.4.

Irregular nominal forms are rare in Nchane. However, suppletion is observed in the singular/plural alternations of the words for 'child' and 'human', both of which belong to gender $1 / 2$. These nouns are shown in Table 5.3.

| Class 1 | Class 2 | Gloss |
| :--- | :--- | :--- |
| mwā | b̄̄:: | 'child' |
| mū | bā-mì | 'person' |

Table 5.3 Irregular class 1 and class 2 nouns.

Another peculiar realization of gender $1 / 2$ nouns is observed in a handful of nouns, which show remnants of an u- prefix as realized by a labial glide following the initial consonant of the stem, illustrated in Table 5.4. These nouns are often kinship terms and likely correspond to a potential class 1a subgrouping. Some of these also take a bi- prefix for plural rather than ba-. The prefix for 'bananas' can be either baor bi-. Agreement for these words prove that they are class 2 rather than class 8. For example, the phrase 'the women' is bīkēsé bāà rather than *bīk $\bar{\varepsilon} s$ é byè. It is possible that the vowel of this class 2 prefix variant has undergone some kind of vowel assimilation process. But evidence to support this hypothesis is lacking at this time.

| Class 1 | Class 2 | Gloss |
| :---: | :---: | :---: |
| chwe | ba-ché | 'witch' |
| gw $n$ ¢ $\bar{\varepsilon}$ | bā-gēn $\bar{\varepsilon}$ | 'in-law' |
| kw $\bar{s}^{\text {sé }}$ | bī-k $\bar{\varepsilon}$ sé | 'woman' |
| jwēnsć | bī-1̄nsś | 'man' |
| Ø̄gว̄nと́ | bī-ngə̄nع́ | 'banana' |

Table 5.4 Class 1 nouns marked with a vestigial labial glide and class 2 nouns marked with bi-

## Classes 3 and 4

Classes 3 and 4 pair together to form a gender and are illustrated in Table 5.5. The singular and plural forms are differentiated by the presence of a labial glide infix for class 3 and zero marking for class 4 . The labial glide infix as a marker for class 3 is an innovation of the Beboid languages and the nearby languages identified as the Yemne-Kimbi group (Good et al. 2011), formerly classified as Western Beboid. ${ }^{33}$

| Class 3 | Class 4 | Gloss |
| :--- | :--- | :--- |
| gwí | Ø-gí | 'net |
| bw $\bar{\varepsilon}$ | $\emptyset-b \bar{\varepsilon}$ | 'mosquito' |
| kw $\bar{\eta} \eta$ | $\emptyset-k \bar{\varepsilon} \eta$ | 'firewood' |
| gwכ̄ŋ | $\emptyset-\mathrm{g} \overline{\mathrm{y}} \mathrm{y}$ | 'bamboo' |

Table 5.5 Selected examples of gender 3/4 nouns.

As mentioned above, class 4 has a zero prefix, a marking also shared by most of the Beboid languages. Conversely, two of the three Yemne-Kimbi languages, classified as Western Beboid at the time of Hombert's 1980 work, have $\mathbf{- y}$ - for class

[^24]4 and the third has $\mathbf{i}$ - for class 4 . The lone Beboid exception is Mungong, which has (y)i- for approximately $90 \%$ of class 4 nouns. The remaining $10 \%$ have zero marking. More details regarding Mungong gender $3 / 4$ is given later in this section.

Roughly $85 \%$ of gender $3 / 4$ roots are monosyllabic and $54 \%$ have velar onsets, suggesting some kind of regularization. These numbers are significant when compared to other classes. For example, only $56 \%$ of class 1 roots are monosyllabic and $37 \%$ have velar onsets. For class 7 roots, $51 \%$ are monosyllabic and $28 \%$ have velar onsets. A similar type of regularization in class 3 roots is also observed in nearby Mundabli, where stem onset alternations of $\mathbf{k p} / \mathbf{t s}$ and $\mathbf{g b} / \mathbf{d z}$ for classes 3 and 10 are observed (Voll 2017: 92-3). Similarly, the Beboid language Sari reports stem onset alternations of velars and +coronal consonants for some class 3 and class 4 roots respectively (Langhout 2015:18).

While this gender is largely quite regular, the three nouns in Table 5.6 exhibit peculiarities worth noting. The word for 'garden' is the lone example of a class 4 noun marked with a prefix. Furthermore, the $[\mathbf{m}]:[\mathbf{y}]$ alternation of the root consonant, is not readily explainable by morphophonological means.

| Class 3 | Class 4 | Gloss |
| :--- | :--- | :--- |
| $m w \bar{\varepsilon}$ | $\overline{\mathrm{e}}-\mathrm{\eta} \bar{\varepsilon}$ | 'garden' |
| $\mathrm{j} w \bar{\varepsilon}$ | $\emptyset-\mathrm{d} \bar{\varepsilon}$ | mouth' |
| $\overline{\mathrm{n}} s h w \bar{\varepsilon} \eta$ | $\emptyset-\mathrm{ns} \bar{\varepsilon} \bar{\eta}$ | 'palm needle' |

Table 5.6 Irregular gender 3/4 nouns.

Meanwhile, the words for 'mouth' and 'palm needle' both show a spirantized:non-spirantized alternation. The source, and therefore the direction, of this alternation is not clear. One obvious possibility is an historical prefix for class 4 , which Hombert (1980) reconstructed as *i-. This explanation would constitute a +back:+front opposition for classes 3 and 4 respectively: the back quality of class 3 *u- associating with "back" consonants and the front quality of class $4 * \mathbf{i}$ - associating with "front" consonants. Indeed, the velar:coronal opposition observed in Sari and Mundabli supports this hypothesis.

A final word regarding the status of class 4 is in order. Many languages in the area report class 4 , in spite of the apparent similarity of class 4 agreement with that of class 10. Insufficient attention to the agreement patterns of these two classes in the works on most nearby languages makes arriving at clear conclusions difficult if not impossible. It is clear that for some languages in the area, class 4 has merged with either class 10 or class 6 . For languages observed to have classes 4 and 10 , it is very likely that, in some cases, class 4 has been maintained in the analyses due to semantic and historical reasons, and for some languages, a difference in nominal marking as well.

The Nchane situation is not entirely clear. Segmentally, the agreement patterns of classes 4 and 10 appear to be identical. The tone on agreement elements is usually the same as well. However, speakers appear to have a high awareness of the grammatical high tone associated with class 10 , a sensitivity that seems to be lacking with the plural counterpart of class 3 nouns. In this work, the agreement patterns given for classes 4 and 10 are identical except in a few areas like possessive pronouns, where a higher tone is sometimes observed as a variant for class 10 agreement forms. Since a complete merger remains questionable, I maintain class 4 in the analysis. But a merger is clearly underway.

Before moving on, the Mungong gender $3 / 4$ merits some discussion. This gender in Mungong provides evidence of an ongoing $5>3$ merger, with a $6>4$ merger appearing to be complete. Three subgroups are observed within the gender designated for convenience as $3 / 4 \mathrm{a}, 3 / 4 \mathrm{~b}$ and $3 / 4 \mathrm{c}$, with a distribution rate of $11 \%, 13 \%$ and $76 \%$ respectively. Gender $3 / 4 \mathrm{a}$ is very similar to Nchane $3 / 4$, with the nominal marking of Cw/Ø-.${ }^{34}$ Gender 3/4c has nominal marking of $\boldsymbol{\emptyset}-/(\mathbf{y}) \mathbf{i}$-, while gender 3/4b appears to represent a transitional phase between the other two subgroups, with nominal marking of $\mathbf{C w} /(\mathbf{y}) \mathbf{i}$-. Examples of each subgroup are given in Table 5.7.

| Subgroup | Class 3 | Class 4 | Gloss |
| :--- | :--- | :--- | :--- |
| a | kpāy | kāy | 'firewood' |
|  | gbà | gà | 'root' |

Table 5.7 Selected examples of Mungong gender 3/4 nouns illustrating three subgroups.

Agreement for class 4 in all subgroups is yi-. But agreement patterns for the three class 3 subgroups are mixed, with 3a represented by wu-, but the other two subgroups showing occurrences of both wu- and yi-. Furthermore, there appears to be some speaker variation of some of these $3 / 4 \mathrm{~b}$ and $3 / 4 \mathrm{c}$ nouns, both in terms of nominal class marking and agreement. In other words, the inclusion of nouns into the $3 / 4 \mathrm{~b}$ and $3 / 4 \mathrm{c}$ subgroups is not fixed at this time.

## Classes 3 and 13

A small number of class 3 nouns make their plural with class 13 , all of which are presented in Table 5.8. The characteristic labial glide infix seen in class 3 gender 3/4 nouns is not apparent in this gender, although all but one of the words have a labial

[^25]component present in the root's onset. The prefix for class 13 is chī-. Note that native speakers sometimes disagree about which nouns belong in this gender. The parentheses around the plural for 'village' indicates that some speakers reject this noun as having a plural form, perhaps reflecting the additional sense of 'world'.

| Class 3 | Class 13 | Gloss |
| :---: | :---: | :---: |
| Ø-ȳgú | chī-ŋgú | 'fire, gun' |
| $\emptyset$-bīné | chī-bíné | 'dance' ${ }^{35}$ |
| Ø-ท̄gvúlé | chī-ŋgguúlé | 'vein' |
| Ø-wã: | chī-wã: | 'market' |
| Ø-wòn | (chī-wōn) | 'village' |
| Ø-ท̄gvúy | chī- y gvúy | 'tail' |
| $\emptyset$-m̄fû: | chī-mfû: | 'stirring stick' |

Table 5.8 Gender $3 / 13$ nouns.

Regarding the designation of " 13 ", Noni marks the same class with ji-, which was labeled 13 by Hyman (1981: 9). As for Nchane, the Noni class 13 is a plural class pairing with two singular classes, 3 and 5, to form minor genders, with the prefix markers to-, ti- and to- respectively. The same genders are also seen in Koshin (Yemne-Kimbi) (Hombert 1980) and the Central Ring languages Kom (Shultz 1997) and Oku (Blood 1999).

While Hombert analyzed this class as 13 for Koshin, he designated it as 27 for Nchane and Noni because two other languages in his Beboid study, Bu and Missong, have the same class, but with the prefixes kz- and ki- respectively, which differ considerably in form from Koshin's class 13 to-. He did not rule out the possibility that 13 and 27 had the same origin, but chose to keep the two separate, allowing the question to remain open. I am not constrained by the challenges entailed by reconstructing the noun class for a family of languages, and choose to align my analysis more closely with the traditional Bantu numbering. Additionally, in support of this analysis is the reconstruction for Proto-Western Grassfields (Hyman 1980), which has *tí- for class 13, a form that easily allows for Nchane's chī- as a reflex.

## Classes 5 and 6

A zero prefix is also observed for class 5. This marking is shared by all the Beboid languages that have class 5 as well as most of the Yemne-Kimbi languages, but is almost nonexistent among other neighboring languages. Lamnso appears to be a rare exception. Class 5 nouns most often pair with class 6 for plural, which has an $\overline{\mathbf{a}}-$ prefix, cognate with Proto-Bantu *ma-. This prefix is closer to the Proto-Bantu form as compared with the other Beboid languages that have class 6 , represented by the

[^26]prefixes $\boldsymbol{\varepsilon}$ - or $\boldsymbol{\emptyset}$-. Note that, as stated earlier, class 6 in Mungong has apparently completely merged with c4.

Some examples of Nchane gender 5/6 nouns are provided in Table 5.9. The examples show that an additional characteristic of this gender is that the singular forms are very often realized with a high tone that is lacking in the plural form.

| Class 5 | Class 6 | Gloss |
| :--- | :--- | :--- |
| Ø-chémé | $\bar{a}$-nchémé | 'calf of leg' |
| Ø-lá | $\bar{a}-\mathrm{la}$ | 'compound' |
| Ø-tī: | $\bar{a}$-tī: | 'stomach' |
| Ø-gvúnē | $\bar{a}-$ gvúnē | 'corpse' |
| Ø-lábè | $\overline{\mathrm{a}}$-lābè | 'web' |

Table 5.9 Selected gender 5/6 nouns.

A number of languages in the area display peculiarities in class 5 and/or its associated plural class, resulting in some analysis challenges. For example, Fang (Yemne-Kimbi) is observed to have some "irregular" plural members in gender 5/13 (e.g., lím/t̀̀límkpà 'tongue'), for which the form of the suffix portion of the plural "is not straightforwardly predictable" (Good et al. 2011: 150). Sari and Naami both have longer stems for class 5 forms when compared to their class 6 forms, with both classes taking zero prefixes (Langhout 2015: 19-20; Tabah 2018a: 5 respectively). Naami also has a few nouns forming a gender $5 / 6$ subgroup which does not have the stem length alternation, but is marked by the prefixes li- and yə- respectively. Some class 5 nouns in Noni are observed to be marked with the suffix -e (Hyman 1981: 9). Finally, Mungbam has two class 5 subgroups, marked with í- and ì- respectively (Lovegren 2013: 121).

The fact that in most of the cases mentioned above, there are multiple realizations for classes 5 and/or 6, suggests that this gender represents a destabilized environment in which changes are currently ongoing. Indeed, slightly more than one third of Nchane gender $5 / 6$ nouns ( $39 \%$ ) show a stem alternation, illustrated in Table 5.10, that results in a longer class 5 stem when compared to its class 6 counterpart.

| Class 5 | Class 6 | Gloss |
| :---: | :---: | :---: |
| Ø-bélé | ā-bē | 'hail stone' |
| Ø-gvúnè | ā-gvūy | 'feather' |
| Ø-sóทó | ā-sōy | 'oil palm' |
| Ø-n̄sūsú | ā-sūy | 'cooking stone' |
| $\emptyset$-jīs $\varepsilon$ ́ | $\overline{\mathrm{a}}$-jī | 'eye' |

Table 5.10 Selected examples of stem length alternation in gender $5 / 6$ nouns.

Two possible analyses to account for this stem alternation involve suffixes. One could analyze a suffix for class 5, as Hyman does for Noni. However, in the Nchane case, this suffix would have multiple realizations with no simple explanation for the various forms. A second analysis calls for a subtractive suffix, resulting in a shorter class 6 form. This analysis is quite abstract and would appear to be difficult to support language internally as well as language externally.

A simpler analysis, and the one adopted here, is that the stem alternation is due to the process of syllable reduction observable in other areas of the grammar (cf. 1PL pronouns described in $\S 7.1$ and the realization of the progressive form of certain verbs discussed in §9.1.2). This hypothesis comes with the question of why this phenomenon is limited to this gender within the noun class system. Further research is needed to find a plausible answer.

While the majority of gender $5 / 6$ nouns show no such stem alternation, some nouns are observed to have a different tonal realization on the stems of the singular and plural forms, as noted earlier (see the words for 'compound' and 'web' in Table 5.9 above). This possibly suggests H and L subgroups similar to those observed for Mungbam, and perhaps provides further evidence for the syllable reduction analysis, with the tonal realizations being the result of stray tones left over following the loss of tone bearing units. But without a careful study of the historical forms of these words, it is impossible to give a strong argument in support of this hypothesis.

Finally, Table 5.11 presents two gender $5 / 6$ nouns that have obscure vowel alternations in addition to syllable reduction.

| Class 5 | Class 6 | Gloss |
| :--- | :--- | :--- |
| tédé | $\bar{a}$-tā | 'stone' |
| gén $\bar{\varepsilon}$ | ā-gíy | 'egg' |

Table 5.11 Gender $5 / 6$ nouns with unexplained vowel alternations.

## Classes 5 and 13

Some class 5 nouns pair with plural class 13 , which has a chī- prefix, as mentioned above. Note that there is no stem alternation in this gender. However, some class 5 nouns show a high tone element lacking in the class 13 counterpart, just as was seen with some gender 5/6 nouns. Selected examples are given in Table 5.12.

| Class 5 | Class 13 | Gloss |
| :--- | :--- | :--- |
| Ø-lú | chī-lú | 'marriage' |
| Ø-kfúy | chī-kfū̄ | 'back' |
| Ø-lélē | chī-lēle | 'dragonfly' |
| Ø-kạ̀: | chī-kà̀: | 'fine' |

Table 5.12 Selected gender $5 / 13$ nouns.

## Classes 7 and 8

The prefixes for classes 7 and 8 are kī- and bī- respectively. All Beboid languages have ki- and bi-classes, although there is some variety for the vowel of class 7 among the various languages. Table 5.13 provides some examples.

| Class 7 | Class 8 | Gloss |
| :---: | :---: | :---: |
| kī-yá | bī-yá | 'ram' |
| kī-gư | bī-gư | 'baboon' |
| kī-mbémé | bī-mbémé | 'caterpillar' |
| kī-jāy | bī-jāy | 'weaver bird' |
| kī-ŋkūf $\bar{\varepsilon}$ | bī-ŋkūf $\bar{\varepsilon}$ | 'bone' |
| kī-mbì | bī-mbì | 'hourglass drum' |
| kī-kō | bī-k̄̄ | 'forest' |
| kī-nchún̄̄ | bī-nchúnç | 'bushy area' |
| kī-kû: | bī-kû: | 'yam' |
| kī-dá:dغ̀ | bī-dá:dè | 'palm branch' |
| kī-gwę | bī-gwę | 'owl' |
| kī-kfūnغ̀ | bī-kfūnغ̀ | 'rat' |
| kī-ŋkōgó | bī-ŋk ${ }^{\text {a }}$ gó | 'wound' |

Table 5.13 Selected gender 7/8 nouns.

[^27]
## Classes 9 and 10

Classes 9 and 10 are differentiated by a tone alternation alone. Class 9 nouns have a relative low tone and class 10 a relative high tone. Some examples are given in Table 5.14.

| Class 9 | Class 10 | Gloss |
| :---: | :---: | :---: |
| jón | jón | 'star' |
| shî | shí | 'chicken' |
| kwē | kwē | 'death' |
| chā | chā | 'monkey' |
| chējēè | chējē | 'hip' |
| gwè | gwé | 'guinea fowl' |
| ñà̀ | n̄sáy | 'friend' |
| bvū | bvú | 'dog' |
| jèbê | jēbè | 'mushroom' |

Table 5.14 Selected gender 9/10 nouns.

Note that these examples are given in their isolation forms and the associated noun class tone is sometimes only observable when placed into a phrase. For example, while the tone for 'death' and 'monkey' is mid for singular and plural in isolation, the low and high tones associated with classes 9 and 10 respectively are revealed when the nouns are put into tone frames, with the class 9 forms usually realized with a relatively lower tone within the frame as compared to their class 10 counterparts. See $\S 4.5$ for more details.

The examples illustrate that a floating tone interacts with the stem tone to produce a variety of surface tone realizations, sometimes in ways that are not easily explainable. Like class 3 above, class 9 shows a strong preference for monosyllabic stems. Furthermore, $73 \%$ of the roots have palatal onsets, which hints at the remnants of the Proto-Western Grassfields *ì- prefix (Hyman 1980).

While the class marking for classes 9 and 10 is not overly conservative, the low-high alternation is characteristic of a large majority of the languages in the region. The segmentless nature of the marking is observed throughout the Beboid languages, as well as most of the Yemne-Kimbi languages. But in the Grassfields languages, the tones often are carried by some vowel (usually [i]) or a nasal consonant.

## Classes 14 and $6 a$

The minor class 14 has a $\mathbf{b}(\mathbf{v}) \overline{\mathbf{u}}$ - prefix. The fricative element is placed in parentheses to indicate that it is often difficult to hear. In contrast, the fricative in words like bvú 'dog'(c9) and bvúlè 'lion'(c1) is always very strong. Native speakers perceive the fricative as present in the prefix, and I have transcribed it as such throughout this work. Class 14 is characteristic of the Beboid group, being observed in all the languages with the exception of Chung.

Nearly all of the Yemne-Kimbi languages also have class 14, where it is usually a single class gender populated with mass nouns. Conversely, class 14 nouns in the Beboid languages often may be pluralized, pairing with class 6 a , which is marked with the prefix māN- in Nchane. This analysis is a departure from earlier works, which designate the plural class as 25 . This decision is based on the shared agreement between non-count class 6 a and the plural class paired with class $14 .{ }^{37}$

Some young speakers no longer identify certain class 14 nouns as having a grammatical plural form, sometimes using the class 14 bvū- with singular and plural expressions. This class is also observed as a single class gender sparsely populated with mass nouns, with liquids usually marked with the prefix $\mathbf{N}$ - and nonliquids marked with māN-. The single class gender 6a also contains abstract nouns derived from predicate adjectives (see §5.2.3). It is not clear if this explains the diminished use of class 6a plurals for class 14 nouns, or if it has more to do with an overall decline in gender 14/6a membership and greater lack of opportunities for plural expression. For example, the occasions to talk about multiple bridges are very few.

All members of gender 14/6a are presented in Table 5.15. The plural of 'fufu' is placed in parentheses to indicate that the plural usage probably indicates "portions" of fufu, while the singular form is most often used as a mass noun expression, and is sometimes used in the language as a generic reference to "food".

| Class 14 | Class 6a | Gloss |
| :---: | :---: | :---: |
| bvū-shí | mān-shí | 'face' |
| bvū-kó | māp-k'́ | 'ladder' |
| bvū-bī $\bar{\varepsilon}$ | mām-bī $\bar{\varepsilon}$ | 'bundle' |
| bvū-shē | mān-shē | 'inheritance' |
| bvū-kū | māy-kū | 'roof' |
| bvū-1غ̃: | (mān-1غ̃: ) | 'fufu' |
| bvū-lı̀: | mān- 1 : | 'intestines' |
| bvū-tā | mān-tà | 'cave' |
| bvū-dyè | mān-dyè | 'bridge' |

Table 5.15 Gender 14/6a nouns.

As a single class gender for noncountable nouns, class 6a has very few members and is very likely disappearing from the language with members moving to other classes (see Table 5.30 for noncount nouns in other classes). As observed above, liquids in this class are marked with a homorganic nasal prefix, presumably with a

[^28]mid tone. Nonliquid mass nouns in this class appear to be marked with māN-. But the paucity of members makes generalizations dubious. All tokens in the corpus are given in Table 5.16. Note that the status of the $\mathbf{N}$ - prefix for the word $\mathbf{m} \bar{\varepsilon}$ : 'oil' is dubious, since the nasal onset does not appear to be phonetically long.

| Class 6a | Gloss |
| :--- | :--- |
| $\overline{\mathrm{m}}-\mathrm{bv} \mathrm{u}:$ | 'wine' (gen.) |
| $\overline{\mathrm{y}}-\mathrm{ku}:$ | 'palm kernel oil' |
| $\overline{\mathrm{m}}-\overline{\mathrm{m}} \overline{\mathrm{\varepsilon}}:$ | oil' |
| māy-kfūnè . |  |
| mày-kàlà | 'pus' |

Table 5.16 Class 6a mass nouns.

## Classes 19 and 18a

The prefix $\mathbf{f i}-/ \mathbf{f i} \mathbf{N}$ - marks nouns of class 19. This class is quite common in the region and is observed in all the Beboid languages. Among these languages, there is some variation in the prefix vowel, but the consonant is always [f].

Class 19 is normally paired with the plural class 18a (called class 26 by Hombert), which is marked with $\mathbf{m} \overline{\mathbf{u}}-/ \mathbf{m} \overline{\mathbf{u}} \mathbf{N}$-. The 18a designation is used for this class to indicate its formal similarity with Proto-Bantu locative class 18 (*mù-), but no claim is being made that this is its source. ${ }^{38}$

Prefixes with the homorganic nasal are prevalent in this gender, with only $25 \%$ of class 19 nouns and $14 \%$ of class 18 a nouns having no nasal immediately following the CV of the prefix. Hombert's analysis for Nchane generalized the prefixes as fi- and muN- for this gender (Hombert 1980: 88). The small number of nouns in the current study with no nasal in the class 19 prefix suggests that the prefix nasal is becoming more prevalent.

This gender is illustrated in Table 5.17 with selected examples. The word for 'thing' is the lone irregular gender 19/18a noun observed. The underlying forms fī-ỳ̀ and $\mathbf{m u} \overline{\mathbf{u}}-\mathbf{y} \dot{\varepsilon}$ are contracted in normal speech to be realized as fyè: and mwè:.

[^29]| Class 19 | Class 18a | Gloss |
| :---: | :---: | :---: |
| fī-láy | mū-láy | 'clay pipe' |
| fī-ní | mū-ní | 'bird' (gen.) |
| fin-chōn $\bar{\varepsilon}$ | mùn-chōn̄ | 'ground nut' |
| fìn-k $\bar{\jmath}$ | mùn-k̄ | 'cup' |
| fî-kùn | mū-kùy | 'heart' |
| fĭm-bì | mūm-bì | 'kola nut' |
| fīn-chīy | mūn-chìn | 'palm rat' |
| fī-kâ: | mūy-kâ: | 'calabash for oil' |
| fīn-sćsċ | mūn-sćsè | 'louse' |
| fīn-yōyà | mūn-yōnà | 'pig' |
| fīn-kōgó | mūy-kōgó | 'wrist, ankle' |

Table 5.17 Selected gender 19/18a nouns.

### 5.2.2 Gender and lexical membership

The above section presented the various noun classes and the primary genders each noun class is a member of. In this section the prevalence of the various genders is considered and observations are made regarding possible semantic criteria for class/gender assignment.

Table 5.18 shows the prevalence of each noun gender. The largest genders are $1 / 2,7 / 8$ and $9 / 10$, which are shaded in the table. All other genders account for less than $10 \%$ each, and it can be seen that single class genders are generally unproductive, with genders $1,3,5,6,6 \mathrm{a}, 7,8,9,10,18 \mathrm{a}$ and 13 each having between one and five members.

| Gender | Number | Percentage |
| :--- | :--- | :--- |
| $1 / 2$ | 105 | $22 \%$ |
| $3 / 4$ | 18 | $4 \%$ |
| $3 / 13$ | 7 | $1 \%$ |
| $5 / 6$ | 28 | $6 \%$ |
| $5 / 13$ | 14 | $3 \%$ |
| $7 / 8$ | 157 | $33 \%$ |
| $9 / 10$ | 67 | $14 \%$ |
| $14 / 6 \mathrm{a}$ | 13 | $3 \%$ |
| $19 / 18 \mathrm{a}$ | 30 | $6 \%$ |
| 16 | 5 | $1 \%$ |
| 17 | 6 | $1 \%$ |
| $1,3,5,6,6 \mathrm{a}, 7$, | 30 | $6 \%$ |
| $8,9,10,18 \mathrm{a}, 13$ |  |  |
| TOTAL | 480 | $100 \%$ |

Table 5.18 Distribution of Nchane genders. ${ }^{39}$

In terms of lexical criteria for class assignment, only a few semantic tendencies are observed. One obvious semantic category is "people". Sixty-eight percent of "people" nouns are found in gender $1 / 2$, which accounts for about one quarter of all gender $1 / 2$ nouns. Some examples are provided in Table 5.19.

| Class 1 | Class 2 | Gloss |
| :---: | :---: | :---: |
| mù | bā-mī | 'person' (cl) |
| m̆fòy | bā-mfòy | 'chief' (c1) |
| chóy | bā-chóy | 'thief' |
| bwè | bā-bwè | 'mother' |
| mfwà | bā-mfwà | 'slave' |

Table 5.19 Gender 1/2: People.

Some foods and tools are found in gender $1 / 2$, as well as some animals. Animals as a lexical category are scattered primarily between genders $1 / 2,7 / 8$ and $9 / 10$, with a small number also in gender 19/18a. It is possible that gender $1 / 2$ contains a subset of animals-those that are dangerous and/or carnivorous, as seen in Table 5.20. Animals from the cat family, such as lions and leopards, are found in this gender, along with the hyena and the crocodile. Similarly, birds of prey such as the hawk and the vulture, appear in gender $1 / 2$. Carnivores rarely if ever appear in other genders. One possible exception is the domesticated dog, which belongs to gender 9/10.

[^30]| Class 1 | Class 2 | Gloss |
| :--- | :--- | :--- |
| bvúlè | bā-bvúlè | 'lion' |
| ȳgūlú | bā-ŋgūlú | 'vulture' |
| kfúlá | bā-kfúlá | 'hyena' |
| kùy | bā-kùy | 'python' |
| ȳgáy | ba-ŋgáy | 'tarantula' |

Table 5.20 Gender 1/2: Dangerous animals and spiders.

Genders 3/4 and 3/13 appear to be miscellaneous genders, although gender 3/13 might include straight objects.

| Class 3 | Class 13 | Gloss |
| :---: | :---: | :---: |
| ȳgú | chī-ŋgú | 'gun, rifle' |
| n̄fû | chī-nfû | 'stirring stick' |
| ¢̄gvúlé | bā-ŋgvứlć | 'vein' |
| Ø̄gvúy | chī-ngvúy | 'tail' |

Table 5.21 Gender 3/13: Straight objects.

A significant percentage of gender $5 / 6$ is body parts, particularly those which are paired and round. These include the eyes, testes and knees. Other small, round objects are also observed in this gender, including eggs, hailstones, potatoes and rice, suggesting that the quality of 'roundness' might be characteristic of the gender. Table 5.22 provides some examples.

| $\text { Class } 5$ | $\text { Class } 6$ | Gloss |
| :---: | :---: | :---: |
| jīs ¢́ | $\overline{\mathrm{a}}$-jī | 'eye' |
| dyá | à-dá | 'testicle' |
| nû: | ā-nứ: | 'knee' |
| ḿbén | ā-mbên | 'breast' |
| gén $\bar{\varepsilon}$ | ā-gín | 'egg' |
| bēlē | ā-bē | 'hailstone' |
| tēdē | $\bar{a}-t \bar{a}$ | 'stone' |

Table 5.22 Gender 5/6: Round objects.

Gender 5/13 contains miscellaneous nouns.
Certain plants and trees, insects and tools are found in gender 7/8. Many animals are also found here, including those designating male varieties, such as billy goat, ram and rooster. There are also a good number of body parts, including a few
internal organs and the extremities．Examples of these two groups are given in Table 5.23 and Table 5．24．

| Class 7 | Class 8 | Gloss |
| :---: | :---: | :---: |
| kī－bé | bī－bé | ＇billy goat＇ |
| kī－ŋgōnと̀ | bī－ng⿹̄nغ̀ | ＇rooster＇ |
| kī－yō： | bī－yō： | ＇elephant＇ |
| kī－gúy | bī－gúy | ＇baboon＇ |

Table 5．23 Gender 7／8：Animals，including male varieties．

| Class 7 | Class 8 | Gloss |
| :--- | :--- | :--- |
| kī－láỳ̀ | bī̀láỳ̀ | ＇jaw＇ |
| kī－bj́ | bī̀b́ | ＇arm＇ |
| kī－kā | bī̄－kā | ＇foot＇ |
| kī－fūfú | bī－fūfú | ＇lung＇ |

Table 5．24 Gender 7／8：Body parts．

This gender also includes numerous nouns that could be viewed negatively， as seen in Table 5．25．Of the twelve＂people＂nouns found in this gender，all of them may be viewed as defective or incompletely human in some way．These include the words for people who are blind，deaf or lame，as well as prostitutes，orphans and ghosts．Other items found here that could be construed as negative are some insects associated with decay（e．g．，maggots），natural disasters and certain illnesses or conditions associated with poor health．

| Class 7 | Class 8 | Gloss |
| :---: | :---: | :---: |
| kī－chífè | bī－nchífè | ＇deaf person＇ |
| kī－yう̄ | bī－yō | ＇spirit＇ |
| kī－yúy | bī－yúy | ＇fool＇ |
| kī－ykú | bī－ykú | ＇flood＇ |
| kī－ntēn $\bar{\varepsilon}$ | bī－ntēn $\bar{\varepsilon}$ | ＇argument＇${ }^{40}$ |
| kī－nchén | bī－nchéy | ＇illness＇ |
| kì－ŋkòḡ̄ | bì－ŋkògऽ̄ | ＇abscess＇ |

Table 5．25 Gender 7／8：Negative entities．

Gender $9 / 10$ contains some animals and insects．Many of these are viewed as edible，such as goats，antelopes，termites and grasshoppers．The generic terms fish， snake and animal are also found here．Examples of these two groups are given in Table

[^31]5.26 and Table 5.27. Also found in this gender are some plants, trees and body parts, including the major reproductive organs.

| Class 9 | Class 10 | Gloss |
| :---: | :---: | :---: |
| shì | shí | 'chicken' |
| bī | bī | 'goat' |
| chā | chā | 'monkey' |
| $\overline{\mathrm{y}} \mathrm{g} \bar{\square}$ | ȳgó | 'termite' |
| $\overline{\mathrm{m}} \mathrm{be}$ | $\overline{\mathrm{m}}$ bé | 'grasshopper' |

Table 5.26 Gender 9/10: Edible animals and insects.

| Class 9 | Class 10 | Gloss |
| :--- | :--- | :--- |
| ȳ̄ | ȳ̄ | 'snake' (gen.) |
| byદ̀ | byદ̌y | 'fish' (gen.) |
| này | nāy | 'animal, meat' |

Table 5.27 Gender 9/10: Generic animal terms.

While gender 14/6a is relatively small and contains miscellany, there are at least three nouns in this gender that have a characteristic physical orientation. Ladder, bridge and roof, given in Table 5.28, are each constructed from two or more long "branches" with numerous shorter, transverse, parallel "branches" affixed. More examples would be needed to substantiate this as a defining element for gender assignment.

| Class 14 | Class 6a | Gloss |
| :--- | :--- | :--- |
| bvū-ḱ | māy-k' | 'ladder' |
| bvū-dȳ̄ | mān-dy $\bar{\varepsilon}$ | 'bridge' |
| bvū-kū | māy-kū | 'roof' |

Table 5.28 Gender 14/6a: Items with a ladder orientation.

Gender 19/18a contains a wide range of nouns with no clear lexical unity, with the possible exception of "smallness". Indeed, a significant portion of these nouns might be viewed as small, some of which are given in Table 5.29.

| Class 19 | Class 18a | Gloss |
| :---: | :---: | :---: |
| fī-ní | mū-ní | 'bird' (gen.) |
| fīn-kō | mūŋ-k̄ | 'cup' |
| fīn-sćsc̀ | mūn-sćss | 'louse' |
| fīm-bì | mūm-bì | 'kola nut' |
| fīn-tãg | mūn-táy | 'bead' |

Table 5.29 Gender 19/18a: Small items?

However, it is difficult to know with certainty how many of these nouns are in fact derived from another class and how many are underived but assigned to this gender based on small size. See $\S 5.2 .3$ for discussion of class 19 as a derivational class.

The single class genders by definition contain noncount nouns. All class 6 a noncount nouns were presented in Table 5.16, which illustrates two types of noncount nouns-liquids and items that tend to be small and numerous, and therefore perceived of as a mass. Table 5.30 lists the remaining noncount nouns in the corpus, with the noun class of each noun following the gloss. Liquids appear in classes $1,3,6,7$ and 9. Note that the class 9 noun for 'water' also refers to 'river', which is countable. Nouns that are treated as mass entities like 'sand' and those which refer to entities with a more amorphous quality such as 'air' and 'light' are also spread out in different classes. Thus, noncount nouns do not appear to display any kind of lexico-semantic unity that would dictate class assignment. Note that 'squirrel' would seem to be countable. Indeed, the Noni cognate is treated as countable. ${ }^{41}$

[^32]| Example | Gloss |
| :---: | :---: |
| mbbòy | 'marrow' (cl) |
| ǹyū | 'light' (gen.) (cl) |
| m̧fúy | 'storm' (cl) |
| Ø̄kàn | 'corn beer' (c1) |
| kwā | 'valuables' (c3) |
| n̄chwēn | 'spring' (c3) |
| mư: | 'sunlight' (c3) |
| bwe | 'dew' (c3) |
| tà: | 'ashes' (c5) |
| ā-mbèn | 'milk' (c6) |
| ā-màn | 'twin' (c6) |
| kī-jíbé | 'darkness' (c7) |
| kī-nchāŋò | 'watery oil' (c7) |
| kī-búlé | 'sky' (c7) |
| bī-fù | 'foam' (c8) |
| bī-kālē | 'menses' (c8) |
| bī-kānè | 'fruit' (gen.) (c8) |
| ŋ̄kà | 'salt' (c9) |
| fì: | 'air' (c9) |
| jày | 'rain' (c9) |
| jō | 'water' (c9) |
| ந̄gā | 'rust' (c10) |
| mūn-jégè | 'smoke' (c18a) |
| mūp-shē: | 'sand' (c18a) |
| chī-ká | 'squirrel' (c13) |

Table 5.30 Single class gender nouns.

### 5.2.3 Derivational classes

Certain classes are associated with derivational processes and are described in this section. These include the diminutive class 19 , and class 14 , which derives abstract nouns from predicate adjectives, as well as the two locative classes designated as 16 and 18. Note that class 7 is observed in a number of Bantu languages as having an augmentative function (Maho 1999: 263). This secondary use of class 7 is observed in limited quantities for Mundabli (Voll 2017: 86) and Sari (Langhout 2015: 22-23), where at least for Sari, it is derogatory as well. However, Nchane class 7 does not appear to function as an augmentative. Furthermore, while Nchane class 7 is observed to be associated with negatively perceived nouns, it cannot be used to derive negative nouns.

## Class 14

Class 14 derives abstract nouns from attributive verbs (described in §10.6). The stem of the abstract form always reflects non-progressive morphology, thus there is sometimes an apparent alternation in the stems of the attributive verb and the derived noun. The process appears to be very productive. Some examples are given in Table 5.31 .

| Attributive verb |  | Abstract noun |  |  |
| :---: | :---: | :---: | :---: | :---: |
| kūgé | 'big' | $\rightarrow$ | bvū-kūgè | 'bigness' |
| n $\bar{\square}: \mathrm{n} \bar{\varepsilon}$ | 'small' | $\rightarrow$ | bvū-n̄̄:n¢ | 'smallness' |
| jíjè | 'heavy' | $\rightarrow$ | bvū-jíjè | 'heaviness' |
| jūy | 'old' | $\rightarrow$ | $b v u ̄-j u ̄ n \varepsilon ̀$ | 'oldness' |
| yídé | 'black' | $\rightarrow$ | bvū-yídè | 'blackness' |
| chē $\dagger \bar{\varepsilon}$ | 'spoiled' | $\rightarrow$ | bvū-chēỳ̀ | 'spoiled-ness' |

Table 5.31 Selected class 14 abstract nouns derived from attributive verbs.

## Class 19

Class 19 as a derivational class of diminutive nouns is reported in neighboring languages, such as Noni (Hyman 1981: 11), Mundabli (Voll 2017: 100) and Mungbam (Lovegren 2013: 124), as well as noted as common among northern Bantu languages (Maho 1999: 88-89). In the past, class 19 was probably used to derive diminutive nouns also in Nchane, but the process is no longer productive. (See also the brief discussion regarding the semantics of c19 nouns in §5.2.2.) Example (5.4) represents a rare exception and shows that the derivational process is similar to those presented above, with the original class prefix being replaced with the class 19 prefix fī-. But it should be noted that some speakers do not recognize fìpı̂ as a derived noun.


While diminution is no longer a productive secondary function of class 19 , a small number of nouns may be derived, which take on the quality of smallness, but are primarily pejorative expressions. For instance, one can say something like, 'see his small head' as a way of poking fun. Some of these examples are given in Table 5.32. The lexical class is given in parentheses following the lexical form. ${ }^{42}$

[^33]| Lexical Form | Diminutive- <br> pejorative (c19) | Gloss |
| :--- | :--- | :--- |
| mwā (c1) | fī-mwā | 'child' |
| bā: (c1) | fī-bā: | 'pa' |
| kī-kwé: (c7) | fî-kwé: | 'head' |
| kī-ndòy (c7) | fī-ndòy | 'neck' |
| kī-bó (c7) | fī-bó | 'hand/arm' |
| kī-ká: (c7) | fī-ká: | 'leg' |
| yē (c9) | fî-yē | 'house' |

Table 5.32 Derived class 19 diminutive-pejorative nouns.

## Class 16

The locative class 16 is primarily a derivational class, although the process cannot be said to be productive. The prefix $\mathbf{f} \bar{\varepsilon}$ - shares its form with the preposition $\mathbf{f} \mathbf{\varepsilon}$, which usually gives a meaning of 'at' or 'on'. Class 16 nouns are derived by removing the original noun class marking and replacing it with the class 16 prefix, as illustrated in example (5.5). An association of this class with Proto-Bantu class 16 *pà- is likely, in spite of the morphological differences. The designation reflects similar semantics commonly expressed through the class, and the $\mathbf{f}$ onset is attested in apparent class 16 reflexes of other Bantoid languages (e.g., Ejagham and Yamba). See Grégoire (1983) for an account of the diversity observed in class 16 reflexes.

$$
\begin{array}{ll}
\begin{array}{l}
\text { kì-tānā } \\
\text { c7-fireplace }
\end{array} & \rightarrow  \tag{5.5}\\
\text { f16-fireplace }
\end{array} \quad \text { 'at the fireplace' }
$$

The use of class 16 in context is seen in example (5.6), which also reveals the noun imposing agreement on the modifying anaphoric demonstrative. Note that 'path' is lexically a class 9 noun, which generates the class 9 agreement seen in the phrase $\mathbf{y e} \mathbf{y} \overline{\mathbf{\varepsilon}}-\bar{\varepsilon}$ 'that path'.

| $\overline{\mathrm{n}}$-y ̇́n | Ø-ற́fòn | kì-kānī | wù | nù | fì-yēlé | f $\bar{\varepsilon}-\grave{\varepsilon}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1sG-see | c1-chief | c7-N. | c1REL | COP(N) | c16-path | c16-ANA1 |

'I saw the chief of Nkanchi, who was there.' (lit. at that path) Fire. 10

Examples of likely lexicalized class 16 nouns, which are few in number, are given in Table 5.33. As the table shows, some of these nouns have a stem differing from that of the historical source noun. Furthermore, in some cases the source is no longer identifiable. The word for 'beginning' shows that it is possible for a class 16 noun to ultimately be derived from a verb, although this is the only example in the corpus of this occurrence. Note that the verb is also marked with the nominalizer prefix $\mathbf{N}$-. See $\S 5.5$ for a description of this prefix.

| Source | Gloss | Class 16 | Gloss |
| :---: | :---: | :---: | :---: |
| chyā:y (?) | 'hand' (c9) | fē-ká | 'palm of hand' |
| bwē y (?) | 'upper arm' (c3) | f $\bar{\varepsilon}$-gbwè | 'shoulder' |
| ?? | - | f $\overline{\text { - -kú }}$ | 'down, on ground' |
| k $\bar{\varepsilon}$ | 'begin' (v) | f $\bar{\varepsilon}-\mathrm{y}-\mathrm{k}$ ¢ | 'beginning' |

Table 5.33 Class 16 nouns.

In all cases, class 16 nouns have the incorporated meaning of 'at' or 'on'. Class 16 nouns do not appear to have a natural morphological plural. See $\S 8.1 .1$ for an account of prepositional phrases involving $\mathbf{f} \varepsilon$ 'at'.

## Class 18

A second locative class is observed with the prefix $\overline{\mathbf{a}}$ - that is designated as class 18 . Like class 16 , the semantics of this class motivates its designation, since correspondence between its prefix and that of Proto-Bantu (*mù-) is doubtful. Note that Nchane class 18 corresponds with Noni class 17 ( $\mathbf{\varepsilon}-$ ) (Hyman 1981: 13). The class 18 prefix corresponds to the preposition à, which usually gives a meaning of 'in' or 'inside'. Nouns from other classes are locativized in the same way as described for class 16 above and usually have the incorporated meaning 'inside of'. An example derivation is given in (5.7) and an example in context in (5.8).

'She appeared with a food-mat in (her) hand.'
Two Wives.3.4

Like class 16, this class is not well represented in the data, but is populated by a few presumed lexicalized forms, including some body parts and words referring to times of the day. The historical source of these nouns is not always known. The nouns sometimes can have class 8 plurals, although it is possible that the locative significance is lacking in the plural forms and might simply reflect the non-derived plural form, as is likely for the word 'morning', seen in Table 5.34, along with other examples.

| Source | Gloss | Class 18 | Class 8 | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| shēप | 'liver' (c9) | $\overline{\mathrm{a}}$-shē¢ | - | 'stomach' |
| กวั | 'god' (cl) | ā-пう̄ | - | 'spirit world' |
| ?? |  | ā-ykáyá | bī-ykáná | 'armpit' |
| kī-ntánā | 'morning' (c7) | ā-ntánā | bī-ntánā | 'in the morning' |
| ?? |  | ā-ntáy | bī-táy | 'night' |

Table 5.34 Class 18 nouns.

See §8.1.2 for a description of prepositional phrases headed by à 'in' for the purpose of comparison.

### 5.3 Compound nouns

A relatively small number of noun-noun constructions are observed in Nchane, with the head noun limited to class 1, particularly various kinds of people. Examples are given in Table 5.35.

| Example | Gloss |
| :--- | :--- |
| Ø-mū-nché <br> c1-person-medicine (c9) | 'traditional healer' |
| Ø-mū-wá: <br> c1-person-market (c3) <br> Ø-mwā-nı̀ <br> c1-child-god (c1) <br> Ø-bwē-yē <br> c1-mother-house (c9) <br> Ø-chī-ŋkfù <br> c1-father-deceased(?) | 'trader' |

Table 5.35 Nchane compound nouns.

Rather than representing compound nouns, these constructions could be associative noun phrases, which have lost the associative marker and the remaining two nouns phonologically incorporated. Noni is observed to have similar optional associative marker loss for all classes with the shape [wu] and [yi] (i.e., classes 1,3 , 4, 9 and 10). It is likely that optional deletion of these associative markers is common in Nchane natural speech as well, although there is no change in meaning or function

[^34]in these cases. One native speaker suggested a difference in meaning between mū wū $\mathbf{k w a ̄}$ 'man of valuables' and mūkwā 'rich man'. But this is unconfirmed.

An attempt at eliciting a plural of a compound noun resulted in example (5.9), which is clearly an associative noun construction. Therefore, the compound noun analysis should be viewed with some suspicion.

| (5.9) | bā-mì <br> c2-person | bā | c2AM | wá: |
| :--- | :--- | :--- | :--- | :--- |
| c3.market |  |  |  |  |$\quad$ 'traders'

### 5.4 Borrowed nouns

Borrowings are not very common in the data. When they do occur, they usually are assigned to gender $1 / 2$, as seen in Table 5.36.

| Class 1 | Class 2 | Gloss |
| :---: | :---: | :---: |
| pyá | bā-pyá | 'avocado' (Cameroon Pidgin English 'pear') |
| ş̄:gと̀ | bā-s̄̄:gと̀ | 'soldier' (English) |
| lēmú | bā-lēmú | 'orange' (English 'lemon') |
| áfyòy | bā-áfyòy | 'airplane' (French 'avion') |
| jākí | bā-jākí | 'donkey' (Hausa 'jaki') |
| kòfī | - | 'coffee' (English) |
| 150 | bā-1כŋ | 'trousers' (Cameroon Pidgin English 'long') |
| māshę | bā-māshệ | 'machine ${ }^{44}$ (English) |

Table 5.36 Gender $1 / 2$ borrowed nouns.

The word for 'pineapple', given in example (5.10), is the only borrowed noun observed in gender $5 / 6$. It is possible that it is assigned to this gender because of its round shape

| Ø-nānā | $\bar{a}-n a ̄ n a ̄$ |
| :--- | :--- |
| c5-pineapple | c6-pineapple |

```

Another possibility is that the shape of the word fits the pattern of class 6 , which has the prefix a-, and therefore looks like a class 6 noun. However, the Noni cognate is assigned to gender \(5 / 13\), with noun class affixes -e/di- respectively, thus resulting in forms dissimilar to the French source word. Therefore, while supported language-internally, the hypothesis that it is assigned to c6 because of its segmental form is questionable

\footnotetext{
\({ }^{44}\) This word is used in reference to a number of mechanical devices, such as motorbikes and chainsaws.
}

\subsection*{5.5 Nominalization}

Nouns may be derived from verbs, which often bring with them extra segments reminiscent of the progressive suffix, but which are more likely reflective of historically longer verb forms. The derivation is accomplished by the addition of the nominalizing prefix \(\mathbf{N}-\), which precedes the root and which has no apparent effect on phonetic realization in the case of nasal-initial roots. The new stem then takes an appropriate noun class prefix. Most derived nouns are observed in gender \(1 / 2\), with a few derived forms seen in gender 7/8 and rarely in other genders. Some examples are given in Table 5.37.
\begin{tabular}{|c|c|c|c|c|}
\hline Source & Gloss & Noun (SG) & Noun (PL) & Gloss \\
\hline bi: & 'ask' & \(\overline{\mathrm{m}}\)-bīl¢ & bā-m-bīlè & 'question' (1/2) \\
\hline \(\mathrm{j} \bar{¢} \mathrm{n} \bar{\varepsilon}\) & 'walk' &  & bā-n-jēnè & 'journey' (1/2) \\
\hline shī & 'sit' & \(\overline{\mathrm{n}}\)-shīl̀ & bā-n-shīlè & 'meeting' (1/2) \\
\hline yēyè & 'teach' & \(\overline{\mathrm{n}}\)-y \(\bar{\varepsilon} \mathrm{y}\) غ & bā-n-yēyè & 'teaching' (1/2) \\
\hline \(\overline{\mathrm{m}} \mathrm{byā}\) y & 'lie' & \(\overline{\mathrm{m}}\)-mbyā & chī-m-mbyáy & 'lie' (5/13) \\
\hline táshé & 'join' & kì-n-tāshé & bì-n-tāshé & 'gathering'(7/8) \\
\hline téné & 'argue' & kì-n-t̄̄nć & bì-n-tēnć & 'argument' (7/8) \\
\hline tè: & 'tell' & fì-n-tēdē & mù-n-tēdē & 'story' (19/18a) \\
\hline
\end{tabular}

Table 5.37 Selected examples of nouns derived from verbs.

While derived nouns are rarely seen in other genders such as \(5 / 13\) and 19/18a, it is likely that there are few restrictions to which genders can take derived nouns. Semantic criteria might play a role in gender assignment. One known case supports this hypothesis. The derived noun for 'meeting' is normally assigned to gender \(1 / 2\). However, it can also appear as kìnshīl̀̀, a class 7 noun. In this case, it has the added meaning of being regular, for example, 'a weekly meeting'.

Derived nouns behave as normal nouns, appearing in the subject position (example (5.11)) and object position (examples (5.12) and (5.13)). Note also the agreement on the demonstrative dictated by the derived noun in example (5.11).
\begin{tabular}{lllllll} 
Ø-j̀̀-shìl̀̀ & wú-yú & gè & bé & kōn \(\bar{\varepsilon}\) & bá-mí & bá \\
c1-NMZR-sit & c1-ANA2 & P3 & \({ }^{\text {P }}\) COP & about & c2-person & c2AM
\end{tabular}
'This meeting was about (or for) preachers.'

\begin{tabular}{llllll} 
tō & kī & bó & yén & bè & lē \\
come & \(\operatorname{COMP}(К)\) & 3PL & see & 1PL & APPL
\end{tabular}
'At the places where we landed, we asked ten questions of the people who came to see us.'

Training.1.18
(5.13) bō k \(\bar{\varepsilon} m-e ́ \quad\) kì-n-tēn \(\bar{\varepsilon}\)

3PL have-PROG c7-NMZR- argue
'...they were having an argument...'
Sun and Wind.1.1

\section*{Chapter 6}

\section*{Noun phrase structure and nominal modifiers}

This chapter is concerned with the structure of Nchane noun phrases. Sections 6.1 and 6.2 describe simple and complex noun phrases respectively. The distinction between "simple" and "complex" is based loosely on Dryer (2007), with simple noun phrases limited to those with non-complex heads and potentially single-word modifiers and complex noun phrases covering all other cases.

A summary of the agreement system is included in this chapter in \(\S 6.3\) since the realization of agreement is an important feature of nominal modifiers, which are presented in §6.4. Some nominal modifiers can themselves serve as nominal constituents of a clause and are discussed in \(\S 6.5\). The final section (§6.6) deals with noun phrase word order.

\subsection*{6.1 Simple noun phrases}

Simple noun phrases are those involving a single noun, with or without a single-word modifier. The head of simple noun phrases is most often a lexical noun or a pronoun, both of which are illustrated in example (6.1). Noun phrases in this section are placed in square brackets while head nouns are bolded.
\begin{tabular}{|c|c|c|c|c|c|}
\hline (6.1) & [Ø-sจ̄ŋ̄] & ná-á & [bè] & bé & [ \(\overline{\mathbf{m}}-\mathbf{m} \overline{\mathrm{c}}\) :] \\
\hline & c5-oil.palm & give-PROG & 1PL & with & c6a-oil \\
\hline
\end{tabular}
'The oil palm tree provides us with oil...'
King of Trees.1.1

Noun phrases may consist of just a head noun alone as in example (6.1), or they may include one or more nominal modifiers, which follow the head noun, as shown in (6.2) and (6.3).

'...it (the fly) left and sat on his (the man's) stomach.'
Greedy Friends.1.15
\begin{tabular}{llll} 
(6.3) & ḿ-bú & {\([b \overline{1}-m b i ̄ \eta \grave{\varepsilon}\)} & bā-fédè \(]\) \\
& 1SG-pick & c2-smooth.stone & c2-two
\end{tabular}
'...I will pick two smooth stones ...'
Inheritance. 11

While pronouns are very common in the corpus, noun phrases with a pronominal head are rare. The types of modifiers observed modifying pronominal head nouns are limited to relative clauses and numerals, the latter of which example (6.4) illustrates.


\subsection*{6.2 Complex noun phrases}

Complex noun phrases are characterized by a head consisting of multiple noun phrases or by modifiers consisting of more than one word. These include conjoined noun phrases and associative noun phrases, both of which are treated in the sections below. Relative clauses are also complex modifiers. However, due to the higher degree of complexity of relative clauses, they are treated separately in chapter 11 rather than here. One could argue that noun phrases consisting of a head noun and a modifying possessive pronoun are complex as well and belong in this section, since the possessive pronoun is by definition a noun. However, possessive pronouns rarely
appear as nominal heads, functioning the majority of the time adjectively. Therefore, I include possessive pronouns with nominal modifiers described in §6.4.

\subsection*{6.2.1 Conjoined noun phrases}

Two noun phrases may be joined together with an intervening conjunction as in (6.5) and (6.6).
\begin{tabular}{lllllll} 
(6.5) & \(b \bar{a}\) & \(k \bar{\varepsilon}\) & \(b \bar{a}\) & chùg-è & \(b \bar{a}\) & bús-è \\
& they & begin & \(c 2\) & wash-PROG & \(c 2\) & remove-PROG
\end{tabular}
\begin{tabular}{llll}
{\([\) chē } & bé & Ø-gvúnē] & yéyē \\
c10.palm.kernel & with & c5-chaff & separate
\end{tabular}
'...they begin to wash and separate the kernels and the chaff...' Making Palm Oil.1.5
(6.6) Ø-sȳŋ̄̄ ná-á bè bé ... bī-tédè bī
c5-oil.palm give-PROG 1PL with ... c8-frond c8REL

cop like c4-bamboo.shaft or c4-firewood
'The oil palm tree provides us with...palm fronds that are used as (lit. like) bamboo rods or firewood...' King of Trees.1.3

Use of the disjunctive coordinator \(\mathbf{g} \bar{\varepsilon}\) in joining noun phrases as in (6.6) is considered undesirable by some native speakers. Nevertheless, this example illustrates identical syntactic structure as that observed for conjoined noun phrases with bé.

Examples (6.7) and (6.8) are taken from the same text and are rare cases of noun phrases with more than two conjoined noun phrases. These examples show that noun phrases consisting of more than two conjoined noun phrases can employ a serial strategy with a conjunction appearing only between the ultimate and penultimate noun phrases, as in (6.7), or a multiple conjunction strategy, with each set of adjacent noun phrases joined by a conjunction, as in (6.8).

\begin{tabular}{llllllll} 
(6.8) & b̄̄ & g \(\bar{\varepsilon}:\) & {\([\) shí } & bé & shóy & bé & bā-nā], \\
& 3pL & put & c10.chicken & with & c10.sheep & with & c2-cow
\end{tabular}
'...they put aside chickens and sheep and cows, ...' Inheritance. 2

The scope in which conjoined noun phrases behave as single, unified phrases is somewhat limited. For example, as (6.9) illustrates, conjoined noun phrases sharing a single determiner is considered ungrammatical; both of the noun phrases must have their own determiner, as in (6.10). This constraint ensures there is no agreement confusion.
\begin{tabular}{|c|c|c|c|}
\hline *[Ø-jwènss̀̀ & bé & Ø-kw & wú-mù] \\
\hline c1-man & with & c1-woman.3SG.POSS & c1-some \\
\hline
\end{tabular}
'... a certain man and his wife ...' (Jealous Husband.1.1)
\begin{tabular}{lllll}
{\([\boldsymbol{O}-\mathbf{j w} \mathbf{\varepsilon} n s \grave{\boldsymbol{\varepsilon}}\)} & wū-mū & bé & \(\boldsymbol{\emptyset}-\mathbf{k w} \boldsymbol{\varepsilon}:\) & wú-mū] \\
c1-man & c1-some & with & c1-woman.3SG.POSS & c1-some
\end{tabular}
'... a certain man and his wife...'
Jealous Husband.1.1

However, conjoined noun phrases can license a single pronoun as observed in (6.11) and (6.12). The "shared" pronoun in the examples below is underlined.
\begin{tabular}{|c|c|c|c|c|c|}
\hline (6.11) & [Ø-jwéns®̋ & bě & Ø-kwè] & jōd-è & kī-fê \\
\hline & c1-husband.hort & with & c1-wife.3sg.poss & take-Prog & c7-tim \\
\hline
\end{tabular}
\begin{tabular}{llll} 
k̄̄ & bó & yūg-è & \(\varnothing\)-ǹ-tēf \(\bar{\varepsilon}\) \\
\(\operatorname{COMP(K)~}\) & 3PL & hear-PROG & c1-NMZR-advise
\end{tabular}
'The husband and wife should be taking time to be hearing advice...'
Marriage.6.1

\begin{tabular}{llllll} 
Ø-kwè: & wú-mū] & b̄̄ & kōn-ē & yé & bá:y \\
c1-woman.3SG.POSS & c1-some & 3PL.REL & love-PROG & c10.body & much
\end{tabular}
'Some [time] ago there was a man and wife who loved each other very much.'

Jealous Husband.1.1

Examples of this phenomenon in the corpus occur only with class 1 human nouns, for which the 3PL pronoun is appropriate. Further research would be necessary to determine if conjoined non-human referents and/or non-class 1 nouns could also share pronoun licensing. Of particular interest would be how the agreement system would handle conjoined nouns of different noun classes.

\subsection*{6.2.2 Associative noun phrases}

Associative constructions consist of two nouns with an intervening associative marker (AM), which agrees with the head noun it follows. The structure of this noun phrase is summarized by the schema below.

\section*{\(\mathrm{N}_{1} \quad \mathrm{AM} \quad \mathrm{N}_{2}\)}

The noun class prefix of the second noun is maintained. The tone on the associative marker varies depending on the class: low tone for class 1, high tone for classes 3, 4 and 10 , and mid tone for all other classes.

The associative construction is primarily used for expressing possession when the possessor is a full noun as in (6.13)-(6.15).
\(\left.\begin{array}{llll}\text { (6.13) } & \begin{array}{l}\text { kī-nchō: } \\ \text { c7-horn }\end{array} & \begin{array}{l}\text { kī } \\ \text { c7AM }\end{array} & \begin{array}{l}\text { Ø-nā } \\ \text { c1-cow }\end{array} \\ \text { cow's horn' }\end{array}\right]\)
'children's pa'

Examples (6.13) and (6.14) clearly show that inalienable as well as alienable possession may be expressed through associative constructions. Inalienable possession may also be expressed through the possessum alone when the possessor is cognitively accessible as in (6.16).
\begin{tabular}{lllll}
\(\emptyset-j w \bar{\varepsilon} y\) & m \(\bar{\jmath}\) & wù & chūg̀̀ & chyà: \\
c1-husband & RES & 3SG & wash & c10.hand
\end{tabular}
'The husband then washed (his) hands.

Associative noun constructions where the \(\mathrm{N}_{2}\) is itself a possessed form lack the associative marker, as demonstrated in examples (6.17)-(6.19). Each of these has a class 1 noun as head, for which the associative marker is [wu], which was suggested in \(\S 5.3\) as possibly prone to elision. It is possible that this phenomenon is limited to associative constructions with class 1 heads or even only those involving kinship terms, although the data are unavailable to confirm this hypothesis.
\begin{tabular}{|c|c|}
\hline (6.17) & \begin{tabular}{l}
Ø-kw \(\bar{\varepsilon} \quad \emptyset-m w a \bar{a}\) wū-nà \\
c1-wife c1-child c1-2pL.pOSS
\end{tabular} \\
\hline & 'wife [of] your child' \\
\hline \multirow[t]{3}{*}{(6.18)} & Ø-bwē \(\quad\)--jwへ̀: \\
\hline & c1-mother c1-husband.2SG.POSS \\
\hline & 'mother [of] your husband' \\
\hline \multirow[t]{3}{*}{(6.19)} & Ø-chíjī \(\quad\) Ø-jwゝ̀: \\
\hline & c1-father c1-husband.2SG.POSS \\
\hline & 'father [of] your husband' \\
\hline
\end{tabular}

In addition to possession, other semantic relationships may be expressed through associative constructions, including OBJECT-SOURCE, OBJECTPURPOSE and some attributives. Examples (6.20)-(6.26) illustrate the range of expressions possible.
\begin{tabular}{|c|c|c|}
\hline (6.20) & \[
\begin{array}{ll}
\text { bā-mī } & \text { bā } \\
\text { c2-person } & \text { c2AM }
\end{array}
\] & n̄chānē N . \\
\hline & 'Nchane people' & \\
\hline (6.21) & \[
\begin{array}{lll}
\text { á-j̄} \overline{1} & \bar{a} & \emptyset \\
\text { c6-eye } & \text { c6AM } & \text { c1 }
\end{array}
\] & \begin{tabular}{l}
Ø-ywà \\
c1-book
\end{tabular} \\
\hline & 'letters of the alph & phabet' \\
\hline (6.22) & bī-ŋkāŋ bī & \(\overline{\mathrm{a}}\)-sจ̄ŋ \\
\hline & c8-beetle c8AM & M c6-palm.tree \\
\hline & 'palm beetles' & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline (6.23) & \(\begin{array}{lll}\text { mw- } \bar{\varepsilon}: & \text { mū } & \emptyset \text {-l } \bar{\varepsilon} m e ̀ ~ \\ c 18 a-t h i n g ~ & c 18 a A M & c 5-\text { work }\end{array}\) \\
\hline & 'tools' (lit. things of work) \\
\hline (6.24) & \(\begin{array}{lll}\text { bvū-j̄̄ŋ̄̄ } & \text { bvū } & \text { Ø-s } s \bar{y} \bar{\supset} \\ \text { c14-goodness } & \text { c14AM } & \text { c5-palm.tree }\end{array}\) \\
\hline & 'importance (or benefit) of palm trees' (lit. goodness of...) \\
\hline (6.25) & \begin{tabular}{l}
Ø-ìg \(\bar{\varepsilon} \quad\) wù j̀̀shyén \\
c1-trouble c1AM c9.property
\end{tabular} \\
\hline & 'land dispute' \\
\hline (6.26) & \begin{tabular}{l}
\(\emptyset\)-mū wù j̀̀chè \\
c1-person c1AM c9.medicine
\end{tabular} \\
\hline & 'doctor' \\
\hline
\end{tabular}

Associative noun phrases may be modified, with the modifier agreeing with the head noun, as in (6.27) and (6.28). The associative noun phrases are placed in brackets and the agreement elements have been bolded to facilitate the illustrations.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (6.27) & \begin{tabular}{l}
[Ø-mū \\
c1-person
\end{tabular} & \begin{tabular}{l}
\(\mathbf{w u ̄}\) \\
c1AM
\end{tabular} & \begin{tabular}{l}
nจ̄] \\
c9.god
\end{tabular} & \begin{tabular}{l}
wú-né \\
c1-PROX
\end{tabular} & & & \\
\hline & 'This man & God & & & & & Marriage.3.7 \\
\hline (6.28) & \[
\begin{array}{ll}
\text { bā } & \mathrm{g} \bar{\varepsilon} \\
\text { they } & \mathrm{P} 3
\end{array}
\] & \begin{tabular}{l}
\(y \bar{y} y \varepsilon ̀\) \\
teach
\end{tabular} & \begin{tabular}{l}
kòn \\
about
\end{tabular} & & & & \\
\hline & [bà-nchī c2-law & bā
c2AM & \begin{tabular}{l}
kī-yō \\
c7-spirit
\end{tabular} & kī c7REL & \begin{tabular}{l}
yūdē] \\
clean
\end{tabular} & bā-n \(\bar{\varepsilon}\) c2-four & \\
\hline & '...they tau that is clea & \[
h t a b c
\] & tt the fou & \(r\) spiritu & l laws & ' (lit. fo & \begin{tabular}{l}
s of the spirit \\
Training.1.7
\end{tabular} \\
\hline
\end{tabular}

As seen in (6.28), the modifying noun \(\left(\mathrm{N}_{2}\right)\) itself can have a modifier, with agreement controlled by \(\left(\mathrm{N}_{2}\right)\). This is further illustrated in (6.29).


What-goes-around.7.1

Note the different syntactic structures of these associative noun phrases. The demonstrative and quantifier in (6.27) and (6.28) respectively have the associative noun phrase itself as head, while the demonstrative in (6.29) has \(\mathrm{N}_{2}\) as its head, and thus belongs to a lower level of syntactic structure. These alternative agreement realizations are summarized by the schemas in Figure 6.1.
\begin{tabular}{lllll}
\((6.27) /(6.28)\) & {\(\left[\begin{array}{llll}\mathrm{N}_{\alpha} & \mathrm{AM}_{\alpha} & \left.\mathrm{N}_{\beta}\right]_{\text {ASSOCP }} & \mathrm{DEM}_{\alpha}\end{array}\right]_{\mathrm{NP}}\)} \\
\((6.29)\) & {\(\left[\mathrm{N}_{\alpha}\right.\)} & \(\mathrm{AM}_{\alpha}\) & \(\mathrm{N}_{\beta}\) & \(\left.\left.\mathrm{DEM}_{\beta}\right]_{\mathrm{ASSOCP}}\right]_{\mathrm{NP}}\)
\end{tabular}

Figure 6.1 Alternative agreement patterns of constructions with associative noun phrases.

Example (6.30) represents a rare case of apparent agreement confusion. It is clear from the textual context that the proper interpretation of this phrase is "this land problem", although the literal reading is "the trouble of this land".
\begin{tabular}{lllllll} 
Ø-ŋ̀g \(\bar{\varepsilon}\) & wù & j̀shyén & yē-nè & wù & g̀̀ & k \(\bar{\varepsilon}\) \\
c1-trouble & c1AM & c9.property & c9-PROX & c1 & P3 & begin
\end{tabular}
kī-fē kì
c7-time c7REL
'This land problem began when...'
Land Dispute.3.1

It is possible that agreement confusion of this kind happens more often when the noun falsely assigned as controller of agreement is \(\mathrm{N}_{2}\) of the associative noun phrase, resulting in the closer of the two nouns being assigned control.

Associative noun phrases are observed to be recursive, at times nesting a second associative noun phrase inside the first. This phenomenon is illustrated in (6.31). Recursive associative noun phrases are not common in the data and might be limited to constructions that are in the process of lexicalization.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(6.31)} & \(\mathrm{b} \overline{\mathrm{o}}\) k ¢ m & & \multicolumn{2}{|l|}{kì bō g \({ }_{\text {ç }}\) :} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{}} \\
\hline & 3pl hav & \(-\mathrm{PROG}\) & \(\operatorname{COMP}(\mathrm{K}) \quad 3\) & 3PL go & & \\
\hline & [bvū-shí & bvū & [Ø-mù & wù & Ø-nı̀] ] & lē \\
\hline & c14-face & c14AM & c1-person & c1am & c1-god & APPL \\
\hline & \begin{tabular}{l}
‘...they \\
person
\end{tabular} & ve to God) & go before the & he man & God.' & go \\
\hline
\end{tabular}

\subsection*{6.3 Agreement}

This section will present a summary of the various elements that show agreement. Agreement is defined as any kind of feature which shows a correspondence between a particular noun and some other word class.

The word classes which show agreement fall into two categories:
(1) Words taking an agreement prefix. These words can be loosely described as modifiers and include possessive pronouns, spatial demonstratives, anaphoric demonstratives, quantifiers, "some", and numbers. The agreement prefixes are summarized in Table 6.1. A minus sign represents an unattested form. The multiple agreement forms associated with possessive pronouns are mostly due to stem shape, with vowel initial stems taking a C prefix, and consonant initial stems taking a CV prefix. Note that tone for the proximal demonstratives is either H or M , while that for the distal demonstratives is either M or L. See §6.4.1 for precise details. Also note that the initial consonant of agreement prefixes for numbers are sometimes elided when they are semivowels (i.e., [w] and [j]).
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Class & Possessive pronoun & Dem spatial & \[
\begin{array}{r}
\text { Dem } \\
\text { ANA1 } \\
\hline
\end{array}
\] & \[
\begin{aligned}
& \text { Dem } \\
& \text { ANA2 } \\
& \hline
\end{aligned}
\] & Quantifier & Num \\
\hline 1 & w-, wū- & wu- & w- & wú- & wù-/wū- & wù- \\
\hline 2 & b-, bē-, bā- & ba- & b- & bá- & bā-, bá- & bā- \\
\hline 3 & w-, wū- & kfu- & kw- & wú- & wū-/wú- & wū- \\
\hline 4 & y -, yē- & che- & ch- & yí- & yī-, yí- & yī- \\
\hline 5 & ch-, chè- & che- & chy- & chí- & chī-, chí- & chī- \\
\hline 6 & \(\overline{\mathrm{a}}\)-, āw-, āwū- & ka- & k- & á- & ā-, á- & \(\overline{\mathrm{a}}\) - \\
\hline 7 & k-, kè- & ki- & k- & kí- & kī-, kí- & kī- \\
\hline 8 & by-, bè- & bi- & by- & bí- & bī-, bí- & bī- \\
\hline 9 & ỳ-, yè- & yi- & y- & yí- & yì, yí- & yì \\
\hline 10 & ý-, yé- & che- & chy- & yí- & yī-, yí- & yī- \\
\hline 14 & bw-, bù-, bwè-, bvù- & bvu- & bw- & bvú- & bvū-, bvú- & bvū- \\
\hline 6a & m-, mw-, mù-, mòy- & ma- & m- & má- & māN-, máN- & māN- \\
\hline 19 & fy-, fī- & fi- & fy \({ }^{-}\) & fí- & fī-, fí- & fi- \\
\hline 18a & mw-, mū-, mwū- & mu- & mw- & mú- & mūN-, múN- & mū- \\
\hline 13 & ch-, chè- & che- & chy- & chí- & chī, chí- & chī- \\
\hline 16 & f -, f ¢ \({ }^{\text {- }}\) & f \(\varepsilon\)-, fo- & f- & f '́- & f \(\bar{\varepsilon}-\), f \(\chi^{\prime}\) - & - \\
\hline 18 & ā-, āw-, āwē- & ya- & y - & á- & \(\overline{\mathrm{a}}\)-, á- & - \\
\hline
\end{tabular}

Table 6.1 Agreement prefixes (for possessive pronouns, spatial demonstratives, anaphoric demonstratives, quantifiers and numerals).
(2) Non-complex words. Morphologically simple words showing agreement include preverbal and postverbal pronouns, relativizers and the associative marker of associative noun phrases. These are summarized in Table 6.2. Relative clauses modifying class 18 are unattested, which is indicated in the table by a minus sign. Words enclosed by parentheses have either doubtful attestations or have extensive restrictions on distribution. Detailed descriptions of pronouns and relative clauses is given in chapters 6 and 11 respectively, while a description of associative noun phrases appears in the section prior to this one (§6.2.2).
\begin{tabular}{|c|c|c|c|c|}
\hline Class & Preverbal Pro & Postverbal Pro & Relativizer \({ }^{45}\) & AM \\
\hline 1 & wū & wù & wu & wù \\
\hline 2 & bā & bó & ba & bā \\
\hline 3 & wū & wú & wu & wú \\
\hline 4 & yī & yí & yi & yí \\
\hline 5 & chī & chí & chi & chī \\
\hline 6 & wō & wó & a & \(\overline{\mathrm{a}}\) \\
\hline 7 & kī & kí & ki & kī \\
\hline 8 & bī & bí & bi & bī \\
\hline 9 & yī & yì & yi & yī \\
\hline 10 & yī, yí & yí & yi & yí \\
\hline 14 & bvū & bvú & bvu & bvū \\
\hline 6a & m๊ & mó & ma & mā \\
\hline 19 & fī & fí & fi & fī \\
\hline 18a & mūy & mứ & muy & mū \\
\hline 13 & chī & yí & chi & chī \\
\hline 16 & (f \(\bar{\varepsilon}\) ) & (f') & (f£) & f \(\bar{\varepsilon}\) \\
\hline 18 & (ā) & (wó) & - & \(\overline{\mathrm{a}}\) \\
\hline
\end{tabular}

Table 6.2 Words showing agreement (preverbal pronouns, postverbal pronouns, relativizers and associative markers).

\subsection*{6.4 Nominal modifiers}

This section describes the following Nchane nominal modifiers: possessive pronouns, demonstratives, quantifiers, "some", numerals and adjectives. Each of these modifiers consists of a stem and an agreement prefix, which expresses agreement with the head noun. These modifiers are broadly classified as determiners, as they function in determining the reference or quantity characteristics associated with the head noun. Some of the modifying word classes are observed functioning as nominal heads themselves, independent of any overt, lexical noun (see §6.5). And I assume that any determiner category may do so. However, the overwhelming function of these words is modifying and as such, they are treated primarily as nominal modifiers.

\subsection*{6.4.1 Possessive Pronouns}

Possessed nouns (other than those in associative noun phrases) are immediately followed by a possessive pronoun which consists of an agreement prefix and a stem. The agreement prefix expresses agreement with the head noun (or possessum), while

\footnotetext{
\({ }^{45}\) The tone of relativizers differs depending on which clause constituent is relativized. See § 12.1 for more details.
}
the stem encodes for person and number of the possessor. Examples (6.32) and (6.33) are given to illustrate.


Non-human possessors do not express possession through possessive pronouns, but rather through associative noun phrases (see for example (6.13)). A possible exception to this rule is when a non-human is personified. This can lead to a situation where pronominal reference associated with a human referent can be used for stylistic reasons.

Table 6.3 provides a summary of the possessive pronoun forms. Some variation of vowels is observed in the stems of all but the 1 SG and 3 PL series. This variation is especially pronounced in the 1PL and 2PL series, where the stem vowel is sometimes \(\mathbf{e}\) and sometimes a. It is likely that this variation is at least in part free, with both forms fully accepted by speakers.

At times, there is also variation of the agreement in the paradigm resulting in less conservative reflexes than those found in the agreement paradigms of other word classes (cf. the quantifiers paradigm). The variation, particularly that of vowels, is even observed within certain series. For example, the class 2 agreement is generally ba-, but for 1PL it is bo-. Class 14 agreement for 2PL is another notable form, with the vowel appearing as \(\boldsymbol{\varepsilon}\) rather than \(\mathbf{u}\).

The agreement for classes 6 and 18 in all but the 3pl series reveals a segmentally longer form than seen in other concordant word classes. The agreement for these classes is usually (C)a, or sometimes the phonetically similar (C)d. But in the possessive pronoun series the underlying agreement is awu. This represents the only case of a disyllabic agreement prefix and is reminiscent of augments in some Bantu languages (see Katamba 2003: 107-8). Regardless of its source, it is likely a strategy adopted by the language to overcome the problem of prefixation of a vowel initial stem with a prefix that has no fundamentally associated consonant. If this hypothesis is correct, then one would need to posit that the strategy is unnecessarily extended to the plural possessive pronoun series, which do not have vowel initial stems.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Class} & \multicolumn{6}{|c|}{Person/Number} \\
\hline & 1SG & 2SG & 3SG & 1PL & 2PL & 3PL \\
\hline 1 & wàn & wò & wè & wūsè & wūnà & wūbō \\
\hline 2 & bày & bòy & bè & bēsà & bānā & bābō \\
\hline 3 & wāq & wò & wē & wūsē & wūnè & wūbう̄ \\
\hline 4 & yāy & yò & yì & yēsē & yēnē & yēbō \\
\hline 5 & chày & chùn & chè & chèsā & chènā & chìbō \\
\hline 6 & āwāy & āwò & āwì & āwūsē & āwūnā & ābō \\
\hline 7 & kàn & kùn & kè & kèsā & kènā & kēbō \\
\hline 8 & byāy & byūn & byè & bèsā & bènã & bēbō \\
\hline 9 & yày & yò & yè & yèsè & yènè & yēbō \\
\hline 10 & yáy & yó & yé & yésé & yéné & yébō \\
\hline 14 & bwày & bwōn & bwè & bvùsà & bwènà & bvùbō \\
\hline 6a & m(w)āy & mōท & mwè & mùsà & mùnā & mò̀bō \\
\hline 19 & fyàn & fyòn & fyè & fīsà & fīnà & fībō \\
\hline 18a & mwày & mwōn & mwè & mūsà & mūnā & mwūbō \\
\hline 13 & chày & chōn & chē & chèsã & chènã & chēbō \\
\hline 16 & fāy & fōท & fē & fèsà & fènà & f \(\overline{\text { ch }}\) ¢̄ \\
\hline 18 & āwày & āwò & āwè & \(\bar{a} w e ̄ s e ̄\) & āwēnē & ābō \\
\hline
\end{tabular}

Table 6.3 Nchane possessive pronouns.

The singular possessives of certain kinship terms, all of which belong lexically to class 1 , display portmanteau forms, with the possessor fused with the possessum. For example, the form for 'my wife' is derived from \(\mathbf{k w} \bar{\varepsilon} s e^{\prime}\) 'wife' + an '1SG.POSS', resulting in the form kwà:. Table 6.4 gives an account of some of these words, along with their plural counterparts. The portmanteau phenomenon does not extend to the plural possessive forms, although the 3PL form is reduced, lacking an agreement prefix.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Base form 'gloss' & 1SG & 2SG & 3SG & 1PL & 2PL & 3PL \\
\hline kwēsé 'wife' jwēysć 'husband' bwè: 'mother' chī: 'father' & \begin{tabular}{l}
kwã: \\
jwà: \\
bwà: \\
chíjàn
\end{tabular} & \begin{tabular}{l}
kwō: \\
jwò: \\
bwō: \\
chíjò
\end{tabular} & \begin{tabular}{l}
kwè: \\
jwę:: \\
bwè̀: \\
chíjè:
\end{tabular} & kw \(\bar{\varepsilon}\) wèsè jōmā wèsè bwē wèsè chíjí wèsè & kw \(\bar{\varepsilon}\) wènè jōmā wènè bwē wènè chíjí wènè & kwē bó jōmā bó bwè bó chíjì b \\
\hline
\end{tabular}

Table 6.4 Nchane possessive series of illustrative kinship terms with portmanteau members.

Identifying a base form for these kinship terms is difficult, since the core semantics of each involve the notion of possession. This allows for these base forms to be used in contexts that express a possessive relationship for which it is not overtly marked. Additionally, the base forms for 'wife' and 'husband' are disyllabic, with the ultimate syllable apparently not present in the conjugated forms. Curiously, the
opposite is observed in the word for 'father', with the base form monosyllabic and most of the conjugated forms displaying all of, or a portion of, the second syllable ji.

The plurals of these kinship terms belong to class 2 and take the prefix bā-. No agreement is observed in the portmanteau forms, but agreement is present in the plural possessor forms (except in the case of 3PL). To illustrate, compare examples (6.34) and (6.35).
\(\left.\begin{array}{lll}\text { (6.34) } & \begin{array}{l}\text { lé } \\
\text { cOP }\end{array} & \text { bā-chíjàn } \\
\text { c2-father.1SG.POSS }\end{array}\right]\)\begin{tabular}{llll} 
& 'They are my fathers.'
\end{tabular}
'They are our fathers.'

\subsection*{6.4.2 Demonstratives}

Two types of demonstratives are present in Nchane, both types being represented by two forms each. The exophoric set of demonstratives expresses the notion of spatial orientation. The endophoric set is used in anaphoric reference and is important to discourse organization. One of these anaphoric demonstratives, designated as ANA2, also has a unique function of encoding speaker attitude toward the participant. Both types occur immediately after the modified noun (or after the possessive pronoun if one is present). The spatial demonstratives are described first and then the anaphoric demonstratives.

\section*{Spatial demonstratives}

Nchane has a bipartite system of spatial demonstratives, which identify the referent in terms of relative distance from the deictic center, which is most commonly the speaker. The proximal demonstrative has the underlying form nē and marks referents located near the speaker, while the distal demonstrative has the underlying form gē and marks referents located far from the speaker. (The distal demonstrative is subject to vowel copying, resulting in the alternate form \(\mathbf{g a ̄}\). See \(\S 3.5\) for more details.) These two demonstratives combine with a set of noun class agreement prefixes as illustrated in (6.36)-(6.39).
\begin{tabular}{lllllll} 
(6.36) & wù & dú, & ḱ & là & mày-kàlà & mā-nē, \\
& 3SG & say & catch.IMP & CE & c6a-cassava.puff & c6a-PROX
\end{tabular}
'She said (with irritation), "Take this cassava puff...".'
\begin{tabular}{lllllll} 
(6.37) & já & ȳ̄ & nàn & jí-nè & lē & chègē \\
& leave.IMP & from & c9.meat & c9-PROX & APPL & quickly
\end{tabular}
'Go away from this meat quickly!'
Greedy Friends.1.11
\begin{tabular}{llll} 
(6.38) & jó & bvū-ḱ & bvù-gè \\
& take.IMP & c14-ladder & c14-DIST
\end{tabular}
'Take that ladder (over there).'
\begin{tabular}{llllllll} 
(6.39) & jó & n \(\overline{0}\) & yī-nē, & n \(\bar{~}\) & yì-gè & kōd \(\bar{\varepsilon}\) & g̀̀ \\
& take.IMP & c9.cutlass & c9-PROX & c9.cutlass & c9-DIST & sharp & NEG2
\end{tabular}
'Take this cutlass (near me), that cutlass (over there) is not sharp.'

While both of these demonstratives are used routinely in normal speech in exophoric reference, only the proximal demonstrative appears in the text corpus and a large majority of these occurrences are used in making anaphoric reference. For example, the phrase "this joining" in (6.40) is a reference to the act of marriage, which is mentioned earlier in the text. It cannot be construed as a reference encoding relative spatial position. Note that anaphoric reference through the proximal demonstrative may also encode special topic status (see \(\S 16.2 .3\) for more details).
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline (6.40) & Ø-ǹ-tāsè & wú-nē & lé & nò & wū & tó & bé & Ø-bwè \\
\hline & c1-NMZR-join & c7-PROX & COP & like.that & 3SG & come & with & c1-mother \\
\hline
\end{tabular}

'This joining (marriage) will come through the mother, the father or THOSE children.'

Marriage.3.3

Other cases are ambiguous-the proximal demonstrative could be functioning exophorically or endophorically. This is illustrated in (6.41), where the phrase "this blind man" refers to a blind man that was seen earlier. It is possible that the blindman is still nearby at the moment of this utterance and the speaker is indicating his physical presence. Or the reference could be anaphoric, indicating the aforementioned blind man.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (6.41) & \begin{tabular}{l}
kì-nfę̀: \\
c7-blind.man
\end{tabular} & \begin{tabular}{l}
kī-nē \\
c7-PROX
\end{tabular} & \[
\begin{aligned}
& \text { lé } \\
& \text { COP }
\end{aligned}
\] & \[
\begin{aligned}
& \text { kī } \\
& \text { c7 }
\end{aligned}
\] & \begin{tabular}{l}
fūg-sè \\
worry-CAUS
\end{tabular} & wá already & \begin{tabular}{l}
bā-mī \\
c2-person
\end{tabular} \\
\hline & wèsè bé very with & kī-lègè c7-begging & & & & & \\
\hline
\end{tabular}
'...this blindman has already worried people too much with begging.'
What-goes-around.3.5

As mentioned earlier, the distal demonstrative is not present in the text corpus at all, suggesting that it does not have a discourse function.

A summary of the spatial demonstratives is provided in Table 6.5.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & Proximal & Distal & & Proximal & Distal \\
\hline 1 & wúnē & wùgè & 2 & bánē & bāgà \\
\hline 3 & kfúnē & kfùgè & 4 & chénē & chēgè \\
\hline 5 & chēnē & chègè & \[
\begin{aligned}
& 6 \\
& 13
\end{aligned}
\] & \begin{tabular}{l}
kánē \\
chénē
\end{tabular} & kàgà chègè \\
\hline 7 & kínē & kìgè & 8 & bínē & bìgè \\
\hline 9 & yínē & yìgè & 10 & chénē & chēgè \\
\hline 14 & bvúnē & bvùgè & 6a & mánē & màgà \\
\hline 19 & fīnē & figè & 18a & mūnē & mùngè \\
\hline 16 & f \(\bar{n}\) ē & fògè & & & \\
\hline 18 & yānē & yāgà & & & \\
\hline
\end{tabular}

Table 6.5 Nchane spatial demonstratives.

\section*{Anaphoric demonstratives}

The other type of demonstrative functions primarily in anaphoric reference. That is, the demonstratives are used to refer to a participant that has been previously mentioned. These referents are most often major participants in the story. Note that other pragmatic considerations can call for the use of the second anaphoric demonstrative (ANA2), as will be illustrated later in this section.

The functional difference between the two anaphoric demonstratives is pragmatic. The first anaphoric demonstrative (ANA1), with the underlying form \(\grave{\varepsilon}\), is used to mark nouns in a story that are coreferential with important participants or
props. For example, "money" (lit. "teeth" \({ }^{46}\) ) in (6.42) is an important prop in a story about a house fire. The money burns up in the fire and the loss of the money was a tremendous hardship for the speaker and a source of sorrow.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (6.42) & \[
\begin{array}{ll}
\mathrm{m} \bar{\varepsilon} & \mathrm{~g} \bar{\varepsilon} \\
\text { 1SG.PRO } & \mathrm{P} 3
\end{array}
\] & \[
\bar{\varepsilon} \bar{\varepsilon}
\] & \begin{tabular}{l}
\(\bar{n}\)-t \\
1sG-come
\end{tabular} & bé with & bī-gè, c8-tooth & \[
\begin{aligned}
& \text { ǹ-tó, } \\
& \text { 1sG-come }
\end{aligned}
\] & ń-ché, 1SG-sleep \\
\hline & bvūchūyū, next.morning & & \begin{tabular}{l}
\(\overline{\mathrm{n}}\)-jò \\
1sG-take
\end{tabular} & \begin{tabular}{l}
bī-gè \\
c8-tooth
\end{tabular} & \begin{tabular}{l}
by- \(\bar{\varepsilon}:\) \\
c8-ANA1
\end{tabular} & & \\
\hline & ǹ-lē \(\bar{y}\) & & ¢̀ y ē & & & & \\
\hline & 1sG-enter 1 & & -put c9.h & ouse & & & \\
\hline
\end{tabular}
'I brought some money (lit. teeth) and slept. The next morning, I took that money and put it in my house.'

Fire.1.4-5

Similarly, the "woman" and the "blindman" in (6.43) are both major participants in the story the example comes from. And the "cow" in (6.44) is an important prop in the Three greedy friends text; it is present throughout the entire story.

'That woman continued frying cassava puffs and that blindman was always coming and begging cassava puffs from her, day after day.'

What-goes-around.1.5

\footnotetext{
\({ }^{46}\) The word for "teeth" is used here to refer to money. The source of this usage is unclear. It is possible that historically the Nchane people literally used teeth as a form of currency. Indeed, many of the "notables" in the area, when in ceremonial dress, wear necklaces strung with teeth from some large animal, an indication of the precious nature of teeth. A second hypothesis is that its use is metaphorical, standing in for something like cowrie shells, which were used for currency. Eggon (West-Plateau), spoken in Nigeria, is documented as having such a polysemy (Roger Blench pers. comm.). However, of the nearby languages, Noni is the only other language known to use "teeth" in reference to money.
}

'They arranged to buy a cow to slaughter and sell. After they bought that cow and came with it...'

Greedy Friends.1.3-1.4

The second anaphoric demonstrative (ANA2), with the root yú, also marks the modified noun as referring to an important participant or prop in the story. However, ANA2 most often has the additional function of marking the referent as one that has been or will be involved in some kind of climactic event and/or one that is viewed as somehow inherently faulty or otherwise negative. The use of ANA2 is largely subjective in nature and reveals the attitude of the speaker towards the referent. The examples given in the remainder of this section illustrate some of the semanticpragmatic uses of the demonstrative. For a fuller treatment of the anaphoric demonstratives, see Boutwell (2018). Also, see the interlinearized text provided in Chapter 17 in order to more easily observe both anaphoric demonstratives functioning within a larger discourse context.

Examples (6.45) and (6.46) illustrate ANA2 modifying a referent that was marked previously with ANA1. In both cases, the function of ANA2 is primarily pragmatic-to indicate to the hearer that a negative event connected to that referent is about to occur. For example, following the sentence in example (6.45), the cow is laid on the man, who is then killed by the cow's horn.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline (6.45) & & & \[
\begin{aligned}
& \text { y-é } \\
& \text { c10- }
\end{aligned}
\] & 3SG.POSS & \[
\begin{aligned}
& \text { chy- } \bar{\varepsilon} \\
& \text { c10-At }
\end{aligned}
\] & & \[
\begin{aligned}
& \mathrm{y} \overline{1} \\
& \mathrm{c} 10
\end{aligned}
\] & b \(\bar{q} \eta\) agree & \begin{tabular}{l}
\(1 \bar{\varepsilon}\) \\
COMP
\end{tabular} \\
\hline & wū & gĩ & & fè-kū & bó & k' & & Ø-nà & wú-yú \\
\hline & 3SG & lie.do & & c16-down & 3PL & catch & & c1-cow & c1-ANA2 \\
\hline & bó & túg & wù & lé & w-è & & & & \\
\hline & 3PL & & & COP & c1-3sG. & Poss & & & \\
\hline
\end{tabular}
'The friends agreed that he should sleep on the ground so they could lay that cow on him.'

Greedy Friends.1.5

Example (6.46) is taken from a story in which rats plan to tie a bell on the tail of a cat who has been terrorizing them, in order to alert them of the cat's approach. In the very next sentence, the cat appears and begins to catch them. The association of the bell with the traumatic event is only peripheral, but it serves as a peak-marking device, increasing tension.

'They agreed that it would be the fat, black rat who would tie THAT bell (on the cat's tail).'

Cat and Rats.1.6

There is some evidence from the text corpus that referents that produce a sound are preferentially marked by ANA2. Thus, there might be multiple factors related to the use of ANA2 with the bell in the previous example. Similarly, ANA2 is used preferentially with referents that are deemed in some way as faulty, abnormal or dangerous. This would include entities such as mentally deranged people and storms. This is particularly the case when the "negative" condition of the referent is in contrast with the "normal" condition. This is illustrated in (6.47), which provides a contrast between a woman who has changed herself into an animal and her fellow-wife who is a normal woman.
\begin{tabular}{llllllll} 
Ø-kw \(\bar{\varepsilon} s e ́\) & \(w \bar{\varepsilon}-\grave{\varepsilon}\) & jà & \(w \overline{1}\) & mēsè, & wú & \(g \bar{\varepsilon}:\) & wú \\
c1-woman & c1-ANA1 & stand & up & complete & 3 SG & go & 3 SG
\end{tabular}

\begin{tabular}{lllllll} 
Ø-kwēsé & wú-yú & shè & j̀chùy & à & nà & lē \\
c1-woman & c1-ANA2 & remain & c?.bush & in & c9.animal & APPL
\end{tabular}
'The woman got up, went and took that food-mat and ran home with it. The (other) "woman" remained in the bush as an animal.'

Two Wives.4.1-3

Note that ANA2 is not always used with this referent; at times this referent appears with ANA1. This suggests that there are several factors related to its use in addition to adverse quality, such as speaker preference and storytelling style.

As a subjective discourse tool, the effect of ANA2 is sometimes subtle and the purpose of its use not readily apparent. Such is the case in (6.48), where it functions to express a speaker comment regarding the appropriate way to enter into marriage. The speaker is giving advice about marriage to a group of young people and is saying that the agreement to marry can be made by the parents or by the children (i.e., the boy and girl) themselves. His use of ANA2 with "children" indicates the speaker's displeasure at children arranging their own marriage, which is traditionally accomplished by the parents of the children.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Ø-ǹ-tāà & wú-nē & lé & nò & wū & tó & bé & Ø-bwè \\
\hline c1-NMZR- join & c1-PROX & COP & like.that & c1 & come & with & c1-mother \\
\hline k \(\bar{n} n e ̄ ~ b \varepsilon ́ ~\) or with & \begin{tabular}{l}
Ø-chíjī \\
c1-father
\end{tabular} & \begin{tabular}{l}
\(k \bar{\varepsilon} n e ̄\) \\
or
\end{tabular} & bé with & \begin{tabular}{l}
bゝ̄: \\
c2.child
\end{tabular} & & & \\
\hline
\end{tabular}
'This joining (marriage) will come through the mother, the father or THOSE children.'

Marriage.3.3

There is otherwise no negative or surprising event connected with this reference and no effect at the discourse level. The sole purpose for its use is the expression of a very subtle discouragement of this behavior and is an extreme case of its subjective use.

While ANA2 is most often associated with adverse reference, it can also be used to express the notion of intensity and/or complexity as in (6.49). This example comes from a text describing a training program for local pastors. The function of ANA2 in this example appears to indicate that the meeting consisted of multiple modules and/or that the training given through the meeting was deemed challenging by the speaker.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Ø-j̀-shìlè & wú-yú & gè & bé & kōn̄ & bá-mí & bá \\
\hline c1-NMZR-sit & c1-ANA2 & P3 & \({ }^{\text {P }} \mathrm{COP}\) & about & c2-person & c2Am \\
\hline Ø-ḿ-fíjē & j \(\bar{\varepsilon}\) & & yī & Ø-nı̀ & & \\
\hline c1-NMZR-preach & h c9.wo & & c9am & c1-god & & \\
\hline
\end{tabular}
'This meeting was about (or for) preachers.'
Training.1.2

It is important to note that ANA1 or the distal demonstrative could be substituted for ANA2 in (6.49). However, it would be unacceptable for ANA2 to be used if the meeting was short, uninteresting and simple in content (with all other factors remaining the same).

Table 6.6 provides a summary of the anaphoric demonstratives. Note that the vowel of the ANA1 root is deleted when the prefix vowel is the low vowel/a/, followed by compensatory vowel lengthening. This is the case for classes \(2,6,6 a\) and 18 . See \(\S 3.4\) for more details. Also, a palatal glide is sometimes heard when prefixes have ch or \(\mathbf{k}\) onsets. The glide realization is often stronger or weaker depending on who is speaking. In contrast, a glide is almost always heard with demonstratives marked with class 8 or 19 agreement.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & ANA1 & ANA2 & & ANA1 & ANA2 \\
\hline 1 & w \(\bar{\varepsilon}^{\text {: }}\) & wúyú & 2 & bà: & báyú \\
\hline 3 & kwè: & wúyú & 4 & \(\operatorname{ch}(\mathrm{y}) \bar{\varepsilon}\) : & yíyú \\
\hline 5 & \(\operatorname{ch}(\mathrm{y}) \bar{\varepsilon}\) : & chíyú & \[
\begin{aligned}
& 6 \\
& 13
\end{aligned}
\] & \begin{tabular}{l}
kà: \\
\(\operatorname{ch}(\mathrm{y}) \bar{\varepsilon}\) :
\end{tabular} & \begin{tabular}{l}
áyú \\
chíyú
\end{tabular} \\
\hline 7 & \(\mathrm{k}(\mathrm{y}) \overline{\mathrm{c}}\) : & kíyú & 8 & by \(\bar{\varepsilon}\) : & bíyú \\
\hline 9 & y ¢ & yíyú & 10 & \(\operatorname{ch}(\mathrm{y}) \bar{\varepsilon}\) : & yíyú \\
\hline 14 & bwè: & bvúyú & 6a & mà: & máyú \\
\hline 19 & fy \(\overline{\text { : }}\) & fíyú & 18a & mwè: & múyú \\
\hline 16 & fı̀: & féyú & & & \\
\hline 18 & yà: & áyú & & & \\
\hline
\end{tabular}

Table 6.6 Nchane anaphoric demonstratives.

\section*{Cross-linguistic and historical observations of the demonstrative system}

While Nchane presents a bipartite system of spatial demonstratives, several other Beboid languages are reported to have a tripartite system of spatial demonstratives, including Naami (Tabah 2018a), Chungmboko (Tabah 2018b), Noni (Hyman 1981) and Mungong (Boutwell 2014b). The tripartite systems include demonstratives which express a location far from the speaker and the hearer, in addition to the near-speaker and near-hearer varieties.

The near-hearer (or medial) demonstrative in some of these languages appear to be cognate with the Nchane ANA1 demonstrative. Hyman noted that the Noni nearhearer demonstrative has the dual purpose of expressing spatial orientation and definiteness, or referentiality (Hyman 1981:24). The fact that this spatial demonstrative is observed to have a discourse role further supports its cognate status with Nchane ANA1. Mungong also has clear cognates with Nchane in its demonstrative system. The distal demonstrative in Mungong is reported to be used in anaphoric reference as well (Boutwell 2014b: 10). The class 2 demonstratives of each of these language varieties is given in Table 6.7, in order to illustrate cognancy. Dedicated anaphoric demonstratives are given with a shaded background.
\begin{tabular}{|c|c|c|c|c|}
\hline (Nchane) & Proximal & \begin{tabular}{l}
Medial \\
(ANA1)
\end{tabular} & Distal & Anaphoric (ANA2) \\
\hline Noni & bā-n & b-ā & bò-bã & bó-dvú \\
\hline Mungong & bō-nə̄ & bé- \(\bar{\varepsilon}\) & b-òkō & bó-jùy \\
\hline Nchane & bá-nē & bā-à & bā-gà & bá-yú \\
\hline
\end{tabular}

Table 6.7 Cognate class 2 demonstrative forms (Noni, Mungong and Nchane).

The morphology of classes \(3,4,6\) and 18 merit a few comments. When considering the complete agreement paradigms for these classes (see Table 6.1 and Table 6.2), each have agreement elements with either no consonant onset or a consonant onset with a high degree of sonorancy (i.e., a glide consonant). However, in the demonstrative paradigm, the agreement for these classes appear with consonant onsets with a lower degree of sonorancy relative to the onsets of their agreement in the remaining agreement system. For example, the agreement for class 6 most often has the form a. But the class 6 agreement for demonstratives is ka. Table 6.8 summarizes these observations.
\begin{tabular}{lll}
\hline Class & \begin{tabular}{l} 
Prevailing \\
agreement onset
\end{tabular} & \begin{tabular}{l} 
Demonstrative \\
agreement onset
\end{tabular} \\
\hline 3 & GV & kwV \\
4 & GV & chV \\
6 & V & kV \\
18 & V & yV \\
\hline
\end{tabular}

Table 6.8 Unique agreement onsets observed in the demonstrative paradigms of classes 3, 4, 6 and 18 .

The "strong" consonant onset appearing in Nchane demonstratives curiously does not extend to the ANA2 forms. This fact suggests that ANA1 is derived from the exophoric set, as supported by the cognancy of ANA1 with the distal demonstrative of nearby languages; but it seems likely that ANA2 derived from a different source. It is unknown at this time what that source might have been. That Nchane has co-opted a spatial demonstrative to serve as a counterpart for ANA2 brings its demonstrative system in line with Diessel's generalization of demonstrative typologies that demonstrative systems are "usually organized in paradigms of contrastive forms" (2012: 2420). With the distal (near-hearer) demonstrative taking up the task of anaphoric reference fulltime, the far distal demonstrative is generalized to mark all references that are away from the speaker. It also began to be used to make anaphoric references for non-major participants. This appears to be handled most often in the Beboid languages by the distal demonstrative.

A final observation is that the subjective and adverse nature of ANA2 has not been observed in any of the other Beboid languages, nor in other languages of the area. Although, the demonstratives of the nearby Grassfields language Bafut have been observed to be used in expressing various degrees of irritation (Mfonyam 2012). In-depth studies of the demonstrative systems of nearby languages are few in number, particularly those with attention to function beyond spatial deixis and basic anaphoric reference. I expect that similar expressions of what some have termed "emotional deixis" are present in the demonstrative systems of nearby languages, but have yet to be adequately studied. Still, the particulars of Nchane's demonstrative system may very well be unique.

\subsection*{6.4.3 Quantifiers}

Two dedicated quantifiers have been identified in the text corpus: dùdē 'many' and chī 'all'. The form mù 'some' has multiple functions, quantification being but one. Since it has more than one use, it is treated independently in §6.4.4. Quantifiers generally immediately follow the modified noun and are always marked with noun class agreement. In this section, the noun phrase appears in brackets and the quantifier is bolded.

The quantifier dùdē 'many' is used to express that the number of the modified noun is large, but the number is not specified. When used with uncountable nouns, the meaning rendered is 'much'. The alternative form dùlē is likely a dialectal variant. Examples (6.50)-(6.52) show it modifying plural nouns, while (6.53) illustrates its use with a mass noun.
\begin{tabular}{|c|c|}
\hline (6.50) & \begin{tabular}{l}
[bā-mì bā-dùdē] \\
c2-person c2-many
\end{tabular} \\
\hline & 'many people' \\
\hline \multirow[t]{2}{*}{(6.51)} & \begin{tabular}{l}
[mw- \(\bar{\varepsilon}: \quad\) mūn-dùlē] \\
c18a-thing c18a-many
\end{tabular} \\
\hline & 'many things' \\
\hline \multirow[t]{3}{*}{(6.52)} & [bī-lòy bī-dùlē] \\
\hline & c8-year c8-many \\
\hline & 'many years' \\
\hline \multirow[t]{3}{*}{(6.53)} & [kwà wū-dùdē] \\
\hline & c3.valuable \({ }^{47}\) c3-many \\
\hline & 'much money' \\
\hline
\end{tabular}

The entire number of a noun is expressed through the quantifier chī 'all'. It follows the noun it modifies, as well as a possessive pronoun, if present, as in (6.55).
\begin{tabular}{lllll} 
(6.54) & wū & t \(\bar{\varepsilon} y\) & {\([b \overline{1}-\mathrm{kfūnè}\)} & bī-chī] \\
& 3sG & call & c8-rat & c8-all
\end{tabular}
'he called all the rats'

\footnotetext{
\({ }^{47}\) The word kwà 'valuable' is a generic term used for things of value. It can sometimes be translated as 'cost' or 'money'. It contrasts with the specific term bī̀gè 'teeth', which is also used as a term for 'money'.
}
(6.55) \begin{tabular}{lll} 
[mw- \(\bar{\varepsilon}:\) & mw-ā & mūn-chī] \\
c18a-thing & c18a-1SG.Poss & c18a-all \\
& all my things,
\end{tabular}

While this quantifier is most often associated with plural nouns, it can also modify singular nouns, where it indicates the entirety of the modified noun as illustrated in (6.56) and (6.57).

'The palm is an important property tree in Nchane and to all the world.' King of Trees.1.1

It is common for the quantifier to appear stranded outside of the noun phrase as in (6.58) and (6.59). It appears that quantifier stranding always occurs when the modified noun is in subject position and there is no object (i.e., intransitive constructions).
\begin{tabular}{llllll} 
[mw- \(\bar{\varepsilon}:\) & mū & l \(\bar{m} \mathrm{\varepsilon}\) & mū & bēlíkīlà & mú \\
c18a-thing & c18aAM & work & c18aAM & builder & c18areL
\end{tabular}
\begin{tabular}{llllll}
\(\mathrm{m} \bar{\varepsilon}\) & \(\mathrm{g} \bar{\varepsilon}\) & \(\overline{\mathfrak{y}}\)-ḱ́m \(\dot{\varepsilon}]\) & \(\mathrm{g} \bar{\varepsilon}\) & fyé & mūp-chī \\
1SG.PRO & P 3 & 1SG-have & P 3 & burn & c18a-all
\end{tabular}
'The builders tools that I had all burnt.'
Fire.5. 4
\begin{tabular}{llllllll} 
l̄ & fí & dó & fí & nù & nȳ, & [bহ̄: & bā-ā] \\
SET & c19 & SIT & c19 & \(\operatorname{cop}(\mathrm{N})\) & like.that & c2.child & c2-ANA1 \\
& & & & & & & \\
g \(\bar{\varepsilon}\) & kwē-yè & bā-chī & & & \\
P3 & die-DISTR & c2-all & & & &
\end{tabular}
'As it was so, those children all died (one after the other).'
What-goes-around.10.1
\begin{tabular}{clll}
{\([y \bar{e}]\)} & \(\mathrm{g} \bar{\varepsilon}\) & fyé & yì－chī \\
c 9 & P 3 & burn & c 9 －all
\end{tabular}
＇．．．it（my house）completely burned．＇
Fire．5．2

The example below is likely a grammaticalized construction，where the noun and quantifier are repeated to express a durative situation．
\begin{tabular}{|c|c|c|c|c|c|}
\hline （6．61） & Ø－kw \(\mathrm{s} s\) é c1－woman & \begin{tabular}{l}
w － \(\bar{\varepsilon}\) \\
c1－ANA1
\end{tabular} & \begin{tabular}{l}
káy－è m \\
fry－PROG c6
\end{tabular} & màn－kàlà， c6a－cassava．puff & \begin{tabular}{l}
kì－fę̀： \\
c7－blind．man
\end{tabular} \\
\hline & \[
\begin{aligned}
& \text { ky- } \bar{\varepsilon}: \\
& \text { c7-ANA1 }
\end{aligned}
\] & gēn－è go－PROG & \begin{tabular}{l}
kī l \(\bar{\varepsilon} g\)－è \\
c7 beg－Prog
\end{tabular} & \begin{tabular}{l}
màn－kàlà \\
c6a－cassava．puff
\end{tabular} & \[
\begin{array}{cc} 
& \text { à } \\
\text { ff } & \text { in }
\end{array}
\] \\
\hline & Ø－kw \(\mathrm{s} s\) é c1－woman & \begin{tabular}{l}
\(w \bar{\varepsilon}-\bar{\varepsilon}\) \\
cl－ANA1
\end{tabular} & \begin{tabular}{l}
lē，［à－jū \\
APPL c6－day
\end{tabular} & \[
\begin{array}{lll}
\overline{\mathrm{u}} & \overline{\mathbf{a}-c h \overline{1}]} & {[\mathrm{a}-\mathrm{j} \overline{\mathrm{u}}} \\
\text { day } & \text { c6-all } & \text { c6-day }
\end{array}
\] & \[
\begin{array}{ll}
\overline{\mathrm{u}} & \overline{\mathbf{a}} \text {-chī] } \\
\text { lay } & \mathrm{c} 6 \text {-all }
\end{array}
\] \\
\hline
\end{tabular}
＇That woman continued frying cassava puff and that blind man was always coming and begging cassava puff from her，day after day．＇

What－goes－around．1．5

While the quantifier routinely appears as a nominal modifier，it also appears in the possibly lexicalized time adverbial compound sēgè－chì＇always＇，combining with the time adverb ségè＇when＇．This is illustrated in example（6．62）．
\begin{tabular}{lllllll}
（6．62） & bぶ & g \(\bar{\varepsilon} n-e ̀\) & f \(\bar{\varepsilon}\) & bゝ̄ & lē & sēgè－chì \\
& 3PL．HORT & go－PROG & at & 3PL & APPL & when－all
\end{tabular}
＇They（the husband and wife）should visit them（their parents）all the time．．．＇Marriage．6．2

\section*{6．4．4＂Some＂}

The determiner \(\mathbf{m u}\)＇some＇is observed as having three functions．One function is as an indefinite quantifier．A second function is as a specific indefinite determiner．In this function，it is used with non－referential nouns，especially when introducing participants of a story，where it is translatable as＇a certain one＇．Finally，it is also used in expressing contrastive reference，where＇other＇is an appropriate translation．Each of these uses are described in this section．In all usages，the canonical position of the determiner is following the modified noun and the determiner takes agreement marking based on its nominal head．When the vowel of the agreement prefix is［i］，the vowel of the determiner variably harmonizes with it．

As a quantifier, mù is used with plural nouns to express an indefinite quantity. The quantity may be either unknown or unimportant. The quantifier function rarely appears in the text corpus. Examples (6.63) and (6.64) were both elicited for the purpose of illustration.
\(\left.\begin{array}{lll}\text { (6.63) } & \begin{array}{ll}{\left[\begin{array}{l}\text { bā-mī } \\ \text { c2-person }\end{array}\right.} & \text { bá-mū }] \\ \text { c2-some }\end{array} \\ & \text { some people' }\end{array}\right]\)
'Give me some (a few) calabashes.'

Example (6.65) shows the quantifier combining with the modifier shēgē 'small', with the resultant meaning of 'small amount'.
\begin{tabular}{llllllll} 
(6.65) & wū & já & \(m \bar{\varepsilon}\) & [bī-gè & bī-mī & shēgē & shēgē] \\
& \(3 S G\) & give & 1 SG.PRO & c8-tooth & c8-some & small & small
\end{tabular}
'...he (God) gave me a little money.'
Fire. 42

No quantifier with a dedicated meaning of 'small amount' or 'few in number' has been identified. Thus, this quantifier-adverb combination might be one of the primary means for making these kinds of expressions.

The most common use of mù in the text corpus is as a specific indefinite determiner, observed often in presentational constructions at the beginning of stories, and often with singular nouns. Examples (6.66) and (6.67) are both the first sentences of stories and are presenting a major or minor participant.


Time expressions sometimes include mù, as in (6.68)-(6.70).

'Sometime in 1997,'
Training.1.1
\begin{tabular}{lllllllll} 
(6.70) & l \(\bar{\varepsilon}\) & kì-nfę̀: & k \(\bar{\varepsilon}-\bar{\varepsilon}\) & dó & kí & t⿹̄-̀े & [Ø-jú & chí-mî] \\
& SET & c7-blind.man & c7-ANA1 & SIT & c7 & come-PROG & c5-day & c5-some
\end{tabular}
'As that blind man was coming one day,...' What-goes-around.2.1

A third sense of this word form is "other" or "another" and usually establishes a contrast between the referent and the other members of the set to which it belongs. For example, in (6.71) the second táy wúmù is contrasting with the first one.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline (6.71) & \begin{tabular}{l}
[Ø-táq \\
c1-time
\end{tabular} & \begin{tabular}{l}
wú-mù] \\
c1-some
\end{tabular} & \begin{tabular}{l}
lé \\
COP
\end{tabular} & \begin{tabular}{l}
byèn \\
c9.fish
\end{tabular} & bú yú. exit on.it & & chī, pull & \\
\hline & [Ø-táy & wú-mù] & lé & byèn & bú-dé & g ¢̀ & yú & g \(\grave{1}\) \\
\hline & c1-time & c1-some & COP & c9.fish & exit-COMPL & NEG2 & on.it & NEG2 \\
\hline
\end{tabular}
'Some times, (after pulling) a fish would come out on it (the fishing line).
We pulled other times and no fish came out on it. , Fishing.1.8-9

Similarly, the two occurrences of múmú in (6.72) constitute a contrast between the 'things' which were rescued from the burning house and those which were not. The determiners in this case are serving a pronominal function, referring to the topicalized noun phrase "things in the house".
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (6.72) & \begin{tabular}{l}
\[
[\mathrm{mw}-\bar{\varepsilon}:
\] \\
c18a-thing
\end{tabular} & \begin{tabular}{l}
mú \\
c18aREL
\end{tabular} & yē & \begin{tabular}{l}
kwè], \\
home
\end{tabular} & \begin{tabular}{l}
mú-mú \\
c18a-some
\end{tabular} & bā they & būs remove \\
\hline & mú-mú & fyē & & & & & \\
\hline & c18a-some & burn & & & & & \\
\hline
\end{tabular}
'Some of the things in the house they removed, other things burned.'
Fire.5.1

The determiner in (6.73) is ambiguous without context. In an out-of-the-blue utterance, the interpretation would likely be as an indefinite quantifier-'I want a few calabashes'. However, if the speaker first states that the calabashes that he bought yesterday were damaged and unusable, then the interpretation would be contrastive'I want other calabashes' or 'different calabashes'.
\begin{tabular}{llll} 
(6.73) & \(\overline{\mathfrak{y}}\)-gō:n-é & bī-bฐ̆̀: & bí-mî \\
& 1SG-want-PROG & c8-calabash & c8-some
\end{tabular}
'I want some (a few) calabashes.'
or
'I want other (or different) calabashes.'

The word mùmù 'some/another person' is a fused form of the noun phrase \(\mathbf{m u} \mathbf{u} \mathbf{w} \mathbf{u}-\mathbf{m} \mathbf{u}\). The class 1 agreement marker \(\mathbf{w} \overline{\mathbf{u}}\) is dropped and the noun \(\mathbf{m u}\) ' person (c1)' fuses with the bare stem of the determiner mù, as illustrated in (6.74).
\begin{tabular}{llllll} 
(6.74) & Ø-táy & wū & bā & \(\bar{m} b u ̄ n-e ́, ~\) & Ø-mù-mù \\
& c1-time & c1REL & they & foam-PROG & c1-person-some
\end{tabular}
\begin{tabular}{llll} 
kól-è & à & kì-ntī & lē \\
catch-PROG & in & c7-bowl & APPL
\end{tabular}
'As they are foaming, \({ }^{48}\) someone else is collecting [the foams] in a bowl.' Making Palm Oil.1.7

\footnotetext{
\({ }^{48}\) This example is from a text explaining how to make palm oil, which is used for cooking, as a lubricant, and for skin care. The palm nuts are put into a stone trough and pounded with large tree limbs, which releases the oil from the nuts. Water is then added to "wash" the pounded nuts, followed by vigorously agitating the oil-water mixture with a small stick. This "foaming" action creates a layer of floating foam containing most of the oil, which is collected in a bowl and cooked to drive out the water.
}

The syntactic behavior of this determiner is not completely understood beyond the fact that it follows the head noun. However, example (6.75) shows the determiner modifying nouns in a coordinate noun phrase, where each noun is modified by a separate determiner. In contrast, the coordinate noun phrase licenses a single relativizer, behavior consistent with its analysis as a single grammatical unit. It is not known if this behavior represents a common restriction against the determiner modifying coordinate noun phrases or if there are pragmatic reasons for the behavior in this particular case.

'Some years ago, there was a man and wife who loved each other very much.'

Jealous Husband.1.1

The fused form mùmù 'someone else' has been observed to co-occur with the anaphoric 1 demonstrative (see \(\S 6.6\) for an example), and the indefinite specific determiner appears in one example with a number that is serving as a predicate. Otherwise, co-occurrences of the determiner and other demonstratives or quantifiers are unattested.

\subsection*{6.4.5 Numbers}

The form of the numbers 1-10 are relatively unremarkable, with the exception of the number 7, which is morphologically complex, consisting of the number 6 plus shwē, whose meaning is unknown (see example (6.76)). I assume that the complex is additive in nature.
\begin{tabular}{lll} 
(6.76) & bvū-s̄̄ \\
c14-six & 'six' \\
& \begin{tabular}{l} 
bvū-s̄̄-shwé \\
c14-six-??
\end{tabular} & 'seven'
\end{tabular}

It is likely that these two numbers have lexicalized class 14 agreement, since the neighboring Noni language has similar forms for these numbers, but without the bvu at the beginning (cf. s̄̄:chàn 'six' and s̄̄:shwî 'seven' (Hyman 1981: 28)). \({ }^{49}\) The number 9 also may have lexicalized class 14 agreement, with the assumed agreement element also present in the number 9 of Mungong, Noni and Chung.

The numbers 11-99 are phrasal, being formed through the connective j̀chì 'plus', which joins the number in the ten's position with the number in the one's position. While the numbers \(1-5\) in single digit numbers appear without agreement marking, in these complex numbers they are marked with agreement, even in citation form. Thus, when appearing without a modified noun, they are marked with gender 19/18a agreement, as seen in (6.77).


As these examples illustrate, the number 1 has class 19 agreement marking, which usually denotes that the head noun is singular rather than plural in number, in spite of the fact that the complex number as a whole expresses plurality. Note that the number 1 is subject to vowel copying and other phonological processes described in §3.5.

Unlike in their citation forms, the numbers 1-5, as single digit numbers as well as in the one's position of complex numbers, are marked with agreement when modifying a noun, while numbers 6-10 are not marked with agreement in either case. Examples (6.78) and (6.79) show the numbers 1 and 4 agreeing with their head nouns, which precede the numbers.

\footnotetext{
49 The Mungong forms for "six" and "seven" are similar to those of Nchane and Noni, while the Beboid languages Kemedzung, Naki, Sari and Naami all show no formal connection between these numbers. Rather, a subtractive strategy is observed for the number "seven", which is derived from "eight" (i.e., \(8-1\) ), and the form for "six" is completely unique. Meanwhile, Chungmboko (also Beboid) numbers 6-10 all appear to be formally independent from each other.
}
(6.78) ラ̄chānē gè jè-mé [j̄ \(\bar{\varepsilon} \quad\) yí-mímyā \(]\)
N. P3 speak-PROG c9.language c9-one
'The Nchane (people) spoke one language.'
History.4.2
\begin{tabular}{llllll}
{\([\mathbf{b a ̀}-n c h \overline{1}\)} & bā & kī-y & kī & yūdē & \(\mathbf{b a ̄}-n \bar{\varepsilon}]\) \\
c2-law & c2AM & c7-spirit & c7REL & clean & c2-four
\end{tabular}
'four spiritual laws'
Training.1.7

Examples (6.80) and (6.81) illustrate the numbers 2 and 4 in the one's position of complex numbers agreeing with their head nouns.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(6.80)} & \[
\begin{array}{ll}
{[\bar{a}-\text { gín }} & \text { yúfè } \\
\text { c6-egg } & \text { ten }
\end{array}
\] & \begin{tabular}{l}
j̀chò \\
plus
\end{tabular} & \[
\begin{aligned}
& \overline{\mathrm{a}} \text {-fá: } \\
& \text { c6-tu }
\end{aligned}
\] & & \\
\hline & \multicolumn{5}{|l|}{'twelve eggs'} \\
\hline \multirow[t]{2}{*}{(6.81)} & [bī-yò & \(\overline{\mathrm{m}} \mathrm{B} \bar{\square}\) & fíyé & j̀chò & bī-nर̂] \\
\hline & c8-elephant & & & & c8-four \\
\hline
\end{tabular}

As (6.82) shows, the number 1 in complex numbers agrees with the singular form of the head noun, rather than the head noun itself, which is plural in number. This follows the pattern observed in citation forms in (6.77)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(6.82)} & [bī-yò & \(\overline{\mathrm{m}} \mathrm{a}\) ¢ & fíy & j̀chò & kī-mīmyā] \\
\hline & c8-elephant & tens & two & plus & c7-one \\
\hline & \multicolumn{5}{|l|}{'twenty-one elephants'} \\
\hline
\end{tabular}

As stated above, the numbers 6-10 are not marked with agreement, even when modifying a noun. This is illustrated in (6.83), and can also be seen in (6.81) and (6.80) above, where the numbers 2 and 10, appearing in complex numbers, have no agreement marking.
\begin{tabular}{llllll} 
(6.83) & bē & \(\mathrm{g} \bar{\varepsilon}\) & bíd-e̋ & {\([\mathrm{bā}-\mathrm{m}-\mathrm{b} \overline{1} 1 \grave{\varepsilon}\)} & yúf \(\grave{\varepsilon}]\) \\
& 1PL & P3 & ask-PROG & c2-NMZR-ask & ten
\end{tabular}
\begin{tabular}{lllllllll} 
bāmī & bá & g \(\bar{\varepsilon}\) & t̄ & kī & bó & yén & bè & lē \\
c2-person & c2REL & P3 & come & \(\operatorname{COMP}(K)\) & 3PL & see & 1PL & APPL
\end{tabular}
'...we were asking ten questions to the people who came to see us.'
Training.1.18

Beginning with the number twenty, the numbers representing multiples of ten are complex, consisting of the base word \(\overline{\mathbf{m}} \mathbf{b a ̄} \mathbf{y}\), the meaning of which is obscure, \({ }^{50}\) followed by a number reflecting the numbers 2-9. A palatal glide following the initial consonant of the second word is observed in numbers \(20,30,40\) and 50. This is illustrated in (6.84), where the top line is the underlying representation and the second line is the surface representation. Note that the form for 2 in 'twenty' is often realized as fíyé in careful speech.
\begin{tabular}{|c|c|c|c|}
\hline (6.84) & \begin{tabular}{l}
m̄bāy \\
[ m bā
\end{tabular} & \begin{tabular}{l}
f \(\varepsilon\) : \\
fjé:]
\end{tabular} & 'twenty \\
\hline & m̄bāy & tēdē & 'thirty' \\
\hline & [ \(\mathrm{m} b \overline{\mathrm{a}} \mathrm{y}\) & \(\left.\int \bar{\varepsilon}\right]\) & \\
\hline & mabāy & \(\mathrm{n} \bar{\varepsilon}\) & 'forty' \\
\hline & [ \(\mathrm{m} b \overline{\mathrm{a}} \mathrm{y}\) & \(\mathrm{n} \bar{\varepsilon}]\) & \\
\hline & m̄bāy & tèy & 'fifty' \\
\hline & [ \(\overline{\mathrm{m}} \mathrm{b} \overline{\mathrm{a}}\) ] & \(\left.\left.\int \varepsilon\right)^{\square}\right]\) & \\
\hline
\end{tabular}

Numbers in the hundred's position are treated as nouns belonging to gender \(3 / 4\). Multiples are formed by adding the numbers 2-9 to the right of the word for 'hundred'.

\footnotetext{
\({ }^{50}\) Several languages in the area have cognates for the word \(\overline{\mathbf{m}} \mathbf{b a ̄} \mathbf{y}\). In nearly all these languages, there appears to be no formal relationship between this number and the number 10 , resulting in a difficult analysis for the word. However, Fransen, with direction from van Reenen, postulates that the Limbum word for twenty \(\overline{\mathbf{m}} \mathbf{b a} \overline{\mathbf{a}}\) is derived from the plural form of 10 ( \(\mathbf{m}-\mathrm{v} \overline{\mathbf{u}} \mathbf{\mathbf { u }}\) 'c6-ten') plus the number 2 (báā) (Fransen 1995: 164-6).
}


As the example for the number 101 shows, the number in the hundred's position is joined to the smaller numbers with the conjunction bé. However, the conjunction j̀chゝ̀ is observed rather than bé when the number is modifying a noun. It is not known if this is a formal distinction between the citation and adjectival forms, or if it represents an artifact of data collection. However, it does reveal the similarity in function and meaning of these two connecting words.

An additional item of interest is that the citation form shows that a head nominal, the generic 'thing', appears to the left of the number 1, for which it licenses agreement. This agreement was pointed out for the examples in (6.77), although no generic noun appeared in those examples. Likewise, no generic noun appears to the left of the number 1 in complex numbers in adjectival form, as was pointed out for (6.82), yet the number 1 agrees with the singular form of the head noun. The presence of the generic noun "thing" in the citation form of 101 then provides a possible clue as to why the number 1 in complex numbers agrees with the singular counterpart of the head nominal. For example, perhaps the source phrase for 'one hundred and one cows' is bà-nà gwí: j̀̀chò Ø-nà wù-mùmwà ( \(\mathrm{c} 2-\mathrm{cow} \mathrm{c} 3\).hundred plus \(\mathrm{c} 1-\mathrm{cow} \mathrm{c} 1-\) one).

Numbers in the thousand's position are treated as nouns belonging to gender \(1 / 2\). Smaller numbers follow the thousand numbers and are joined together with the connective bé 'with' as above with the hundred numbers.

‘1997’ (the year)

The numbers for hundreds and thousands never agree with the head noun, but maintain their fundamental markings for genders \(3 / 4\) and \(1 / 2\) respectively.

Numbers may function as a predicate adjective, following a copula as in (6.87).
\begin{tabular}{|c|c|c|c|c|}
\hline \(\mathrm{m} \bar{\varepsilon}\) & \(\overline{\mathrm{m}}\)-f \(\bar{\varepsilon}\) & kwē & yī & \(\emptyset-\mathrm{k} \overline{1}\) \\
\hline 1sG.PRO & 1SG-make & c9.death & c9ReL & c4-month \\
\hline lé y & ¢̀ j̀ c chò & yī-fź: & & \\
\hline COP te & plus & c4-two & & \\
\hline
\end{tabular}
'I am having a death celebration in December.' (lit. death that month is twelve)

Finally, (6.88) shows that numbers may be reduplicated. The reduplicated number follows the head noun and functions to express repetition. In this example, it co-occurs with a verb marked with the Distributive suffix, and presumably clarifies that four people were chosen from each church, rather than only four people in total being chosen from all the churches.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(6.88)} & chī-chó & chí & wจ̄ท & wū & misà \({ }^{\text {c }}\) ¢ & \multicolumn{2}{|l|}{lē \(\quad \mathrm{g} \bar{\varepsilon}\)} \\
\hline & c13-church & c13Am & c3.country & c3Am & M. & APPL & P3 \\
\hline & bā-yè & [bā-m & bā-n̄̄ & bā-n & & & \\
\hline & choose-DISTR & c2-pe & on c2-four & c2-fo & & & \\
\hline
\end{tabular}
'The churches of the Misaje area chose four people each.' Training.1.5

Table 6.9 below presents a partial list of Nchane cardinal numerals in citation form, along with the numbers as they appear when modifying a noun.
\begin{tabular}{|c|c|c|}
\hline & Number & Gender 1/2 ('cow__ ') \\
\hline 1 & mēmà & nà wūmūmwã \\
\hline 2 & f ¢́: & bànà bāfé: \\
\hline 3 & tēdé & bànà bātēdé \\
\hline 4 & n \(\bar{\varepsilon}\) & bànà bān \\
\hline 5 & tèy & bànà bātè \\
\hline 6 & bvūsō & bànà bvúsō \\
\hline 7 & bvūsōshwê & bànà bvúsōshwī \\
\hline 8 & nā & bànà nā \\
\hline 9 & bvùgê & bānā bvùgê \\
\hline 10 & yúfè & bànà yúfè \\
\hline 11 & yúfè jòchò fimímyà & bànà yúfē \(\overline{\mathrm{n}} \mathrm{ch} \overline{\text { ¢ }}\) wūmūmwã \\
\hline 12 &  & bànà yúfì j̀ j̀hò bāfé: \\
\hline 13 & yúfè j̀̀chò mūntédé & bànà yúfé j̀chò bàt̄̄dé \\
\hline 14 & yúfè j̀̀chò mūnê & bànà yúfí j̀chò bānर̂ \\
\hline 15 & yúfè j̀̀chò mūntên & bànà yúfè jǹchò bātên \\
\hline 16 & yúfé j̀̀chò bvùsō & bànà yúfé j̀̀chò bvūsó \\
\hline 17 & yúfè j̀̀chò bvùsōshwê & bànà yúfè j̀chò bvùsōhwê \\
\hline 18 & yúfì j̀ ǹchò nà & bànà yúfì ̇̀ n chò jnã \\
\hline 19 & yúfè j̀chò bvūgê & bànà yúfè j̀chò bvūĝ̂ \\
\hline 20 & mbāy fíyć & bànà mbāy fíyé \\
\hline 21 & mbā̃ fíyć j̀̀chò fīmímyà & bànà m̄bāy fíyć ỳchò wùmùmwà \\
\hline 22 & m̄bāy fíyé j̀chò mùmfę̃: & bànà m̄báy fíyć j̀chò bāfé: \\
\hline 100 & gwí: & bànà gwí: \\
\hline 101 & gwí: bé fīy \(\bar{\varepsilon}\) fīmímyà & bànà gwí: j̀chò wūmūmwã \\
\hline 200 & gí:f̌́: & bànà gî:fè: \\
\hline 1000 & j̀chfūgè & bànà ǹchfūgè \\
\hline 2000 & bànchfùgè bāfé: & bànà bànchfùgè bāfź: \\
\hline
\end{tabular}

Table 6.9 Partial list of Nchane numbers.

Ordinal numbers are very limited and are not number based. They involve the use of the words fwee 'front', bī 'follow' and jin 'back' appearing in relative clauses. (6.89)-(6.91) illustrate fwē and bī in ordinal expression.
\begin{tabular}{llll} 
mày-kàlà & mā & fwē & mā-à \\
c6a-cassava.puff & c6aREL & front & c6a-ANA1
\end{tabular}
'that first cassava puff'
What-goes-around.4.1
\(\begin{array}{lllll}\text { (6.90) } & \begin{array}{l}\text { kì-mā } \\ \text { c7-week }\end{array} & \text { kí } & \text { c7REL } & \text { frō }\end{array} \quad\) lē \(\begin{aligned} & \text { APPL }\end{aligned}\)
'the first week'
\begin{tabular}{llllll} 
(6.91) & \begin{tabular}{l} 
kì-mā \\
c7-week
\end{tabular} & kí & c7REL & follow & f̄ \\
there & lē \\
APPL
\end{tabular}

The word 'follow' is usually understood in context as indicating that the modified noun is following some other like entity in a sequence. Therefore, it has a generalized meaning of "the follower", and only expresses the notion of "second" when following the "first".

When two like-entities are presented as a contrastive pair, the word jín can be used to refer to the non-first noun, sometimes interpreted as "the second", as in (6.92). It is probably more correct, however, to consider this expression as "the last one". In fact, it is likely that the words for 'front' and 'back' are iconic representations of 'first' and 'last' respectively. Unfortunately, the data corpus contains no examples of jím with a clear "last" reading.
\begin{tabular}{lllllll} 
(6.92) & \begin{tabular}{l}
\(\emptyset\)-kw \(\bar{\varepsilon} s e ́\) \\
c1-woman
\end{tabular} & wū & f1REL & fwō & bé & wū \\
front & with & c1REL & c18-back
\end{tabular}
'the first wife and the second one' Two Wives.1.2

While not common, these words functioning as ordinal numbers may co-occur with numbers, as illustrated in (6.93).
\(\begin{array}{llllll}\text { (6.93) } & \begin{array}{lll}\text { bā-mī } \\ \text { c2-person }\end{array} & \text { bá } & \text { c2REL } & \text { bā-n } \bar{\varepsilon} & \text { c2-four }\end{array}\) bá \(\begin{array}{l}\text { c2REL }\end{array}\) fwē \(\left.\begin{array}{l}\text { front }\end{array}\right]\) Training.1. 9

\subsection*{6.4.6 Adjectives}

The two words \(\mathbf{f} \bar{\varepsilon} \mathbf{y}\) 'new' and kēgē 'ancient' form a very small class of adjectives identified through elicitation methods, since they do not appear in the text corpus. Example (6.94) shows that adjectives follow the modified noun and are marked with noun class agreement.
\begin{tabular}{lllll} 
(6.94) & \begin{tabular}{l} 
kw \(\bar{\varepsilon} y\) \\
c3.firewood
\end{tabular} & wú-kwēgē \\
c3-ancient
\end{tabular} \begin{tabular}{l} 
t \(\bar{\varepsilon}:\) m-é \\
strong-PROG
\end{tabular}\(\quad\)\begin{tabular}{l} 
kwà \\
c3.value
\end{tabular}
'Very old firewood is expensive.'

Adjectives are distinguished from attributive verbs (described in §9.6) by several formal characteristics. First, unlike attributive verbs, adjectives require a
copula in simple property type expressions like " X is Y ". This is illustrated with the adjectives in examples (6.95) and (6.96).
\begin{tabular}{llll}
\((6.95)\) & kī-bę̨: & lé & {\([k \overline{1}-f \bar{\imath} \eta]\)} \\
& c7-calabash & COP & c7-new
\end{tabular}
'The calabash is new.'

'The tree is ancient (or very old).'

A second formal distinction is that attributive verbs have the capacity for verbal affixation such as the Progressive suffix. Adjectives may not take any verbal suffixes. Furthermore, they are not candidates for class 14 abstract noun derivation, which is a productive process for attributive verbs.

Finally, adjectives are affected by high back vowel copying similar to that seen in numbers when "modifying" class 1 and class 3 nouns, as illustrated in (6.97), as well as (6.94) above. Note that the adjective appears as a predicate adjective in (6.97), but a nominal modifier in (6.94).
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (6.97) & Ø-ywā & \(\mathrm{g} \bar{\varepsilon}\) & & & & &  \\
\hline & c1-book & P3 & & COP & & & 1-new \\
\hline
\end{tabular}
'The book was new.'

The occurrence of high back vowel copying suggests phonological incorporation of the agreement element and supports the analysis that these words are nominal modifiers similar to numbers rather than verb-like words like the attributive verbs.

\subsection*{6.5 Nominal modifiers as pronouns}

As pointed out in the introduction to \(\S 6.4\), several of the nominal modifier word classes are observed in the data functioning as pronouns. They appear in the subject and object positions, although, because of the small number of examples, it is impossible to be certain that there are no syntactic restrictions on any given nominal modifier word class. The examples below demonstrate their pronominal use, including possessive pronouns (6.98)-(6.99), the proximal demonstrative (6.100), "some" (6.101)-(6.102), and numbers (6.103).
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(6.98)} & \multirow[t]{2}{*}{\(\uparrow(y \bar{~}\) c9.house} & \multirow[t]{2}{*}{\begin{tabular}{l}
yì \\
c9REL
\end{tabular}} & & \multicolumn{2}{|l|}{gè j̀-ché-é} & \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { yì } \\
& \text { on }
\end{aligned}
\]} & lē), \\
\hline & & & 1SG.PRO & P3 1sG & stay-PROG & & APPL \\
\hline & yì & nù &  & jì & \(\mathrm{m} \bar{\varepsilon}\) & g ¢ & \\
\hline & c9REL & \(\operatorname{COP}(\mathrm{N})\) & c9-1sG.poss & c9ReL & 1SG.PRO & P3 & \\
\hline & j̀-ché-é & & yè lé & kībè, & \(\mathrm{j}_{1} \mathrm{i} \quad \mathrm{g} \bar{\varepsilon}\) & fyé & jì-chī \\
\hline & 1sG-stay- & -Prog & on APPL & actually & c9 P3 & burn & c9-a \\
\hline
\end{tabular}
'The house in which I was staying, which was mine and in which I was actually staying, completely burned.'

Fire.5.2
(6.99) ȳgú kfú-nē wū yīdī lé w-ày
c3.gun c3-prox c3REL black COP c3-1sG.Poss
'This black gun is mine.
(6.100) bহ̄: bā-ā gè bé bō tó, wū já bő
c2.child c2-ANA1 P3 \({ }^{\mathrm{P}} \mathrm{COP}\) 3pl come 3SG give 3PL
mày-kàlà mā-ā mān-t \(\bar{\varepsilon} d e ́, \quad w \bar{u}\) ná wú-nē,
c6a-cassava.puff c6a-ANA1 c6a-three 3sG give c1-PRox
wū ná wú-nē
3SG give c1-Prox
'Those children came and he gave them those three cassava puffs; he gave to each one.' (lit. he gave to this one and he gave to this one)

What-goes-around.7.8
(6.101) mw- \(\bar{\varepsilon}: ~ m u ́ ~ y e ̄ ~ k w e ̀, ~ m u ́-m u ́ ~\)
c18a-thing c18arel on home c18a-some
bā būsè, mú-mú fyē
they remove c18a-some burn
'The things in the house, some were removed, others burned.' Fire.5.1


\subsection*{6.6 Noun phrase word order}

The modifiers described above never occur all together, modifying the same noun. But there are several examples in the text corpus in which two modifiers occur together. From these examples, the word order given in Figure 6.2 is extrapolated.
```

NOUN + POSSESSIVE + "some" + DEMONSTRATIVE + QUANTIFIER

```

Figure 6.2 Canonical word order of the noun phrase

One departure from this word order is rarely observed, where a demonstrative precedes the noun in what appears to be a topic-marking strategy, as described in §16.2.3.

The position of relative clauses is somewhat variable. Usually, the position is sensitive to the type of relative clause in question, whether it is restrictive or nonrestrictive. Restrictive relative clauses usually precede demonstratives and nonrestrictive relative clauses follow demonstratives (and probably quantifiers as well). However, other factors such as information load, and topic and focus concerns, are believed to impact position as well. See \(\S 12.1\) for more details.

The phrases in (6.104)-(6.106) present various modifier combinations allowing for the canonical word order of noun phrases to be postulated.
\(\begin{array}{lllll}\text { (6.104) } & \text { jó: } & \text { [mw- } \bar{\varepsilon}: & \text { mw-̀̀ } & \text { mūj-chī] } \\ & \text { take.IMP } & \text { c18a-thing } & \text { c18a-2SG.POSS } & \text { c18a-all }\end{array}\)
'Take all your things...'
Two Wives.7.2
\begin{tabular}{|c|c|c|c|c|c|}
\hline (6.105) & [Ø-mū-mū & W \({ }^{\text {c }}\) - \(\left.\bar{\varepsilon}\right]\) & k \(\bar{\varepsilon}\) & wù & bēd-è \\
\hline & c1-person-some & c1-ANA1 & begin & 3sG & cry-PROG \\
\hline
\end{tabular}
'That other man started crying...'
Greedy Friends.1.16
(6.106) bD̄̃: \(\quad\) bā-ā \(\quad\) g̀̀ \(\begin{array}{llllllll} & \text { bé } & b \bar{~} & \text { tó, } & \text { wū } & \text { ná } & \text { bő }\end{array}\) c2-child c2-ANA1 P3 \({ }^{\mathrm{P}} \mathrm{COP}\) 3PL come 3SG give 3PL
[mày-kàlà mā-ā mān-t̄̄dé], wū ná wú-nē, c6a-cassava.puff c6a-ANA1 c6a-three 3sG give c1-PROX
wū ná wú-nē
3SG give c1-PROX
'Those children came and he gave them those three cassava puffs; he gave to each one.' (lit. he gave to this one and he gave to this one)

What-goes-around.7.8

\section*{Chapter 7}

\section*{Pronouns}

The Nchane pronoun is defined by its coreferential characteristic. In other words, a pronoun has coreference with a noun phrase or in certain cases a larger discourse portion, for which it is substitutable. The various kinds of Nchane pronouns are presented in this chapter, with the largest portion of the chapter dedicated to personal pronouns, including simple and complex forms, which are presented in §7.1. This section also presents the so-called "class pronouns", which constitute a large subset of third-person pronouns.

Substantial attention is given to locative pronouns and the adverbial pronouns in sections 7.2 and 7.3 respectively. The chapter concludes with relatively short sections on the impersonal subject pronoun (§7.4), dummy subjects (§7.5), question word pronouns (§7.6) and other pronominals (§7.7). Note that relativizers, which have a possible analysis as relative pronouns, are described in Chapter 12.

\subsection*{7.1 Personal pronouns}

This section describes the Nchane personal pronoun system, including simple and complex forms, as well as what I refer to for the sake of convenience as "class pronouns". The conventional category of personal pronouns includes those which encode person and number categories and typically apply primarily to humans. Class pronouns always belong to the third-person category, but also encode the category of
noun class, with third-person human referents expressed through the gender \(1 / 2\) pronouns. These two types of pronouns are considered as belonging to a single set of personal pronouns.

The Nchane simple personal pronouns are given in Table 7.1, with preverbal and postverbal varieties listed separately. The pronouns for classes 16 and 18 appear in parentheses to indicate their rarity.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Person} & \multirow[t]{2}{*}{Gender} & \multicolumn{2}{|c|}{SG} & \multicolumn{2}{|c|}{PL} \\
\hline & & Preverbal & Postverbal & Preverbal & Postverbal \\
\hline \multicolumn{2}{|l|}{\(1^{\text {st }}\)} & \(\mathrm{m} \bar{\varepsilon}\) & mè & bē & bè \\
\hline \multicolumn{2}{|l|}{\(2^{\text {nd }}\)} & wō & wò & \(\mathrm{b} \bar{\varepsilon} \eta\) & bèn \\
\hline \multirow[t]{10}{*}{\(3^{\text {rd }}\)} & 1/2 & wù & wù & bó, bō & bó \\
\hline & 3/4 & wū & wú & yī & yí \\
\hline & 5/6 & chī & chí & w̄̄ & wó \\
\hline & 7/8 & kī & kí & bī & bí \\
\hline & 9/10 & yì, yī & yì & y y , yí & yí \\
\hline & 14/6a & bvū & bvú & mう̄ท & mó \\
\hline & 19/18a & fī & fí & mūy & mư \\
\hline & 13 & & & chī & yí \\
\hline & 16 & ( \(\mathrm{f} \overline{\bar{\varepsilon}})\) & (fó) & & \\
\hline & 18 & ( \(\overline{\mathrm{a}})\) & (w') & & \\
\hline
\end{tabular}

Table 7.1 Nchane personal pronouns.

The table illustrates that pronouns appearing in preverbal and postverbal positions are mostly segmentally identical for each person and number referent, but usually differ tonally. Furthermore, the class pronouns usually conservatively reflect the common agreement forms associated with their respective noun classes.

In terms of tone, there are two primary patterns observed which appear to distinguish class pronouns from those referring to people (which are henceforth referred to as "human pronouns"). Class pronouns mostly have a mid tone on preverbal forms and a high tone on postverbal forms. Exceptions are classes 1 and 9, which have a low tone on pronouns in both positions, consistent with the characterization of these classes as "low tone classes" in most of the nearby Western Grassfields languages (Hyman 1980). The class 9 and class 10 pronouns have two tonal realizations each. The source of the variation has not been identified, but could be phonological context. \({ }^{51}\) Meanwhile, the human pronouns tend to have a mid tone

\footnotetext{
\({ }^{51}\) I have observed that native speakers are acutely aware of the high grammatical tone associated with class 10, as evidenced by over-correction in cases of class ambiguity. It is believed that, because of this awareness, the realization of phonological output is sometimes altered to accommodate the perceived "highness" of class 10 forms.
}
in the preverbal position and a low tone in the postverbal position. As with classes 9 and 10 , the third-person plural preverbal pronoun has two unexplained tonal variants.

The fact that almost all pronouns have a mid tone in preverbal position and a low tone (in the case of human pronouns) or a high tone (in the case of class pronouns) in postverbal position suggests that these tones are associated with their respective clausal positions rather than with the lexical items themselves or with specific grammatical roles. This hypothesis, while not formally investigated, is supported by example (16.20), the relevant portion of which is given below for convenience, where the postverbal focused 2 SG "subject" is realized with a low tone rather than a mid tone. (See \(\S 11.4\) for a discussion of how pronouns in such constructions are interpreted in terms of grammatical relations.)
\begin{tabular}{lllll} 
(16.20) & n \(\bar{\varepsilon}\) & jál̀̀ & gē & ẁ̀ \\
& if & wrong & do & 2 SG
\end{tabular}
'[Or] if YOU ...did wrong...'

While the tones of pronouns in postverbal position are very stable, usually surfacing as given in the table, the tone on the preverbal pronouns are sometimes affected by grammatical tones associated with certain constructions (e.g., Durative, Stimulus, Hortative, etc.). These tone changes are discussed in the relevant sections in the verb chapter (Chapter 9).

The 1PL pronouns are often realized with a half-long vowel. This length is likely due to syllable reduction, a hypothesis that is supported by the Noni cognates bèsèn ' 1 PL(exclusive)' and bēènè '1PL(inclusive)' (from Hyman 1981: 15), which show disyllabic forms. (Nchane generally does not distinguish between inclusive and exclusive categories, although such a distinction is observable in some of the complex pronouns described later in this section.)

Pronouns are used anaphorically, replacing an already mentioned and discourse-accessible referent, or one that is understood without full mention. Examples of simple pronouns are given in (7.1)-(7.6), which also illustrate pronouns in various syntactic and semantic roles.
\begin{tabular}{lll} 
wù & ké & ẁ̀ \\
\(3 S G\) & know & \(2 S G\)
\end{tabular}
'He knows you.'
\begin{tabular}{llll} 
wù & ná & mè & Ø-ygwë \\
3SG & give & 1SG.PRO & c1-fishing.pole
\end{tabular}
'He gave me a fishing pole.'
Fishing.1.2
\begin{tabular}{llllll} 
(7.3) & \(\mathbf{m} \bar{\varepsilon}\) & \(\mathrm{g} \bar{\varepsilon}\) & ń-t̄ & b \(\varepsilon \quad\) bī-gè
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline bā-mì & bá-dùdē & \(1 \bar{\varepsilon} g\)-è & Ø-n亏̄ & fı̀ & bè̀ & le \\
\hline c2-person & c2-many & beg-PROG & c1-god & at & 2PL & APPL \\
\hline
\end{tabular}
'...many people will be praying to God for you,' Marriage.4.1
(7.5) n̄sā y-ē bí: wù lē,
c9.friend c9-3sG.POSS ask 3SG APPL
'Her friend asked her, ...'
What-goes-around.2.2
(7.6) bó tú bé wù jī̄

3PL return with 3SG back
'...they returned back with him.' Land Dispute.2.2

The class pronouns function the same as human pronouns and are illustrated in (7.7)-(7.9). Class pronouns in postverbal position are somewhat rare, since inferable Objects are usually omitted (see \(\S 11.1 .1\) for more details) and inferable objects of prepositions are usually referred to through non-agreeing locative pronouns (see §7.2).
(7.7) yī kās̀̀ yī tú \(\quad\)-mū wū wōn
c9 return c9 become c1-person c1AM c3.world
'It (goat) turned back into a human. , 52 Two Wives.6.3
\(\begin{array}{lll}\text { wù } & \text { nìlě } & \text { kí } \\ \text { 3sG } & \text { hide } & \text { c7 }\end{array}\)
'He hid it (calabash).'
(7.9) \(\overline{\mathrm{n}}\)-tó bé yì

1sG-come with c9
'I will bring it (rat poison).'
What-goes-around.3.3

\footnotetext{
\({ }^{52}\) Note that the second c9 pronoun in this example is considered to be preverbal rather than postverbal.
}

As stated above, the pronouns for classes 1 and 2 are coreferential with both humans and nonhumans. Class 1 and 2 pronouns with nonhuman antecedents are illustrated in (7.10)-(7.13).
\begin{tabular}{lll} 
wù & j \(\bar{n}\) n-é & chúlē \\
3SG & walk-PROG & well
\end{tabular}
'It (the cow) is walking well.'
(7.11) bō tó bé wù

3PL come with c1
'...they came with it (the cow)...' Greedy Friends.1.4
(7.12) b̄̄ jí
c2 eat
'The cows ate.'
(7.13) wù nīlè bó

3sG hide c2
'He hid them (the baskets).

Example (7.14) shows that a pronoun can also be used in reference to multiple entities which belong to different noun classes. It appears that, in such cases, it is the final noun in the series which licenses the pronoun.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (7.14) & bī-ntà c8-chai & \begin{tabular}{l}
bé \\
with
\end{tabular} & bà-ŋwà, c2-book & \begin{tabular}{l}
\(m w-\bar{\varepsilon}\) : \\
c18a-thing
\end{tabular} & \begin{tabular}{l}
mw-ày \\
c18a-1sG.Poss
\end{tabular} & \begin{tabular}{l}
mūn-chī, \\
c18a-all
\end{tabular} \\
\hline & ... bà & wà & b-à & bā-s & lífikk & \\
\hline & c2 & ook & c2-1sG.poss & c2-c & tificate & \\
\hline & ... b & t́̇ & g غ̀ fyē & bà-chì & & \\
\hline & c2 & & P3 burn & c2-all & & \\
\hline
\end{tabular}
'Chairs and books, all my things, ...my books, ...certificates, ...they also all burned.' Fire.5.6-8

The pronominal forms generally share the segmental shape of their corresponding class prefixes (or their historical shape in some cases), as previously mentioned. However, the class 2 pronoun bý (or third-person plural) appears to be an innovation, with the conservative pronoun bā currently used as an impersonal
pronoun (described in §7.3), although there are times when the two pronominal forms are presumably used in place of the other. (While the pronominal forms are different, both pronouns usually license the same class 2 agreement forms. Only rarely is the form bo- seen as an agreement marker.)

This phenomenon is reminiscent of what is observed in some nearby Western Grassfields languages. Hyman points out that the third-person pronouns in some of those languages resemble the proximal demonstrative or the word for 'body', with the original third-person pronoun forms sometimes utilized for logophoric reference (2018a: 201). However, these innovated third-person pronouns are reflected throughout the noun class pronoun systems, suggesting common third-person root forms. The Nchane case appears to involve the class 2 pronoun only, rather than all third-person pronouns. In addition, there is obviously no correlation between the class 2 pronoun and the proximal demonstrative (nē) or the word for 'body' (yē), but it does bear a striking resemblance to the third-person plural possessive pronoun root bj .

Pronouns for the locative classes are rare and are identical to their locative pronoun counterparts (treated in §7.2), which are coreferential with prepositional phrases. Consequently, instances of these pronouns are often ambiguous regarding the type of antecedent with which they are coreferential. The antecedents in (7.15)-(7.18) are considered to be locativized nouns, and as such are illustrative of locative class pronouns.

\footnotetext{
(7.15) f \(\bar{\varepsilon} \quad\) jùn
    c16 old
    'It (the fireplace site) is old.'
    wù nīl̀ fó
    3sG hide c16
    'He hid it (the palm of his hand).'
\(\begin{array}{llll}\text { (7.17) } & \overline{\mathbf{a}} & \text { yù } & \text { bó } \\ & \text { c18 } & \text { kill } & \text { 3pL }\end{array}\)
    'It (their stomachs) hurts them.'
(7.18) wù jīlè wó
3SG hide c18
'He hid it (his hand, or lit. at his arm).'
}

A system of compound pronouns is observed in Nchane which enables the expression of specific combinations of referents. These complex pronouns are formed by combining various simple pronouns into a single structure, a special type of pronominal construction only observed in languages spoken in Cameroon (Cysouw 2009: 183). The Nchane compound pronouns are summarized in Table 7.2.

The dashed line in the table indicates that there are two series of compound pronouns, one based on first person and one on second person. In both series, the base form, appearing to the far left, denotes a plural referent which includes the referent of the second part, appearing to the right. In other words, the base form expresses the notion of "plural" (in addition to either first or second person). The second part denotes the other member(s) of the reference. Thus, the first part is "incorporative" rather than additive (see Cysouw 2009: 171).
\begin{tabular}{lll}
\hline Example & Gloss & Meaning \\
\hline bēsáwò & 1PL.2SG & "me + you.SG" \\
bēsáwù & 1PL.3sG & "me + him/her" \\
bēsábèn & 1PL.2PL & "me + you.PL" \\
bēsābó & 1PL.3PL & "me + them" \\
\hline bēnéwù & 2PL.3sG & "you.PL + him/her" \\
bēnēbó & 2PL.3PL & "you.PL + them" \\
\hline
\end{tabular}

Table 7.2 Nchane compound personal pronouns.

The first person-based compound pronouns are formed by joining bēsá with one of the non first-person pronouns (i.e., w̄̄, wù, \(\mathbf{b} \overline{\boldsymbol{\varepsilon}} \boldsymbol{\eta}\) and bó). The form bēsá appears to be cognate with the Noni first-person exclusive pronoun bèsèn (Hyman 1981: 15), although this base form is used to construct inclusive as well as exclusive Nchane compound pronouns. This pronoun element resembles the first-person plural pronoun bē, which might be a derivative, as was implied earlier in this section.

Examples (7.19) and (7.20) show compound first-person pronouns in preverbal position and (7.21) and (7.22) show them in postverbal position. The examples show that an inclusive:exclusive distinction is expressed through these compound pronouns. The pronouns in (7.19) and (7.21) are understood as excluding the addressee, while those in (7.20) and (7.22) specifically include the addressee.
\begin{tabular}{lll} 
bēsáwù & bs̄ & à-jō \\
1pL.3sG & descend & c18-water
\end{tabular}
'We (me plus him/her) went down to the stream.'

'Tada gave us (me plus you) fufu.'

The second person-based compound pronouns are formed by joining bēné with a third-person pronoun (i.e., wù or bý). The bēné element is cognate with the Noni first-person inclusive pronoun bè:nè (Hyman 1981: 15). These compound pronouns also may appear in preverbal and postverbal positions, as shown in \((7.23)^{53}\) and (7.24).
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{3}{*}{(7.23)} & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
bēnéwù bé jí mw- \(\bar{\varepsilon}\) : \\
2PL.3SG P1 eat c18a-thing
\end{tabular}}} \\
\hline & & & \\
\hline & \multicolumn{3}{|l|}{'You all (you plus he/she) ate something.} \\
\hline \multirow[t]{2}{*}{(7.24)} &  & bēnēb' & lē \\
\hline & c1-chief P3 see & 2PL.3pL & APPL \\
\hline
\end{tabular}
'The chief saw you all (you plus them).'

Observe that this base form expresses incorporative plurality as with the first-person base form bēsā, which was suggested as a possible source for the first-person plural pronoun bē. This base form, however, expresses second person plural rather first person, in spite of sharing the bee element.

\footnotetext{
\({ }^{53}\) In this example, the H of the P 1 marker following the complex pronoun is observed not to be downdrifted. A concerted study of the tonal behavior of complex pronouns has not been carried out and, therefore, this tonal realization is unexplained.
}

The base part of the compound pronouns can also be used with full nouns, as seen in (7.25) and (7.26), a phenomenon also observed for the nearby Ring language Aghem (Hyman 1979: 54-5).
\begin{tabular}{lllll} 
(7.25) & \begin{tabular}{l} 
bēsá- Ø-kwà::
\end{tabular} & bē bé & làd-é, \\
1PL-c1-wife.1SG.POSS & 1PL & P1 & go.goal-PROG
\end{tabular}
'I and my wife were going (to the farm to do work) and she CARRIED FUFU WITHOUT SOUP.'

Jealous Husband.19.1
\begin{tabular}{lllll} 
Ø-n̄fōn & g \(\bar{\varepsilon}\) & yén & bēnē-tádà & lē \\
c1-chief & P3 & see & 2PL-T. & APPL
\end{tabular}
'The chief saw you all (you and Tada).'

The Beboid languages Mungong and Noni also have compound pronouns (Boutwell 2014b: 25; and Hyman 1981: 17-8 respectively). Following attempted targeted elicitation, Naki (Beboid) is reported to not have them (Good et al. 2011: 63). As a part of the same study of Naki, compound nouns were attested in Ajumbu (Yemne-Kimbi) (Good et al. 2011: 42).

Mundabli (Yemne-Kimbi) was earlier reported as having compound pronouns as well, but the analysis was changed to that of "inclusory conjunction" constructions (Voll 2017: 167-72). This type of construction involves the conjoining of two nominals via a conjunction, with the first nominal described as an "inclusory conjoint", which denotes the entire set (Haspelmath 2007a: 33). Indeed, in contrast to Nchane, Mundabli appears to have a conjunctive element in these constructions. Nevertheless, the Mundabli inclusory conjunction constructions and the Nchane compound pronouns accomplish similar semantic output and should therefore be considered as two varieties of the same phenomenon. Note that the presence of compound pronouns has not been attested in any of the other Beboid languages.

\subsection*{7.2 Locative pronouns}

There are three locative pronouns fó, yó and yú, which are coreferential with prepositional phrases headed by the three main prepositions fè 'at', à 'in' and yè 'on' respectively \({ }^{54}\) Each of these pronouns is presented in this section. As will be seen in the various examples below, the locative pronouns encode not only coreference with a nominal, but also the spatial deictic semantics associated with the preposition heading the coreferential prepositional phrase.

The corpus contains no occurrences of these pronouns in preverbal position, most likely because the canonical position for prepositional phrases is postverbal. Therefore, I assume that the locative pronouns are limited to postverbal position. The pronoun yú is also coreferential with Comitative Obliques, which are introduced by the conjunction/preposition b' 'with'. While this pronominal reference is not strictly locative, both types of yú coreference are described in this section for convenience.

Prepositional phrases headed by the preposition fè 'at' can be referenced with the locative pronoun f's 'there', which is illustrated in examples (7.27)-(7.29). Note that the preposition \(\mathbf{f} \mathbf{\varepsilon}\) is used to express motion towards as well as away from, but can also express static location with some verbs (i.e., "be at" someplace). Examples of the corresponding pronoun that is coreferential with a prepositional phrase expressing motion towards are lacking in the data.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{wù
\[
3 \mathrm{SG}
\]} & já & \multirow[t]{2}{*}{\begin{tabular}{l}
fó \\
there
\end{tabular}} & \multirow[t]{2}{*}{wù
3SG} & \multirow[t]{2}{*}{\begin{tabular}{l}
kwè \\
home
\end{tabular}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
f̌̀-yēlē, \\
c16-way
\end{tabular}}} \\
\hline & leave & & & & & \\
\hline wù & tó & wù & shì & wù f & fúf-è & shē \(y\) \\
\hline 3SG & come & 3SG & sit & 3SG r & rest-PROG & c9.liver \\
\hline
\end{tabular}
'He left (the farm) and returned home, and he sat and relaxed.'
Jealous Husband. 16
\begin{tabular}{llllllll} 
wù & m̄̄ & wù & bús \(\bar{\varepsilon}\) & \(\overline{\mathrm{m}}\)-bà: & f́, & wù & ná \\
3SG & RES & 3SG & remove & c6a-soup & there & 3 SG & give
\end{tabular}
\(\begin{array}{ll}\text { Ø-jwè:: } & \text { lē } \\ \text { c1-husband.3sG.POSS } & \text { APPL }\end{array}\)
'She just removed soup from there (the leaf) and gave [it] to her husband.'

Jealous Husband. 13

\footnotetext{
\({ }^{54}\) The words fènè 'there' and yànè 'here' are treated as locational adverbs and are described in §8.6, although they could be interpreted as locative pronouns as well. Perhaps the primary difference between these words and the locative pronouns presented here is that antecedents for these words are not clearly identifiable as they are for the locative pronouns.
}


The referent object \({ }^{55}\) of the pronoun usually occurs earlier in the text, or the referent object is inferable or generic, as in the previous examples. In rare cases, it is present in the same sentence as the pronoun, as in (7.30), where the relative clause demands the use of the resumptive pronoun. (This appears to be a special case, since relative clauses usually do not have resumptive pronouns. See Chapter 12 for more details.)

'At the places where we landed, we asked ten questions of the people who came to see us.'

Training.1.18

The locative pronoun yá 'inside' is coreferential with prepositional phrases headed by the preposition à 'in'. It is rare in the text data, occurring only three times. Examples (7.31) and (7.32) clearly show the substitutive role of the pronoun, while example (7.33) provides an illustration from the text data.
\begin{tabular}{lllllll} 
(7.31) & wū & dè: & byáy & à & Ø-ká & lē \\
& 3SG & cook & c10.palmnuts & in & c1-barrel & APPL
\end{tabular}
'He cooked palm nuts in a barrel.'

\footnotetext{
\({ }^{55}\) The term "referent object" is used here rather than simply "referent" to account for the fact that the locative pronoun is coreferential with the entire prepositional phrase rather than only the object of the prepositional phrase.
}
\begin{tabular}{lllll} 
(7.32) & wū & dè: & byáy & yá \\
& 3 SG & cook & c10.palmnuts & inside
\end{tabular}
'He cooked palm nuts in it (a barrel).'
\begin{tabular}{llllllll} 
bā & g \(\bar{\varepsilon}\) & jò & yó, & bā & k \(\bar{\varepsilon}\) & bā & chùg-è \\
they & put & c9.water & inside & c2 & begin & c2 & wash-PROG
\end{tabular}
'...they put water inside (the trough) and begin washing (the palm nuts)...' Making Palm Oil.1.5

The final locative pronoun yú 'on.it' is coreferential with prepositional phrases headed by the preposition yè 'on', as in (7.34) and (7.35).
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(7.34)} & \begin{tabular}{l}
wù \(\mathrm{g} \bar{\varepsilon}\) \\
3 SG put
\end{tabular} & \begin{tabular}{l}
kì-chídē \\
c7-food.mat
\end{tabular} & \[
\begin{aligned}
& \mathrm{k} \bar{\varepsilon}-\grave{\varepsilon} \\
& \mathrm{c} 7-\mathrm{ANA} 1
\end{aligned}
\] & \begin{tabular}{l}
fè \\
c16-down
\end{tabular} & & \begin{tabular}{l}
fīs \(\varepsilon\) \\
twist
\end{tabular} \\
\hline & \begin{tabular}{l}
yē \\
c9.body
\end{tabular} & yú, wù on.it 3sG & fīsé yē twist c9.body & \[
\begin{array}{ll} 
& \text { yú } \\
\text { on.it }
\end{array}
\] & & \\
\hline & \multicolumn{6}{|l|}{\begin{tabular}{l}
'...she put the food mat on the ground and twisted her body on it multiple times... \\
Two Wives.3.6
\end{tabular}} \\
\hline (7.35) & \begin{tabular}{l}
Ø-táy \\
c1-time
\end{tabular} & \[
\begin{array}{ll}
\text { wú-mù } & \text { lé } \\
\text { c1-some } & \text { COP }
\end{array}
\] & byèn bư c9.fish exit & \[
\begin{array}{ll}
\text { xú } & \text { yú } \\
\text { exit } & \text { on.it }
\end{array}
\] & & \\
\hline
\end{tabular}
'Sometimes, fish will come out on it (the fishing line).' Fishing.1.8

As mentioned above, this pronoun is also coreferential with Comitative Obliques. But the data suggests that this pronoun can only refer to INSTRUMENTS and not ACCOMPANIMENT, even though both of these semantic roles are expressed through Comitative Obliques. Referential ACCOMPANIMENT obliques maintain the conjunction/preposition bé followed by an appropriate personal pronoun (see (7.9) and (7.11) above). One possible exception is described at the end of this section.

Example (7.36) illustrates the locative pronoun yú which is coreferential with a Comitative Oblique. The pronoun (in example b) has the same semantic role and occurs in the same position in the clause as its referent object (in example a), which appears in square brackets. (Although the speaker substituted "medicine" for "poison", the set of examples clearly shows the syntactic and semantic structures of the base sentence which correspond to the sentence with the pronoun.)
\begin{tabular}{lllllll} 
a. & wù & m \(\bar{\jmath}\) & wù & chú & ńtāy, & l̄ \\
3SG & RES & 3SG & respond & suggest & COMP
\end{tabular}
\begin{tabular}{lllllll} 
& & & & & \(S_{\text {(AGENT) }}\) \\
bé & bé & \(m \bar{\varepsilon}\) & wū & wò, & tū & \(m \bar{\varepsilon}\) \\
1PL.COND & \({ }^{\text {P }} \mathrm{COP}\) & 1 SG.PRO & c1REL & 2 SG & then & 1 SG. PRO
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline V & & & \(\mathrm{O}_{\text {(EXP) }}\) & & (INSTR) \\
\hline \(\overline{\mathrm{m}}\)-bé & \(\overline{\mathrm{n}} \mathrm{-y} \overline{\mathrm{u}}^{\text {a }}\) & wà & wù & [bé & Ø-ńl̀ \(]\) \\
\hline 1SG-P1 & 1SG-kill & already & 3SG & with & c1-poiso \\
\hline
\end{tabular}
'She then suggested, "If I were you, I would have killed him with poison."

What-goes-around.3.1
b. \(1 \bar{\varepsilon} \emptyset\)-kw \(\bar{\varepsilon} s e ́\) wé- \(\bar{\varepsilon}\) dú nō,
SET c1-woman cl-ANA1 say like.that
\begin{tabular}{|c|c|c|c|c|c|}
\hline \(\mathrm{m} \bar{\varepsilon}\) & m \(\bar{\square}\) & g ¢̇̇: \(\quad \mathrm{m} \bar{\varepsilon}\) & \(\overline{\mathrm{n}}\)-jò & j̀chè & y \(\overline{1}\) \\
\hline
\end{tabular}
bā yú-yī bī-kfūnè yú,
c2 kill-DISTR.PROG c8-rat on.it
\begin{tabular}{llllll} 
m \(\bar{\varepsilon}\) & \(\bar{y}\)-g \(\bar{\varepsilon}:\) & à & mäy-kälä & mà-à & lē \\
1SG.PRO & 1SG-put & in & c6a-cassava.puff & c6a-ANA1 & APPL
\end{tabular}
'As that woman said so, I went and brought medicine that kills rats and put it in that cassava puff.,

What-goes-around.9.14

This pronoun often occurs as a resumptive pronoun in nonrestrictive relative clauses that provide additional information regarding the referent object (i.e., the relative clause's head) (cf. (7.30)). The referent object is given in square brackets in (7.37) and (7.38).
\begin{tabular}{|c|c|c|c|c|c|}
\hline [bī-dádغ̀] & bī & bā & sáy-ë & yé & yú \\
\hline c8-palm.branch & c8REL & they & thatch-PROG & c10.house & on.it \\
\hline
\end{tabular}
\begin{tabular}{llcllllll} 
bó & kô: & [bá & Dāmūmē \(],\) & wù & bó & g \(\bar{\varepsilon}\) & jō \\
3PL & catch & pa & D. & c1REL & 3PL & P3 & take \\
& & & & & & & & \\
bó & dāy & jò & & yú & & & & \\
3PL & cross & c9.stream & on.it & & & &
\end{tabular}
'...they captured Pa Damume, whom they used in crossing the stream.'
(lit. whom they crossed the stream with him) Land Dispute.2.3

The data have a few examples of yú which appear to express the notion of existence or living and are possibly cases of coreference with an ACCOMPANIMENT oblique. Most of these examples have the pronoun following a copula or some other element of the verb complex. The pronoun is understood to refer to a generic, inferable Comitative Oblique referent, such as 'life' or some other contextually relevant entity. For example, in (7.39) the referent must be something like 'with the fufu', while that in (7.40) is less transparent, but could be something like 'with life'.
\begin{tabular}{lllllll} 
Ø-jwà::, & & kéf \(\bar{\varepsilon}\) & wó & fàn-è & fy- \(\bar{\varepsilon}:\) & g \(\bar{\varepsilon}\), \\
c1-husband.1SG.POSS & VET & 2SG & fear-PROG & c19-thing & NEG2 \\
\(\overline{\text { m}}\)-bà: \(\quad\) lé \(\quad\) yú & & & & & \\
c6a-soup & cop & on.it & & & & \\
\hline
\end{tabular}
'My husband, don't fear anything, there is soup.' (lit. soup is with the fufu(?)) Jealous Husband.2.2
(7.40) Ø-kwēsé wú-mù gè bé yú wū gè
c1-woman c1-some P3 \({ }^{\mathrm{P}} \mathrm{COP}\) on.it c1REL P3
\(\begin{array}{lllll}\text { kā } y \text {-ē } & \text { màn-kàlà } & \text { Ø-ǹt̀̀ } & \text { wè } & \text { lē } \\ \text { fry-PROG } & \text { c6a-cassava.puff } & \text { c1-quarter } & \text { up } & \text { APPL }\end{array}\)
'There was a woman who was frying cassava puff in that quarter.' (lit. a certain woman was with life(?))

What-goes-around.1.4

The referent for the pronoun in (7.41) is even less clear, but obviously connotes "being".
\begin{tabular}{llllll} 
(7.41) & g \(\varepsilon\) & fy- \(\bar{\varepsilon}:\) & fí-mí & bà & yú \\
& NEG2 & c19-thing & c19-some & still & on.it
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline fí & lé & fí & nò & fī & gà-s \(\bar{\varepsilon}\) & bė̇ & \(\mathrm{g} \bar{\varepsilon}\), \\
\hline c19REL & COP & c19.fut & like.that & c19 & divide-caus & 2PL & NEG2 \\
\hline
\end{tabular}
'...nothing that will separate you, ...' (lit. not a certain thing with
existence(?)) Marriage.5.5

\subsection*{7.3 Adverbial pronouns nò and nē}

Pronominal reference to events or situations is made through the adverbial pronouns \(\mathbf{n \grave { j }}\) or n̄̄ 'like.that' and nē 'like.this', which are either clause-final or clause-initial. They appear to contrast with each other and at times operate as discourse deictics. Further, they often appear to express a sense of "manner"- the doing of something in the way previously described. The pronoun ǹे is modestly prevalent in the data, but nē is uncommon. As a result, the analysis for nee is tentative and is only briefly described at the end of this section.

Events or situations being referenced by ǹ̀ are usually stated previously, with the coreferential pronoun relating it to a second event or situation, as illustrated in examples (7.42) and (7.43). The pronoun in example (7.42) is coreferential with the instruction given previously, that they should go before the man of God to be blessed and to sanction their marriage. The situation referenced in (7.43) is the children having eaten poison and the doctor not being able to help them.

'If you do so, you have done what is required in the book of God.'
Marriage.3.8
\begin{tabular}{llllll}
\(\mathrm{l} \bar{\varepsilon}\) & fí & dó & fí & jù & \(\mathbf{n \overline { j }}\), \\
SET & c 19 & SIT & c 19 & \(\operatorname{COP}(\mathrm{~N})\) & like.that
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline bD̄: & bā-ā & \(\mathrm{g} \bar{\varepsilon}\) & \(\mathrm{kwi}-\mathrm{y}\) ¢ \\
\hline c2.child & c2-ANA1 & P3 & die-DISTR \\
\hline
\end{tabular}
'As it was so, all those children died (one after another).'
What-goes-around.10.1

In example (7.44), the pronoun is acting as a discourse deictic, where the antecedent is the thing said by someone earlier. The reference is to the proposition made through the utterance, that they should poison the beggar.


> 'As that woman said so, I went and brought medicine that kills rats and put [it] in that cassava puff.' \(\quad\) What-goes-around.9.14

The adverbial pronoun in (7.45) appears to be part of a conventionalized prepositional phrase translated as "so". A clear antecedent is not apparent, suggesting that this prepositional phrase is a discourse device of some kind, perhaps indicating a topic shift. As this is the only example of the construction in the text data, it is not possible to substantiate this hypothesis. The prepositional phrase is realized at a higher tonal register and the pronoun itself has a long vowel.

'So, many people will be praying to God for you,'
Marriage.4.1

This pronoun has a secondary function of introducing certain support clauses and complement clauses. See \(\S \S 13.2 .2\) and 13.3 for descriptions of these other uses of ǹ̀.

As stated in the introduction to this section, the form nee is rare in the data and the analysis is tentative at this time. But as (7.46) and (7.47) show, it can co-occur with ǹ , resulting in constructions that may be interpreted as "since this, then...". In (7.46), the speaker seems to be saying that, as a result of his speaking, his behavior will change. In (7.47), the people thought that, since his house burned down, then he would go hang himself.
\begin{tabular}{lllll} 
(7.46) & n \(\quad\) n-jèm-é & à-bèn & nē \\
& like.that & 1sG-speak-PROG & c18-today & like.this \\
& & & &
\end{tabular}
'As I am saying this today,...' Jealous Husband. 22
\begin{tabular}{lllll} 
(7.47) & bā-mī & \(\mathrm{g} \grave{\varepsilon}\) & ké-é & \(l \bar{\varepsilon}\) \\
& c2-person & P3 & know-PROG & COMP
\end{tabular}
\begin{tabular}{lllll} 
nı̀ & \(\emptyset\)-lá & chī-nē & fyé & nē \\
like.that & c5-compound & c5-PROX & burn & like.this
\end{tabular}
'People were knowing that as this (my) compound burned like this, ...'
Fire. 26

The form of nē, along with the apparent proximal semantics, suggests a connection between this pronoun and the proximal demonstrative, possibly even that they are one and the same, with the use presented here representing a second function of the demonstrative. However, the form ǹ̀ has no such demonstrative counterpart and seems to form a contrasting pair with nē. More research is needed for a more complete analysis.

\subsection*{7.4 The impersonal subject pronoun}

The pronoun bā, an obviously conservative reflex of Proto-Bantu class \(2 * \mathbf{b a}\)-, is used as an impersonal subject pronoun and is glossed as 'they', with the word bā-mì 'people' the pronoun's antecedent. It is only used for human referents, where the 3PL pronoun bó would otherwise be appropriate. The impersonal subject pronoun is used whenever the agent is generic or the precise identity of the agent is unimportant. The subjects in examples (7.48) and (7.49), taken from historical and procedural texts respectively, are both generic entities, referring to "people" in general.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline (7.48) & \(\mathrm{f} \bar{\varepsilon} \quad \mathrm{mu}\) at c1- & son & \[
\begin{aligned}
& \mathrm{g} \bar{\varepsilon} \\
& \mathrm{P} 3
\end{aligned}
\] & \begin{tabular}{l}
shíl \(\bar{\varepsilon}\) \\
sit
\end{tabular} & fó, there & \begin{tabular}{l}
bā \\
they
\end{tabular} & \[
\begin{aligned}
& \mathrm{g} \bar{\varepsilon} \\
& \mathrm{P} 3
\end{aligned}
\] & té-ŋé call & \begin{tabular}{l}
fó \\
there
\end{tabular} \\
\hline & Ø-j- \(\overline{1}\) & ch-é & & 1 l & & & & & \\
\hline & c5-name & c5-3s & G.POSS & AP & & & & & \\
\hline
\end{tabular}

> 'At the place each person settled, they called the place by his name.'
> History.4.1

'...they add cold water to cool the oil.' Making Palm Oil.1.10

The agents in example (7.50) are not necessarily generic as are those in the above examples. Here there were particular people who helped remove things from the burning houses, and the speaker surely is aware of the identities of many of them. However, while the impersonal pronoun refers to these particular people, their identities are unimportant. Therefore, the impersonal subject pronoun is used.
\begin{tabular}{lllll} 
mw- \(\bar{\varepsilon}\) : & mú & yē & kwè, & mú-mú \\
c18a-thing & c18arel & in & home & c18a-some
\end{tabular}
'The things in the house, some they removed, some burned.' Fire.5.1

\subsection*{7.5 Dummy subject}

In contrast to the nearby languages like Noni (Hyman 1981) and Mungbam (Lovegren 2013), Nchane does not have a dedicated dummy subject. Cleft constructions have a gap in the subject position rather than a dummy subject. Likewise, a gap is observed in postverbal subject (agent) focus constructions whenever there is no object appearing in the preverbal position through defocalization, again in contrast to Noni and Mungbam. See \(\S 16.3 .1\) for a treatment of these structures.

However, one case is observed where the c19 pronoun \(\mathbf{f i}\) is utilized as a semantically empty subject. This pronoun is coreferential with \(\mathbf{f y}-\overline{\boldsymbol{\varepsilon}}\) 'thing' and can refer to the overall context or situation grounding the predication as seen in example (7.51).
\begin{tabular}{llllllll} 
(7.51) & \(l \bar{\varepsilon}\) & wū & fú:, & fī & ghá & wù & bá:y, \\
& SET & 3SG & satisfy & c19 & surpass & 3sG & much
\end{tabular}
'As he was satisfied (from eating), he was very surprised...' (lit. it surpassed him much) Jealous Husband. 15

In the previous sentences of the text, the man's wife gave him food with "soup", when he thought she did not have any "soup" to give him. She has provided him with the complete meal, which he eats and is satisfied. The question of where the "soup" came from was impossible for him to answer.

\subsection*{7.6 Question word pronouns}

Question words are presented in some depth in Chapter 14. Nevertheless, it is appropriate to look at question words in their function as pronouns. The question words lá ' Q ' and \(\mathbf{y} \bar{\varepsilon} \boldsymbol{\eta}\) 'who' occur only rarely outside of direct question constructions in the corpus. Examples (7.52) and (7.53) show that they can be used as pronouns in embedded interrogative constructions, although it appears that they are limited in their distribution, almost always following the copula lé and usually in cleft constructions.

'As the woman was going, she stood and the husband wondered what would happen.' (lit. it is what is) Jealous Husband.4.2
(7.53) bó g \(\bar{\varepsilon}\) kém-é ki-nt \(\bar{n} \bar{\varepsilon}\), l \(\bar{\varepsilon}\) lé y \(\bar{\varepsilon} \eta\) wú
3PL P3 have-PROG c7-argument COMP COP who c1REL
\begin{tabular}{lllll} 
k \(\bar{\varepsilon} m-e ̀ ~\) & mù- \(\mathrm{ygà}\) & wù & ghá & \(\emptyset\)-mù-mù \\
have-PROG & c18a-power & 3SG & surpass & c1-person-some
\end{tabular}
'...they were arguing about who was stronger...' (lit. it is who that is having strength, he passing the other) Sun and Wind.1.1

\subsection*{7.7 Other pronominals}

As demonstrated in \(\S 6.5\), certain noun modifiers are observed that can function pronominally. In other words, they occur not as modifiers in a noun phrase, but rather as the lone nominal element of a noun phrase and are coreferential with a full noun referent. These noun modifiers include possessive pronouns, the proximal demonstrative, the indefinite demonstrative, and numbers. Their occurrence as pronouns is uncommon in the text corpus. See \(\S 6.5\) for specific examples.

\section*{Chapter 8}

\section*{Other word classes}

This chapter is concerned with word classes other than nouns, nominal modifiers, verbs and grammatical markers such as tense and aspect auxiliaries. I begin in \(\S 8.1\) with a description of prepositions, which function in locational deictic expressions, as well as establishing 'aboutness' relationships. §8.2 describes the comitative preposition bé 'with', which is also functions as a coordinating conjunction. Interjections and ideophones are presented in sections 8.3 and 8.4 respectively. A brief description of predications involving hand movements appears in §8.5, and locational adverbs are treated in \(\S 8.6\). The chapter ends with \(\S 8.7\), in which temporal adverbs are described.

\subsection*{8.1 Prepositions}

The primary preposition type in the data corpus establishes locational and orientational relationships between verbs and their constituents. Description of these "locational" prepositions takes up the largest portion of this section. The preposition kı̀nと̀ 'about' represents a second type and is relatively uncommon in the data. Accordingly, it is briefly described at the end of the section.

There are four different locational prepositions attested in the data corpus. With each of these prepositions, the resulting prepositional phrases include the postpositional applicative marker lē 'APPL'. (See §11.1.3 for a discussion regarding
the applicative analysis.) The various prepositions are described in the subsections which follow, where prepositional phrases in the examples appear in brackets and prepositions are bolded.

Table 8.1 summarizes the locational prepositions and the semantic expressions typically associated with each.
\begin{tabular}{lll}
\hline Preposition & Gloss & Semantic expression \\
\hline f̀̀ & at & movement \\
à & in & bounded location \\
yè & on & unbounded location \\
mabébé & near & approximate location \\
\hline
\end{tabular}

Table 8.1 Summary of Nchane locational prepositions.

As a reminder, fè and à each have locative noun counterparts designated as classes 16 and 18 respectively, which are described in \(\S 5.2 .3\). Prepositional phrases are differentiated from their corresponding locative noun phrases by phrase syntax and agreement patterning. First, as stated above, prepositional phrases usually include the postposition applicative marker, while locative noun phrases do not. Second, prepositions do not generate agreement marking; their nominal complements maintain their own lexical class marking and agreement protocols. Locative nouns generate agreement, generally \(\mathbf{f} \boldsymbol{\varepsilon}\) and a respectively, which is reflective of the locative noun class marking.

\subsection*{8.1.1 fè 'at'}

The preposition fè usually expresses a change in location of the subject and is glossed as 'at'. The concept of 'movement' is illustrated in examples (8.1) and (8.2).
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline (8.1) & \(1 \bar{\varepsilon}\) & bó & dó & bó & \(\mathrm{g} \overline{\widetilde{c}}\) & bó & bú & [fı̀ & kìtē & ky- \(\bar{\varepsilon}\) : & & ] \\
\hline & SET & 3pL & SIT & 3 PL & go & 3PL & arrive & at & c7-tree & c7-ANA1 & & PPL \\
\hline
\end{tabular}
\begin{tabular}{lllllll} 
l \(\bar{\varepsilon}\) & Ø-bwē: & làd-é & mw \(\bar{\varepsilon}\), & wù & g \(\bar{\varepsilon}:\) & bī-nfūn \(\bar{\varepsilon}\) \\
SET & c1-mother & go.goal-PROG & c3.garden & 3SG & put & c8-corn
\end{tabular}
\begin{tabular}{lll}
\(\mathrm{l} \bar{\varepsilon}\) & wù & shé \\
SET & 3SG & remain
\end{tabular}
\begin{tabular}{llllll}
\(w \bar{u}\) & \(g \bar{\jmath}\) & {\([f \mathbf{f}\)} & \(\emptyset\)-y-gò & wù-bàlà & l̄\(]\) \\
3SG & grind & at & c1-NMZR-grind & c1-foreign & APPL
\end{tabular}
'As the mother was going to the farm, she put corn aside so that she (the daughter) would remain (near the house) and take [it] to the grinding mill.'

Disobedient Child.1.3

Movement is also apparent in clauses with the verb g \(\bar{\Sigma}:\) : \(g o\) ', where the endpoint of the movement is expressed through the prepositional phrase, as in (8.3) and (8.4).
\begin{tabular}{llll} 
wù & tū & bớ: & bā-ā \\
3SG & carry & c2.child & c2-ANA1
\end{tabular}
\begin{tabular}{lllllll} 
wù & gè: & {\([f \hat{\varepsilon}\) è } & \(\emptyset\)-mū & wù & nchē & lē] \\
3SG & go & at & c1-person & c1AM & c10.medicine & APPL
\end{tabular}
'...he took those children to a doctor.'
What-goes-around.9.6
(8.4) bő gēn-è [fì̀ bō lē] sēgè-chì,

3PL.HORT go-PROG at 3PL APPL when-all
bő gvūn-è bó bó ká fìì bó
3PL.HORT obey-PROG 3PL 3PL ITER help-PROG 3PL
'They (the husband and wife) should visit them (their parents) all the time, and respect them (lit. obeying them and helping them)' Marriage.6.2

It is possible that the complements of fè prepositions are not primarily expressions of locations, but a mixture of LOCATION and some other semantic role such as RECIPIENT or BENEFACTIVE (perhaps generalized as GOAL), particularly those where the complement is Human. For example, a benefactive reading is appropriate for the prepositional phrase in (8.5).
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & lè), & & & & nù & & \\
\hline on & like.that & APPL & c19 & & c19 & \(\operatorname{COP}(\mathrm{N})\) & & OMP \\
\hline bā-mì & & & \(1 \overline{\mathrm{c}} \mathrm{g}\)-è & & Ø-nว̄ & [fı̀ & ) & ) \\
\hline 2 -perso & on c2-m & & beg-P & & c1-god & at & PL & AP \\
\hline
\end{tabular}
'So, many people will be praying to God for you,' Marriage.4.1

\subsection*{8.1.2 à 'in'}

The preposition à is the most common preposition in the text corpus and is most often best translated as 'in'. It expresses the location of a constituent, a location that is characterized as bounded. In other words, the location is conceived of as an entity with boundaries like a container and the identified constituent is located within the boundaries. Examples (8.6)-(8.8) illustrate.
(8.6) bā dè: [à Ø-ká lē]
they cook in c1-barrel APPL
'They cook [the palm nuts] in a drum.' Making Palm Oil.1.3

\(\operatorname{SET} \quad \operatorname{COP}(\mathrm{N})\) soon c1-woman c1-ANA1 remove c9.chicken
bā nù bā yòn bā kènẽ wá, bā
they \(\operatorname{COP}(\mathrm{N}) \quad \mathrm{c} 2\) cook c2 prepare already c2
kūjè [à kī-ŋkámè lē]
wrap in c7-leaf APPL
'Immediately, that woman took the chicken out, having already cooked and prepared [it] and wrapped in a leaf.' Jealous Husband. 12
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \(\mathrm{m} \bar{\varepsilon}\) & m \(\bar{\square}\) & \(\overline{\mathrm{y}} \mathrm{g} \mathrm{g}\) :, & \(\mathrm{m} \bar{\varepsilon}\) & \(\overline{\mathrm{n}}\)-jò & \multicolumn{2}{|l|}{j̀chē} & yī \\
\hline 1SG.PRO & O RES & 1sG-go & 1SG.PRO & 1sG-take & c9.me & cine & c9REL \\
\hline bā y & yú-yí & & bī-kfūnè & yú, & & & \\
\hline they k & kill-DIST & R.PROG & c8-rat & on.it & & & \\
\hline \(\mathrm{m} \bar{\varepsilon}\) & y -g \(\bar{\varepsilon}\) & [ä & mäy-kälà & & mà-à & lē] & \\
\hline 1sG.PRO & O 1SG-p & ut in & c6a-cassa & a.puff ct & c6a-anal & APPL & \\
\hline
\end{tabular}
'I went and brought medicine that kills rats and put [it] in that cassava puff.'

What-goes-around.9.14

The located constituent and its location are usually concrete, as in the above examples. However, the locational relationship between the constituent and its location in (8.9) might be considered as abstract. This example comes from a story about two wives, one of whom can transform herself into an animal. The first wife goes home, while the second one stayed out in the wilderness in her animal form.
\begin{tabular}{lllllll} 
Ø-kwēsé & wú-yú & shè & j̀chùn & {\(\left[\begin{array}{l}\text { à }\end{array}\right.\)} & này & lē] \\
c1-woman & c1-ANA2 & stay & c?.bush & in & c9.animal & APPL
\end{tabular}
'That (other) "woman" remained in the bush as an animal.' (lit. inside the animal)

Two Wives.4.3

Historically, many of the people groups throughout Cameroon believed that certain people can change their forms from that of a human to that of an animal. This is in contrast to a person's spirit leaving his or her body and possessing the body of an animal. Therefore, the bounded, locational expression made through the prepositional phrase in this example is figurative.

Most of the verbs appearing with this preposition express movement from outside the location to inside the location. In other words, the prepositional phrase serves as a GOAL. However, certain verbs appearing with the preposition require a SOURCE, with movement from inside the location to outside the location. The examples below illustrate this difference.
\begin{tabular}{lllrll} 
(8.10) & gélć & kī-yò & {\(\left[\begin{array}{ll}\text { à } & \text { kī-tã: }\end{array}\right.\)} & lē] \\
& put.IMP & c7-elephant & in & c7-fence & APPL
\end{tabular}
'Put the elephant inside the fence (enclosure).'
\begin{tabular}{llcll} 
bűsह̋ & kī-yò & [à & kī-tằ: & lē \(]\) \\
remove.IMP & c7-elephant & in & c7-fence & APPL
\end{tabular}
'Remove the elephant from the fence (enclosure).'

\subsection*{8.1.3 yè 'on'}

The preposition yè has a core meaning of 'on'. Like à 'in' above, it is not directional, but rather expresses information regarding the location of a constituent or the location of the verb's affect. The location is not considered bounded as it is with the preposition à, and the constituent is thought of as merely present at or in contact with the location, as seen in (8.12) and (8.13).
\begin{tabular}{lllllll} 
(8.12) & bē & sú: & \(\bar{y} g \bar{\jmath}\) & {\([y \bar{e}\)} & \(\emptyset-\bar{y} g w e ̀ ~\) & lē \(]\) \\
& 1PL & string & c10.termite & on & c1-fishing.pole & APPL
\end{tabular}
'We put termites on the hook.' \({ }^{56}\)
Fishing.1.4
\begin{tabular}{llllllll} 
k \(\overline{1}\) & já & kì & shì & {\([y \overline{\mathbf{e}}\)} & \(\emptyset\)-tí: & ch- \(\bar{e}\) & lē \\
c7 & leave & c7 & sit & on & c5-stomach & c5-3SG.POSS & APPL
\end{tabular}
'...it (the fly) left (the meat) and sat on his (the man's) stomach...'
Greedy Friends.1.15
As with à, this preposition can sometimes express a SOURCE location, as in (8.14). This of course is dictated by the requirements of the verb.
\begin{tabular}{llllll} 
já & {\([\mathbf{y e}\)} & nàn & yí-nè & lē \(]\) & chègē \\
leave.IMP & on & c9.meat & c9-PROX & APPL & quickly
\end{tabular}
'Go away from this meat quickly!'
Greedy Friends.1.11

Note that the preposition 'from' is used in the free translations for both examples (8.11) and (8.14), while these examples have different Nchane prepositions. The difference between the two is that (8.11) expresses the bounded location "in the fenced enclosure", while (8.14) expresses the unbounded location "on the meat".

Some conventionalized uses of yè are orientational and temporal, as seen in the examples below.
\begin{tabular}{|c|c|c|c|c|c|}
\hline (8.15) & \(\bar{m}\) bémbé near & \[
\begin{aligned}
& \text { [yè } \\
& \text { on }
\end{aligned}
\] & \begin{tabular}{l}
kì-b̄̄ \\
c7-arm
\end{tabular} & kī-ŋk k̀̀ỳ̀ c7-left & lē], APPL \\
\hline & wù \(\mathrm{g} \bar{\varepsilon}\) & \(y \bar{\varepsilon} y\) & bā-mì & bā-mù & \\
\hline & 3SG P3 & see & c2-perso & c2-some & \\
\hline
\end{tabular}
'Off to his left, he saw some people...'
Lake.5.4

\footnotetext{
\({ }^{56}\) The word \(\overline{\mathbf{y}}\) gwè 'fishing pole' actually refers to the apparatus used for fishing. This includes a stick or pole of some kind, a string, usually a float, and a hook. There are individual words for each of the parts. However, as seen in this example, it is appropriate to talk about attaching the bait using the word referring to the whole apparatus. I assume the speaker could also have used the actual word for hook if he had wanted to.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (8.16) & \begin{tabular}{l}
kī-fē \\
c7-time
\end{tabular} & kí-mú c7-some & \begin{tabular}{l}
lé \\
COP
\end{tabular} & \[
\begin{aligned}
& \text { [yè } \\
& \text { on }
\end{aligned}
\] & kì-lùn c7-year & \begin{tabular}{l}
lē] \\
APPL
\end{tabular} & Ø-n̄chfùgè c1-thousand \\
\hline & b with & hundred & \begin{tabular}{l}
bvùgè \\
nine
\end{tabular} & & jbvùg \(\bar{\varepsilon}\) & \begin{tabular}{l}
n̄chò \\
plus
\end{tabular} & bvūsōs seven \\
\hline
\end{tabular}
'Sometime in 1997...'
Training.1.1

\subsection*{8.1.4 \(\overline{\mathbf{m}}\) bémbé 'near'}

Proximity is expressed through the preposition \(\overline{\mathbf{m}}\) bémbé (or \(\overline{\mathbf{m}}\) bébé) 'near', which sometimes can be interpreted as 'beside', and is possibly derived from the noun kìmbè 'side'. This preposition, which is rare in the data, locates a constituent as being close to the preposition's complement, as illustrated in (8.17) and (8.18).
\begin{tabular}{lllll} 
gélé & Ø-nà & {\([\) m̀bébé } & yē & lē \(]\) \\
put.IMP & c1-cow & near & c9.house & APPL
\end{tabular}
'Put the cow near the house.'
\begin{tabular}{llllll} 
l \(\bar{\varepsilon}\) & wú & \(y \bar{\varepsilon} n-e ̀ ~\) & \(\emptyset-\grave{j} k e ̀: ~\) & wù & tō \\
SET & 3SG & sing-PROG & c1-song & 3SG & come
\end{tabular}
[m̄bémbé \(\varnothing\)-lā wù \(\emptyset\)-kw \(\bar{s}\) sé wú kàn-é
near c5-compound c3AM c1-woman c1REL fry-PROG
\begin{tabular}{lll} 
mà \(y\)-kàlà & w \(\bar{\varepsilon}-\bar{\varepsilon}\) & lē], \\
c6a-cassava.puff & c1-ANA1 & APPL
\end{tabular}
'As he was singing and coming near to the compound of that woman who was frying cassava puff,'

What-goes-around.4.4

\subsection*{8.1.5 kònè 'about'}

Aboutness relationships can be established through the preposition kìnè 'about'. Unlike the locational prepositional phrases above, kj̀nと̀ phrases do not have the applicative postposition. Example (8.19) illustrates the function of this preposition.
\begin{tabular}{lllllll} 
bā & \(g \bar{\varepsilon}\) & \(y \bar{\varepsilon} y \grave{\varepsilon}\) & {\([\mathbf{k} \grave{n} \dot{\varepsilon}\)} & Ø-ŋwā & wù & bī-njī̄nī \(]\) \\
they & P 3 & teach & about & c1-book & c1AM & c8-picture
\end{tabular}
'...they taught about the picture booklet...'

Prepositional phrases headed by kı̀nと̀ may also serve as predicate, as seen in (8.20).
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (8.20) & \begin{tabular}{l}
Ø-j̀̀-shìlغ̀ \\
c1-NMZR-sit
\end{tabular} & \begin{tabular}{l}
wú-yú \\
c1-ANA2
\end{tabular} & \[
\begin{aligned}
& \mathrm{g} \grave{\varepsilon} \\
& \mathrm{P} 3
\end{aligned}
\] & \begin{tabular}{l}
bé \\
\({ }^{\mathrm{P}} \mathrm{COP}\)
\end{tabular} & \begin{tabular}{l}
[kう̀nè \\
about
\end{tabular} & bá-mí c2-person & bá
\[
\mathrm{c} 2 \mathrm{Am}
\] \\
\hline & Ø-ḿ-fíjē & j \(\bar{\varepsilon}\) & & yī & Ø-nı̀] & & \\
\hline & c1-NMZR-prea & ch c9.w & & c9am & c1-god & & \\
\hline
\end{tabular}
'This meeting was about (or for) preachers.'
Training.1.2

\subsection*{8.2 The Comitative conjunction/preposition bé}

The relational particle bé 'with' has multiple functions. In certain contexts, it behaves like a coordinating conjunction. In other contexts, it is a preposition, establishing a certain type of relationship, usually between the subject and the preposition's complement. These different functions, and the syntactic contexts in which they occur, are summarized in Table 8.2. Note that this summary represents a generalization, since exceptions are observed. A description of each of these functions is given in the remainder of this section.
\begin{tabular}{lcll|l}
\hline \multicolumn{2}{l|}{ Syntactic context } & & & Function/Expression \\
\hline & Noun & Conjunction & Noun & coordination \\
\hline Noun & Verb \(_{[+ \text {motion }] ~}\) & - & Preposition & Noun \\
Noun & Copula \(^{2}\) & - & Preposition & Noun \\
Noun & Verb \(_{[+ \text {process }] ~}\) & Noun & Preposition & Noun \\
\hline
\end{tabular}

Table 8.2 Generalized syntactic contexts and corresponding semantic expressions of the conjunction/preposition bé.

As a conjunction, bé joins two noun phrases in a coordinate construction, as in (8.21) and (8.22). Note that the conjunction is bolded and the coordinated constituents are in brackets. See also \(\S 6.2 .1\) for a treatment of conjoined noun phrases.

\begin{tabular}{|c|c|c|c|c|}
\hline [Ø-jwénsě] & bér [Ø-kw̄̀] & jōd-è & kī-fê & kī \\
\hline c1-husband.HORT & with c1-wife & take-PROG & c7-time & COMP(K) \\
\hline bó yūg-è & Ø-ǹ-tēf̄̄ & wú būd & & \\
\hline 3PL hear-PROG & c1-NMZR-advise & c1REL exit & PROG & \\
\hline Ø-dē \(\quad\) yī & [Ø-chíjì] bé & [Ø-bwē] & lē & \\
\hline c4-mouth c4AM & c1-father with & c1-mother & APPL & \\
\hline
\end{tabular}
'The husband and the wife should be taking time to be hearing from the father and mother.'

Marriage.6.1

As a nominal coordinator, its function is similar to the English conjunction 'and', and can be used to complete a list of nouns, with the conjunction occurring between the final constituent and the rest of the list.
\begin{tabular}{lllllllll} 
bó & g \(\bar{\varepsilon}\) & jā & tíkālì, & b̄̄ & nū & bó & bā-tèn, & ȳkání \\
3PL & P3 & leave & T. & 3PL & COP(N) & 3PL & c2-five & N. \\
& & & & & & & & \\
chūyè & \(\bar{m} f u ́ m e ̀ ~\) & kībó & b & bèm & & & \\
Ch. & N. & K. & with & B. & & &
\end{tabular}
'They left Tikari, five of them: Nkanchi, Chunge, Nfume, Kibbo and Bem.' History.2.1

Examples (8.24) and (8.25) illustrate rare cases where constituents other than noun phrases are coordinated. In (8.24) a prepositional phrase and a locative noun phrase are conjoined. In (8.25) a complex prepositional phrase is conjoined to an adverbial phrase.

'The palm is an important property tree in Nchane and to all the world.' King of Trees.1.1
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline (8.25) & kī-mā & kí & fwe & lē, & bā & \(\mathrm{g} \bar{\varepsilon}\) & & y \(¢\) y & [kòne̋ & & nchī \\
\hline & c7-week & c7REL & front & APPL & they & P3 & & teach & about & & 2-law \\
\hline
\end{tabular}
\begin{tabular}{lllllll} 
bā & kī-yò & kī & yūdē & bā-n \(\bar{\varepsilon}]\) & bé & [nò \\
c2AM & c7-spirit & c7REL & clean & c2-four & with & like.that
\end{tabular}
Ø-mù lé nò wú bì: bà-mbīlĕ]
c1-person COP like.that 3SG.FUT ask c2-question

> 'In the first week, they taught about the four spiritual laws and how to give a questionnaire.' (lit. like that a person will ask questions.)
> Training.1.7

Comitative relationships are also expressed through bé. In this function, illustrated in (8.26)-(8.28), the particle follows the verb or verb complex, and the verb is usually a motion verb. The preposition indicates that the Agent carried out the action in the presence of the preposition's complement.
\begin{tabular}{llllllll} 
(8.26) & \(\emptyset\)-jw \(\bar{\varepsilon}\) & wù & já & wē & bé & \(\emptyset-k w \bar{\varepsilon}:\) & lād-è \\
& c1-husband & 3SG & leave & up & with & c1-wife.3SG.Poss & go.goal-PRoG
\end{tabular}
'The husband got up with his wife, going [to the farm to work].'
Jealous Husband.3.3
(8.27) \(w \bar{u}\) bū bé kī-chídè à-bō

3SG arrive with c7-food.mat c18-hand
'She appeared with a food-mat in [her] hand.' Two Wives.3.4
(8.28) wù lēgè wù kwé bé kī

3SG run 3SG home with c7
'...she ran home with it (the food mat).' Two Wives.4.2

Clauses containing bé phrases preceded by a copula usually have a possessive reading that is reflected in the free translations by the word 'have', as in (8.29) and (8.30).

'In fact (or truly), I have medicine that kills rats.'
\begin{tabular}{llllllll}
\(\mathrm{m} \bar{\varepsilon}\) & lé & bé & màn-kàlà & yānē & à & k \(\overline{1}-\mathrm{k} \bar{\varepsilon}:\) & lē \\
1SG.PRO & COP & with & c6a-cassava.puff & here & in & c7-bag & APPL
\end{tabular}
'I have some cassava puff here in [my] bag...' What-goes-around.7.6

The verb \(\mathbf{k} \overline{\boldsymbol{\varepsilon}} \mathbf{m} \overline{\boldsymbol{\varepsilon}}\), which is glossed as 'have', is also routinely used in possession expressions. While a careful study of the similarities of these two predication types has not been made, it appears that the bé phrase more often connotes physical co-occurrence rather than actual possession.

Example (8.31) represents an exception to the generalized context of a bé phrase following a copula as expressing possession. Here it is expressing a comitative relationship.

'As that blind man was coming one day, that woman who was frying cassava puff was there (in the neighborhood) with her friend.'

What-goes-around.2.1

Finally, this preposition is used to express instrumental relationships. Here, the PATIENT-object, when syntactically present, occurs between the verb and the INSTRUMENT-object. When the PATIENT-object is not present, it is always inferable. The verb is usually one which expresses a process carried out by the subject. Instrumental expressions are illustrated in (8.32) and (8.33).
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(8.32)} & & & wù & bò: & \(\emptyset\)-tí: & \multirow[t]{2}{*}{bé
with} & fī-nō, \\
\hline & 3sG & RES & 3sG & stab & c5-stomach & & c19-knife \\
\hline & wù & gwē & wù & kw & & & \\
\hline & 3sG & fall & 3sG & & & & \\
\hline
\end{tabular}
'...he then stabbed [his] stomach with the knife, he fell and died.'
Greedy Friends.1.15

'When the oil has cooled off well, they start collecting [it] with a bowl, keeping [it] in a pot.'

Making Palm Oil.1.11

Example (8.34) illustrates an abstract instrumental relationship-the blindman has caused many people to be worried or bothered through his begging.
(8.34) \begin{tabular}{lllllll} 
kì-nfę̀: & kī-nē & lé & kī & fūy-s̀ & wá \\
c7-blind.man & c7-PROX & COP & c7 & worry-CAUS & already
\end{tabular}
'...this blindman has already worried people too much with begging.' What-goes-around.3.5

\subsection*{8.3 Interjections}

Words that function to primarily express the emotion of the speaker are known as interjections. While interjections are certainly quite common in everyday speech, there are just a few examples of them in the text corpus, and none of them are exclusive to Nchane.

The interjections in the text data always occur clause-initial, often with a raised tonal register, usually with lengthened vowels, and prone to reduplication. Examples (8.35)-(8.37) illustrate two interjections that are common throughout the anglophone regions of Cameroon. As (8.35) and (8.36) show, the interjections wé: \({ }^{57}\) and hébê are interchangeable for the most part and express distress and/or surprise.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline (8.35) & & \(\bar{n}\)-dú 1SG-say & \(1 \bar{\varepsilon}\), COMP & \begin{tabular}{l}
wē:, \\
INTERJ
\end{tabular} & \begin{tabular}{l}
Ø-lā \\
c5-compound
\end{tabular} & \begin{tabular}{l}
w-āy \\
c3-1sG.Poss
\end{tabular} & & c3 & \begin{tabular}{l}
fyé \\
burn
\end{tabular} \\
\hline & & said & h! & cor & und has b & d!",58 & & & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{57}\) Possibly coming from German weh or wehe translatable as "woe" or "how dare you". Note that Cameroon was colonized by Germany between 1884 and 1917.
\({ }^{58}\) This example appears to illustrate a case of agreement confusion, since the noun lā 'compound' is usually treated as a class 5 noun and pairing with class 6 . Note that the agreement consonant for class 5 is "ch". Other examples of this noun in the corpus display the same confusion, while the plural form is always unambiguously class 6 .
}

'As I said, "Oh! My compound has burned!", ...they (all the people with me) had gotten up and were running (to where the fire was) ...'

Fire.2.6-3.2
```

Ø-kw\overline{sé w\overline{\varepsilon}-\grave{\varepsilon} gē l\overline{\varepsilon}, hćb\hat{\varepsilon}:, wō gé}
c1-woman c1-ANA1 cry.out COMP INTERJ 2SG do.COND
bvū-jòyc̀, ... wō t̄̄ wâ
c14-good ... 2SG come already.QP
'...that woman called out, "Oh! You-do-good..., have you already
come?"' What-goes-around.4.4

```

The interjection \(\mathfrak{\jmath}\) : in (8.38) expresses surprise, while ha̋y in (8.39) expresses frustration and general distress. This second one might be cognate with the Hausa word kai. Note that, while the text examples of these interjections show them reduplicated, non-reduplicated instances are common in natural speech.

\begin{tabular}{|c|c|c|c|}
\hline \(1 \bar{\varepsilon}\) & Ø-m̄fòn & wē-nè & g⿹̄龴:n-è \\
\hline COMP & c1-chief & c1-2sG.poss & wan \\
\hline
\end{tabular}
\begin{tabular}{lllll} 
k̄ & wù & jí & fī̀-kùg & fy-àn \\
\(\operatorname{COMP(K)}\) & 3SG & eat & c19-heart & c19-1SG.POSS.QP
\end{tabular}
'Oh, oh, my friend! Is it really true that your chief wants to eat my heart?'

Smart Monkey.1.11-12
\begin{tabular}{lllllllll} 
ha̋y & hảy & fī & ghá & wù, & wù & tū: & bớ: \\
INTERJ & INTERJ & c19 & surpass & 3sG & 3SG & carry & c2.child
\end{tabular}
'"Hey, hey!'" It (their illness) was beyond his ability to give aid, and he took them to a doctor. '

Example (8.40) illustrates the use of \(\overline{\mathbf{\jmath}} \mathbf{c h} \underset{\sim}{:}: ~(o r ~ \overline{\mathbf{\jmath}}\) chyé́: ) as an interjection, where it expresses a strong affirmation.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline (8.40) & ग̄chę́:, & \(\mathrm{m} \bar{\varepsilon}\) & lé & [bé & & chè & yí & yū & & ūnè] \\
\hline & true & 1SG.PRO & COP & with & & 9. medicine & c9REL & kill & & 8-rat \\
\hline
\end{tabular}
'In fact (or truly), I have medicine that kills rats.'
What-goes-around.3.2
This construction could also be viewed as an instance of verum focus, which is treated in §16.3.4.

\subsection*{8.4 Ideophones}

Ideophones have not been intensively researched. However, a few occurrences are observed in the text data, which are presented here. Ideophones are words that are iconic in some way, referencing not only an entity, but also some intrinsic quality of the entity. Or as Dingemanse put it, they are "DEPICTIONS" which encourage the hearer to experience "the scene depicted" by the predication (2012: 655).

Perhaps the most common and readily recognized examples of ideophones are onomatopoeic, mimicking the sound of the referent. Examples (8.41)-(8.43) illustrate this type of ideophone. The ideophone wáà in (8.41) is clearly not a lexical noun, but is simply a mimicked sound of something being poured. Example (8.42) presents a similar ideophone type, where the utterance of the word j́shīi is to a degree somehow representative of 'silence'.


Meanwhile the ideophone fini in (8.43) is clearly a lexical noun, but with idiophonic properties.

\footnotetext{
\({ }^{59}\) Noni has the cognate shùmm, apparently with the \([\mathbf{m}]\) lengthened.
}
\begin{tabular}{lllll} 
(8.43) & l \(\bar{\varepsilon}\) & fīi & yé & lēs-è \\
& SET & c9.air & c9REL & enter-PROG
\end{tabular}
'...so that air that was entering [the plane]...'
Training.1.14

In each of the above examples, the ideophone contains a long vowel. The vowel in fin 'air' in (8.43) is particularly long, measuring 0.35 ms , while long vowels typically measure around 0.25 ms . This word is also used to express that the weather is 'cold'. In this usage, the vowel is often "dragged" very long and with falling tone, finì 'It's very cold.' (presumably because the wind is blowing strongly). Note that the vowel of \(\mathbf{f i n}\) in other occurrences is consistent with typical long vowels, suggesting that the vowel length of ideophones can be varied for stylistic effect and/or expression of degree. (These long vowels are represented here in the orthography as double and triple vowels rather than utilizing the conventional long vowel representation \(\mathbf{v}\) : to reflect this characteristic of ideophone phonology.)

Ideophones may also in some way mimic the movement of the referent. The verb \(\bar{n} \mathbf{d} \bar{\varepsilon} n d \grave{\varepsilon}\) 'stumble' in (8.44) appears to be a reduplicated form that expresses a stuttering action, although the non-reduplicated source of the verb has not been identified.
\begin{tabular}{llllllll} 
wù & gè & bé & yè & kì-màǹ̀ & lē & b \(\varepsilon ́\) & kì-n-ch \(\bar{\varepsilon} \eta\) \\
3SG & P3 & \({ }^{\text {P }}\) COP & on & c7-doubt & APPL & with & c7-NMZR-soil
\end{tabular}
'He was confused and ill, and he stumbled outside...' Lake.6.4

Reduplicative morphology in ideophones is not unexpected, as Dingemanse points out that ideophones are "susceptible" to this type of "expressive morphology" (2012: 656). In addition, the reduplication here is consistent with that seen with certain Nchane infinitive verbs functioning as manner adverbs (see §9.4).

\subsection*{8.5 Quotable gestures}

This section presents a short description of what some researchers refer to as "quotable gestures" (see Kendon 2013: 12 for example). These are expressions accomplished through the use of a movement of a hand or some other physical gesture with semantic content. The text corpus has only a few examples, two of which are presented below in (8.45) and (8.46). Both of these examples contain the word né 'GEST', which is possibly derived from the adverbial pronoun nē 'like.this'.

In example (8.45), at the moment né was uttered, the speaker made a motion with his hand across his neck, mimicking the action of the knife cutting across the neck.
\(\left.\begin{array}{lllllll}\text { (8.45) } & \text { já } & \text { lò } & \text { chēgé, } & \text { m } \bar{\varepsilon} & \text { lé } & \text { mé } \\ & \text { leave.IMP } & \text { FOC } & \text { quickly } & 1 \text { SG.PRO } & \text { COP } & 1 \text { SG.PRO.FUT }\end{array}\right]\)

Example (8.46) is taken from a hortatory text in which a father is giving advice to his son before he is sent off to school in a village outside of the speaker's tribal area. Whether figuratively or literally, the father is holding out some money for the son to take as he says "né".
\begin{tabular}{llllllllll} 
(8.46) & né & kwà & kfū-nè & shēgē & nò & w̄̄ & gè̀: \\
& GEST & c3.value & c3-PRox & small & like.that & 2 2SG & go
\end{tabular}
'Here is a little money for you to go and start your stay with.'
School Advice. 6

\subsection*{8.6 Locational adverbs}

Intentional study of locational deictics has not been undertaken. Nevertheless, several locational adverbs are present in the data corpus, allowing for some analyses to be made. These adverbs usually occur immediately after the verb, but may also follow one of the postverbal constituents, such as an Object or Comitative Oblique. This section presents two different locational paradigms expressed through adverbs: place deixis and vertical deixis.

Place deixis expresses the notions of "here" and "there". The most common way of expressing the notion of "there" in the data corpus is through the locational pronoun f's, which is described in §7.2. This pronoun is coreferential with a location expressed through a prepositional phrase headed by the preposition f̀ ' \(a t\) '. It is likely that specific, referential locations are expressed in this way, while nonspecific location reference is made through one of the adverbs described below.

The adverb \(\mathbf{f} \overline{\mathbf{z}} \mathbf{n e}\) 'here' refers to a generic place and often is interpreted as the present location of the speaker. Its form suggests that it is derived from the proximal demonstrative marked with class 16 agreement. It is cognate with the Noni adverb fēn, which looks to be further along in the grammaticalization process. Examples (8.47) and (8.48) are given to illustrate the adverb's use.


The notion "here" may also be expressed through the adverb yānē, as seen in (8.49) and (8.50). The difference between the adverbs fēnē and yānē is not clear, although the form of this second adverb hints at a derivation from the proximal demonstrative marked with class 18 agreement. Therefore, in addition to proximity, yānē might encode the notion of "inside", which is associated with class 18 semantics. It is cognate with the Noni form jān.
\begin{tabular}{llllllll} 
m \(\bar{\varepsilon}\) & lé & b \(\varepsilon\) & màn-kàlà & yānē & à & kī-k \(\bar{\varepsilon}:\) & lē \\
1SG.PRO & COP & with & c6a-cassava.puff & here & in & c7-bag & APPL
\end{tabular}
'I have some cassava puffs here in [my] pocket...'
What-goes-around.7.6
\begin{tabular}{lllllllll} 
nnsā & y-ē & bí: & wù & lē & là:, & kì-fę̀: \\
c9.friend & c9-3SG.POSS & ask & 3SG & APPL & Q.COMP & c7-blind.man
\end{tabular}
'Her friend asked her, "(Does) this blind man also come here?"' What-goes-around.2.2

Example (8.51) shows yānē being used in opposition to the adverb yāl̄̄. The identical onsets indicate shared prefixes, again suggesting class 18 agreement. This "there" adverb does not appear elsewhere in the data corpus and no further analysis is available at this time.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline (8.51) & kī-ntűgè c7-hole & \begin{tabular}{l}
lé \\
COP
\end{tabular} & \[
\text { ā-bè-nt } \bar{\varepsilon} \mathrm{r}
\]
c18-1PL-n & \[
\begin{array}{ll}
\text { Enn } \bar{\varepsilon} & \text { kī } \\
\text { middle } & \text { co }
\end{array}
\] & כмP(К) & tá be.able & \[
\begin{aligned}
& \text { lò } \\
& \text { FOC }
\end{aligned}
\] & \\
\hline & \begin{tabular}{l}
Ø-mù \\
c1-person
\end{tabular} & \begin{tabular}{l}
g \(\varepsilon\) \\
NEG2
\end{tabular} & jā leave & yè yāl̄̄, on there & \[
\begin{aligned}
& \text { wú } \\
& 3 \mathrm{SG}
\end{aligned}
\] & tó come & \[
\begin{aligned}
& \text { yānē } \\
& \text { here }
\end{aligned}
\] & \begin{tabular}{l}
g ह̀, \\
NEG2
\end{tabular} \\
\hline & \begin{tabular}{l}
kī \\
COMP(K)
\end{tabular} & \begin{tabular}{l}
tá \\
be.able
\end{tabular} & \[
\begin{aligned}
& \text { lò } \\
& \text { FOC }
\end{aligned}
\] & \begin{tabular}{l}
\(\emptyset\)-mū \\
c1-person
\end{tabular} & \[
\mathrm{g} \dot{\varepsilon}
\]
NEG2 & jā leave & \begin{tabular}{l}
yānē, \\
here
\end{tabular} & \\
\hline & \[
\begin{array}{ll}
\text { wú } & \text { tó } \\
3 \mathrm{SG} & \text { com }
\end{array}
\] &  & \[
\begin{array}{ll}
\text { l } & \text { g̀̀ } \\
\text { re } & \text { NEG22 }
\end{array}
\] & & & & & \\
\hline
\end{tabular}
'There is a hole between us, so that a person cannot leave from there and come here, and cannot leave here and come there.' Richman. 17

Vertical deixis expresses the notions of "up" and "down". The adverb wē is often marked with class 16 agreement and usually follows the verb, as in (8.52). It is unknown if it can be marked with agreement for any class other than 16.
\begin{tabular}{llllllllll} 
(8.52) & bē & & jā & bè & bènと̀ & fè̀-wé & fè & Ø-nı̀ & lē \\
& 1PL & P3 & leave & 1PL & ascend & c16-up & at & c1-god & APPL
\end{tabular}
'...we left and climbed up toward heaven.' Training.1.13

It commonly appears, as in (8.53) and (8.54), without any class agreement.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (8.53) & Ø-jw & wù & já & wē & bé & Ø-kwè: & lād-è \\
\hline & c1-husband & 3SG & leave & up & with & c1-wife.3sG.poss & go.goal-PROG \\
\hline
\end{tabular}
'The husband got up with his wife, going [to the farm to work].'
Jealous Husband.3.3

The difference between the prefixed and nonprefixed forms is probably nuanced, with the prefixed form expressing movement as well as location.

While the adverb usually immediately follows the verb, it can also follow an
Object.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (8.54) & \begin{tabular}{l}
\(\emptyset\)-mū \\
c1-person
\end{tabular} & \begin{tabular}{l}
wù \\
c1AM
\end{tabular} & \[
\begin{aligned}
& \emptyset-\mathrm{n} \bar{~} \\
& \text { c1-god }
\end{aligned}
\] & \begin{tabular}{l}
wú-né \\
c1-PROX.FUT
\end{tabular} & \begin{tabular}{l}
chās \(\bar{\varepsilon}\) \\
raise
\end{tabular} & \begin{tabular}{l}
chyà̀: \\
c9.hand
\end{tabular} & \[
\mathbf{w e}
\]
up \\
\hline & 'This man & f god & ll rais & [his] hand up & & & Ma \\
\hline
\end{tabular}

The adverb \(\mathbf{f} \mathbf{\varepsilon}-\mathbf{k} \overline{\mathbf{u}}\) 'down' always appears marked with class 16 agreement and may immediately follow the verb or some postverbal constituent, as examples (8.55)-(8.57) show.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(8.55)} & \multicolumn{6}{|l|}{\(\begin{array}{lll}\text { Ø-jwḕ: } & \text { shī } & \text { fè-kū } \\ \text { c1-husband } & \text { sit } & \text { c16-down }\end{array}\)} \\
\hline & 'The hus & and sat & t down.' & & & Jealous Husband. 8 \\
\hline \multirow[t]{2}{*}{(8.56)} & \(\begin{array}{ll}\text { bā } & \text { shi } \\ \text { they } & \text { sit }\end{array}\) & \begin{tabular}{l}
-sh \(\bar{\varepsilon}\) \\
CAUS
\end{tabular} & \begin{tabular}{l}
fè -kū \\
c16-down
\end{tabular} & & & \\
\hline & \multicolumn{5}{|l|}{'...they put [the oil] down.'} & Making Palm Oil.1.9 \\
\hline \multirow[t]{3}{*}{(8.57)} & \(\mathrm{m} \bar{\varepsilon}\) & \(\overline{\mathrm{y}}\)-g \(\bar{\varepsilon}\) & yēn-é & bà-mì & 1 e & fè -kū \\
\hline & 1sG.PRO & 1SG-P3 & see-Prog & c2-person & APPL & c16-down \\
\hline & \multicolumn{6}{|l|}{'I was seeing people on the earth ...' Training.1.16} \\
\hline
\end{tabular}

Example (8.58) shows that multiple locational adverbs can occur in the same clause, although this is the only such example in the data corpus.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(8.58)} & g \(\varepsilon\) ' & fy- \(\bar{\varepsilon}\) : & fī-mì & jùmと̀ & \multicolumn{3}{|l|}{yú} \\
\hline & NEG2 & c19-thing & c19-some & \(\operatorname{COP}(\mathrm{N})\) & on.it & & \\
\hline & fí & ghàg-ē & bvù & & fēnē & fè-kū & g غ̀ \\
\hline & c19REL & surpass- & OOG c14- & arriage & here & c16-down & NEG2 \\
\hline
\end{tabular}
'...there is nothing greater than marriage here on earth.' Marriage.3.1

\subsection*{8.7 Temporal adverbial constructions}

Several different types of structures are used in expressing temporal information in Nchane sentences, ranging from simple nouns or adverbs to noun phrases with modifying relative clauses. Simple nouns and adverbs, serving as time adverbials are common in natural speech, where they usually appear in sentence-initial position. The time adverbials in the text data are primarily more complex structures. Some of these structures are presented below, with the temporal adverbial structure bolded.

Time adverbials often consist of a noun phrase with a time word like kīlūŋ 'year' as the head, as in (8.59) and (8.60).
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (8.59) & \begin{tabular}{l}
kī-lūy kí-mí \\
c7-year c7-some
\end{tabular} & \[
\begin{array}{ll}
\text { gè } & \text { bé } \\
\text { P3 } & { }^{\mathrm{P}} \mathrm{COP}
\end{array}
\] & \begin{tabular}{l}
Ø-jwènsè \\
c1-man
\end{tabular} & \begin{tabular}{l}
wū-mū \\
c1-some
\end{tabular} & b with & \\
\hline & \begin{tabular}{l}
Ø-kwè: \\
c1-woman.3sG.POSS
\end{tabular} & \begin{tabular}{l}
wú-mù \\
c1-some
\end{tabular} & \begin{tabular}{l}
bō \\
3pl.REL
\end{tabular} & \begin{tabular}{l}
kэ̄ŋ-ē \\
love-Prog
\end{tabular} & \begin{tabular}{l}
yé \\
c10.body
\end{tabular} & \begin{tabular}{l}
bá:y \\
much
\end{tabular} \\
\hline & 'A certain year (a very much.' & o), there & was a man & and wife \(w\) & ho loved e Jealous Hu & ach other band.1.1 \\
\hline (8.60) & bī-lūŋ̄ bí-dùlē c8-year c8-many & \begin{tabular}{l}
jít, \\
back
\end{tabular} & & & & \\
\hline & bì-X́ \(\mathrm{X} \bar{\varepsilon}\) lì: & j̀shyáy & yì bì-n & kānī lē & & \\
\hline & c2-X P3 enter & c9.land & c9am c2-N & N. APPL & & \\
\hline & 'Many years ago territory.' & the \(X\) p & people tres & passed (lit & entered) Land D & Nkanchi spute.1.2 \\
\hline
\end{tabular}

The time adverbial can also take the form of a prepositional phrase. In these constructions, the applicative postposition, which usually appears in prepositional phrases, is not present.

'On that one (day), we left, climbing toward heaven.' Training.1.13

The time adverbial in (8.62) appears to be a lexicalized clausal construction, consisting of bvū-chū yú 'c14-day kill'. \({ }^{60}\)

```

next.morning 1SG-take c8-teeth c8-ANA1 1SG-enter 1SG-put c9.house

```
'The next morning, I took that money (lit. teeth) and put it in my house.'
Fire.1.4-5

\footnotetext{
\({ }^{60}\) The root for 'day' has an unclear analysis, since its use as a time reference is limited. The word for 'day' when counting or referring to a certain 'day' is jú, which also means 'sun'. It is possible that the root chū actually means something like 'dark' or 'darken', which could explain its assignment to the abstract noun class 14 .
}

\section*{Chapter 9}

\section*{The verb and verb complex}

This chapter describes the formal characteristics of the Nchane verb and the verb complex. Verbal morphology is presented in \(\S 9.1\), followed by a discussion of the grammatical high tone clitic in \(\S 9.2\). This high tone clitic is associated with Imperative and Hortative constructions, as well as several of the preverbal elements of the verb complex, which are treated in §9.3. A group of postverbal particles, which I treat as adverbs, is described in §9.4. Section 9.5 deals with a small group of words that function similarly to the adverbs in \(\S 9.4\), but which differ from them in terms of formal properties and are thus more difficult to categorize. The chapter ends with a presentation of attributive verbs in §9.6.

The term 'auxiliary' is conventionally used as a label for verbs and verb-like words that are used in a secondary fashion, adding grammatical information to the verbal expression, such as tense or aspect. I use the term in this work as a means of grouping together a set of words that occur in the preverbal position of the verb complex. While many of these words are clearly related to active main verbs, the sources for several of them have not been identified.

Below is a generalized schema of the verb complex, where SM refers to subject agreement.
[AUXILIARY SM-VERB-suffix ADVERB] VERB COMPLEX

\subsection*{9.1 Verbal morphology}

This section discusses the form of Nchane verbs, including the few affixes observed in the data. About half of Nchane verb roots are monosyllabic, with the majority of these roots having a CV or CGV syllable shape. Verbs with disyllabic roots include a significant number with obvious or suspected verbal extension remnants. Thus, it is reasonable to conclude that Nchane verbs have a preference for monosyllabic roots.

Nchane verbs are relatively simple in their morphology, as seen in all Beboid languages. The only prefix that is possible is subject agreement. Suffixes are also relatively limited, with apparently just one suffix slot available. This slot may be occupied by the Progressive suffix, the Distributive suffix or the Causative suffix. Verbs may be marked with Progressive and Distributive simultaneously, but the two suffixes fuse into a single suffixal form, thus occupying a single suffix position. More details are given in the sections below.

\subsection*{9.1.1 Subject agreement}

As mentioned above, the only verb prefix observed is subject agreement. Although only first-person singular subjects are phonologically bound, and thus morphological elements of the verb, subject agreement as a category is discussed here, since the bound and unbound forms occur in the same positions relative to other elements of the verb complex, as well as generally functioning in the same way.

In canonical sentences, all verbs and verb-like words (i.e., auxiliary verbs) usually require a preceding subject element. The subject noun phrase precedes the initial verbal element, whether that is the main verb or an auxiliary verb. When the verb complex contains multiple verbs or auxiliary verbs in addition to the main verb, then each verbal element following the initial verbal element is usually preceded by a subject agreement marker. This pattern of subject agreement is illustrated in (9.1), which has a full noun subject and (9.2), which has a pronoun subject.


What-goes-around.9.10
\begin{tabular}{llllll} 
wù & m & wù & bús \(\bar{\varepsilon}\) & \(\overline{\mathrm{m}}\)-bà: & fó, \\
3SG & RES & 3SG & remove & c6a-soup & there
\end{tabular}
'She just removed soup from there (the leaf)...' Jealous Husband. 13

First-person singular subject agreement is realized as a homorganic nasal and is distinguished from other subject agreement forms in at least three ways:

First, it appears to be a reduced form derived from the unbound first-person singular pronoun \(\mathbf{m} \bar{\varepsilon}\), which is glossed as '1SG.PRO' to differentiate it from the
reduced, subject agreement form ' 1 SG '. In contrast, the other agreement forms appear to be unreduced, being segmentally identical to their pronominal counterparts, such as postverbal pronouns and relativizers.

Second, first-person singular subject agreement is phonologically bound to the main verb and verb auxiliaries, while the other subject agreement forms are unbound.

Third, they have a wider distribution than other subject agreement markers, usually occurring on the first verbal element of the verb complex, even when a full subject pronoun is present. The contrastive behavior is illustrated in (9.3), which has a first-person singular unbound pronoun and subject agreement, and (9.4), which has only a third-person singular unbound pronoun preceding the main verb and no subject agreement.
\begin{tabular}{llllll}
\(m \bar{\varepsilon}\) & \(\overline{\mathfrak{y}}-\mathrm{g} \bar{\varepsilon}:\) & à & màn-kàlà & mā- \(\overline{\mathrm{a}}\) & lē \\
1SG.PRO & 1SG-put & in & c6a-cassava.puff & c6a-ANA1 & APPL
\end{tabular}

> '...I put [the poison] in the cassava puff.' What-goes-around.9.14
(9.4) wù g \(\bar{\varepsilon}\) à \(\emptyset\)-ŋkà: lē
3SG put in cl-basket APPL
'...she put [the fufu] in a basket.' Jealous Husband.3.1

This wider distribution pattern extends to constructions with the P3 marker (see example (9.15)), with the homorganic nasal prefixing both the P3 marker and the main verb that follows. As will be pointed out in §9.3.1, the P3 marker is usually not followed by subject agreement marking other than first-person singular subjects.

The first-person singular subject agreement prefix might be considered a clitic. In fact, a similar homorganic subject marker is treated as such in nearby Mundabli (Voll 2017: 56-7). Its reduced form and the fact that it has word-like functions but phonological characteristics of an affix are consistent with the description of clitics given by Spencer and Luís (2012). Additional support for this analysis would seem to be its inclusion in a subject agreement system where all the other members are unbound forms. However, the prefix analysis is maintained, given that it is supported by the syntax, with the homorganic nasal occurring multiple times, marking agreement on verbs and auxiliary verbs.

A final comment to be made regarding subject agreement has to do with the numerous iterations of subject marking in Nchane clauses. It seems that most verbal elements, including auxiliaries which express tense and aspect, as well as the main verb, must be preceded by a subject element. Multiple subject marking such as this can be referred to as "Hyperagreement" (see for example Carstens 2011).

As stated above, subject agreement forms other than first person singular for Nchane are segmentally identical to pronominal forms. \({ }^{61}\) Therefore, sentences which contain a single lexical verb and one or more auxiliaries are syntactically similar if not identical to those which contain multiple lexical verbs such as conjoined clauses and serial verb constructions. Consequently, for the most part, the current analysis makes no distinction between "subject pronouns" and "subject agreement markers".

\subsection*{9.1.2 Progressive}

Non-progressive/Progressive is the primary aspectual distinction made in Nchane, with all main verbs expressing one of these aspects. Non-progressive aspect is perfective in nature and has zero marking, as in example (9.5). Progressive aspect is an imperfective aspect and expresses an action that is in process. It is indicated by the suffix -é, as illustraed in example (9.6). Note that the nasal vowel of the verb in (9.5) is realized as VN when the verb is marked with the progressive suffix as in (9.6).

'She cooked (by stirring) food.' (just now)
\begin{tabular}{lll} 
wù & k \(\overline{\text { en -é }}\) & bvū-lę: \\
3SG & stir-PROG & c14-food
\end{tabular}
'She is cooking (or stirring) food.'

The high tone of the Progressive suffix is realized as a low tone whenever certain high-toned grammatical elements precede it in the clause, as demonstrated in example (9.7). See \(\S 9.2\) for a discussion of this phenomenon.
\begin{tabular}{lllll} 
j̀jì & lé & wú & fō:s-è & bī-gè \\
N. & COP & 3sG.FUT & borrow-PROG & c8-teeth
\end{tabular}
'Nji will be borrowing money.' (lit. teeth)

There are three different realizations of the Progressive suffix, depending on the syllable shape of the verb. Verbs with the syllable shapes CV and CVN (which are phonemically the same) take the suffix -é, as shown above. The suffix is realized through vowel ablaut in verbs with CVCV shape. These verbs almost exhaustively

\footnotetext{
\({ }^{61}\) Segmentally distinct subject agreement forms for \(2 \mathrm{SG}(\overline{\mathbf{a}})\) and \(2 \mathrm{PL}(\mathbf{m} \overline{\boldsymbol{\varepsilon}})\) were initially identified in two separate texts. Subsequently, these forms were rejected by language consultants, who replaced them with the pronominal-like forms ( \(\mathbf{w} \overline{\boldsymbol{\jmath}}\) and \(\mathbf{b} \overline{\boldsymbol{\varepsilon}} \boldsymbol{\jmath}\) respectively). It is probable that these distinct agreement markers represent older forms that have largely fallen into disuse.
}
have a final \(\boldsymbol{\varepsilon}\) which alternates with \(\mathbf{e}\) when in the progressive form. This vowel alternation is illustrated in (9.8), with the verb lēg \(\bar{\varepsilon}\) 'run'.
\begin{tabular}{llll} 
l \(\bar{\varepsilon}\) & b̄̄ & lēg-é & \(\emptyset^{\star}{ }^{\star}\) kfúlá \\
COMP & 3PL & run-PROG & c1-hyena
\end{tabular}
'...[they saw] that they (the people of that village) were fleeing from a hyena.' Inheritance. 8

The third progressive marking strategy is observed in verbs with CV shape. These verbs often form Progressive by copying the vowel and taking a H tone (with the original verb tone presumably deleted), as seen in (9.9) with the verb bì 'follow'.
\begin{tabular}{lllll} 
j̀jì & g \(\bar{\varepsilon}\) & bí-í & wù & lē \\
N. & P3 & follow-PROG & 3SG & APPL
\end{tabular}
'Nji was following him.'

The different progressive marking strategies are summarized in Table 9.1.
\begin{tabular}{|c|c|c|c|c|}
\hline Strategy & Syllable shape & Non-progressive & Progressive & Gloss \\
\hline \multirow[t]{4}{*}{-é} & \multirow[t]{2}{*}{CV} & k \(\overline{\text { ® }}\) : & k \(\overline{\text { né }}\) & stir \\
\hline & & fวิ: & fōné & sharpen \\
\hline & \multirow[t]{2}{*}{CVN} & tón & tóné & fry \\
\hline & & \(1 \varepsilon\) ¢ & l̄̄né & work \\
\hline \multirow[t]{2}{*}{\(\varepsilon \rightarrow\) é} & \multirow[t]{2}{*}{CVCV} & kémè & kéme̋ & have \\
\hline & & jījè & jījé & look \\
\hline \multirow[t]{2}{*}{\(\mathrm{V} \rightarrow \mathrm{V}\) :} & \multirow[t]{2}{*}{CV} & bì & bí: & follow \\
\hline & & ná & ná: & give \\
\hline
\end{tabular}

Table 9.1 Summary of Progressive marking strategies.

Many CV verbs do not form Progressive by vowel copying, but follow the strategy of CV and CVN verbs, taking the progressive suffix -é. Example (9.10) illustrates this alternative for the CV shaped verb \(\mathbf{f} \bar{\varepsilon}\) 'make'.
\begin{tabular}{lllllll} 
Ø-gvúnē & \(\ldots\) & chì & bā & fèll-é & bī-tēgē & yū \\
c5-palm.chaff & \(\ldots\) & c5REL & they & make-PROG & c8-pillow & on.it
\end{tabular}
'...palm chaff, ...that people are making pillows with ...'
King of Trees.1.3

In these cases, I assume that a suppressed \(\mathrm{C}_{2}\) is realized, revealing an older form of the verb stem. Support for this hypothesis is found in the verb bífé 'ask' from
the neighboring Noni language, whose progressive form is bi:te. Compare these forms with bî: and bíde̋, the Nchane forms of the same verb. \({ }^{62}\) The crucial element in the comparison is the CVCV shape of the non-progressive form of the Noni verb, suggesting that the protoform likely had a second consonant in the non-progressive form. The result of this alternative Progressive marking strategy for CV verbs is that it is often unpredictable what the surface form of the progressive verb form will take based on the perfective form of a verb.

Table 9.2 gives examples of verbs in their non-progressive and progressive forms, organized by tone group. The Non-progressive forms are given in their utterance-final form, which often results in the tone of H and M verbs being realized with a falling contour. In sentence internal context, these verbs are usually realized as level H or M tones respectively, although the contour tone of disyllabic M nouns is usually maintained in this context as well.
\begin{tabular}{|c|c|c|c|}
\hline Tone group & Non-progressive & Progressive & Gloss \\
\hline \multirow[t]{9}{*}{H} & bî: & bíde̋ & ask \\
\hline & kô: & kó:le̋ & catch \\
\hline & bíy & bíne̋ & dance \\
\hline & tóy & tóne" & fry \\
\hline & téy & téne" & call \\
\hline & kémè & kéme̋ & have \\
\hline & kwé & kwé: & die \\
\hline & yú & yú: & kill \\
\hline & ná & ná: & give \\
\hline \multirow[t]{8}{*}{M} & bō & bōgé & descend \\
\hline & chū & chūlé & ignite \\
\hline & fwè: & fwē:dé & burn \\
\hline & kè: & k \(\bar{\varepsilon}\) :né & stir \\
\hline & yãy & yāné & vomit \\
\hline & sùy & sūyé & beat \\
\hline & lèy & lēné & work \\
\hline & jīņ & jīné & look \\
\hline \multirow[t]{2}{*}{L} & bì & bí: & follow \\
\hline & jù & jú: & fight \\
\hline
\end{tabular}

Table 9.2 Utterance final perfective and progressive forms of selected verbs.

The data shows possible complementary distribution between the M and L groups, with M verbs having CVC-V progressive forms and L verbs CV-V. More research

\footnotetext{
\({ }^{62}\) Note that Noni is observed to have a fecte alternation for a small number of verbs having the shape CVfs (see Hyman (1981: 47)). No attempt is made to explain the role of the consonants in this alternation.
}
would be needed to verify that these results are not an artifact of the limited number of \(L\) verbs in the data.

Note that speakers sometimes perceive the \(\mathrm{V}_{1}\) in progressive forms with CVC-V realizations as long, even though the duration is usually of "normal" short length or what might be described as half-long. I have chosen not to represent this perceived length in the examples. Also note that the H of the progressive is usually realized as SH when the progressive form has a CVC-V shape and the verb is a H verb. I suggest that the Progressive H is realized as SH in this context in order to maintain contrast in the tonal environment.

There are numerous exceptions to the generalized presentation of Progressive marking presented in this section. For example, in Table 9.2 we see that the progressive form for the H verb th' 'come' does not have a surface H tone as we expect. The verb otherwise appears to behave as a H tone verb. No satisfactory explanation is available. In addition, the verb kwé 'die' appears to have the same form for Non-progressive and Progressive. One possible explanation for this is that the CGV shape is less open to vowel copying, but this is unconfirmed. Another possible explanation for unexpected Progressive forms is competing strategies, as is observed for some verbs. For example, the verb jù 'fight' has two alternate progressive forms, jú: and jùdé. And as mentioned above, some speakers percieve vowel length when others apparently do not.

\subsection*{9.1.3 Distributive}

Another verb suffix is the Distributive -y \(\grave{\varepsilon}\), illustrated by the elicited paradigms in (9.11) and (9.12), which give the non-suffixed form for comparison. The meaning added by the suffix is usually either "one-after-another" or "successive times", with the context helping the hearer to arrive at a proper interpretation. These examples also demonstrate that the distributive suffix fuses with Progressive marking, resulting in the form -yí.
```

a. tádà g\overline{\varepsilon}}\mathrm{ sर亠: Ø-bīlilkán
T. P3 cut c1-papaya

```
'Tada cut the papaya (once).
b. tádà \(\mathrm{g} \bar{\varepsilon} \quad \mathrm{s} \bar{\varepsilon}\) :-y \(\varepsilon \quad\) Ø-bīlīkán
T. P3 cut-DISTR c1-papaya
'Tada cut the papaya (into pieces).
c. tádà \(\mathrm{g} \bar{\varepsilon} \quad \mathrm{s} \bar{\varepsilon}:-\mathrm{yí} \quad \emptyset\)-bīlīkán
T. P3 cut-DISTR.PROG c1-papaya
'Tada was cutting the papaya (into pieces).
```

a. jā\eta g
c9.rain P3 drop
'The rain dripped (one drop).'
b. jā\eta ché:n-yí lo
c9.rain drop-dISTR.PROG FOC
'The rain is dripping.'

```

This suffix is not very common in the data corpus and elicitation efforts reveal that the extension is not productive, with only a small number of verbs identified which can take it. Examples (9.13) and (9.14) come from the text corpus and reveal that slightly different interpretations of distributive action are possible through -yè. My language consultants informed me that the sentence in (9.13) is interpreted as successive actions. The sentence would still be grammatical without DISTR, but the extension apparently brings focus to the act of dying of each individual child, following their ingestion of poison. \({ }^{63}\)
(9.13) \begin{tabular}{llllll} 
bহ̄: & bā-ā & \(g \bar{\varepsilon}\) & kwē-ỳ̀ & bā-chī \\
c2.child & c2-ANA1 & P3 & die-DISTR & c2-all
\end{tabular}
'...all those children died (one after another).' What-goes-around.10.1

A slightly different interpretation is called for in example (9.14), where the Distributive functions in describing the use of rat poison. The "medicine" is presumably commonly used by many individuals to kill many rats.
\begin{tabular}{lllllll} 
(9.14) & \begin{tabular}{l} 
nchè, \\
c9.medicine
\end{tabular} & yī & c9REL & bā & yú-yí & bī-kfūnè \\
& kill-DISTR.PROG & c8-rat & yú \\
& & on.it
\end{tabular}

\footnotetext{
\({ }^{63}\) Noni (Hyman 1981: 36) and Mungong (Boutwell 2014b: 31-2) are both observed to also have a distributive extension, the forms being -y \(\boldsymbol{\varepsilon}\) and -shə respectively. In both of these Beboid languages, they are reported to express pluractionality, with either multiple agents carrying out an action or with one agent carrying out an action multiple times. In addition, in both languages a secondary sense of the extension is completeness, where the action is repeated to the point where the action cannot be carried out again (e.g., completely cutting something up). This sense is unconfirmed for the Nchane Distributive. In neither Noni or Mungong is successive action observed as a part of the extension's semantics.
}

Disyllabic verbs taking the extension have not been observed. Therefore, it is unknown how the Distributive and Progressive suffixes would behave in such a context.

\subsection*{9.1.4 Causative}

The status of -se, the Causative suffix, in Nchane is tenuous. A few nearby languages have been documented as having an active Causative extension. These include Limbum (Fransen 1995: 205) and fellow Beboid language Noni (Hyman 1981: 38), although these descriptions are from 20-30 years ago, and it is possible that the suffix is no longer active in these languages. Recent works in the nearby Yemne-Kimbi languages do not observe an active Causative suffix. Aghem was observed to have a decaying Causative (Anderson 1979: 81). The Causative in Nchane is likely in a similar state, evidenced primarily in a number of lexicalized forms given in Table 9.3, which also includes potential candidates for the original source of the stems when possible.

The variable tone observed on the grammaticalized suffixes in the table has several possible explanations. Some of these word forms might not really have a historical Causative suffix, although the semantics of most is suggestive of a such an analysis. Another possible explanation is that the variable tone represents different degrees of lexicalization. As will be shown below, the active suffix itself does not present with a consistent suffixal tone. Therefore, it is not possible to confidently posit a tone for the current Causative suffix or its previous form.

A small number of causative verbs in Table 9.3 present with word-final she rather than \(\mathbf{s \varepsilon}\). These words might represent cases of Distributive-Causative fusing, similar to what is observed with co-occurrences of Distributive and Progressive marking (see §9.1.3), but involving lenition of the Causative consonant and no change to the vowel. Such a hypothesis seems appropriate in view of the semantics of some of these derived forms. For example, the causative verb "spill" could be interpreted as multiple instances of "pour".
\begin{tabular}{|c|c|c|c|}
\hline Stem & Gloss & Causative form & Gloss \\
\hline -- & -- & bāŋss̀ & 'stumble' \\
\hline -- & -- & bว̄nsć & 'groan' \\
\hline bīy & 'dance' & bēnsć & 'roll' \\
\hline bú & 'exit' & būs \(\bar{\varepsilon}\) & 'remove' \\
\hline dáy & 'jump' & dānsć & 'spread' (e.g., fire) \\
\hline -- & -- & \(\mathrm{j} \bar{\varepsilon} \mathrm{s} \bar{\varepsilon}\) & 'praise' \\
\hline jí & 'curse' & jī̀s̀ & 'annoy' \\
\hline f \(\bar{\varepsilon}\) & 'pass' & f \(¢\) s \(\varepsilon\) ¢ & 'arrive' \\
\hline -- & -- & fyēn \(\mathrm{s} \bar{\varepsilon}\) & 'resemble' \\
\hline -- & -- & fīns \(\varepsilon^{\prime}\) & 'mix' \\
\hline -- & -- & fīs \(\varepsilon\) & 'twist' \\
\hline -- & -- & fōs & 'borrow' \\
\hline fū & 'pour' & fūshē & 'spill' \\
\hline -- & -- & \(\mathrm{g} 9 \mathrm{~s} \bar{\varepsilon}\) & 'grind' \\
\hline gù \({ }^{64}\) & 'buy' & gīs \(\bar{\varepsilon}\) & 'sell' \\
\hline y \(\overline{\widetilde{c}}\) & 'see' &  & 'uncover' \\
\hline -- & -- & yísć & 'fill' \\
\hline ká & ITER & kásè & 'return' \\
\hline -- & -- & k⿹̄¢¢ \(\underbrace{\text { ć }}\) & 'awaken' \\
\hline -- & -- & kōs \(\bar{\varepsilon}\) & 'barter' \\
\hline -- & -- & kūs \(\bar{\varepsilon}\) & 'alter' \\
\hline \(1 \bar{\sim}\) & 'hurt' & lāysc̀ & 'wound' \\
\hline -- & -- & \(1 \bar{\varepsilon} s{ }^{\text {c }}\) & 'disappear' \\
\hline lé & 'enter' & lésé & 'dress' \\
\hline -- & -- & māsè & 'admire' \\
\hline -- & -- & \(\mathrm{m} \bar{s} \varepsilon^{\prime}\) & 'complete' \\
\hline shī & 'sit' & shīshé & 'lower' \\
\hline -- & -- & tāshē & 'add, join' \\
\hline -- & -- & chīns \(\varepsilon\) ¢ & 'send' \\
\hline
\end{tabular}

Table 9.3 Possible lexicalized Nchane causatives.

As eluded to above, while the Causative does not appear to be a productive verbal extension in Nchane, there are two clear examples of a Causative suffix in the text corpus, given in (9.15) and (9.16). In these cases, the Causative allows for the verb to take an Object complement. \({ }^{65}\)

\footnotetext{
\({ }^{64}\) This verb is realized utterance finally with a falling \(L\) tone.
\({ }^{65}\) In example (9.15), the Object "airplane" is inferable and, therefore, omitted as described in §11.1.1.
}

'As we were coming back from Nfume, I said to the pilot that he should reduce the height so that I could greet my children at the farm.' Training.1.17

'...they add cold water to cool the oil.' Making Palm Oil.1.10

Note that example (9.15) is somewhat remarkable as, in addition to the Causative extension, it utilizes the verb \(\mathbf{f} \overline{\boldsymbol{\varepsilon}}\) 'make', which is how causative constructions are routinely formed, which is illustrated in (9.17).
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (9.17) & Ø-sōŋ̄ & fí-í & kì & chī & f : & jàn & \\
\hline & c5-oil.palm & help-PROG & \(\operatorname{COMP}\) (K) & c5 & make & c9.rain & come \\
\hline
\end{tabular}
'Palm trees help to make the rain come.'
King of Trees.1.7

\subsection*{9.2 The Irrealis/Imperfective \(\mathbf{H}\) tone}

As observed in §9.1.2, the high tone associated with the Progressive suffix is usually unrealized on that suffix whenever it is preceded by certain high-toned elements. This phenomenon is restricted to specific grammatical markers and/or constructions, such that it is better explained as a result of a grammatical high tone clitic rather than a tonological process.

Irrealis as a grammaticalized category is not widely reported among the languages of the area (although it is observed for nearby Mungbam (Lovegren 2013: 188) where it is argued for based on the tonal behavior of certain conjugations). Nevertheless, this high tone clitic can be described as expressing something
approaching Irrealis mood, while also characterizing Imperfective constructions. The relationship between Irrealis and Imperfective is perhaps derived from both categories expressing incomplete, and therefore unrealized, predications. A connection between the two is recognized in other languages (see for example Fleischman 1995), and appears to be dictated by the facts of Nchane grammar, which are presented below.

To illustrate the behavior of this grammatical tone, a paradigm is presented in Table 9.4 consisting of five different conjugations of verbs from each of the tone groups ( \(\mathrm{H}, \mathrm{M}\) and L ). The morpheme on which the grammatical H tone is realized is bolded for illustration purposes. The P0 forms serve as a base for comparison. With each verb, the Progressive suffix of the indicative Progressive forms have a high tone. The high tone is realized on the verb in the Imperative conjugation. \({ }^{66}\) The subject element to the left of the verb is realized with the high tone to indicate Hortative mood. In Hortative-Progressive conjugations, the subject is again realized with the high tone, but the Progressive suffix has a low tone. \({ }^{67}\)
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{Example} & Free translation & Verb form \\
\hline jí & (H verb) & & \multicolumn{2}{|l|}{eat} \\
\hline w \(\bar{\square}\) & jí & fī-mbì & You ate a kola nut. & P0 \\
\hline wō & jí-í & fî-mbì & You are eating a kola nut. & \({ }_{\text {PROG }}\) \\
\hline & \(\uparrow\) jí & fī-mbì & Eat a kola nut! & IMP \\
\hline wó & jí & fī-mbì & You should eat a kola nut. & HORT \\
\hline wó & ji-ì & fī-mbì & You should be eating a kola nut. & HORT-PROG \\
\hline k \(\bar{\varepsilon} \mathrm{m}\) ¢̀ & \multicolumn{2}{|l|}{(M verb)} & \multicolumn{2}{|l|}{have} \\
\hline wō & k \(\overline{\mathrm{c}} \mathrm{\Sigma}\) ¢ & bī-gè & You had money. & P0 \\
\hline wō & kém-é & bī-gè & You are having money. & PROG \\
\hline & kémé & bī-gè & Have money! & IMP \\
\hline wó & kēmと̀ & bī-gè & *You should have money. & HORT \\
\hline wó & k \(\mathrm{\varepsilon} \mathrm{~m}\)-è & bī-gè & You should be having money. & HORT-PROG \\
\hline gù & \multicolumn{2}{|l|}{(L verb)} & \multicolumn{2}{|l|}{buy} \\
\hline wō & gù & fî-mbì & You bought a kola nut. & P0 \\
\hline wō & gūd-é & fī-mbì & You are buying a kola nut. & PROG \\
\hline & gú: & fî-mbì & Buy a kola nut! & IMP \\
\hline wó & gu & fī-mbì & You should buy a kola nut. & HORT \\
\hline wó & gūd-è & fî-mbì & You should be buying a kola nut. & HORT-PROG \\
\hline
\end{tabular}

Table 9.4 Realization of grammatical tone in \(\mathrm{H}, \mathrm{M}\) and L tone verbs in clauses with expressions of modality.

\footnotetext{
\({ }^{66}\) The \(\uparrow\) symbol on the Imperative \(H\) verb indicates that the register is raised in order to accommodate the H Imperative marking on a lexically H verb.
\({ }^{67}\) The non-progressive hortative form for 'have' is ungrammatical, presumably due to a semantic constraint.
}

This paradigm is representative of how the grammatical high tone behaves in various constructions in which a verb with a Progressive suffix is realized with low tone rather than a high tone. The markers and constructions displaying this behavior, and therefore believed to be associated with the grammatical H, are Future, Hortative, Habitual, Durative, Situative, Still, and Iterative. Other constructions which likely involve this high tone clitic are Imperative and Conditional. \({ }^{68}\) Furthermore, sentences with multiple Progressive verbs show that only the Progressive suffix of the first verb is realized with a high tone, while the remaining verbs have a low tone on the suffix, as illustrated in (9.18).
\begin{tabular}{llllll} 
bó & g \(\bar{\varepsilon}\) & láy-é & bó & yén-è & bà- \(\mathfrak{y k e ̈ ,}\) \\
3PL & P3 & rejoice-PROG & 3PL & sing-PROG & c2-song
\end{tabular}
\begin{tabular}{lll} 
bó & bín-è & \(\emptyset\)-bỉne̋ \\
3PL & dance-PROG & c5-dance
\end{tabular}
'They were rejoicing, singing and dancing., 69
Lake.5.3

The reader is encouraged to be mindful of the grammatical H tone clitic and its association with the various markers listed above, most of which are presented in §9.2. No generalized glossing is used for indicating the H clitic, since this would not be very helpful in indicating the specific functions of each marker or construction type. Instead, glossing is provided for individual moods and aspects. The remainder of this section describes Imperative constructions and Hortative constructions, both of which are expressed through the grammatical H tone by itself, without segmental marking.

\subsection*{9.2.1 Imperative}

Commands are formed by a H tone placed on the verb, as in (9.19) and (9.20). The underlying form of the verb in (9.19) is \(\mathbf{j} \overline{\mathbf{x}}\) and that for the verb in (9.20) is chūgè. As mentioned above, if the verb is disyllabic, then the H tone associates with both syllables of some verbs, but only with the ultimate syllable of other verbs, as is the case in (9.20). No explanation for this variation is available. Another unexplained peculiarity is that the vowel of some monosyllabic verbs lengthens in the Imperative

\footnotetext{
\({ }^{68}\) The Progressive suffix in conditional constructions are sometimes observed with a low tone. But other times it appears that the conditional high tone is realized at the clause level, with various elements of the clause having a high tone and/or a higher tonal register. In the few instances of this in the data corpus, the tone on the Progressive suffix is sometimes high as well. See \(\S 13.2 .4\) for a description of Conditional constructions.
\({ }^{69}\) The clause bj́ bínè bïne̋ illustrates the occurrence of a cognate deverbal noun object, which has been argued as evidence in other languages that there are no true intransitive verbs. However, it is more likely for Nchane that a number of verbs which are often intransitive in English, like 'dance' and 'sing', are usually or even strictly transitive. There are plenty of Nchane verbs which present as intransitive (e.g., 'cry', 'sleep' 'die' and 'breathe').
}
form. One possible explanation for this lengthening is that these verbs were formerly disyllabic.
\begin{tabular}{|c|c|c|c|c|c|}
\hline (9.19) & \begin{tabular}{l}
jó: \\
take.IMP
\end{tabular} & \begin{tabular}{l}
mw- \(\bar{\varepsilon}\) : \\
c18a-thing
\end{tabular} & \[
\begin{aligned}
& \text { mw-òn } \\
& \text { c18a-2sG.POSs }
\end{aligned}
\] & \begin{tabular}{l}
mū-chī \\
c18a-all
\end{tabular} & \multirow[b]{2}{*}{Two Wives.7.2} \\
\hline & \multicolumn{3}{|l|}{'Take all your things...'} & & \\
\hline \multirow[t]{2}{*}{(9.20)} & \begin{tabular}{l}
chūgé \\
wash.IMP
\end{tabular} & \begin{tabular}{l}
chyâ: \\
c10.hand
\end{tabular} & & & \\
\hline & 'Wash & ur) hands & & & Jealous Husband. 9 \\
\hline
\end{tabular}

While the examples above have no preverbal nominal element, it is not uncommon for commands to have a second-person pronoun preceding the verb, as illustrated in (9.21), which has the ML verb kj̄:.
\begin{tabular}{llll} 
(9.21) & w̄̄ & kó: & ýǵ́ \\
& 2 SG & catch.IMP & c10.termite
\end{tabular}
'You, catch termites.'

Despite the free translation, this does not appear to be a vocative imperative expression, since there is usually no pause between the pronoun and the verb. One also can see that the tone realized on this nominal element is the same as that for typical preverbal pronouns. More study is needed to determine what motivates the presence or absence of the pronoun, and what difference, if any, exists between the two imperative varieties.

\subsection*{9.2.2 Hortative}

Expressions of the speaker's desire and/or obligation are accomplished through the addition of a high tone clitic that associates with the subject element to the left of the verb. This is illustrated in examples (9.22)-(9.24), with the element associated with the high tone clitic bolded. In (9.22), the high tone is realized on the normally mid-toned 2 SG pronoun.
\begin{tabular}{lllll} 
(9.22) & wó & bī & wù & lē \\
& 2SG.HORT & follow & 3SG & APPL \\
& You should follow him.'
\end{tabular}

Examples (9.23) and (9.24) show that the Hortative H tone is realized as a SH tone when the subject element is lexically H , represented in these examples by the nouns chíjī and kwēsé respectively. The realization of the SH on the predicate
adjective element in example (9.24) is somewhat unexpected and I have no good explanation for this occurrence. Note further the SH tone realized on the class 1 relativizer, which is underlyingly M or H .
\begin{tabular}{|c|c|c|c|c|c|}
\hline (9.23) & \(1 \bar{\varepsilon}\) & Ø-chíjī & bó & & chègē \\
\hline & COMP & c1-father.Hort & c1.3PL.poss & come & quickly \\
\hline & & d] that their & er should & me q & ckly...' \\
\hline
\end{tabular}

What-goes-around.9.4
\begin{tabular}{lllll} 
w \(\bar{\jmath}\) & wű & \(\emptyset\)-kw \(\bar{\varepsilon} s e ̋\) & ká & l̄ \\
2SG & c1REL & c1-woman.HORT & promise & COMP
\end{tabular}
'You the girl should promise that...'
Marriage.5.4

Example (9.25) shows that the H tone clitic occurs on the subject pronoun as well as the subject agreement marker, with the Resultative marker m̄̄ intervening. It also shows that the H tone associated with Progressive aspect is changed to a L tone when the clause is marked with Hortative H tone. This alternation apparently has no effect on the Hortative H tone realized on the subject. This alternation is further illustrated in examples (9.26) and (9.27).
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(9.25)} & wú & mう̄ wú & & tádà & lē \\
\hline & 3sG.HORT & RES 3SG & follow-PROG & T. & APPL \\
\hline & \multicolumn{5}{|l|}{'He should just be following Tada.'} \\
\hline \multirow[t]{3}{*}{(9.26)} & wó & bì-ì & wù lē & & \\
\hline & 2SG.HORT & follow-PROG & G 3SG APPL & & \\
\hline & \multicolumn{5}{|l|}{'You should be following him.'} \\
\hline \multirow[t]{3}{*}{(9.27)} & bén & gè-è̀ la & \multicolumn{3}{|l|}{kì-y-kı̀ \({ }^{\text {ex }}\)} \\
\hline & 2PL.HORT & do-Prog Co & \multicolumn{3}{|l|}{c7-NMZR-want} \\
\hline & 'You sho & be showing & ng love...' (lit & ou s & ould b \\
\hline
\end{tabular}

\subsection*{9.3 Preverbal elements}

The verb complex includes a position to the left of the main verb. This "slot" may be occupied by one of several words, each dealing in some way with the temporal situation of the predication. These include tense markers and aspectual markers, each of which are discussed in the sections below. As mentioned in §9.1.1, subject
agreement is usually observed between the various auxiliaries and the main verb. Exceptions are noted in the relevant sections below.

\subsection*{9.3.1 Tense}

Non-future tense expression is accomplished through various tense particles, or auxiliary verbs, which precede the main verb. Future tense is realized as a high tone clitic as well as a copula. Table 9.5 presents a frame to illustrate the tenses, where the main verb is given in its non-progressive form. The same paradigm is possible using a progressive verb, with the tense elements identical in both cases.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Tense & \multicolumn{4}{|l|}{Example} & & Time Frame \\
\hline P0 & wù & & & jí & bvū-1̌̃: & just now or not specific \\
\hline P1 & wù & bé & wū & jí & bvū-lę̃: & some hours ago \\
\hline P2 & wù & ché & wū & jí & bvū-1¢̃: & yesterday or some days ago \\
\hline P3 & wù & \(\mathrm{g} \bar{\varepsilon}\) & & jí & bvū-ľ̃: & more than several days ago \\
\hline FUT & wù & lé & wú & jí & bvū-1̨̇: & sometime in future \\
\hline & 3SG & & 3SG & & c14-food & \\
\hline \multicolumn{7}{|c|}{'She ate/will eat food.'} \\
\hline
\end{tabular}

Table 9.5 Paradigm of Nchane tenses.

The concept of "time frame" as presented in this description should be understood as a general indication of the time reference. However, the various tenses may be used according to the given context to communicate relative proximity of time of occurrence between two separate events. For example, stories are often situated in the past using p3, with references to earlier events within the context of the story utilizing P 1 , even though the actual time difference between the two events is more than "several hours". See examples (9.32) and (9.33) below for illustrations of relative time reference.

The description presented here does not attempt to elucidate the finer details of the system, but recognizes that, in many cases, Nchane tense does not simply reflect a linear measurement of time. In some cases, it can be viewed as an interplay between time and remoteness, with remoteness characterized not only in terms of linear time, but also degree of certainty or other expressions of pragmatic concerns. The reader is encouraged to consider the findings of Botne and Kershner (2008), who detail some of these extra-temporal uses of tense in several Bantu languages.

Note that present tense is not a part of the Nchane tense system. Present events or states are commonly expressed through the use of Progressive aspect or, in some cases, through the use of the copula lé, although clauses involving the copula can have an immediate past reading in certain contexts.

The bare form of the verb (usually interpretable as P 0 ) is often interpreted as expressing immediate past tense, or generic past tense, where the specific time of the
event is either unknown or unimportant. This tense is illustrated in examples (9.28) and (9.29).
\begin{tabular}{lll} 
bē & yú & Ø-nà: \\
1PL & kill & c1-cow
\end{tabular}
'We killed the cow.' (just now or recently)
```

wū k\varepsiloǹ\eta bvū-lę̃:
3sG cook cl4-food

```
'She cooked food.' (sometime in the past)

In longer strings of discourse, the tense, usually P 3 , is often established in the initial sentence or in the setting section, with P0 utilized in the following clauses. (See also the description preceding example (9.40) for more discussion of this point.)

Events that occurred between several minutes and several hours ago are indicated through the particle bé (P1), which is possibly related to the verb bí 'to follow'. This tense is illustrated in examples (9.30) and (9.31).
\begin{tabular}{llllll} 
(9.30) & kībó & bé & wū & bèy & fwē \\
& K. & P1 & 3SG & ascend & front
\end{tabular}
'Kibbo went ahead.'
\begin{tabular}{llllll} 
(9.31) & bē & bé & bē & bòy & bì-nfùnè \\
& 1PL & P1 & 1pL & plant & c8-corn
\end{tabular}
'We planted corn.'

In stories, P1 is often used in background events or in quoted speech, as in (9.32) and (9.33) respectively. In both cases, its use indicates that the speaker considers the predication with P1 to have taken place only a short while before the events in the mainline of the story and reflecting relative rather than linear temporal distance. In other words, the actual time difference between events might be more than several hours. Note that example (9.33) comes from a third-person narrative text about a husband and wife. In this sentence, the husband is telling his friends about the events that occurred earlier in the text.

'They went and arrived at their home, being the children of that woman who gave that blindman those cassava puffs.,

What-goes-around.8.2


Events that occurred approximately one to three days ago are indicated by the particle ché (P2), as seen in examples (9.34) and (9.35). It possibly comes from the verb ché 'stay'. \({ }^{70}\)
\begin{tabular}{llllll} 
(9.34) chílá & ché & wū gù jà & gu \\
Ch. & P2 & \(3 S G\) & buy & c9.meat
\end{tabular}
'Chila bought meat.' (e.g., yesterday)
\begin{tabular}{lllll} 
(9.35) jày & ché & \(\mathrm{y} \overline{1}\) & \(\mathrm{t} \overline{0}\) \\
c9.rain & P 2 & c 9 & come
\end{tabular}
'The rain came.' (a few days ago)

This tense is found in the text corpus only once, with the example given in (9.36). It follows example (9.32) in the text by several sentences and distinguishes this event (the woman coming and deceiving) from the P1 event (the mother giving the poisoned cassava puffs to the blind man).

\footnotetext{
\({ }^{70}\) The gloss of this verb is perhaps insufficient, since it usually expresses the notion of residing or staying overnight at a location.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline (9.36) & \begin{tabular}{l}
Ø-kw \(\mathrm{s} s\) é \\
c1-woman
\end{tabular} & \begin{tabular}{l}
w -́ \(\varepsilon\) \\
c1-ANA1
\end{tabular} & \begin{tabular}{l}
chfú \\
reply
\end{tabular} & \(1 \bar{\varepsilon}\),
СомP & \begin{tabular}{l}
bহ̄: \\
c2.chil
\end{tabular} & & & \[
\begin{aligned}
& \text { dú } \\
& \text { say }
\end{aligned}
\] & \(1 \bar{\varepsilon}\), COMP \\
\hline & bō lé & bō jí & màn- & kàlà & mà & & & & \\
\hline & 3PL COP & 3pl eat & c6a-c & assava.p & uff c6a & Rel & & & \\
\hline & Ø-kw \(\mathrm{s} s\) é c1-woman & \begin{tabular}{l}
wú-mù \\
c1-some
\end{tabular} & \[
\begin{aligned}
& \text { chí } \\
& \text { P2 }
\end{aligned}
\] & tô come & \begin{tabular}{l}
wú \\
c1REL
\end{tabular} & lé: deceive & bé with & & 'G.PRO \\
\hline
\end{tabular}
'The woman answered that "These children are saying that they ate cassava puffs, which a certain woman came who deceived me ..."

What-goes-around.9.13

Events that occurred four days or more ago are indicated by the marker \(\mathbf{g} \bar{\varepsilon}\) (P3) as in (9.37)-(9.39). It is not known if this form is related to an active verb. But one possibility is that it comes from the verb \(\mathbf{g \varepsilon}\) 'put', that has the alternative forms
 P 2 in that there is no subject agreement marker preceding the main verb (or any auxiliary verb that might follow). First person singular is an exception to this generality, with subject agreement almost always occurring in this case, as illustrated in (9.39). This reduced agreement marking suggests that the P3 marker has undergone greater grammaticalization than the other past tense markers.


The P3 tense can be described as the narrative past and is used extensively in story-telling. In some texts, P3 is used liberally throughout the text. But more often, P3 is used only in the introduction with little or no tense marking in the rest of the text. Example (9.40) comes from a text where P3 occurs twice in the first sentence, with no tense marking throughout the remaining text until the final sentence.

'The first day that I went fishing (many years ago), my friend took me. He gave me a fishing pole.'

Fishing.1.1-2

Examples (9.41) and (9.42) show that future events are indicated by the copula lé and a H tone clitic that docks on the subject agreement element occurring between the copula and the main verb. When the subject agreement is already carrying a H tone, the future H tone is usually realized as a SH (super high) tone, as illustrated in (9.42). See Chapter 10 for a detailed description of Nchane copulas and their various functions.
\begin{tabular}{lllll} 
(9.41) & ā⿹kāy & lé & wú & kás \(\varepsilon ́\) \\
& A. & COP & 3SG.FUT & return
\end{tabular}
'Akang will return.'
\begin{tabular}{lllll} 
bó & lé & bő & gù & fī-mbï \\
3pL & COP & 3PL.FUT & buy & c19-kola.nut
\end{tabular}
'They will buy a kola nut.'

The verb bū 'exit' in its progressive form is also sometimes used in near future expressions. As with future expressions involving the copula, a H tone clitic is present on the subject agreement element to the right, as illustrated in example (9.43).
\begin{tabular}{lllll} 
j̀jì & būd-é & wú & sūy & \(\emptyset\)-mwā \\
N. & exit-PROG & 3sg.fut & beat & c1-child
\end{tabular}
'Nji will beat the child.'

Future tense constructions can sometimes be interpreted as expressing Irrealis mood rather than tense. This is illustrated in example (9.44) below. The occurrence of the first singular pronoun following the copula is possibly an emphatic usage, but this is unconfirmed
```

(9.44) já lò chēgé, m $\bar{\varepsilon}$ lé mé
leave.IMP FOC quickly 1sG.PRO COP 1sG.PRO.fUT
ý-kj́ wò, m $\bar{\varepsilon} \quad n$-s $\bar{\varepsilon}: \quad n \varepsilon ́, \quad f \varepsilon ̀-b w e \bar{e}$
1sG-catch 2SG 1SG.PRO 1 SG-cut GEST c16-neck
'Leave quickly or else I will catch you and cut you like this, at [your]
neck!' Greedy Friends.1.19

```

\subsection*{9.3.2 Perfect}

In the previous section, the copula was seen to occur in simple future constructions, where the subject marker following the copula is realized with a high tone clitic. When the high tone clitic is absent, the construction usually renders a perfect reading. For example, the copula in the preverbal position in (9.45) establishes a temporal relationship between the action of 'harvesting the palm cones' and 'separating the thorns from the nuts', with the harvesting being completed before the separating.
(9.45) \begin{tabular}{lllllllll} 
Ø-táy & wù & bā & lé & bā & tàn & bī-bā: \\
c1-time & c1REL & they & cop & c2 & harvest & c8-palm.cone
\end{tabular}
'After they have harvested many palm cones, the cones are scattered to separate the nuts from the thorns. ' Making Palm Oil.1.2

Example (9.46) is another illustration of the copula's function as a perfect marker. The completed "action" of women surpassing provides the context for the speaker's encouragement for husbands to stop being suspicious of their wives. In this case, the Perfect reading is reinforced by the co-occurrence of the postverbal adverb wá 'already' (see §9.4).

'If a man has a wife, he stops suspecting her a lot, because women are already wiser.' (lit. ...women have already surpassed or conquered [us/me].) Jealous Husband. 23

A past tense example of the copula's expression of perfect is given in (9.47). In this text about a house fire, the speaker states at the beginning that his house had burned down. Then he begins to describe the context leading up to the event. In this section, there is a series of sentences with the P3-COP sequence, each giving background information, setting the stage for when he discovered his house was burning. Note that the copula has two forms differentiating Past and non-Past tenses. See §10.1.1 for more details.
\begin{tabular}{llllll} 
bē & \(\mathrm{g} \bar{\varepsilon}\) & bé & bē & yú: & bī-tādā \\
1PL & P 3 & \({ }^{\mathrm{P}} \mathrm{COP}\) & 1PL & hear & c8-shout
\end{tabular}
'We had heard shouting.'
Fire.1.15

\subsection*{9.3.3 Habitual}

Habitual aspect is formed analytically through the use of the verb ts' 'come' in the preverbal position, illustrated in examples (9.48) and (9.49). These examples show that both Progressive and non-Progressive verbs can be used in habitual expressions. The tone on the Habitual marker is realized as SH when preceding a H tone verb, irrespective of the intervening subject element. It can also be seen in these examples that the P3 auxiliary precedes the Habitual auxiliary, and there is no subject marking intervening, which is as expected with P 3 tense constructions.
\begin{tabular}{lllllll} 
tádà & \(\mathrm{g} \bar{\varepsilon}\) & tỏ & wù & bín-è & bé & bā-mì: \\
T. & P3 & HAB & 3SG & dance-PROG & with & c2-person
\end{tabular}
'Tada was always dancing with people.'
\begin{tabular}{lllllll} 
tádà & \(\mathrm{g} \bar{\varepsilon}\) & to & wù & bíy & bé & bā-mì: \\
T. & P3 & HAB & 3SG & dance & with & c2-person
\end{tabular}
'Tada always danced with people.'

The meaning of Habitual is further illustrated in examples (9.50)-(9.52), where the actions are regularly occurring. Example (9.50) is taken from a text
describing how palm oil is processed. In the procedure, the people always dry certain byproducts after the nuts have been pounded and washed. The Habitual in example (9.51) is used to describe the habitual activity of a certain woman. Example (9.52) shows the Habitual in a negative construction and with what appears to be a verb of cognition. In this case, the speaker is choosing to make a habit of NOT thinking in a certain way about his wife.
\begin{tabular}{lllllll} 
bā & t3 & bā & ténと̀ & chē & bé & Ø-gvún \(\bar{\varepsilon}\) \\
they & HAB & c2 & dry & c10.palm.kernels & with & c5-chaff
\end{tabular}
'They always dry the palm kernels and chaff.' Making Palm Oil.1.15
\begin{tabular}{lllllll} 
wù & bé & légé & l̀ & à & \(\emptyset\)-kw \(\bar{s} s e ́ ~\) & wú-mù \\
3SG & P1 & beg & FOC & in & c1-woman & c1-certain
\end{tabular}
\begin{tabular}{lllllll} 
lē, & wú & tó & wū & kāy-è & mày-kàlà \\
APPL & c1REL & HAB & 3SG & fry-PROG & c6a-cassava.puff
\end{tabular}
'He asked for [cassava puff] from a certain woman who is always frying cassava puffs. '

What-goes-around.9.10
\begin{tabular}{llllll} 
jád-ē & á-bèn & gēn-ē & fwé, & \(\bar{m}\)-báy & g \(\bar{\varepsilon}\) \\
leave-PROG & c18-day & go-PROG & front & 1SG-still & NEG2 \\
n-t́ & ḿn-bīnè & Ø-kwà:: & g̀̀ & \\
1SG-HAB & 1SG-suspect & c1-wife.1SG.POSS & NEG2 &
\end{tabular}
'From this day forward, I will not suspect my wife.' Jealous Husband. 22

\subsection*{9.3.4 The Durative and Sequential marker tú}

The word tú 'return' is fundamentally a verb that functions semantically in multiple ways depending on its syntactic context. As a main verb, it occurs a few times in the text data and is distinguished by taking a locative complement. The other uses are in expressions of duration and of sequence, and realized when the marker occurs in the preverbal auxiliary slot. Both of these grammatical functions are treated in turn below in this section

Durative aspect is expressed through the addition of the verb tú 'return'. As examples (9.53) and (9.54) show, Durative aspect is used to express an action that is occurring over a relatively long period of time. In other words, it adds a sense of longevity to the occurring action. These expressions contrast with plain progressive expressions presented in §9.1.2, which only express that the action is ongoing, but without any reference to length of duration. Note that Durative aspect only occurs with verbs in Progressive form.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline (9.53) & \begin{tabular}{l}
Ø-jw \(\overline{\text { ® }}\) : \\
c1-husband
\end{tabular} & tú return & \[
\begin{aligned}
& w \bar{u} \\
& 3 \mathrm{SG}
\end{aligned}
\] & jīn-
look & K-PROG & \[
\begin{aligned}
& \text { nò } \\
& \text { as }
\end{aligned}
\] & \multicolumn{2}{|l|}{bī-nì c8-buttock} \\
\hline & \begin{tabular}{l}
shīpsh-é \\
shake-PROG
\end{tabular} & \[
\begin{aligned}
& \emptyset-k w \\
& \text { c1-wif }
\end{aligned}
\] & \[
.3 \mathrm{SG} . \mathrm{P}
\] & & \[
\begin{aligned}
& \text { kī-d } \overline{0} \\
& \mathrm{c} 7 \text { - } \mathrm{je}
\end{aligned}
\] & & tá grow & wù
3 SG \\
\hline
\end{tabular}
'The husband was watching (the whole time) how her buttocks were shaking, and he was jealous.'

Jealous Husband.4.1

'She remained going around outside, still being an animal.'
Two Wives.4.10

When tú occurs before a main verb in non-progressive form, it is orienting two sequential events or periods of time to each other at the discourse level. \({ }^{71}\) The action in example (9.55) occurs after a man and his wife go to their farm to do work. The sequential tú serves to link this sentence with the previous one, providing discourse cohesion. This same function is illustrated in example (9.56), which takes place after a woman has put corn flour into a pot of boiling water.
\begin{tabular}{llll} 
mé & ń-tú & ý-g \(\bar{q}:\) & \(\bar{n}-\) jí \\
1SG.PRO & 1SG-then & 1SG-go & 1SG-eat
\end{tabular}
'I then went and ate...'
Jealous Husband. 20
\begin{tabular}{llll}
\(w \bar{u}\) & tú & \(w \bar{u}\) & \(l \hat{\underset{c}{:}}:\) \\
\(3 S G\) & then & \(3 S G\) & stand
\end{tabular}
'She then stood...' Jealous Husband.4.2

\footnotetext{
\({ }^{71}\) Note that sequential events are routinely expressed through simple juxtaposition and usually with non-progressive verbs, as pointed out in §13.1.1. Therefore, the function of tú as a sequential marker is concerned with discourse organization.
}

Note that the relationship between the two sequential events or periods is often a logical one. For example, the ordered steps for preparing fufu are: boiling water, adding the corn flour, stirring the mixture. This logical ordering is completely transparent in conditional if-then constructions, where tú occurs in the clause-initial position of the apodosis clause (which always follows the protasis clause). See §13.2.4 for a detailed presentation of these constructions.

\subsection*{9.3.5 Resultative}

The word m̄ 'RES' occurs in the preverbal position and expresses a resultative relationship between the action in its clause and a previous clause, as illustrated in examples (9.57)-(9.59). A main verb counterpart for this word has not been identified. Note that in the sentence preceding example (9.59), the man "measures" his neck with a knife while warning a vulture that he will "cut him (the vulture) like this." Therefore, the "knife cutting him at his neck" is the result of his intended mimicked cutting.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \[
\begin{align*}
& \text { bó }  \tag{9.57}\\
& \text { 3PL }
\end{align*}
\] & \begin{tabular}{l}
tún \\
shoot
\end{tabular} & & \begin{tabular}{l}
Ø-nà \\
c1-cow
\end{tabular} & \[
\begin{aligned}
& w \bar{\varepsilon}-\dot{\varepsilon} \\
& c 1-A N A 1
\end{aligned}
\] & \[
\begin{array}{ll} 
& l \bar{\varepsilon} \\
1 & \text { SET }
\end{array}
\] & \begin{tabular}{l}
kī-nchô \\
c7-horn
\end{tabular} & kí
\[
\mathrm{c} 7 \mathrm{Am}
\] & \begin{tabular}{l}
Ø-nà \\
c1-cow
\end{tabular} \\
\hline mう & kī & bう & wù, & wù k & kwé & & & \\
\hline RES & c7 & stab & - 3SG & 3 SG d & die & & & \\
\hline
\end{tabular}
'They sent that cow (on top of him) so that the cow's horn then pierced him and he died.' Greedy Friends.1.6
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline ségé & wū & gė̀: & wū & jí, & wú & m̄ & wū & kwé, & wō \\
\hline when & 3SG & go & 3SG & eat & 3SG.HORT & RES & 3SG & die & 2SG \\
\hline fú-d \(\bar{\varepsilon}\) & & ā-ทg & -wù- & & & & & & \\
\hline rest-co & MPL & c18-t & ouble & SG-h & & & & & \\
\hline
\end{tabular}
'When he goes and eats, he should then die, and you will rest from the trouble from him.

What-goes-around.3.4

'The knife then cut him at [his] neck, he then fell and died.'

Example (9.60) suggests that there might be an emotional element in the semantics of the Resultative marker. The husband had asked earlier if the wife had soup, since he saw that she did not, and it is expected that soup will be served with the fufu. Now that it is time to eat, he is asking again about the soup, but with an attitude that suggests that he believes that it is unlikely that the wife will be able to provide soup.

'Like that, her husband sat down, then he asked "Where will you get soup?", Jealous Husband. 10

Note that another function of the m̄ particle is as a marker of scalar focus, which is presented in §16.3.3.

\subsection*{9.3.6 Situative}

The function and distribution of the word do 'sIT', is not well understood. It appears in subordinate clauses, usually but not always preceding the main clause, and expresses the situation in which the mainline event(s) of the main clause occurs. In this respect, it is similar to the Situative observed in the Bantu language Makhuwa (see Devos 2008; and Van der Wal 2014).

The Situative particle often appears to relate two events or conditions in a cause-effect relation, as in (9.61), where the subordinate clause with SIT refers to hildren having eaten poison.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(9.61)} & \(1 \bar{\varepsilon}\) & & & & nù & nō, & bহ̄: & bā-ā & \(\mathrm{g} \bar{\varepsilon}\) \\
\hline & SET & c19 & SIT & c19 & \(\operatorname{COP}(\mathrm{N})\) & like.that & c2.child & c2-ANA1 & P3 \\
\hline & \begin{tabular}{l}
kwī \\
die-
\end{tabular} & & \multicolumn{7}{|l|}{bā-chī:} \\
\hline
\end{tabular}

What-goes-around.10.1

However, a cause-effect reading is not clear in examples like (9.62), where it seems that a sequential temporal relation between the subordinate and main clauses is expressed. While sequential events are often encoded without the presence of SIT, its presence in this sentence indicates that their "having gone" is somehow relevant to their "arrival at the tree", rather than the subordinate clause simply serving in discourse cohesion.
\begin{tabular}{lllllllllll} 
l \(\bar{\varepsilon}\) & bó & dó & bó & g \(\bar{c}:\), & bó & bú & fè & kì-tē & ky- \(\bar{\varepsilon}:\) & le \\
SET & 3PL & SIT & 3PL & go & 3PL & arrive & at & c7-tree & c7-ANA1 & APPL
\end{tabular}
'As they (a husband and wife) went [to their farm], they arrived at the tree (in which a man is hiding in order to trick the husband).'

Jealous Husband.3.6

The Situative particle often co-occurs with the Setting marker l\(\overline{\mathbf{\varepsilon}}\). However, native speakers report that the Setting marker is usually considered optional in these sentences, while SIT is not.

\subsection*{9.3.7 Still}

The verb bāŋ̧̀̀ 'cover' might be the source for the word bắ or bạ́: 'still', which precedes the verb and expresses that an action or condition is ongoing and/or current. It is observed occurring only with verbs in progressive form, as examples (9.63) and (9.64) show. Example (9.65) illustrates its use with a copula.
\begin{tabular}{llll} 
ḿ-bá: & ń-lég-è, & ń-tó-̀̀ & á-jīshí \\
1SG-still & 1SG-run-PROG & 1SG-come-PROG & c18-path
\end{tabular}
'(They started putting out the fire while) I was still running, coming to the place.,

Fire.4.1
\begin{tabular}{lllllll} 
Ø-kw \(\bar{s}\) é & wù & kém-é & Ø-mwà & báa & shēgē & shēgè, \\
c1-woman & c1 & have-PROG & c1-child & still & small & small
\end{tabular}
\begin{tabular}{lllll} 
wú & bá & wū & yán-è & \(\bar{a}-m b \bar{\varepsilon} \eta\) \\
c1REL & still & 3sG & suck-PROG & c6-breast
\end{tabular}
'The woman had a child who was still very small, who was still breastfeeding.'

Two Wives.4.6
\begin{tabular}{llllll} 
wū & tú & wū & k \(\bar{\varepsilon}\) n-è & à-kfúy, \\
3 SG & return & 3 SG & go.around-PROG & c18-outside
\end{tabular}
'She remained going around outside, still being an animal.'
Two Wives.4.10

This word is the same one used in certain negative constructions, which is presented in §15.2.

\subsection*{9.3.8 Iterative}

The word ká 'ITER' precedes the main verb and is used to indicate the repetition of an action, as in (9.66)-(9.68).
(9.66) bā-mī bá bā-n \(\bar{\varepsilon}\) bá fwē \(g \grave{\varepsilon}\) bé bó fún c2-person c2REL c2-four c2REL front P3 \({ }^{\text {P }}\) COP 3 3pl fly
\begin{tabular}{llllllll} 
à & Ø-àfyōy & lē, & k̀̀g-è & mìsà \(\bar{\varepsilon} \bar{\varepsilon}\) & b̄̄ & g \(\bar{\varepsilon}:\) & dùmbú rānch \\
in & c1-airplane & APPL & begin-PROG & M. & 3PL & go & D. R.
\end{tabular}


\begin{tabular}{llllllll} 
yē & bī-bó & bī & Ø-jú & lé & \(\bar{m} b a ̄ n n ̃ ~\) & j̀chò & bì-tèn \\
in & c8-arm & c8AM & c5-day & cop & forty & plus & c8-five
\end{tabular}
'The four persons flew from Misaje town, to Dumbu Ranch, to Akweto, then passed over Misaje to Nfume, and back to Misaje in 45 minutes.,

Training.1.10
(9.67) kì-mā kí bì f万̄ lē, bā g \(\bar{\varepsilon}\) y \(\mathrm{c} y \varepsilon ̀\)
c7-week c7REL follow there APPL they P3 teach

Ø-lēmè chí kì-mā kī fwē
c5-work c5AM c7-week c7ReL front
'The second week, we studied the picture booklet and reviewed the work treated in the first week.' Training.1.8
(9.68) l \(\bar{\varepsilon}\) wū-nè Ø-kwès \(\bar{\varepsilon}\) wū nùm \(\bar{\varepsilon}\) này, wù ká COMP c1-PROX c1-woman c1REL \(\operatorname{COP}(\mathrm{N})\) c9.animal c1REL ITER
nūmè Ø-mù wū wùn, lé Ø-kwèsē wū nè lè \(\operatorname{COP}(\mathrm{N})\) c1-person c1AM c3.village \(\operatorname{COP}\) c1-woman 3SG how APPL
'[He said], "This woman who is an animal and again a human is what kind of woman?"'

Two Wives.7.3

\subsection*{9.4 Postverbal adverbs}

Postverbal adverbs, words which modify in some way the meaning of the verb, are presented in this section. These markers include the manner adverbs chègē 'quickly', chúlē 'well' and reduplicated infinitives, and the degree adverbs bá: \(\boldsymbol{y}\) 'much', wèsè 'very' and wá 'already'. The adverb wá 'already' immediately follows the verb, with any verbal complements present (e.g., objects or locative obliques) following the adverb. The adverbs chègē 'quickly', bá: \(\boldsymbol{y}\) 'much' and wèsè 'very' follow verbal complements when present, while the data is inconclusive regarding the precise behavior of chúlē 'well' and reduplicated infinitives in terms of word order.

\section*{Quickly}

The manner adverb chègē 'quickly' immediately follows the verb, as in (9.69), or the complement of the verb, as in (9.70). As the gloss implies, this adverb indicates that the action takes place in a short period of time or with haste.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (9.69) & \begin{tabular}{l}
Ø-chiji' \\
c1-father.HORT
\end{tabular} & \begin{tabular}{l}
bő \\
c1.3pl.POSS
\end{tabular} & \begin{tabular}{l}
to" \\
come
\end{tabular} & chēgé, quickly & \begin{tabular}{l}
wú \\
3SG.HORT
\end{tabular} & \begin{tabular}{l}
tó \\
come
\end{tabular} \\
\hline & wú yén & fy- \(\bar{\varepsilon}\) : & fī & lē & lē & \\
\hline & 3SG.HORT see & c19-thing & c19REL & COP & APPL & \\
\hline
\end{tabular}
'Their father should come quickly and see what is happening.'
What-goes-around.9.4
\begin{tabular}{llllll} 
já & yē & jày & yí-nè & lē & chègē \\
leave.IMP & on & c9.meat & c9-PROX & APPL & quickly
\end{tabular}
'Go away from this meat quickly!'
Greedy Friends.1.11

The adverb in (9.69) is presumed to be realized with a higher tone as a result of the Hortative H marking. Note that this example appears to be an exception to the general rule that the grammatical H tone can only occur once in a sentence. Here it appears that the H is realized at the clause level, with all elements of the first clause having higher than normal tone, as well as the subject elements of the second clause, but not the verbs. It is presumed that this liberal realization of the grammatical H reflects a pragmatic application of the grammatical H , expressing a great sense of urgency and desire of the speaker.

\section*{Well}

Another manner adverb is chúlē 'well', which also follows the verb and expresses that an action is of good quality and/or that a process has progressed to an acceptable point. Lack of data makes it difficult to know if it also follows any complements that are present. This adverb is illustrated in examples (9.71) and (9.72).

'When the oil has cooled off well, they start collecting it with a bowl, keeping it in a pot.' Making Palm Oil.1.11

\section*{Reduplicated infinitives}

Examples (9.73) and (9.74) show reduplicated infinitives following the main verb and functioning like a manner adverb. These are the only examples in the data of reduplicated infinitives serving as adverbs, thus it is not known if adverbial expressions other than manner are possible. The meaning of the reduplicated infinitive is ultimately connected to the semantics of the lexical verb from which it is derived, but has been grammaticalized into an adverbial sense. In the case of 'run' in (9.73), the reduplicated infinitive adds the adverbial meaning of 'immediately', while reduplication of the infinitive meaning 'hide' in (9.74), gives the reading of 'in secret'. Note that the second iteration is usually pronounced at a lower tonal register, indicated by the non-raised down arrow \(\downarrow\).

'After the Nkanchi people heard that news (lit. that horn), they left immediately for X to take Long Boy back.' Land Dispute.2.2
(9.74) \(\quad\) wù \(\quad\) jō \(\quad\) wù \(\quad\) gễ: wù gō \(\quad\) n-nì̀
3SG take 3SG go 3SG grind NMZR-hide NMZR-hide
'...she took [the corn] and went and ground it secretly.'
Disobedient Child.1.6

These reduplicated infinitives contrast formally with verbs used multiple times, as seen in (9.75), a rare case where the repeated verb \(\mathbf{g} \bar{\varepsilon} n e ́ ~ e x p r e s s e s ~ a ~ d u r a t i v e ~\) action. The reduplicated adverbial infinitives follow the main verb and have no subject element preceding them, while the repeated verbs have a subject element preceding the first verb in the series. In addition, the repeated verbs maintain their core meaning, while the adverbial reduplicated infinitive has an extended meaning.
\begin{tabular}{llllllll}
\(l \bar{\varepsilon}\) & bó & jā & b̄̄ & gēn-é & gēn-é & ḡ̄n-è, & b́́ \\
SET & 3PL & leave & 3PL & go-PROG & go-PROG & go-PROG & 3PL
\end{tabular}
bú f と̀-d3 \(\bar{o}-n t \bar{\varepsilon} n \bar{\varepsilon}\)
arrive c16-water-middle
'As they left and went and went and went, they reached the middle of the river.'
Smart Monkey.1.9

\section*{Much}

Examples (9.76)-(9.78) illustrate the degree adverb bá:ŋ 'much', which has the alternate form báyá. It follows the verb and, when present, the object, as in (9.76) and (9.77).

'Some years [ago], there was a man and his wife, who loved each other very much.'

Jealous Husband.1.1
(9.78) \(\overline{\mathrm{m}}\)-fày báyá

1SG-fear much
'..I was very worried.'

Although it has a similar form to the adverb bá 'still', described in §9.3.7, their different syntactic distribution patterns and very different semantics suggest that they are in no way related.

Very
Another degree adverb is wèsè 'very'. This adverb often modifies adjectival complements and expresses intensity and/or degree, as in (9.79).
(9.79) Ø-táy wū m \(\bar{\varepsilon} \quad \mathrm{g} \bar{\varepsilon} \quad \overline{\mathrm{n}}\)-chīlè by \(\bar{\eta} \mathrm{y}\), c1-time c1REL 1SG.PRO P3 1SG-pull c9.fish
\(\mathrm{m} \bar{\varepsilon} \quad \mathrm{g} \bar{\varepsilon} \quad \overline{\mathrm{m}}\)-bé lāyy c wèsè

1SG.PRO P3 1SG- \({ }^{\text {PCOP }}\) happy very
'When I caught a fish, I was very happy.'
Fishing.1.10

Example (9.80) shows that it can also follow a verbal complement.
(9.80) \begin{tabular}{lllllll} 
kì-nfę̀: & kī-nē & lé & kī & fūn-sè & wá \\
c7-blind.man & c7-PROX & cOP & c7 & worry-CAUS & already \\
& & & & & & \\
& bā-mī & wèsè & b \(\varepsilon\) é & kī-lı̀g̀̀ & & \\
c2-person & very & with & c7-beg & &
\end{tabular}
'...this blindman has already worried people too much with begging.' What-goes-around.3.5

The semantics of this adverb and bá:y 'much' are very similar and it is unclear what differentiates their use.

\section*{Already}

The adverb wá 'already' is relatively common in the text data and expresses an action or state that has already occurred. It is exemplified in examples (9.81) and (9.82), which show that it occurs immediately following the verb, with (9.81) also illustrating that it precedes any present complements of the verb.
\begin{tabular}{llllllll} 
kī & g \(\bar{\varepsilon}\) & bá: & jí & g \(\bar{\varepsilon}\), & & & \\
c7 & P3 & still & eat & NEG2 & & & \\
n̄̄ & kī & gè & jí & wá & mw- \(\bar{\varepsilon}:\) & kī & fū: \\
like.that & c7 & P3 & eat & already & c18a-thing & c7 & satisfy
\end{tabular}
'...he did not eat [it] (the cassava puff), as he had already eaten something and was satisfied.'

What-goes-around.5.1
\begin{tabular}{lllllll} 
l' & jū & kìnf \(\bar{\varepsilon}:\), & Ø-kw \(\mathrm{\varepsilon} s \bar{\varepsilon}\) & \(\mathrm{w} \bar{\varepsilon}-\grave{\varepsilon}\) & būs \(\bar{\varepsilon}\) & shì, \\
SET & \(\operatorname{COP}(\mathrm{N})\) & soon & c1-woman & c1-ANA1 & remove & c9.chicken
\end{tabular}
\begin{tabular}{llllllll} 
bā & nù & \(b \bar{a}\) & yò & \(b \bar{a}\) & kغ̀n \(\check{\varepsilon}\) & wá, & \(b \bar{a}\) \\
they & \(\operatorname{COP}(\mathrm{N})\) & c 2 & \(\operatorname{cook}\) & c 2 & prepare & already & \(c 2\)
\end{tabular}
kūjè à kī-ŋkámè lē
wrap in c7-leaf APPL
'Immediately, that woman took the chicken out, having already cooked and prepared [it], and wrapped in a leaf.' Jealous Husband. 12

The core meaning of wá involves temporal focus-contrasting the realization of the action at an earlier time with the presumed alternative (i.e., that the action is currently unrealized). It is not observed to occur with verbs in the Progressive form and often appears to contribute to a past perfect reading, as seen in (9.83).
\begin{tabular}{|c|c|c|c|c|c|}
\hline \[
\begin{array}{ll}
n \bar{\varepsilon} & \emptyset \text {-mù }  \tag{9.83}\\
\text { if } & \text { c1-person }
\end{array}
\] & \begin{tabular}{l}
kém-é \\
have-PROG
\end{tabular} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Ø-kwè:, \\
c1-wife.3sG.poss
\end{tabular}} & \[
\begin{aligned}
& \text { wū } \\
& 3 \mathrm{sG}
\end{aligned}
\] & \begin{tabular}{l}
chínè \\
abandon
\end{tabular} \\
\hline mū-m-bín \(\bar{\varepsilon}\) & lē & \(\bar{n} j \mathrm{e}\) & bī-késć & lé & bō \\
\hline c18a-NMZR-suspect & ct APPL & reason & c2-woman & COP & 3PL \\
\hline ghà wà & & & & & \\
\hline surpass already & & & & & \\
\hline
\end{tabular}
'If a man has a wife, he stops suspecting her a lot, because women are already wiser.' (lit. ...they have already surpassed or conquered [us/me].)

Jealous Husband. 23

\subsection*{9.5 Other adverbs}

The adverbs presented in this section differ from those in the previous section in terms of scope and/or restricted distribution. They include gé 'EXCL', t' 'also' and là 'CE'.

\section*{Exclusive}

The adverb gé 'EXCL' expresses exclusivity and represents a second function of the conjunction \(\mathbf{g} \bar{\varepsilon}\) 'or'. It most often immediately follows the verb, but may be preceded by a locative pronoun. Its scope can be the predicate, as in (9.84), or the verb's complement, as in (9.85).

Determining the adverb's scope appears to be based on context. For example, the adverb in (9.84) immediately follows the verb "look" and its scope is the predicate. The context for this sentence is a man who is having trouble breathing has asked a woman for help. Rather than helping the man, the woman just looks at him-all
actions other than "looking" are excluded. Although it is plausible that given a different context, the alternative reading of the woman looking only at the man, excluding other people, is possible. But this possibility is unconfirmed.
\begin{tabular}{lllllll} 
(9.84) & wū & g \(\bar{\varepsilon}\) & jìỳ̀ & ǵ & wù & ń \\
& 3SG & P3 & look & EXCL & 3SG & GEST
\end{tabular}
'She only looked at him.'
Lake.4.7

In contrast, the adverb in (9.85) follows the verb, but is preceded by the locative pronoun "there". The adverb's scope is the complex comitative oblique "trousers and shoes", which follows the adverb and appears in brackets.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \(\overline{\mathrm{y}}\)-g \(\bar{\varepsilon}\) & \(\overline{\mathrm{n}} \mathrm{-}\) ¢̇: & fó & gé & [bé & Ø-1ôy & wù-mùmwà \\
\hline 1SG-P3 & 1SG-stand & d there & EXCL & with & c1-trousers & c1-one \\
\hline bé & bà-lābā b & bà & \(\mathrm{m} \bar{\varepsilon}\) & gè & 门̀-k̄̄m-ē & bī-kà:lē] \\
\hline with & c2-shoe & c2REL & 1sG.PRO & P3 & 1SG-have-PROG & c8-?? \\
\hline
\end{tabular}
'I stood there only with one pair of trousers and a pair of shoes.'
Fire.6.1

\begin{abstract}
Also
The adverb t' 'also' is used in expressions of subject (or agent) focus, highlighting the argument's membership in a group of one or more similar lexical items. Its position is somewhat variable, sometimes following the verb, and sometimes preceding it. However, the argument within the scope of the adverb always precedes the adverb.

For example, in the sentence preceding (9.86), a friend encourages a woman that, after poisoning and killing a begging blindman, the woman will rest from his begging. Therefore, the scope of the first adverb in this example is the subject 'we'the friend, including herself, and others with the woman in "resting". The second adverb adds the subject "many people" to the group of those who are "resting". The scope cannot include the verb itself, since there are no other predicates of which "many people" are agents. In both cases, the scope of the adverb is the subject, which precedes the adverb, although the second adverb also follows the verb. (The source of the vowel length and falling tone pattern of the second adverb is unkown at this time, and the significance of these differences is uncertain.)
\end{abstract}
\begin{tabular}{lllllll} 
bē & t' & fü-dé, & bā-mī & bá-dùdē & fū-d \(\bar{\varepsilon}\) & t̂̂́: \\
1PL & also & rest-COMPL & c2-person & c2-many & rest-COMPL & also
\end{tabular}
    ā-wù-b\overline{ }
    c18-3SG-hand
    'We also (in addition to you) will rest, and many people also will rest
from his hands (from his begging)...' What-goes-around.3.5
```

Likewise, the scope of the adverb in (9.87) is the location "here", which precedes it. The friend is clearly implying by her question that the blindman comes to other places. Therefore, "here" is being added to the group of other locations to which the blindman is always coming.

(9.87) | nnsā | y-ē | bí: | wù | lē, | là: | kì-fè̃̀: |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c9.friend | c9-3sG.POSs | ask | 3SG | APPL | Q.COMP | c7-blind.man |

> 'Her friend asked her, "(Does) this blind man also come here?"' What-goes-around.2.2

Example (9.88) further illustrates the function of $\boldsymbol{t} \boldsymbol{\varepsilon}$, indicating that the "certificates" belong to the list of items previously stated, all of which burned in the house fire.

| (9.88) | m $\bar{\square}$ | bā-sālífikè | bà | $\mathrm{m} \bar{\varepsilon}$ | g ¢ | ỳ-kém-é |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RES | c2-certificate | c2REL | 1SG.PRO | P3 | 1SG-have-PROG |  |  |  |
|  | yūnī <br> univ | āsētī wú sity c1Am | tùlútù <br> T. | kánādà, C. | $\begin{aligned} & \text { bā } \\ & \text { c2 } \end{aligned}$ | té <br> also | $\begin{aligned} & \mathrm{g} \grave{\varepsilon} \\ & \mathrm{P} 3 \end{aligned}$ | fyē <br> burn | bà-chì |

'Even the certificates that I was having from the University of Toronto, Canada, they also all burned.'

Examples of this adverb with predicate scope have not been observed.

## Counter-expectation

The adverb là ' CE ' is rare in the data and is not well understood. The examples show that some kind of counter-expectation is present in the predication and its use may be restricted to direct speech. The adverb can follow an Imperative verb and is used when the speaker is coerced in some way to give a command that he/she does not truly want carried out. The expectation with an imperative is that the speaker giving the command desires that the command be followed. The adverb là indicates that the
hearer should interpret the desire of the speaker as counter to that associated with a non-modified imperative.

A possible context for (9.89) is the speaker wanting the monkey as a pet, but someone in authority over the speaker has ordered them to have the monkey killed.

| yú | là | chă: | yí-nè |
| :--- | :--- | :--- | :--- |
| kill.IMP | CE | c9.monkey | c9-PROX |

'Kill this monkey (although I'd prefer that you didn't).'

The adverb in example (9.90) might be interpreted as a pretense. The woman really does want the blindman to take the poisoned cassava puff. But she wants to appear as if she is annoyed by his begging and is only giving in to his request so that he will be contented for the moment and leave her alone.

| (9.90) | wù̀ | dú, | ḱ́ | là | màn-kàlà | mā-nē, | wó | jí |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | say | catch.IMP | CE | c6a-cassava.puff | c6a-PROX | 2SG.HORT | eat |

> 'She said (with irritation), "Take this cassava puff, you should eat [it].""
> What-goes-around.4.9

The particle là in the next examples appears in questions. In both cases, the speaker is indicating that there is a mismatch between perceived realities. For example, (9.91) occurs just after some children, who were sick, have explained that they had eaten cassava puffs that a beggar had given them, which he had gotten from a certain woman. The children's mother immediately began to cry with great intensity, because she is the one who gave the beggar the cassava puffs, which she had poisoned in order to kill him. She realizes that her children have instead eaten the poisoned food. Her husband is surprised at her emotional outburst and is essentially saying that there is no reason for her to be crying like that.

| Ø-jw $\overline{\underset{c}{c}}:$ | bí: | là: | lé | lá |
| :--- | :--- | :--- | :--- | :--- |
| c1-husband.3SG.POSS | ask | Q.COMP | COP | Q |


| fì | wò | bēd-é | là |
| :--- | :--- | :--- | :--- |
| c19REL | $2 S G$ | cry-PROG | CE |

'Her husband asked, "So, why are you crying?".' (lit. it is what that you
are crying) What-goes-around.9.12

Example (9.92) also clearly expresses the mismatch between perceived realities. This example comes from a story where a wife devises a plot to trick her husband. She has secretly prepared a full meal, including soup. But the husband only sees her preparing the fufu. Since his wife is preparing the fufu where her husband
can see her, she is apparently inferring that she is also preparing soup or has already done so (particularly since soup is considered a crucial part of the meal). Therefore, he asks his wife if she has soup, while indicating that he believes she does not. A possible appropriate translation might be something more like an accusation, "You don't really have soup, do you!".

| w $\overline{0}$ | lé | bé | ḿ-bà: | lā |
| :--- | :--- | :--- | :--- | :--- |
| 2SG | COP | with | c6a-soup | CE |

'So, do you have soup?'
Jealous Husband.2.1

In both of these question examples, the speaker appears to be expressing a belief counter to the facts being presented. In this way, it is possible that they are a type of rhetorical question, where the purpose of the question is less about getting an informative answer and more about expressing a belief in the unreliability of perceptions.

### 9.6 Attributive verbs

Expressions of attributes such as color and size are accomplished through adjectives in many languages. The word class Adjective, is typically analyzed as a type of nominal modifier. These attributive expressions are sometimes difficult to analyze in African languages, many of which are said to have a very small restricted set of adjectives. Unsurprisingly, Nchane attributives do not offer a clear and simple analysis. It appears, however, that most attributives in Nchane can best be described as a special type of verb which will be referred to as "attributive verbs". Because the analysis of these attributive words has not been straightforward, one of the primary goals of this section is establishing the verb-hood of such words. See $\S 6.4 .6$ for a description of the small class of Nchane adjectives and a brief discussion regarding how they differ from attributive verbs.

Both of the attributives in (9.93), kùgē 'big' and yídè 'black', are associated with agreeing elements which are virtually indistinguishable as either relativizers or agreeing prefixes (although such agreement elements are not always present, as seen in many of the examples in this section).

| bó | b $\bar{y} y$ | l $\bar{\varepsilon}$ | lé | kī, | kī-kfūnè | kí | kùgē | kī |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | agree | COMP | COP | c7 | c7-rat | c7REL | big | c7REL |

yídè k $\bar{\varepsilon}-\bar{\varepsilon}$ kí lé kí shú m̄byàyè yí-yú
black c7-ANA1 c7REL COP c7.fut tie c9.bell c9-ana2
'They agreed that it is him, the fat, black rat, who will tie THAT bell (on the cat's tail).'

The elicited examples (9.94)-(9.96) show behavior of kūgè 'big' that is consistent with verbs. First, in (9.94) and (9.95), the word appears with high tone on the final vowel $\mathbf{e}$ which is associated with Progressive aspect. Second, the clause-final focus particle l5, which is typical for intransitive progressives (see §16.3.5), is required. Finally, examples (9.95) and (9.96) display tense marking.

| (9.94) | kī-bę̨: <br> c7-calabash | kī-nē <br> c7-PROX | kùg-é <br> big-PRO | $\begin{array}{ll} \mathrm{e} & 15 \\ \mathrm{OG} & \text { FOC } \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'This calab | h is big. |  |  |  |
| (9.95) | kī-b $\bar{\sim}$ : <br> c7-calabash | kī-nē <br> c7-PROX | $\begin{aligned} & \text { chí } \\ & \text { P2 } \end{aligned}$ | kùg-é <br> big-PROG | ŋ̄ <br> FOC |
|  | 'This calab | h was bi |  |  |  |
| (9.96) | kī-b $\bar{c}$ : <br> c7-calabash | kī-nē <br> c7-PROX | $\begin{array}{ll} \text { lé } & k \\ \text { COP } & \end{array}$ | kí c7.fut | kūg-è <br> big-PROG |

'This calabash will be big (e.g., it is small now, but it is still growing).'

The attributive word also has an Imperative conjugation form. The command in (9.97) could be said to someone who is considered to be too small or sickly. Alternatively, the verb can be shortened to kú (which is the preferred form for at least some speakers).

```
kūg\varepsiloń
big.IMP
`Fatten up!'
```

Preverbal aspectual markers can also precede these attributive words. In (9.98), bá 'still' occurs before the attributive verb shēgē 'small', which is repeated to express degree.

| Ø-kwēsé | wù | kém-é | Ø-mwà | bá | shēgē | shēgè, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c1-woman | c1 | have-PROG | c1-child | still | small | small |

'The woman had a child who was still very small...' Two Wives.4.6

The nominalized forms of words that function as attributive verbs are considered abstract nouns and belong to class 14 . The non-progressive form of the verb serves as the stem. A partial list of these attributive verbs and their nominalized forms appear in Table 9.6.

| Attributive verb | Nominalized form | Gloss |
| :---: | :---: | :---: |
| kùgē | bvū-kūgè | 'bigness' |
| n$๊ \overline{\text { ¢ }} \mathrm{n} \bar{\varepsilon}$ | bvū-nŋ̄n¢ | 'thinness' |
| ${ }^{\mathrm{j} 1 \mathrm{j}} \overline{\mathrm{j}}$ | bvū-jíjè | 'heaviness' |
| jùn | bvū-jūn¢ | 'oldness' |
| yídè | bvū-yídè | 'blackness' |

Table 9.6 Selected Nchane attributive verbs and their nominalized forms.

## Chapter 10

## Nonverbal predicates and copulas

This chapter is about clauses that lack a lexical verb. All of these involve a copular verb, of which Nchane has two. Because of the importance of the copulas to nonverbal predicate constructions, I begin this chapter with their descriptions (§10.1). The remaining sections (10.2-10.6) present various kinds of nonverbal predicate constructions. Throughout this chapter, the predicates in examples are given in brackets, while copulas are bolded.

### 10.1 Copulas

Nchane has two copulas: lé 'COP' and jù̀(m̀̀) ' $\operatorname{COP}(\mathrm{N})$ '. ${ }^{72}$ These are referred to as "copula" and " $n$-copula" respectively. Both of these copulas generally serve as a link between the subject and a predicative expression. A number of different grammatical constituents may serve as the predicate element, including such items as nouns or

[^35]noun phrases, prepositional phrases and adjectives. See §§10.2-10.6 for examples of each type.

The copula appears in the data about four times as often as the $n$-copula and is considered the "basic" type. While Nchane has two copulas, it does not appear that they are distinguished by introducing predicates of different constituent categories, as is the case in some languages. Nor is the difference between the two associated with the expression of different copular clause types, although identification of such differentiation can be difficult to obtain, as observed by Mikkelsen (2005). Nevertheless, examples (10.1) and (10.2) demonstrate that the same copula is used in what I designate as predicational and identificational copular clauses respectively.

'This cow is old.'

| (10.2) | Ø-nã <br> c1-cow | w-à | c1-1SG.POSS | lé |
| :--- | :--- | :--- | :--- | :--- | [wú-nē] | c1-PROX |
| :---: |

'My cow is this one.'

The fundamental difference between the two copulas appears to be a tendency related to the type of state being expressed-fixed or static state versus dynamic state. Examples (10.3) and (10.4) are given to illustrate this distinction. An equative relationship is expressed in (10.3) and the truthfulness of the statement is fixed; it is a fact that "these things" equal "things that God gave me". The state in example (10.4) is expressed within the context of the speaker's perception from a helicopter high above the scene. The state expressed, "that people are small", is context-dependent and would be false in a different context, for example, if the speaker saw the people from a much lower height. In contrast, the statement in (10.3) is true in any possible context.

| (10.3) | $\mathrm{mw}-\bar{\varepsilon}$ : <br> c18a-thing | mū-nē <br> c18a-Prox | lé <br> COP | [mw- $\bar{\varepsilon}$ : <br> c18a-thing | mù <br> c18aREL | $\begin{aligned} & \text { Ø-nı̀ } \\ & \text { c1-god } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | já m $\bar{\varepsilon}$ | yú], |  |  |  |  |
|  | give 1sG. | Ro on.it |  |  |  |  |


| (10.4) | $\mathrm{m} \bar{\varepsilon}$ <br> 1SG.PRO | $\begin{aligned} & \overline{\mathrm{y}}-\mathrm{g} \bar{\varepsilon} \\ & 1 \mathrm{SG}-\mathrm{P} 3 \end{aligned}$ | yēn-é <br> see-PROG | bà-mì <br> c2-person | lē APPL | f $\grave{\varepsilon}$-kū, c16-down | $\begin{aligned} & \text { bō } \\ & \text { 3PL } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | jù̀mè | [shēgē | shēgē] |  |  |  |  |
|  | COP(N) | small | small |  |  |  |  |

'I was seeing people on the earth looking very small.' Training.1.16

Some formal tendencies between the two copulas are also observed. For example, the n-copula is relatively more common in backgrounded constructions, such as $\overline{\mathbf{\varepsilon}}$ setting clauses (appearing more than twice as often in these as the copula). In addition, the n -copula functions secondarily as a focus marker (see §16.3.4), contrasting its complement with an alternative, usually expected or desired, complement.

The observations made to this point might suggest that the difference between the two copula types has to do with semantic-pragmatic concerns. An alternative hypothesis is that the difference involves a modality component, with the n -copula being associated with Irrealis or Irrealis-like expression. Dynamic states are viewed as less real than static ones. Support clauses (e.g., Setting clauses) do not necessarily encode Irrealis predications; but they do communicate background, rather than mainline information, and therefore the information is less relevant and salient. And the contrastive focus constructions presume an alternative reality.

Ultimately, the difference between the two copulas remains obscure for now, awaiting more intensive research. The remainder of this section looks more closely at the formal properties of the two copulas, first lé ' $\operatorname{COP}$ ', followed by nù ' $\operatorname{COP}(\mathrm{N})$ '.

### 10.1.1 lé 'COP'

As stated in the introduction, the copula is generally used to link a subject with a predicative expression, as in (10.3) above. Examples (10.5) and (10.6) further illustrate this function. Additionally, example (10.6) shows that the copula has the alternate form bé 'PCOP' for past tense expressions, also appearing with P 3 , which is common in the text data.

| $(10.5)$ | j̀jì | lé | [Ø-mwā | y-āy] |
| :--- | :--- | :--- | :--- | :--- |
|  | N. | cOP | c1-child | c1-1SG.POSS |

'Nji is my son.'

| b̄̄ | gè | bé | [ńsày] |
| :--- | :--- | :--- | :--- |
| 3PL | P3 | ${ }^{\text {P }}$ COP | c9.friend |

The copula may occur with no overt subject in clauses where other languages require a dummy subject．An example of this is the cleft construction，as illustrated in （10．7）and（10．8），which again shows the past tense form of the copula．See §16．3．2 for a fuller description of cleft constructions．

| （10．7） | lé | ［Ø－nl⿳亠丷厂犬 | wù | bō： | bā－ā |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | COP | c1－poison | c1ReL | c2．child | c2－ANA1 |  |  |

＇．．．it is POISON that those children had eaten．＇What－goes－around．9．7
（10．8）chí bé［ńjì wú chí nà m̀－bvừ：tádà lē］
P2 ${ }^{\mathrm{P}} \mathrm{COP} \quad \mathrm{N}$ ．C1REL P2 give c6a－wine T．APPL
＇It was NJI who gave wine to Tada．＇

The copula may also precede the main verb（i．e．，as an auxiliary verb in the preverbal slot）．In this position it functions either in expressing Future tense or Perfect aspect．See $\S \S 9.3 .1$ and 9.3 .2 respectively for more details．

## 10．1．2 jù̀＇ $\operatorname{COP}(N)$＇

Clauses with the n －copula often appear to have predicates that express temporary states or those that are in some way context dependent，as illustrated in（10．4）above． The n－copula has short and long forms（jù and jùmè），for which no satisfactory explanation is available other than possibly representing different stages of grammaticalization．The short form is much more prevalent．In most cases it appears that there is a preference for one over the other．

Unlike the copula，clear occurrences of the n－copula in clauses with a tense marker have not been observed．However，examples（10．9）and（10．10）show it co－occurring with the aspectual auxiliaries bá＇still＇and dó＇SIT＇respectively．Note that the $n$－copula does not elicit a subject agreement element in（10．9），indicating that it is less verb－like than common verbs，at least in this context．

| wū | tú | wū | k $\bar{\varepsilon}$ n－è | à－kfúy， |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | return | 3SG | stir－PROG | c18－outside |  |
|  |  |  |  |  |  |
| wù | bá | nù | $[y \bar{e}$ | yī | này］ |
| 3SG | still | $\operatorname{COP}(\mathrm{N})$ | c9．body | c9AM | c9．animal |

＇She remained going around outside，still being an animal．＇
Two Wives．4．10

| (10.10) | l $\bar{\varepsilon}$ | dó | jù | $[k \overline{1}-f \bar{e}$ | kì | b̄̄̄: | bā | Ø-nwà |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SET | SIT | COP(N) | c7-time | c7REL | c2.child | c2AM | c1-book |  |

'When it was time that school children come to eat something...
What-goes-around.7.1

The n -copula also functions as a constituent focus marker as described in $\S 16.3$.4. It is not always easy to discern when it is acting to express focus versus as a copula. But it is certain to be outside the verbal core when bringing focus. In example (10.11), the n-copula is modifying the postverbal object bvùlè: 'food', which is in the form of flour before being cooked. Object focus is called for because the daughter in the story has not taken corn to be ground into flour, and she believes that her mother is boiling the unground corn rather than the flour.

'She took the FLOUR, poured [it], pssss, into the water, and stirred and stirred.'

Disobedient Child.1.10

### 10.2 Nominal predicates

Nouns may serve as predicate expressions and as such are linked to the subject by the copula as illustrated in (10.12) and (10.13).

'I left and went to school, because I am a teacher.'
Fire.1.6

| (10.13) | b̄̄ | gè | bé | [ńsàng] |
| :--- | :--- | :--- | :--- | :--- |
|  | 3PL | P 3 | ${ }^{\mathrm{P}} \mathrm{COP}$ | c9.friend |

Certain locational nouns, such as 'house' and possibly 'school', are routinely used in locative expressions without a preposition, which is usually associated with locative expressions. Thus, the predicate nominal in (10.14) gives the location of the subject, and is linked by the copula.

| (10.14) | $\emptyset$-mwā | bé | $\emptyset$-bwè: | g $\bar{\varepsilon}$ | bé | $[y \bar{e}]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c1-child | with | c1-mother | P 3 | ${ }^{\mathrm{P}} \mathrm{COP}$ | c 9. house |

'A child and her mother were in their house.' Disobedient Child.1.1

Existentials usually involve a copula linking a subject with the locative pronoun yú 'on.it'. This locative pronoun is coreferential with yè 'on' prepositional phrases, as well as with Comitative Objects marked with b' 'with'. This type of construction is illustrated in (10.15).

'There was a woman who was frying cassava puff in that quarter.' What-goes-around.1.4

This presentational strategy is very common in the text data, frequently observed in the setting sections of stories where the major participants are introduced. The precise antecedent of the locative pronoun is unknown, resulting in some interpretational ambiguity. In other words, it is not known whether the pronoun is coreferential with a Locative Oblique or with a Comitative Oblique. The "existential" interpretation is reflected in the translation, which is always "there was $x$ ". See §7.2 for more details.

A less common syntactic construction type involving the copula is the cleft construction, where the predicate nominal follows a copula with no argument in the subject position. Example (10.16) demonstrates that the cleft construction represents a second strategy for expressing existentials.

'Some years ago, there was a man and wife who loved each other very much.'

Jealous Husband.1.1

Example (10.17) is another case of a cleft construction with a predicate nominal. In this instance, the predicate expresses a time reference, establishing the temporal setting for the text.

'It was the $17^{\text {th }}$ of February (lit. the month in which children used to run)...’

Fire.1.1

The adverbial pronoun nj̀ 'like.that' can serve as a predicate in similative expressions. In (10.18), where $\mathbf{n j}$ follows the n-copula, the subject is the empty class 19 pronoun, which refers generally to the situation described earlier, that her children have eaten poisoned food intended for an annoying blind beggar.

| (10.18) | l $\bar{\varepsilon}$ | fí | dó | fí | jùmè | [n̄̀:], |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | SET | c19 | SIT | c19 | $\operatorname{COP}(\mathrm{N})$ | like.that |


| Ø-kwēsé | w $\bar{\varepsilon}-\grave{\varepsilon}$ | m̀bữ: | bé | kwè, | wù | bēd-è |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c1-woman | c1-ANA1 | burst | with | c9.death | 3SG | cry-PROG |

'As it was so, that woman started crying and crying.'
What-goes-around.9.11

As was stated in $\S 10.1 .2$, the longer $n$-copula form seen in this example is thought to represent an older form of the stem.

### 10.3 Comitative predicates

Predicates marked with the comitative conjunction/preposition are treated in much the same way as nominal predicates. The subject is linked to the comitative predicate via the copula, establishing a comitative relation between the two nouns. Examples (10.19)-(10.21) are given to illustrate.

'In fact (or truly), I have medicine that kills rats.'

| $(10.20)$ | w̄̄ | lé | $[b \dot{\varepsilon}$ | ḿ-bà: $]$ | lā |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2SG | COP | with | c6a-soup | CE |

'So, do you have soup?'
Jealous Husband.2.1
(10.21) g $\hat{\varepsilon}$ bē $g \bar{\varepsilon}$ jí mw- $\bar{\varepsilon}: \quad$ mú j́-jīlē $g \grave{\varepsilon}$, NEG2 1PL P3 eat c18a-thing c18aAM nMzR-eat NEG2
bē g $\bar{\varepsilon}$ bé [bé jèn]
1PL P3 ${ }^{\mathrm{P}} \mathrm{COP}$ with c9.hunger
'We did not eat food, we remained hungry.' (lit. we were with hunger)
Fire.1.9

### 10.4 Prepositional phrases as predicate

Prepositional phrases are also linked to the subject with a copula when acting as a predicate. These clauses are usually expressions of location, as illustrated in (10.22) and (10.23).

| (10.22) | l $\varepsilon$ y-g $\bar{\varepsilon}$ <br>  $\emptyset$-sùkū | $\bar{a}-n t a ̄ n a ̄, ~$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | SET | 1SG-go | c1-school | c18-morning |


'As I went to school in the morning, I was at the school when it was half past two...' 73

Fire.1.7


SET 1SG.PRO $1 \mathrm{SG}-\mathrm{P} 3$ 1SG- ${ }^{\mathrm{P}} \mathrm{COP}$ in c1-airplane APPL
'As I was in the airplane ...' Training.1.14

[^36]Example (10.24) is a rare case of a prepositional phrase predicate that is expressing something other than location.

| (10.24) | wù | gè | bé | $[y \bar{e}$ | kì-màǹ̀ | lē | bé | kì-n-ch $\bar{q} \eta$ | f̄̄] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3 SG | P 3 | ${ }^{\mathrm{P}} \mathrm{COP}$ | on | c 7 -doubt | APPL | with | c 7 -NMZR-spoil | there |

'He was confused and ill...' (lit. 'was on doubts and with spoiledness
there') Lake.6.4

Prepositional phrases headed by the non-locational preposition $\mathbf{k} \bar{n} \bar{\varepsilon}$ 'about' can also serve as a predicate. Once again, the prepositional phrase is linked to the subject via a copula.

| Ø-j̀-shìlı̀ <br> c1-NMZR-sit | wú-yú <br> c1-ANA2 | gè | b3 | bé | $[k \overline{\mathrm{P}} \mathrm{COP}$ | bá-mī <br> about |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c2-person | bá | c2REL |  |  |  |  |

'This meeting was about (or for) preachers.'
Training.1.2

### 10.5 Numeral predicates

Examples (10.26) and (10.27) illustrate numbers serving as predicates. The number is marked with agreement corresponding to the class of the subject whenever appropriate (see §6.4.5 for rules regarding numbers and agreement). Example (10.26) shows the subject and number being linked by the copula, while the third-person pronoun bú precedes the number in (10.27). In this case, it is possible that the numeral predicate is linked to its subject through simple juxtaposition. But insufficient data does not allow for a clear analysis at this time.

'There were two compounds that burned (lit. those compounds that burned were two).'

| bō | $\mathrm{g} \bar{\varepsilon}$ | jā | tíkālì, | bō | jù | [bó | bā-tèn], | ŋ̄káyí |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 PL | P3 | leave | T. | 3PL | COP(N) | 3PL | c2-five | N . |
| chūgè |  | פ̧fúmè | kībó | bé | bèm |  |  |  |
| Ch. |  | N. | K. | with | B. |  |  |  |

'They left Tikari, five of them: Nkanchi, Chunge, Nfume, Kibbo and Bem.'

History.2.1

### 10.6 Adjectival Predicates

As observed in §6.4.6, adjectives do not appear in the text corpus. Nevertheless, elicited examples such as (10.28) and (10.29) (repeated from §6.4.6) show that adjectives may serve as predicate, following the copula.

| (10.28) | kī-bฐֻ: | lé | [ $\mathrm{k} \overline{1}-\mathrm{f}$ ¢̄ f$]$ |
| :---: | :---: | :---: | :---: |
|  | c7-calabash | COP | c7-new |

'The calabash is new.'
(10.29) kī-tē lé [kī-kēgē]
c7-tree COP c7-ancient
'The tree is ancient (or very old).'

## Chapter 11

## Clause structure

The specifics of Nchane clause structure are described in this chapter. The discussion is limited to clauses with verbs, although many of the characteristics of clauses with verbal predicates are present in those with non-verbal predicates. Clauses with non-verbal predicates and copulas are treated in Chapter 10.

There are five categories of clausal constituents identified by formal distinctions: Subject, Object, Applied Object, Comitative Oblique, Locative Oblique. These formal distinctions are discussed in §11.1. Conventional labels have been used in part out of convenience, since they offer an easily recognizable starting point for describing how the various constituents are realized and how they function. However, as pointed out by Haspelmath, the use of conventional categories as a means of describing clausal constituents is highly problematic since "the categories of language structure are language-particular" (Haspelmath 2007b: 121).

Therefore, these terms should be understood as attempts at recognizing common characteristics shared between a constituent associated with a traditional term and Nchane's version of that constituent. For example, the Nchane Subject may be more like a traditional object in certain respects, but the label "subject" represents a closer approximation as compared to the label "object". In order to avoid unintended claims regarding the assignment of labels, I will be describing the Nchane variety of constituents utilizing the proper noun form of the constituent label (e.g., Subject,

Object, etc.). However, as will be seen below, while these designations are useful in capturing formal characteristics of the various constituent types, they are of limited use in describing how these constituents are organized into clauses.

Certain verbs are noted to usually appear with certain types of constituents and in certain syntactic configurations. This characteristic of verbs is often treated in grammars through the notion of transitivity, along with the identification of arguments (i.e., constituents required by the verb for grammaticality). However, assessing Nchane clausal constituents for argumenthood is challenging. First, some of these constituents may be omitted from the clause whenever they are inferable. The phenomenon of clauses lacking certain argument-like constituents is particularly clear for objects, but is true of even subjects, as discussed in §11.1.1. Second, some verbs have multiple "argument frames", appearing with different constituents, with different shades of meaning in each frame.

Consequently, rather than attempting to establish the transitivity of verbs, I will subscribe to the notion of clausal valency, categorizing clauses according to the number of constituents present. Descriptions of the different clause types are given in §11.2. In many cases, these constituents may be argued for as obligatory elements for grammaticality, in other words, as conventional arguments. But in other cases, the degree of obligation is not so clear.

I treat all of the constituent types as Nchane Arguments and make no attempt at distinguishing among them between Arguments and Adjuncts, because each of them, as will be further shown, can be seen as obligatory in particular clauses (though not necessarily in every one of those from the examples). Although such a distinction can certainly be made in semantic terms, it does not appear to have any bearing on formal expression in Nchane and is ignored for the moment.

An additional important observation is that the various constituent types have a tendency to appear in a particular order and in particular clausal "positions" or "slots". I infer this tendency into an assumed canonical word order as presented in §11.3. Non-canonical word orders are observed which bring into question how Nchane organizes and governs clause syntax. There is some evidence to suggest that Nchane clause structure is oriented around semantic roles and information structure elements like Topic and Focus, in addition to grammatical relations. This issue is taken up in §11.4.

### 11.1 Syntactic constituent types

Nchane distinguishes two categories of clausal constituents in terms of phrasal elements: those that are formally marked and those that are formally unmarked. Altogether, five distinct types of constituents are observed: Subject, Object, Applied Object, Comitative Oblique, Locative Oblique. Subjects and Objects are unmarked constituents, most frequently differentiated by clause position, with Subjects occurring before the verb and Objects occurring after the verb. Applied Objects occur with the postposition applicative marker lē 'APPL' and follow the Object, if present.

The two oblique constituents also follow any co-occurring Objects and are both introduced by prepositions (which serves as a partial defining characteristic). Comitative Obliques are introduced by the preposition b' 'with' and encode accompaniment constituents as well as instrumentals. ${ }^{74}$ Locative Obliques are usually marked by one of several prepositions and the applicative marker lē 'APPL'.

These different clausal constituents are summarized in Table 11.1, with a detailed description of each given in subsections 11.1.1 and 11.1.2, where the constituent being described appears in brackets. The Applicative analysis presented here is somewhat unconventional and not undisputable. Therefore, a discussion regarding this postposition and choice of analysis is provided in subsection 11.1.3.

| Constituent | Syntactic form |
| :--- | :--- |
| S | NP |
| O | NP |
| $\mathrm{O}_{\text {APPL }}$ | $\mathrm{NP}+\mathbf{l}-\overline{\mathbf{e}}$ |
| OBL $_{\text {COM }}$ | $\mathbf{b} \dot{\varepsilon}+\mathrm{NP}$ |
| OBL $_{\text {LOC }}$ | prep + NP + lē |

Table 11.1 Summary of Nchane clausal constituent types.

### 11.1.1 Formally unmarked constituents

Subject and Object are formally unmarked constituents and differentiated by clause position and agreement patterning. Descriptions of both are given in this section, beginning with the Subject, followed by the Object.

## Subject

The formal characteristics of the Nchane Subject are as follows: 1) Subjects are unmarked, 2) Subjects occur to the left of the verb, the position associated with sentence topics, 3) Subjects generate subject agreement in certain cases. Note that this is the only constituent type that generates agreement on verbs. These characteristics are exemplified in (11.1) and (11.2), both of which also illustrate the tendency of Subjects to encode semantic AGENTS.

| [kì-nfè̀: | kí-mú] | $\mathrm{g} \bar{\varepsilon}$ | $\mathrm{j} \bar{\varepsilon} n-1 ́$ |
| :--- | :--- | :--- | :--- |
| c7-blind.man | c7-some | P3 | walk-PROG ${ }^{75}$ |

'A certain blind man was walking around.' What-goes-around.1.1

[^37]| (11.2) | $[\mathrm{m} \bar{\varepsilon}]$ | $\mathrm{g} \bar{\varepsilon}$ | $\overline{\mathrm{n}}-\mathrm{j} \overline{\mathrm{a}}$ | $\overline{\mathrm{y}}$-g $\bar{\varepsilon}:$ | Ø-j̀j-jèn $\ddot{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG.PRO | P3 | 1SG-leave | 1SG-go | c1-NMZR-walk |

'I left and went on a journey...'
Fire.1.2

Referents of Subjects are usually animate, but it is possible to have an inanimate Subject, as in (11.3). Inanimate Subjects are rare and might be limited to INSTRUMENTS in constructions which serve to suppress agentivity.

| (11.3) | [fī-n̄̄] | m $\bar{\square}$ | fī | sê: | wù | fè-bwé, | wù | m $\bar{\square}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | c19-knife | RES |  | cut | 3SG | c16-neck | 3SG | RES |
|  | wù gwè | wù | kw |  |  |  |  |  |
|  | 3SG fall |  |  |  |  |  |  |  |

'The knife then cut him at his neck, he then fell and died.'
Greedy Friends.1.21

While the preverbal position usually is filled by a Subject, there are a number of circumstances in which this is not the case. One such situation is when the subject of the sentence is first-person singular. At times, no subject pronoun is used, leaving this position empty. However, the verb is usually marked with subject agreement as in (11.4). This is quite common in the text data.

$$
\begin{array}{llll}
\text { (11.4) } & \overline{\mathbf{j}} \text {-já } & \overline{\mathbf{\jmath}} \text {-gę̆: } & \text { Ø-sùkū, } \\
& \text { 1sG-leave } & \text { 1sG-go } & \text { c1-school } \\
& \text { 'I left and went to school...' }
\end{array}
$$

So-called agent focus constructions also may leave the preverbal position empty, as in (11.5).

| (11.5) | chí | yén | tādà | wù | lē |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | P2 | see | T. | 3SG | APPL |

'TADA saw him.'

In agent focus constructions, the logical subject (i.e., the AGENT constituent which canonically is expressed by a Subject) appears in the postverbal position, the position associated with Focus. But as this example shows, the postverbal constituent does not generate the expected subject agreement, taking on the properties of an Object and analyzed as such. So, although this clause has a logical subject, no syntactic subject is present.

This observation is important when viewing a clause like that in (11.6), where the preverbal and postverbal constituents of a neutral-focus clause have switched positions. This is the usual outcome of agent focalization in clauses with a PATIENT (at least those which are non-human); the PATIENT is said to be defocalized and moved to the preverbal position.

| bvū-ŋgá | bw- $\bar{\varepsilon}:$ | bvù-chí: | g $\bar{\varepsilon}$ | ná | $\emptyset$-nı̀ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| c14-power | c14-ANA1 | c14-all | P3 | give | c1-god |

'GOD gave all that power.'
Fire. 57

Note that in this case-agent focalization of clauses with a Subject (AGENT) and Object (PATIENT) - the language apparently prefers having a constituent in the preverbal position. This preference is observed in neighboring Noni (Hyman 1981: 107), where the preverbal position is filled by either a dummy subject or a preposed object, as well as Naki (Good 2010: 11). See $\S 16.3 .1$ for a fuller description of word order focus constructions.

The temptation to call the defocalized PATIENT the new Subject must be abandoned because this preverbal constituent does not generate subject agreement. This fact is illustrated in (11.7), which is grammatically acceptable, but where a semantically infelicitous reading is dictated when the semantic PATIENT in preverbal position generates subject agreement.

(11.7) | \#mūn-chn̄nē | chí | mū | jí | bā-nā |
| :---: | :--- | :--- | :--- | :--- | :--- |
| c18a-groundnut | P2 | c18a | eat | c2-cow |

'Groundnuts ate the cows.'

*‘The COWS ate the groundnuts.'

Cleft constructions, a second focus strategy, also routinely result in an empty preverbal position. In other words, these constructions have no syntactic subject, as illustrated in (11.8). (See §16.3.2 for more details regarding cleft constructions.)

| lé | $\emptyset$-nı̀ | wú | g̀̀ | nà | jè | y $\bar{\varepsilon}-\grave{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| cop | c1-god | c1REL | P3 | give | c9.path | c9-ANA1 |

'It is GOD who gave that way.'
Fire.50.2

An argument could be made that in constructions like those in (11.5) and (11.8), where the preverbal position is empty, there is a null subject. However, there is no subject agreement in either example. And while other nearby languages make use of expletive subjects in these kinds of constructions, the occurrence of an expletive subject in Nchane is not attested. See $\S 7.5$ for further discussion of dummy subjects.

## Object

Objects show the following characteristics: 1) Objects are unmarked, and 2) Objects do not generate agreement on verbs. Furthermore, they usually immediately follow the verb, the position generally associated with focus, although this is only a strong tendency. Examples (11.9) and (11.10) illustrate the typical Object, which is usually associated with semantic PATIENTS.

| (11.9) | bā | lé | bā | yú | [nàn | $\mathrm{y} \bar{\varepsilon}-\bar{\varepsilon}]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | c2 | COP | c2 | kill | c9.animal | c9-ANA1 |

> '...they have killed that animal.'

Inheritance. 25

| (11.10) | bó | k $\bar{\varepsilon}$ | b̄̄ | jīnss-è | [ỳgú] |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3pL | begin | 3PL | extinguish-PROG | c3.fire |

'They started quenching the fire.'
Fire.3.4

Frawley (1992) distinguishes PATIENTS as undergoers of an action with a resulting change of state (as in the above examples) and THEMES as undergoers of an action with no change of state. Examples (11.11) and (11.12) have Objects encoding semantic THEMES, illustrating that Nchane makes no formal distinction between the two semantic roles. Therefore, while both terms are utilized in this description, they may often be considered as interchangeable.

| (11.11) | Ø-kwèsē <br> c1-woman | $w \bar{\varepsilon}-\grave{\varepsilon}$ <br> c1-ANA1 | būsē remove | [shī], <br> c9.chicken |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | '...that woman took the chicken out...' |  |  |  | Jealous Husband. 12 |
| (11.12) | bó ká | bő | k ¢ m -è | [Ø-ǹ-téfé] |  |
|  | 3pl ITER | 3PL.fut | have-PROG | c1-NMZR-advise |  |
|  | 'They again will be having advice...' |  |  |  | Marriage.4.2 |

As mentioned above, agent focus constructions where the AGENT and PATIENT switch clausal positions have no Subject. Rather, the AGENT and PATIENT of these clauses are both Objects (see example (11.6) above). Another context which allows for clauses with two Objects is when a THEME and a RECIPIENT appear in the same clause. These constituents are usually expressed as Objects, with the RECIPIENT immediately following the verb and the THEME coming next. Examples (11.13) and (11.14) illustrate such double-object clauses. Both Objects appear in brackets and the RECIPIENT Object is bolded as well.

| (11.13) | wú | ná | $[\mathbf{b y ̄}]$ | $[$ kì-m-bōnć $]$ |
| :--- | :--- | :--- | :--- | :--- |
|  | 3SG.HORT | give | 3PL | c7-NMZR-pray |

'...he will bless them...' (lit. give them prayers)
Marriage.3.7
(11.14) jū bD্́: bá Ø-kwése̋ w $\bar{\varepsilon}-\varepsilon ̀$, wū bé
$\operatorname{COP}(\mathrm{N})$ c2.child c2AM c1-woman c1-ANA1 c1REL P1
nā [kì-nfę̣̀: k $\bar{\varepsilon}-\grave{\varepsilon}] \quad$ [màn-kàlà mā-ā]
give c7-blind.man c7-ANA1 c6a-cassava.puff c6a-ANA1
'...being the children of that woman who gave that blindman that
cassava puff.'
What-goes-around.8.2

Note that RECIPIENTS may also be expressed through Applied Objects, as described in §11.1.2. In this case, the order of the two constituents is reversed, with the THEMEObject preceding the RECIPIENT-Applied Object.

The object is often inferable, and thus open to ellipsis, which is very common in the data. The omitted object in (11.15), indicated by a minus, is inferred from the full noun referent appearing in the previous clause.

| (11.15) | b $\overline{\bar{c}}$ | báǹ̀ | mw- $\bar{\varepsilon}:$ | mw- $\bar{\varepsilon}:$, | b $\bar{y}$ | tóy | $[-]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3PL | gather | c18a-thing | c18a-ANA1 | 3pL | burn | c18a |

'...they gathered those things and burned [them].' Inheritance. 6

In (11.16), the full noun referent $\overline{\mathrm{y}} \mathrm{gwè}$ 'fishing pole' appears in the first sentence of the example, and corresponds to the omitted object in the setting clause of the second sentence. Note that the use of the class 1 pronoun in the main clause of the second sentence might serve to make clear that the thing thrown into the water is the baited hook rather than just the termites.
$\begin{array}{lllllll}\text { (11.16) } & \text { bē } & \text { sū: } & \bar{y} g \bar{y} & y \bar{e} & \emptyset \text { - } \bar{y} g w e ̀ ~ & \text { lē } \\ & \text { 1PL } & \text { string } & \text { c10.termite } & \text { on } & \text { c1-fishing.pole } & \text { APPL }\end{array}$

| $1 \bar{\varepsilon}$ | bé | sú: | $[-]$, | bē | nộ | wù | à-jō |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SET | 1 PL | string | c10 | 1 PL | throw | c1 | c18-water |

'We put termites on the hook. After putting [them on the hook], we threw it (the baited hook) in the stream.'

Fishing.1.4-5

Ellipsis of human objects is unattested in the data. Referential human Objects typically appear as pronouns, as illustrated in (11.17).

'They sent that cow (on top of him) so that the cow's horn then pierced him and he died.' Greedy Friends.1.6

Locative nouns (described in §5.2.3) are derived from prepositional phrases and represent another type of Object-those which express semantic LOCATIONS. ${ }^{76}$ They are observed as exhibiting distribution patterns comparable to their Locative Oblique counterparts (described later in this section), as seen in the examples below. Example (11.18) shows a LOCATION-Object following a PATIENT-Object, while in example (11.19) it follows a Comitative Oblique. ${ }^{77}$

| bá | ḿbứ: | bá | $m \bar{\varepsilon} s \bar{\varepsilon}$, | bá | d $\bar{\varepsilon}:$ | $\bar{m}-m \bar{\varepsilon}:$ | [f̀̀̀-tāy] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| they | foam | c2 | finish | c2 | cook | c6a-oil | c16-fireplace(c7) |

> 'After finishing foaming, they cook the on the fireplace.' (lit. at the fireplace)
> Making Palm Oil.1.

| (11.19) | wū | $b \bar{u}$ | $b \dot{\varepsilon}$ | kī-chídè | $[$ à-bō] |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | arrive | with | c7-food.mat | c18-hand(c7) |

'She appeared with a food-mat in [her] hand.' Two Wives.3.4

Examples (11.20)-(11.22) are other instances of LOCATION constituents without a preposition. The verb $\mathbf{g} \bar{\varepsilon}$ : 'go', illustrated in (11.20) and (11.21), usually does not have a prepositional phrase as complement, although it is possible. Likewise, locations expressed through proper nouns as in (11.22) typically are not introduced by a preposition.

[^38]| (11.20) | m | $\bar{n}$-lé | ý-gè: | [yē] |
| :---: | :---: | :---: | :---: | :---: |
|  | RES | 1SG-enter | 1SG-go | c9.house |

'...so, I just entered the house.'
(11.21) l $\varepsilon$ ǵ ý-gę̀: [Ø-sùkū] ā-ntānā,

SET 1SG-go c1-school c18-morning
'As I went to school in the morning... '
Fire.1.7

| (11.22) | $\mathrm{b} \overline{ }$ | $\mathrm{g} \bar{\varepsilon}$ | ja | $[$ tíkālì $]$, |
| :--- | :--- | :--- | :--- | :--- |

3PL P3 leave T.
'They left Tikari, ...'
History.2.1

### 11.1.2 Formally marked constituents

The remaining clausal constituents are described in this section. Each of them appears with some kind of formal marking and usually follows the verb. The Applied Object is marked with the postposition applicative marker. The Comitative Oblique is introduced by a preposition, while the Locative Oblique is marked with a preposition and the postposition applicative marker.

The designations "Object" for Applied Object and "Oblique" for the two preposition-marked constituents, should not be considered as conventionally applied terms. They are simply reflections of the fact that Applied Objects may often be considered as obligatory constituents, while the two Oblique constituents often appear to have Adjunct status. Furthermore, the designation "Oblique" provides a means to recognize the formal similarities of the two different constituent types, both of which are marked by prepositions.

## Applied Object

Applied Objects are marked with the phrase-final applicative postposition lē 'APPL' and usually occur immediately after the verb, unless an Object is present, then they follow the Object. They are less common than Objects, but are often seen with certain verbs like 'see', 'tell' and 'touch', as seen in (11.23)-(11.25) respectively. The semantic roles encoded are usually THEME, ADDRESSEE or BENEFACTIVE/ RECIPIENT.

| (11.23) | $\mathrm{m} \bar{\varepsilon}$ | $\bar{\eta}$-g $\bar{\varepsilon}$ | $\overline{\mathrm{n}}$-yēn-é | [bà-mì | lē] | fı̀-kū, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1sG.PRO | 1SG-P3 | 1SG-see-Prog | c2-person | APPL | c16-down |
|  | 'I was seeing people on the earth ...' |  |  |  |  |  |


| (11.24) | $\begin{aligned} & \text { wù } \\ & 3 \mathrm{SG} \end{aligned}$ | $\mathrm{g} \bar{\varepsilon}$ P 3 | tī <br> tell | [wư 3SG | A |  | $1 \bar{\varepsilon}$ <br> COMP | $\begin{aligned} & \text { wù } \\ & 3 \mathrm{SG} \end{aligned}$ | mòn-é <br> feel-PROG | $\mathrm{s} \bar{\varepsilon} \eta$ <br> pain | kì COMP(K) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | wū | $y \bar{\varepsilon} \mathrm{n}$ |  |  | $1 \bar{\varepsilon}$ | wū | gə̄n |  | Ø-ń-fì: |  |  |
|  | 3SG | brea | he-P |  | SET | 3SG | wan | -PROG | c1-NMZR- |  |  |

'He told her that he was feeling pain when breathing so that he wanted help.'

Lake.4.6

| (11.25) | $\bar{y}$-g $\bar{\varepsilon}:$ | k $\overline{1}-$ bó | à-kfūy, | $l \bar{\varepsilon}$ | fî: | yé | lēs-è |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG-put | c7-arm | c18-outside | SET | c9.air | c9REL | enter-PROG |


| yè̀ | kòn-è | $[m \bar{\varepsilon}$ | lē $]$ |
| :--- | :--- | :--- | :--- |
| $c 9$ | touch-PROG | 1 SG.PRO | APPL |

'...I put my hand outside so as to receive fresh air.' (lit. so that the air that is entering touches me)

Training. 1.14

| (11.26) tádà já mùn-chōnē | $[$ j̀jì | l̄̄] |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | T. | give | c18a-ground.nut | N. | APPL |

'Tada gave groundnuts to Nji.'

Applied Objects encoding RECIPIENTS in clauses with a THEME-Object,
like in (11.26), are uncommon in the data corpus. Usually, the object is inferable and thus, omitted as described in §11.1.1. In this case, the Applied Object occurs immediately after the verb, as illustrated in (11.27).

| (11.27) | wù | m̄ | wù | bús $\bar{\varepsilon}$ | $\bar{m}$-bà: | fó, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | RES | 3 SG | remove | c6a-soup | there |

'She just removed soup from there (the leaf) and gave [it] to her husband.' Jealous Husband. 13

As a reminder, when the THEME-Object is retained, the RECIPIENT usually is expressed through a second Object, which follows the verb and precedes the THEME as in (11.13) and (11.14) above.

There are no convincing examples in the text corpus of an omitted Applied Object. However, (11.28) might illustrate such an omission. If there is an omitted Applied Object here, it would be encoding a RECIPIENT. But the RECIPIENT is apparently no one in particular.

| (11.28) | wù | ná | $\varnothing$ - $\overline{\mathrm{y}} \mathrm{g} \bar{\varepsilon}$ | $[-]$ | g $\bar{\varepsilon}:$ | bú | kī-fē |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | give | c1-trouble | the people(?) | go | reach | c7-time |  |

'...he gave trouble (was disruptive) to the point (lit. going and reaching time) that an elder turned and said to him...' Lake.3.1

Example (11.29) shows that the predication 'give trouble' can have a RECIPIENT, although in this case it appears as an Object rather than an Applied Object. Therefore, because the RECIPIENT can be encoded as an Object or an Applied Object, it is not possible to know which one of these constituents is omitted in (11.28), if in fact the RECIPIENT has been omitted.

| (11.29) | wù | tó | wù | nā-à | m $\bar{\varepsilon}$ | $\emptyset-\overline{1} g \bar{\varepsilon}$, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | HAB | 3SG | give-PROG | 1SG.PRO | c1-trouble |
|  | n̄ché: | ségé-chī | ségé-chī |  |  |  |
|  | true | when-all | when-all |  |  |  |

'...he is always giving me trouble, truly all the time.'
What-goes-around.2.3

Constructions involving a speech verb, but with no ADDRESSEE, as in (11.30), are another possible source of evidence for an omitted Applied Object. Speech acts can sometimes have no specific addressee. But the "blind man" is clearly being addressed in this example, even though he does not appear in the sentence.

| wù dú | $[-]$, | kò | lä |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | say | blind.man | catch | CE |  |
| mày-kàlà |  | mā-nē, | wó | jí |  |
| c6a-cassava.puff | c6a-PROX | 2SG.HORT | eat |  |  |

'She said (with irritation) [to the blindman], "Take this cassava puff, you should eat [it]."'

Both of these examples with no grammatical applied object, along with the ellipsis of objects presented in §11.1.1, suggests that the notion of valency is of limited importance to Nchane. More discussion on this issue is provided in §11.2.

Example (11.31) is a rare example of a BENEFACTIVE in the text data. It is not surprising that it is expressed through an Applied Object, since RECIPIENTS often are as well.

| (11.31) | m $\bar{\varepsilon}$ | $\bar{y}$-g $\bar{\varepsilon}$ | $\overline{\mathrm{y}}$-gūd-é | $\emptyset-\bar{y} k a ̄ \eta$ | $[\mathrm{bj}$ | lē], |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG.PRO | 1SG-P3 | 1SG-buy-PROG | c1-sha $^{78}$ | 3PL | APPL |

'I was buying sha (i.e., corn beer) for them....'
Fire. 46

A few examples are observed in the text corpus that have Applied Objects expressing LOCATIONS. These could be prepositional phrases (i.e., Locational Obliques), but with the preposition omitted for some reason. Examples (11.32) and (11.33) are given to illustrate.

| (11.32) | Ø-mwā | wū | Ø-bwī | bó | bèm | g $\bar{\varepsilon}$ | $j \bar{a}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c1-child | c1AM | c1-mother | 3PL.POSS | B. | P3 | leave |  |
|  |  |  |  |  |  |  |  |
|  | [Ø-n̄-táś́-jé | lé] |  |  |  |  |  |
|  | c1-NMZR-cross-path | APPL |  |  |  |  |  |

'Their brother Bem left the junction...'
History.3.4
$\begin{array}{llllll}\text { (11.33) } & \text { b } & \text { k } \bar{\varepsilon} m-e ́ ~ & \text { kì } & \text { b̄̄ } & g \bar{\varepsilon}: \\ & \text { 3PL } & \text { have-PROG } & \operatorname{COMP}(\mathrm{K}) & \text { 3PL } & \text { go }\end{array}$

| $[$ bvū-shí | bvū | Ø-mù | wù | $\emptyset$-nò | lē] |
| :--- | :--- | :--- | :--- | :--- | :--- |
| c14-face | c14AM | c1-person | c1AM | c1-god | APPL |

'...they have to go before the man of God.' (lit. go to the face of the
person of God)

## Comitative Obliques

Comitative Obliques are marked with the conjunction/preposition bé 'with', which is described in detail in $\S 8.2$. These obliques immediately follow the verb in clauses with no object and express the semantic roles of ACCOMPANIMENT and INSTRUMENT, as seen in (11.34) and (11.35) respectively.

[^39]| (11.34) | kéf $\bar{\varepsilon}$ | wó | wā:d-è | $[b \varepsilon ́$ | Ø-chíjī | Ø-jwṑ:] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | VET | 2 SG | quarrel-PROG | with | c1-father | c1-husband.2SG.POSS |

'...don't quarrel with your father-in-law...' Marriage.6.6
(11.35) Ø-táy wù m̀̀-m $\bar{\varepsilon}: ~ j \bar{\varepsilon}-\mathrm{d} \ddot{\varepsilon}$ chúlē,
c1-time c1REL c6a-oil cool-COMPL well

| $b \bar{a}$ | $k \bar{\varepsilon}$ | $b \bar{a}$ | k $\bar{l}-\mathrm{e}$ | $[b \varepsilon ́$ | kì-ntī], |
| :--- | :--- | :--- | :--- | :--- | :--- |
| they | begin | $c 2$ | catch-PROG | with | $c 7-b o w l$ |

'When the oil is cool, they start collecting [it] with a bowl...'
Making Palm Oil.1.11

Examples (11.36) and (11.37) show that Comitative Obliques follow Objects. Occurrences of Comitative Obliques and Objects in the same clause are somewhat rare in the data, likely due to the tendency to omit inferable objects.

| (11.36) | $l \bar{\varepsilon}$ | wú | $m \bar{\varepsilon} s \bar{\varepsilon}$ | $y \bar{\varepsilon}$ | $y \overline{1}$ | Ø-nò |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SET | 3 SG | finish | c9.word | c 9 AM | c 1 -god |  |

'...after devotions with his host (lit. house-mother)...' Lake.4.2
(11.37) m $\varepsilon$ ḿ-bṑ: wò [bé fī-nゝ̄ fī-nē]

1SG.PRO 1SG-stab 2SG with c19-knife c19-PROX
'...I will pierce you with this knife...' Greedy Friends.1.14

A formal distinction is made between Comitative Obliques which encode ACCOMPANIMENT and those which encode INSTRUMENT. The former are usually observed in the text corpus to use personal pronouns for referential entities, while maintaining the comitative preposition, as in (11.38). In contrast, referential INSTRUMENTS never appear with simple pronominal reference, but instead are modified by a relative clause and with the resumptive locative pronoun yú 'on.it', as illustrated in (11.39), where the locative pronoun is best translated as "with him". See $\S 7.2$ for a description of yú and its multiple antecedent types.
$\begin{array}{llllllllll}\text { (11.38) } & \text { l } \bar{\varepsilon} & \text { bó } & \text { gū } & \emptyset \text {-nà } & \text { w } \bar{\varepsilon}-\grave{\varepsilon}, & \text { bō } & \text { tó } & {[\mathrm{b} \text { ह́ }} & \text { wù }] \\ & \text { SET } & \text { 3PL } & \text { buy } & \text { c1-cow } & \text { c1-ANA1 } & \text { 3PL } & \text { come } & \text { with } & \mathrm{c} 1\end{array}$
'When they bought the cow and came with it...' Greedy Friends.1.4

```
(11.39) bó kô: bá dāmūm \(\bar{\varepsilon}\),
3PL catch P. D.
\begin{tabular}{llllllll} 
wù & bó & g \(\bar{\varepsilon}\) & jō & bó & dā & jò & [yú] \\
c1REL & 3PL & P3 & take & 3 PL & cross & c9.stream & on.it
\end{tabular}
```

'...they captured Pa Damume, who they used in crossing the stream.' (lit. who they crossed the stream with him) Land Dispute.2.3

These two examples are particularly striking since the ACCOMPANIMENT referent is -[human] and encoded with a personal pronoun, while the INSTRUMENT referent is + [human] but encoded with a locative pronoun, which would presumably require a referent with a lower animacy factor.

Example (11.40) is a rare case of a clause with two Comitative Obliques. While the literal interpretation is problematic, it seems that both of these obliques are encoding ACCOMPANIMENT. ${ }^{79}$

| (11.40) | wó | ká | wó | chēy $̀$ | [bé | kī-n-ché | k-ūn] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2SG | ITER | 2 SG | spoil | with | c7-NMZR-stay |  |
|  | [bé | Ø-пу |  | -̀] |  |  |  |
|  | with | c1-god |  | -2SG.PO |  |  |  |

'You have also spoiled your own life with your God.'
School. 23

The text corpus contains no examples of Applied Objects and Comitative Obliques in the same clause.

## Locative Obliques

Locative Obliques are expressed through prepositional phrases consisting of one of several prepositions followed by a noun phrase and the phrase-final applicative postposition lē. These constituents usually express LOCATION and follow any Objects and/or Comitative Obliques that might be present. See $\S 8.1$ for a description of prepositions.

[^40]Examples (11.41)-(11.43) demonstrate Locative Obliques expressed through prepositional phrases which are headed by the three primary prepositions, fı̀ 'at', à 'in' and yè 'on', respectively.

| (11.41) | bó | bú | $[f \hat{\varepsilon}$ | kì-tē | ky- $\bar{\varepsilon}:$ | lē $]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3pL | arrive | at | c7-tree | c7-ANA1 | APPL |

'..they arrived at that tree. Jealous Husband.3.6

| $(11.42)$ | bā | d $\bar{c}:$ | $[a ̀ ~$ | $\varnothing$-ká | lē $]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | c2 | cook | in | c1-barrel | APPL |

'They cook [the palm nuts] in a drum.' Making Palm Oil.1.3
(11.43) wé, m $\bar{\varepsilon} \quad \overline{\mathrm{y}}$-g $\varepsilon$ è j̀-y $\bar{\varepsilon} n$-é $\quad l \bar{\varepsilon}$
up 1sG.PRO 1sG-P3 1sG-see-PROG COMP
Ø-àfyón sél-é [yè kì-njá lē]
c1-airplane skip-PROG on c7-cloud APPL
'Up (in the air), I felt (lit. saw) that the airplane was galloping on the clouds.'

Training.1.15

SOURCE constituents may be expressed through a Locative Oblique, as seen in (11.44). It may be that SOURCE is a subtype of LOCATION in Nchane.
(11.44) Ø-bā $w \bar{\varepsilon}-\grave{\varepsilon} \quad l \bar{\varepsilon} \quad m \bar{\varepsilon} \quad$ lé $b \varepsilon ́$
c1-pa c1-ANA1 COMP 1SG.PRO COP with
mày-kàlà yānē à kī-k $\bar{\varepsilon}: ~ l \overline{e ́, ~ m a ̀ ~}$
c6a-cassava.puff here in c7-bag APPL c6areL
n-lēg-é [à Ø-kwēsé wū-mù lē]
1sG-beg-PROG in c1-woman c1-some APPL
'That pa [said], "I have some cassava puff here in [my] bag, which I was begging from some woman."'

What-goes-around.7.6

Locative Obliques follow Objects and Comitative Obliques, as shown in (11.45) and (11.46) respectively. Note that, while the Locative Obliques in the above examples are arguably adjuncts, example (11.45) illustrates a case where it is an obligatory constituent in this particular argument frame, since its absence would result in an alternative semantic reading of the verb (that he was set aside for some later use or purpose). Alternative argument frames are discussed in some detail in §11.2.4.

| (11.45) | $\begin{aligned} & \text { bā-mī } \\ & \text { c2-person } \end{aligned}$ | bá-mù c2-some | $\begin{array}{ll} \mathrm{g} \bar{\varepsilon} & \mathrm{t} \\ \mathrm{P} 3 & \mathrm{c} \end{array}$ | $\begin{array}{ll} \text { toे } & \text { b̄̄ } \\ \text { come } & \text { 3PL } \end{array}$ | $\mathrm{g} \varepsilon$ : <br> put | $\begin{aligned} & \text { wü } \\ & 3 \mathrm{SG} \end{aligned}$ |  | kì-ntā c7-chair | lē] <br> APPL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | '...some people came, put him in a chair...' |  |  |  |  |  | Lake.5.1 |  |  |
| (11.46) | yé <br> c10.sorrow | $\begin{array}{ll} \text { gé } & \text { bē } \\ \text { P3 } & \text { COP } \end{array}$ | $\begin{aligned} & \text { bó, } \\ & \text { 3PL } \end{aligned}$ | $\begin{aligned} & \mathrm{bī}-\mathrm{X} \\ & \mathrm{c} 2-\mathrm{X} \end{aligned}$ | kô: <br> catch | $\begin{aligned} & \text { láy-bōy } \\ & \text { L.-B. } \end{aligned}$ |  |  |  |
|  | bō gè: | bé wù | [à | Ø-ǹtō | wù- |  | l | ] |  |
|  | 3PL go | with 3SG | in | c1-palace | e c1-3 | PL.POSS |  | PPL |  |
|  | 'Unfortunately for them ${ }^{80}$ (lit. sorrows were them), the X people captured Long-Boy and took him to their palace.' Land Dispute.2.1 |  |  |  |  |  |  |  |  |

Although quite rare, topic-marked Locative Obliques occur clause-initially, which is illustrated in example (11.47).

'In the tree, Nenge saw a chicken.'
Prepositional phrases as Locative Obliques may be referenced via locative pronouns, which occur in the same clausal position as their non-pronominal counterparts. See $\S 7.2$ for specific details. While locative noun phrases (described as Objects in §11.1.1) have similar distribution and semantics of Locative Obliques, they are only rarely replaced with a pronoun, and pronominal reference might be limited to lexicalized locative nouns like "palm of hand", which might be more identifiable as PATIENTS/THEMES than as LOCATIONS.

### 11.1.3 The applicative postposition lē

The lē postposition does not present as a typical applicative marker, which is conventionally recognized as a verbal extension reconstructed for Proto-Bantu as *-id- (Meeussen 1967). Nevertheless, its occurrence with constituents encoding various types of semantic roles and of different syntactic types is suggestive of applicative-like function, with polysemy widely recognized as associated with applicatives (see for example Hyman 2018b: 179; and Jerro 2016a: 218). This section begins with a look at how the cognates of lē are treated in neighboring languages, followed by a brief presentation of some of the different contexts in which lē is observed and possible analyses. Language data contrasting clauses with and without lē is presented next, illustrating semantic alternation associated with lē and seeking

[^41]evidence of a core function of the postposition. The section concludes with a brief summary of the relevant points presented and justification for an applicative analysis.

The Nchane applicative marker lē is cognate with Mundabli lā (Voll 2017) and Mungbam =n'́V (Lovegren 2013), both of which are treated as marking dative case. However, it is also cognate with Noni lé, which has several proposed analyses, including "locative suffix" (Hyman 1981: 13), "in someone's stead" (cf. benefactive) and a marker of "indirect object" (cf. dative) (Hyman 1981: 80-81). The Mungong cognate nə is analyzed as a locative marker (Boutwell 2014). However, it appears to be much less productive and occurs with fewer types of constructions.

Nchane RECIPIENTS/BENEFACTIVES are often marked with lē, as well as the complements of certain verbs like 'see' and 'say'. (Examples of these are given in §11.1.2 above.) In the case of RECIPIENTS, a dative analysis as taken in Mundabli and Mungbam is supported. However, this analysis is less appropriate for the THEME complements of 'see' and 'touch', where the transfer of goods or services is not immediately evident.

It is possible that in each of these cases there is a sense of directionality involved in the predication. With RECIPIENTS, there is the movement of an object from one individual to another. Meanwhile, the act of "seeing" could be understood as the transfer of an image from the object to the eye/mind of the EXPERIENCER. Likewise, ADDRESSEES are the recipients of some kind of verbal message. Indeed, analyzing lē as a Locative postposition is well suited for its role in marking Locative Obliques. However, not all LOCATIONS are marked with lē. Note that I assume the postposition marking Applied Objects (e.g., RECIPIENTS) and Locative Obliques as representing a single morpheme.

De Kind and Bostoen (2012) argue that similar polysemy of the Ciluba (Bantu) applicative is best subsumed in the general term GOAL. An analysis of lē as a marker of GOAL seems plausible, but only infers its similarity to the applicative extension observed in other languages like Ciluba. Thus, an applicative analysis might be merited in order to capture similar function, even though lē is not a verbal extension.

Applicatives are also typically thought of as valency-changing operators, which would seem to make this analysis less appropriate for Nchane, since lē arguably does not affect the valency of the verb. However, recent attention has been given to the role that applicatives play in effecting semantic shifts in certain Bantu languages (see Jerro 2016b and; Marten \& Mous 2017 for example), without an apparent change in valency. Semantic alternations can be observed in contrasting clauses with and without a lē-marked constituent, which is illustrated below.

In both of the clauses in (11.48) and (11.49), "Tada" is the THEME of the verb chūj̀̀ 'show' and the 3sG pronoun wū is the BENEFACTIVE, or the one for whom something is being shown. The interpretation of (11.48), with the double-object construction, must be that "he" was looking for "Tada". While the same interpretation
is possible for (11.49), the clause with the Applied Object, it also could mean that "he" was altogether unaware of "Tada".

| (11.48) | j̀jjì | g $\bar{\varepsilon}$ | chūǹ̀ | wū | tádà |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | N. | P3 | show | 3SG | T. |

> 'Nji showed him Tada.' ("he" was looking for Tada)
(11.49) j̀jì g $\bar{\varepsilon}$ chūnè tádà wù lē
N. P3 show T. 3SG APPL
'Nji showed Tada to him.' or 'Nji introduced Tada to him.'

One way to interpret the difference between the two clauses is in terms of specificity. The clause in (11.48) with the two Objects (i.e., without an Applied Object) has a narrower range of expression, where the action of the AGENT is motivated by the desire of the BENEFACTIVE. On the other hand, the clause in (11.49) with the Applied Object expresses a more general situation, where the predication possibly happened without any intentionality or forethought of any of the parties involved.

Examples (11.50) and (11.51) show a similar semantic alternation involving the seeing of a tree. Example (11.50) has an Object followed by a locative pronoun, which provides a locational setting for the "tree". This locative pronoun is also present in (11.51), but here it follows a prepositional phrase. In this second example, the reading is of seeing the place where the tree is rather than the tree itself.

| (11.50) | nēnǵ́ | y $\bar{q} \eta$ | kī-tē | y $\overline{0}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | N. | see | c7-tree | inside |

'Nenge saw a tree there (in the forest).'

| (11.51) | nēnǵ́ | y $\bar{\varepsilon} \eta$ | $\overline{\mathrm{a}}$ | kī-tē | lē | y $\overline{0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | N. | see | in | c7-tree | APPL | inside |

'Nenge saw the area of a tree there (in the forest).'

Again, the clause with the applicative postposition is used to express a predication with a broader or more general interpretation.

The next two sets of examples contrast a locative noun with its corresponding prepositional phrase. A locative noun is seen in (11.52) and expresses a specific location, while a prepositional phrase, with accompanying applicative postposition, occurs in (11.53) and expresses an approximate location.


The locative noun in (11.54) also expresses a specific location. The "market" refers to a specific one that the speaker has in mind. Reference to "market" in (11.55) is made through a prepositional phrase and applicative postposition and gives a generic reading-the market is either one that the speaker does not personally know (i.e., has never seen it or been to it) or the specificity of the market is unimportant.


In each of the example sets above, the clauses with the applicative postposition give a more general reading than do the clauses with an unmarked Object, suggesting that the marker is associated with some kind of semantic alternation. It is possible that this alternation is a reflection of what Jerro describes as the Applied Object making a "stronger pragmatic contribution" as compared to the non-applied variety (2016a: 218-19). Thus, the clauses with the Applied Object are pragmatically marked. For example, the sentence with the locative noun Object in example (11.54) is something commonly said, while the applicative example in (11.55) requires a more unusual context in order to be uttered.

To conclude, the lē postposition routinely occurs marking RECIPIENTS/BENEFACTIVES, ADDRESSEES, LOCATIVES, and the complement of certain verbs like 'see'. The wide range of semantic roles associated with the postposition is comparable to that observed with applicative constructions in other languages and indicates a similar function. In addition, the presence of lē is sometimes observed effecting a semantic alternation, although the nature of that alternation is somewhat obscure. Finally, the form is plausible as a reflex of the Proto-Bantu applicative *-id-, which often is realized as -il, with the form -le present
in the Bantu A40 language Bakoko (Kenmongne 2000: 52-3). Since the function and form of the Nchane postposition lē is similar to the applicative as described in other languages, the adoption of an applicative analysis for Nchane is justified and desirable.

### 11.2 Argument frames

This section is concerned with the different kinds of syntactic clauses available in Nchane. As noted in the chapter's introduction, identifying clausal constituents as "arguments" based on their obligatory presence in the clause is not easily accomplished. The data seems to indicate that all types of constituents may be omitted, even Subjects (see §11.1.1). Nor does there appear to be any formal recognition by the language of a distinction between "argument" and "adjunct". Therefore, the use of terms associated with transitivity would be somewhat misleading and of limited benefit.

In this section I will simply refer to clauses with differing numbers of constituents, where "constituent" refers more specifically to nominal constituents (i.e., the clause constituent "verb" is excluded). Thus, clauses with only one constituent (cf. intransitive) are described in §11.2.1, clauses with two constituents (cf. transitive) are presented in $\S 11.2 .2$ and those with more than two constituents are discussed in $\S 11.2 .3$. The final section (11.2.4) presents clauses with certain verbs which display multiple argument frames. In other words, they can appear with different kinds of constituents, resulting in different shades of meaning expressed by the verb.

None-constituent clauses are not attested in the text data. Intransitive imperatives are considered as having no nominal constituents. But these represent a special type of construction, while this section is limited to looking at declarative clauses. For illustration purposes, the clausal constituents of the examples in this section appear in brackets, along with constituent abbreviations.

### 11.2.1 One-constituent clauses

Some Nchane clauses have just one constituent-a Subject-which precedes the verb, as in (11.56) and (11.57). Note that while some languages differentiate between unergative and unaccusative clauses, these examples show no difference between the two. One-constituent clauses are relatively uncommon in the data corpus.

| (11.56) | S |  | V |  |
| :---: | :---: | :---: | :---: | :---: |
|  | [kì-nfę̀: | kí-mú] | [g $\bar{\varepsilon}$ | j $\mathrm{j}^{\text {n }}$-í] |
|  | c7-blind.man | c7-some | P3 | walk-PROG |

'A certain blind man was walking around.' What-goes-around.1.1

(11.57) | S |  | V |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | [Ø-mū-kwā | wú-nē $]$ | $[g \bar{\varepsilon}$ | $\mathrm{kw} \overline{\mathrm{e}}]$ |
|  | c1-person-value | c1-PROX | P3 | die |

'This rich man died. '
Richman. 12

The most basic clause is illustrated in (11.58), where the first-person singular subject is expressed through a subject agreement prefix. An argument could be made that such clauses actually have no constituents at all. However, subject agreement markers for persons other than first-person singular are phonologically unbound and have the same function (see §9.1.1). Thus, I consider the agreement prefix as functioning like a nominal constituent.

| $(\mathrm{S}) \mathrm{V}$ | (S) V |
| :--- | :--- |
| [ñ-tó] | [ǹ-ché] |
| 1sG-come | 1SG-stay ${ }^{81}$ |

'I came and slept.'

Fire. 1.3

As shown in §11.1.1, agent focus constructions without a PATIENT Object have no preverbal constituent. Therefore, although no example is available to demonstrate this, an intransitive verb with a focused AGENT would consist of a verb followed by an AGENT Object. This observation suggests that grammatical roles are less influential in constituent alignment, which is discussed further in § 11.4.

### 11.2.2 Two-constituent clauses

Clauses with two constituents usually have a Subject and a second constituent, which can be any of the other constituent types. Each of these different configurations is presented in this section.

Clauses may have an Object as well as a Subject. The Object follows the verb, as illustrated in examples (11.59) and (11.60).

| (11.59) | S | V |  |  | O |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [Ø-jwฐ్:] | [fí | wù | jí] | [bvū-lè̇:] |
|  | c1-husband.3sG.poss | receive | 3SG | eat | c14-fufu |

'The husband received and ate the fufu...'
Jealous Husband. 14

[^42]| (11.60) | S | V |  |  | O |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $[\mathrm{ba}]$ | $[l e ́$ | bā | yú $]$ | $[$ [nàn | y $\bar{\varepsilon}$ - $̀]$ |
|  | they | COP | c 2 | kill | c9.animal | c9-ANA1 |

'...they have killed the animal.'
Inheritance. 25

In place of an Object, the clause can have an Applied Object. This variety of clause occurs with a small number of verbs like $\mathbf{y} \overline{\mathbf{\varepsilon}} \boldsymbol{\eta}$ 'see', as in (11.61).

| (11.61) | S | V | $\mathrm{O}_{\text {APPL }}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $[\mathrm{wu}]$ | $y \bar{\varepsilon} y]$ | $[k \overline{1}-c h i ́ d e ̀ ~$ | $k \bar{\varepsilon}-\grave{\varepsilon}$ | lē $]$ |
|  | 3 SG | see | c7-food.mat | c 7 -ANA1 | APPL |

'...she saw that food mat. ${ }^{82}$ Two Wives.6.1

This configuration is also seen in clauses with a RECIPIENT when the THEME Object is omitted. Example (11.62) illustrates an omitted Object, where "cassava puff" in the final clause is inferable from the first clause of the sentence. The omitted Object often appears in an earlier sentence, or perhaps not at all, in the case of a universally known referent.

| (11.62) | wù | jó | màn-kàlà | mā- $\bar{a}$ | mà |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | take | c6a-cassava.puff | c6a-ANA1 | c6aREL |


|  |  |  |  |  | S | V | $\mathrm{O}_{\text {APPL }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wù | bé | yéfè | wū | g ¢, | [wù] | [ná] | [wù | lē] |
| 3sG | ${ }^{\text {P }} \mathrm{COP}$ | rub | 3SG | put | 3 SG | give | 3SG | APPL |

'She took that cassava puff, which she had rubbed [with poison] and set aside, and gave [it] to him.'

What-goes-around.4.8

Two-constituent clauses may also have a Subject and a Comitative Oblique or a Locative Oblique. These are illustrated in (11.63) and (11.64). The obliques in these clauses are not obligatory, in the sense that leaving them out would not affect grammaticality. Nevertheless, that fact does not appear to have any consequences beyond the clause having only two constituents.

[^43]| (11.63) | S | V |  | OBL $_{\text {COM }}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | $\mathrm{m} \bar{\varepsilon}$ | $[\mathrm{g} \bar{\varepsilon}$ | ń-tō $]$ | $[\mathrm{b} \dot{\varepsilon}$ |
| bī-gè $]$ |  |  |  |  |
|  | 1SG.PRO | P 3 | 1SG-come | with |
|  | c8-teeth |  |  |  |

'I brought some money.' (lit. I came with teeth)
Fire.1.4

| (11.64) | S | V | OBL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | [bó $]$ | $[$ fúnè $]$ | $[$ à | $\emptyset$-afyōy | lē $]$ |
|  | 3pL | fly | in | c1-airplane | APPL |

'...they flew in an airplane ...'
Training.1.10

### 11.2.3 Three-constituent clauses

Some verbs are able to take a Subject, an Object and an Applied Object, resulting in clauses with three constituents. The Object follows the verb and expresses the THEME, while the Applied Object follows the Object and expresses the RECIPIENT. The text corpus contains no examples of such object-applicative clauses, but the elicited clauses in (11.65) and (11.66) are given to illustrate.

| $(11.65)$ | S | V |  | O | $\mathrm{O}_{\text {APPL }}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | [tádà] | $[\mathrm{g} \bar{\varepsilon}$ | ná $]$ | [Ø-ỳgənē] | [chà: | lē] |
|  | T. | P 3 | give | c1-banana | c9.monkey | APPL |

'Tada gave a banana to the monkey.'

| (11.66) | S | V | O | $\mathrm{O}_{\text {APPL }}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | [tádà $]$ | [chíns-é] | [̄̄ -bvừ:] | [ǹjì | lē] |
|  | T. | send-PROG | c6a-wine | N. | APPL |

'Tada is sending wine to Nji.'

Clauses with a THEME and a RECIPIENT more commonly express these semantic arguments through two Objects, as seen in (11.67) and (11.68). The RECIPIENT immediately follows the verb and the applicative postposition is not present.

| (11.67) | S | V | $\mathrm{O}_{1}$ | $\mathrm{O}_{2}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | $[\mathrm{wu}]$ | $[$ ná $]$ | $[\mathrm{m} \bar{\varepsilon}]$ | $[Ø-\bar{y} g w e ̀ ~]$ |
|  | 3 sG | give | 1sG.PRO | c1-fishing.pole |

'He gave me a fishing pole.'
Fishing.1.2

```
(11.68)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & & & & S & V & \\
\hline b】̃: & bā & \(\emptyset-k w \varepsilon ̄ s e ́ ~\) & \(\omega \bar{\varepsilon}-\grave{\varepsilon}\) & [wū] & [bé & nā] \\
\hline c2.child & c2AM & c1-woman & c1-ANA1 & c1REL & \({ }^{\text {P }} \mathrm{COP}\) & give \\
\hline
\end{tabular}
\begin{tabular}{llll}
\begin{tabular}{lll}
\(\mathrm{O}_{1}\) & & \(\mathrm{O}_{2}\) \\
\begin{tabular}{ll} 
[kì-fè̀:
\end{tabular} & \(\mathrm{k} \bar{\varepsilon}-\bar{\varepsilon}]\) & [màn-kàlà \\
c7-blind.man & c7-ANA1 & c6a-cassava.puff
\end{tabular} & ma-a] & c6a-ANA1
\end{tabular}
'...the children of that woman who had given that blindman that cassava puff.' What-goes-around.8.2
```

It is possible that the preference for this configuration is the result of the higher rank of recipients on the animacy scale as compared with typical themes, with animates appearing closer to the verb and inanimates less close. (This observation is also relevant to the notion of the postverbal position as associated with focused constituents, as discussed in $\S \S 11.4$ and 16.3.)

Three-constituent clauses may also have a Subject, an Object or Applied Object, and one of the oblique constituent types. (11.69) and (11.70) show clauses with a Subject, an Object and a Comitative Oblique, the first example having an INSTRUMENT constituent and the second example having an ACCOMPANIMENT constituent. Meanwhile, (11.71) illustrates a clause with a Subject, an Object and a Locative Oblique. In each case, the oblique follows the Object, which follows the verb.

| (11.69) | S | V | O | OBL ${ }_{\text {co }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | [mé] | [ḿ-bò:] | [wò] | [bé | fī-nō |
|  | 1SG.PRO.FUT | 1sG-stab | 2SG | with | c19-knife |
|  | '...I will pierce you with this knife...' |  |  |  |  |
| (11.70) | S V |  | O | OBL ${ }_{\text {com }}$ |  |
|  | [j̀ji] [ḡ̄ | là] | [wá:] |  | bī] |
|  | N. P3 | go.goal | c3.marke | with | c9.goat |

'Nji went to the market with a goat (e.g., to sell).'


> '...the blindman was coming and begging cassava puff from that woman, day after day.' $\quad$ What-goes-around.1.5

Clauses with a Subject, an Applied Object and an oblique constituent, as in (11.72), are rare. As indicated by the parentheses, the postposition applicative marker is optional for the first postverbal constituent (i.e., "monkey"). Therefore, this clause can appear with an Applied Object or an Object. It is unclear if there is an actual semantic difference between the two versions (e.g., see vs. look at), although the semantic role of "monkey" is THEME in both.

| (11.72) | S | V | $\mathrm{O}_{\text {(APPL) }}$ | OBL ${ }_{\text {Loc }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [nēngé] | [yء̄n] | [chā̀: | (lè)] | [ā | kī-tē | lē] |
|  | N . | see | c9.monkey | APPL | in | c7-tree | APPL |

'Nenge saw a monkey in a tree.'

The text corpus contains no examples of clauses with more than three of the primary nominal constituents, but the elicited examples in (11.73), alternative iterations of the same clause, show that they can be formed. It could be argued that the Locative Oblique in (11.73)a is modifying the RECIPIENT-Applied Object, and therefore not actually a clausal constituent. However, this argument is less tenable for the clause in (11.73)b, where the Locative Oblique and the RECIPIENT-Object are separated by the THEME-Object.

'Tada gave a banana to the monkey in the tree.'

'Tada gave the monkey a banana in the tree.'

The applicative postposition marking the Applied Object in (11.73)a is obligatory in this case, avoiding a potentially problematic double-object construction. I assume that the grammar dictates that the first Object in such constructions be interpreted as the RECIPIENT and the second Object as the THEME. Thus, omitting the applicative postposition would result in a semantically infelicitous utterance.

### 11.2.4 Alternative argument frames

A small number of verbs have been observed to have more than one argument frame. In other words, the same verb appears in different clauses with different kinds of, and/or different numbers of, clausal constituents. This sometimes leads to difficulties in determining which constituents are required by a given verb, as stated in the chapter's introduction. Thus, rather than considering the valency of verbs, I have chosen to describe the valency of clauses. This section illustrates some of these verbs and the accompanying semantic shift presented by the alternative frames.

The examples below illustrate the alternative argument frames of the verb já 'give'. In example (11.74), the verb takes two Objects, (or as shown in (11.65) above, an Object and an Applied Object). In contrast, the verb in example (11.75) takes an Object and a Comitative Oblique. Considering the Semantic roles in each clause, (11.74) has a RECIPIENT and a THEME, while (11.75) has a BENEFACTIVE and a THEME (or perhaps INSTRUMENT).

| (11.74) | S | V | $\mathrm{O}_{\text {RECIPIENT }}$ | $\mathrm{O}_{\text {THEME }}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | $[\mathrm{wu}]$ | $[$ ná $]$ | $[\mathrm{m} \bar{\varepsilon}]$ | $[$ - $\overline{\mathrm{y}} \mathrm{gwè}]$ |
|  | 3 SG | give | 1SG.PRO | c1-fishing pole |

'He gave me a fishing pole.'
Fishing.1.2

| (11.75) | S | V | Obenefactive | OBL $_{\text {THEME? }}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | [Ø-s̄̄ŋ̄̄] | [ná-á] | [bè] | $[\mathrm{b} \dot{\varepsilon}$ |
| ḿ-mé:] |  |  |  |  |
|  | c5-oil.palm | give-PROG | 1PL | with |
| c6a-oil |  |  |  |  |

'The palm tree provides us with oil.
King of Trees.1.3

The verb gè: 'put' often takes an Object and a Locative Oblique as seen in (11.76). A second argument frame is illustrated in (11.77), where there is no locative constituent. In this second frame, the verb expresses the notion of something being put aside or stored for use at a later time.

| (11.76) | S <br> [bā-mī <br> c2-person | bā-mû] c2-some | $\begin{aligned} & \mathrm{V} \\ & {[\mathrm{~g} \bar{\varepsilon}} \\ & \mathrm{P} 3 \end{aligned}$ | tò come | b̄̄ 3PL | $\mathrm{g} \bar{\varepsilon}$ :] put | $O_{\text {patient }}$ <br> [wü] <br> 3SG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OBL Location |  |  |  |  |  |  |
|  | [à kì-nt | lē] |  |  |  |  |  |
|  | in c7-ch | ir APPL |  |  |  |  |  |

'...some people came, put him in a chair...'
Fire.5.1

| (11.77) | S | V | OPATIENT |
| :--- | :--- | :--- | :--- |
|  | wù | g $\bar{\varepsilon}:$ | bī1-nfūn $\bar{\varepsilon}$ |
|  | 3SG | put | c8-corn |

'...she put the corn aside...'
Disobedient Child.1.3

The lack of a locative element in this example does not simply imply that the location is unimportant and therefore unspecified. When this is the case, the generic location bvūjú bvūmū [c14-place c14-some] can be used.

The verb yét 'see’ also has multiple argument frames, as illustrated in examples (11.78) and (11.79). The first takes an Applied Object and expresses that the object is actually seen or will be seen. The second example takes a complement clause and functions like a verb of cognition.

'...he realized that it is POISON that the children had eaten.'
What-goes-around.9.7

### 11.3 Order of clausal constituents

The canonical order of clausal constituents (in terms of grammatical roles) is given in Figure 11.1. This schema reflects the basic order of words in positive declarative main clauses with default or neutral topicality and focus.

$$
\text { Subject-Verb-(Object)-(Object } \left.{ }_{\text {APPL }}\right)-\left(\text { Oblique }_{\mathrm{COM}}\right)-\left(\text { Oblique }_{\mathrm{LOC}}\right)
$$

Figure 11.1 Canonical word order.

The above order is extrapolated from examples with various constituent combinations, since all of the constituent types have not been observed together in a single clause. All of the constituents following the verb are in parentheses, indicating that they are optional elements of the clause. In some clauses, a first-person singular subject is expressed only through an agreement prefix on the verb. However, as this is the only case in which it could be argued that the Subject constituent is not present, at least in canonical sentences, I maintain an analysis of the Subject as an obligatory constituent of the clause. ${ }^{83}$ This observation has been made for the nearby language Mundabli (Voll 2017: 269) and is likely representative of all the languages in the area.

Note that time adverbs like "yesterday" and "next week" are somewhat free in their clausal position, although they tend to occur either clause-initially or clause-finally.

In general, there is no case marking of constituents, and grammatical relations are dictated to a large extent through word order. Yet, there is a strong tendency for object pronouns to carry a L tone or a H tone, while subject pronouns usually have a M tone, although this tendency is considered to be associated with clause position rather than with grammatical case. (See $\S 11.4$ for further discussion).

Departure from the canonical word order primarily has to do with topic-marking and focus strategies. These are described in Chapter 16.

### 11.4 Clausal constituent alignment

In this section I attempt to identify how Nchane organizes and governs clauses. There are three areas with apparent influence over constituent alignment and selection: grammatical roles, semantic roles, information structure. First impressions are that much of clause governance falls within the domain of grammatical roles. However, as will be demonstrated below, semantic role and information structure considerations are more active in influencing clause syntax. The hypothesized constituent mapping as controlled by these three systems is summarized in Figure 11.2.

[^44]| Slot | 1 | V | 2 |  | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| GR: | SUBJ | VERB | OBJ | OBJAPPL | OBLCOM | OBLLOC |  |
| SR: | AGT | VERB | PAT/THM | RECIP | INSTR | LOC |  |
| IS: | [TOPIC] | VERB | [FOCUS... |  |  |  | $\ldots$ |

Figure 11.2 Comparison of constituent mapping in clauses via grammatical roles vs. semantic roles vs. information structure.

Each of these systems are addressed below in order.
Nchane can be viewed as an SVO language, with grammatical relations encoded largely by word order. As observed for Mundabli (Voll 2017: 279), support for grammatical relations is relatively weak beyond word order. The only possible evidence of case marking is found in the pronominal system, where preverbal pronouns may be differentiated from postverbal pronouns by the realization of tone. As mentioned earlier, preverbal pronouns usually have a mid tone, while postverbal pronouns usually have a low or a high tone.

However, this variation in tone appears to be more associated with clause position than with grammatical role. As was stated in §7.1, the observation that postverbal pronouns usually have a low or a high tone extends not only to Objects, but also to Applied Objects and Comitative Obliques; in other words, any postverbal pronoun. Thus, for example, tone cannot be said to specifically mark for Accusative case, although it might be argued that pronouns are marked tonally as Subjective/Nominative case, in opposition to non-Subjective/Nominative case.

Another possible evidence for grammatical relations is agreement marking on verbs. It is clear that in focus-neutral, declarative sentences with certain TAM configurations, verbs agree with the Subject, as in (11.80).

| (11.80) | bā-nã | ché | bā | jí | kì-nfūnē |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | c2-cow | P2 | c2 | eat | c7-corn |

'The cows ate the corn.'

However, as (11.81) shows, in agent focus constructions where the logical subject and the logical object switch clausal positions, the preverbal "object" does not elicit verbal agreement. Nor does the postverbal "subject" (which by my definition is an AGENT-Object).

| (11.81) | kì-nfūnē <br> c7-corn | ché | p2 | eat |
| :--- | :--- | :--- | :--- | :--- | | bā-nā |
| :--- |
| c2-cow |

Constructing a sentence with the inanimate referent serving as a grammatical subject (i.e., preverbal and eliciting verbal agreement) results in the clause in (11.82). This clause is grammatical, but semantically infelicitous.

| (11.82) | \#kì-nfūnē | ché | kī | jí | bā-nā |
| :---: | :---: | :--- | :--- | :--- | :--- |
|  | c7-corn | P2 | c7 | eat | c2-cow |

'The corn ate the cows.'

The above observations demonstrate that clause positions are not strictly designated according to grammatical roles. Subjects are limited to the preverbal position, but not all preverbal constituents are Subjects. Furthermore, non-agentive preverbal constituents are normally not Subjects. As reflected in Figure 11.2, there is a fairly strong tendency for constituents encoding the various semantic roles to occur in a particular position and in a particular order relative to the other constituents. In other words, AGENTS almost always precede the verb and PATIENTS and THEMES usually follow the verb. INSTRUMENTS follow PATIENTS and LOCATIONS come last.

One common exception to the semantic role mapping in Figure 11.2 is observed in double-object constructions, where RECIPIENTS precede THEMES. As mentioned in §11.1.2, this word order might be related to animacy concerns. But the important thing to observe about this exception as it relates to constituent alignment is that the RECIPIENT can only precede the THEME when it is encoded as an Object, not as an Applied Object. This indicates two competing influences in the alignment process.

Good (2010: 64-65) notes similar concerns related to the clause structure of Naki, Noni and Aghem, stating that "...the interpretation of the word order facts indicate(d) that such grammatical roles [i.e., subject and object] play relatively little role in these languages' surface syntax." He suggests that information structure concerns such as topic and focus are critical in determining constituent alignment, such that these languages could be described as "discourse centered" rather than "grammatical-role centered."

The degree to which Nchane is similar to Naki in terms of syntax management is difficult to determine. However, it seems clear that Nchane clause structure also displays strong tendencies for Topic and Focus positions (or "fields" as Good puts it). Topics usually appear in the preverbal position, although it seems that clause-initial position is more topical than the immediately before verb position, since non-subject constituents marked as topic are observed to precede preverbal subjects when they are present.

Focus is associated with the postverbal position. This is evidenced in postverbal agent focus constructions as well as the focusing cleft construction (see
examples (11.6) and (11.8) respectively). In both of these constructions, the focused constituent follows the verb (or the copula in the case of the cleft construction).

The argument for Topic and Focus influence over clause syntax is further supported by the "dummy" focus element l̀ 'FOC' in certain predicate focus constructions, as in (11.83). The focus particle is obligatory in this example and apparently fulfills the syntactic requirement of this verb form to have a complement in the postverbal position, the clausal position which happens to be associated with focus.

| (11.83) | wù | g $\bar{\varepsilon}$ | já | $\emptyset-n t a ̄ y$ | $l \bar{\varepsilon}$ | wū | kwé-é | l̀̀ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $3 S G$ | P 3 | give | c1-thought | COMP | 3 SG | die-PROG | FOC |

'He thought that he was dying.'
Lake.4.4

Hyman makes similar observations regarding the same focus marker in Noni, noting that certain verb forms "require a verbal complement" (Hyman 1981: 77). One can therefore infer that, in these cases, where the focus is on the entire predication, the language prefers to have some element in the postverbal focus position rather than having it empty. See $\S 16.3 .5$ for a description of this focus marker.

However, it does not necessarily follow that the sentence topic always occurs preverbally. In the case of postverbal agent focus constructions where the logical object is preposed (or defocalized), the preverbal THEME-Object is normally more topical than in its canonical postverbal position, but it might not be the de facto Topic. In fact, postverbal agent focus constructions with no PATIENT/THEME-Object end up without a preverbal constituent altogether. The same is true of cleft constructions, which have no subject, dummy or otherwise. Nevertheless, topic-marking strategies usually position the Topic to the left of the verb.

In addition, while there is some validity to the notion of the postverbal position being associated with Focus, only postverbal agent focus constructions place the focused constituent immediately after the lexical verb. The focused constituent follows the copula in cleft constructions, while in counter-expectation focus constructions, the focused constituent follows the n -copula and can remain in situ, as illustrated in (11.84)

| (11.84) | á | wū | bé | ná | bvū-l $\bar{\sim}:$ | nū | shì | lē | gè |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | NEG1 | 3SG | P1 | give | c14-fufu | $\operatorname{COP}(\mathrm{N})$ | c9.chicken | APPL | NEG2 |

## 'She did not give fufu to THE CHICKEN.' (she gave it to someone else)

In summary, Subjects only appear in the preverbal position, but Objects may be postverbal or preverbal (in certain contexts). However, Applied Objects never precede Objects and Locative Obliques are almost always clause-final. Likewise, AGENTS tend to be preverbal and to serve as sentence Topics. There is a preference
for RECIPIENTS to precede THEMES, but only when encoded as an Object. But when a RECIPIENT follows a THEME, it is encoded as an Applied Object. Topics usually are somewhere to the left of the verb, with non-Subject Topics preceding the preverbal Subject. But postverbal Topics are attested (for example (16.6)). In addition, there is strong evidence that Focused constituents follow the verb or a copula. But the expression of focus through the postverbal position of the lexical verb is limited to in situ Objects (in so-called neutral focus constructions) and postverbal agent focus constructions.

I conclude that no single system can be viewed as primary in clausal constituent selection and alignment. It appears that all three of these areas (grammatical roles, semantic roles and information structure) are working together to control the placement of the various clausal constituents. However, the influence of grammatical roles is significantly limited in comparison with discourse-semantic concerns

## Chapter 12

## Relative clauses

This chapter describes Nchane relative clauses. I begin in $\S 12.1$ with a presentation of various details related to clause structure and the formal elements of relative clauses. Section 12.2 looks at how relative clauses differ from main clauses and $\S 12.3$ addresses the topic of which clause constituents are available for relativization and which clausal roles may be filled by noun phrases modified by relative clauses. Note that in the examples, the head nominal and resumptive pronouns (when present) are bolded and relative clauses appear in brackets. Gaps are represented by a minus sign.

### 12.1 Relative clause structure and formal properties

Nchane relative clauses follow the head nominal and are introduced by a relativizer which agrees with the head nominal. This is illustrated in example (12.1), which has a relativized class 2 noun, and example (12.2), which has a relativized class 9 noun.

| (12.1) | $\begin{aligned} & \mathbf{b a ̄}-\mathbf{m} \\ & \text { c2-pe } \end{aligned}$ |  | [bá |  | person | $\begin{aligned} & \text { g̀̀ } \\ & \text { P3 } \end{aligned}$ | tó-ó] come-PROC | $\begin{aligned} & \text { bā } \\ & \text { c2 } \end{aligned}$ | $\begin{aligned} & \text { yēs-è } \\ & \text { greet } \end{aligned}$ |  | mè <br> 1sG.PRO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | lē | $1 \bar{\varepsilon}$ |  | Ø-lā |  |  | w-ày | lé |  | fyé |  |
|  | APPL |  |  | c5-c | ompound |  | 1-1SG.Poss | COP | c1 |  |  |

'The people who were coming, were sympathizing (lit. greeting) with me that my compound had burned. ' Fire. 44

| Ø-sōŋ̄̄ | ná-á |
| :--- | :--- |
| c5-oil.palm | give-PROG |


| fī: | [yē | mw- $\bar{\varepsilon}:$ | mūn-chī | kòy $\bar{\varepsilon}$ | $-]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| c9.air | c9REL | c18a-thing | c18a-all | want | air |

'The palm tree provides air that all things need.' King of Trees.1.8

The relativizers, which are summarized in Table 12.1, are segmentally identical to the personal pronouns. However, they present a different tone pattern. While main clause preverbal pronouns are marked with either a $L$ or a $M$ tone, relativizers introducing clauses with a relativized preverbal constituent are marked with a H tone. Likewise, main clause postverbal pronouns are marked with a H tone, but relativizers introducing clauses with a relativized postverbal constituent are marked with either a L or a M tone. ${ }^{84}$

The parentheses enclosing certain relativizers in the table indicate that they are rare. The alternative form for class 2 enclosed in parentheses is a particularly interesting case, illustrating a possible split in the relativizer system. The prevalent form is ba, which is a conservative reflex of the class 2 nominal prefix. This form is observed as the relativizer for human and nonhuman relativized constituents. The alternative form bs is seen only with human relativized constituents, often appearing to be interchangeable with ba in this context. It is likely to be used with postverbal as well as preverbal relativized constituents, although it is only observed in the text data with those that are preverbal. No difference has been established in meaning between the two relativizers as they are used with human relativized constituents.

[^45]| Class | Relativizers with preverbal relativized constituents | Relativizers with postverbal relativized constituents |
| :---: | :---: | :---: |
| 1 | wū, wú | wù |
| 2 | bá, (bó) | bà |
| 3 | wú | wū |
| 4 | yí | yī |
| 5 | chí | chī |
| 6 | á | $\overline{\mathrm{a}}$ |
| 7 | kí | kī |
| 8 | bí | bī |
| 9 | yì | yì, yī |
| 10 | yí | yī, yí |
| 14 | bvú | bvū |
| $6 a^{85}$ | má | mà, mā |
| 19 | fí | fī |
| 18a | mứ | mu |
| 13 | yí | chī |
| 16 | (fó) | (f $\bar{\varepsilon}$ ) |
| 18 | (wó) | ( $\overline{\mathrm{a}})$ |

Table 12.1 Nchane relativizers.

The position of the relative clause within the noun phrase is not clearly substantiated due to insufficient data. However, noun phrases containing a relative clause and a demonstrative are common in the data, which show that the relative clause can either precede or follow the demonstrative, as examples (12.3) and (12.4) respectively illustrate.

| Ø-kwēsé | [wú | - | káy-è | màn-kàlà] | $\omega \bar{\varepsilon}-\bar{\varepsilon}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| c1-woman | c1REL | woman | fry-PROG | c6a-cassava.puff | c1-ANA1 |
| wù jù | fó | bé | n̄sā | y-è |  |
| $3 \mathrm{SG} \quad \operatorname{COP}(\mathrm{N})$ | there | with | c9.friend | c9-3sG.Poss |  |

'...that woman who was frying cassava puff was there (in the neighborhood) with her friend.'

What-goes-around.2.1

[^46]
'She took that cassava puff, which she had rubbed [with poison] and set aside, and gave [it] to him.'

What-goes-around.4.8

The motivation for the alternative ordering is not completely clear but is believed to be related to information load. Relative clauses that are relatively long tend to follow the demonstrative, while shorter ones precede them. The information load presented by longer relative clauses is possibly too heavy to accommodate the binding of the demonstrative to the head nominal when separated by such a great distance. Examples (12.5) and (12.6) provide further evidence for this hypothesis, where the long relative clause in (12.5) follows the demonstrative and the short relative clause in (12.6) precedes the demonstrative.

| (12.5) | $\begin{array}{ll} \text { bó } & \text { k } \\ \text { 3pL } & \text { be } \end{array}$ | kwe̋غ̀ be.home | $\begin{aligned} & \text { bó } \\ & \text { 3PL } \end{aligned}$ | g <br> go | $\begin{aligned} & \text { bó } \\ & \text { 3pL } \end{aligned}$ | f śs <br> arri |  | kfúy, <br> L-home |  | $\begin{aligned} & \text { 1ū } \\ & \text { op(N) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | bó: | bá |  | O-kwés |  | $\omega \bar{\varepsilon}-\bar{\varepsilon}$ | [wū | - |  | bé |
|  | c2.child | d c2am |  | 1-woma |  | 1-ANA | c1REL | woman |  | 1 |
|  | nā | kìnfę̇: |  | k $\bar{\varepsilon}-\bar{\varepsilon}$ |  | mày-k |  | mā-ā] |  |  |
|  | give | c7-blindm |  | c7-AN | 1 | c6a-ca | ava.puff | c6a-AN |  |  |

'They went and arrived at their home, being the children of that woman who gave that blindman that cassava puff.'

What-goes-around.8.2

| ý-k $\bar{\varepsilon} \mathrm{\ell} \grave{\varepsilon}$ | yē | [yí | - | fyé] | ché-'́ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG-repair | c10.house | c10REL | house | burn | c10-ANA1 |

'...I repaired those houses that burned...'

It is further observed that head nominals with modifiers appearing in RCDEM word order often appear to have a stronger incorporation of the relative clause and head nominal, such that the modified noun phrase is used as a discriminating designation for the referent. For example, the modified noun phrase in (12.3) "that woman who was frying cassava puff" appears three times in the text, with the additional information provided by the relative clause seemingly unnecessary in one of those occurrences, since there is no other "woman" present in the story with whom
she could be confused. The modified noun phrase apparently takes on the role of a formulaic label for the woman.

No examples of headless relative clauses are observed in the text data. However, (12.7) shows that relative clauses may be formed without an overt head. In this case, the relativized constituent is an inferable object that, as a result, has been omitted from the main clause. The relativizers in these constructions are not invariant as one would expect in a headless relative clause, but in contrast agree with the omitted object. ${ }^{86}$

| (12.7) | j̀jì | $\mathrm{g} \bar{\varepsilon}$ | fí, | $[$ mā | tádà | $\mathrm{g} \bar{\varepsilon}$ | chīņs̀ | $-]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | N. | P3 | receive | c6arel | T. | P3 | send | wine |

'Nji received [the wine] that Tada sent.'

Example (12.8) represents a rare case of an apparent relative clause without a relativizer. These kinds of relative clauses have not been intentionally studied and, therefore, nothing more can be said of them except that they seem to be an acceptable variation.

| (12.8) | w̄̄ | lé | bé | fy- $\bar{\varepsilon}:$ | [wó | ná | bè | yû:] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2SG | COP | with | c19-thing | 2SG.HORT | give | 1PL | on.it.QP |

'"...do you have something [that] you should give us?"’ What-goes-around.7.5

A single head noun may be modified by multiple relative clauses, which may be juxtaposed to each other as in (12.9) or joined by a conjunction as in (12.10). While the relative clauses share a single head, each has its own relativizer.

| $\uparrow(\mathbf{y e}$ | [yì | $\mathrm{m} \bar{\varepsilon}$ | g ¢ ${ }^{\text {j}} \mathrm{l}$-c | hé-é | yì | lē]), |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| c9.house | c9REL | 1SG.PRO | P3 1S | Stay-PROG | c9 | APPL |
| [yì | - | jù y - | y-àn], | [yì | $\mathrm{m} \bar{\varepsilon}$ | gغ̀ |
| c9ReL | house | $\operatorname{COP}(\mathrm{N}) \quad \mathrm{c} 9$ | c9-1sG.poss | c9REL | 1SG.PRO | P3 |
| j̀-ché-é |  | yì lé | kībè], | $\mathrm{y} \overline{1} \mathrm{~g} \bar{\varepsilon}$ | fyé | yì-chī |
| 1SG-stay- | -Prog | c9 APPL | actually | c9 P3 | burn | c9-al |

'The house in which I was staying, which was mine and in which I was currently staying, it completely burned.'

Fire.5.2

[^47]Ø-gvúnē [chì bā fwèd-é -] g $\bar{\varepsilon}$
c5-palm.nut.chaff c5REL they burn-PROG chaff or

| $[$ chì | bā | fèl-é | bī-tēgē | yú $]$ |
| :--- | :--- | :--- | :--- | :--- |
| c5REL | c2 | make-PROG | c8-pillow | on.it |

'...palm nut chaff, that they use as kindling (lit. burn) or that they are making pillows with..., King of Trees.1.3

Typologically, the relationship between the relative clause and the matrix noun phrase is important to establish (Andrews 2007: 207). Most Nchane relative clauses are adjacent to the head nominal, which suggests that the relative clause is externally embedded. "Embedded" refers to the relative clause occurring within the matrix noun phrase. "Externally" refers to the head nominal occurring outside of the relative clause.

A relatively small number of examples in the text data show a different orientation of the head nominal and relative clause. For example, (12.11) and (12.12) show the head nominal and the relative clause separated by elements not belonging to the noun phrase. In the case of (12.11), a verb intervenes between the head nominal and the modifying relative clause. In (12.12), the head nominal and relative clause are separated by a locative adverb and a prepositional phrase.

'People knew that as my compound burned, money burned, and the tools (lit. things of work) burned that I was using to earn that money with...'

| (12.12) | $\mathrm{m} \bar{\varepsilon}$ 1SG.PRO |  | b with | màn-kàlà <br> c6a-cassava.puff | yānē <br> here |  | $\begin{aligned} & \text { à } \\ & \text { in } \end{aligned}$ | $\mathrm{k} \overline{1}-\mathrm{k} \overline{\mathrm{c}}$ : <br> c7-bag | lē, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | COP |  |  |  |  |  |  |  |  |
|  | [mà | ǹ-l̄̄g |  | - | à | Ø- | wēsé | wū |  | lē] |
|  | c6arel | 1SG-b | g -PROG | cassava.puff | in | c1- | oman | $n \mathrm{cl}$ - |  | APPL |

'I have some cassava puff here in [my] bag, that I was begging from a certain woman.'

What-goes-around.7.6

The relationship between the head nominal and relative clause in these examples is said to be "adjoined" (Andrews 2007: 214), where the relative clause is located outside of the noun phrase of which the head nominal is head. It is possible that all Nchane relative clauses are of the adjoined type, even though they are usually adjacent to the head nominal. But the main point to be made here is that Nchane relative clauses are sometimes not so tightly bound to the noun phrase of the head nominal that they cannot appear outside of it. ${ }^{87}$

Another important aspect of the relative clause to consider is what happens to a nominal when it is relativized. Unmarked constituents (Subjects and Objects), as well as Applied Objects, leave a gap in the relative clause in the position where that constituent would appear in its non-relative clause counterpart. Conversely, a resumptive pronoun occurs in place of relativized constituents introduced by a preposition (Comitative Obliques and Locative Obliques). Examples of both strategies are illustrated in § 12.3 below.

### 12.2 Asymmetries between main and relative clauses

There appear to be no limitations on tense and aspect marking in relative clauses which would differentiate them from main clauses. However, two elements of the grammar set relative clauses apart from main clauses.

The first distinguishing grammatical feature is subject agreement. As described in §9.1.1, subject agreement is usually present in main clauses, preceding the second verbal element of the verb complex. However, subject agreement is usually not observed in relative clauses following P1 and P2 tense auxiliaries, as seen in (12.13) and (12.14).

[^48]$\left.\begin{array}{llllllllll}\text { (12.13) } & \text { wù } & \text { jó } & \text { màn-kàlà } & \text { mā-ā } & \text { [mà } & \text { wù } & \text { bé } \\ & \text { 3SG } & \text { take } & \text { c6a-cassava.puff } \\ \text { c6a-ANA1 }\end{array}\right)$
'She took that cassava puff, which she rubbed [with poison] and set aside, and gave [it] to him.' What-goes-around.4.8

| (12.14) | bvū-nē | lé | bvū-k̄ | $[b v u ̄$ | tádàa | chí | yèn | $-]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c14-PROX | cOP | c14-ladder | c14REL | T. | P2 | see | ladder |

'This is the ladder that Tada saw.'

Otherwise, there is no difference in subject agreement patterning in relative clauses versus main clauses for auxiliary verbs. Additionally, main and relative clauses with first-person singular subjects show no distinction in subject agreement patterning, regardless of which auxiliary verbs are present.

A second difference between relative clauses and main clauses involves the focus marker lì. As observed in $\S 16.3 .5$, this marker is required to follow progressive verbs that are [-FUT, -NEG] and which have no other complement. Examples (12.15) and (12.16) show that this marker does not occur in relative clauses in this verbal context.

| (12.15) | Ø-kwēsé c1-woman | $w \bar{\varepsilon}-\grave{\varepsilon}$ <br> c1-ANA1 | shísh $\bar{\varepsilon}$ <br> put.down | ŋ̄kà <br> c9.basket |
| :---: | :---: | :---: | :---: | :---: |
|  | [yì wù | bé tù | tūd-é | - ] |
|  | c9REL 3SG | P1 c | carry-PROG | basket |

'...that woman put down the basket that she was carrying.'
Jealous Husband. 7
(12.16) bā-mī [bá - gè tó-ó],
c2-person c2REL person P3 come-PRoG
'The people who were coming, ...' Fire. 44

Focus strategies in general are unattested in the relative clauses of the text corpus. Asymmetry between main and relative clauses in focus marking has been observed as a tendency among Sub-Saharan languages (Creissels 2017: 262-3) and is not surprising, since relative clauses typically express background information in which focus is usually not encoded. However, Mungbam and Mundabli both report
no such asymmetry, with focus strategies available to relative as well as main clauses (Lovegren 2013: 401; and Voll 2017: 292 respectively). Therefore, this observation for Nchane should be considered as preliminary, as further research might prove otherwise.

### 12.3 Accessibility of constituents to relativization

Any clausal constituent may be relativized, including Subjects, Objects, Applied Objects, Comitative Obliques, Locative Obliques and Time Adverbials. ${ }^{88}$ Examples (12.17)-(12.19) illustrate a relativized Subject, Object and Applied Object respectively. In each of these cases, the relativized constituent leaves a gap in the relative clause, indicated by a minus sign. Note that the Applicative postposition is also absent in the case of a relativized Applied Object. (The syntactic structure of the relative clauses in the examples of this section is provided for the reader's convenience.)

|  |  | S | V | OBL $_{\text {LOC }}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| bā-mī | [bá | - | t̄̄ | kwè $]$ | dú |
| c2-person | c2REL | person | come | c9.death ${ }^{89}$ | say |

'The people who came to the death said...'
Disobedient Child.1.14

| $\mathrm{m} \bar{\varepsilon}$ | kə̄$\eta-\mathrm{é}$ |
| :--- | :--- |
| 1SG.PRO | want-PROG |


|  |  | S | V |  | O |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bvū-lè: | $[b v u \bar{l}$ | Ø-kw $\bar{\varepsilon}:$ | lé | wú | k $\bar{\varepsilon} n-e ̀ ~$ | $-]$ |
| c14-fufu | c14REL | c1-wife | COP | 3SG.FUT | cook-PROG | fufu |

'I want the fufu that (my) wife will be cooking.'

[^49]| (12.19) | mw- $\bar{\varepsilon}$ : <br> c18a-thing | [mú c18aREL | S <br> bā-mí <br> c2-person | V <br> yと́n <br> see | $\mathrm{O}_{\text {APPL }}$ <br> thing |  | $\mathrm{O}_{\text {APPL }}$ <br> kì-nché <br> c7-stay | k-àn c7-1sG.Poss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | lē] lé | $\emptyset$-d $\bar{\varepsilon}$ | yī-bō |  | yí l | lé | yí | s¢ֻ̇: |
|  | APPL COP | c4-mouth | c4-3pl.PO |  | c4REL |  | c4.fut | tell |

'The things people saw in my life, only their mouths will say.' (lit. it is their MOUTHS that will tell)

Fire. 62

Prepositional phrases are technically not themselves relativized, but rather the nominals of the prepositional phrases, with a resumptive pronoun occurring in the place of the prepositional phrase. This distinction is important, since as stated in §7.2, these locative pronouns encode coreference to the nominal of the prepositional phrase as well as the spatial deictic semantics of the preposition. Therefore, the locational reference of the prepositional phrase remains in situ, while the nominal element is ex situ, but overtly accessible as the nominal head of the relative clause.

A relativized nominal of a Comitative Oblique is illustrated in example (12.20), while that of a Locative Oblique appears in example (12.21). A resumptive pronoun is utilized in both cases.

| (12.20) | $\mathrm{m} \bar{\varepsilon}$ | $\mathrm{m} \bar{\jmath}$ | $\mathrm{g} \bar{\varepsilon}:$ | $\mathrm{m} \bar{\varepsilon}$ | $\overline{\mathrm{n}}$-jò |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG.PRO | RES | go | 1SG.PRO | 1SG-take |


|  |  | S | V | O | OBLcom |
| :---: | :---: | :---: | :---: | :---: | :---: |
| j̀chè | [yī | bā | yú:-yí | bī-kfūnè | $\mathbf{y u}]$, |
| c9.medicine | c9ReL | they | kill-DISTR.PROG | c8-rat | on.it |
| $\mathrm{m} \bar{\varepsilon}$ |  | ä m | -kälä | mà-à | lē |
| 1sG.PRO | -put | in c6 | -cassava.puff | c6a-ANA1 | APP |

'...I went and took poison that they are killing rats with and I put it in that cassava puff.'

What-goes-around.9.14

|  |  | S | V |  | OBL $_{\text {Loc }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\uparrow($ bvū-jú $)$ | $[$ bvù | bè | g̀̀ | gwē | fó $],$ |
| c14-place | c14REL | 1PL | P3 | fall | there |

'At the places where we landed...'
Training.1.18

Relativized time adverbials are fairly common in the text data. Section 11.3 points out that time adverbials may appear in either clause-initial or clause-final positions. The tone on the relativizer in example (12.22) suggests that the language
treats this time adverbial as occurring postverbally, which is reflected in the example by the placement of the gap after the Object.

'When it was time that school children usually eat...'
What-goes-around.7.1

The tone of the relativizer for kīfè 'time' is generally consistent throughout the text corpus, while that for other time adverbials is realized as high. This suggests that the various time adverbials could be categorized as either clause-initial or clause-final. But this analysis is currently untested.

While not common, it is also possible for a constituent of a relative clause itself to be relativized. In other words, relativization is recursive, which can be seen in (12.23). The nested relative clause appears in parentheses with its head nominal underlined, while the higher-level relative clause appears in brackets.


## Chapter 13

## Complex sentences

Sentences involving more than one verb are described in this chapter, which is divided into three main sections: Coordination and verb serialization (§13.1), Supporting clause constructions (§13.2), and Complement clause constructions (§13.3). The first section describes sentences with multiple clauses which can be understood as having equal status in terms of expressing events or states. The notion of verb serialization as a syntactic construction type is questionable for Nchane. Therefore, the section begins with a discussion of sentences with adjacent verbs and the problems associated with assigning a serial verb construction analysis. This is followed by descriptions of juxtaposed clauses and disjunctive clauses.

Section 13.2 looks at sentences with different types of supporting clauses, as conceived by Dixon (2009), who characterizes the majority of multiclause sentences as having a Focal clause and a Supporting clause. A Focal clause 'refers to the central activity or state of the biclausal linking', while a Supporting clause 'may set out the temporal milieu for the Focal clause, or specify a condition or presupposition for it or a preliminary statement of it, etc.' (Dixon 2009: 3). The notion of "supporting" is chosen rather than "subordinate" since, in most cases, the non-main (or non-Focal) clause is difficult to define according to typical criterion for identifying subordination, such as embeddedness, inflectional restrictions, etc.

Complement clauses, which are described in §13.3, function as clausal arguments. As such, they differ from the other types of complex sentences described in this chapter, belonging to the syntactic structure of the focal clause.

The various types of complex sentences are summarized in Table 13.1. Parentheses indicate that those items are optional. In the case of coordination, " $\left(\mathrm{Cl}_{\mathrm{n}}\right)$ " suggests that more than two clauses may be juxtaposed. Complement clauses are represented by "-clause ${ }_{i}$ ", indicating that they are a part of the syntactic structure of the focal clause.

| Category | Subcategory | Syntactic structure |
| :---: | :---: | :---: |
| Coordination | juxtaposition disjunction | $\begin{aligned} & \mathrm{Cl}_{1}-\mathrm{Cl}_{2}-\left(\mathrm{Cl}_{\mathrm{n}}\right) \\ & \mathrm{Cl}_{1}-\text { ken } \varepsilon-\mathrm{Cl}_{2} / \\ & \mathrm{Cl}_{1}-\text { gen } \varepsilon-\mathrm{Cl}_{2} \end{aligned}$ |
| Supportive | temporal <br> purpose <br> circumstantial <br> reason <br> condition <br> time | $\begin{aligned} & \mathbf{l} \boldsymbol{\varepsilon}-\mathrm{Cl}_{1}-\mathrm{Cl}_{2} \\ & \mathrm{Cl}_{1}-\mathbf{l} \boldsymbol{\varepsilon}-\mathrm{Cl}_{2} \\ & \text { ns }-\mathrm{Cl}_{1}-\mathrm{Cl}_{2} \\ & \mathrm{Cl}_{1}-\mathbf{n j e}-\mathrm{Cl}_{2} \\ & (\mathbf{n \varepsilon ́})-\mathrm{Cl}_{1}-(\mathbf{t u ́})-\mathrm{Cl}_{2} \\ & \text { sege }-\mathrm{Cl}_{1}-\mathrm{Cl}_{2} \end{aligned}$ |
| Complementation | cognition/speech manner intent | $\begin{aligned} & \mathrm{Cl}_{1} \text { - le-clause }{ }_{i} \\ & \mathrm{Cl}_{1} \text { - no-clause }{ }_{i} \\ & \mathrm{Cl}_{1} \text { - } \mathbf{k i} \text {-clause } \end{aligned}$ |

Table 13.1 Summary of complex sentence types.

Note that sentences involving relative clauses are not discussed here, but are described in Chapter 12. Commas are employed in the examples of this chapter to indicate perceived clause boundaries, which often coincide with breath pauses, except for $\S 13.3$, where they are more strictly representative of pauses. See the introduction of $\S 13.1$ for details regarding clause boundary identification. Words under consideration in a particular section are bolded for the reader's convenience.

### 13.1 Coordination and verb serialization

Sentences with multiple verbs are common in Nchane. Those which consist of clauses of equal status could possibly be described as serial verb constructions (henceforth SVCs), which are generally defined as "sequence[s] of verbs which act together as a single predicate[s]" (Aikhenvald 2006: 1).

Aikhenvald gives a number of definitional criteria for SVCs, such as expressing a single event, monoclausality (e.g., no markers of clausal dependency or conjunctions), verbs sharing arguments and TAM marking, and prosodies associated with a single clause. But these criteria are only slightly helpful for Nchane, since they do not clearly differentiate juxtaposed clauses from single clauses with serialized verbs. To illustrate this point, two comparable examples are given in (13.1).

The notion of 'single-event' expression through SVCs is difficult to obtain while remaining objective and without depending on cultural factors, as pointed out by Bisang (2009: 810). However, this example set is construed as contrasting 'multiple-event' and 'single-event' sentences. The context for (13.1)a is a man has gone to bed, but wakes up in the middle of the night unable to breathe. He gets out of bed and goes into the next room in an attempt to get better air. While it is possible to imagine this sentence as expressing one single event, it is more likely that rising up and exiting represent separate (although perhaps related) events. And significantly, the verb $\mathbf{j} \mathbf{a}$ 'rise' contributes its lexical meaning to the sentence.

Meanwhile, example (13.1)b occurs after a man has worked all day at his farm and has just returned home. The verb to' 'come' does not indicate the discrete action of the man arriving (as the previous clause has already established his arrival at home), and so, does not contribute its lexical meaning to the sentence.

| a. | wù | g $\bar{\varepsilon}$ | jā | wé, | wù | ndéndè | wù | bú | à-kfúu |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | P3 | rise | up | 3SG | stumble | 3 SG | exit | c18-outside |  |

'He got up and stumbled outside ...'
Lake.4.5
$\begin{array}{lllllll}\text { b. wù } & \text { tó } & \text { wù } & \text { shī } & \text { wù } & \text { fúf-è } & \text { sh } \bar{y} \eta \\ \text { 3SG } & \text { come } & \text { 3SG } & \text { sit } & \text { 3SG } & \text { rest-PROG } & \text { c9.liver }\end{array}$
'...he came and relaxed.' Jealous Husband. 16

In comparing the two expressions, it can be seen that they are structurally similar. There are no morphological or syntactic markers of clausal subordination or of support clause status, nor of clausal adjunction in either example. Subject marking is usually associated with each verb of a sequence. This is evidenced in both of the examples and therefore not diagnostic for SVCs. This is in contrast to the neighboring Yemne-Kimbi languages Mungbam and Mundabli, both of which are reported to have SVCs with single subject marking (Lovegren 2013: 215-254 and; Voll 2017: 215240 respectively). In addition, as stated in §11.1.1, objects are routinely omitted from clauses whenever they are inferable. Thus, the possibility of shared objects as a means of identifying SVCs is also unhelpful.

Tense, aspect and mood (TAM) marking also offers little or no help in differentiating the two possible multiverbal structure types. The example in (13.1)a has a tense marker preceding the first verb only. This illustrates the tense-marking strategy of the language, which usually establishes tense at discourse boundaries, with little or no tense marking for later sentences. One could interpret the single tense marker in (13.1)a as being shared by the following clauses. The same strategy is observed for expressions like (13.1)b. While this specific example has no tense marking, similar SVC-like expressions such as the relative clause in (13.2) show the
same pattern as that seen in (13.1)a, with the tense marker occurring only one time and preceding the first verb of the sequence.

'...they captured Pa Damume, whom they used in crossing the stream.' (lit. whom they crossed the stream with him) Land Dispute.2.3

Aspect marking may occur on adjacent verbs, but it is not apparent that two "serialized" verbs may share such marking. More study is required to know if mood marking could be used as a diagnostic for SVCs. However, Bisang (2009: 805) observes that complex single events tend to be characterized by a single set of TAM expression, whether the complex event is coded by adjacent clauses or SVCs. Thus, TAM marking is probably of little help.

Prosodies represent another possible indicator to differentiate SVCs. However, prosodic elements in Nchane sentences are somewhat inconsistently realized. Clause boundaries are often marked by pauses, but this is not always the case. Example (13.3) presents multiple verbal elements with no apparent pause, change in intensity or tonal phenomena to mark a clause boundary. However, the two verbs may not be interpreted as encoding a single complex event, but rather two separate events in sequence. Thus, I interpret this sentence as comprised of two juxtaposed, independent clauses.

| (13.3) | wó |  | à m | mày-kàlà | mā-nē | lē, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2SG.FUT |  | in c | c6a-cassava.puff | c6a-PROX | APPL |
|  | wó | ná | wù | lē |  |  |
|  | 2SG.fut | give | 3SG | APPL |  |  |

Conversely, some sentences with multiple verbs which seem to express a single event, and thus, representative of an SVC analysis, have clear pauses following the verbs. Such is the case in (13.4), which has a distinct pause following the verb 'go'.

| (13.4) | mé | ń-tú | ý-gè: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG.PRO | 1SG-then | 1SG- |  |  |  |
|  | $\overline{\mathrm{n}}$-jí | bvū-lę: |  | nàn | yī | shì |
|  | 1SG-eat | c14-food | with | c9.meat | c9 9 m | c9.chicken |

'I then went and ate fufu with chicken ...
Jealous Husband. 20

Note that the verb $\mathbf{g} \bar{\Sigma}$ : in this example does not contribute its basic lexical meaning, since the eater does not actually change location. Note also that the verb tú is serving as an auxiliary and not as a so-called "coverb" (i.e., one of multiple lexical verbs constituting an SVC), although it illustrates how auxiliaries within the verb complex are syntactically indistinct from possible SVC constructions, with a subject appearing before each verb, "coverb" and auxiliary verb.

Nevertheless, there is a significant occurrence in the data of multiverb sentences, such as (13.4), where the apparent "primary" verb is preceded by some "secondary" verb, most often one of motion like "go" or "come". This ordering of verbs is in contrast to Mundabli and Mungbam, where the so-called "minor" coverb follows the "major" coverb. This alternative ordering does occur in Nchane, as illustrated in (13.5), although it is rare.

| (13.5) | lásálō | kwé, | wù | b $\overline{\underline{\sim}}$ | wù | $\mathrm{g} \overline{\mathrm{E}}$ : | f | Ø-nı̀ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L. | die | 3SG | ascend | 3sG | go | at | c1-god |  | PPL |

'Lazarus died and went to heaven ...'
Richman. 11

It is unknown what, if any, significance is represented by the alternative sequencing of the apparent primary and secondary verbs in (13.4) and (13.5).

To summarize, there is some evidence in support of SVCs in Nchane. However, it is likely that those instances of SVC-like structures are less typical than those of other languages reported to have SVCs, even languages nearby. Formal characteristics of sentences expressing complex events through multiple verbs are not observed to differentiate clause chaining structures from SVCs. Primarily, evidence for Nchane SVCs is the relatively common co-occurrence of primary verbs and closed class verbs such as 'go', 'come' and 'exit', particularly when the semantic expression provided by these latter verbs may be construed as more functional than lexical. ${ }^{90}$

Therefore, the current analysis pays little attention to the possible existence of SVCs in Nchane. Sentences with multiple verbs are treated as constructed with

[^50]chains of clauses, unless there are conjunctions present or formal markers of dependency.

### 13.1.1 Juxtaposition

Clauses which communicate different actions are often joined through simple juxtaposition (i.e., without a conjunction), as in (13.6). If any tense marking is present, it occurs only in the first clause and applies to the entire sentence.
(13.6) wù mō wù bús $\bar{\varepsilon}$ m-bà: fó, 3SG RES 3SG remove c6a-soup there
wù ná $\quad$-jwę̀: lē
3SG give c1-husband.3SG.Poss APPL
'She just removed soup from there (the leaf) and gave [it] to her husband.' Jealous Husband. 13

More than two clauses can be juxtaposed in this manner, forming clause chains.
(13.7) kī jō mày-kàlà mā-ā, ki gè: à-kè, kī já c7 take c6a-cassava.puff c6a-ANA1 c7 put c18-bag c7 leave kī gēn-è, kī nā-à c1-ỳkè l $\bar{\varepsilon} \quad$ wō gé c7 go-PROG c7 give-PROG c1-song COMP 2 SG do.COND

| bvū-jō $\bar{\varepsilon}$ | tū | w̄̄ | gé | yē |  | -ธ̄ | ē, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| c14-good | then | 2 SG | do | on |  | -2 | PPL |


| wō | gé | bvū-bēfè | tū | w̄̄ | gé | yē | $y-\bar{o}$ | lē |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2SG | do.COND | c14-bad | then | $2 S G$ | do | on | $c 9-2 S G . P O S S$ | APPL |

'He took that cassava puffs and put it in his bag and left and was going and singing his song, "You do good you do for yourself; you do bad you do for yourself.", What-goes-around.5.2
(13.8) bēy tỏ béy kó, bén jí,
2PL come.IMP 2PL catch 2PL.HORT eat
béy mú jò fó
2PL.HORT drink c9.water there
'"Come and take [the cassava puff], you should eat [it] and drink water." What-goes-around.7.7

The actions of these complex sentences are usually interpretable as sequential occurrences when the verbs are in non-progressive form. Simultaneous action can also be expressed through clause chains when the verbs are in progressive form, as illustrated in (13.9).

| (13.9) | bó | g $\bar{\varepsilon}$ | láy-é, | bó | yén-è | bà- $\eta k$ kë, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3pL | P3 | rejoice-PROG | 3pL | breathe-PROG | c2-song |


| bó | bín-è | $\emptyset$-bỉne̋ |
| :--- | :--- | :--- |
| 3PL | dance-PROG | c5-dance |

'They were rejoicing, singing and dancing.' ${ }^{11}$
Lake.5.3

While clauses within the same sentence generally have the same subject referent, clauses with different subjects can also be juxtaposed, as in (13.10). This sentence is describing a single, complex event and is characterized by short pauses at clause boundaries and a gradual diminishing intensity pattern over the entire sentence.

| bā | k $\bar{c}:$ | bvù-lę̀:, | $\overline{\mathrm{y}}$-gū | $\overline{\mathrm{m}}$-bà:, | b̄̄ | jí | yú |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | stir | c14-food | 1SG-buy | c6a-soup | 3PL | eat | on.it |

'They cooked fufu, I bought soup and they ate with it.'
Fire. 46

### 13.1.2 Disjunction

Two types of disjunctive constructions are observed-those which express simple alternatives and those which express counter expectation. The first type, which is not present in the text data, involves the conjunction kèn $\bar{\varepsilon}$ 'or' and expresses two alternative actions or events, as illustrated in (13.11).

| (13.11) | tādà | $\mathrm{g} \bar{\varepsilon}$ | lè, | k kèn $\bar{\varepsilon}$ | wù | ỳgū: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | T. | P3 | work | or | 3SG | play |

'Tada either worked or he played. '

Counter-expectational clauses are joined through the disjunctive conjunction gēné 'but', which might have a second function in expressing frustration. The counter-expectational clause occurs as the second clause, as illustrated in (13.12) and

[^51](13.13). The examples show that tense marking occurs in both of the conjoined clauses, contrasting with juxtaposed clauses described above.


> 'He rang the bell, but no one responded (lit. came).' Lake.6.7

| (13.13) | wù | gè | bá:y | y $\bar{\varepsilon} \eta$ | g $\bar{\varepsilon}$ | bī-bāg $\bar{\varepsilon}$ | lé | g̀̀, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | P3 | still | see | NEG2 | c8-wound | APPL | NEG2 |

'He saw no injuries, but they were clearly dead.'
Lake.6.3

### 13.2 Support clauses

As suggested in the chapter's introduction, Support clauses typically provide necessary information for the proper interpretation of the focal clause. This can be background information, such as the temporal setting. Or it can provide the purpose or conditions for the focal clause predication. Support clauses are often introduced by a particle or word of some sort, with the type of support clause dictating the order of the main and support clauses. Support clauses in the examples of this section are placed in brackets.

### 13.2.1 Setting particle

The Setting particle $\overline{\mathbf{\varepsilon}} \overline{\text { }}$ 'SET' introduces support clauses that provide details surrounding the action or event that occurs in the focal clause, such as temporal or situational setting, as in (13.14) and (13.15). The Setting clause usually precedes the focal clause.

| (13.14) | $\left[\begin{array}{lll}{[\bar{\varepsilon}} & \text { bē } & \text { bíj} \bar{\varepsilon}],\end{array}\right.$ | bē | yén | nò | ỳgú | bèn-é |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | SET | 1 PL | look | 1 PL | see | like.that | c9.fire | ascend-PROG |

'As we looked, we saw that the fire was burning.'
Fire.2.1

| (13.15) | [ $\overline{\text { ® }}$ | bī-tādā | g ¢ | yòd-é |  | èssà3 $\overline{\text { ] }}$, | bē | $\mathrm{g} \bar{\varepsilon}$ | bé |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SET | c8-shout | P3 | shout-PROG | M |  | 1PL | P3 |  | P |
|  | bè <br> 1pL | bú fó exit ther |  | è sá:, <br> scatter | $\begin{aligned} & \text { be } \\ & \text { PL } \end{aligned}$ | bú <br> L exit | $\begin{aligned} & \text { bè } \\ & \text { 1PL } \end{aligned}$ | $\begin{aligned} & \text { gę: } \\ & \text { go } \end{aligned}$ |  | jèshí <br> 18-path |

'As they were shouting in Misaje, we then scattered and went out on the road.' Fire.1.16-17

The $\mathbf{l} \bar{\varepsilon}$ particle often is accompanied by a tonal change of the following subject pronoun, which is partially illustrated in (13.14). Low toned pronouns often are realized with a M tone and mid toned pronouns (such as bē 1PL) with a H. Note that the $l \bar{\varepsilon}$ particle functions as a complementizer in other syntactic contexts. See $\S 13.3$ for details.

The Setting clause can sometimes give a sequential reading as in (13.16), usually indicated by the word 'after' in the free translation. The event or action in the Setting clause occurs first, followed by that of the focal clause.

| (13.16) | [ $\overline{\bar{\varepsilon}}$ | b⿹̄龴: | bā-ā | jí], | bó | jä | b $\bar{\square}$ | kwè:d-è |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SET | c2.child | c2-ANA1 | eat | 3PL | leave | 3PL | return.home-PROG |

'After those children ate, they left and were returning home.'
What-goes-around.8.1

Other times, the Setting clause appears to be in a logical relationship with the focal clause that could be interpreted as cause-effect, although a sequential reading is often still appropriate. This is illustrated in (13.17) (as well as (13.15) above).

| (13.17) | $\begin{aligned} & {[l \bar{\varepsilon}} \\ & \text { SET } \end{aligned}$ | bā-mfúmè c2-N. | yú hear | Ø-ńtùn c1-news | wú-yú], <br> c1-ANA2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | b $\bar{\square}$ | $\mathrm{g} \bar{\varepsilon} \quad \mathrm{j} \overline{\mathrm{a}}$ | bō |  | kì-jwī | lē |
|  | 3PL | P3 leave | 3PL | arrive at | c7-boundary | APPL |

'When the Nfume people heard the news, they left and arrived at the boundary.' Land Dispute.1.3

When $\overline{\mathbf{\varepsilon}}$ occurs with nù ' $\operatorname{COP}(\mathrm{N})$ ', there is no subject in the Setting clause. The Setting clause in (13.18) provides a temporal setting for the action of the focal clause. But it might also be interpreted as a causal clause as in the previous example. In other words, the woman cooked because it was evening, the normal time for cooking.

| (13.18) | [ $\overline{1}$ | nù | f $\bar{\varepsilon}-\mathrm{mfù}]$, | $\emptyset-\mathrm{kw}$ ¢̄sé | w'́- $\bar{\varepsilon}$ | $\mathrm{g} \bar{\varepsilon}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SET | COP(N) | c16-evening | c1-woman | c1-ANA1 | P3 | ${ }^{\text {P }} \mathrm{COP}$ |
|  |  | k $\bar{\sim}: ~ b v u ̄-l \bar{q}: ~$ <br> stir c14-food |  |  |  |  |  |
|  | 3SG |  |  |  |  |  |  |

'As it was evening, that woman cooked fufu.' Jealous Husband.2.3

The initial Setting clause in (13.19) gives situational context, referring to the previous events of speaker rushing to his burning house and trying to go inside to rescue his belongings. (Note that the sequence $\overline{\mathbf{\varepsilon}}$ jù in this example and the previous one demonstrates that cleft constructions in Setting clauses use the $n$-copula rather lé.)

| (13.19) | $\begin{array}{ll} {[l \bar{\varepsilon}} & \text { nù } \\ \text { SET } & \text { COF } \end{array}$ |  | nò ], <br> like.that |  | $\overline{\mathrm{n}}$-tó <br> 1SG-come | ý-kásè 1SG-return | $\begin{array}{ll}  & \text { m̀-bé } \\ \text { rn } & 1 \mathrm{SG}-\mathrm{Pl} \end{array}$ | $\overline{\mathrm{n}} \mathrm{j} \mathrm{j} \overline{\mathrm{n}} \mathrm{\varepsilon}]$, 1sG-look |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{m} \bar{\varepsilon}$ | $\overline{\mathrm{y}}$-g $\bar{\varepsilon}$ | $\overline{\mathrm{y}}$-kā |  | j̀-yćn | bゝ̄: | Ø-bwễ: | lé, |
|  | 1sG.PRO | 1SG-P3 | 3 1sG- | eturn | 1SG-see | c2.child | c1-mother | APPL |
|  | nò | bō | jùd-é |  | $\varnothing$-ńgè, |  |  |  |
|  | like.that | 3PL | fight-PR |  | c1-trouble |  |  |  |
|  | kì | bó | jī̄s-è |  | ỳgú |  |  |  |
|  | COMP(K) |  | extingui | sh-PRO | OG c9.fire |  |  |  |

'As it was so, as I turned and looked, I saw my brothers, that they were suffering to put out the fire.'

Fire.8.1

The Setting particle may also introduce Purpose clauses, which usually express the reason for the action in the focal clause. In this case, the support clause follows the focal clause, as illustrated in (13.20) and (13.21). This second example also illustrates the Setting particle functioning both ways in the same sentence, first introducing a Setting clause, and second introducing a Purpose clause.

| (13.20) | $\mathrm{m} \bar{\varepsilon}$ | $\overline{\mathrm{y}}$-gè | ỳ-wēnè | kì-mbōy | kí | shēgē, small |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG.PRO | 1SG-P3 | 1SG-open | c7-cover | c7REL |  |
|  | $\overline{\mathrm{y}} \mathrm{g} \mathrm{g}$ : | kī-bó | à-kfūŋ | $\left[\begin{array}{ll}\bar{\varepsilon} & \mathrm{fi}\end{array}\right.$ | fì: |  |
|  | 1SG-put | c7-arm | c18-outside | SET c9 | c9.air |  |
|  | yí | lēs-è | yì kònè | m $\bar{\varepsilon}$ | lē] |  |
|  | c9REL | enter-PROC | c9 touch | - 1sG.PR | RO APPL |  |

'..I opened the window and kept my hand outside so as to receive fresh air (lit. air that was entering touch me).'

Training.1.14

'As the mother was going to the farm, she put corn aside so that she (the daughter) would remain (near the house) and take [it] to the grinding mill.'

Disobedient Child.1.3

### 13.2.2 Circumstantial clauses

The adverbial pronoun nj 'like.that' may be used to introduce support clauses that usually can be interpreted as providing the circumstances under which the event in the focal clause occurs. The Circumstantial clause precedes the focal clause and appears to serve a discourse cohesion role, as it most often repeats events that occurred in earlier sentences. For example, in the text from which (13.22) is taken, the action of the husband sitting down occurs two sentences earlier.

| (13.22) | [ǹ | Ø-jw $\overline{\mathrm{c}} \mathrm{y}$ | shìlé | fı̀-kū:], | wū | mó | wū |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | like.that | c1-husband | sit | c16-down | 3SG | RES | 3SG |


| l $\bar{\varepsilon}$ | w $\bar{\jmath}$ | jó | fàn $\bar{\varepsilon}$ | $\overline{\mathrm{m}}$-bà |
| :--- | :--- | :--- | :--- | :--- |
| COMP | 2 SG | take | where | c6a-soup |

'As her husband sat down, he then asked, "Where will you get soup?",
Jealous Husband. 10

Likewise, example (13.23) comes two sentences after the text says that the woman and her husband "left and were going (to the farm)".

'As the woman was going, she stood and her husband wondered what would happen.'

Jealous Husband.4.2

Example (13.24) illustrates a slightly different formulation of the Circumstantial clause as compared to the earlier examples. While the support clauses of those examples contained at least the same verb as an earlier sentence in linking the current and earlier events, the Circumstantial clause in (13.24) abstracts the state of "weakness" from the previous sentence, where the participant was "confused and
sick". However, the effect is the same, with the two sentences given greater cohesion through the support clause.

'As he was weak (lit. with no power), he left and went to the church to go and ring the bell, as they always did in times of trouble, Lake.6.5

The second nò in the above example does not precede the focal clause and does not have the same discourse cohesion role. In this case, the support clause expresses a manner relationship with the focal clause. The meaning realized here is reflective of the use of nò in complement clauses (see §13.3).

Note that in many cases, ǹ̀ and $\overline{\mathbf{l}}$ are interchangeable. Indeed, the introducing particles in (13.24) were "corrected" by language consultants from $\overline{\boldsymbol{\varepsilon}}$ (in the original version of the text) to ǹे. The interchangeability of these two particles in part reflects the discourse role of ǹे. Since $\bar{l} \bar{\varepsilon}$ has not been observed to have the same kind of function in producing discourse cohesion, it is not surprising that multiple readings of a text can result in these kinds of corrections. However, as will be seen in the section on complement clauses, these two particles can introduce subtle changes to the meaning of the expressions.

### 13.2.3 Reason clauses

Reason clauses are introduced by $\overline{\mathbf{j}} \mathbf{j} \mathbf{e}$ 'reason' and usually follow the focal clause, as in (13.25) and (13.26).


```
(13.26) kóy bó, wó gvúy bó,
love.IMP 3PL 2SG obey 3PL
```

| [jıjē | lé | bó | bó | bフ̄y1 | Ø-jwゝे:] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| reason | COP | 3PL | 3PL.REL | birth | c1-husband.2SG.POSS |

'Love them (your parents-in-law), respect (lit. obey) them, because it is they who delivered (gave birth to) your husband.' Marriage.6.7

### 13.2.4 Conditional

Conditional constructions are variable in form. However, they are likely based on the schema given in Figure 13.1. ${ }^{92}$

$$
[(\mathbf{n} \dot{\varepsilon})+\mathrm{H} \ldots]_{\text {Protasis }},[(\mathbf{t u ́}) \ldots]_{\text {APodosis }}
$$

Figure 13.1 Conditional construction schema.

The particle né introduces the protasis and is glossed in this context with 'if'. The same word appears in other contexts glossed 'like.that' and associated with gestural predications (see §8.5). The apodosis is introduced by the word tú 'then', which is also seen marking Durative and Sequential (see §9.3.4). Both of these polysemous particles are largely differentiated from the other use of their forms by syntactic considerations, with the conditional particles occurring clause-initially (see example (13.32) for a possible exception).

Example (13.27) illustrates the fully marked conditional construction, with high tone on the verb of the protasis (realized here as SH due to a grammatical H on top of a lexical $H$ when preceding a L ), which is also introduced by ń́, and the apodosis introduced by tú.


[^52]As the parentheses in Figure 11.1 indicate, the né and tú are not always present. However, the order of the construction is always protasis-apodosis, and there is nearly always a H tone element associated with the protasis. This H tone is observed in the minimal pair given in (13.28), where the mid-toned verb gvūŋ in the conditional clause in b . is realized with a H tone.
(13.28)

$$
\begin{aligned}
& \text { a. wù gvūn-é m } \quad \begin{array}{l}
\text { we } \\
\text { 3SG obey-Prog } \quad 1 \mathrm{SG} . \mathrm{PRO}
\end{array} \\
& \text { 'He is obeying me.' } \\
& \text { b. [Ø-mwā gvún-é] } \\
& \text { c1-child obey-PROG.COND } \\
& \text { 'If the child is obeying ...' }
\end{aligned}
$$

The factors motivating the behavior of this H tone are unknown at this time. It is usually observed marking the verb or auxiliary verb. Sometimes even the entire protasis clause may be realized at a higher than normal register, as illustrated in example (13.29). This higher tonal register is indicated by the up arrow, which applies to everything in the parentheses.

'If you mess with me (lit. play [me]), I will pierce you with this knife and you will die., Greedy Friends.1.14

It is possible that the H tone is the true marker of Conditional, with né and tú simply contributing their own meanings, which are consistent with if-then semantics. The verbs or auxiliary verbs of the protases in this section are analyzed with COND in their glosses in order to account for the H tone associated with conditionals. However, as just stated, it is often the case that the realization of the H tone extends beyond the predicate.

The text corpus contains no examples of a fully marked conditional construction. Instead, conditional constructions usually have only né and no tú as in (13.30) or the inverse as in (13.31). Note that (13.31) is another example where the entire protasis is realized on a higher tonal register than the apodosis.

'You the husband, if you have done wrong, ask that your wife forgive you.'

Marriage.4.5


| fy- $\bar{\varepsilon}:$ | fī | b $\bar{\varepsilon} y$ | yūg-é | à | $\emptyset$-nwà | wù | $\emptyset$-nò | lē |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c19-thing | c19REL | 2PL | hear-PROG | in | c1-book | c1AM | c1-god | APPL |

'If you do so you have done what is required in the book of God.'
Marriage.3.8

Example (13.32) is a rare case where n' does not precede the Subject. This example is comparable to (13.30), both of which have a topic-marked (left-detached) subject. It is not known what motivates this alternative ordering, nor if it has any effect on the meaning.
(13.32) w wű Ø-mwā wú Ø-kwēsé, wò né le̋
2SG c1REL c1-child c1REL c1-woman 2SG if COP.COND

| w $\bar{\jmath}$ | lè: | $\mathrm{f} \bar{\varepsilon}$ | $\emptyset$-lá | chī | $\emptyset$-jw $\bar{\varepsilon} \eta \mathrm{s} \dot{\varepsilon}$ | lē, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2SG | enter | at | c5-compound | c5AM | c1-man | APPL |

$\begin{array}{llllll}\text { kéf } \bar{\varepsilon} & \text { wó } & \text { lās-è } & \text { bā-mī } & \text { bā-ā } & \text { g } \bar{\varepsilon}, \\ \text { VET } & \text { 2SG } & \text { lose }^{93}{ }_{\text {-PROG }} & \text { c2-person } & \text { c2-ANA1 } & \text { NEG2 }\end{array}$
lose -PROG c2-person c2-ANA1 NEG2
kéf̄̄ wó wā:d-è bé Ø-chijī Ø-jwŋ̀:
VET 2SG quarrel-PROG with c1-father c1-husband.2SG.POSs
mò $\varnothing$-bwē $\quad$-jwŋ̀: gè
RES c1-mother c1-husband.2SG.POSS NEG2
'You the girl child, if you enter into your husband's compound don't look down on those people, don't quarrel with your father-in-law or mother-in-law.'

[^53]
### 13.2.5 Temporal clauses

Events may be described temporally through a support clause introduced by a time word. The support clause, which usually precedes the focal clause, establishes a temporal setting for the event (or future event) in the focal clause. The primary time word observed introducing this kind of support clause is ségé 'when', which is illustrated in (13.33) and (13.34). ${ }^{94}$
(13.33) [ségé wū gغ̀̀: wū jí], wú mō wū kwé,
when 3sG go 3SG eat 3sG.HORT RES 3sG die
wó fü-dé ā-ŋgē-wù-bō
2SG.FUT rest-COMPL c18-trouble-3SG-hand
'When he goes and eats, he should then die, and you will rest from the trouble from him.' What-goes-around.3.4
(13.34) [ségē bēy lé bēn gē wá nō:], tú bēy lé
when 2 PL COP 2 PL do already like.that then 2 PL COP


2PL become already c1-person COP c1-one
yē yē-né tū yī-mímyā
c9.body c9-2PL.Poss become c9-one
bvù-kūgè mò bvù nùmè à-bદ̀n-tēn $\bar{\varepsilon}$
c14-wealth RES c14 $\operatorname{COP}(\mathrm{N}) \quad$ c18-2PL-middle
'When you have done like that you have already become one, your body will become one, then riches will be in your midst.' Marriage.3.9

The word táy 'time' (from English) also functions in providing temporal background information similar to ségé. Although it usually occurs as the head nominal of a relative clause, as in (13.35), it appears to be in the process of grammaticalizing as an introducer of temporal support clauses. This is supported by example (13.36) where it appears without a relative clause.

[^54](13.35) [Ø-táy wū m $\bar{\varepsilon} \quad \mathrm{g} \bar{\varepsilon}$ chīl̀ $\quad$ by $\bar{y}]$ ],
c1-time c1REL 1SG.PRO P3 pull c9.fish

'When I caught a fish, I was very happy.
Fishing.1.10

'When the oil is ready, they (remove it from the fireside and) put it down (on the ground).'

Temporal background information is commonly expressed in the text data through a relative clause with the time word kīfé as the head nominal, as demonstrated in (13.37).

'The time I was coming from that house, I was coming out with my clothes and shoes that I was wearing already burned.'

Fire.7.2

Less commonly, temporal support clauses may occur in sentence-final position, as demonstrated in (13.38) and (13.39). In both of these examples, the temporal clause does not apply to the initial main verb, a likely explanation for its occurrence in sentence-final position.

| (13.38) | wū | jénغ̀ | bé | bī-kā:, | wū | $\mathrm{g} \overline{\bar{z}}$ :, | wū | lă | Ø-lı̄mè, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3SG | walk | with | c8-footstep | 3SG | go | 3SG | work | c5-work |


| $[k \grave{\varepsilon} g-e ̀ ~$ | $\emptyset$-jú | chí | fwē | yē | kì-mà: | lē, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| begin-PROG | c5-day | c5REL | front | on | c7-week | APPL |


| gèn-è | ā-jú | lé | $\bar{a}-t a ̄ d e ̄] ~$ |
| :--- | :--- | :--- | :--- |
| go-PROG | c6-day | COP | c6-three |

'He traveled by foot (to the village) and held services (lit. went and worked work), starting the first day of the week (Monday) and going through the third day (Wednesday).'

Lake.1.2
$\begin{array}{llllllll}\text { (13.39) } & \mathrm{b} \overline{\mathrm{a}} & \mathrm{g} \bar{\varepsilon} & \mathrm{y} \bar{\varepsilon} \mathrm{y} \grave{\varepsilon} & \mathrm{ba}-\mathrm{mi} & \mathrm{l} \bar{\varepsilon} & \text { lé } & \text { nò } \\ \text { they } & \mathrm{P} 3 & \text { teach } & \text { c2-person } & \text { COMP } & \text { COP } & \text { like.that }\end{array}$

| bó | fī | bā-mī | bá-mù | bé | Ø-b̄̄nદ̀ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | help | c2-person | c2-some | with | c5-prayer |

fè bà-ŋg $\bar{\varepsilon}$ bā-bó lē, [kī-fē
at c2-trouble c2-3PL.POSS APPL c7-time

| kì | bā | chūn-í | b̄̄̄-jīní | kī | Ø-mwā-nò] |
| :--- | :--- | :--- | :--- | :--- | :--- |
| c7REL | they | show-PROG | c8-picture | c7AM 95 | c1-child-god |

'They taught people how to help certain people with prayer for their problems, while they were showing the Jesus Film.' Training.1.4

See $\S 8.7$ for an account of temporal adverbs, which usually fulfill a similar function.

### 13.3 Complement Clauses

Complement clauses are those which serve as an argument of a verb and which contain a verbal or predicative element. There are several different kinds of complement clauses observed in Nchane, each of which are introduced by a complementizer. More often than not, there is no breath pause associated with these complementizers. (Note that breath pauses are indicated by a comma in this section.) But the examples below show that when a breath pause is present, it usually occurs after the complementizer. This is especially true for speech complements. The verbs in complement clauses are apparently fully finite, except for those in kī complements. The different kinds of

[^55]matrix verbs and their complements, which appear in brackets, are treated below in this section.

## $L \bar{\varepsilon}$

The particle $\mathbf{l} \overline{\mathbf{\varepsilon}}$, which functions as a support clause introducer (see §13.2.1), also serves as a complementizer, introducing complements of several different types of verbs, including those of cognition and sensation, and verbs of communication. Examples of each of these are given below, where the gloss for $\mathbf{l} \bar{\varepsilon}$ is 'COMP'.

Verbs of cognition and desire often take a complement clause which is introduced by $\overline{\mathbf{\varepsilon}}$ 'COMP', as illustrated in (13.40)-(13.42).

| bó | g $\bar{\varepsilon}$ | ké-é | $[l \bar{\varepsilon}$, | m $\bar{\varepsilon}$ | lé | ń-jó |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | P3 | know-PROG | COMP | 1SG.PRO | COP | 1SG.FUT-take |
| Ø-kfù, | $\bar{y}$-g $\bar{\varepsilon}:$ | $\bar{n}$-shèn $]$ |  |  |  |  |
| c1-rope | 1SG-go | 1SG-hang |  |  |  |  |

'They were knowing that I will take a rope and go hang (myself).'
Fire. 28
(13.41) bē kwāj-í [l̄̄ kī-lūy kí tō lē,
1pl think-PROG COMP c7-year c7ReL come appl

| bē | nú | kì | bé | bús $\bar{\varepsilon}$ | $\overline{\mathrm{a}}$-j̄̄ | $\overline{\mathrm{a}}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 PL | $\operatorname{COP}(\mathrm{N}) . \mathrm{FUT}$ | $\operatorname{COMP}(\mathrm{K})$ | 1 PL | remove | c6-eye | c6AM |

Ø-ywà wù j̀̀chānē]
c1-book c1Am $N$.
'We are thinking that next year, we will be publishing the Nchane alphabet.' Speech.1.4
 reason 3PL want-PROG NEG2 COMP c19-thing c19-some
$\begin{array}{ll}1 \bar{\varepsilon} s \bar{\varepsilon} & g \grave{\varepsilon}]\end{array}$
end NEG2
'...because they don't want anything to be wasted (lit. end, disappear
or become extinct).'
Greedy Friends.1.4

Verbs of sensation like 'see' and 'hear' can also take a complement clause introduced by $\mathbf{l} \bar{\varepsilon}$ if the sensation results in realization, as seen in (13.43) and (13.44).

| (13.43) | $1 \bar{\varepsilon}$ <br> SET | $\begin{aligned} & \text { Ø-mù } \\ & \text { c1-per } \end{aligned}$ |  | j̀ché c9.medicine | wé- <br> c1-ANA1 | $\begin{aligned} & \text { g } \bar{\varepsilon}: \\ & \text { go } \end{aligned}$ | wú 3SG | $\mathrm{j} \overline{1} \eta \bar{\varepsilon}$, look.at | $\begin{aligned} & \text { wù } \\ & 3 \mathrm{SG} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | yén <br> see | $[\mathbf{l} \bar{\varepsilon}$ COMP | lé <br> COP | Ø-nlò, c1-poison | wù c1REL | bゝ̄: <br> c2.child |  | ANA1 | $\begin{aligned} & \text { jí] } \\ & \text { eat } \end{aligned}$ |

'When the doctor looked, he realized that it is POISON that those children ate. What-goes-around.9.7


| $[l \bar{\varepsilon}$ | $\bar{m} b y \grave{̀ v} y \grave{c}$ | kūd-é $],$ | bē | mò | bè | lēgè |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| COMP | c9.bell | ring-PROG | 1 PL | RES | 1 PL | run |

'When he is coming, we will then hear that the bell is ringing and we will then run away.' Cat and Rats.1.4

Verbs expressing the various forms of communication have complements introduced by $\mathbf{l} \bar{\varepsilon}$ 'COMP'. This includes the verbs 'say', 'ask' and 'reply', as in (13.45)(13.47). Except for different pronominal reference, direct and indirect quotations are formally indistinguishable, as is seen in (13.45) and (13.46) respectively.

| (13.45) | Ø-kw $\varepsilon$ sé $\quad \omega \bar{\varepsilon}-\bar{\varepsilon}$ <br> c1-woman c1-ANA1 | $\begin{aligned} & \text { dú } \\ & \text { say } \end{aligned}$ | $[1 \bar{\varepsilon}$, COMP |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ø-jwá:, <br> c1-husband.1sG.Poss | shīlé <br> sit.IMP | fè-kū, c16-down | bē $1 \mathrm{PL}$ |  | $m w-\bar{\varepsilon}:]$ <br> c18a-thing |

'That woman said "My husband, sit down and we will eat."'
Jealous Husband.8.1
(13.46) Ø-bā: w $\bar{\varepsilon}-\bar{\varepsilon} \quad$ bé wù dú $[1 \bar{\varepsilon}$,
c1-pa c1-ANA1 ${ }^{\text {P }}$ COP 3 SG say COMP

| wū | bé | léǵ $\varepsilon$ | lò | à | $\emptyset-k w \bar{s} s e ́$ | wú-mù | lē, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | ${ }^{\text {P }} \mathrm{COP}$ | beg | FOC | in | c1-woman | c1-some | APPL |

wú tó wū kāy-è màn-kàlà]
3REL HAB 3SG fry-PROG c6a-cassava.puff
'That pa said that he begged (something to eat) from a certain woman who is always frying cassava puff.'

What-goes-around.9.10

| (13.47) | wù | chfú | $[\mathbf{l} \boldsymbol{\varepsilon}$, | $\bar{\varepsilon}:$, | wù | tó | wù | jā-à | m $\bar{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $3 S G$ | reply | COMP | yes | 3 SG | HAB | 3 SG | give-PROG | 1 SG.PRO |


| Ø- $\bar{\eta} g \bar{\varepsilon}$, | $\bar{\jmath} c h \underset{\sim}{c}:$ | ségé-ch $\overline{1}$ | ségé-ch $\overline{1}]$ |
| :--- | :--- | :--- | :--- |
| c1-trouble | true | when-all | when-all |

'She answered, "Yes. He is always giving me trouble, truly all the time.", What-goes-around.2.3

Quotations of questions are usually introduced by the complementizer là:, as illustrated in example (13.48). ${ }^{96}$

'Her friend asked her, "(Does) this blind man also come here?"'
What-goes-around.2.2

Speech verbs more commonly associated with indirect quotations also take complements introduced by $\mathbf{l} \overline{\mathbf{\varepsilon}}$. These include verbs such as 'agree', 'suggest', 'beg' and 'promise'. Examples (13.49) and (13.50) are representative of these kinds of communication verbs.

| (13.49) | bó | b $\bar{q} y$ | $[l \bar{\varepsilon}$ | lé | kī | kī-kfūnè | kí | kùgē | kī |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | agree | COMP | COP | c7 | c7-rat | c7REL | big | c7REL |  |

'They agreed that it is him, that fat, black rat, who will tie THAT bell (on the cat's tail).'

Cat and Rats.1.6

[^56]
'You the husband, if you have done wrong, ask that your wife forgive you.' Marriage.4.5

Rarely, the quotation occurs before the speech verb. In this case, there is no complementizer, as illustrated in example (13.51). Note that the SOV word order observed in this example is characteristic of one of the clausal negation strategies, which is described in $\S 15.2$.

'"Why don't you help me? " he asked., ${ }^{97}$
Lake.4.8-9

Examples (13.52)-(13.55) show other verbs that can take a complement introduced by $\overline{\mathbf{l}} \bar{\varepsilon}$ that do not fit neatly into the above categories, although all of them, with the exception of (13.55), may be construed as expressing different types of communication. (Example (13.55) might be better understood as a purpose clause, which is described in §13.2.1.)

'You should take an oath that there shall be nothing that will separate you, because that is how the book of God want us to stay.' Marriage.5.5

[^57]
'They taught people how to help certain people with prayer for their problems, while they were showing the Jesus Film.' Training.1.4
(13.54) fì-máyá fī-nē dūn-í $\quad[\bar{\varepsilon} \quad$ wō gé bvū-jōn̄ $\bar{\varepsilon}$,
c19-story c19-PROX show-PROG COMP 2SG do.COND c14-good

| tū | wò | gé | nù | yē | y- $\overline{0}$ | lē, | wò | gé |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| then | $2 S G$ | do | $\operatorname{COP}(\mathrm{N})$ | on | C9-2SG.POSS | APPL | 2SG | do.COND |

bvū-bēfè, tū wò gé nù yē y-̄̄ lē]
c14-bad then 2 sg do $\operatorname{COP}(\mathrm{N})$ on C9-2SG.POSS APPL
'This story is teaching (lit. showing) that, if you do good, then you do FOR YOURSELF; if you do bad, then you do FOR YOURSELF.'

What-goes-around.10.2

| (13.55) | bén | gè-è | $[l \bar{\varepsilon}$, | kì- $\eta$-kòy $\bar{e}$ | nùmè |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2PL.HORT | do-PROG | COMP | c7-NMZR-want | $\operatorname{COP}(\mathrm{N})$ |


| ā-bèn-ǹténć, | sēgē | chī:, | m̄̄ | b $\varepsilon$ | Ø-kfū | chī-nā] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c18-2PL-middle | when | all | RES | with | c5-family | c5-2PL-POSS |

'You should be showing love among yourselves and even YOUR FAMILY.

[^58]The copula nù is observed taking a complement clause introduced by $\mathbf{l} \bar{\varepsilon}$ in example (13.56). This is the only example of a $\overline{\mathbf{\varepsilon}}$ complement clause following a copula and it is difficult to know for certain if it is functioning similarly to those cases above. However, the example illustrates that it is possible.

| (13.56) | $\begin{array}{ll} \uparrow \text { (yè̀ } & \mathrm{n} \\ \text { on } & \text { lik } \end{array}$ | n̄̄: <br> like.that | lè), APPL | $\begin{aligned} & \text { fí } \\ & \text { c19 } \end{aligned}$ | $\begin{aligned} & \text { mó } \\ & \text { RES } \end{aligned}$ | $\begin{aligned} & \text { fī } \\ & \text { c19 } \end{aligned}$ | nù $\operatorname{COP}(\mathrm{N}$ |  | [ $\mathbf{l} \bar{\varepsilon}$, COMP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | bā-mì | bá- | ùdē | $1 \bar{\varepsilon} \mathrm{~g}$-è |  | Ø-пว̄ |  | bèn | lē] |
|  | c2-person |  |  | beg-PR |  | c1-god |  | 2PL | APPL |

'So, it is then that many people will be praying to God for you, '99
Marriage.4.1

Ǹ
The adverbial pronoun ǹे, as with the particle $\mathbf{l} \bar{\varepsilon}$ treated above, introduces certain complement clauses, in addition to its function in introducing support clauses (see $\S 13.2 .2$ ), although its use as a complementizer is less common. These complement clauses, illustrated in (13.57) and (13.58), usually may be described as manner complements, with the free translation often appropriately utilizing the word "how".


[^59]The complement clause may appear well after the main verb. In example (13.59) it appears as the second member of a coordinate complement, following a prepositional phrase.

| (13.59) | kī-mā c7-week | kí <br> c7REL | fwē <br> front | lē, bā <br> APPL they | $\begin{aligned} & \mathrm{g} \bar{\varepsilon} \\ & \mathrm{P} 3 \end{aligned}$ | yદ̄yè <br> teach | kònë, about |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | bà-nchī | bā | kī-yō | kī | yūdē, | bā-n̄̄ | bé |
|  | c2-law | c2Am | c7-spirit | c7REL | clean | c2-four | with |
|  | [ $\mathbf{n}$, | $\emptyset$-mù | lé | nò | wú | bì: | bà-mbīlë] |
|  | like.that | c1-pers | O COP | like.that | 3sG.FU | T ask | c2-question |

'In the first week, they taught about the four spiritual laws and how to give a questionnaire.' (lit. like that a person will ask questions)

Training.1.7

As the examples in (13.60) show, ǹ̀ and $\mathbf{l} \bar{\varepsilon}$ as complementizers are interchangeable with a slight difference in meaning. The ǹ̀ complement has a manner semantic element which is lacking in the $\overline{\mathbf{\varepsilon}}$ complement.
a. l̄̄ bē bíj̄, bē yén [nù ỳgú bèn-é]
SET 1PL look 1PL see like.that c9.fire ascend-Prog
'As we looked, we saw how the fire was going up.'
Fire.2.1
$\begin{array}{llllllll}\text { b. } & l & \text { l } \bar{\varepsilon} & \text { bé } & \text { bíj } \bar{\varepsilon}, & \text { bē } & \text { y } \varepsilon ́ n & {[l \bar{\varepsilon}} \\ \text { ỳgǵ } & \text { bèn-é }] \\ \text { SET } & \text { 1PL } & \text { look } & \text { 1PL } & \text { see } & \text { COMP } & \text { c9.fire } & \text { ascend-PROG }\end{array}$
'As we looked, we saw that the fire was going up.'

## Ki

The particle kì/kī ' $\operatorname{COMP}(\mathrm{K})$ ' introduces clauses which often appear to be complements, although in certain usages they are more similar to Purpose support clauses. It is cognate with the Noni form kèé-, which is treated as an infinitive prefix (Hyman 1981: 52). However, the corresponding Nchane form is perhaps always unbound, although it shares the form of the c7 prefix kī̀, which is possibly its source.

This particle functions in a similar way to $\bar{l} \bar{\varepsilon}$ 'SET' in Purpose clauses (see $\S 13.2 .1$ ), although kì complements always have the same subject as the focal clause, while $\overline{\bar{\varepsilon}}$ Purpose clauses can have the same subject or a different subject. The main verb of the complement clause may be described as less finite or "deranked" (following Cristofaro 2005), as it never appears with an auxiliary of any type. However, they can appear with verbal extensions. It appears that $\mathbf{l} \bar{\varepsilon}$ may often be substituted for kì, but kì generally may not be substituted for $\mathbf{l} \bar{\varepsilon}$. The difference in
meaning between the two types of clauses is nuanced, with kì complements often expressing something like Intention rather than Purpose. The complements introduced by kì may represent a focused type, but this hypothesis is yet to be substantiated.

Examples (13.61)-(13.63) illustrate kì introducing complements of cognition and communication verbs, similar to $\overline{\mathbf{\varepsilon}}$ complementation. As stated above, the complement clause always has the same subject as the focal clause.
 1SG.PRO 1SG-P3 want-PROG $\operatorname{COMP}(\mathrm{K})$ 1SG-join at c2-person
'I wanted to join the people...'
Lake.5.5

| bó | bé | $[\mathbf{k i ̀}$ | b̄̄ | k $\bar{\varepsilon}$ | b̄̄ | chè-è |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | agree | $\operatorname{COMP}(\mathrm{K})$ | 3PL | begin | 3PL | stay-PROG |


| kì-n-chê | kī-bj̄, | j́jē | $\emptyset$-mù | bé | $\emptyset-\mathrm{kw} \bar{\varepsilon}]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| c7-NMZR-stay | c7-3pl.poss | reason | c1-person | with | c1-wife |

'They will agree to live together as husband and wife.' Marriage.3.4
$\begin{array}{lllllllllll}\text { (13.63) } & \text { bó } & \text { sís } \bar{\varepsilon} & {[\mathbf{k} \overline{1}} & \text { bó } & \text { gū } & \text { Ø-nà, } & \text { bó } & \text { sé: } & \text { ból } & \text { gēs } \bar{\varepsilon}] \\ & \text { 3PL } & \text { decide } & \operatorname{COMP}(\mathrm{K}) & \text { 3PL } & \text { buy } & \text { c1-cow } & \text { 3PL } & \text { cut } & \text { 3PL } & \text { sell }\end{array}$
'They arranged to buy a cow to slaughter and sell.' Greedy Friends.1.3

Examples (13.64) and (13.65) show that other clausal constituents may intervene between the verb of the focal clause and the complement. These examples also better illustrate the "intention" sense often expressed through these complements. Example (13.65) further shows that the complement clause can consist of multiple clauses and have a complex syntactic structure.
(13.64) $\overline{\mathrm{n}}$-yén bā-mī bá mèsàz $\bar{\varepsilon}$ lē, nò bō 1sG-see c2-person c2AM M. APPL like.that 3PL

| jùd-é | $\emptyset$-ýg̀̀ | $[\mathbf{k i ̀}$ | bó | jīnss-è | ỳgú $]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| fight-PROG | c1-trouble | COMP(K) | 3PL | extinguish-PROG | c9.fire |

'I saw the people of Misaje, as they were suffering (lit. fighting trouble) to put out the fire.'

Fire.8.2
(13.65) nò wù gè bé g $\bar{\varepsilon}$ bé bvù-ทgà gè, like.that 3SG P3 ${ }^{\mathrm{P}} \mathrm{COP}$ NEG2 with c14-power NEG2

| wū | g $\bar{\varepsilon}$ | jā | wù | g $\bar{c}:$ | yē | yì | Ø-nò | lē, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | P3 | leave | 3SG | go | c9.house | c9AM | c1-god | APPL |


| [kì | wú | gę: | wú | kūy | m̄byènı̀, |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMP(K) | 3sG | go | 3SG | ring | c9.bell |  |  |


| bó | tỏ | bś | gè-è, | kì-fè | kī | Ø-ìg $\bar{\varepsilon}$ | lē] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | HAB | 3PL | do-PROG | c7-time | c7AM | c1-trouble | APPL |

'Although he was very weak, he set out for the church to ring the bell as they always did in times of trouble.'

Lake.6.5

Again, similar to $\mathbf{l} \bar{\varepsilon}$ complementation, kì can introduce a complement of a copula, as in (13.66) and (13.67).
(13.66) l $\bar{\varepsilon}$ wū kwé,

SET 3SG die

| ba | $\mathrm{g} \bar{\varepsilon}$ | bé | $[\mathbf{k i ̀}$ | ba | $\mathrm{t} \bar{\varepsilon}$ | kwè | yí-yú $]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| they | P 3 | ${ }^{\mathrm{P}} \mathrm{COP}$ | $\operatorname{COMP}(\mathrm{K})$ | they | celebrate | $\mathrm{c} 9 . \mathrm{die}$ | c 9 -ANA2 |

'When she died, they were to celebrate THAT death.'
Disobedient Child.1.13

'We have been learning the Nchane language.'
Speech.1.3

Obligation may be expressed through a kì clause preceded by the verb $\mathbf{k} \overline{\boldsymbol{\varepsilon}} \mathbf{m} \bar{\varepsilon}$ 'have'. Note that the verb of the complement clause appears with the progressive suffix.

| (13.68) | gé <br> do.IMP | nò <br> like.that | Ø-jwŋ̀: <br> c1-husband.2sG.poss | k $\bar{\varepsilon} \mathbf{m}-\mathbf{e ́}$ <br> have-Prog |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & w \bar{u} \\ & 3 \text { SG } \end{aligned}$ | kòn-è <br> love-Prog | Ø-bwō: <br> c1-mother.2sG.Poss | bé Ø-ch <br> with c1-fat | er. 2 S | POSS |
|  | bé with | $\begin{aligned} & \text { Ø-kfū } \\ & \text { c5-family } \end{aligned}$ | ch-è chī-chī <br> c5-3SG.POSS c5-all | $\begin{aligned} & \text { n̄̄, bì-mbè } \\ & \text { c8-side } \end{aligned}$ |  | $\begin{aligned} & \text { bī-chì] } \\ & \text { c8-all } \end{aligned}$ |

'Your husband has to love your mother and your father in all ways.' (lit. has to be loving your mother and father with all his family, all sides)

While not common, the kì complement clause can occur before the focal clause. Example (13.69) illustrates such a case, where the complement clause appears to be topicalized.

'My child, as for now, to stay well in a married house is that you have to know many things, because there nothing that is above marriage here on earth. '

## Chapter 14

## Questions

Nchane interrogative constructions may be categorized into two types: polar questions (sometimes referred to as yes-no questions) and content questions. Polar questions are formed by a low tone enclitic, while content questions utilize one of several question words, most of which behave like interrogative pronouns, taking the place of the constituent being questioned. The different types of interrogative constructions, and the question element associated with them, are summarized in Table 14.1.

| Tone/word | Gloss | Type of interrogative |
| :--- | :--- | :--- |
| L tone enclitic | QP | polar |
| lá/-lá | Q | general |
| $\mathbf{y} \bar{\varepsilon} \mathbf{y}$ | who | person |
| fàn $\bar{\varepsilon}$ | where | place |
| -m $\bar{\varepsilon}:$ | how.many | number |
| $\mathbf{n} \bar{\varepsilon}:$ | how | manner/quantity |

Table 14.1 Summary of Nchane question types.

Section 14.1 describes polar questions, which also includes a short description of tag questions, a subtype of polar question. Section 14.2 treats content questions.

Note that rhetorical questions appear to be formally identical to non-rhetorical questions, with context indicating which type it is. These are therefore not covered explicitly in this chapter. Embedded questions also do not appear here, since they occur infrequently in the corpus and little is known about their form and function. See §7.6 for limited examples.

### 14.1 Polar Questions

Polar questions are those for which a 'yes' or 'no' response is appropriate. In Nchane, these clauses are differentiated from their declarative counterparts by a floating low tone enclitic "QP" (an abbreviation for Question-Polar), which is most often realized as a falling tone on the final syllable of the clause. This is illustrated in the example set given in (14.1), where $a$. is a declarative clause, and $b$. is its polar question counterpart.

$$
\begin{align*}
& \text { a. } w \bar{o} \text { jí-í Ø-bèlèkāy }  \tag{14.1}\\
& \text { 2SG eat-PROG c1-papaya } \\
& \text { 'You are eating papaya.' }
\end{align*}
$$


'Are you eating papaya?'

The falling realization of the enclitic can be mitigated or neutralized in some circumstances. Such appears to be the case in (14.2), where the length of the utterance is so long that downdrift and lack of air support results in the polar question enclitic being realized as low rather than falling. Note that the applicative marker usually has a mid tone.

| (14.2) | n̄sā c9.friend |  | G.POS | bí: <br> ask | wù $3 \mathrm{SG}$ | lē, APPL | là |  | kì-nfę̀: <br> c7-blind.man |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | kī-nē | tó | kī | tò |  | yànè | té | lè |  |
|  | c7-Prox | HAB | c7 | come-P |  | here | als |  |  |

'Her friend asked her, "Is this blind man always coming here too?"' What-goes-around.2.2

Example (14.3) shows further that the enclitic is neutralized when the word it cliticizes already has a falling tone. The word for "thing" normally is pronounced with a ML fall in utterance final position.

| (14.3) | wő | jí | wā | fy- $\bar{\varepsilon}:$ |
| :--- | :--- | :--- | :--- | :--- |
|  | 2SG | eat | already | c19-thing.QP |

'Have you already eaten something?' What-goes-around.4.5

Note that this example also shows what appears to be question intonation, with the mid-toned 2SG pronoun having a SH tone and the word for "already", which normally has a HL tone, is realized with a M tone. Question intonation as seen here is sometimes observed in Content questions as well, but its realization appears to optional.

Tag questions are a special type of polar question consisting of an assertive declarative statement, followed by a short polar question, requesting affirmation or disaffirmation of the assumption asserted in the declarative statement. Example (14.4) demonstrates that the tag in Nchane tag questions takes the form of the short phrase lé j́chę̃: 'it is true', with the polar question tone enclitic realized on the final word of the tag. The form for 'true' without the $L$ enclitic is normally $\overline{\mathbf{\jmath}} \mathbf{c h} \underset{\mathcal{E}}{ }$ :.

| (14.4) | wò | ké-é | l̄ | mw- $\bar{\varepsilon}:$ | mū-nē |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2SG | know-PROG | COMP | c18a-thing | c18a-PROX |

$$
\begin{aligned}
& \text { 'You know that these things are offensive to me (lit. smelling me), } \\
& \text { right?' }
\end{aligned}
$$

An important aspect of tag question formation to typological studies is whether the assertion and the tag have the same polarity. The assertion and tag have opposite polarity in many languages. This is not the case for Nchane; the tag is invariably positive, regardless of the polarity of the assertive statement, as illustrated in (14.5). The polarity of the assertive statement is positive in $a$. and negative in $b$. Nevertheless, the tag portion of the question remains positive in each case.

| a. | j̀jì | gēn-é | ā-bèn, | lé |
| :--- | :--- | :--- | :--- | :--- |
| n. j́chè: |  |  |  |  |
| N. | go-PROG | c18-B. | COP | true.QP |

'Nji is going to Bem, true?
b. á ǰjì gēn-è ā-bèn gè, lé j́chę:: NEG1 N. go-PROG c18-B. NEG2 COP true.QP
'Nji is not going to Bem, true?'

### 14.2 Content questions

Content questions are those which seek the identity of some unknown constituent. These questions in Nchane utilize one of several question words, which correspond to the type of constituent that is unknown by the questioner. The question word typically is coreferential with the unknown constituent (i.e., they are interrogative pronouns), occurring in the same clausal position as that constituent in a declarative clause.

The question word $\mathbf{m} \bar{\varepsilon}:$ 'how.many' is an interrogative nominal modifier which follows a noun. It stands in the place of the number in declarative sentences and is appropriately marked with an agreement prefix. So, although it is not itself pronominal, it is replacive.

Although question words are considered as inherently focused, the interrogative clause may explicitly mark the question word as in focus, either through a cleft construction or postverbal focus. Each of the interrogative words is treated in the following sections, where they appear bolded.

### 14.2.1 The interrogative pronoun lá ' $Q$ '

The form lá is productive as an interrogative marker and is observed in three different types of syntactic constructions. In the first, lá takes the place of the constituent in question. The resulting question can often be translated with the question word 'what'. The examples presented in (14.6) represent two different syntactic strategies for the common question, "What is this?".
(14.6) a. fī-nē lé lá
c19-PROX COP $Q$
'What is this?'
b. lé la̋ fī-nè

COP Q c19-PROX
'What is this? ' (lit. it is what, this)

Note that non clause-final occurrences of lá are usually realized with a super high tone when preceded by the copula, as in (14.6)b. This super high tone is likely the result of question intonation associated with this particular type of question construction.

In both examples, the interrogative pronoun occurs in the postverbal focus position. But example (14.6)b is a copula clause with a right-dislocated subject, marking it explicitly as Topic.

Examples (14.7) and (14.8) illustrate questions with an object and subject interrogative respectively. Example (14.7) utilizes a cleft construction to mark the
questioned constituent as in focus. In addition, it demonstrates that lá is treated as belonging to class 19 , as evidenced by the corresponding class 19 relativizer.

| (14.7) | wù | bí: | bহ̄̃: | bā-ā | lé | là: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | ask | c2.child | c2-ANA2 | APPL | Q.COMP |  |

'...he asked those children, "What is it that you ate?"." What-goes-around.9.8

The syntactic analysis of example (14.8) is unclear, but it demonstrates that the interrogative pronoun can occur clause initially. The high tone on the subject marker suggests that it is really a relativizer, which then hints at this clause being a type of cleft construction (but lacking a copula). Another possibility is that the tone reflects pragmatic concerns. Regardless, this example is important for establishing the different clausal positions available for the interrogative pronoun.

| lá | fí | yí | wò |
| :--- | :--- | :--- | :--- |
| Q | c19REL | pain | 2SG |

'What is hurting you?'
The question word lá can sometimes be used to elicit the reason for an action or state, with the translation appropriately using the word "why", as illustrated in example (14.9). In the sentence which follows this example, the wife explains the reason for her crying.

| Ø-jw̨̄̄: | bí: | là: | lé | lá |
| :--- | :--- | :--- | :--- | :--- |
| c1-husband.3sG.POSS | ask | Q.COMP | cop | Q |


| fì | wò | bēd-é | là |
| :--- | :--- | :--- | :--- |
| c19REL | 2SG | cry-PROG | CE |

'Her husband asked, 'So, why are you crying?".' (lit. it is what that
you are crying) What-goes-around.9.12
As was stated in $\S 9.5$, this example might actually present a type of rhetorical question, where the presence of the Counter-expectation adverb indicates that the speaker somehow does not believe that there is a valid reason for her crying.

The second type of syntactic construction involves lá and an adverbial word of some kind. In (14.10) and (14.11) lá follows the time word ségé and the reason clause introducer $\overline{\mathbf{j}} \mathbf{j} \mathbf{e}$ respectively. In both cases, the interrogative pronoun is replacing the elements given in the response, which follow the adverb. For example,
 (lit. strong)'. The adverbial introducer is maintained in the response.

(14.10) | Ø-ìfòng |  |  |  |
| :--- | :--- | :--- | :--- |
| c1-chief | tó | ségé | lá |
| when |  |  |  |$\quad \mathrm{Q}$

'When will the chief come?'

| (14.11) | wò | bá: | j $\bar{y}$ | $\mathrm{k} \overline{\mathrm{y}}-\mathrm{d} \bar{\varepsilon}$ | $\mathrm{g} \bar{\varepsilon}$ | $\bar{\jmath} j \mathrm{e}$ | lá |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2SG | still | c9.water | catch-COMPL | NEG2 | reason | Q |

'Why have you not carried water?'

Finally, lá can appear in a noun phrase, where it takes an agreement prefix corresponding to the head noun. The resulting form can be translated as "which". The agreement prefix is realized with a H tone. Examples (14.12) and (14.13) are given to illustrate.

(14.12) | lé | $\emptyset$-mwā | wú-lá | wú | jí | bvù-lè̀: |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | COP | c1-child | c1-Q | c1ReL | eat | c14-fufu |

'Which child ate fufu?'
(14.13) Ø-ìjfòn tó Ø-jú chí-lá
c1-chief come c5-day c5-Q
'When will the chief come?' (lit. the chief comes which day)

### 14.2.2 The interrogative pronoun $y \bar{\varepsilon} \eta$ 'who'

The interrogative word $\mathbf{y} \bar{\varepsilon} \boldsymbol{\jmath}$ 'who' is pronominal, taking the place of the unknown referent, which is usually a human, as in (14.14).

$$
\begin{array}{llll}
\text { (14.14) } & \text { wū-nē lé yèn } \\
& \text { c1-PROx cop } & \text { who } \\
& \text { 'Who is this?' }
\end{array}
$$

Unknown possessors are usually encoded with $\mathbf{y} \bar{\varepsilon} \mathbf{y}$, with the accompanying translation of "whose", as illustrated in (14.15). The pronoun y $\bar{\varepsilon} \eta$ is coreferential with the possessor, whether expressed as a possessive pronoun or the $\mathrm{N}_{2}$ of an associative noun phrase. (As stated in §5.3, omission of the associative noun marker for class 1 and class 9 head nominals has been reported for Noni and is likely for Nchane as well. Thus, the syntax of this interrogative could be comparable to either type of genitive construction.)

| (14.15) | lé | $\emptyset$-mwā | yḕ | wú | jí | bvù-lę̀: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | COP | c1-child | who | c1REL | eat | c14-fufu |

'Whose child ate fufu?'
Example (14.16) shows yég again appearing in an associative noun phrase. But in this case, it is not expressing the notion of possession, but is best translated as "which". This question could be asked in the context of buying a hoe from a vendor at the market who has several hoes to choose from.

| (14.16) | wò | gón-ẻ | jì | ȳ̄ | yén |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2SG | want-PROG | c9.hoe | c9AM | who |

'Which hoe do you want?'

### 14.2.3 The interrogative pronoun fàn $\bar{\varepsilon}$ 'where'

'Where' questions utilize the interrogative pronoun fàn $\bar{\varepsilon}$, as in (14.17) and (14.18).
$\left.\begin{array}{llll}\text { (14.17) } & \begin{array}{l}\text { wò } \\ \\ \text { 2SG } \\ \text { go-PROG }\end{array} & \text { fàn } \bar{\varepsilon} \\ \text { where }\end{array}\right]$

Example (14.19) presents the locative interrogative pronoun co-occurring with an Object. The interrogative pronoun appears in the immediately-after-verb Focus position, with the Object following, suggesting that this is normative for the interrogative locative pronoun. This is particularly noteworthy since focus-marked Locative Obliques are unattested in the immediately-after-verb position.
(14.19) nò $\emptyset$-jwฐ̄: shìl-é fè-kū:,
like.that c1-husband.3SG.POSS sit-PROG c16-down

| wù | m $\bar{\jmath}$ | wù | bí: | l $\bar{\varepsilon}$ | w $\bar{\rho}$ | jó | fàn $\bar{\varepsilon}$ | $\overline{\mathrm{m}}$-bä |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | RES | 3SG | ask | COMP | 2 SG | take | where | c6a-soup |

'As her husband was sitting down, then he asked "Where will you get

$$
\text { soup?"’ Jealous Husband. } 10
$$

### 14.2.4 The interrogative nominal modifier mè: 'how.many'

The unknown quantity of countable items is expressed through the interrogative nominal modifier mè:, which is marked by a noun class agreement prefix corresponding to the item in question. It follows the noun that it modifies, as illustrated in (14.20) and (14.21).

| (14.20) |  | lé bé COP with | bহ̄: <br> c2.child | bā-mè: <br> c2-how.many |
| :---: | :---: | :---: | :---: | :---: |
|  | 'How many children do you have?' |  |  |  |
| (14.21) | lé | bī-gè | bī-mè: |  |
|  | COP | c8-teeth | c8-how.ma |  |
|  | 'How much does it cost?' |  |  |  |

### 14.2.5 The interrogative adverbial pronoun nè: 'how'

The interrogative adverbial pronoun $\mathbf{n} \bar{\varepsilon}$ : is utilized in forming manner questions, as demonstrated in example (14.22). The pronoun occurs at the right edge of the clause and is coreferential with the propositional response.

| (14.22) | bā | f ¢̀-d $\bar{\varepsilon}$ | Ø-йkāy |
| :---: | :---: | :---: | :---: |
|  | they | make-COMPL | c1-beer |

'How do they make corn beer?'
A second function of $\mathbf{n} \bar{\varepsilon}:$ is in forming questions seeking the unknown quantity of uncountable (or mass) nouns. In (14.23) the interrogative pronoun follows the uncountable noun in question, while in (14.24) it follows the main verb.

| (14.23) | wò | k $\mathrm{\varepsilon} \mathrm{~m}$-é | Ø-ńkāy | nè: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2SG | have-PROG | c1-sha | how |  |  |  |
|  | 'How much sha (i.e., corn beer) do you have?' |  |  |  |  |  |  |
| (14.24) | jòc9.w | ler $\begin{aligned} & \text { lé } \\ & \text { cop }\end{aligned}$ | yī sh $\bar{\varepsilon}$ <br> c9 remain | nè: <br> how | ain | shāc9.pot | lē |
|  |  |  |  |  |  |  | APPL |

'How much water is remaining in the pot?' (lit. the water remains how in the pot)

In this second example, the uncountable noun appears to be topical, as it occurs in the preverbal position associated with Topics. It is possible then that this accounts for the differing clause position of the interrogative pronoun.

This interrogative pronoun also appears in questions requesting the degree of certain quality nouns attributed to some nominal constituent. In this context, the interrogative pronoun follows a prepositional phrase in which the quality noun is the prepositional complement, as (14.25) and (14.26) illustrate.

| $(14.25)$ | bī | y-̀̀ | lé | yē | bvū-tād $\bar{\varepsilon}$ | lē | nè: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c9.goat | c9-2SG.POSS | COP | on | c14-grow | APPL | how |


| (14.26) | $\emptyset$-mwā | w-ò | lé | yē | bvū-jūnē | lē | nè: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c1-child | c1-2SG.POSS | cop | on | c14-be.old | APPL | how |

'How old is your child?' (lit. your child is on oldness how)
It can be observed that the interrogative adverbial pronoun nè: is similar in form to the interrogative nominal modifier $\mathbf{m} \bar{\varepsilon}$ : treated in §14.2.4. Both have the shape $\mathbf{N \varepsilon}$ : and are marked with a ML falling tone. Furthermore, there is partial overlap in the semantics expressed by both words-both encoding measurement of quantity. Therefore, it is possible that they share a common source. One candidate for that source is the né 'GEST' treated in §8.5.

## Chapter 15

## Negation

Negative constructions in Nchane display a fair amount of variety, which presents a challenge for description. This chapter attempts to capture the generalities that have been observed, as well as point out some of the finer details which appear to be related to motivating different negation construction strategies.

Negative clauses utilize one or more negation words, which are summarized in Table 15.1. The negative marker $\mathbf{g} \overline{\boldsymbol{\varepsilon}}$ ' NEG 2 ' appears in all negative clause constructions, usually in clause-final position. Note that the tense and aspect "contexts" for the negation markers bą́ ‘still' and á 'NEG1' as provided in the table are approximations and not absolute, since the actual situation is more complicated. More details are provided in $\S 15.2$.

| Marker | Gloss | Context |
| :--- | :--- | :--- |
| ḡ $\bar{\varepsilon}$ | NEG2 | multiple |
| bá | still | preverbal (+PAST, -PROG) |
| á | NEG1 | clause initial (-PAST) |
| kéf $\bar{\varepsilon}$ | VET | clause initial (+IMP) |

Table 15.1 Summary of Nchane negation markers.

Negation constructions may be divided into two types, depending on the target or scope of the negation. Constituent negation is described in §15.1 and clausal negation in $\S 15.2$. Triply marked negative constructions are presented in $\S 15.3$. The final section (15.4) deals with negative commands, which are designated as "vetitive" constructions.

### 15.1 Constituent negation

Negative constructions, in which the target of the negation is a clausal constituent, utilize a discontinuous marker consisting of two instances of $\mathbf{g} \bar{\varepsilon}$ 'NEG2'. The first $\mathbf{g} \bar{\varepsilon}$ immediately precedes the negated constituent; the second $\mathbf{g} \bar{\varepsilon}$ occurs at the end of the clause. The NEG2 marker is usually realized in clause-final position with a L tone. Note that it has the alternative pronunciation of $[\mathbf{k} \bar{\varepsilon}]$, particularly in non-clause final position. The framing construction is summarized in Figure 15.1.

$$
\mathbf{g} \bar{\varepsilon} \mathrm{x} \ldots \mathrm{~g} \grave{\varepsilon}
$$

Figure 15.1 Formula for Nchane constituent negation constructions.

The ellipsis in the formula represents any elements which canonically follow the negated constituent " $x$ ". This includes the verb complex, in the case of subject negation. Presumably, any clausal constituent may be negated utilizing this strategy. Examples (15.1)-(15.3) demonstrate subject, object and comitative oblique negation respectively.

| (15.1) | g $\varepsilon$ <br> NEG2 | fy- $\bar{\varepsilon}$ : <br> c19-thing | fī-mì c19-some | $\begin{aligned} & \text { jùmı̀ } \\ & \operatorname{COP}(\mathrm{N}) \end{aligned}$ | yú on.it |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | fí c19REL | yàg-é surpass |  | arriage | f $\overline{\text { c̄nē }}$ <br> here | f $\grave{c}-\mathrm{kū}$ <br> c16-down | gè <br> NEG2 |

'...no other thing exists that is greater than (lit. surpassing) marriage here on earth.'

| mū-ní | gè | já-á | $\mathbf{g} \bar{\varepsilon}$ | bà- $\mathrm{ykè}$ | gè |
| :--- | :--- | :--- | :--- | :--- | :--- |
| c18a-bird | P3 | give-PROG | NEG2 | c2-song | NEG2 |

'Birds were not singing.' (lit. giving no songs)
Lake.6.1
(15.3) nò wù gè bé g $\bar{\varepsilon}$ bé bvù-ngà gè,
like.that 3SG P3 ${ }^{\mathrm{P}}$ COP $\quad$ NEG2 with c14-power NEG2
'Although he was very weak...' (lit. as he was not with power) Lake.6.5

The text data also provide examples of negation of complement clauses, as in (15.4).

| (15.4) | $\begin{aligned} & \text { kī-fē } \\ & \text { c7-time } \end{aligned}$ | shégé, <br> small | $\begin{aligned} & \text { wù } \\ & 3 \mathrm{SG} \end{aligned}$ |  | jā stand | wé, up | $\begin{aligned} & \text { wù } \\ & 3 \text { SG } \end{aligned}$ | $\begin{aligned} & \text { nū } \\ & \operatorname{COP}(\mathrm{N}) \end{aligned}$ | $\mathrm{g} \bar{\varepsilon}$ <br> NEG2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | nò | wú y | éné | g $\bar{\varepsilon}$ |  |  |  |  |  |
|  | like.that | 3SG b | eathe | NEG2 |  |  |  |  |  |

'Sometime later, he awoke, unable to breathe.' (lit. he being not like that he breathe) Lake.4.3

### 15.2 Clausal negation

As with constituent negation, the negation of clauses also involves discontinuous negative marking. However, unlike with constituent negation, clausal negation is sensitive to TAM expression, resulting in two distinct negation strategies, which are summarized in Figure 15.2. For the sake of convenience, I refer to the first strategy as the "bád-strategy" and the second strategy as the "á-strategy". ${ }^{100}$

$$
\begin{array}{ll}
S & \text { bá́ } \\
\mathrm{V}_{\text {[core] }} \ldots \mathbf{g} \grave{\varepsilon} & \text { (clauses with [+PAST], [-PROG] verbs) } \\
\text { á } S \mathrm{~V}_{\text {[complex] } \ldots . .} \mathbf{g} \dot{\varepsilon} & \text { (elsewhere) }
\end{array}
$$

Figure 15.2 Formulas for Nchane clausal negation constructions.

The bá-strategy involves the auxiliary bá or bá : ‘still', which immediately precedes the verb core and does not allow subject agreement to intervene between it and the main verb, although it is itself marked with subject agreement when the subject is 1 SG. Tense markers, when present, precede the negative marker. For these reasons, I consider bá as belonging to the verb complex. Data is lacking that would establish the ordering of bá and preverbal TAM markers other than tense.

In the á-strategy, the negative marker á 'NEG1' occurs in the clause-initial position. A suitable candidate for the source of NEG1 has not yet been identified. As Figure 15.2 indicates, the bád-strategy is used only with past, non-progressive constructions and the á-strategy elsewhere. The NEG2 marker $\mathbf{g} \bar{\varepsilon}$ occurs in the clausefinal position in both strategies.

[^60]The association of 'still' in negative constructions aligns with the notion of "phasal polarity expressions", where the negative counterpart of the "still" expression is the "no longer" expression or the "not yet" expression. ${ }^{101}$ Löfgren (2019) shows that it is not uncommon for Bantu languages to utilize such phasal polarity expression systems, where at least one positive term appears with and without negation markers to establish such a contrastive set of expressions.

The two strategies for clausal negation constructions are illustrated through an elicited TAM paradigm presented in Table 15.2, with the phrase " Nji catches ( $\mathbf{k} \mathbf{\overline { \mathbf { } }}$ ) termites ( $\overline{\mathbf{j}} \mathbf{\overline { \mathbf { j } }}$ )" serving as the base. It can be seen that the object in the bád-strategy obligatorily occurs in the immediately-before-verb position, although not in triple negative constructions (see §15.3). Presumably, this allows NEG2 to occur in the immediately after verb position associated with canonical focus. Meanwhile, the object appears in situ in the á-strategy. ${ }^{102}$

| Tense | Example | Gloss |
| :---: | :---: | :---: |
| P0 | j̀jì bá $\overline{\text { y }} \mathrm{g}$ ¢ kō gè | 'Nji didn't catch termites.' |
| P1 |  | 'Nji didn't catch termites.' |
| P2 |  | 'Nji didn't catch termites.' |
| P3 |  | 'Nji didn't catch termites.' |
| PROG |  | 'Nji isn't catching termites.' |
| FUT |  | 'Nji will not catch termites.' |
| HAB | á j̀jì tó wù kō $\mathfrak{y} \mathrm{g}$ ¢ gè | 'Nji doesn't catch termites. ' |

Table 15.2 Clausal negation strategies illustrated through a TAM paradigm.

Note that the position of the object in negative clauses is slightly different from object defocalization observed in affirmative clauses. In negative constructions, the object occurs between the negative marker bá and the main verb, while in affirmative clauses the defocalized object precedes the entire verb complex. See §16.3.1 for more details.

[^61]Example (15.5) is a text example illustrating a preverbal object in a non-progressive negative construction.

| (15.5) | Ø-lá <br> c5-compound | chí-mī, bā | g $\grave{\varepsilon}$ | bắ: | fy- $\bar{\varepsilon}:$ | fó | bús $\bar{\varepsilon}$ | g $\bar{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | they | P3 | still | c19-thing |  |  |  |  | there | remove | NEG2 |
| :--- | :--- |

'In the other compound, they did not remove anything.' Fire. 22

As mentioned above, clauses with progressive verbs utilize the á-strategy, as in (15.6).

| (15.6) | á | ńjì | chí | kūy-è | Ø-nà | gè |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | NEG1 | N. | P2 | drive.away-PROG | c1-cow | NEG2 |

'Nji was not driving the cow away (yesterday).'

The Progressive suffix is realized with a low tone, just as in constructions with a preverbal grammatical high-toned element, such as Hortative and Durative, which was discussed in §§9.1.2 and 9.2.

Although it is typical for non-progressive past clauses to utilize bá rather than á, there is at least one exception worth noting. Examples (15.7) and (15.8) both show the á-strategy being utilized with non-progressive past clauses. However, both clauses are focus constructions. Example (15.7) is a postverbal agent focus clause with the pronoun wù in focus and example (15.8) shows focus on the applied object shī lē through the use of the focusing copula nù.

| (15.7) | (ȳgáy), | á | bvū-lē̃:: | bé | ná | wù | shī | lē | gè |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | no | NEG1 | c14-fufu | P1 | give | 3sG | c9.chicken | APPL | NEG2 |

## '(No), HE did not give the chicken fufu (someone else did).'

(15.8) á wù bé ná bvū-lę̧̃: jū shī lē gè

NEG1 3SG P1 give c14-fufu $\operatorname{COP}(\mathrm{N}) \quad$ c9.chicken $\quad$ APPL $\quad$ NEG2
'He did not give THE CHICKEN fufu.' (he gave it to THE DOG, for example)

Therefore, to the elements characterizing clauses which utilize the bád-strategy, we should add that any kind of formal focus marking is absent. Note that no examples of a clause with a Progressive main verb utilizing the bá-strategy appear in the data.

Sometimes, the initial negation marker is omitted, as in (15.9) and (15.10). However, the high tone associated with the negation marker usually remains and is realized on the subject element preceding the verb.

| (15.9) | bá-mí g̀̀ jèm-é | g̀̀ |  |
| :--- | :--- | :--- | :--- | :--- |
| c2-person.NEG | P3 | talk-PROG | NEG2 |

This phenomenon suggests that the language may be in the early stages of losing the initial negative marker, as predicted by the Jespersen cycle (see Jespersen (1917), and Devos and van der Auwera (2013) more specifically for this phenomenon among African languages), which is also relevant to the following section on triple negation constructions.

### 15.3 Triple negation constructions

Clauses with three negative markers are neither common nor rare in the text data. They always consist of the non-progressive negative marker bã́, a NEG2 marker preceding a negated constituent and a clause-final NEG2. Examples (15.11) and (15.12) are given to illustrate.

| (15.11) | n̄sá | y-é | ch $\overline{-}-\bar{\varepsilon}$ <br> c10-ANA1 | gèP3 | bá: <br> still | yēyè <br> learn | $\mathrm{g} \bar{\varepsilon}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | c10.friend | c10-3sG.poss |  |  |  |  | NEG2 |
|  | fy- $-\bar{\varepsilon}$ : | fī-mī g | gè |  |  |  |  |
|  | c19-thing | c19-some | NEG2 |  |  |  |  |

'Those his friends did not learn anything (from the man's death).' Greedy Friends.1.7


Note that the Object in these triple negation constructions remains in situ.

### 15.4 Vetitive

Prohibitions or negative commands utilize the clause-initial vetitive marker kéf $\bar{\varepsilon}$, as in (15.13)-(15.15). ${ }^{103}$ In addition to the clause-final NEG2 marker, a second-person pronoun is always present and realized with a high tone. As with the á-strategy clausal negation constructions, the progressive suffix in Vetitive constructions is realized as low.

'You the girl child, if you enter into your husband's compound don't look down on those people, don't quarrel with your father-in-law or mother-in-law.'

Marriage.6.6

[^62]| (15.15) | kéf $\bar{\varepsilon}$ | bén | j $\bar{\varepsilon} n-i ̀ ~$ | $b \bar{\varepsilon} \eta$ | ság-è | wù | $\bar{a}-1 \bar{a}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| VET | 2PL | walk-PROG | 2 PL | judge-PROG | 3SG | c6-compound |  |

'Do not go around, gossiping about her (lit. judging her) in people's compounds, ..., Marriage.6.4

The vetitive marker is likely a grammaticalized contraction of some sort. The ké portion of the word is possibly a form of $\mathbf{g} \bar{\varepsilon}$ NEG 2 , which is sometimes pronounced as $[\mathbf{k} \bar{\varepsilon}]$ as pointed out in $\S 15.1$. The high tone could represent a negative grammatical high tone associated with the other preverbal negative markers bą́ and á; or perhaps it is the high tone associated with Imperative or Hortative constructions.

Two possibilities are noted for the source of the $\mathbf{f} \bar{\varepsilon}$ element. The first is that it comes from the verb $\mathbf{f} \bar{\varepsilon}$ 'make, do'. A more likely possibility is that it is derived from the locative class 16 prefix $\mathbf{f} \overline{\mathbf{\varepsilon}}$-. Indeed, the same form is seen in some rare cases acting like a conditional introducer. Further, the development of the class 16 locative affix into a negative marker is observed in other African languages (see Devos \& Van der Auwera 2013: 237).

## Chapter 16

## Information structure

This chapter is concerned with how information is presented and organized within a discourse and, at a simpler level, the sentences of a discourse. As pointed out in §11.4, information structure plays a key role in the alignment of constituents in a clause. There is an apparent preference for Topics to appear to the left of the verb and focused constituents to the right of the verb, a general tendency observable in many of Nchane's topic and focus construction types, as will be seen in the sections below.

Information structure is an area of study involving many factors, but I limit the discussion here to four primary issues: Thetic expressions, Topic, Focus, and Givenness. Because these terms, especially topic and focus, can be used in different ways and have different scopes of expression, I begin here in the introduction with some definitions.

Thetic expressions are those presented as one piece of information, generally considered as lacking topical and focused elements. Furthermore, they often contain all new information. For the most part, this type of expression in Nchane offers little in the way of unique structures or markers and may be helpful as a kind of backdrop for viewing the various information packaging structures. Thus, $\S 16.1$ offers a brief description of two different kinds of thetic expressions appearing in the text corpus.

Topic, according to Lambrecht, is "the thing which the proposition...is ABOUT" (1996: 118). Nchane Topics are usually expressed by agents appearing in the preverbal position, agents being particularly suited for the topic role. Various marking strategies are employed to indicate the topical status of referents, especially when the intended Topic might otherwise be unclear. Much of $\S 16.2$ is dedicated to describing these different strategies.

I follow Krifka and Musan (who cite Rooth 1985) in defining focus as indicating "the presence of alternatives that are relevant for the interpretation of linguistic expression" (2012: 7). Different types of focus represent specific salient characteristics of the relationship between the members of the set of alternatives. For example, contrastive focus denotes one member of a restricted set, where the alternative member(s) does not result in a true proposition. Scalar focus, on the other hand, denotes one member of a set, which is presupposed to be the least likely to result in a true proposition.

Postverbal referents in canonical sentences are often construed as focused and could be thought of as having been selected from among numerous other plausible referents. These postverbal referents also most often represent new information, which aligns well with Lambrecht's observation that "focus has to do with the conveying of new information" (1996: 206). Therefore, $\S 16.3$ begins with a brief description of sentences with no "special" focus marking, followed by separate presentations of the various structures expressing focus in Nchane.

Givenness has to do with the activation status of a referent within a discourse setting. A referent may be new or old. Or a referent can be old, but inactive, and therefore in need of reactivation. While the concept of givenness applies to clausal expressions as well as nominal expressions, its realization in participant tracking in Nchane is particularly notable and will receive most of the attention in the description given in §16.4.

### 16.1 Thetic expressions

Sentences for which there is no discourse context are comparable to canonical sentences. Both have SAuxVO word order and no special marking. So-called "out of the blue" statements, referred to as "annuntiative" by Sasse (2011:281), are illustrated by examples (16.1) and (16.2).

| (16.1) | jāy | t'́-ó | lò |
| :--- | :--- | :--- | :--- |
|  | c9.rain | come-PROG | FOC |

'Rain is coming. ${ }^{\prime}$

| (16.2) | $\mathrm{m} \bar{\varepsilon}$ | $\overline{\mathrm{m}}-\mathrm{f} \bar{\varepsilon}$ | $\mathrm{kw} \overline{\mathrm{e}}$ | $\mathrm{y} \overline{1}$ | Ø-k $\overline{1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG.PRO | 1SG-make | c 9. death | c 9 REL | c4-month |  |

'I am having a death celebration in December.' (lit. death that month is twelve)

Presentational utterances, which are commonly observed as the first sentence of stories, also closely follow the canonical pattern. As described in §6.4.4, this type of construction often includes a nominal subject modified by the specific indefinite determiner mù 'some', as in (16.3) and (16.4).

| (16.3) | Ø-jwēnsé <br> c1-man | wū-mū <br> c1-some | $\begin{aligned} & \mathrm{g} \bar{\varepsilon} \\ & \mathrm{P} 3 \end{aligned}$ | bé <br> ${ }^{\mathrm{P}} \mathrm{COP}$ | yú, on.it | wū c1REL | kémè <br> have |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | bī-k $\bar{\varepsilon} s \varepsilon ́$ c2-woman | bā-f f́dè <br> c2-two |  |  |  |  |  |

'There was a man who had two wives.' Two Wives.1.1

| (16.4) | kì-nfę̀: | kí-mú | $\mathrm{g} \bar{\varepsilon}$ | $\mathrm{j} \bar{\varepsilon} \mathrm{n}-\mathrm{í}$, | k | l $\bar{\varepsilon} \mathrm{g}$-è | mw- $\bar{\varepsilon}:$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c7-blind.man | c7-some | P3 | walk-PROG | c7 | beg-PROG | c18a-thing |

'A certain blind man was walking around and begging.'
What-goes-around.1.1

### 16.2 Topic

As mentioned in the chapter's introduction, Topic is defined as the referent which the proposition is about. Nchane Topics may occur in the preverbal position or in the postverbal position as in (16.5) and (16.6) respectively, although the language appears to prefer preverbal Topics. The discourse contexts are given in (16.5)a and (16.6)a, which show that the referent that functions as Topic often appears in the postverbal position of the preceding sentence, although it is also possible for it to appear in the preverbal position. Note that Topics in this section appear in brackets.

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<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">ń-t̄</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">b</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">bī-gè,</td>
<td style="text-align: left; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">ǹ-tó</td>
</tr>
<tr style="border-top: none !important; border-bottom: none !important;">
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<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">1SG-come</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">with</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">ch-ché</td>
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| :--- | :--- | :--- | :--- |
| c14-day | brighten(?) | 1sG-take | c8-teeth |</td>
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<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">$\bar{y}$-g̀̀:</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">yē</td>
<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; " class="_empty"></td>
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<td style="text-align: left; border-right: none !important; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; " class="_empty"></td>
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</table>
<table-markdown style="display: none">| b.bvū-chfū yū, $\overline{\mathrm{n}}$-jò [bī-gè &lt;br&gt; c14-day brighten(?) 1sG-take c8-teeth | c8-ANA1 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| ǹ-lē | $\bar{y}$-g̀̀: | yē |  |  |
| 1SG-enter | 1SG-put | c9.house |  |  |</table-markdown></div> 

'The next morning, I took that money and put [it] in [my] house.'
Fire.1.5

More could be said about the Nchane Topic as a notional expression. But the current work is mostly concerned with describing particular constructions and grammatical elements involved with identifying Topics. As such, the remainder of this section describes the various topic-marking strategies utilized by Nchane. These strategies are: Left dislocation, Left detachment and DP-internal word order changes. The section ends with a brief treatment of right dislocation, although its function as a Topic-marking device is dubious. Note that, in addition to Topics appearing in brackets, the symbol $\uparrow$ precedes elements enclosed in parentheses to indicate tone realization at higher tonal register, which is often associated with special topic-marking strategies.

### 16.2.1 Left dislocation

PATIENTS and Locative Obliques have been observed in left dislocations, where the topic-marked referent occurs in sentence-initial position and realized at a higher tone
register, maintained across a portion of or the entire dislocated phrase. ${ }^{105}$ The need for special topic marking such as left dislocation arises in several situations, such as when a referent has inactive status due to a relatively long gap between mentions or no previous mention at all, or in some cases of topic shift. Furthermore, non-agent referents usually require special topic marking.

Left dislocation usually involves relativized nominals as in (16.7), in which the PATIENT is Topic. This referent is mentioned five sentences earlier, but becomes inactive, as there are three different Topics between mentions. The Topic of the previous sentence is 'the first four', referring to those who earned the award of a helicopter ride. The in situ Object pronoun likely occurs because the antecedent is human. This is suggested by the observation made in $\S 11.1 .1$ that human Objects are subject to special syntactic requirements such as being restricted from Object ellipsis.

| (16.7) | $\begin{aligned} & {[\uparrow(\mathrm{m} \bar{\varepsilon}} \\ & \text { 1sG.PRO } \end{aligned}$ | wú c1REL | $\begin{aligned} & \text { chīlāa) } \\ & \text { Ch. } \end{aligned}$ | $\begin{aligned} & \bar{n} j i ̀ ̀ ~ \\ & \text { N. } \end{aligned}$ | $\begin{aligned} & \text { īnı̀k], } \\ & \text { E. } \end{aligned}$ | $\begin{aligned} & \emptyset-\mathrm{n} \overline{ } \\ & \text { c1-god } \end{aligned}$ | $\begin{aligned} & \mathrm{g} \bar{\varepsilon} \\ & \mathrm{P} 3 \end{aligned}$ | fí <br> help | [mı̀], <br> 1sG.Pro |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | bā they | bá: <br> choose | mè <br> 1sG.PRO | $\begin{aligned} & \text { à } \\ & \text { in } \end{aligned}$ | bā-mì c2-person | bá c2REL |  | $\begin{aligned} & \bar{a}-\mathrm{n} \bar{\varepsilon} \\ & \text { our } \end{aligned}$ | ǹt $\bar{n} n \overline{\text { en: }}$ <br> middle |

'I, myself, Chila ${ }^{106}$ Nji Enock, was blessed to have been chosen among the four persons.' (lit. God helped me and they chose me) Training.1.11

Example (16.8) shows another topicalized PATIENT. This sentence is part of the conclusion to the text, with previous sentences talking about how the speaker was able to overcome the destruction of his house and belongings. These 'events' in his life are consolidated into one reference and flagged as Topic by the left dislocation construction.

| $[\uparrow(\mathrm{mw}-\bar{\varepsilon}:$ | mú | bā-mí | yén | kì-nché | k-à |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c18a-thing | c18aREL | c2-person | see | c7-stay | c7-1SG.POSs |


| lē)] | lé | $\emptyset$-d $\bar{\varepsilon}$ | yī-bō | yí | lé | yí | sḉ: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| APPL | COP | c4-mouth | c4-3pL.POSS | c4REL | cOP | c4.FUT | tell |

'The things that people saw in my life, only their mouths will say (lit. it is their mouths that will tell).'

Fire. 62

[^63]The examples of left dislocation so far have dealt with reactivating a previously active referent. Example (16.9) illustrates a previously unmentioned referent marked as Topic through left dislocation. Lambrecht observes that "brand-new referents", which have low acceptability as topics because they are unidentifiable (or cognitively inaccessible), are made more acceptable through anchoring to an identifiable referent (Lambrecht 1996: 167). Thus, in this example, the brand-new referent "things" is linked to the addressee through the second-person pronoun to make it more identifiable and acceptable as a topic.

| (16.9) | $[\uparrow(\mathrm{mw}-\bar{\varepsilon}:$ | mù | w $\bar{\jmath}$ | búd-é | wó) | gēn-è |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c18a-thing | c18aREL | 2 SG | exit-PROG | 2SG.FUT | go-PROG |  |

'All the things you are to go to school with, I have already bought.' School. 3

The complex sentence in example (16.10) begins with a left-dislocated relativized noun phrase which is coreferential with the PATIENT and AGENT in contrasting consecutive clauses. The Topic "things" refers to a sum of money that was mentioned more than twenty sentences earlier, as well as other things in the house such as furniture and clothes, which are cognitively accessible through cultural association (i.e., certain items are commonly found in Nchane houses and assumed to be present). As with the previous example, the new information ("things") is anchored to old information ("home") to mitigate its low accessibility.

| (16.10) | $[\uparrow($ mw- $\bar{\varepsilon}:$ mú | yē | kwè $)]$, | [mú-mú] | bā | būsè, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c18a-thing | c18aREL | on | home | c18a-some | they | remove |

'The things in the house, some was removed, others burned.' Fire.5.1

Note that the PATIENT Topic in the first main clause is expressed twice, first through the left-dislocated noun phrase "things in the house", and second through a left-dislocated demonstrative pronoun. This is the clearest example in the data of PATIENT-AGENT-verb (PAV) word order. (Compare with examples (16.7), which has an in situ PATIENT pronoun, and (16.8), which has no PATIENT pronoun, neither in situ nor left-dislocated.) I assume that the clause would be grammatical without the demonstrative pronoun, but it occurs in order to establish a contrastive frame consisting of two instances of the demonstrative pronoun as described in §6.4.4.

This example also shows that, while unmarked Topics most often occur in the immediately-before-verb position, specially marked Topics occur as the leftmost constituent. The second main clause has a second instance of the demonstrative pronoun as Topic. But in this case, it is an in situ AGENT and its relationship with the sentence-initial phrase is more correctly analyzed as representing a left-detached Topic, which is described in $\S 16.2 .2$.

### 16.2.2 Left detachment

While AGENTS are often sentence Topics, appearing with no special topic marking and in the immediately-before-verb position, some AGENT Topics require more encoding to indicate their topic status. This is the case for at least some contrastive AGENT Topics and unpredictable switch Topics. The topic-marking strategy for such AGENTS is what Lambrecht calls "left detachment" (1996: 177). In this topic-marking strategy, a noun phrase is "detached" from the main clause, being separated by a breath pause and followed by a pronoun, and usually realized with a raised tonal register. The "unmarked" AGENT Topic is differentiated from the left-detached Topic by having no breath pause between it and the main clause, lacking a following subject pronoun, and realized with a non-raised tonal register.

A left-detached Topic is illustrated in example (16.11). In this case, "Kibbo" is contrasted with "Nfume", the Topic of the previous sentence, which reported where he settled when he and his four brothers first came to the Nchane area.

| (16.11) | $\uparrow([$ kībó, | wù $]$ | bé $)$ | wù | bฐ̀: | fwé, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | K. | $3 S G$ | ${ }^{\text {P }}$ COP | 3SG | ascend | front |

'Kibbo, he had gone ahead...'
History.3.3

The left-detached Topic in example (16.12) follows example (16.10) in the text and represents an unexpected, abrupt topic switch. Topics usually remain as topic for several sentences at a time. Therefore, the switch of topic from "things in the house" to "my house" after just one sentence is unexpected and requires special encoding.

| (16.12) | [ $\uparrow(\mathrm{ye}$ c9.house | yì <br> c9REL | $\mathrm{m} \bar{\varepsilon}$ 1SG.PRO | $\begin{array}{ll} \mathrm{g} \grave{\varepsilon} & \text { j̀-ch } \\ \text { P3 } & \text { 1SG-s } \end{array}$ | $\begin{aligned} & \text { hé-é } \\ & \text {-stay-PROG } \end{aligned}$ | yè on | lē), APPL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | yì | nù | y-ā ${ }^{\text {, }}$ | yì | $\mathrm{m} \bar{\varepsilon}$ | g ¢ |  |
|  | c9REL | $\operatorname{COP}(\mathrm{N})$ | c9-1sG.poss | c9REL | 1SG.PRO | P3 |  |
|  | j̀-ché-é |  | yè lé | kībè, | $\mathrm{yi}] \quad \mathrm{g} \bar{\varepsilon}$ | fyé | yì-chī |
|  | 1sG-stay- | -PROG | on APPL | actually | c9 P3 | burn | c9-all |

'The house in which I was staying, which was mine and in which I was currently staying, it completely burned.'

Fire.5.2

### 16.2.3 DP-internal word order change

Section 6.4.2 showed that the canonical word order for demonstrative phrases is noundemonstrative. The opposite order is rarely observed in the text data and appears to mark the referent as a Topic, while also expressing some emotion such as surprise or exasperation. The raised tonal register associated with the other topic-marking strategies is again observed. There is no pause between the Topic and the main clause, nor does a subject pronoun follow the Topic. A possible analysis is that the non-canonical word order expresses a contrastive reading of the demonstrative. In other words, "this X" as opposed to "that X". Future research is needed to reach clear conclusions. Examples (16.13) and (16.14) are given to illustrate.

| (16.13) | wù | dú | bó | lé | l $\bar{\varepsilon}$, |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3sG | say | 3PL | APPL | COMP |


| $\uparrow([f i ̄ 1-n e \bar{e}$ | fy- $\bar{\varepsilon}:]$ | lé | fī | ghā | wá | m̀̀ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c19-PROX | c19-thing | COP | C19 | surpass | already | 1SG.PRO |

'...he said to them, "This thing is beyond me."' (i.e., this problem is too difficult for me to solve) Inheritance. 6
(16.14) $\quad \bar{\varepsilon}, \quad[\uparrow(w \bar{u}-n e ̀ ~ \emptyset-k w \varepsilon ̀ s \bar{\varepsilon} \quad w u \bar{u})$ nùm $\bar{\varepsilon}$ nàn), $\operatorname{COMP}$ c1-PROX c1-woman c1REL $\operatorname{COP}(\mathrm{N}) \quad$ c9.animal

| wù | ká | nūmè | $\emptyset$-mù | wū | wùy] | lé |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c1REL | ITER | $\operatorname{COP}(\mathrm{N})$ | c1-person | $c 1 \mathrm{AM}$ | c3.village | $\operatorname{COP}$ |

Ø-kwèsē wū nè lè
c1-woman c1AM how APPL
'[He said], "This woman who is an animal and again a human is what kind of woman?", Two Wives.7.3

### 16.2.4 Right dislocation

Right dislocations involve a detached referent, which appears in sentence-final position. Evidence for this structure as a topic-marking strategy is relatively weak, with (16.15) the clearest example in the text corpus. Note that the right-dislocated phrases in the below examples are bolded.

| (16.15) | m $\bar{\varepsilon}$ | lé | j́-ná |  | bèn | bvū-ngá, |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG.PRO | cop | 1SG.FUT-GIVE | 2PL | c14-power |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Ø-mū | wű | lé | wú | yú | jà | yínē |  |
| c1-person | c1REL | COP | 3SG.FUT | kill | c9.animal | c9-PRox |  |  |

'I will give power to you all, to the person who will kill this animal...'
Inheritance. 7

Example (16.16) demonstrates that right dislocations often provide further clarifying information regarding the referent. The right dislocation in this example (and in the previous one) might be analyzed as what Lambrecht calls an "antitopic", which has limited functionality as a topic-marking device (e.g., it cannot be used to mark new topics). Indeed, right dislocations in Nchane are not characterized by the raised tonal register associated with the other topic-marking strategies, just as antitopics are observed as always being unaccented. See Lambrecht (1996: 202-205) for more on antitopics. Note that the phrase appearing in all caps in the translation is a focus-marked constituent. See $\S 16.3 .4$ for a description of this focus strategy.

'Those children [said] that they had eaten SOME CASSAVA PUFF WHICH A CERTAIN BLINDMAN HAD GIVEN THEM, that blindman who always says that you do good, you do for yourself; you do bad, you do for yourself.,

Slightly more common in the text data is the right-dislocated vocative, illustrated in example (16.17), in which the vocative is enclosed in brackets. ${ }^{107}$

'The blindman agreed, "I am already resting, my children."'
What-goes-around.7.4

Rather than marking Topics, these are probably best described simply as "addressing structures", exhibiting a function of vocatives that Sonnenhauser and Noel Aziz Hanna observe as one of the few clearly defining characteristics of the phenomenon (2013: 17). While this type of right dislocation is not associated with topic marking, it is presented here for easy comparison with examples (16.15) and (16.16) and to illustrate the rightward position's weaker association with topic expression, since right dislocation is not a dedicated topic-marking strategy, and even when used to mark topic, it is limited in that capacity.

### 16.3 Focus

As stated in the introduction, focus establishes the focused element as being selected from among alternatives. Focused referents tend to appear in the immediately after verb position, where PATIENTS routinely occur. Thus, postverbal PATIENTS are otherwise unmarked, as illustrated in (16.18), a response to the question, "What did Tada buy?".

```
(16.18) Tádà gú jì
    T. buy c9.hoe
    'Tada bought a hoe.'
```

While it is true that there are many alternative items which Tada could have bought in the above example, these alternatives are not necessarily active in the common ground of the communicative act. This observation leads Krifka and Musan to restrict the definition of focus further to mean that it "especially stresses and points out the existence of particular alternatives" (2012: 7, emphasis my own). Thus, the remainder of this section describes focus constructions with this more restricted definition in mind.

[^64]Nchane uses several different strategies for different kinds of focus. These strategies include word order changes, clefting and the use of focusing words or particles. Generally, the various strategies are associated with the expression of specific types of focus, although there is some limited overlap. Furthermore, with the exception of word order change, these strategies are not limited to focus of just one constituent type. These details are summarized in Table 16.1.

| Focus device | Type of focus | Scope of focus |
| :--- | :--- | :--- |
| non-canonical | exhaustive/contrastive | agent |
| $\quad \quad$ word order |  |  |
| cleft | exhaustive/identification | any clausal term |
| $\mathbf{m \overline { \jmath }}$ 'RES' | scalar | any clausal term |
| jù 'COP(N)' | counter-expectation | non-agents/clause/VP |
| l̀̀ 'FOC' | assertive | verbs |

Table 16.1 Nchane focus strategies.

The remainder of this section presents the different focus strategies observed, organized according to the form of the focusing structure. Non-canonical word order is described in $\S 16.3 .1$ and clefts in $\S 16.3 .2$. The focus markers m̄ , nù, and lì are presented in $\S \S 16.3 .3-16.3 .5$. In the examples below, focusing words are bolded while the target of the focus appears in brackets.

### 16.3.1 Non-canonical word order focus

This section describes focus constructions where the AGENT appears in the immediately-after-verb position, which may be characterized as the in-focus position. Along with the post-posing of the AGENT, the PATIENT, if present, is usually preposed. The strategy is only rarely observed in the data and is limited to agent focus, the same as observed for Noni (Hyman 1981: 108). Meanwhile, the immediately-after-verb position is also identified as a focus position in Naki, Mundabli and Mungbam, but allows for the focus of presumably any constituent (Good 2010: 49; Voll 2017: 318 ; and Lovegren 2013: 343 respectively).

Example (16.19) illustrates an AGENT-PATIENT inversion, which marks the AGENT as being in focus.

| (16.19) | bvū-ŋgá | bw- $\bar{\varepsilon}:$ | bvù-chí: | g $\bar{\varepsilon}$ | ná | [Ø-nò] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c14-power | c14-ANA1 | c14-all | P3 | give | c1-god |

'GOD gave all that power.'
Fire. 57

The sentence in example (16.19) follows the report of the speaker's house being destroyed by fire, along with a large sum of money and all of his carpenter's tools. The loss of the money was a great hardship, since he had to provide food and
drinks for the people who came to condole with him. After a long while, he was able to repair his house. In this sentence he expresses that his ability to overcome all these difficulties was a result God's intervention, and no one else's. Thus, this example illustrates exhaustive focus.

While the AGENT appears in the postverbal position, the PATIENT usually appears in the preverbal position in what may be referred to as "defocalization" of the PATIENT. This term is used to reflect the occurrence of the PATIENT in the out-of-focus position, rather than in the in-focus position, where PATIENTS occur canonically. While the text corpus contains no examples of a defocalized PATIENT which clearly does not serve as Topic, I consider defocalization to be a byproduct of the agent focus strategy rather than topicalization.

Defocalization differs from the topic-marking strategies presented in §16.2 in two important ways. First, it does not involve a raised tonal register. Second, it only occurs in cases of postverbal agent focus. Therefore, while such defocalized PATIENTS, occupy the preverbal position associated with canonical topics, they are not considered to be de facto topics themselves.

The notion of "defocalization" of the PATIENT is supported externally by evidence from the language Aghem (West Ring-Grassfields), spoken about 70 kilometers west of the Nchane-speaking area. The object noun (cf. PATIENT) in Aghem is observed to take a prefix when occurring in "focus neutral" constructions, where the noun immediately follows the verb. This prefixed noun structure is the expected Bantu noun structure. However, when any element other than the object is focused, the object takes a suffix, appearing in the "out of focus" form (Hyman \& Watters 1984). This defocalized form of the object noun (i.e., suffixed rather than prefixed) is therefore comparable to the Nchane defocalized PATIENT (i.e., preverbal rather than postverbal).

The example set in (16.20) shows word order focus expressing contrast. The sentence in (16.20)a is given to show the normal, non-focused sentence structure, which is contrasted with the structure in (16.20)b, which has an AGENT-PATIENT inversion. The parallel protases displaying the focus alternation are bolded for the reader's convenience.

| a. $\begin{array}{r}\mathrm{w} \overline{\mathrm{s}} \\ 2 \mathrm{SG}\end{array}$ | wű c1REL | $\begin{align*} & \emptyset-j w \bar{n}  \tag{16.20}\\ & \text { c1-man } \end{align*}$ | $\begin{array}{ll} \dot{\varepsilon}, & \text { né } \\ & \text { if } \end{array}$ | $\mathbf{w \overline { ~ }}$ | lé <br> COP | $\begin{aligned} & \mathbf{w \overline { \mathbf { y } }} \\ & 2 \mathrm{SG} \end{aligned}$ | $\begin{aligned} & \text { gè } \\ & \text { do } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wō | légè | $1 \bar{\varepsilon}$ | Ø-kwò: |  |  | f̄̄s $\bar{\varepsilon}$ | w | j |
| 2SG | beg.IMP | СомP | c1-wife | 2sG.poss |  | forgive |  | SG |

[^65]| b. $\mathbf{n} \overline{\boldsymbol{\varepsilon}}$ if | jálè <br> wrong | $\begin{aligned} & \text { gē } \\ & \text { do } \end{aligned}$ | $\begin{aligned} & \text { [w文] } \\ & 2 \mathrm{SG} \end{aligned}$ | wū <br> c1REL |  | Ø-kwēsé, <br> c1-woman | $\begin{array}{ll} \text { wò } & 1 \not ̋ \\ 2 \mathrm{SG} & \mathrm{~b} \end{array}$ | 1 हैg $\varepsilon$ beg.IMP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 \bar{\varepsilon}$ | Ø- |  |  | $1 \bar{\varepsilon}$ | $\bar{\varepsilon}$ | wú | fōs $\bar{\varepsilon}$ | wo |
| COMP | c1-hu | ban | .2SG. |  | Con | 3sG.FU | forgive | e 2 SG |

'[Or] if YOU who are the woman did wrong, ask that your husband will forgive you.' Marriage.4.6

Defocalization of a postverbal constituent in word order focus constructions does not occur in certain contexts. One such situation is when the PATIENT is first person. Thus, the example set in (16.21) demonstrates that first-person PATIENTS may not be defocalized.
(16.21) a. chí sūy [n̄jī] mè

P2 beat N. 1SG.PRO
'NJI beat me. '
b. ${ }^{*} \mathrm{~m} \bar{\varepsilon} \quad$ chí sūy [ $\left.\overline{\mathrm{nj}} \mathrm{i}\right]$

1sG.pro P2 beat N .
Intended: 'NJI beat me.'

Note that the post-posed, focused AGENT, along with a first-person PATIENT, results in a clause with an empty preverbal slot. Note also that there is no subject agreement; in clauses with canonical word order and with a P2 marker, subject agreement is required. The fact that it does not appear in this example, indicates that there is no grammatical subject relation present in the clause.

Likewise, Applied Objects appearing in clauses with a focused postverbal AGENT remain in their canonical position following the postposed AGENT, as illustrated in (16.22). Applied Objects can precede the verb in certain negation constructions. Thus, the restriction of Applied Object defocalization might be limited to word order focus constructions as seen here.

| (16.22) | chí | yén | [tādà] | wù | lē |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | P2 | see | T. | 3sG | APPL |

'TADA saw him.'

In three-term clauses, the PATIENT is defocalized, just as they are in the two-term (AGENT-PATIENT) clauses presented above, and the Applied Object again remains in its canonical position, as demonstrated in (16.23).

| (16.23) | mūn-chōnē ná | [tádà] j̀jì | lē |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | c18a-groundnut | give | T. | N. | APPL |

'TADA gave groundnuts to Nji.'

As mentioned earlier, some nearby languages (although, not Noni) allow for non-subject constituents to be focused by appearing in the immediately after verb position and with the PATIENT defocalized. Example (16.24) shows that this is not possible for the Nchane Applied Object, which requires a different focus strategy.

| (16.24) | *tádà | mùn-chōnē | ná | $[$ ńjì | lē] |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | T. | c18a-groundnut | give | N. | APPL |

Intended: 'Tada gave groundnuts to NJI.'

Negative, non-canonical word order focus operates much the same as its affirmative counterpart, with the focused agent following the verb and the PATIENT preceding it. Example (16.25) is a response to the question "Did Nji give the chicken fufu?". The question asserts that it was Nji who gave, while the response contrasts this assertion, expressing that while someone did give, that someone was not Nji .

| (16.25) | yggáy, | á | bvú-lę̃: | bé | ná | [wù] |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| no | NEG1 | c14-fufu | P1 | give | 3SG |  |  |
|  |  |  |  |  |  |  |  |
|  | shī |  | lé | gè |  |  |  |
|  | c9.chicken | APPL | NEG2 |  |  |  |  |

'No, HE did not give the chicken fufu.' (someone else did)

This example appears to indicate that focused constituents may not be concurrently negated, since a clause negation strategy is utilized rather than one for constituent negation. (See $\S 16.3 .5$ for further discussion on this matter.) As noted in $\S 15.2$, the á-strategy is employed in negative constructions involving formal focus marking, as is observed here.

In some cases, word order focus is constrained by semantics and social hierarchy concerns. Example (16.26) has two possible interpretations, with the focused interpretation having questionable acceptability. Given the right context, my language consultants agreed this could have the second interpretation. However, an adult man has a higher social status than a child. Therefore, the non-focused interpretation is the default one.

```
(16.26) Ø-bā wū-nē sūy [b\grave{:`}]
c1-pa c1-Prox beat c2.child
```

'This pa beat the children.'
(?) 'The CHILDREN beat this pa.'

Example (16.27) has only one possible interpretation, since the agent and PATIENT are of equal social status. Therefore, a different focus strategy is needed to obtain an unambiguous focused reading.

| (16.27) | tádà | sùg | j̀jì |
| :--- | :--- | :--- | :--- |
|  | T. | beat | N. |
|  | 'Tada beat Nji.' |  |  |
|  | *'NJI beat | Tada.' |  |

### 16.3.2 Cleft constructions

Clefts consist of a clause-initial copula followed by an object noun phrase ${ }^{108}$ (the $e x$ situ focused constituent) modified by a relative clause. In contrast to nearby languages such as Noni (Hyman 1981), Mundabli (Voll 2017) and Mungbam (Lovegren 2013), there is no dummy subject present. Presumably, any nominal constituent may be focused through a cleft construction, which identifies the denotation. In other words, the focused constituent answers the question of "who", "what", "when" or "where".

A cleft construction focusing an agent is illustrated in (16.28). The focused agent is identified as the answer to the previous sentence's seemingly rhetorical question, where the speaker asked himself how he is going to accomplish a certain task that appeared impossible.

| (16.28) | lé | [Ø-nı̀] | wú | g ¢ | nà | jè | $y \bar{\varepsilon}-\grave{\varepsilon}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | COP | c1-god | c1REL | P3 | give | c9.path | c9-ANA |

'It is GOD who gave that way.'
Fire. 49.2

Note that the cleft construction places the focused term to the right of the copula, which serves as the main verbal element of the sentence. Therefore, this strategy supports the notion of the immediately-after-verb position as associated with focus.

[^66]Example (16.29) involves a focused PATIENT. This example comes from a story in which some children are sick and a doctor is asked to discover what is the cause of their sickness. Because the children are having stomach pain, one can suppose that they have eaten "something". That "something" is identified as poison.


> 'When the doctor looked, he saw that it was POISON that those children ate.'
> What-goes-around.9.7

As stated in §11.1.1, inferable PATIENTS are routinely omitted. This is the case in example (16.30), representing an unusual instance where focus is obtained for a null expression. The prior sentence explicitly mentions the "cassava puff" being referenced here. Thus, the cleft construction involves a headless relative clause, where the omitted PATIENT is the focused constituent, which is identified as the "cassava puff" that the children have eaten. Here, the focus is exhaustive, since the poisoned cassava puff is the only entity that results in a true proposition.

| (16.30) |  |  | $\begin{aligned} & {[-]} \\ & \text { cass } \end{aligned}$ | a.puff | mà c6aREL |  | $\mathrm{m} \bar{\varepsilon}$ <br> SG.PRO | bé nà <br> P1 give |  | kī-mfę̣: <br> 7-blind.man |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | k $\grave{\varepsilon}$ - $\grave{\varepsilon}$ |  | lē, | kí |  | kí |  | bò: |  | à-nè |
|  | c7-An |  | APPL | c7REL |  |  |  | c2.child |  | -Prox |
|  | $1 \bar{\varepsilon}$ | bó |  | f $\chi^{\prime}$ | à-shéy |  | kī | á |  | $\mathrm{b} \bar{\square}$ |
|  | SET | 3pL | eat | make | c18-liv |  | COMP( | ) c 18 |  | 3pL |

'[That] is [the very CASSAVA PUFF] that I gave to the blind man, who went and gave [it] to these children to eat, making [their] stomachs to hurt them.'

What-goes-around.9.15

RECIPIENTS may also be focused through cleft constructions, as illustrated in (16.31). ${ }^{109}$ However, as the noun phrase following the copula is not marked with the applicative postposition lē, the example suggests that the focus construction is based on a clause with RECIPIENT-THEME word order, where both postverbal

[^67]constituents are Objects. Focus of Applied Objects through clefting is apparently not possible.

| (16.31) | lé | [ńjì] | wü | tādá | wū | jua | mùn-chōnē |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | COP | N. | c1REL | T. | 3SG | give | c18a-groundnut |

'It is NJI to whom Tada gave groundnuts.'

A focused time adverbial in a cleft construction is shown in example (16.32) In the preceding sentence, five brothers consider where each will go to do farming This temporal context is identified as the time that the first brother makes his decision.
(16.32) lé [kī-fē kī-nē lé] kì chūngè gè jā
COP c7-time c7-PROX APPL c7REL Ch. P3 leave

| wú | bèně | kì-mbè | kī | Ø-jú | sàn-é | yó | lé, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | ascend | c7-side | c7REL | c5-sun | rise-PROG | inside | APPL |


| wū | g $\bar{\varepsilon}$ | dàn | jō | yì | kìnk $\bar{\varepsilon} \overline{1}$ | wū | shí | chūngè-kj̄ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | P3 | cross | c9.water | c9AM | K. | 3SG | sit | Ch.-forest |

'It is at THIS TIME that Chunge moved toward the east and crossed the Kikenyeh River and settled in Chunge-Ko (Chunge Forest).'

History.3.1

Questions often are formed utilizing cleft constructions, as illustrated in (16.33) (AGENT focus) and (16.34) (PATIENT focus). ${ }^{110}$

(16.33) | lé | $[\emptyset-m w a ̄$ | wú-lá $]$ | wú | jí | bvù-lè̀: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| COP | c1-child | c1-Q | c1REL | eat | c14-fufu |

'It is which child who ate fufu?'

[^68]| (16.34) | wù | bí: | b⿹̄龴: | bā-ā | lé | là: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3sG | ask | c2.child | c2-ANA2 | APPL | Q.COMP |

'...he asked those children, "What is it that you ate?".' (lit. it is what
that you ate)
What-goes-around.9.8

No examples of negative clauses involving cleft constructions are present in the text data. But example (16.35) shows that it involves the $n$-copula rather than lé.

'No, it was not HIM who gave the chicken fufu. (It was someone else.)

Furthermore, no examples of a focused prepositional phrase in a cleft construction are observed in the text data. However, this has not been ruled out as a possibility.

### 16.3.3 The scalar focus particle m̄

The Resultative marker m̄ 'RES', in its primary function, occurs in the preverbal slot and establishes a resultative relationship between two clauses (see §9.3.5). In its secondary function, it precedes a focused clausal constituent. The focused constituent is interpreted as being selected from a group of one or more "similar" alternatives, and often might be assumed to be excluded from this group or to be the extreme member of the group. For example, "snakes" in the sentence, "I like all animals, even snakes.", is considered an extreme member of the group "animals", perhaps because they are dangerous or hard to care for. Thus, "snakes" are measured along a desirability scale and identified as the least likely member of the group "animals" to be liked.

Scalar focused constituents are somewhat rare in the data and are apparently always right-dislocated. This is illustrated in (16.36), which has a focused PATIENT. The context for this sentence is a husband sending his wife away after he discovers she is doing witchcraft. He orders her to take all her things with her, including the smallest article, her 'rags', which are used in a variety of mundane tasks such as serving as a cushion when carrying objects on the head.

```
(16.36) jó mw-\overline{\varepsilon}: mw-ōy mū-chī, m̄ [fī-cháyā
take.IMP c18a-thing c18a-2SG.POSS c18a-all RES c19-rag
```


'Take all your things, even [YOUR] RAGS, and return to your parents (lit. your father).'

Two Wives. 7.2

The focus in (16.37) is very similar to that in the above example. The focused PATIENT appears as the ultimate member of a group of activities.

'The Nchane people spoke the same language and did the same things, even their traditional activities.'

History.4.2

A scalar focused Comitative Oblique appears in (16.38), which is the last sentence of a hortatory text giving advice to young married couples. The final admonition is to love not only themselves, but also the families of the husband and wife, which is presumably harder to do or less likely to be considered.

| (16.38) | béy | gè̀è | l̄ | kì-ŋ-kj̀nē | nùm̀̀ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2PL.HORT | do-PROG | COMP | c7-NMZR-desire | COP(N) |

ā-bèn-ǹténć sēgē chī: m̄̄ [bé $\quad$ - -kfū chī-nā $]$
c18-2PL-middle when all RES with c5-family c5-2pL.POSS
'You should be showing love among yourselves and even YOUR FAMILY.'

Marriage. 7

The scalar focus marker occurs twice in example (16.39). The first occurrence involves a complex agent, with the focused member appearing at the right edge of the sequence and being marked as the most important or surprising of the agent members. The second occurrence is found at the end of the sentence forming an ellipsis, and represents a final addition to the list of agents.

| (16.39) | bā-mī <br> c2-person |  | b <br> with |  |  | bā c2A |  |  | $\begin{aligned} & \text { sābó } \\ & \text { L.3PL } \end{aligned}$ | $\begin{aligned} & \text { g̀̀ } \\ & \text { P3 } \end{aligned}$ |  | P | bā-chī, c2-all |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | m】 |  | ¢ | bō | $\mathrm{g} \bar{\varepsilon}$ | bé |  | bō | já | já-á |  |  |  |
|  | RES | c1-p | stor | 3PL | P3 | ${ }^{\text {P }}$ C |  | 3 P | - le | leave-P | OOC |  |  |
|  | b | lég |  | bó | $\mathrm{g} \bar{\varepsilon} \mathrm{n}$ |  | m | $\bar{\nu}$ | $\mathrm{m} \bar{\varepsilon}$ |  | t $\hat{\varepsilon}$ |  |  |
|  | 3 PL |  | ROG | 3PL | go-P |  | RES |  | 1SG.P | .PRO | als |  |  |

'All the people, with our elders, and even THE PASTOR, they were running and going, and even I also.'

Fire.3.1-2

It is assumed that any clausal constituent could be focused using the scalar focus marker, although no examples are observed in the data of applied objects or locative obliques in such constructions. However, example (16.40) shows that propositions can also be focused through $\mathbf{m} \overline{\mathbf{\jmath}}$. The focused proposition represents the extreme act of raising someone from the dead to preach to a man's living brothers, who are not accepting the preaching of Moses.

| (16.40) | mò | bā | bűs $\grave{\varepsilon}$ |  | $\emptyset$-mù | à-j $j \bar{\varepsilon} y$, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | RES | they | remove.cond | c1-person | c18-grave |  |

'...even if they remove someone from the grave, they (your brothers) will not hear.' Rich man.1.21

### 16.3.4 The n-copula (nù) as a focus marker

The copular verb jù̀ ' $\operatorname{COP}(\mathrm{N})$ ' (presented in §10.1.2) has a secondary function as a focus marker. The copula precedes the focused constituent, contrasting it with some alternative, and with an additional expression of emotion such as surprise or counter-expectation. The data show PATIENT focus is obtained often via this strategy, as well as focus on locatives. AGENTS, however, are never focused with the copula. The focused constituent most often appears immediately after the verb, although there is some evidence to indicate that the focused constituent remains in situ.

Example (16.41) illustrates PATIENT focus with jù. The focused denotation contrasts bvùl $\bar{\sim}$ : ${ }^{111}$ 'fufu' with $\operatorname{bīnfūn} \bar{\varepsilon}$ ' $\operatorname{corn}(\mathrm{pl})$ ', that is mentioned in the previous sentence.

| (16.41) | wù 3SG | jó take | nù <br> $\operatorname{COP}(\mathrm{N})$ |  | [bvù-1気: c14-fufu |  | $\bar{\varepsilon}:]$, <br> -ANA1 | wù <br> 3sG | chú <br> pour | wáà, <br> IDEO | à |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | jò |  |  | wū | tú | wū | k $\bar{n} \mathrm{n}$ ¢̀ | wū | k n n ${ }^{\text {c }}$ | wū | k $\overline{\text { en }}$ |
|  |  |  | PL |  | then | 3SG | stir | 3SG | stir | 3SG | stir |

'She took the FLOUR, poured [it], pssss, into the water, and stirred and stirred.' Disobedient Child.1.10

The discourse context suggests that this contrast is expressing a counter expectation. In the story, before leaving for work on the farm, a mother left corn with her daughter with the instruction to take it to the mill to be ground into flour so that it would be available to cook for the evening meal. The daughter did not do as her mother demanded. So, when the mother returned home, she found the unground corn and, without her daughter's knowledge, took other corn to the mill to be ground. Later in the evening, she asked her daughter to bring her the corn. However, instead of using the unground corn, she took the flour and put it in the water to cook.

The intention of killing an annoying, blind beggar is the context for example (16.42), another instance of PATIENT focus with jù.

| (16.42) | $\begin{array}{ll} \text { bহ̄: } & \text { bā- } \bar{a}, \\ \text { c2.child } & \text { c2-ANA } \end{array}$ | $1 \bar{\varepsilon}$ <br> COMP |  | $\begin{aligned} & \text { bé } \\ & { }^{\text {P}} \mathrm{COP} \end{aligned}$ | jí <br> eat | jù <br> $\operatorname{COP}(\mathrm{N})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [mày-kàlà c6a-cassava.puff | má-mù <br> c6a-some | mà <br> c6art |  |  |  |
|  | $\begin{array}{ll} \text { kì-mfę̇ } & \text { kí } \\ \text { c7-blind.man } & \text { c7- } \end{array}$ |  | ná give | $\begin{array}{ll}  & \text { bò } \\ \mathrm{e} & 3 \mathrm{PL} \end{array}$ |  |  |

'Those children [said] that they had eaten SOME CASSAVA PUFF, WHICH A CERTAIN BLINDMAN GAVE THEM...'

What-goes-around.9.9

In the previous sentences, the cassava puffs are poisoned and given to the blind beggar. However, he did not eat them, but later gave them to the woman's own children, who then ate the poisoned cassava puffs. Focusing this Object emphasizes

[^69]this surprising turn of events, that they are the same "cassava puffs" that were intended for the blindman to kill him.

In example (16.43), nù is used to underline the importance and surprise of the location of the fire, expressed through an Applied Object. The speaker was alarmed to discover the fire was occurring near his house. Therefore, a contrast is established between the actual location of the fire and the assumed location of the fire.

'As we saw fire burning, fire was burning in the side of government school, being WHERE I WAS LIVING.'

Fire.2.3

The example set in (16.44) illustrates how nù can be used to focus a prepositional phrase. The two examples are parallel sentences, with (16.44)a appearing early in the text and the "song" utilized as the name of a major participant. The same set of phrases occurs in (16.44)b, serving as the moral of the story. This time, however, the focusing copula appears. The moral is emphasizing the false belief that a person can treat others poorly and not experience negative effects from that treatment. It also highlights the surprise experienced by the woman who ended up killing her own children with poison intended for the blind beggar.

'...he was moving and singing a song, "You do good, you do for yourself; you do bad, you do for yourself.", What-goes-around.1.3

[^70]

| tū | wò | gé | jù | $[y \bar{e}$ | $y-\overline{0}$ | l̄̄ $]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| then | $2 S G$ | do | $\operatorname{COP}(\mathrm{N})$ | on | $c 9-2 S G . P O S S$ | APPL |

'This story is teaching that, [if] you do good, you do FOR YOURSELF; if you do bad, you do FOR YOURSELF.'

What-goes-around.10.2

The scope of the n-copula is over whatever immediately follows. In the above examples, that has been a clause constituent. But example (16.45) demonstrates that jù can mark an entire clause for focus. Here, the focus copula follows a locative, which serves as the subject of the following focused clause. The fact that the house is already burnt upon the speaker's arrival is focused and contrasts with the possibility of the house being only partially burnt.

'As I arrived at the house, I came to my house when IT HAD ALREADY COMPLETELY BURNED.'

The focus copula may also precede a verb phrase, as in (16.46). The focus is on the act of a man's wife carrying fufu without soup, which is in contrast with the normal situation of soup accompanying the fufu. A short while later, the wife produces fufu with soup, which is a pivotal event in the story.

| (16.46) | bēsá-Ø-kwā:: | bē | bé | làd-é, | wū | nù |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1PL-c1-wife.1SG.POSS | $1 P L$ | P1 | go.goal-PROG | 3SG | COP(N) |

'"I and my wife were going (to the farm to do work) and she CARRIED FUFU WITHOUT SOUP."'

In example (16.47), the focus copula follows the matrix verb and precedes the PATIENT, which would appear to be the focused constituent. However, it is not simply the PATIENT that is in focus. The example follows the husband asking where the wife will get soup, with this sentence offering an indirect answer to the question. The contrast expressed is between two activities, "worrying over where the soup will come from" and "preparing for eating".

$$
\begin{aligned}
& \text { (16.47) Ø-kw̄ chfú l̄̄ [chūgé jù chyà̀:], } \\
& \text { c1-wife reply COMP wash.IMP } \operatorname{COP}(\mathrm{N}) \text { c10.hand } \\
& \begin{array}{llllll}
\text { Ø-jwā:, } & \text { Ø-jw } \overline{\text { E }}: & \text { m̄̄ } & \text { wù } & \text { chūg̀̀ } & \text { chyà.: } \\
\text { c1-husband.1sG.Poss } & \text { c1-husband } & \text { RES } & \text { 3SG } & \text { wash } & \text { c10.hand }
\end{array} \\
& \text { 'The wife answered, "JUST WASH [YOUR] HANDS, my husband." } \\
& \text { and the husband washed [his] hands.' Jealous Husband. } 11
\end{aligned}
$$

Perhaps the placement of the focus copula before the PATIENT in what is interpreted as verb phrase focus is dictated by the main verb appearing in its imperative form. This explanation would restrict the n -copula from preceding imperative verbs. Or it might be that the main verb of a clause with no preverbal nominal term cannot be preceded by the $n$-copula when functioning as a focus marker. Indeed, a clause with no subject elements and having an n-copula followed by a lexical verb might be confused with a type of cleft construction. However, these hypotheses remain untested for the moment.

The n -copula as a focus marker may appear in negative constructions, as illustrated in (16.48). As was observed in §15.2, focused clauses demand the use of the á-strategy for negation, which is also utilized for clauses with verbs that are not [+PAST] and [-PROG]. Additionally, the various constituents appear in their canonical order. This example also provides the clearest evidence in the data corpus that nù-focused constituents remain in situ, with the focused Applied Object following the Object.

| (16.48) | á | wù | bé | nā | bvū-l $\bar{\varepsilon}: ~$ | jū̀ | [shī | lē] | g̀̀ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | NEG1 | 3SG | P1 | give | c14-fufu | $\operatorname{COP}(\mathrm{N})$ | c9.chicken | APPL | NEG2 |

'He did not give THE CHICKEN fufu.' (e.g., he gave to the dog)

### 16.3.5 The verb focus particle l̀̀

The focus marker ly 'FOC' is not clearly a focus marker, at least not entirely. In some cases, its occurrence is seemingly related to clause structure concerns. To better understand its function, I begin with a few comments regarding the marker as it appears in the neighboring language Noni.

A homophonous form is observed in Noni，where Hyman observes that it is required with sentences which have verbs that are minus future［－FUT］，minus negative ［－NEG］，and minus focused［－FOC］．The［－FOC］designation indicates that the verb does not appear with the focus auxiliary nój ，which is somewhat analogous to Nchane＇s n－ copula jù，and is often translated with the immediate past adverb＂just＂（Hyman 1981： $56,60,77)$ ．It is further observed that $\mathbf{l} \mathbf{~}$ is not required if a verb complement，such as an object，is present．Thus the＂aspectual adverb．．．either completes the［－FUT，－FOC］ verb，or，places additional focus on the verb itself＂（Hyman 1981：85）．${ }^{113}$

Nchane presents a similar pattern with l̀̀．As illustrated in（16．49）－（16．51）， $\mathbf{l} \mathbf{~}$ is required with verbs that are［－FUT，－NEG，－FOC］when there is no verb complement． （As inferred above，the＋FOC verb form for Nchane is the n－copula．Thus，l̀ is not expected in clauses in which the $n$－copula serves as the main verb．）In addition，lı̀ is not permitted in negative constructions or in constructions with other focus marking． Note that Hyman and Watters convincingly argue that negation structures are ＂intrinsically focused＂，representing the marked polarity value（1984：262）．Thus，a language might disallow the presence of more than one focus feature（in this case， verb focus and negation）．However，example（16．25）above demonstrated that，while term negation is incompatible with a focused agent，clausal negation and a focused agent are allowed to co－occur．

| （16．49） | wù | g $\bar{\varepsilon}$ | já | $\emptyset-n t a ̄ y$ | $l \bar{\varepsilon}$ | wū | ［kwé－é］ | lì |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $3 S G$ | P3 | give | c1－thought | COMP | $3 S G$ | die－PROG | FOC |

＇He thought that he was dying．＇
Lake．4．4

| bē | gø̄n－é | wò | l $\bar{\varepsilon}$ | Ø－mfòn | wū－sè | ［chén－é］ | lỳ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1PL | want－PROG | 2 SG | SET | c1－chief | c1－1PL．POSS | sick－PROG | FOC |

＇We want you because our chief is sick．＇
Smart Monkey．1．10

| （16．51） | shā | y $\overline{1}$ | t万̄nē | y1̄－nè | ［kùgè］ | lì |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | c9．pot | c9REL | hot | c9－PROX | big | FOC |

＇This hot pot is big．＇

The above examples suggest that Nchane clauses，at least in some verb conjugations，require a verb complement，and lì fulfills that requirement when no other complement is available．Good（2010：66）suggests that such a phenomenon can be taken as evidence for the existence of a postverbal＂field＂，which in some

[^71]contexts must be filled. As we have seen with word order focus and cleft focus constructions, this postverbal field could be designated as a Focus field, as is argued for Naki.

While the analysis of lı̀ as a slot filler has some merit, it does not, however, account for its occurrence in certain other cases. For example, the minimal pair in (16.52) shows that it is not required with imperative verbs having no following constituent. But when it is present, it appears to have an intensifying or emphatic function. The focused version could be used, for example, after the speaker has already used the non-focused version, but with the command going unheeded.

> a. géné
> go.IMP
‘Go.'
b. [géné] \̀̀
go.IMP FOC
'Go!'

Example (16.53) is a natural text example of a similar construction. The command could occur without FOC, but its presence makes the command stronger.

| [já] | l̀̀ | chēgé, | $m \bar{\varepsilon}$ | lé | mé |
| :--- | :--- | :--- | :--- | :--- | :--- |
| leave.IMP | FOC | quickly | 1sG.PRO | COP | 1sG.PRO.FUT |
| ý-ḱ | wò, | m $\bar{\varepsilon}$ | n-s $\bar{\varepsilon}:$ | ń́, | fè-bwē |
| 1SG-catch | 2SG | 1SG.PRO | 1sG-cut | GEST | c16-neck |

'Leave quickly or I will catch you and cut you like this, at [your] neck!'
Greedy Friends.1.19

Examples (16.54) and (16.55) are somewhat ambiguous regarding focus. Example (16.54) occurs after a woman realizes that her husband suspects her of being unfaithful to him. The sentence here can be understood as her waiting until the right time to enact her plan to solve this problem.

| (16.54) | wù | tú | wu | $[$ mān-è $]$ | g $\varepsilon$ | l̀̀ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | return | 3SG | watch-PROG | EXCL | FOC |

'She then was just watching...' Jealous Husband.1.4

Example (16.55) is part of a response to the question of what the woman's children had eaten to make them sick. It is possible that the verb is focused here in
order to emphasize that the blind beggar received it from that woman rather than buying it somewhere or preparing it himself.

| (16.55) | wù | bé |  | [ľ́gé] | l̀ | à | Ø-kwēsé | wú-mù | lē, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3SG | P1 |  | beg | FOC |  | c1-woman | c1-certain | APPL |
|  | wú | t | ó | wū |  |  | mày-kàlà |  |  |
|  | c1REL |  | нав | 3SG |  | PRO | c6a-cassav | .puff |  |

'He asked for [cassava puff] from a certain woman who is always frying cassava puffs.'

What-goes-around.9.10

The neighboring languages Mundabli and Mungbam apparently acquire similar verb focus through cognate deverbal noun constructions, which occur in the postverbal position instead of a focus particle like Nchane, Noni and Naki (Voll 2017: 320; and Lovegren 2013: 350 respectively). For example, while Nchane utilizes a structure like "The man drank lì" to report that the man drank (something), Mundabli would likely use the structure "The man drank drink", where the infinitivized form of the verb serves as the verb's complement. Cognate deverbal nouns in Nchane are observed, but are quite rare and not used systematically with otherwise intransitive verbs, as they apparently are in Mundabli.

### 16.4 Givenness

Krifka and Musan state that givenness has to do with "the indication that the denotation of an expression is present in the immediate common ground content" (2012: 21). In other words, expressions may be denotations of new information, those which are absent from shared knowledge in communication, or they may be denotations of old or given information, those which are known by both speaker and addressee. Furthermore, Krifka and Musan indicate that the notion of givenness must accommodate degrees of givenness. This accounts for denotations of expressions that are no longer salient in common ground due to long absence.

Givenness in Nchane is largely expressed through its demonstrative system and is slightly different for minor versus major participants. In short, new participants in a discourse are most often introduced with the specific indefinite demonstrative mù 'some', which in this context is usually translated as 'certain'. Subsequent mentions, while the participant maintains active status, are generally made through personal pronouns. Participants may be reactivated following long absences through full nouns.

References to major participants follow a similar pattern. However, second mention often includes one of the anaphoric demonstratives presented in §6.4.2. Reactivation of major participants again includes one of the anaphoric demonstratives. The reader is encouraged to observe these patterns in the interlinearized texts provided in Chapter 17. The text excerpt in (16.56) also illustrates the above points. References to the major participant "woman" are bolded to make identification easier.
(16.56)


Following sentence 4, there are three sentences of dialogue. This results in the need for the "woman" to be reactivated in the mainline through a full nominal reference and accompanying anaphoric demonstrative.

| d. | l $\bar{\varepsilon}$ | nù | f $\bar{\varepsilon}-m f u ̀$, | Ø-kw $\bar{\varepsilon} s e ́ ~$ | $\mathbf{w} \dot{\varepsilon}-\bar{\varepsilon}$ | g $\bar{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bé |  |  |  |  |  |  |
| SET | $\operatorname{COP}(\mathrm{N})$ | c16-evening | c1-woman | $\mathrm{c} 1-\mathrm{ANA} 1$ | P 3 | ${ }^{\mathrm{P}} \mathrm{COP}$ |

    wù k
    3SG stir c14-food
    'As it was evening, that woman cooked fufu.'

Jealous Husband.2.3 (Sentence 8)

The following references are again made through a pronoun. This pattern is repeated several times throughout the text.

A summary of these patterns is given in Table 16.2.

| Information <br> status | Sequence | Minor <br> participants | Major <br> participants |
| :--- | :--- | :--- | :--- |
| new | first mention | $\mathrm{N}(+\mathrm{mu})$ | $\mathrm{N}+\mathrm{mu})$ |
| - | second <br> mention | pronoun | $\mathrm{N}+\mathrm{ANA} /$ <br> given |
| subsequent <br> mention | pronoun | pronoun |  |
|  | reactivation | N | - |

Table 16.2 Summary of Nchane givenness strategies.

## Chapter 17

## Interlinearized text

The text provided in this chapter was originally provided by a male speaker from Nkanchi village. It is a narrative text and can be further classified as a folk tale. As with so many folk tales, it serves a dual purpose of providing entertainment, while also teaching something. The moral of this story is that you reap whatever you sow, and comes in the form of parallel conditional clause constructions translated as, "You do good, then you do for yourself; you do bad, then you do for yourself."

The moral is overtly stated in the final sentence, where it is also marked with focus. But it also appears several times throughout the story, as one of the main characters, a blind beggar, is quoted periodically singing a song consisting of the moral. In the sentence found at (17.17), the blind beggar is addressed by the parallel clause constructions. Later, in (17.28), the name is truncated, with just the first conditional construction used, as well as having the honorific title "Pa" at the front.

Although these parallel clause constructions have characteristic conditional syntax, their tonal behavior is not entirely consistent with conditional constructions, as described in §13.2.4. The verb appearing in these clauses is the mid-toned gé 'do', which is realized with a high tone in the protasis (as expected), but also in the apodosis (which is not necessarily expected). Furthermore, the apodosis introducer tú 'then' is usually realized with a mid tone, rather than the expected high tone. I attribute these discrepancies to the fact that, in all cases but the final occurrence, these parallel
conditional constructions are presented either as lyrics of a song or as a name. As such, it would not be surprising if the clauses are affected by prosodies associated with those contexts.

A final observation of interest is that in the original version of the text (and in the original telling), the second-person singular pronouns in the conditional constructions were given as $\overline{\mathbf{a}}$ rather than $\mathbf{w} \overline{\mathbf{\jmath}}$, except for the final iteration in (17.53). This pronominal form is rejected by some speakers, although it is still commonly used in some Nchane speaking locations in certain constructions like ā jí 'You, eat!'. I assume this represents an archaic form which still occurs in some grammaticalized contexts, such as names, which in some cases are derived from clauses, such as bānéw̄̄ŋmme 'The WORLD hates me'.

## Mr. What-goes-around-comes-around

## By Soka Sylverius Dosi

| (17.1) | kì-nfę̀: kí-mú g $\bar{\varepsilon}$ $j \bar{\varepsilon} n-i ́$, | k 1 | l $\bar{\varepsilon}$-gè | mw- $\bar{\varepsilon}:$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| c7-blind.man | c7-some | P3 | walk-PROG | c7 | beg-PROG | c18a-thing |

What-goes-around.1.1

| (17.2) | kì-nfę̃ : | k $\overline{1}-\mathrm{ne}$ | g ¢ | j $\bar{\varepsilon} \mathrm{n}-1$. | $1 \bar{\varepsilon}$ | Ø-lá |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | c7-blind.man | c7-PROX | P3 | walk-PROG | SET | c5-compound |


| $l \bar{\varepsilon}$ | Ø-lá, | $\mathrm{k} \overline{1}$ | $\mathrm{j} \bar{\varepsilon} \mathrm{n}-\grave{1}$ | $\mathrm{k} \overline{1}$ | l $\bar{\varepsilon}$-gè | mw- $\bar{\varepsilon}:$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SET | $\mathrm{c} 5-$ compound | c 7 | walk-PROG | c 7 | beg-PROG | c18a-thing |


| à-jú | à-chī | à-jú | à-chī |
| :--- | :--- | :--- | :--- |
| c6-day | c6-all | c6-day | c6-all |

'This blind man was walking around from compound to compound and begging, day after day.'

What-goes-around.1.2

'As he was walking around and begging, he was walking around and singing a song, "You do good you, do for yourself; you do bad, you do for yourself."" What-goes-around.1.3

(17.4) | Ø-kw $\bar{s} s e ́$ | wú-mù | $\mathrm{g} \bar{\varepsilon}$ | bé | yú | wú | $\mathrm{g} \bar{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| cl-woman | cl-some | P 3 | ${ }^{\mathrm{P}} \mathrm{COP}$ | onit | c 1 REL | P 3 |

| káy-é | mày-kàlä | $\varnothing$-ǹt $\varepsilon$ | wè | lē |
| :--- | :--- | :--- | :--- | :--- |
| fry-PROG | c6a-cassava.puff | c1-quarter | up | APPL |

'There was a woman who was frying cassava puff in that quarter.'
What-goes-around.1.4
(17.5) Ø-kwēsé wé- $\bar{\varepsilon}$ káy-è mày-kàlä, kì-fè:
c1-woman c1-ANA1 fry-PROG c6a-cassava.puff c7-blind.man

c7-ANA1 go-Prog c7 beg-Prog c6a-cassava.puff in
$\emptyset$-kw $\overline{s e}$ e $w \bar{\varepsilon}-\bar{\varepsilon} \quad$ lē, à-jū $\bar{a}-c h \overline{1} \quad$ à-jū $\bar{a}-\operatorname{ch} \overline{1}$
c1-woman c1-ANA1 APPL c6-day c6-all c6-day c6-all
'That woman continued frying cassava puffs and that blind man was always coming and begging cassava puffs from her, day after day., ${ }^{14}$

What-goes-around.1.5

[^72]
'As that blind man was coming one day, that woman who was frying cassava puff was there (in the neighborhood) with her friend.'

What-goes-around.2.1
(17.7) n̄sā̃ y-ē bí: wù lē lâ:, c9.friend c9-3sG.Poss ask 3sG APPL Q.COMP
kì-nfę̀: kī-nē tó kī tò-ò yànè té lè c7-blind.man c7-PROX HAB c7 come-PROG here also APPL.QP
'Her friend asked her, "(Does) this blind man also come here?"'
What-goes-around.2.2
(17.8) wù chfú $1 \bar{\varepsilon}$, $\bar{\varepsilon}:$, wù tó wù nā-à m 3SG respond COMP yes 3SG HAB 3SG give-PROG 1SG.PRO

c1-trouble true when-all when-all
'She replied, "Yes. He is always giving me trouble, truly all the time.'
What-goes-around.2.3
(17.9) wù mō wù chfú Ø-ńtāy $\bar{\varepsilon}$, bé bé
3SG RES 3SG respond c1-suggest COMP $1 \mathrm{PL} \quad{ }^{\mathrm{P}} \mathrm{COP}$
$m \bar{\varepsilon} \quad w \bar{u}$ wò, tū $m \bar{\varepsilon} \quad \bar{m}$-bé $\overline{\mathrm{n}}$-yū wà
1SG.PRO 3SG 3SG then 1 SG.PRO 1 SG-P1 1 SG-kill already
wù bé Ø-ńlò
3SG with c1-poison
'She then suggested, "If I were you, I would have killed him with poison."

What-goes-around.3.1
(17.10) n̄chę́:, m $\bar{\varepsilon}$ lé bé n̄chè yí yū bī-kfūnè true 1sG.PRO COP with c9.medicine c9REL kill c8-rat 'In fact (or truly), I have medicine that kills rats.' What-goes-around.3.2
(17.11) n̄-tó bé yī, wō gé: à màn-kàlà 1SG-come with c9 2SG put.IMP in c6a-cassava.puff
mā-nē lé, wó ná wù lē c6a-PROX APPL 2SG.HORT give 3sG APPL
'I will bring it (poison) and you put it in this cassava puff and you should give [it] to him.'

What-goes-around.3.3
(17.12) ségé wū gè $w u \bar{u}$ jí, wú mō wū kwé,
when 3SG go 3SG eat 3SG.HORT RES 3SG die
wō fú-d $\bar{\varepsilon} \quad \bar{a}-\eta g e \bar{e}-w u ̀-b \bar{~}$
2SG rest-COMPL c18-trouble-3sG-hand
'When he goes and eats, he will just die, then you will rest from the trouble from him.'

What-goes-around.3.4
(17.13) bē t $\varepsilon$ ́ fü-d $\varepsilon$, bā-mì bā-dùdē fū-d̄̄ t̂́:
1PL also rest-compl c2-person c2-many rest-Compl also
ā-wù-bō, $\overline{\mathrm{n} j e ̄ ~ k i ̀-n f e ̨ ̀: ~} \quad$ kī-nē lé
c18-3SG-hand reason c7-blind.man c7-PROX COP

| kī | fūy-s $\varepsilon$ | wá | bā-mī | wèsè | b $\varepsilon ́$ | kī-lègè |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $c 7$ | worry-CAUS | already | c2-person | very | with | c7-begging |

'We also (in addition to you) will rest, and many people also will rest from his hands (from his begging), because this blindman has already worried people too much with begging.'

What-goes-around.3.5

| $1 \bar{\varepsilon}$ | bvū-chfū | dó | bvú-yú, | $1 \bar{\varepsilon}$ | wū | tón | màn-kàlà |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SET | c14-day | SIT | c14-break | SET |  | fry | c6a-cassava.p |
| mā | fwē |  | wù | jō | ñchē |  | hy |
| c6art | front | c6a | 3SG | take | c10 | dic | NA1 |


| wù | yéf $\bar{\varepsilon}$ | mày-kàlà | mā-yú |
| :--- | :--- | :--- | :--- |
| 3SG | rub | c6a-cassava.puff | c6a-ANA2 |

'The next morning (lit. as the day broke), as she fried the first cassava puff, she took that poison (lit. medicine) and she rubbed [it] on that cassava puff.'

What-goes-around.4.1
(17.15) wù chás $\grave{\varepsilon}$ wù gè:
3SG pack 3SG put
'She packed (or loaded) [it] and put [it] aside.' What-goes-around.4.2
(17.16)

| $l \bar{\varepsilon}$ | nù | g $\bar{\varepsilon}$ | shēgē, | kì-nfę̀: | k $\overline{-}-\bar{\varepsilon}$ | j $\bar{\varepsilon} n-i ̀ n$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SET | $\operatorname{COP}(\mathrm{N})$ | P 3 | small | c7-blindman | c7-ANA1 | walk-PROG |

bvū-jōŋघ $\bar{\varepsilon}$, tū wō gé yē $y-\bar{\jmath}$ lē,
c14-good then 2SG do on c9-2SG.POSS APPL

'After a little while ...that blindman was walking around, and coming, and singing a song that "You do good, you do for yourself; you do bad, you do for yourself."'

What-goes-around.4.3


| (17.21) | wù jó mày-kàlà mā-ā mà 3sG take c6a-cassava.puff c6a-ANA1 c6aREL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  | wù bé yéfè wū gè:, wù ná wù lē 3SG ${ }^{\text {P }}$ COP rub 3SG put 3SG give 3SG APPL |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 'She took that cassava puff, which she had rubbed [with poison] and set aside, and gave [it] to him.' <br> What-goes-around.4.8 |  |  |  |  |  |
| (17.22) | wù dú, ḱ là màn-kàlà mā-nē, <br> 3SG say catch.IMP CONCESS c6a-cassava.puff c6a-PROX |  |  |  |  |  |
|  | wó jí |  |  |  |  |  |
|  | 2SG.HORT eat |  |  |  |  |  |
|  | 'She said (with irritation), "Take this cassava puff, you should eat [it]."' <br> What-goes-around.4.9 |  |  |  |  |  |
| (17.23) | $\begin{array}{lllll}\text { kì-nfę̨̀: } & \mathrm{k} \bar{\varepsilon}-\bar{\varepsilon} & \text { kī } & \text { fí } & \text { mày-kàlà } \\ \text { c7-blind.man } & \mathrm{c} 7 \text {-ANA1 } & \mathrm{c} 7 & \text { receive } & \text { c6a-cassava.puff }\end{array}$ |  |  |  |  |  |
|  | mā-ā, kī g $\bar{\varepsilon}$ bá jí $g \bar{\varepsilon}$, c6a-ANA1 c7 P3 still eat NEG2 |  |  |  |  |  |
|  | $\begin{array}{llllllll}\text { n } \grave{y} & \mathrm{k} \overline{1} & \text { gè } & \text { jí } & \text { wá } & \text { mw- } \bar{\varepsilon}: & \mathrm{ki} & \text { fū: } \\ \text { like.that } & \mathrm{c7} & \text { P3 } & \text { eat } & \text { already } & \text { c18a-thing } & \text { c7 } & \text { satisfy }\end{array}$ |  |  |  |  |  |
|  |  |  |  |  |  |  |

'The blind man took the cassava puff and did not eat it as he had already eaten something and was satisfied.'

What-goes-around.5.1
(17.24) kí jó mày-kàlà mā-ā, k̄ $\mathrm{g} \bar{\varepsilon}: \quad$ à-kē, kī já c7 take c6a-cassava.puff c6a-ANA1 c7 put c18-bag c7 leave kī gēn-è, kī nā-à Ø-ŋjkè l $\bar{\varepsilon}$, wō gé c7 go-PROG c7 give-PROG c1-song COMP 2SG do.COND

| bvū-jōy $\bar{\varepsilon}$ | tū | w $\bar{\square}$ | gé | yē | y-̄̄ | lē, | w万̄ | gé |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| c14-good | then | 2SG | do | on | c9-2sG.poss | APPL | 2SC | do.COND |
| bvū-bēfè | tū | wō | gé | yē | y-ō | lē |  |  |
| c14-bad | then | 2SG | do | on | c9-2sG.poss | APP |  |  |

'He took that cassava puffs and put it in his bag and left and was going and singing his song, "You do good, you do for yourself; you do bad, you do for yourself."'

What-goes-around.5.2
 SET c7 go-PROG c7 reach c16-water c7 sit there $\operatorname{COMP}(\mathrm{K})$
fúf-è shēn, kī nù fó, kī nù fó rest-PROG $\quad \mathrm{c} 9$. liver $\quad \mathrm{c} 7 \quad \operatorname{COP}(\mathrm{~N})$ there $\quad \mathrm{c} 7 \quad \operatorname{COP}(\mathrm{~N})$ there 'As he was going and reached the water, he sat there to rest, and was there (for an extended period of time).'

What-goes-around.6.1


fwé $g \bar{\varepsilon}$ bé bহ̄: bā Ø-kw $\bar{s} s e ́ \quad w \bar{\varepsilon}-\bar{\varepsilon}$
front P3 ${ }^{\mathrm{P}}$ COP c2.child c 2 AM c1-woman c1-ANA1
'When it was time that school children come to eat something, the children who came first were the children of the woman.'

What-goes-around.7.1
(17.27)

| l $\bar{\varepsilon}$ | bó | dó | bó | tó, | b̄̄ | yén | w $\bar{\jmath}$ | gé | bvū-j̄̄ŋ $\bar{\varepsilon}$, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SET | 3PL | SIT | 3PL | come | 3PL | see | 2SG | do.COND | c14-good |


| tū | $w \bar{\jmath}$ | gé | yē | $y-\bar{\jmath}$ | lē, | w̄ | gé | bvū-bēfè, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| then | 2 SG | do | on | $\mathrm{c} 9-2$ SG.POSS | APPL | 2 SG | do.COND | c14-bad |

tū w̄̄ gé yē y-̄̄ lē, wú shì-ì fè-jō then 2SG do on c9-2SG.POSS APPL 3SG sit-PROG c16-water
'As they came, they saw You-do-good-then-you-do-for-yourself-you-do-bad-then-you-do-for-yourself, sitting at the water.'

What-goes-around.7.2
 3PL greet COMP c1-pa 2SG COP 2SG sit-PROG 2SG
fúf-è shéy, Ø-bā: wō gé bvū-jōy $\bar{\varepsilon}$, rest-PROG c9.liver c1-pa 2SG do.COND c14-good
tū w̄̄ gé yē y-̄̄ lē
then 2 SG do on c9-2SG.POSS APPL
'They greeted him "Pa, are you sitting and resting, Pa You-do-good-then-you-do-for-yourself?

What-goes-around.7.3
(17.29) kì-nfę̃: $k \bar{\varepsilon}-\bar{\varepsilon}$ b $\hat{\varepsilon}: \eta, \quad \bar{n}$-fūf-é wá sh $\bar{\eta}$,
c7-blindman c7-ANA1 agree 1SG-rest-PROG already c9.liver
b̄̄ㅁ: b-āŋ
c2.child c2-1SG.POSS
'The blindman agreed, "I am already resting, my children."
What-goes-around.7.4
(17.30) Ø-bă:, w̄̄ gé bvū-jōy $\bar{\varepsilon}$, tū w̄̄ gé yē y-̄̄
c1-pa 2SG do.COND c14-good then 2SG do on c9-2SG.POSS
lē, wō lé bé fy- $\bar{\varepsilon}$ : wó já bè yû:
APPL 2SG COP with c19-thing 2SG.HORT give 1PL on.it.QP
'"Pa You-do-good-then-you-do-for-yourself, do you have something to provide us with?",

What-goes-around.7.5
(17.31) Ø-bā $w \bar{\varepsilon}-\grave{\varepsilon} \quad l \bar{\varepsilon} \quad m \bar{\varepsilon} \quad$ lé bé mày-kàlä yānē
c1-pa c1-ANA1 COMP 1sG.PRO COP with c6a-cassava.puff here
à kī-kè: lē, mà ǹ-lēgé à Ø-kw $\bar{s}$ sé wū-mù lē in c18-bag APPL c6arel 1sG-beg in c1-woman c1-some APPL
'That pa [said], "I have some cassava puff here in [my] bag, which I begged from some woman."' What-goes-around.7.6
(17.32) bēy tỏ běy kó, béy jí,

2PL come.IMP 2pL catch 2PL.HORT eat
béy mú jò fó
2PL.HORT drink c9.water there
'"Come and take [the cassava puff], you should eat [it] and drink water."' What-goes-around.7.7
(17.33) bָ̄̄: bā-ā gè bé bō tó, wū ná bő
c2.child c2-ANA1 P3 ${ }^{\mathrm{P}}$ COP 3PL come 3SG give 3PL
mà̀-kàlà mā-ā mān-tt̄dé, wū ná wú-nē, c6a-cassava.puff c6a-ANA1 c6a-three 3sG give c1-PRox
wū ná wú-nē
3sG give c1-PRox
'Those children came and he gave them those three cassava puffs; he gave to each one.' (lit. he gave to this one and he gave to this one)

What-goes-around.7.8
(17.34) l̄ $\bar{\varepsilon}$ bহ̃: bā-ā jí, bó ja̋ bō kw $\overline{\text { ® }}$ d-è SET c2.child c2-ANA1 eat 3PL leave 3PL be.home-PROG
'After those children ate, they left and were returning home.'
What-goes-around.8.1

| bó | kwěغ̀ | bó | g | bó | f'́s ${ }^{\text {c }}$ | fē-bó-kfúy, | jù |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3PL | be.home | 3PL | go | 3 PL | arrive | c16-3PL-home | COP(N) |

bD̄: bā Ø-kw $\bar{s} e^{e ́} w \bar{\varepsilon}-\grave{\varepsilon} \quad w \bar{u}$ bé nā
c2.child c2AM c1-woman c1-ANA1 c1REL P1 give
kì-nfę̀: k $\bar{\varepsilon}-\bar{\varepsilon}$ mày-kàlà mā-ā
c7-blind.man c7-ANA1 c6a-cassava.puff c6a-ANA1
'They went and arrived at their home, being the children of that woman who gave that blindman those cassava puffs.

What-goes-around.8.2
(17.36) l̄̄ bó dó bó g $\bar{\varepsilon}$ : bう̄ lē:, b̄̄ gwē
SET 3PL SIT 3PL go 3PL enter 3PL fall
$l \bar{\varepsilon} \quad$ à-sh $\bar{\varepsilon} \eta, \quad l \bar{\varepsilon} \quad$ à-sh $\bar{\varepsilon} \eta$ yú-ú bó
COMP c18-liver COMP c18-liver kill-PROG 3PL
'As the children entered [the house], they felt that (their) stomachs were killing them.' (lit. they fell so that [their] liver was killing them)

What-goes-around.8.3
(17.37) Ø-bwē bó tó wù bí: bò lē
c1-mother 3PL.POSS come 3sG ask 3PL APPL
là: lé lá, bD్̃: b-ā!
COMP.Q COP Q c2.child c2-1SG.POSS
'Their mother came and asked them, "What is (the problem), my children?",'

What-goes-around.9.1
(17.38) b̄̄̃: bā-ā l̄,$\quad$ à-sh $\bar{\varepsilon} y$
children that COMP c18-liver
'The children [replied], "(Our) stomachs."'
What-goes-around.9.2
(17.39) Ø-bwē bó chínè bহ̄̀: bā-ā lé fó
c1-mother 3pL.poss leave c2.child c2-ANA1 APPL there

| wù | lég $\bar{\varepsilon}$ | wù | g $\bar{\varepsilon}:$, | wū | lá | Ø-bá | wù-b $\overline{0}$, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | run | 3SG | go | 3SG | go.goal | c1-pa | c1-3PL.POSS |


| $l \bar{\varepsilon}$ | b̄̄$:$ | bā-nē | bēd-é | bā | l $\bar{\varepsilon}$ | à-sh $\bar{\varepsilon} y$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| COMP | c2.child | c2-PROX | cry-PROG | c2 | COMP | c18-liver |

'Their mother left those children there and ran to their pa and [said] that these children are crying, they [are saying] "(Our) stomachs."'

What-goes-around.9.3
(17.40) l̄̄ $\quad$-chījì bó tó chègē, wú tó, COMP c1-father.HORT 3PL.POSS come quickly 3SG.HORT come wú yén fy- $\mathrm{\varepsilon}: ~ f i ̄ ~ l e ́ ~ l e ̄ ~$ 3SG.HORT see c19-thing c19.REL COP APPL
'[They said] that their father should come quickly and see what is happening.' What-goes-around.9.4
(17.41) wù tó wù yéy fy- $\bar{\varepsilon}$ : fî-yú nù 3SG come 3 SG see c19-thing c19-ANA2 $\operatorname{COP}(\mathrm{N})$
à jè yí-mì lē
in c9.road c9-some APPL
'He came and saw that thing was in a bad way.' (lit. in other or different path) What-goes-around.9.5
(17.42) ha̋y ha̋y, fī ghá wù, wù tú: bহ̄: INTERJ INTERJ c19 surpass $3 \mathrm{SG} \quad 3 \mathrm{SG}$ carry $\begin{gathered}\text { c2.child }\end{gathered}$
bā-ā wù gè̀: fદ̀ Ø-mù wù nchē lé c2-ANA1 3sG go at c1-person c1AM c10.medicine APPL
'"Hey, hey!'" It (their illness) was beyond his ability to give aid, and he took them to a doctor. '

What-goes-around.9.6
(17.43) l $\bar{\varepsilon} \quad$-mù-nché wé- $\varepsilon$ gę̃: wú jīn $\bar{\varepsilon}$, wù yén SET c1-person-medicine c1-ANA1 go 3sG watch 3 sG see
l̄̄ lé Ø-nlò wù b̄̄: bā-ā jí COMP COP c1-poison c1REL c2.child c2-ANA1 eat
'When the doctor looked, he saw that it was POISON that those children ate.'
(17.44) à Ø-nlò w $\bar{\varepsilon}-\bar{\varepsilon}$ nù wū gę̃: wá bহ̃. bā-ā in c1-poison that $\operatorname{COP}(\mathrm{N})$ c1 go already c2.child c2-ANA1 yē lē wèsè, wù bí: bহ̄̃: bā-ā lé là:, c9.body APPL much 3SG ask c2.child c2-ANA1 APPL Q.COMP
lé lả fī bē̃ bé jì
COP Q c19REL 2PL p1 eat
'Since the poison had already spread through their bodies too much, he asked those children, "What is it that you ate?",

What-goes-around.9.8

'Those children [said] that they had eaten SOME CASSAVA PUFF, WHICH A CERTAIN BLINDMAN HAD GIVEN THEM, that blindman who always says that you do good, then you do for yourself; you do bad, then you for yourself.

What-goes-around.9.9

| (17.46) | $\begin{aligned} & \text { Ø-bā } \\ & \text { c1-pa } \end{aligned}$ | $\begin{array}{ll} \bar{a} & w \bar{\varepsilon}-\dot{\varepsilon} \\ \mathrm{a} & \mathrm{c} 1-\mathrm{ANA} 1 \end{array}$ | $\begin{array}{ll} \text { bé } & \text { wù } \\ \text { P1 } & 3 \text { SG } \end{array}$ | dú <br> say | $1 \bar{\varepsilon}$ <br> COMP | wù 3sG | $\begin{aligned} & \text { bé } \\ & \text { P1 } \end{aligned}$ | $\begin{aligned} & \text { l'́g' } \dot{\varepsilon} \\ & \text { beg } \end{aligned}$ | $\begin{aligned} & \text { lò } \\ & \text { FOC } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | à in | Ø-kw $\bar{\varepsilon} s \varepsilon ́$ <br> c1-woman | wú-mù c1-certain | lē, <br> APPL | wú <br> c1REL | tó <br> HAB |  |  |  |
|  | wū <br> 3SG | kāy-è <br> fry-PROG | màn-kàlä <br> c6a-cassava |  |  |  |  |  |  |

'That Pa said that he begged from a certain woman who is always frying cassava puffs.'

What-goes-around.9.10

| (17.47) | l $\bar{\varepsilon}$ | fí | dó | fí | jùmè | nj̀:, | Ø-kw $\bar{\varepsilon} s e ́ ~$ | w $\bar{\varepsilon}-\grave{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | SET | c 19 | STIM | c 19 | $\operatorname{COP}(\mathrm{~N})$ | like.that | c1-woman | $\mathrm{c} 1-\mathrm{ANA} 1$ |

mbuũ̃: bé kwè, wù bēd-ë
burst with c9.death 3SG cry-PROG
'As it was so, that woman started crying and crying.
What-goes-around.9.11
(17.48) Ø-jwฐ్̨ bí: là: lé lá fì wò bēd-é là
c1-husband ask COMP.Q COP Q c19REL 2SG cry-PROG Q
'The husband asked, "Why are you crying?"' What-goes-around.9.12

| (17.49) | Ø-kw $\varepsilon$ sé <br> c1-woman | wé- $\varepsilon$ <br> c1-ANA1 | chfú <br> reply | $\mathrm{l} \bar{\varepsilon}$, COMP | bহ̄: <br> c2.child | $\begin{aligned} & \text { bā-nē } \\ & \text { c2-PRC } \end{aligned}$ | $\begin{array}{ll} \text { dú } \\ \text { ox } & \text { say } \end{array}$ | $1 \bar{\varepsilon}$, COMP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | bō lé | bō jí | màn- | kàlà | mà |  | kwēsé | wú-mù |
|  | 3PL COP | 3PL eat | c6a-c | ssava.puff | ff c6arel | c1- | woman | c1-some |
|  | chí tô | wú |  |  |  |  | bé | $\mathrm{g} \bar{\square}$ |
|  | P2 come | e c1rel | deceive | with | 1sG.PRO | SET | 1PL.HORT | search |
|  | jè | yì bē | yú-yé |  | kì-nfę̇: |  | kī-nē | kí |
|  | c9.path c9 | c9REL 1PL | kill-D | STR.COND | c7-blind | d.man | c7-Prox | c7rel |
|  | jèn-1̄ |  | l $\bar{\varepsilon} \mathrm{g}-\mathrm{c}$ |  | $w-\bar{\varepsilon}$ :, |  | yú |  |
|  | walk.around | d-PROG c7 | beg- | OG cl | 18a-thing | c7-PR | ox on.it |  |

'The woman answered that "These children are saying that they have eaten cassava puffs, which a certain woman came who deceived me that we should look for a way to kill this blindman who is going around begging things, [kill] this one with it."'

What-goes-around.9.13
 SET c1-woman c1-ANA1 say like.that 1sG.PRo then go $m \bar{\varepsilon} \quad \overline{\mathrm{n}}$-jò j̀chè yī bā yú-yí 1SG.PRO 1SG-take c9.medicine c9REL they kill-DIST.PROG
bī-kfūnè yú m̄̄ $\bar{\varepsilon}$-gè: à màn-kàlà mā-ā lé c8-rat on.it 1sG.PRO 1sG-put in c6a-cassava.puff c6a-ANA1 APPL
'As that woman said so, I went and brought medicine that kills rats and put [it] in that cassava puff.'

What-goes-around.9.14
(17.51) lé mó mà $m \bar{\varepsilon}$ bé ná kì-mfę̀: k $\bar{\varepsilon}-\bar{\varepsilon}$ lé, COP RES c6aREL 1sG.PRO P1 give c7-blind.man c7-ANA1 APPL
kí gā̃̃: kí nā bָ̄̄: bā-nē lé, bó jí, c7REL go c7 give c2.child c2-PROX APPL 3PL eat
fè à-shén k̄̄ á yù-ù bó
make c18-liver begin c18 kill-PROG 3pL
'That is the very cassava puff that I gave to the blind man, who went and gave [it] to these children for them to eat, that made (their) stomach to begin hurting them.'

'This story is teaching that, if you do good, then you do FOR YOURSELF; if you do bad, then you do FOR YOURSELF.

What-goes-around.10.2

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## Summary in English

Nchane is a Bantoid (Beboid) language with approximately 15,000 speakers located primarily in five villages in the Northwest Region of Cameroon. The language is vigorously used in Nchane homes and at community events, with a growing list of vernacular literary works available since the early 2010's. This book provides a description of Nchane grammar, beginning with the sound system and ending with information structure. The data corpus supporting this work includes a lexicon with about 1,600 entries, 23 texts of various genres, and some elicited material. Most of this data was collected while I lived in the Nchane village of Nfume from 2004 to 2015.

The sound system is composed of 18 consonants, seven vowels and seven tone melodies involving three level tones. The vowel inventory includes one fricative vowel, realized as a near high central vowel with accompanying friction, but often showing behavior consistent with a high back vowel, which is the best analysis for its underlying form.

There is an observable preference for monosyllabic roots, and syllable codas are limited almost entirely to the velar nasal $\mathbf{y}$. The process of syllable reduction has resulted in the allophonic variants $\mathbf{C V} \mathbf{y}$ and $\mathbf{C} \tilde{\mathbf{V}}$, as well as what could be described as half-long vowels. A few phonological processes are observed, including nasal place assimilation and high front vowel laxing in the environment of a following NC sequence.

The tone system is characterized by high, mid and low level tones, which combine into high-mid, high-low, mid-low and mid-high contour tones. Vowels serve as tone-bearing units, with tones serving to mark lexical items as well as some grammatical distinctions. Tone analysis is complicated by lowering-tonal effects associated with the nasal of nouns belonging to so-called nasal classes (eg, classes 1,

8 and 9). Tonological processes include downdrift, downstep, and a number of phraseboundary phenomena.

Nouns are grouped into 17 different noun classes, with noun class affixes the primary form of nominal morphology. Most noun classes are characterized by the noun having either zero marking or a prefix. Classes 9 and 10 are distinguished by low and high tone clitics respectively and class 3 is marked by a labial glide infix -w, which is an innovation of the Beboid and nearby Yemne-Kimbi languages. Derivational classes include two locative noun classes (classes 16 and 18), which correspond to the prepositions fì̀ 'at' and à 'in' respectively, with the core semantics of the prepositions usually evident in the locative nouns as well.

Noun phrases are head-initial, consisting of a head nominal followed by an optional modifier of some kind. Modifiers always agree with the head noun, expressed through an agreement prefix. The anaphoric demonstratives are of particular interest, with the anaphoric demonstrative 2 yú appearing with participants which are judged by the speaker as being associated with a usually negative quality, in addition to marking it as a major participant in the discourse. Very few Nchane adjectives have been discovered, with attributes more commonly expressed through verbs.

Nchane pronouns may be divided into two types: simple and compound. Compound pronouns have only been observed in Cameroonian languages and consist of two pronominal elements. The base form denotes plural reference in addition to either first or second person. The second element specifies the other member(s) of the reference. Generic reference is made through the impersonal pronoun bā, the antecedent of which is the noun bā-mì 'people'. Unlike nearby languages such as Noni (also Beboid), Nchane does not have a dummy subject. Constructions in which a dummy subject element appears in these other languages, are observed with a gap in the preverbal "subject" position in Nchane.

Verbs tend to be monosyllabic. Verb morphology is limited to the firstsingular subject agreement prefix and Progressive, Distributive and Causative suffixes. A high tone clitic is observed in a number of constructions, including Imperative and Hortative constructions. The normally high-toned Progressive suffix of verbs in constructions with the accompanying high tone clitic is realized with a low tone, indicating that the Progessive high tone is itself the same high tone clitic, which is usually restricted to a single iteration per sentence. Tense and aspectual distinctions are largely expressed through various preverbal particles. Nchane also has a number of post-verbal adverbs, some of which belong to the verb complex.

Nchane makes use of two copulas lé 'COP' and jù ' $\operatorname{COP}(\mathrm{N})$ ', with lé often expressing static states and jù expressing dynamic states. In addition to their function in copula clauses, lé functions as an auxiliary verb in future constructions and perfect constructions, while jù also functions as marker of counter-expectation focus. These
copulas appear in nonverbal predicate constructions, with a variety of elements serving as predicate, including nouns, numbers, adjectives and prepositional phrases.

Clauses consist of a verb (minimally) and usually one or more nominal constituents. The nonverbal clause constituent types include Subject and Object (both of which are formally unmarked), Applied Object, Comitative Oblique and Locative Oblique. While Nchane could be classified typologically as an SVO language, constituent governance is based upon semantic roles and information structure concerns more than upon grammatical roles. Agents are strongly associated with the preverbal position, as are sentence topics. Meanwhile, Patients almost always occur in the postverbal position, which is also the position most frequently associated with focus.

Applied Objects are marked by the Applicative postposition lē, in contrast to most analyses of applicatives in Bantu languages, which typically involve an applicative verbal suffix. The applicative analysis is supported by the occurrence of this postposition with semantic RECIPIENTS/ BENEFACTIVES, ADDRESSEES, and LOCATIVES, semantic roles commonly associated with applied objects in Bantu languages. Further support comes from some cases of the Applicative postposition effecting an apparent semantic alternation

Relative clauses are introduced by a relativizer that agrees with the head nominal. Relativized constituents leave a gap in the relative clause, except in the case of constituents introduced by prepositions, which makes use of resumptive pronouns. Relativizers are realized with a high tone when the relativized constituent is preverbal and a low or mid tone when the it is postverbal. The verbs of relative clauses are only slightly less finite than those of main clauses, with relative clauses requiring subject agreement in fewer tense environments than in main clauses.

Sentences involving more than one verb are common in Nchane. While some nearby languages display distinctive serial verb constructions, sentences with multiple clauses of equal status in Nchane are better described as clause chaining structures. Most support (cf. subordinate) clause types usually precede their focal clause counterparts. Furthermore, most are introduced by a particle or word of some sort, indicating the type of support clause. Complement clauses are introduced by one of three complementizers. The most common complementizer is $\mathbf{l} \bar{\varepsilon}$, which introduces complements of verbs of cognition and communication.

Polar questions are marked by a low tone enclitic and content questions utilize one of several question words, which correspond to the unknown constituent. Question words often occur in situ, appearing in the canonical position associated with the constituent to which the question word corresponds. However, the use of cleft constructions to mark the question word as focused is relatively common.

Negative constructions usually involve discontinuous negative marking， with the clause－final negative marker $\mathbf{g} \bar{\varepsilon}$ always present．Negated constituents are preceded by the same negative marker $\mathbf{g} \bar{\varepsilon}$ ，while negated clauses are marked either by the auxiliary bă＇still＇（in the case of past tense and nonprogressive verbs）or a clause－ initial á（in all other contexts）．

In canonical sentences，the preverbal position usually expresses sentence topics，while the postverbal position is associated with focus．When the topic is for some reason unclear，Nchane uses one of three strategies to indicate the topic：left dislocation，left detachment，or DP－internal word order change．Each of these strategies is usually accompanied by a higher tonal register realized on at least a portion of the topic－marked phrase．

Several strategies are utilized for the expression of various kinds of focus． Non－canonical word order is limited to focusing Agents only，with the Agent constituent occurring in the immediately－after－verb position．When an Object（usually a Patient）is also present，it is＂defocalized＂，occurring in the preverbal position．This kind of strategy normally expresses exhaustive or contrastive focus．

Cleft constructions may be used to focus any nominal constituent，usually identifying the denotation，for example in answering＂who＂or＂what＂questions．And the words／particles m̄ ，nù and l⿳亠㐅 expectation，and assertive focus respectively．

## Samenvatting in het Nederlands

Nchane is een Bantoid (Beboid) taal met ongeveer 15.000 sprekers die voornamelijk in vijf dorpen in de Noordwestelijke regio van Kameroen wordt gesproken. De taal wordt thuis gebruikt en bij evenementen in de gemeenschap, en het afgelopen decennium is er meer literatuur in het Nchane verschenen. Dit boek geeft een beschrijving van de Nchane grammatica, beginnend met het klanksysteem en eindigend met de informatiestructuur. Het datacorpus waarop het gebaseerd is bevat een lexicon met ongeveer 1.600 lemma's, 23 teksten van verschillende genres, en materiaal uit elicitatie. De meeste van deze gegevens zijn verzameld tussen 2004 en 2015, toen ik in het Nchane dorp Nfume woonde.

Het klanksysteem bestaat uit 18 medeklinkers, zeven klinkers en zeven toonmelodieën met drie niveaus. Nchane heeft één fricatieve klinker, gerealiseerd als een tweedegraads centrale klinker met bijbehorende frictie; omdat deze zich echter gedraagt als een hoge achterklinker, is dat de beste analyse is voor zijn onderliggende vorm.

Er is een duidelijke voorkeur voor eenlettergrepige stamwoorden, en voor open lettergrepen - coda's zijn bijna volledig beperkt tot de velaire nasaal y. Het proces van lettergreepreductie heeft gezorgd voor de allofone varianten $\mathbf{C V y}$ en $\mathbf{C V}$, evenals wat kan worden omschreven als halflange klinkers. Enkele fonologische processen zijn assimilatie van nasalen en het veranderen van de hoge voorklinker van gespannen naar ongespannen voor een NC-sequentie.

Het toonsysteem wordt gekenmerkt door hoge, middelhoge en lage tonen, die kunnen combineren tot de contourtonen hoog-mid, hoog-laag, mid-laag, en midhoog. Klinkers dienen als toondragende eenheden, en tonen markeren zowel lexicale als enkele grammaticale verschillen. De analyse van toon wordt gecompliceerd door het toonverlagende effect van nasalen aan het begin van woorden in de zogenaamde nasale naamwoordklassen (bijv. klasse 1, 8 en 9). Tonologische processen omvatten
downdrift, downstep, en een aantal fenomenen die de grenzen van fonologische groepen markeren.

De naamwoorden zijn verdeeld in 17 verschillende naamwoordklassen, waarbij de klassemarkeerders de belangrijkste nominale morfologie vormen. De meeste naamwoordenklassen hebben een nulmarkering of een voorvoegsel. De klassen 9 en 10 worden onderscheiden door respectievelijk lage en hoge tonen, en klasse 3 wordt gemarkeerd door een labiale glijklank -w- als infix, wat een innovatie is van de Beboid en de nabijgelegen Yemne-Kimbi-talen. Tot de afgeleide klassen behoren twee locatieve zelfstandige naamwoordenklassen (klasse 16 en 18), die overeenkomen met respectievelijk de voorzetsels $\mathbf{f} \mathbf{\varepsilon}$ ' op , bij' en à 'in', waarbij de kern van de betekenis van de voorzetsels meestal ook in de locatieve zelfstandige naamwoorden terug te vinden is.

Zelfstandige naamwoordgroepen zijn hoofdinitieel, bestaande uit een hoofd gevolgd door een optionele bepaling zoals een bijvoeglijk of bezittelijk voornaamwoord. De bepalingen komen altijd overeen met het hoofdnaamwoord in naamwoordklasse, gemarkeerd als prefix. Met name de anaforische demonstratieven zijn interessant: de anaforische demonstratief 2 yú geeft aan dat de spreker de referent associeert met een negatieve eigenschap, en dat de referent een 'major participant' in het verhaal/gesprek is. Er zijn zeer weinig bijvoeglijke naamwoorden van Nchane ontdekt - bijvoeglijke bepalingen worden over het algemeen uitgedrukt door werkwoorden.

De persoonlijke voornaamwoorden in het Nchane kunnen worden onderverdeeld in twee soorten: eenvoudige en samengestelde. Samengestelde persoonlijke voornaamwoorden zijn alleen in Kameroense talen waargenomen en bestaan uit twee voornaamwoordelijke elementen. De basisvorm geeft de eerste of tweede persoon aan alsook getal. Het tweede element geeft het (de) andere lid (leden) van de verwijzing aan. Een algemene verwijzing wordt gemaakt door middel van het onpersoonlijk voornaamwoord bā, waarvan het antecedent het zelfstandig naamwoord bā-mì 'mensen' is. In tegenstelling tot nabije talen zoals Noni (ook Beboid), heeft Nchane geen dummy onderwerp. Constructies waarin een dummy onderwerp in deze andere talen voorkomt, hebben in het Nchane simpelweg een lege onderwerpspositie.

Werkwoorden zijn over het algemeen monosyllabisch. De morfologie van de werkwoorden is beperkt tot het voorvoegsel van de eerste persoon enkelvoud van het onderwerp en de progressieve, distributieve en causatieve achtervoegsels. Een enclitische hoge toon komt voor in een aantal constructies, waaronder Imperatieve en Hortatieve constructies. Het Progressieve achtervoegsel, wat normaal een hoge toon heeft, wordt gerealiseerd met een lage toon in constructies met de enclitische hoge toon, wat aangeeft dat de Progressieve hoge toon en de enclitische toon één en dezelfde zijn, en dat deze hoge toon meestal beperkt is tot één per zin. Tijd en aspectueel onderscheid komt grotendeels tot uiting in verschillende preverbale
partikels. Nchane heeft ook een aantal post-verbale bijwoorden, waarvan sommige tot het werkwoordelijk complex behoren.

Nchane maakt gebruik van twee copula's lé $\operatorname{COP}$ en jù $\operatorname{COP}(\mathrm{N})$, waarbij lé vaak statische toestanden uitdrukt en jù dynamische toestanden. Naast hun functie in copulazinnen fungeert lé als hulpwerkwoord in toekomstige constructies en perfecte constructies, terwijl jù ook fungeert als markering van tegenverwachtingsfocus. Deze copula's komen voor in non-verbale predikaatconstructies, met een verscheidenheid aan elementen die als predikaat dienen, waaronder zelfstandige naamwoorden, getallen, bijvoeglijke naamwoorden en voorzetsels.

Zinnen bestaan uit (minimaal) een werkwoord en meestal één of meer naamwoorden. De niet-verbale constituenten van de zin zijn Onderwerp en Lijdend Voorwerp (die beide formeel ongemarkeerd zijn), Applicatief Voorwerp, Meewerkend Obliek en Locatief Obliek. Terwijl Nchane typologisch zou kunnen worden geclassificeerd als een SVO-taal, worden de constituenten meer bepaald door de semantische rollen en de informatiestructuur dan de grammaticale rollen. De Agens worden sterk geassocieerd met de pre-verbale positie, net als Topics. De Patiens komt bijna altijd in de post-verbale positie, wat ook de positie is die vaak geassocieerd wordt met Focus.

Applicatieve Voorwerpen worden gemarkeerd door de Applicatieve postpositie lē, in tegenstelling tot de meeste analyses van applicatieven in Bantoetalen, die typisch een applicatief verbaal achtervoegsel bevatten. De applicatieve analyse wordt ondersteund door het feit dat de postpositie ook gebruikt wordt met semantische RECIPIËNTEN/BENEFACTIEVEN, ADDRESSEES, en LOCATIEVEN, semantische rollen die gewoonlijk geassocieerd worden met applicatieven in Bantoetalen. Verdere argumenten komen van enkele gevallen waarin de Applicatieve postpositie een semantisch verschil teweegbrengen.

Relatiefzinnen worden geïntroduceerd door een relatiefmarkeerder die overeenkomt in de naamwoordklasse met het gerelativiseerde constituenten. Gerelativiseerde constituenten laten een gat achter in de relatieve bijzin, behalve in het geval van constituenten geïntroduceerd door voorzetsels, die gebruik maken van resumptive voornaamwoorden. Relatiefmarkeerders worden gerealiseerd met een hoge toon als het gerelativiseerde constituent preverbaal is en een lage of middentoon als het postverbaal is. Relatieve bijzinnen lijken iets minder finiet dan hoofdzinnen, aangezien werkwoorden in relatiefzinnen in minder werkwoordstijden vervoeging vereisen dan in hoofdzinnen.

Zinnen met meer dan één werkwoord komen vaak voor in het Nchane. Terwijl sommige naburige talen seriële werkwoordconstructies vertonen, worden zinnen met meerdere zinnen van gelijke status in Nchane beter beschreven als clause chaining structuren. De meeste typen bij zinnen gaan vooraf aan de hoofdzin. Bovendien worden de meeste zinnen geïntroduceerd door een partikel of een woord,
wat het type bijzin aangeeft. Complementszinnen worden ingeleid door een van drie voegwoorden. Het meest voorkomende voegwoord is $\mathbf{l} \bar{\varepsilon}$, dat complementen van werkwoorden van cognitie en communicatie introduceert.

Polaire vragen worden gemarkeerd met een lage toon, en inhoudelijke vragen maken gebruik van een van de vele vraagwoorden, die overeenkomen met de onbekende referent. Vraagwoorden komen vaak in situ voor, in de canonieke positie de bevraagde constituent. Het gebruik van gekloofde constructies om het vraagwoord als gefocust te markeren komt echter relatief vaak voor.

Negatie maakt meestal gebruik van tweeledige negatieve markering, waarbij de zinsfinale negatieve markering $\mathbf{g} \bar{\varepsilon}$ altijd aanwezig is. Negatieve constituenten worden voorafgegaan door dezelfde negatieve markering $\mathbf{g} \bar{\varepsilon}$, terwijl ontkennende zinnen worden gemarkeerd met de aanvullende á 'nog steeds' (in het geval van werkwoorden in de verleden tijd en niet-progressieve werkwoorden) of een zinsinitiële á (in alle andere contexten).

In canonieke zinnen wordt in de pre-verbale positie meestal het topic van de zin uitgedrukt, terwijl de postverbale positie wordt geassocieerd met focus. Wanneer het onderwerp om een of andere reden onduidelijk is, gebruikt Nchane een van drie strategieën om het onderwerp aan te duiden: dislocatie of detachement naar de linker periferie, of het wijzigen van de DP-interne woordvolgorde. Elk van deze strategieën gaat meestal gepaard met een hoger tonaal register dat wordt gerealiseerd op minstens een deel van de topic-markeringszin.

Verschillende strategieën worden gebruikt voor het uitdrukken van verschillende soorten van focus. De niet-canonieke woordvolgorde is beperkt tot het focussen van de Agens, waarbij de Agensconstituent zich aansluitend achter het werkwoord moet bevinden. Wanneer een Voorwerp (meestal een Patiëns) ook aanwezig is, wordt het "gedefocaliseerd" door de pre-verbale positie geplaatst te zijn. Dit soort strategie drukt normaalgesproken een exhaustieve of contrasterende focus uit.

Gekloofde constructies kunnen worden gebruikt om eender welke nominale constituent te focussen, waarbij meestal de referent wordt geïdentificeerd, bijvoorbeeld bij het beantwoorden van "wie" of "wat" vragen. En de partikels m̄̄, jù en l̀̀ worden gebruikt in uitdrukkingen van respectievelijk scalaire, tegenverwachting, en assertieve focus

## Curriculum Vitae

Richard Lee Boutwell was born in Oklahoma, USA on 4 September, 1965. After graduating from Cleveland Innovative High School in Oklahoma City in 1983, he attended the University of Central Oklahoma, earning a Bachelor of Science degree in Medical Technology in 1990. He worked as a medical technologist in Oklahoma City from 1990 until 1997, when he joined Wycliffe Bible Translators and began his training in language development. In 2000, Richard earned a Master of Arts in Linguistics from the University of Texas at Arlington. His Master's thesis is titled Functional universals of tense-aspect-modality morphology in SOV languages. From 2000 to 2002, he studied French in Neuchatel, Switzerland, followed by language development work in Cameroon with SIL International, where he served as a linguistics specialist for the Beboid (Misaje) language cluster project from 2003 to 2015. During this period, Richard also helped as a trainer and advisor for various linguistics courses for language development projects in the Northwest Region, as well as performing some limited teaching and administration activities at the Cameroonian Baptist Theological Seminary in Ndu, Cameroon. His Ph.D. studies formally commenced in 2016 at Leiden University in the Netherlands. This dissertation is the culmination of his doctoral research.


[^0]:    ${ }^{1}$ The Expanded Graded Intergenerational Disruption Scale (EGIDS) (Lewis \& Simons 2016) is an expansion of the GIDS developed by Fishman in 1991. A language designated as Level 5 is described as qualifying for level 6 a , with vigorous oral use, in addition to also having standardized literature available and in use at least by a small segment of the population. One could argue that Nchane is better designated as level 6 a "vigorous", although standardized literature is available. The near future will determine if the current language development activities are sufficient for solidifying the level 5 designation.

[^1]:    ${ }^{2}$ Over the course of several weeks of visits to Mungong for data collection, I identified at least six languages other than Mungong being spoken in and around the Mungong palace, many of which were heard several times during that period.

[^2]:    ${ }^{3}$ Since the start of language development among the Beboid languages, Mungong and Nchane have both moved ahead separately, using their own orthographies and producing several pieces of literature each. Modest support of language development activities is present in both language communities and locally elected language committees are involved.

[^3]:    ${ }^{4}$ The wordlist used for this collection consisted of 1,500 words organized around domains appropriate for the African context. Of the 1,500 words attempted during elicitation, approximately 1,200 words were obtained.

[^4]:    ${ }^{5}$ Determining the number of consonants for these neighboring languages is not completely straightforward, as the analyses offered sometimes include questionable phonemes such as $/ \mathbf{p} /$ and $/ \mathbf{h} /$, both of which are rare in the data and are often limited to borrowed words or exclamations and ideophones.

[^5]:    ${ }^{6}$ Additional evidence countering an analysis of the alveopalatal affricates representing palatalized versions of the alveolar plosives is observed with the spirantization of the number 'three' when prefixed with class 10 agreement presented in $\S 3.6$. When followed by a palatal
    
    ${ }^{7}$ It is possible that Richards was moved in this direction because he observed that Noni had a minor phoneme [h], which he treated as a velar fricative; thus, that slot was filled and could not also take [y]. The treatment for Noni was then presumably extended to the Nchane case.

[^6]:    ${ }^{8}$ Without more data it is difficult to draw well supported conclusions．However，as mentioned earlier，it is possible that the gh in the word for＇wrist＇is a phonological artifact resulting from a velar plosive in a［ $\mathbf{0 C o}$ ］sequence．Careful speech results in［fïnk ${ }^{\mathbf{h}} \mathbf{y} \mathbf{g} \mathbf{y}$ ］，which corresponds more closely with the Noni cognate fīkōkó．The word for＇blink＇is unusual as it surfaces with the phone［æ］for which a clear analysis is lacking．Careful speech also results in［g］rather than ［ y ］．Therefore，neither of these two words provide unquestionable evidence for stem－internal gh，but rather supports an analysis of phonological variation of／g／．
    ${ }^{9}$ Likely，more specifically the knobby bone of the wrist and ankle（pisiform）．

[^7]:    ${ }^{10}$ Assigning [ $\mathbf{m}$ ] as an allophone of $/ \mathbf{m} /$ is somewhat arbitrary, since it is a product of place assimilation and its underlying form is not clearly identifiable from its source.

[^8]:    ${ }^{11}$ It is possible that $\mathbf{I}$ has $\mathbf{r}$ as an allophone, occurring with words that have an $\mathbf{I}$ preceding the Progressive suffix -I, the li sequence sometimes surfacing as $\mathbf{f I}$ and also sometimes with apparent vowel harmony within the word. Speakers sometimes are not certain themselves if these words should be pronounced with an $\mathbf{l}$ or a $\mathbf{r}$, with limited free variation observed.
    ${ }^{12}$ The vowel [ $\mathbf{w}$ ] only precedes [i] when $\mathbf{w}$ is part of a CG sequence. See $\S 2.3 .2$ for an account of distribution restrictions.

[^9]:    ${ }^{13}$ All tokens of $\mathbf{y w}$ in the data have the sequence preceding the vowel $\mathbf{a}$, but I suspect that this apparent restriction is an artifact of the limited database. This suspicion is supported by the greater variety of vowels observed following the sequence in Noni words, although there is a clear preference for $\mathbf{a}$ in this environment. Also note that the Cw sequence in the word $[\bar{\eta} \mathbf{w} \mathbf{a}]$ 'granary' (c5) is one in which the two consonants belong to different syllables.

[^10]:    ${ }^{14}$ The vowel /i/ of agreement prefixes for the anaphoric 1 demonstrative is always realized as a palatal glide for classes 8 and 19 (i.e., [ $\mathbf{b j} \bar{\varepsilon}-\grave{\varepsilon}]$ and $[\mathbf{f j} \bar{\varepsilon}-\bar{\varepsilon}]$ respectively). Meanwhile, a palatal glide is sometimes also observed in the agreement prefixes for classes $4,5,10$ and 13 (i.e., [ $\mathbf{t} \mathbf{j} \mathbf{j} \bar{\varepsilon}$ $\grave{\varepsilon}]$ ) and class 7 (i.e., [kje $\bar{\varepsilon}-\grave{\varepsilon}]$ ), particularly in careful speech.

[^11]:    ${ }^{15}$ Note for example the form Cane as one of the observed varieties of the language name.

[^12]:    ${ }^{16}$ The inclusion of $\mathbf{n y}$ as a NC sequence type is supported by the presence of a hiatus occurring between the nasal and the consonant. Furthermore, the palatal consonant in both of these words is sometimes realized as the allophone [j].
    ${ }^{17}$ This is obviously a compound word of some sort. However, the NCw sequence is our focus here, and there is no reason to doubt it as a valid example of this sequence.
    ${ }^{18}$ This word refers to any instrument used to beat a person, e.g., a cane, stick or strap.
    ${ }^{19}$ The $\mathbf{w}$ in this word comes from c3 affixation. The word is likely the source from which the word 'broom' is derived, which is fashioned by tying palm needles together. The class 3 affix is apparently maintained in the stem of the new class 9 word.

[^13]:    ${ }^{20}$ To agitate a liquid with a paddle or stick, resulting in the formation of foam. This is an action used in the production of palm oil to separate the oil from the water.

[^14]:    ${ }^{21}$ The CFu sequence is actually not attested by Richards for Nchane, even though at least one instance occurs in his data. However, in the same work, he treats CFu as an allophone of Cwu for Noni. The fact that CFu is not observed by Richards for Nchane may indicate that it is a relatively new development. The current Noni orthography observes 12 consonants in the initial position of CFu sequences (Andrus \& Lux 2009: 8), whereas Hyman observed only seven (Hyman 1981: 1). While this might be a result of a relatively small sample size in the case of Hyman's study, it might also support the notion that this phenomenon is relatively novel in the area. Meanwhile, Mungong is the only other Beboid language reported as having this phenomenon of frication associated with the high back vowel, with preliminary work revealing only three consonants ( $\mathbf{b}, \mathbf{k}$ and $\mathbf{g}$ ) allowed to precede the vowel in question (Boutwell 2011: 10).
    ${ }^{22}$ These zones reflect the F1 and F2 measurements of the various vowels plotted on a chart, with F1 serving as the horizontal axis and F2 as the vertical axis. The actual number of vowels measured are as follows: $\mathrm{i}=38, \mathrm{e}=53, \varepsilon=52, \mathrm{a}=19, \mathrm{o}=21, \mathrm{o}=12$, $\mathrm{u}=8$.

[^15]:    ${ }^{23}$ The vowel [æ] was not observed as a vowel for Nchane by Richards (1991). However, he did note the long version [æ:], but as the phonetic realization of /a:/ (Richards 1991: 355-6). This analysis is not supported by the data corpus associated with this current work, in which /a:/ is realized as [a:], as described in §2.2.5.

[^16]:    ${ }^{24}$ Occurrences of $\underset{\sim}{\mathbf{V}}$ in the data are usually represented as $\mathbf{V} \boldsymbol{\eta}$ in this work. Although, since free variation between $\underset{\sim}{\mathbf{V}}$ and $\mathbf{V} \boldsymbol{\jmath}$ is observed, both representations are used and are considered as accurate.

[^17]:    ${ }^{25}$ Note that Richards (1991) postulates that [æ] is the surface realization of the long low vowel /aa/. However, there is no evidence in the current data to support this analysis.

[^18]:    ${ }^{26}$ The underlying forms of the numbers are based on the surface realizations of the numbers in citation form with no nominal head.
    ${ }^{27}$ As with the numbers 'two' through 'four' in the previous case, the underlying form of the number 'one' is based on its surface realization in citation form and with no nominal head.

[^19]:    ${ }^{28}$ While these nouns have no segmental prefix, a floating $L$ is hypothesized as associated with the class 1 prefix position. However, any possible effect of this floating $L$ is imperceptible in isolation utterances.

[^20]:    ${ }^{29}$ This inventory excludes nouns of gender $9 / 10$, since these nouns have underlying tone that is often difficult to discern because of the assumed interaction between the hypothesized floating tone prefixes and noun root tone, in addition to probable nasal depression.

[^21]:    ${ }^{30}$ Lowering in the H forms might actually occur, but be imperceptible due to the relatively small difference between a standard $M$ and a lowered $M$ relative to the $H$.

[^22]:    ${ }^{31}$ The agreement forms appearing in this table represent the primary agreement realizations. See Table 6.1 for a more complete inventory of agreement forms.

[^23]:    ${ }^{32}$ I make no distinction between the terms "agreement" and "concord", although one could certainly be made. See Corbett (2006: 5-7) for a discussion regarding the benefits of making such a distinction. For our purposes here, "agreement" is used to express the important generalization that noun classes exhibit control over various word classes, both inside and outside the noun phrase.

[^24]:    ${ }^{33}$ Most of the Beboid and Yemne-Kimbi languages have a labial glide infix as the class 3 marker. Those that do not, utilize u- or $\boldsymbol{\emptyset}$ - marking instead. The only other languages in the area observed to have the labial glide infix for class 3 nouns are the Central Ring languages Kom and Men, both of which also have a vowel prefix element (i.e., the class marking has the shape of V-Cw ) (see Kießling 2010).

[^25]:    ${ }^{34}$ Note that the Mungong class 3 labial glide infix is realized as a labiovelar kp or $\mathbf{g b}$ when the stem-initial consonant is a velar. Also note that the $3 / 4$ a group shows a strong preference for stem-initial velar consonants, encouraging comparisons with regularization tendencies of Nchane gender 3/4 and of Mundabli, which were noted earlier.

[^26]:    ${ }^{35}$ This word has also been observed as a $5 / 13$ noun.

[^27]:    ${ }^{36}$ This is a payment for some indescretion, such as adultery.

[^28]:    ${ }^{37}$ Hombert (1980: 92) follows the convention of distinguishing noun classes based on differing nominal prefixes. Therefore, because the plural counterpart to class 14 has a different prefix shape (maN-) from the mass noun class 6a ( $\mathbf{N}-$ ), the class 25 designation was used. However, additional support for designating the plural counterpart as $6 a$ is the fact that many Bantu languages are observed as having a 14/6 gender (Maho 1999: 190).

[^29]:    ${ }^{38}$ This class and its mu- prefix is observed as an areal feature of the northwestern Bantu A60 group of languages. Maho (1999: 199) offers several different possible sources for this form, but a direct correlation to Proto-Bantu class 18 remains unclear.

[^30]:    ${ }^{39}$ The number of tokens excludes nouns for which class assignment has not been established due to variable agreement patterning or lack of data

[^31]:    ${ }^{40}$ This noun is derived from the verb $\mathbf{t} \overline{\mathrm{c}} \mathrm{n} \bar{\varepsilon}$＇argue＇．

[^32]:    ${ }^{41}$ The Mungong cognate is also noncountable.

[^33]:    ${ }^{42}$ Pejorative expression associated with derived diminutive nouns is also reported for Mundabli (Voll 2017: 101) and Mungbam (Lovegren 2013: 124-5).

[^34]:    ${ }^{43}$ This term refers to the woman who is recognized as the head woman of a home. She is responsible for hosting visitors, preparing meals, etc.

[^35]:    ${ }^{72}$ The Nchane copula lé is cognate with the Chungmboko copula lo, which is relatively distant from Nchane geographically. Meanwhile, the n-copula is cognate with the Noni copula nú, the only copula observed in that language (Hyman 1981: 88). No other Beboid language has been reported as having two copulas, as far as I am aware, although most of these languages are in the early stages of linguistic research and such a discovery might simply not yet have been published.

[^36]:    ${ }^{73}$ The H of the number 'two' in this example clearly appears to be downstepped, even though the context does not appear to fit that which is associated with downdrift or downstep. The pitch is considerably lower than that of the preceding noun 'day' and the same as the conjunction that follows. There is a pause after 'two', so the apparent downstep could represent a phrase-final lowering. Another possible explanation is that this time adverbial is conventionalized and doesn't present the expected surface forms. Regarding the semantics of the phrase jú bīkā bïfé: the word for leg is assumed to be a metaphor for the big hand of a clock, both of which have a long, thin and straight shape.

[^37]:    ${ }^{74}$ The word bé actually functions as a conjunction as well as a preposition. See $\S 8.2$ for a fuller description.
    ${ }^{75}$ In addition to simply 'walking', the verb jēn'́ expresses the notion of 'strolling' or 'walking around', without a particular destination in mind. It can also mean 'visit' and 'travel'. Context is necessary to determine which shade of meaning is intended.

[^38]:    ${ }^{76}$ There is no reason to think that a locative noun could not also serve as a Subject, although the locational semantics severely limit the possible contexts in which it could be Subject. The most likely candidates for a locative noun Subject are those which are lexicalized, such as certain body parts.
    ${ }^{77}$ The fact that the LOCATION-Object follows the THEME-Comitative Object supports the analysis that clause syntax is organized by semantic roles rather than grammatical roles, at least to a degree. This asymmetry between semantic and grammatical roles is discussed in detail in §11.4.

[^39]:    ${ }^{78}$ Sha is a regional term used for locally produced corn beer.

[^40]:    ${ }^{79}$ The verb in this example is semantically complex and poorly understood. In constructions which have no post-verbal complement, it can mean "become spoiled" and the pre-verbal complement appears to be a PATIENT. Post-verbal complements are always introduced by the comitative preposition and the meaning is "destroy" or "cause to be spoiled". The Comitative Oblique in such constructions appears to be affected by the action and therefore might be construed as a PATIENT rather than ACCOMPANIMENT. However, this would be the only known case of a Comitative Oblique encoding a semantic role other than ACCOMPANIMENT or INSTRUMENT.

[^41]:    ${ }^{80}$ The analysis of this apparently conventionalized phrase is not certain.

[^42]:    ${ }^{81}$ The word ché 'stay' expresses the idea of staying overnight at a location. It often may be interpreted as sleeping. In its extended meaning, it means to live somewhere.

[^43]:    ${ }^{82}$ This word translated as "food mat" is usually a flat, circular mat made of woven strips of dried palm frond shavings. The food mat is used in food processing, such as separating beans from chaff.

[^44]:    ${ }^{83}$ It might be more precise to say that the only obligatory constituent is the Agent rather than the Subject. See $\S 11.4$ and $\S 16.3 .1$ for details regarding this point.

[^45]:    ${ }^{84}$ The term "relativizer" is utilized here rather than "relative pronoun", in spite of the fact that the Nchane relativizer is represented by different forms depending on the grammatical role (or clausal position) of the relativized constituent. This fact hints at an extraction strategy, which would be supportive of a relative pronoun analysis. Future research may in fact reveal that these relative linkers are best described as such. But for now, the more broadly defined term is chosen in order to align with the current trend in typological studies of relative clauses (e.g., Atindogbé \& Grollemund 2017).

[^46]:    ${ }^{85}$ The class 6 a pronouns are pronounced by some speakers as $\mathbf{m s}$ or mэy.

[^47]:    ${ }^{86}$ The class 19 relativizer $\mathbf{f i}$ is the likeliest candidate for a headless relative clause, if they are possible, since this is the relativizer observed in relative clauses involving the question word lá as an apparent relativized constituent.

[^48]:    ${ }^{87}$ The separation of the relative clause from the head nominal as in these examples might be limited to constructions involving nonrestrictive relative clauses. Thus, perhaps the separation reflects a type of afterthought, where additional information is added at the end. More research would be needed to confirm this proposition.

[^49]:    ${ }^{88}$ It is perhaps technically more correct to say that prepositional phrases (i.e., Comitative Obliques and Locative Obliques) themselves are not the target of relativization, but rather the nominals appearing in the prepositional phrases. See the discussion regarding this distinction, appearing with the relevant examples in this section.
    ${ }^{89}$ In its nominal form, kwè 'death' is often used, as it is here, in reference to the celebration of a death, also referred to as a "cry-die" in Cameroon Pidgin English.

[^50]:    ${ }^{90}$ These SVC-like constructions are likely involved in the grammaticalization of "minor" coverbs into grammatical markers of TAM categories. For example, the verb tú 'return' often expresses Sequentiality or Durative aspect when followed by a second verb, and where the core semantic expression is encoded by the second verb. See $\S 9.3 .4$ for more examples.

[^51]:    ${ }^{91}$ The clause bý bínè bïne̋ illustrates the occurrence of a cognate noun object, which has been argued as evidence in other languages that there are no true intransitive verbs. However, there are plenty of Nchane verbs which present as intransitive (e.g., 'cry', 'sleep' 'die' and 'breathe'). Meanwhile, some Nchane verbs which are often intransitive in English, like 'dance' and 'sing', are usually or even strictly transitive.

[^52]:    ${ }^{92}$ The Conditional construction is very similar to that reported for Noni, where the protasis is introduced by $\overline{\boldsymbol{\varepsilon}}$ (cf. n'́) and the apodosis is introduced by either $\boldsymbol{\varepsilon}$ or tō (cf. ń and tú respectively) (Hyman 1981: 102).

[^53]:    ${ }^{93}$ This verb can also mean "minimize" or "make small".

[^54]:    ${ }^{94}$ In very rare cases, this word shows class 1 agreement, suggesting that it is a noun. However, it commonly appears phonologically bound with nominal modifiers such as chī 'all', and without any agreement. Thus, it is believed to have grammaticalized into an adverb.

[^55]:    ${ }^{95}$ The use of the c7 associative marker with a c8 noun reflects the singular nature of 'pictures' as used here, where it refers to a single 'film'.

[^56]:    ${ }^{96}$ There are counter examples, where a question quote is introduced by the standard $\mathbf{l} \overline{\boldsymbol{\varepsilon}}$. The motivation for this variation, as well as the difference in meaning or function between the variants, is unknown at this time.

[^57]:    ${ }^{97}$ The high tone on the first two words of this sentence is the result of intonation associated with exasperation or some other strong emotion.

[^58]:    ${ }^{98}$ The use of the c 7 associative marker with a c8 noun reflects the singular nature of 'pictures' as used here, where it refers to a single 'film'.

[^59]:    ${ }^{99}$ The analysis of the prepositional phrase translated as 'so' presents some difficulties. The tone on nj 'like.that' appears with a SH tone. Furthermore, the tone on the entire prepositional phrase is higher than on a neutral prepositional phrase, with the high tone continuing onto the subject and auxiliary $\mathbf{m} \overline{\mathbf{y}}$ of the focal clause. A possible explanation is that this high tone represents Hortative mood, which is realized on, not only the subject, but also on the preceding prepositional phrase functioning as an adverbial. As for the prepositional phrase itself, it appears to have a conventional usage here and, therefore, lexicalized. Thus, the lexicalized form might present a different tonal pattern than expected for the ungrammaticalized form. Further research would be needed to substantiate these hypotheses.

[^60]:    100 The neighboring Beboid language Noni makes the same distinction, with +PAST, -PROG clauses utilizing the negative marker bá ~bá: in the preverbal position, and +PROG clauses utilizing the negative marker k'́ in clause initial position (Hyman 1981: 57, 60). The nearby Yemne-Kimbi language Mungbam also makes a distinction between two categories of clauses in negative clause formation. However, in this language, the distinction is Realis vs. Irrealis, and differentiates the two by utilizing different negative markers for each distinct type, with comparable syntax in each (Lovegren 2013: 417).

[^61]:    101 Nchane uses the same term "still" for both, "not yet" and "no longer" expressions, a phenomenon observed by Kramer (2017: 6) for some languages.
    102 It appears that future tense marking in the future example in Table 15.2 is neutralized. Regardless, this clause may not be confused with an immediate past reading, since the corresponding P0 clause utilizes the negative marking associated with the bắ-strategy.

[^62]:    ${ }^{103}$ The term "vetitive" is derived from the word "veto", and follows its use in the nearby language Mungbam (Lovegren 2013).
    ${ }^{104}$ This verb can also mean "minimize" or "make small".

[^63]:    ${ }^{105}$ Left dislocations of simple noun phrases are presumed to be allowed, but no instances are observed in the text data, nor have they been tested for acceptability through elicitation studies. However, example (16.10) hints at its possibility, along with the possibility of left-dislocated agents.
    ${ }^{106}$ This is a compound word consisting of chī (c1) + lá (c5) 'father + compound' and is used as a title of respect for the leader of a family living in a compound.

[^64]:    ${ }^{107}$ Left edge vocatives are also observed in the data. As vocatives have not yet been formally investigated, I have no hypothesis at this time regarding the function or pragmatics of leftward versus rightward varieties.

[^65]:    'You who are the man, if you did wrong, ask that your wife forgive you.'

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[^66]:    ${ }^{108}$ According to the definitions given in $\S 11.1$, the noun phrase following the copula has the grammatical form of an Object, even though this Object may express any of the various semantic roles, such as AGENT or RECIPIENT.

[^67]:    ${ }^{109}$ This example shows a third-person-singular pronoun between the AGENT and the verb in the relative clause. Unfortunately, it is unknown if this pronoun is coreferential with the AGENT or with the focused RECIPIENT. If coreferential with the AGENT, then the full noun AGENT would appear to be left-detached; if coreferential with the RECIPIENT, then the pronoun is resumptive, which has only been observed in coreference with prepositional phrases.

[^68]:    110 There are no examples in the text data of word order focus in question constructions. However, this strategy is observed in examples from the Nchane New Testament. For example, Nya yęy bvuŋga bvuyu wo le? [give who c14.power c14.this 2SG APPL] 'Who gave this power to you?' (Matthew 21:23).

[^69]:    ${ }^{111}$ This word is the generic word for 'food', but more specifically denotes 'fufu', made from boiled corn flour and formed into a ball. The way it is used here suggests that it can also refer to the flour before it is cooked.

[^70]:    112 The word kīmbè 'side' here is expressing a general location that could be translated as "village quarter" or "area".

[^71]:    ${ }^{113}$ A similar case is presented for the West Ring－Grassfields language Aghem，where nò＇FOC＇ （cf．l⿳亠丷厂）is observed as obligatory in sentences with no verbal complement and non－focus verb marking（Watters 1979：166）．

[^72]:    ${ }^{114}$ The tone on the anaphoric demonstrative in the first clause of this sentence is expected to be mid-low rather than high-mid. Furthermore, the tone on the progressive suffix is expected to be high rather than low. Low tone on the progressive suffix is only expected when there is a grammatical high tone clitic preceding it. The translation provided indicates that this clause is interpreted as having Durative aspect. Therefore, I assume that the high tone on the anaphoric demonstrative is the realization of the high tone associated with the Durative marker tú.

