# A grammar and lexicon of Kam (àyẁ m), a Niger-Congo language of central eastern Nigeria 

Jakob Lesage

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## A grammar and lexicon of Kam (ànwว̀m), a Niger-Congo language of central eastern Nigeria

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Nyò nyíng wòm yō, là kúmé â à nyò à, rì ná nyó yō ā túb pêh rì nyò à, rì cì nyó yō ā rì dúg nyó rì à, rì yì nyó ${ }^{\downarrow}$ ámō.

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## Abbreviations and symbols

| - | Morpheme boundary |
| :---: | :---: |
| *** | Censored (in case of sensitive information in examples) |
| . | Gloss boundary (but not morpheme boundary) |
| : | Gloss boundary (morphemes are not segmented) |
| 1 | Tonal morphology |
| $\sim$ | Partial reduplication |
| $\bigcirc$ | Pause |
| 1 | First person |
| 2 | Second person |
| 3 | Third person |
| ADJ | Adjectivizer |
| ADVZ | Adverbializer |
| APPL | Applicative |
| C | Consonant |
| CAUS | Causative |
| COM | Comitative |
| COND | Conditional |
| DIST | Distal |
| EMPH | Emphasis |
| EXP | Experiencer |
| EXPA | Experiential |
| FOC | Focus |
| FUT | Future |


| FV | Final Vowel |
| :---: | :---: |
| H | High tone |
| ID | Independent |
| INSTR | Instrumental |
| INT | Intensive/Intensity |
| IPFV | Imperfective |
| IT | Iterative |
| L | Low tone |
| LOC | Locative |
| LOG | Logophoric |
| M | Mid tone |
| N | Noun |
| NEG | Negator |
| NFUT | Non-future |
| NMLZ | Nominalizer |
| O | Object |
| PFV | Perfective |
| PL | Plural |
| POSS | Possessive |
| PRED | Predicative Adjective |
| PROX | Proximal |
| PRSTT | Presentative |
| PURP | Purposive |
| Q | Question marker |
| QUOT | Quotative |
| REL | Relativizer |

Subject
SEQ Sequential marker
SG
Singular
SIM Similative

STAT
TEMP Temporal
UNM Unmotivated
V
$\mathrm{V}^{\mathrm{HIGH}}$
$\sigma$

Vowel/Verb
High Vowel
Syllable

## I Part one: Introduction

## 1 Introduction

### 1.1 The language, its relatives and its neighbors

Before this project started, Kam [ISO 639-3: kdx; Glottocode: kamm1249] had been provisionally classified as an Adamawa language, Adamawa languages being a subgroup of Niger-Congo (Greenberg 1963; Boyd 1989; Güldemann 2018b). This classification was based on about 100 words collected by Charles Meek (1931c) in the early twentieth century. Over the past years, the unity of Adamawa as a language family has been seriously questioned. Some authors argue that the sub-groups previously subsumed under Adamawa - including Kam, which forms a sub-group on its own - may well be high-level isolated language groups within Niger-Congo (Güldemann 2018b). Others argue that some of such languages may in fact be part of the large Benue-Congo family within Niger-Congo (Idiatov \& Van de Velde 2019). How Kam fits in these possible alternative pictures is a question for further inquiry. ${ }^{2}$

What is clear from the current picture we have of Kam is that its Niger-Congo membership is uncontroversial, insofar Niger-Congo is an established language family (cf. Güldemann 2018b). The main indications for this come from first person and second person subject pronominals, lower numerals and some wide-spread Niger-Congo reflexes that reappear in Kam (cf. Lesage 2019, under review). What is also clear is that Kam belongs to the linguistic macro-area called the Macro-Sudan belt (cf. Güldemann 2008, 2010, 2018a: 479-488, 494-507), showing typological characteristics such as labial-velar consonants, logophoric pronominals, multi-verb constructions, clause-final negation, STAMP-morphs, a plural word, three tone levels and nasal vowels. ${ }^{3}$ Notable features of Macro-Sudan belt languages or sub-areas thereof

[^1]that are absent in Kam include implosive consonants (Maddieson 2013c) and labial flaps (Olson \& Hajek 2004)

While the precise genealogical links between Kam and other languages are uncertain, it is clear that there is and has been contact between Kam and languages spoken around it.

In the past, these languages included Central Jukunoid varieties [Glottocode: cent2241]. The Kam claim to descend from the Jukun ethnic group, and to be affiliated with the (possibly legendary) Jukun kingdom often referred to as Kororofa. Various sources include the Kam speaking area in the extent of this historical Jukun kingdom (e.g. Meek 1931a; Shimizu 1980: 8), and the political centre of the kingdom (and the homeland of the Jukunoid languages) may have been located to the south of the Kam speaking area (Shimizu 1980: 8; Dinslage \& Leger 1996), possibly close to Wukari. A quarrel with a Jukun sub-group would have sent the Kam off to the Kamajim mountain. There, they allegedly encountered an unidentified ethnic group which they supplanted. Since then, they have continued to practice a traditional religion related to that of the Jukun, which is apparent from some religious terminology (cf. Meek 1931a, c). The Kam use the name ni kwân 'kwàn people' to refer to the Jukun ethnic group and to speakers of Central Jukunoid varieties.

Languages currently spoken around Kam include Hausa [ISO 639-3: hau; Glottocode: haus1257], a variety of Eastern Fula/Fulfulde [Glottocode: fula1265], one or more varieties of Mumuye [Glottocode: mumu1250], Jirim [ISO 639-3: dir; Glottocode: diri1253], and more recently Glavda [ISO 639-3: glw; Glottocode: glav1244]. (Nigerian) English and Nigerian Pidgin [ISO 639-3: pcm; Glottocode: nige1257] are fairly recently introduced contact languages in the area.

Hausa is a Chadic (Afro-Asiatic) language. The Hausa form the largest ethnic group of the northern half of Nigeria, and Hausa is one of the most widely spoken languages in the country and West-Africa in general. It is spoken as a lingua franca in central-eastern Nigeria. Islam is the majority religion among Hausa speakers in Nigeria, and the Kam use one name, màkpà, for both 'Muslim' and 'Hausa'. The etymology of this name is uncertain.

Fulfulde is a North Atlantic (Niger-Congo) language that is spread across the length of western and central Africa as a dialect continuum. It is spoken by the Fulani, who call themselves Fulbe and their language Fulfulde. The Fulani and their language are also known as Fula, but Fulani, which is a Hausa name, is the name that is most often used in Nigeria. The majority of the Fulani people are cattle rearers, and the name by which they are called in Kam is ánīmsī, which is an attributive adjectival form of the verb nìmsí 'feed', or a variant adjectivization with nìmsí such as nīmsī nág ('ADJ:feed cow’), ní nág nīmsī ('person cow ADJ:feed'). The language does not have a specific name in Kam. The specific variety of

Fulfulde that is spoken may be either Hausa States Fulfulde [ISO 639-3: fuv; Glottocode: nige1253] or Adamawa Fulfulde [ISO 639-3: fub; Glottocode: adam1253].

Mumuye is a Central Adamawa language group spoken by the Mumuye people, who are spread across Taraba State as one of the largest ethnic groups of the state. They have two names in Kam, Kwàntóy and àkómlâ. In kwàntóy the Kam noun for 'mountain', ǹtóy, can be recognized, but its exact etymology is unclear. The etymology of àkj́mlâ is also difficult to establish.

The Jirim are called Dirim in Hausa and Fulfulde, but they themselves prefer the name Jirim. Jirim is a variety of Chamba Daka, a Dakoid (Benue-Congo) language or language group also mainly spoken in Taraba State. The Kam and nearby Jirim share a close cultural and political bond. A Jirim can be invited to celebrate festivals and ceremonies together with the Kam. They have similar religious ceremonies, which are related to Jukun religious traditions (cf. Meek 1931c: 538-550). They are the preferred trade partners. And they traditionally prefer intermarriage among each other over marriage with other ethnic groups. The Jirim are called Dàw in Kam. There are also Jirim that live further away from the Kam area, in Gashaka Local Government Area in the south of Taraba State, as stated by my main Jirim informant and in Meek (1931b: 397). This latter group is reportedly not culturally associated with the Kam.

Glavda is a Chadic (Afro-Asiatic) language that is mainly spoken in Gwoza Local Government Area, close to Maiduguri, in Borno State. According to Ethnologue, Glavda had some 31,000 speakers around the year 2000. After the Boko Haram insurgence in Gwoza in 2014, many people fled their homes and sought refuge elsewhere. Some fled to Cameroon, some fled to other places in Nigeria. Some refugees ended up in Taraba State. A number of them, mainly Glavda speakers, were provided a place to live in Kam villages. The Kam call all of these people Gwoza, after the place where they fled from, but all refugees I met were speakers of Glavda. ${ }^{4}$

[^2]
### 1.2 The language and its speakers

### 1.2.1 Environment and context

### 1.2.1.1 Delimitation and population size

Kam is spoken in northeastern Nigeria, in Bali Local Government Area, approximately in the center of Taraba State. It is important to keep two definitions of Kam country separate. First, there is the place where the Kam traditionally lived, and where the Kam language is currently spoken. For now, I will refer to this as the Kam speaking area. Second, there's the place that is under political responsibility of the Kam political king (there are two Kam kings, one "political" and one "traditional", which will be explained further below). ${ }^{5}$ I will refer to this political entity as the Kam district of Bali Local Government Area, which is how it is officially called. The Kam district is larger than the Kam speaking area, and its delineation has changed a bit over the last couple of decades. It includes villages and groups of people that are not ethnically Kam and that have nothing to do with the Kam people or language traditionally, including Hausa villages, Fulani villages, Mumuye villages, and possibly others). This section maps out the Kam speaking area, but not the Kam district. Although reference will be made to it when discussing the geographical and political background of the Kam people, a full treatment of the Kam district area falls outside of the scope of this book.

It is difficult to estimate both the general population numbers of this area and the population numbers by ethnic group. Population data for Nigeria generally show high error rates and census results are often disputed (cf. R.S. 2018). ${ }^{6}$ The latest projections of population and population density for Bali Local Government Area indicated a population density of $30.83 / \mathrm{km}^{2}$ in March 2016, based largely on census data from 1991 and 2006 (Brinkhoff 2017). This would yield a 2016 population size of about 11,100 people in the Kam speaking area (about $360 \mathrm{~km}^{2}$ ). The same model indicates a population growth rate of $2.94 \%$ each year. Since Kam is the majority ethnic group in the immediate area, we could estimate that there are currently some 8,325 Kam living among people from other ethnic groups; $75 \%$ of the local population.

[^3]In 1919, one source estimated that there were 583 Kam people (Temple 1919: 80). Brinkhoff’s growth estimates would expect a population size of $9,690 \mathrm{Kam}$ in $2016 .{ }^{7}$ My estimate of Kam population size at 8,325 people indicates a yearly population growth of $2.74 \%$ between 1922 and $2016,{ }^{8}$ which is lower than Brinkhoff's $2.94 \%$. Of course, these estimations cannot fully consider confounding factors influencing population size, such as migration and disease. They also do not consider varying distributions between Kam and other ethnic groups, and complex issues related to identity. Changing marriage patterns with neighboring ethnic groups or changing perceptions of different ethnicities could for example lead to more or fewer people identifying as Kam at a given point in time. It needs to be stressed, again, that the error margin for these numbers is probably fairly large. It should also be noted that not everyone who identifies as Kam is necessarily a speaker of the language (cf. § 1.2.4).

### 1.2.1.2 Climate, terrain and life

The Kam speaking area falls within the tropical savannah climate zone. It is relatively close, however, to the warm semi-arid climate zone further to the north. It has a short (three months) but pronounced wet season, usually from July to September, a five month dry season from November to March, and two transition periods, April-June and October, when a moderate amount of rain falls. The dry season is characterized by the Harmattan wind, an airmass blowing from the north-east that brings with it dust and warmth from the Sahara, causing a hot $\left(20^{\circ} \mathrm{C}\right.$ to $\left.42^{\circ} \mathrm{C}\right)$ and dry $(0 \mathrm{~mm}$ to 2 mm of precipitation) climate in the area. There are often water shortages during the dry season. During the wet season, moist southwestern winds from the South Atlantic Ocean are pulled into the continent by the retreating Harmattan airmass. These winds bring higher precipitation (between 45 mm and 66 mm ) and a narrower, generally cooler range

[^4]Adding values, this gives us:

$$
r=\frac{\ln \left(\frac{8325}{583}\right)}{(2016-1919)}=2.74 \%
$$

of temperatures $\left(22^{\circ} \mathrm{C}\right.$ to $\left.31^{\circ} \mathrm{C}\right) .{ }^{9}$ During the wet season, the area exhibits particularly heavy winds and rainfall with frequent thunderstorms. This heavy weather causes frequent power outages and weather damage in nearby cities such as Jalingo.

The Harmattan's retreat is caused by the sun's northward shift from the southern to the northern hemisphere from February to June, when it also passes straight over the Kam speaking area. The Kam traditional religion views the sun (àléy) as an ancestral deity that has to be cared for by means of daily rites. The sun, and by extension its caretakers or earthly mediators (in Kam culture the traditional king) are seen as bringing rainfall and securing harvest (Meek 1931c). The causal link between the behavior of the sun and the progression of seasons is an essential part of many traditional belief systems in the area.

The immediate area where the Kam live is drained by the river Kam (màrè $\eta$ wj̀m in Kam, a literal translation of 'river (of) Kam'), a tributary of the Taraba River ${ }^{10}$. The Taraba River feeds into the left side of the Benue River. The Benue, in its turn, is a branch of the Niger River. The Benue River has always been a major transportation route in the area.

The landscape is characterized by plains, with a forested mountain or a hill here and there. There are floodplains and there are various lakes in the vicinity. These mountains, hills and lakes have historical significance to the Kam. Two notable places important to Kam culture and traditions are the Kamajim mountain that hosts a number of Kam villages (Figure $1 \mathrm{on} \mathrm{p.9)} ,\mathrm{including} \mathrm{the} \mathrm{traditional} \mathrm{chief's} \mathrm{quarters}$, and Lake Ku , where the Kam claim to have beaten a host of jihadi invaders in the nineteenth century (see the fragment of oral tradition appended to this book).

[^5]

Figure 1 - Vegetation during the rainy season (Kamajim mountain, view from Sabongida Kamajim, May 20 ${ }^{\text {th }}$, 2017)


Figure 2 - Vegetation in the dry season (picture taken in Sarkin Dawa, January 4 ${ }^{\text {th }}$, 2016)

The area is part of a savanna ecosystem, with widely spaced woodlands and relatively short grass with some low forests. It is part of the Guinean forest-savanna mosaic. Vegetation is somewhat different in the dry season and in the rainy season, when the landscape is greener and grasses and weeds are more prominent (see p. 9). The Kam do not go out hunting in the rainy season because of the dense growth of plants, especially close to the mountains, which makes walking and exploring too dangerous. They are mostly concerned about the presence of snakes.

It is possible that vegetation today is quite different from what it was a few centuries ago. Some Kam have told me that a traditional way of hunting and clearing land for farming involved burning large packs of forests. Animals would run out as easy prey and the burned woodlands would make for fertile farming lands. ${ }^{11}$

Large animals in the area include leopards, hippopotami and antelopes. These used to be more abundant than they are now and dwindled partly due to uncontrolled hunting and habitat loss to people. There are still reptiles such as tortoises, an abundance of lizards and snakes, crocodiles, different kinds of monkeys, and a large variety of birds. Notably, the Gashaka Gumpti National Park to the south-east of the Kam speaking area (where the river Kam also reaches) is reported to have a population of chimpanzees.

### 1.2.1.3 Human subsistence

Human subsistence in the area revolves around agriculture, both for personal consumption and for trade. The main crops produced in the immediate area are groundnut, maize, rice, sorghum, millet, cassava, yam, beans and sugar cane. Cattle, goats, sheep, pigs and chickens are also kept. Cattle is a common investment for local people. It may be kept in the village or cattle may be reared by herdsmen around the area. These herdsmen are usually hired Fulani. Domesticated goats, sheep, pigs and chickens roam around the village. The Kam also fish and hunt to supplement farm food. Producing pottery, weaving, dyeing, mat making, carving, embroidery, blacksmithing and carpentry are common traditional and modern occupations.

Geography has played a large role in the history of politics and conflicts in the area. The mountains are important natural strongholds for the minority ethnic groups that have settled there. The plains have been the scene of various conflicts over the centuries. The alleged Jukun kingdom of Kororofa is said to have conquered much of present-day Taraba state a few centuries in the past. In the $19^{\text {th }}$ century the area

[^6]was raided in a jihad organized by an alliance of Fulani and Chamba invaders. During this latter conflict, local peoples such as the Kam sought refuge in and around the mountains and at least once, according to Kam oral history, by building a platform on top of a lake. Presently, there are ongoing disagreements in the area between herdsmen and agriculturalists about the borders and rights of grazing land and farming land, which sometimes end in violence.

The main road in the area is the Bali road, which connects the state capital of Jalingo with the Bali Local Government Area capital, Bali town. There are various paths leading to different villages. Traditional transportation happens on foot. Currently, people most frequently travel between villages by motorcycle, and between towns by car. Bikes are rare, horses are rare.


Figure 3 - Rice farming near the banks of the Kam river (close to Fincon B, May $5^{\text {th }}, \mathbf{2 0 1 7}$ )


Figure 4 - Women fetching water at the borehole in Sarkin Dawa (December 2 ${ }^{\text {nd }}$, 2016)

### 1.2.1.4 Recent environmental changes

The Kam themselves do not remember the landscape being significantly different in the past. One change that is mentioned in songs, however, is the 'breaking' of the Kamajim mountain in two. In one particular song, this is connected with the sale of land by a former political king to people of other ethnic groups (included in the text collection at the end of this dissertation). It is not clear to me what event this may refer to.

Global warming has caused changing weather patterns including increased temperature, lower humidity levels, less and later rainfall, unpredictable flooding and a generally shorter rainy season. For farmers, this has resulted in a delay of planting, a reduced crop yield and higher costs of commercial crops. Water resources have declined and fuel wood has become scarcer (Oruonye 2014).

In the last twenty years, farmers have begun using herbicides to increase their work's efficiency. It is not clear to me where these herbicides are produced and whether they are controlled. They may or may not have short- or long-term effects on the soil and environment as well as on the health of those who use them. In any case, they have transformed traditional agriculture. Today, for those who can afford them, spraying herbicides is an integral part of day to day farm work. Before herbicides were introduced, substantially more time and effort were spent preparing the farm for planting and maintaining the land by weeding it. Nowadays, less frequent visits to the farm are necessary after the farm has been prepared and
crops have been planted. This has reduced stress for farmers and freed up leisure time as well as time to pursue other interests such as education and trading activities.

I have heard reports of individuals using poison (possibly herbicides) as a tool for catching fish in lakes. The method would involve throwing poison into an area of the lake, and then gathering the dead fish that come floating up. This practice is met with disapproval by local fishermen, and according to my consultants it is easy to spot a fish that has been caught by means of poison on the market. It will disintegrate soon after it has been taken out of the water. The method has reportedly depleted fish in some lakes.

As of around 2014, there has been a surge of Chinese business interest for rosewood in the area. This has resulted in uncontrolled and illegal exploitation of threatened barwood (Pterocarpus erinaceus) madrid in Hausa, àváykày in Kam - in the area (Ahmed et al. 2016; EIA 2017). The tree is traditionally used for firewood, medicine (against fever), wood working, textile dying (the red sap of the tree) and retaining fertility of farmland. The business interest has led to quick but unsustainable profit for local farmers, unemployed youths and economically vulnerable groups. For many locals, the opportunity appeared especially attractive in times of economic crisis. When passing through Garba Chede, a town to the north of the Kam speaking area, one can see large piles of cut barwood prepared to be sold, often to Yoruba intermediaries. The trees are found on hilltops. They are cut there and rolled downhill, and then transported with trucks to the road. This logging has recently transformed the landscape, where, in many places, tree stumps are more numerous than actual trees. In Mayo Kam, at one point, over one thousand youths were employed in the logging business (Ahmed et al. 2016: 4). The long-term economic and ecological impact of this type of business is currently unclear. I am not aware of any reforestation initiatives.

### 1.2.2 Names of the language

In their own language, the Kam call themselves ní ywj̀m. ní means 'person' or 'people' and $\eta w \grave{m}$ is a nonpostpausal form of àywı̀m, a noun that refers to anything associated with the Kam, as in àlày ywı̀m 'a Kam pot'. The Kam call their language variably àyẁ̀m, $\eta w e ́ ~ \eta w \grave{m}$, literally 'the Kam language', and $\eta w e ́ ~ n i ́$ $\eta w \grave{m}$ 'the language of the Kam people'. The name Kam is used by surrounding groups, by the government, by the Kam themselves when they are not speaking their language but any other language and has been used in previous research on the language and people. The name probably derives from the river Kam, which is the main river flowing through Kam country. The Kam themselves call this river màrè $y$ wòm 'the river (of) Kam'. The term Kam does not carry any negative connotations to the speakers themselves, and according to oral history accounts, the name was even coined by one of their own (according to Saheedu, p.c. in session_284). I use the name Kam for the language because it is the most widely known name by which the people and their language are known, officially, informally, and in the academic literature. I do
not see a reason to introduce a new English term for the language (such as à $y w \grave{m}$ or $\eta w \grave{m}$ ) if one already exists (cf. Haspelmath 2017). ${ }^{12}$

### 1.2.3 Current geographical and political background

To reach the Kam speaking area from Jalingo, the capital of Taraba State, one drives southwards, following the Bali-Jalingo Road for about 70 kilometers. The nearest well-known town to the north of the Kam speaking area (for people who are not from Bali Local Government Area) is Garba Chede, an important commercial center where many Kam go to sell and buy supplies at the market every Thursday. Garba Chede is a Jirim town, and the current (as of 2020) king of Garba Chede, Maigandi Kaigama, has Jirim and Kam ancestry. He identifies as Jirim ethnically, and he does not speak Kam, but he still regards Kam culture as part of his heritage. At a certain point in recent history, Garba Chede was allegedly also part of the Kam District area, but Kam was never spoken there as a dominant language. To the south of the Kam speaking area, a bit further away than Garba Chede, lies Bali, the capital of Bali Local Government Area, where the Emir of Bali lives, who is Fulani.

The Kam speaking area has two main natural landmarks: the Kamajim mountain, which lies at the eastern side of the area, and the river Kam (màrè ywòm), which runs north from the southeastern part of the mountain for 5 kilometers until it takes a sharp turn to the southwest, where after 13 kilometers it passes through Mayo Kam and then goes northwest again. For the most part, the Kam people live in the space between the river and the mountain. Just a few villages are located on the mountain. The map in Figure 5 shows the Kamajim mountain, the Kam river and all Kam villages. The yellow line in the middle represents the main road that goes from Bali to Jalingo. Some villages that serve as reference points in this thesis are printed in larger font. Other villages are printed in smaller font for reference. All villages are listed with some details in Table 1 on p. 23.

[^7]

Figure 5 - Map of the Kam speaking area


Figure 6 - Banks of the Kam river, close to Fincon B (May 5 ${ }^{\text {th }}$, 2017)


Figure 7 - The Kam river, close to Fincon B (May 5th, 2017)


Figure 8 - Plains across the Kam river from Kamajim, close to Fincon B (May 5th, 2017)
There is a rather clear dialectal, religious, and cultural distinction between the people living closer to the mountain (roughly the northeastern part, or the 'highlands', called àwù in Kam) and those living further away from the mountain (roughly the western part, or the 'lowlands', called $\grave{a} d \grave{y} \eta$ in Kam). The northeastern people speak what will be referred to as highland varieties in this analysis. Most speakers of these highland varieties still practice the traditional Kam religion and have preserved more of the traditional culture, for example in terms of storytelling. The western part speak what will be called lowland varieties. The speakers of lowland varieties are for the most part Christian or Muslim and they do not often practice traditional culture anymore (no mythology is remembered and no folktales are told). The religious and cultural divisions are more easily made than the dialectal division. In the villages intermediate between the mountain and the river, both highland and lowland varieties are spoken, or an intermediate variety. The speech of some speakers from this intermediate area, including such villages as Sarkin Dawa and Mayo Kam, shows a mix of features of the two major dialect groups. The Kam spoken by most people in Mayo Kam, I have been told by my informants, is supposedly more influenced by Hausa and possibly Fulani. One of my main informants, Babangida Audu, was born in Kamajim and was raised in Highland Kam by his parents, although his family moved to Sarkin Dawa soon after he was born. Solomon Ahmadu, another main informant, was born in Sarkin Dawa and has features of both highland and Lowland Kam in his speech. Isa Sarkin Dawa, with whom I worked quite a bit as well, was born and raised in Fincon, and largely speaks

Lowland Kam. Speakers themselves recognize dialect differences, but do not have specific names for the different dialects.

Kamajim is the collective name of a number of villages located closest to and on the Kamajim mountain. It is the religious and traditional center of the Kam speaking area. It is in Kamajim where most traditional festivals are held, where religious rituals are carried out in shrines by the traditional king, and where the traditional king resides. The traditional king is considered to be able to control rainfall and is responsible for rituals in which he feeds the ancestors of the Kam (see Meek 1931b). If the ancestors are not fed, nature fails: the sun (which is considered to be one of the ancestors) cannot rise, rain cannot fall, and crops wither. In earlier times, Kamajim was strictly off-limits to outsiders, and nobody who was not Kam could meet the traditional chief. With the arrival of the British in the northern part of Nigeria, or perhaps earlier, with the establishment of the Fulani emirates in the region, the need arose for someone who could represent the chief towards outsiders and towards the ruling administration. Apart from the traditional, spiritual chief, who is responsible for the spiritual affairs of Kam land, a political representative was appointed to prevent strangers from entering strictly Kam territory. His task was to mediate between the Emir of Bali and the traditional king, and to represent the Kam people in official matters. His title is Sarkin Dawa, which is also the name of the village where he resides. Sarkin Dawa is a Hausa name and can be translated as 'king of guinea corn'. According to Isa Sarkin Dawa, this is a reference to the king's ability to control rainfall. ${ }^{13}$ More recently, this representative acquired an official status as the district head and has been appointed as the political king of Kam country by the Emir of Bali. In this role, he is a delegate of the Emir of Bali, under whom and according to whose regulations he rules the Kam district of Bali Local Government Area (i.e. Kam country). When the current Sarkin Dawa dies, a successor is elected by a council of Kam elders, but he is ultimately appointed by the Emir, who turbans him. While Kamajim is the cultural capital of the Kam speaking Area, Sarkin Dawa might be considered its political capital.

Table 1 list all Kam villages I have been able to identify. For some villages I managed to collect geographical coordinates, others I could not visit because of time limits or because I was not allowed to go there for cultural reasons. ${ }^{14}$ In some villages, I managed to speak with the village head, from whom I collected the Kam name of the village, their estimated number of Kam speakers, the previous place where

[^8]the people came from that settled in the village, their estimated date of settlement, the religion of the people who live there, whether members of other ethnicities also live in the villages, and which dialect group people in the village identify with. Speaker numbers are meant to give a rough idea of the relative size of villages but are in many cases likely to be exaggerated estimates by the village heads. It is notable that when some villagers were asked for their own estimates, they tended to give a much lower number than village heads did. ${ }^{15}$ If all numbers are added up, the total amounts to about 30,000 speakers of Kam, which is an unrealistically high figure given the estimates outlined in § 1.2.1.1. When place names are given in brackets, this means that their pronunciation is uncertain. The consultants with whom I checked the traditional place names were not familiar with all the place names, because the "primary names" (as shown in the first column) are normally used and the Kam names are falling out of use. Question marks indicate uncertainty.

[^9]

Figure 9-Traditional artefacts, including sábirág, a spear, dig, the longer cilindrical drum to the left, tî dig (diminutive: child drum), the smaller drum in the middle, gìngày, the round drum to the right, and ǹtfí, the bow at the back. Exhibited before the start of the traditional ǹsúróy dance (January 2 $\mathbf{2}^{\text {nd }} \mathbf{2 0 1 7}$ ).


Figure 10 - Performing ǹsúróy - a traditional dance to celebrate the harvest, performed in September. Picture taken in Sabongida Kamajim (January 2 ${ }^{\text {nd }}$, 2017).


Figure 11 - The king's palace in Sarkin Dawa (December $8^{\text {th }}, 2016$ )


Figure 12 - Inside the political king's palace in Sarkin Dawa (left to right: Garba Abubakar Bako, the king's secretary; Isa Sarkin Dawa, the king; Muhammad Bose Yuguda, an older relative of the king) (January $4^{\text {th }} 2017$ ).

## Table 1 - Kam-speaking villages

| ID | Primary name | Kam name | Speakers ${ }^{16}$ | Dialect group | Other notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Sarkin Dawa | No Kam name recorded | ca. 4500 (?) | Intermediate | No data collected. The king wants to wait to provide data until he talked with his elder brothers. |
| 2 | Mayo Kam | màrè yw ẁm 'river Kam' | ca. 6,000 | Intermediate | According to oral tradition provided by an elder living in Mayo Kam, Mayo Kam was founded around 1,000 A.D. This contradicts other accounts of oral history that say the Kam came from the south, north of Gashaka Local Government Area, a few centuries ago. Other ethnicities found in Mayo Kam include Wurkun, Mumuye, Yendang, Jukun, Wurbo, Jibu, Fulani, Tiv, Kuteb, Hausa. <br> Religions practiced: mostly <br> Christianity and Islam, but still about 1,000 people follow traditional Kam religion. |

[^10]|  |  |  |  |  | Parents do not generally speak Kam to their children anymore in Mayo Kam. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Kamajim 1 | à $\begin{aligned} & \text { wí bóg } \\ & \text { gr }\end{aligned}$ <br> place? ${ }^{17}$ foot? ${ }^{18}$ <br> 'foot place?' | ca. $150(?)^{19}$ | Highlands | Not visited yet. <br> Only traditional religion is practiced here. |
| 4 | Kamajim 2 | ànwí lí ${ }^{\dagger}$ léb place? middle 'middle place'? | ca. 2,200 (? ${ }^{20}$ | Highlands | The village head could not speak to me. <br> Only traditional religion is practiced here. |
| 5 | Kamajim 3 | à $̧ w i ́ ~ f$ f́nsòg place? ? '?' | ca. 1,700 (? ${ }^{21}$ | Highlands | Not visited yet. <br> Only traditional religion is practiced here. |

[^11]| 6 | Gangtu Kamajim | gày-tú <br> upside?-hill? ${ }^{22}$ <br> '?' | ca. $350(?)^{23}$ | Highlands | I was unable to come here for cultural reasons. This is the place where the traditional king and his caretakers live. Only traditional religion is practiced here. <br> There are also Jirim living here. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Sabongida Kamajim | (amawan)? ${ }^{24}$ <br> 'checkpoint?' | ca. 2,500 | Highlands | Founded ca. 1800 <br> People came from a place called màn nág 'cow fat', an unidentified place that is now deserted. <br> People mainly practice traditional religion. |
| 8 | Abanderi | àbén ndérí talk idiotic 'curse'? | ca. 1,500 | Highlands | Founded ca. 1900 <br> People came from Sabongida <br> Kamajim. <br> People mainly practice traditional religion. |

[^12]| 9 | Garin Lah | bùntí 'to ride' | ca. 2,000 | Highlands | Founded ca. 1850 <br> People came from (kajiga) ${ }^{25}$, an unlocated place that is now deserted. People mainly practice traditional religion. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | Gunduma A | No Kam name | ca. 1,500 | Highlands | Founded ca. 1850 <br> People came from Kamajim, but they did not specify which part of Kamajim. Mumuye, originally from Jalingo, also live in the village, as well as Jirim. Jirim is often spoken here. People mainly practice traditional religion. |
| 11 | Gobti | gòp-tín ${ }^{26}$ <br> unknown meaning | ca. 1,050 | Highlands | Founded ca. 1850 <br> People came from Kamajim, but they did not specify which part of Kamajim. People mainly practice traditional religion. |

[^13]| 12 | Kam Sira | ànwóg bíní <br> 'House of Bini' | ca. 100 | Lowlands | Founded ca. 1850 <br> People came from (bareki) ${ }^{27}$, an unidentified place that is now deserted. People mainly practice traditional religion. There are some Christians. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | Bayaro | kpágárág 'tilapia fish' | ca. 1,500 | Lowlands | Founded ca. 1800 <br> People came from ìtóy sání, an unidentified place that is now deserted. Christianity and Islam are practiced here. |
| 14 | Fincon A | Kam name not recorded | ca. $350{ }^{28}$ | Lowlands | I did not meet anyone in this village. Kuteb also live here. |

[^14]| 15 | Garin Hamza | (àywóg Hámzà)? <br> 'House of Hamza' | ca. 2,000 | Lowlands | Founded ca. 1800 <br> People came from (jaygran) ${ }^{29}$, an unlocated place that is now deserted. Other ethnicities found here are Mumuye, Yendang and Glavda. Around 1,500 people are christian. ca. 500 people practice traditional religion. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16 | Garin Shingaw | Kam name not recorded | ca. $100^{30}$ | Lowlands | Not visited yet. |
| 17 | Garin Ardo Sonvini | (àywóg Ardo Sonvini) 'House of A. S.' | ca. 200 | Lowlands | Founded ca. 1850 <br> People came from (doygoloy) ${ }^{31}$, an unlocated place that is now deserted. Glavda refugees also live here. <br> Most inhabitants are Christian, some practice traditional religion. |

[^15]| 18 | Garin Kadiri | ànwóg kádìrì <br> 'House of K.' | ca. 200 | Lowlands | Founded ca. 1900 <br> People came from (muruna) ${ }^{32}$, an unlocated place that is now deserted. Mumuye also live here. Mostly Christian, some traditional religion. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Garin Tukura | Kam name not yet attested | ? | ? | I did not meet anyone at the village. |
| 20 | Fincon B | f $\mathfrak{\varepsilon} \mathrm{n} \mathrm{f} \int \overline{\mathrm{D}}$ <br> ? cocoyam <br> 'coco yam'? | ca. 500 | Lowlands | Founded around 1850 <br> People came from Sabongida Kamajim. <br> Most people practice traditional religion. Some are Christian. |
| 21 | Garin Zana | $\begin{aligned} & \text { aŋwonya }(?)^{33} \\ & ? \end{aligned}$ | ca. 500 | Intermediate | Founded around 1990 <br> People came from Bayaro. <br> About 1,000 Hausa people live here as well. <br> This village is strictly Muslim. <br> It is sometimes counted as a part of Mayo Kam. |

[^16]| 22 | Dadin Kowa | Kam name not recorded | $?$ | Intermediate | Not visited yet. <br> It is sometimes counted as a part of <br> Mayo Kam. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 23 | Manti | Kam name not recorded | $?$ | ? |  |
| Garin Baba | (àywóg Daba) ${ }^{34}$ <br> 'House of Daba' | ca. 200 | Not visited yet. |  |  |
| 25 | Makyeri | Kam name not yet attested | $?$ | Founded ca. 1950 <br> People came from Garin Hamza. <br> Most people are Christian, some <br> practice traditional religion. |  |
| 26 | Wura | Kam name not recorded | $?$ | $?$ | Not visited yet. |

[^17]
### 1.2.4 Some sociolinguistic facts

At this moment, most people who identify themselves as Kam also speak Kam, usually as their first language. There are some Kam, who live in the villages closer to the road, who do not speak the language well. In commercially important places, like Mayo Kam and Sarkin Dawa, not all parents speak Kam to their children, raising their children in Hausa instead. In the more remote villages, all children still grow up speaking Kam with their parents. Everybody who speaks Kam also speaks Hausa, which is the main trade language in the area. Some Kam also speak Fulani, because they frequently have to deal with Fulani groups. Many also speak Jirim (cf. § 1.1). A minority of Kam speakers speak English. Kam is not taught or used at schools, where Hausa and English are taught and used instead. When Kam people gather, they will usually speak Kam, unless a non-Kam person is around, in which case they will switch to a common language with the non-Kam people present. For official purposes, Kam, Hausa, or English is used. In the past, Kam rulers and elders also spoke Jukun. This may still be true for some old people. There are no Kam radio or television programs but Kam youth occasionally talk in their language on WhatsApp and on Facebook. There is no standard orthography at this time.

There is no obvious variation between the speech of older and younger speakers, and between speakers of different genders.

Reportedly, there is a Kam sign language that is different from Hausa Sign Language (according to Wesam, p.c. in session_262). I have not been able to investigate how different it is, whether they may be related, or whether the Kam may have an entirely independent sign language. Probably, the language (or languages) in use is a home-based sign system rather than a language that has been passed down for different generations.

### 1.3 A typological sketch of $\mathrm{Kam}^{35}$

### 1.3.1 Basic word order

Basic word order in Kam is Subject-Verb for intransitive clauses and Subject-Verb-Object for transitive sentences. Adpositions precede the noun they occur with, and all adnominal modifiers follow the noun they modify in the noun phrase. Relative clauses also follow the noun they modify. Complementizers introducing complement clauses follow verbs.

[^18]
### 1.3.2 Phonology

Kam has 24 consonants, including two labial-velar stops $/ \mathrm{kp} /$ and $/ \mathrm{gb} /$ and two rare phonemes, $/ \mathrm{h} /$ and $/ \mathrm{f} /$ that occur in a very limited set of lexemes. There are eight vowel phonemes, five of which are contrastive in all syllabic and prosodic positions ( $/ \mathrm{i} /, / \varepsilon / / / \mathrm{a} /, / \mathrm{\jmath} / \mathrm{l} / \mathrm{u} /$ ). Three vowels, $/ \mathrm{i} /$, /e/ and $/ \mathrm{o} /$, are contrastive in a more limited set of environments. There are four nasal vowels, /ĩ/, /ẽ/, /õ/ and /ã/. Vowel length is not synchronically contrastive and there is no vowel harmony in Kam.

Kam has three level tones - L, H and M - which can also be combined into contour tones. M tone is less frequent than L and H tones and may historically derive from simplified LH contours. There are also floating ${ }^{\mathrm{L}}$ tones, and (in only two morphemes) floating ${ }^{\mathrm{H}}$ tones. Kam has a fair amount of tonal morphology marking case on pronominals, marking tense, aspect and polarity on verbs, and playing an important role in nominalization and verbal derivation. ${ }^{36}$ There are a number of phonological tonal rules, the most prominent of which are H-tone spread, L-tone shift and non-automatic downstep due to floating ${ }^{\mathrm{L}}$ tones.

Kam syllables can occur in prosodically strong positions and prosodically weak positions, equivalent to stressed and unstressed positions in other languages. Kam features stem-initial prominence and stem-final weakening. There are more consonant and vowel contrasts in stem-initial position than in stem-final or stem-medial position, and there are a number of phonological and phonetic rules that distinguish weak from strong positions. Fortis versus lenis variants of stop consonants are an example of this: bilabial stops in prosodically strong positions become approximants in weak positions, velar stops become glottal stops (or velar approximants), and alveolar stops become alveolar taps.

### 1.3.3 Nominal morphosyntax

There is little segmental nominal morphology. Such morphology is restricted to deverbal nominalization and possessive indexes. All other morphology is tonal, marking nominalization, but also case on some pronominals, and arguably tense, aspect and polarity (cf. § 13.2). There are different pronominals for 1SG and 2SG categories for different tense, aspect and polarity values which can be considered STAMP (portmanteau Subject-Tense-Aspect-Mood-Polarity) morphemes from a typological perspective ${ }^{36}$. Many polysyllabic nouns in Kam have an initial prosodic prefix (à- or a homorganic nasal $N$-). ${ }^{37}$ These prefixes may or may not be traces of an earlier noun class system, but they currently serve no morphosyntactic function. The optional plural marker $j \bar{o}$ that marks the entirety of the noun phrase may from a typological

[^19]perspective be considered a plural word. There is no other number marking in non-pronominal noun phrases.

There is no distinction between alienable and inalienable possession constructions in Kam.
There are no noun classes nor is there a system of nominal classification in most domains of Kam grammar. Humanness and some other semantic distinctions do play a role in some parts of the grammar of Kam.

- There are human third person pronominals, àwú ' 3 SG ' and àjí ' 3 PL ', but no pronominals for nonhuman third person referents.
- Content interrogatives make a distinction between humans ( $b \hat{c}^{H} \ldots$... $b \grave{c}$ 'who?'), places ( $r \hat{\varepsilon}$ 'where?'), manners (sim 'how?') and other non-human entities ( $g \grave{\varepsilon}^{H} \ldots g \grave{\imath}$ 'what?'). Quantities are inquired after with the manner interrogative sim, without a distinction between count nouns and mass nouns.

Kam has a dedicated logophoric pronominal for third person singular human subjects, objects and possessors. This logophoric pronominal is used in reported discourse to indicate that a participant in the reported discourse is the same entity as the subject of the reporting verb, or in general the entity whose discourse is being reported (e.g. ' $\mathrm{He}_{\mathrm{i}}$ said that he $\mathrm{e}_{\mathrm{i}}$ (himself) would write it.' as opposed to ' $\mathrm{He}_{\mathrm{i}}$ said that he $\mathrm{j}_{\mathrm{j}}$ (someone else) would write it.'

There is no inclusive/exclusive distinction in the pronominal system of Kam, nor is there a gender distinction in third person pronominals. The only number distinction is between singular and plural. There are no third person non-human pronominals, only human arguments are regularly expressed pronominally. There is no politeness distinction in the pronominal system.

The deictic demonstrative system has a two-way distinction between near ( $\grave{a}$ or $b a^{-}$'this') and far ( $o$ or $b \hat{o}$ 'that'). There are three presentative demonstrative markers that have different uses in discourse but that do not distinguish distance. There is an existential quantifier $m L^{\text {' }}$ 'some, any, a certain', which can often be translated as a definite or indefinite article into English. Relative clauses are formed with a postnominal marker $\bar{a}$, segmentally similar to the proximal demonstrative $\grave{a}$ and one of the presentative demonstratives $\dot{a}$, and an optional relative clause final marker $\grave{a}$.

Apart from the existential quantifier $m i^{L}$ 'some, any, a certain', which behaves as a modifier in the noun phrase, quantifiers are not generally embedded in noun phrases but behave as 'floating quantifiers', occurring in different places in the clause. Syntactically, they are more similar to adverbial modifiers than to attributive adjectives or nouns.

There is a distinction between prepositions proper and prepositional nouns. Prepositions proper take independent pronominals as their complements. Prepositional nouns derive from nouns and behave as regular possessed nouns in a possessor construction. They take possessive pronominals as their complements. Prepositional nouns mostly express spatial meanings (àlíb 'on', àliléb 'in the middle of', àlím 'in front of', àgún 'behind', etc.). Prepositions proper can express instrumental and temporal meanings ( $k$ '́ 'with', sé 'until', hár 'until'), comitative (rà 'with', also a noun phrase coordinator 'and'), similative (àrí ‘like') and locative (à 'at, in', dāk $k \bar{a}$ ‘from').

When two pronouns are coordinated with the comitative preposition $r$ ' 'with/and', they can form an inclusory construction, where the initial plural pronominal (àjí 'they' or jùrù 'we') refers to the group as a whole and the following noun or pronominal (a singular noun or pronominal) picks out one of the two referents (cf. Singer 2001). jùrù rà nà 'we and you', for example, is used to express the equivalent of 'me and you'.

The numeral system is decimal (10-based) and vigesimal (20-based), with a possible trace of a quinary (5-based) system in number seven: ḑùb jīrāg can be compared to đ̧ùb 'six' and jīrāg 'two'.

### 1.3.4 Verbal morphosyntax

Verbal morphology is mostly tonal, marking different polarity, aspect and tense values and also playing an important role in verbal derivation and deverbal nominalization. In addition to tonal morphology, there are different types of verbal reduplication, marking future tense, experiential aspect, and deriving predicative adjectives. There are some preverbal aspectual, temporal, polar and other grammatical markers. These occur following subject indexes and may derive from earlier verbs (e.g. sì, marking sequential clauses, rà ${ }^{L}$ marking negative future tense, and an optional non-future negator màg). There is a post-verbal perfective aspect marker $\grave{a}$ that occurs after the object of a transitive clause or after the verb if there is no object.

Kam has multi-verb constructions, a type of construction that may be of interest to researchers of serial verb constructions, auxiliaries, light verbs, complex predicates, verb compounding, coordination, adverbial modification, comparative constructions and valency change. Clauses with multi-verb constructions can be analyzed as consisting of two types of verbal components. The first type, which I call primary verbs, are marked for tense, aspect and polarity. The other type, secondary verbs, may precede a primary verb or follow a primary verb and its object if there is one. Secondary verbs are not inflected. A clause typically has one primary verb and may have one or more secondary verbs. The secondary verbs may express repetition, persistence, spontaneity, resultative or stative aspect, completive aspect, ventive direction, andative direction and experiential aspect. They may also be used to add arguments to a clause in benefactive constructions and comparative constructions.

Verbs may have a toneless final vowel - $i$ that does not have a clear function but obligatorily occurs in a variety of constructions including (a) deverbal adnominal adjectives, (b) affirmative future tense constructions, (c) the negative future tense construction, (d) speech and thought reporting clauses. This final vowel element in Kam is reminiscent of the so-called final vowels in Bantu languages (e.g. Grégoire 1979).

There is also a final vowel $i$ that occurs optionally in a number of verb stems in Kam but that does not have a morphosyntactic function. The inflectional/derivational final vowel $-i$ and the optional final vowel $i$ are synchronically different elements but may be historically related.

There are three verb extensions, causative -tí and -si and iterative -rí. Verbs with these markers are often lexicalized, and the extensions cannot be applied to all verbs. They are only partially productive. They are prosodically strong and may derive from secondary verbs in earlier multi-verb constructions and/or from other reconstructible Niger-Congo verb extensions. There is no passive or antipassive construction and there are no reflexive or reciprocal derivations. Reflexive and reciprocal constructions are expressed periphrastically with the noun kpò 'body'.

There are no conjugation classes in Kam, and there are only a few irregular verbs (see § 14.6.1). There is no suppletion in verbs. There are, however, different affirmative and negative copulas.

Evidentiality is not grammatically encoded in Kam. There are no interrogative verbs for content interrogatives in Kam.

### 1.3.5 Word classes and derivation

Kam only distinguishes nouns and verbs as open word classes. There are some adverbs or adverbial expressions, but these often appear (at least historically) morphologically complex. There is an adjective class that typically functions as nominal attributive modifiers. Predicative adjectives are derived from verbs by means of reduplication. They can also be analyzed as stative or resultative verb forms that are not inflected for tense or aspect. Attributive adjectives syntactically behave like possessor nouns in associative constructions. Most attributive adjectives are derived from verbs, but a few attributive adjectives only show a historical relationship to current verbs, and some attributive adjectives no longer have an equivalent verb stem. Synchronically, underived adjectives constitute only a small lexical set.

Adnominal adjectives are derived from verbs by means of a prefix $\dot{a}^{L}$-, a replacive M-tone on the stem ${ }^{38}$ and (only in the case of CVC-stems) the derivational final vowel -i.

[^20]There are different strategies of deverbal nominalization, deriving agent, patient and abstract nouns. All such nominalizations include prefixation and tonal marking. Some include a suffix -rì as well.

The noun ( $\grave{a}) t \stackrel{y}{i}$ 'child' can be used as a diminutive marker. Larger male specimens of animals are often modified with àná 'father'. I have no examples of àná as an augmentative marker for inanimate nouns.

Data on ideophones is scarce in the current corpus of Kam. They are not very frequent. Future research will include more data collection focusing on genres where they may be more likely to occur. In addition, I have abstained from analyzing certain lexemes as ideophones that may at first glance seem sound-symbolic. These do not behave differently from other elements in the morphosyntax or phonology of Kam, so the only reason for singling them out as marked sound-symbolic lexemes would be my intuition or the intuition of a handful of consultants. Sound-symbolism and ideophones in Kam are a matter for further research.

### 1.3.6 Clausal morphosyntax

Argument marking is done primarily by means of word order. Nominative arguments (in Kam: subjects) precede the verb. Accusative arguments (in Kam: objects) follow the verb. Pronominals are formally distinguished by means of tone. Nominative pronominals (or subject pronominals) feature L tones. Accusative pronominals (or object pronominals) have H tone. Possessive pronominals feature $\mathrm{H}^{\mathrm{L}}$ tone, where the ${ }^{\mathrm{L}}$ stands for a right-attached floating ${ }^{\mathrm{L}}$ tone and could be analyzed as a possessive flag. Some pronominals also have segmentally different stems in different argument functions.

Various sensations and emotions (such as being sick, being angry, being sleepy) are expressed with a construction where the experiencer is coded as the object and the experience as a subject noun phrase (for example, lù rà déy ám 'sleep is roasting me', féb tágí $m$ à 'anger affected me'). Others are encoded with a body part as the subject, the experience as the verb, and the experiencer as either the object of the verb or the possessor of the body part. Yet other sensations are encoded with other idiomatic expressions specific to individual sensations.

In most clauses, there is no distinction between accusative arguments (in Kam: objects) and noncore arguments such as recipients, beneficiaries, etc. Most extended transitive clauses, such as ditransitives, are expressed with multi-verb constructions, where non-core arguments are coded as the object of a second verb (e.g. 'give him a house' is jàg ingwj́g mō 'take house give:him'). Pronominal complements of prepositions proper, however, are expressed with independent pronominals and not with indexes.

Various grammatical categories are marked simultaneously in different slots in the clause. Tense, aspect and polarity, for example, are expressed by means of different pronominals (for 1 SG and 2 SG ), tonal
marking on verbs, as well as with segmental markers. One category that is exemplary in this regard is negation. There are different negation constructions for different tense and aspect values.

Like many other languages in the Macro-Sudan belt, Kam features clause-final standard negation (with the phonologically peculiar negator $h \grave{n}$ ).

Interrogation is partly expressed clause-finally as well, with a particle $j \bar{\imath}$, or with a M tone at the end of a clause. Of special interest are the human and non-human content interrogatives, which are bipartite ( $b \grave{\varepsilon} \ldots$... bì 'who?' and $g \varepsilon \ldots g i ̀$ 'what?' and enclose the clause within their scope (e.g. gè sin gì? 'what


There is a copula, dá, for existential and locational predication. Nominal predication features the presentative demonstrative $\dot{a}$ on the non-verbal predicate. There is no copula for adjectival predication, however, which is expressed with a reduplicated verb.

There are two ways of expressing predicative possession in Kam. One involves the copula dá followed by a comitative prepositional phrase ( $n$ dá rá đ wó ‘I am with a dog'). The other involves the haveverb kàr 'to keep, to have').

Comparative constructions are expressed with a multi-verb construction including the verb kjrr(i) 'to surpass'.

There are a number of focus, topic and emphasis constructions in Kam that are not yet currently fully understood. These include nominal topicalization with a post-nominal particle $d<\varepsilon$ é, discourse-cohesive uses of the prosodically weak presentative demonstrative $b \bar{\varepsilon}$ and cleft constructions with the postnominal relativizer $\bar{a}$. These topics feature in a short chapter (17.6) but have not received much attention in the current dissertation, which focuses on basic phonology, morphology and syntax. They offer promising avenues for future research.

### 1.3.7 Morphology vs. syntax; fusional vs. analytic; bound forms vs. words,

If we adopt the terminology of traditional morphological typology, Kam could be characterized as both a fusional and an analytic language. It has some (phonologically bound) morphology - predominantly tonal - and different grammatical meanings are often combined in a single marker. A low tone first person subject index, for example, marks its argument function (subject), the polarity value of the clause, and (in case it has positive polarity) the aspect value of the clause. At the same time, segmentally invariable markers are also often found, for example marking aspectual values (e.g. rà 'imperfective'), plural number on noun phrases ( $j \bar{o}$ ) and negation at the end of a clause (hì). Multi-verb constructions are also frequently used, for example to express direction (pè 'to come', sáy 'to go'), and in transitive clauses repetition of the verb after
the object is used to mark future tense. In my view, the difference between 'phonologically bound' morphology and 'phonologically free' particles or auxiliaries is not particularly meaningful in the morphosyntax of Kam. Some markers that appear syntactically bound behave like prosodically strong stems, (notably the derivational verbal suffixes - some may analyze them as phonologically free particles $--s i,-t i$ and $-r i ́$, and it is not clear what can be gained, for example, from analyzing the syntactically free presentative demonstrative $b \bar{\varepsilon}$ as a bound morpheme, although it is prosodically weak.

Related to this, there are no clear generally accepted definitions of word that work well from a crosslinguistic perspective (see Bickel et al. 2009; Haspelmath 2011; Bickel \& Zúñiga 2017; Lesage \& Neshcheret 2017). Bloomfield defined word as a "minimum free form" (Bloomfield 1933: 160, 178), or, as rephrased by Haspelmath (2011: 39), an "utterance segment that can occur on [its] own". This definition is still representative of how the concept word is conceived by a substantial part of the linguistic community. The opposite of a word, for Bloomfield, is a 'bound form'. Many items that have been analyzed across languages as 'particles' cannot occur as separate utterances but are simply phonologically invariable grammatical markers. The term particle, like word, is currently not uniformly defined in the typological literature. I avoid claiming explicitly that something is a word in this description of Kam, since I do not believe this is necessary or helpful to understand the language. Where it seems useful from a typological perspective to make this distinction, I provide all the information a typologist might need to make their own choice of whether a marker in question adheres to their comparative concept of word. Orthographic choices in this grammar do not reflect analyses of wordhood (cf. § 2.6)

### 1.4 Previous work on Kam

### 1.4.1 Before the current project

Before this project started, a limited amount of data and analyses had been published on the Kam language and on its speakers. Table 2 lists all documents produced before 2016 that give some information on Kam and that I have been able to identify. The contents of each document are briefly described, and the documents are classified into types: (1) word lists, (2) Classification, (3) Ethnographic notes and (4) Bibliography. A brief note on the context in which it was produced is also given.

The most notable documents for linguistics are the two basic word lists that have been produced. The first word list was produced by Charles Meek (1931b) in a survey of ethnic groups in Northern Nigeria. The word list consists of about 100 entries and was for a very long time the only linguistic data published on the language. In 2011, Ulrich Kleinewillinghöfer collected about 200 words from two consultants in Garba Chede.

Other linguistic documents include a number of classifications in which Kam was considered part of the Adamawa language family. These did not add any linguistic data but provided hypotheses on the basis of the data published by Meek. Meek (1931c: 547-550) himself already identified that Kam is not a Jukunoid language, although it has some links to Wapan (his "Wukari Jukun") ${ }^{39}$ in noun structure (specifically the prosodic $a$-prefix, see $\S 4.2 .9$ ). He further says Kam's vocabulary resembles Bendic ${ }^{40}$ (cf. Blench 2001) and Delta Cross ${ }^{41}$ (cf. Villa et al. 2015) languages. He also saw lexical links to Tula-Waja ${ }^{42}$ (Adamawa) languages and even Chadic languages such as Pero ${ }^{43}$ and Kushi ${ }^{44}$ (cf. Kraft 1981; Batic 2017).

Most subsequent classifications follow Greenberg's (1963) proposal where Kam is seen as an isolated group within Adamawa. Exceptionally, Blench (n.d.) groups Kam together with Tula-Waja, without presenting explicit arguments for this change.

Broadly, contexts in which documents were produced are the following.

- Colonial Nigeria. These documents focused on providing basic ethnographic and geographic documentation, providing an overview of who lived in certain part of Nigeria at the time of British rule. Authors worked for the government. Charles Meek, for example was a Government Anthropologist whose main interest was studying the Jukun. His report on Kam in Meek (1931c) remains the most informative material published on Kam ethnography to date.
- Overview of Nigerian ethnic groups and languages. These documents are indexes of ethnic groups or languages in Nigeria, compiled over the years. These documents were compiled after the colonial era by researchers interested in Nigerian languages from an academic perspective. Some are focused on ethnic groups; others are focused on languages.
- Greenberg era linguistic classification. These documents sought to elaborate Greenberg's proposals concerning Adamawa language classification. They do not provide extra data but are mainly speculation where the classification of Kam is concerned. They are valuable as overviews of the languages they treat and of the state of affairs of language classification at the time when they were published. They also contain useful bibliographical references.

[^21]- Local interest. These documents are locally produced collections or manuscripts that give some information about the Kam and their language. The people who produced them are interested in their own language or in the languages of their country or region. None of these have been officially published or distributed in large numbers. One document is a dictionary that was in preparation some years before I arrived. The author is unknown to me, and the existence of the project is only known to me through hearsay. Unfortunately, the project was abandoned after the author reportedly died of a snake bite. The location of the manuscript is unknown. Another document is a fragmentary summary of oral history, along with some administrative notes on the Kam, by a man called Bala Iliyasu, in the 1980s. The original manuscript, of which I took pictures, is in possession of the political king of Kam.
- Global linguistic classification effort. These documents are syntheses of the worldwide linguistic classification literature. They have been compiled as reference websites. Ethnologue (Eberhard et al. 2019) contains information about the context of languages, as well as speaker numbers (which are not always equally reliable), and provides a language classification. For Kam, the classification still follows Greenberg's (1963) proposal. Glottolog (Hammarström et al. 2019) provides a more up to date classification of languages along with a continually updated bibliography for each of the languages it covers.
- Re-examination of Adamawa languages. The documents under this context type are produced in the light of a recent academic effort to describe, document and analyze Adamawa languages.

Table 2 - Previous work on Kam

| Reference | Summary of contents | Type of document | Context |
| :--- | :--- | :--- | :--- |
| Temple (1919: 80-81) | Provides speaker numbers (583) of Kam and a <br> very basic (less than one page) summary of their <br> activities. | Ethnographic notes | Colonial Nigeria |
| Meek (1931b: 4, 398, 436, 449) | Passing notes comparing Kam culture with other <br> ethnic groups. | Ethnographic notes | Colonial Nigeria |
| Meek (1931c: 538-550) | Notes on the duties of the traditional chief of Kam, <br> Kam traditional religion, death and election of a <br> new chief, names of officials, social organization <br> and traditional marriage. A vocabulary with 98 <br> entries is included. | Ethnographic notes + | Word list |


| Wente-Lukas (1985) | Index of ethnic groups in Nigeria. Summarizes Temple's (1919), Meek's (1931b,c), Hansford et al.'s (1976) notes on Kam. | Ethnographic notes | Overview of Nigerian ethnic groups and languages |
| :---: | :---: | :---: | :---: |
| Boyd (1988) | Classification proposal of Adamawa languages. Kam is suggested to be more closely related to Mbumic languages and Kim/Masa than to Chamba Leko, Mumuye, Yendang, and Nimbari. Based on 17 of the words collected by Meek. | Classification | Greenberg era linguistic classification |
| Boyd (1989) | An overview chapter on Adamawa and Ubangi languages. It restates Greenberg's (1963) classification. | Classification | Greenberg era linguistic classification |
| Williamson \& Blench (2000) | An overview chapter on the classification of Niger-Congo languages, restating Greenberg's (1963) classification for Kam. | Classification | Greenberg era linguistic classification |
| Blench (n.d.) | A proposal for restructuring Niger-Congo that classifies Kam together with the Tula-Waja languages. | Classification | Greenberg era linguistic classification |
| Unidentified (n.d.) | An unpublished unfinished dictionary by an unidentified Kam author. Its whereabouts are unclear. | Word list | Local interest |


| Blench (2012) | Overview of Nigerian languages with alternative names, villages where languages are spoken, estimated speaker numbers, classification, and sources. For Kam, the Greenberg classification is followed. A new version of the Atlas has been published (2019), but the Kam data remains to be updated. | Classification | Overview of Nigerian ethnic groups and languages |
| :---: | :---: | :---: | :---: |
| Kleinewillinghöfer (2015) | Minimal grammatical and classificatory notes on Kam, along with a 200 -item word list. | Word list | Re-examination of Adamawa languages <br> (Grundlagenforschung in den <br> Adamawasprachen, Mainz, Germany) |
| Eberhard et al. (2019) (pre2016 editions) | Reference source that restates Greenberg's (1963) classification. Other minimal contextual information (population, location, endangerment status) is also available. | Classification | Global linguistic classification effort |
| Hammarström et al. (2019) (pre-2016 editions) | Reference source with continually updated classification and bibliography. It classified Kam as an isolated language within the Adamawa family. | Classification + <br> Bibliography | Global linguistic classification and bibliography effort |

### 1.4.2 During the current project

Table 3 summarizes the documents that have appeared over the course of this project. Most documents listed here are part of the current project and involve presentations on a specific topic of Kam phonology and morphosyntax. One reference (Idiatov et al. 2017) is concerned with the collection of a preliminary word list and grammatical questionnaire by Tope Olagunju and Bitrus Andrew. The elicitation of these materials was a pilot study to prepare for the current project and was funded by the AdaGram research project. Two sources (Güldemann 2018a, Hammarström 2019) are general references treating the classification of African languages in general, but taking into account recent research on Adamawa languages. I identified two locally produced documents dealing directly with Kam. One is a term paper by a local student addressing language shift from Kam to Hausa in Sarkin Dawa. I could not reach the student in question but heard about his project from others. The other is a summary of ethnographic and linguistic materials earlier published in Meek (1931c), along with some supplemented information the author (Anthony John Ante) gathered from Isa Sarkin Dawa, Garba Abubakar Bako and Muhammad Bose Yuguda.

| Table 3 - Studies that appeared over the course of this project |  |  |  |
| :---: | :---: | :---: | :---: |
| Reference | Summary of contents | Type of document | Context |
| Unidentified (n.d.) | Term paper by a local student addressing language shift from Kam to Hausa. I could not reach the student in question. | Specific topic | Local interest |
| Ante (2016) | Collection of materials on the history of Kam, mostly taken over from Meek (1931c), with some supplementary information gathered from interviews. | Ethnographic notes | Local interest |
| Idiatov et al. (2017) | Report of a survey of Adamawa languages, including the collection of 638 item word lists and 143 item grammatical questionnaires. | Word list | Re-examination of Adamawa languages (AdaGram project, Paris, France) |
| Hammarström et al. (2020) (post-2016 editions) | Reference source with continually updated classification and bibliography. The current classification of Kam in Glottolog considers it to be an isolated language in the North Volta-Congo sub-family of Niger-Congo languages. | Classification + <br> Bibliography | Global linguistic classification and bibliography effort |
| Güldemann (2018a: 202, 204, 212) | An evaluation of the current state of affairs of African language classification. It considers the possibility that 'Adamawa' groups may be small high-level Niger-Congo groups, and do not form a genealogical Adamawa unity. | Classification | Re-examination of African language classification |
| Pozdniakov (2018) | An attempt to reconstruct Proto-Niger-Congo numerals, where the data from Kleinewillinghöfer (2015) is used for Kam. | Specific topic | Re-examination of African language classification |


| Lesage (2018a) | Overview of negation; the information in the current dissertation supersedes that of the presentation. | Specific topic | Re-examination of Adamawa languages (AdaGram project) |
| :---: | :---: | :---: | :---: |
| Lesage (2018b) | Overview of tense, aspect and modality; the information in Lesage (2019d) and in the current dissertation supersedes that of the presentation. | Specific topic | Re-examination of Adamawa languages (AdaGram project) |
| Lesage (2019a) | A preliminary lexicon of Kam, containing 1,701 entries. The information in the current dissertation supersedes that of this preliminary lexicon. | Word list | Re-examination of Adamawa languages (AdaGram project) |
| Lesage (2019b) | A sample of Kam text and elicitation with audio. | Data sample | Re-examination of Adamawa languages (AdaGram project) |
| Lesage (2019c) | Some preliminary data on logophoric pronominals in Kam. The information in the current dissertation supersedes that of the preliminary data. | Specific topic | Re-examination of Adamawa languages (AdaGram project) |
| Lesage (2019d) | Overview of tense, aspect and modality; the information in the current dissertation supersedes that of the presentation. | Specific topic | Re-examination of Adamawa languages (AdaGram project) |
| Lesage (2019e) | Presentation about the difficulties to classify Kam within Niger-Congo. | Classification | Re-examination of Adamawa languages (AdaGram project) |
| Lesage (2019f) | Overview of adjectives; the information in the current dissertation supersedes that of the presentation, especially where tones are concerned. | Specific topic | Re-examination of Adamawa languages (AdaGram project) |


| Lesage \& Litvinova (2019) | Presentation on tone in Kam. The information in <br> the current dissertation supersedes that of the <br> presentation. | Specific topic | Re-examination of Adamawa <br> languages (AdaGram project) |
| :--- | :--- | :--- | :--- |

### 1.5 Materials, field work, and presentation of examples

### 1.5.1 Practical considerations

This description of Kam is the first analysis and is not comprehensive. The limited timeframe of my PhD project has imposed inevitable constraints on the breadth of the description and on the depth of the analysis. I have pointed out unanswered questions where appropriate, sometimes with an indication of how these questions could be answered in the future. While I have taken care to review all examples and analyses provided, I acknowledge that some inconsistencies may remain intact. As always, I will continue to revise my work beyond the scope of this document.

In the coming years, I am planning to continue my work on a comprehensive description of Kam. That description will be based on a more representative collection of data, collected for a coming two-year post-doctoral documentation project on Kam.

To encourage transparency and collaboration and/or independent projects, I am keeping an inprogress to-do list of incomplete analysis and open questions for every chapter. Upon request, I am happy to provide this list and further analytical considerations, which includes notes on those insightful comments that I was unable to fully process before handing in this document. ${ }^{45}$

### 1.5.2 General literature consulted

When establishing contact with the community, finding my way in the field, collecting data, analyzing those data and writing up the analysis, I consulted a number of field guides as well as questionnaires and textbooks that I would like to mention here.

- The fieldwork textbooks that I relied on most heavily are Bowern (2008) and Chelliah \& de Reuse (2011).
- Textbooks and basic articles on phonology and tone that I found particularly helpful are Gussenhoven (1998, 2004), Hall (2013), Hayes (2009), Hyman (2014), Johnson (2012), Ladefoged \& Johnson (2014); Ladefoged \& Maddieson (1996), Odden (2013), Smalley (1968), Snider (2018) and Yip (2002).

[^22]- General reference works and textbooks on morphosyntax that I consulted are Aikhenvald (2015), Creissels (2006), Dixon (2010a,b, 2012), Payne (1997) and Shopen (2007). Cristofaro (2005) was helpful as a general reference on subordination.
- The general analytical questionnaires I used were Comrie \& Smith (1977) and the questions at the end of chapters in Dixon (2010a,b, 2012).
- Translation questionnaires used to collect the lexicon are the AdaGram survey (Idiatov et al. 2017), the SIL comparative word list (Snider \& Roberts 2006) and the main questionnaire in Bouquiaux \& Thomas (1976). Analytical and translation questionnaires I used for data collection on specific grammatical topics are Goddard \& Wierzbicka's (2014) 150 canonical sentences, Pepper's (2020) questionnaire on binominal compounds, Dahl's (1985) tense, aspect and modality questionnaire, Kramer's (2017) questionnaire on phasal polarity and Miestamo \& Veselinova's (2019) negation questionnaire. I also used Mayer's (1969) Frog, where are you? to elicit semi-spontaneous narrative.

Grammatical descriptions that I often consulted for inspiration and that served as models for the current analysis are Elders' (2000) grammar of Mundang, Anonby's (2008) analysis of Mambay, Van de Velde's (2008) grammar of Eton, and Huddleston \& Pullum (2002) or Haeseryn (1997) when the only preliminary analysis I could come up with was the translation of a marker into English or Dutch. I was also inspired by Littig's (2017) concise and accessible description of Kolbila. Jaggar (2001) and Newman (2000) were my reference works for Hausa; De Wolf (1995) was my main reference for Fulfulde.

### 1.5.3 Description of field work

The data that form the basis of this analysis were collected in a number of different places in Nigeria under a number of different circumstances which I will briefly describe here.

I made five field trips to Nigeria in total, each trip one to two months in length. All trips were made from 2016 to 2018. I made two visits during the dry season, between October and December. I made three visits during the transition period between the dry season and the rainy season, between April and June. I spent a total of 174 days working with Kam speakers.

Part of the time during those trips was spent living in a Kam speaking community, in the central village Sarkin Dawa. I was there for a total of 85 days. In this village I met my main language consultants and I learned to speak some Kam. The political king of Kam, Isa Sarkin Dawa, is based in Sarkin Dawa and has been one of my main consultants throughout my field work. From Sarkin Dawa, I occasionally visited Sabon Gida Kamajim, a village that is not as close to the road and is less "urbanized". Many people in Sabon Gida Kamajim are followers of the traditional Kam religion, and they have cultural knowledge
that is difficult to find in Sarkin Dawa. There I recorded the bulk of the conversation and narratives making up my corpus, and there I fragmentarily documented a traditional dance, ìsúróv, that was performed in my presence. I visited a number of other Kam villages to collect some sociolinguistic data, such as estimations of the number of speakers and geographical coordinates, as well as some songs. During my first trip in Sarkin Dawa, I was generously hosted by Jauro Babangida Tukura and Isa Sarkin Dawa, who provided me with a generator to charge my equipment at night, with a place to sleep, work and store my belongings, with food, security and warm hospitality. During subsequent trips, I was hosted by one of my main consultants, Babangida Audu, whose family also provided everything I needed to be comfortable and productive in the village. To ensure a steady supply of electricity, Babangida and I locally acquired a solar panel and an accompanying battery.

For security reasons, I spent 85 days of my time in Nigeria in Jalingo, the capital of Taraba State, where I invited speakers of Kam to come and work with me. The data I collected there consist mostly of elicitation, respeaking, and translation of texts that I gathered in the Kam speaking area. I stayed in different places, notably CAN (Christian Association of Nigeria) Secretariat, the Pastoral Centre of the Catholic Diocese of Jalingo, and Alhaji Maigandi Kaigama's house, the current chief of Garba Chede. From those places, I travelled frequently to Sarkin Dawa. When space allowed it, I invited as many consultants as possible, which worked stimulating for everyone and which allowed me to gather more data.

Part of the data was the result of a preliminary survey in 2016 by Tope Olagunju and Bitrus Andrew, who established contact with the community and collected 500 lexical items and 140 phrases (Idiatov et al. 2017). Tope and Bitrus are part of the AdaGram team. Tope is a linguistics student who graduated at Kwara State University and did field work and linguistic analysis on Fam, a small, endangered language spoken in southern Taraba state not far from Kam. Bitrus is a native speaker of Bena and the main language consultant of Dmitry Idiatov and Mark van de Velde. They collected the data in the span of five days, when they stayed in Mayo Kam, the biggest, most urbanized village in the Kam speaking area. They worked with two consultants: the secretary of the king, Garba Abubakar Bako (on grammatical constructions), and Saheed Bala Kam (on the lexicon).

The third part of the data was collected in Ilorin, the capital of Kwara State, in the western part of Nigeria, during a brief stay there of a couple of weeks with Dmitry Idiatov and Mark van de Velde. Before travelling to the Kam speaking area, we invited Mr. Garba Abubakar Bako to come to Ilorin, so that I would have a preliminary way into the community. I worked with Abubakar for four days on various topics, which was my first real exposure to linguistic field work. A couple of days after that he drove back to Mayo Kam, I followed by airplane, and he came to pick me up at the airport in Jalingo.

Table 4 gives some more details of the field trips that form the basis of the data collection for this grammar, as well as a summary of what happened where and when.

Table 4 - Overview of field work in Nigeria

| Dates | Locations | Phase | Summary | Concrete data |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 5 \text { days } \\ & 05-08-2016 \text { to } \\ & 09-08-2016 \end{aligned}$ | Mayo Kam | Preliminary survey <br> by Tope Olagunju <br> and Bitrus Andrew | Lexical and grammatical elicitation with Garba Abubakar <br> Bako and Saheed Bala Kam, using the AdaGram questionnaire | 500 words <br> 140 phrases |
| 4 days $\begin{aligned} & 20-11-2016 \text { to } \\ & 23-11-2016 \end{aligned}$ | Ilorin | Field trip 1, Ilorin | Preliminary elicitation work with Garba <br> Abubakar Bako, using the AdaGram questionnaire | 13 sessions on basic vocabulary, basic expressions, and basic morphosyntax, 12 of which are recorded (4.5 hours); 2 small texts (3 minutes) |
| $\begin{aligned} & 36 \text { days } \\ & 01-12-2016 \text { to } \\ & 05-01-2017 \end{aligned}$ | Sarkin Dawa (Jauro Babangida Tukura's compound), Sabon Gida Kamajim (on occasion) | Field trip 1, Sarkin Dawa | First stay in Sarkin Dawa: establishing contact with people, learning some basic Kam, finding consultants, lexical and grammatical elicitation, struggles with tonal analysis, collection of texts, documentation of ǹsúríy dance. | 48 sessions on basic vocabulary, basic morphosyntax, 22 of which are recorded (16 hours); 20 texts (1 hour) |


| $\begin{aligned} & 48 \text { days } \\ & 04-05-2017 \text { to } \\ & 17-06-2017 \end{aligned}$ | Jalingo (CAN secretariat) and Sarkin Dawa (Babangida's house), various Kam villages (small trips) | Field trip 2 | Stay in Jalingo for security reasons, with weekly trips to Sarkin Dawa. Mostly elicitation for tonal analysis, paradigm elicitation, and checks of initial analyses; collection of metadata about villages; notable: recording of king's narrative of Kam oral history by Babangida Audu | 59 sessions on tonal analysis, paradigms and basic sentences, 14 of which are recorded (8.5 hours); 11 texts and songs (45 minutes) |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 22 \text { days } \\ & 06-10-2017 \text { to } \\ & 28-10-2017 \end{aligned}$ | Jalingo (Maigandi <br> Kaigama's house) and Sarkin Dawa <br> (Babangida's house), <br> Sabon Gida Kamajim <br> (on occasion) | Field trip 3 | Stay in Jalingo with frequent trips to Sarkin Dawa, eliciting words with a vocabulary game, respeaking and translation of previously collected texts, interviews on traditional life with people in Sabon Gida Kamajim, recording of spontaneous conversation in Sabon Gida Kamajim, recording of texts in Sabon Gida Kamajim | 67 interview segments and texts (6 hours); respeaking and translating of earlier collected texts; 29 sessions on elicitation and vocabulary checking, 4 of which were recorded (40 minutes); spontaneous unrecorded checks of dictionary |
| $\begin{aligned} & 43 \text { days } \\ & 26-04-2018 \text { to } \\ & 07-06-2018 \end{aligned}$ | Jalingo (Maigandi <br> Kaigama's house) and Sarkin Dawa <br> (Babangida's house) | Field trip 4 | Stay in Jalingo with frequent trips to Sarkin Dawa, invited 6 Kam speakers visiting Jalingo; respeaking, translating, and checking previous data; analyzing texts; elicitation with focus on negation and tense, aspect and modality | Respeaking and translating of earlier recorded texts and conversations; 38 elicitation sessions, including checks, 3 of which were recorded (9 minutes); 1 text (1 minute) |


| $15 \text { days }$ 31-10-2018 to 14-11-2018 | Sarkin Dawa <br> (Babangida's house) | Field trip 5, Sarkin <br> Dawa | Filling gaps in the analysis, elicitation on questions, adjectives, numerals, the noun phrase, complex sentences; recording missing words; recording a traditional prayer | Respeaking, <br> translating and analysis of texts; 18 elicitation sessions, 5 of which were recorded (3.5 hours); 1 text (1 minute) |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 10 \text { days } \\ & \text { 17-11-2018 to } \\ & 27-11-2018 \end{aligned}$ | Jalingo (Pastoral <br> Center) | Field trip 5, Jalingo | Filling gaps in the analysis, respeaking, translating and analyzing earlier collected texts; elicitation on verb classes; elicitation on negation | Respeaking, <br> translating and analysis of texts; 13 <br> elicitation sessions, <br> 1 of which was <br> recorded (1 hour); 1 <br> text (1 minute) |



Figure 13 - Elicitation session in Sarkin Dawa. From left to right, bottom to top: Audu, Muhammad Bose Yuguda, Awunu Yakubu, the author, Isa Sarkin Dawa in the chair, and five unidentified participants. ${ }^{46}$

[^23]
### 1.5.4 Presentation of examples

Examples in this grammar are presented as follows.

- The first line of an example presents the Kam text.
- The second line provides word-for-word translations and/or glosses for grammatical categories. Grammatical glossing and segmentation of morphologically complex lexemes have only been applied where this helps the interpretation of the example in its relevant context in the grammar.
- When appropriate for the analysis, a line is inserted between the first and second line that shows the lexical form of each item (including tone and morphologically analyzed morphemes). This presentation is useful to make transparent tone rules and other phonological or morphological processes that are applied. Grammatical tones and their glosses are indicated here with a backslash \.
(1)

| à̀ì | vān | $\bar{a}$ | táb | ó̀ né | kó | ttáb | â |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :--- |
| àní | ávān | $\bar{a}$ | tàb\H | àné | kó | àtábé | à |
| person | male | REL | touch\PFV | hand | INSTR fish | REL, |  |

'The man who touched the fish'
(session_048, Isa Sarkin Dawa, narrative)

- The following line shows a free translation.
- The final line of an example displays an ID referring to the recording session the example is taken from, mentions the speaker who provided the data or who produced the text, and gives a broad idea of the genre the example is taken from.


## II Part two: Phonology

## 2 Phoneme inventory

The current chapter discusses the phonemes and tones of Kam. In this chapter, phonological rules are only treated when relevant. Chapters 3 to 6 provide a more detailed description of the phonological rules. § 2.1 provides a terminological introduction. § 2.2 treats the consonant phonemes and their distribution in different syllable shapes and prosodic positions. § 2.3 does the same for vowels. 2.4 and § 2.5 provide evidence for the phonological status of the phonemes introduced in § 2.2 and § 2.3. Finally, I discuss some orthography decisions I made for the remainder of this thesis in § 2.6. I describe the tonal system of Kam in Chapter 3.

### 2.1 Introduction: phonemes, allophones, and intermediate relationships

In any language, two sounds are in a phonemic opposition if the choice between them is completely unpredictable on the basis of the phonological environment alone but is encoded in the lexicon. They share an allophonic relationship if the choice between them is completely predictable from a given phonological context. In Kam, in between two low vowels $a$ (a context that can be formalized as $/ a \_a$ ), either a voiceless labial-velar stop $k p$ could occur, or its voiced counterpart $g b$. Which one occurs in a given environment completely depends on the lexeme that is being pronounced. Therefore, $k p$ and $g b$ are in a contrastive distribution and their relationship is phonemic. An alveolar stop in prepausal position (/_仓) will always be unreleased in Kam ([ $[\mathrm{t}]$ ). It will never be a released voiced stop $d$ or a released voiceless stop $t$ that we find in other positions. That is, $\vec{t}$ is in complementary distribution with both $d$ and $t$ and is in an allophonic relationship with either of them. If the choice between two sounds is completely unpredictable both from the lexicon and from the phonological environment, they are allophones in free variation. In Kam, this is usually the case for $r, \vec{t}$ and $l$ in prepausal position: the verb meaning 'farm' can be pronounced either as bàl, bàr, or as bàt.

Allophonic and phonemic relationships are usually taken as the two basic relationships between the sounds of a language. There are, however, a number of intermediate phonological relationships that should be taken into account when describing a language (cf. Hall 2013). Firstly, phonological environment is a broad term: it includes (supra)segmentally defined environments (e.g. intervocalic position, prepausal position), but also positions within the syllable (onset, rhyme, coda), and prosodically defined environments (stressed vs. unstressed syllables). For some sound pairs, one could say that the occurrence of one sound or another is not predictable on the basis of the segmental environment alone, but if the syllable structure or the prosodic structure are taken into account, it becomes predictable. In Kam, for example, velars in prosodically weak positions (àygwóg 'house') are realized as a voiced velar stop in intervocalic position,
or as a lenited variant of a voiced velar stop, see $\S 44.2 .5$. A voiceless velar stop can never occur here. In prosodically strong, positions, $/ \mathrm{k} /$ and $/ \mathrm{g} /$ do contrast (/àná kı̀m/ 'father of the place' vs. /àná gゝ̀m hǹ/ 'father did not pay'). Such a relationship is intermediate between phonological contrast (the choice is unpredictable if we do not take into account the prosodic structure) and allophony (the choice is predictable in prosodically weak positions). Secondly, the choice between two sounds can be predictable in most parts of the lexicon but not in a specific layer of the lexicon. For example, ideophones and recent borrowings may contain sounds that do not occur elsewhere, or they may be subject to phonological rules that do not apply elsewhere. Such marginal phonological contrasts and rules need to be acknowledged explicitly in the phonological analysis of a language.

In each section of this chapter, a summary is provided of the syllabic and prosodic contexts where each sound is contrastive or more predictable. Phonological properties of different prosodic positions are discussed in chapter 3. Syllable structure is treated in chapter 5. The phonological rules that operate within syllables and prosodic units are also given more treatment in those chapters than in this first overview chapter. In chapter 6 , I provide an overview of the phonological changes that may take place when certain segments happen to be adjacent to each other, such as hiatus resolution and nasalization. Chapter 6 also discusses free variation and allowed consonant clusters.

Sounds that only occur in interjections are excluded from this overview, but can be found in the discussion of interjections in Chapter 1.

### 2.2 Consonants and their distributions

### 2.2.1 Consonant inventory

For consonants, seven manners of articulation are recognized. All non-sonorant consonants have a voicing contrast, except for the postalveolar fricative $\int$ and the glottal fricative $h$ which do not have voiced counterparts. Eight places of articulation are contrastive, although the glottal $h$ has a low functional load in the lexicon. Table 5 presents all consonants found in Kam.

Table 5-Consonant phonemes in Kam

|  | bilabial | labio- <br> dental | alveolar | post-alveolar | palatal | velar | labial-velar | glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| voiceless stop <br> voiced stop | p <br> b |  | $\left\lvert\, \begin{aligned} & \mathrm{t} \\ & \mathrm{~d} \end{aligned}\right.$ |  |  | k <br> g | $\mathrm{kp}$ <br> gb |  |
| voiceless affricate voiced affricate |  |  |  | $\begin{aligned} & \mathrm{t} \\ & \text { d } \end{aligned}$ |  |  |  |  |
| nasal | m |  | n |  | n | y |  |  |
| tap |  |  | ¢ |  |  |  |  |  |
| voiceless fricative voiced fricative |  | $\mathrm{f}$ | $\begin{aligned} & \mathrm{s} \\ & \mathrm{z} \end{aligned}$ | ऽ |  |  |  | h |
| approximant |  |  | 1 |  | j |  | w |  |

Kam has 24 consonants that contrast in some phonological environment. The phonemes $/ \mathrm{f} / \mathrm{and} / \mathrm{h} /$ have a peculiar distribution in the lexicon. In most lexemes, [r] is in complementary distribution with /l/ or /d/ (see § 4.2.6). Where /r/ is not in complementary distribution with /l/ or /d/ it occurs in (mostly) ${ }^{47}$ strong prosodic positions in proper names, borrowings, some high-frequency markers, bound morphemes and just a few items from the general lexicon.

[^24]```
(2) -f' 'iterative derivation suffix'
-rì 'nominalizing suffix'
fì 'comitative preposition' and 'imperfective marker'
rì 'postverbal negative future marker'
rt '' 'preverbal negative future marker'
rig 'emphatic marker' and 'negative possessive marker'
sìr̄̀ 'negative copula'
hác '(not) until', a borrowing, likely from Hausa (har) or Adamawa Fulfulde (har)
kì\etakìnduírí 'person name'
wàrkû 'person name'
kùr̀̀kî 'God'
àrí' 'type, like'
àkprà 'plate'
ḿprîm 'okra'
múrô 'maize'
jīrāg 'two'
wūrī 'to answer, to like'
```

$/ \mathrm{h} /$ occurs in only three items in the currently collected lexicon of Kam, which has approximately 1,550 Kam entries (see the lexicon at the end of this grammar).
at the end of this grammatical description):
(3) hǹ 'negator'
hác '(not) until', a borrowing, likely from Hausa (har) or Adamawa Fulfulde (har)
hwás 'to think'

Depending on whether such rare phonemes are taken into account and the definition of phoneme used, Kam has an average-sized (minimally 22) to moderately large (maximally 26) consonant inventory as compared to other languages of the world (cf. Maddieson 2013d).

### 2.2.2 Distributions of consonants in syllables and prosodic positions

The positions of each sound in syllables and prosodic positions are summarized in Table 6. The sounds are ordered from least predictable (occurring in many environments without restrictions) to most predictable
(occurring in fewer environments, sometimes in complementary distribution with other sounds). A white cell with a ' + ' indicates that the sound occurs in that position and thus contrasts with other sounds that occur there. A grey cell with an empty-set symbol ' $\varnothing$ ' means that the sound in question does not occur in that position and thus does not contrast with any other sound occurring there. In the table, stops with a neutralized voice feature are written with capitals, e.g. as $\mathrm{P}, \mathrm{T}$ and $\mathrm{K} .{ }^{48}$

Most contrasts are only relevant in prosodically strong syllable onsets. Only ten consonants appear in prosodically weak positions:

- bilabial, alveolar and velar stops (without voice distinction, i.e. P, T and K),
- all nasals $(m, n, \eta)$ except for the palatal nasal,
- the approximants $j, w$ and $l$, and
- the tap $r$

By way of exception, in partial reduplication constructions, all consonants can occur in the copy, which is considered prosodically weaker than the base in a number of ways (cf. § 4.3.2).

The conclusions one can draw on the basis of this table and the consonant inventory presented in Table 5 are the following.

- All of these sounds are contrastive in Kam when segmental environments alone are considered.
- In prosodically weak positions, all contrasts are neutralized except: (a) places of articulation for bilabial, alveolar and velar stops, nasals and approximants and their contrasts with the palatal approximant $j$; (b) manners of articulation for bilabial, alveolar and velar consonants and approximants.
- Coda position is a kind of weak position in Kam and behaves similarly to onset positions in prosodically weak syllables.

[^25]Table 6 - Distributions of consonants

|  | Strong <br> syllable <br> onset | Weak positions (including syllable codas) |
| :---: | :---: | :---: |
| m | + | + |
| J | + | + |
| j | + | + |
| ¢ | + (but rare) | + (but rare) |
| f | + | $\emptyset$ |
| s | + | $\emptyset$ |
| J | + | $\emptyset$ |
| t | + | $\varnothing$ |
| kp | + | $\emptyset$ |
| p | + | $\emptyset$ |
| t | + | $\emptyset$ |
| k | + | $\emptyset$ |


|  | Strong syllable onset | Weak positions (including syllable codas) |
| :---: | :---: | :---: |
| n | + | + |
| w | + | + |
| 1 | + | + |
| j | + | $\emptyset$ |
| v | + | $\emptyset$ |
| z | + | $\emptyset$ |
| h | + (but rare) | $\emptyset$ |
| ds | + | $\emptyset$ |
| gb | + | $\emptyset$ |
| b | + | $\emptyset$ |
| d | + | $\emptyset$ |
| g | + | $\emptyset$ |


| P(no voice <br> contrast) | $\varnothing$ | + |
| :--- | :---: | :---: |
| K (no voice <br> contrast) | $\varnothing$ | + |


| T (no voice <br> contrast) | $\varnothing$ | + |
| :--- | :--- | :--- |

### 2.3 Vowels and their distributions

### 2.3.1 Vowel inventory

### 2.3.1.1 Oral monophthongs

Kam contrasts eight vowel qualities, with four heights and three degrees of backness: $/ \mathrm{i}, \mathrm{e}, \varepsilon, \mathrm{i}, \mathrm{a}, \mathrm{u}, \mathrm{o}, \mathrm{\jmath} /$. The functional load of some of the oppositions, viz. between $i$ and $i, e$ and $\varepsilon$, and $o$ and $\jmath$, is very low and we find only a very limited number of (near-)minimal pairs for these oppositions. ${ }^{49}$ The choice between $i$

[^26]and $i, e$ and $\varepsilon$, and $o$ and $\jmath$ is often but not always predictable once we take into account syllable structure and prosodic strength (cf. § 2.3.2 below). By and large, the two degrees of backness (front and back) are really important, and for most of the lexicon, only three heights have to be distinguished (low, mid and high). As compared to other languages around the world, Kam has an average (minimally five) to large (maximally eight) vowel inventory (cf. Maddieson 2013a). There is no vowel harmony. As in most languages without a roundedness contrast, front vowels and low back vowels are unrounded, while lowmid and higher back vowels are rounded. The following figure gives an idea of the language's vowel space. It is based on data from just one male speaker, Solomon Ahmadu, who is 26 years old and lives in Sarkin Dawa. ${ }^{50}$


Figure 14 - Preliminary vowel space of Kam

[^27]
### 2.3.1.2 Nasal monophthongs

There are four phonologically nasal vowels: $\tilde{v}, \tilde{e}, \tilde{o}$ and $\tilde{a}$. They are rare in the lexicon, as evidenced by the counts in Table 7. Because the nasal vowels can be considered nasal equivalents of both vowels in the $i-i$, $e-\varepsilon$, and $o-\supset$ pairs, Table 7 counts the paired vowels together in the relative frequency counts ${ }^{51}$.

Table 7 - Counts of oral and nasal vowels in stems

| Vowel quality | $\mathbf{N}$ of oral attestations | $\mathbf{N}$ of nasal attestations | Total |
| :--- | :--- | :--- | :--- |
| i \& $\dot{y}$ | $248(97 \%)$ | $7(3 \%)$ | 255 |
| e \& \& | $130(92 \%)$ | $12(8 \%)$ | 142 |
| o \& o | $137(95 \%)$ | $7(5 \%)$ | 144 |
| a | $423(97 \%)$ | $14(3 \%)$ | 437 |
| Total | $938(96 \%)$ | $40(4 \%)$ | 978 |

As is cross-linguistically common, the quality of high nasal vowels is often perceived lower and that of low nasal vowels as higher than their non-nasal counterparts (Beddor 1993: 187, 188). As a result of this, the contrast between $\tilde{l}$ and $\tilde{e}$ is usually blurred in phonological contexts where the $\tilde{e}$ is raised because of surrounding consonants (cf. § 6.3.1). [ẽ] and [ĩ] appear in free variation in such cases. In my data there is, however, still a minimal pair contrasting $\tilde{l}$ and $\tilde{e}$ in such a position: [ǹté̃] 'tendon' vs. [ǹtíl] 'bow'. This serves as an example of how phonological relationships may exist somewhere in between phonemic and allophonic and how a segment can be marginally distinctive in a language.

[^28]I do not provide a vowel space for nasal vowels as I have done for oral vowels in Figure 14. Formant values obtained for nasal vowels are not comparable to those for oral vowels due to interactions with other acoustic factors. Instead, Figure 15 gives the approximate position of nasal vowels on a vowel diagram.


Figure 15 - Nasal vowels

### 2.3.1.3 Vowel length

All native lexical items in Kam derive their vowel length from the combination of two short vowels.
When two same-quality vowels meet, the result is typically one long vowel. Such vowels are, however, in free variation with short vowels. Where the result is a long vowel, this can lead to contrasts and nearminimal pairs.

$$
\begin{align*}
& \text { àt } \mathrm{i} \text { 'child' + ígbàn 'female' } \rightarrow \text { /àtfígbàn/ or /attígbàn/ 'daughter, girl, girlfriend' }  \tag{4}\\
& \text { vs. àtyî 'child' + àgbàn 'wife' } \rightarrow \text { /àtīgbàn/'wife's daughter' } \\
& \text { nì̀ 'thing' + ífò 'hot' } \rightarrow \text { /niífò/ 'living being' }  \tag{5}\\
& \text { vs. nì } 111 \text { 'snake' } \\
& \text { zá 'side' + ágbàn 'female' } \rightarrow \text { /záágbàn/ 'left side' } \tag{6}
\end{align*}
$$

This is the only regular situation in which vowel length is contrastive. A possible exception, where vowel length is lexically specified, is the long vowel $i$ : in àlàmî:s 'Thursday', a borrowing, likely from Hausa ( 'Alhamis - originally from Arabic yoom al-khamiis ‘Thursday').

### 2.3.1.4 Diphthongs

Most diphthongs in Kam result from an optional diphthongization of $e, \tilde{e}, \tilde{z}, \supset$ and $\tilde{o}$ in prosodically strong positions (cf. § 4.2.8, § 6.2.2.1). A few special cases need to be mentioned here, however.

The occurrence of [ĩẽ] is generally predictable as an allophone of /ẽ/ (cf. § 6.2.2.1). In one noun, however, it does not alternate with either [ẽ] or [ĩ]. àliẽ̀ 'armband' is always pronounced [àlì̀̀̀], and as such forms a minimal pair with the noun àlè̀ 'cave', which can be pronounced either [àlî̀̀̀] or [àlè̀]. In àlıë̀, riè̀/ may thus be considered a phonological diphthong. It is possible that the /liè̀/ sequence here is the result of a recent merger of two CV syllables (i.e. $l i ̀+j e ̀ ̀)$.

Kam allows three types of Vj-sequences within one syllable: /oj/, /عj/ and /ãj/.
My decision to analyze these as Vj sequences and not as diphthongs is an analytical decision to keep the phoneme inventory as simple as possible. Alternatively, an analysis where they are regarded as diphthongs is currently also possible. More research is needed to establish whether they can in fact be analyzed as true diphthongs or not, e.g. by testing whether the second vowel can be realized as an approximant.

In the currently collected lexicon of approximately 1,550 entries, there is only one stem with $/ \mathrm{j} \mathrm{j} /$, there are thirteen stems with $/ \mathrm{kj} /$, and there are six stems with $/ \mathrm{a} \mathrm{j} /$ in the data.

## s $\mathbf{j} \mathbf{j}$ 'iron’

vs. -sí 'causative suffix'
vs. sé '(not) until'
vs. sá 'monkey'
vs. sù 'section of an ethnic group'
vs. tàsò 'dish'

```
(8) ty'j 'jerboa`
    vs. àtÍ 'child'
```



```
    vs.ǹtfí 'bow'
    vs. ffè 'guinea corn'
    vs.àtfée 'war'
    vs. f(\overline{u} 'maternal uncle'
    vs. ǹt/\tilde{\widetilde{0}}\mathrm{ 'coco yam'}
    vs.ábetya`` 'blue'
    vs.ǹt\a\tilde{a} 'star'
    ní mfố `séj 'clan, sp.'
    vs. sé '(not) until'
    vs. àsé 'tail'
    vs. láPásós 'alligator'
(9) kằj 'falcon'
    vs. kùrìkî 'God'
    vs. kí 'instrumental preposition'
    vs. kú 'magic'
    vs. k0 52 'to clap'
    vs. àtàké 'person name'
    vs. k\tilde{\tilde{0}}\mathrm{ 'that (far) place'}
    vs. ka\tilde{a}}\mathrm{ 'this (near) place'
    vs. kà 'to break (something long)'
    yinnà̀j 'twin'
    vs. \mgbètè 'pouched rat'
    vs. \grave{k}\mathrm{ \̀nt\̀ró 'person name'}
```

[^29]In a similar fashion, Kam allows /aw/ sequences (pronounced as [^w], cf. § 6.3.4). These can, at this point, in principle be analyzed as diphthongs, but since they are so rare, I did not include them in the phoneme inventory. They are considered VC sequences here.
(10) /gàw/ 'ribs'
vs. gè 'what?'
vs. gó 'guest'
vs. gá 'trap'

### 2.3.2 Distributions of vowels in syllables and prosodic positions

The following table illustrates the syllabic and prosodic positions in which each vowel phoneme occurs. All vowel phonemes occur in prosodically strong open syllables, where they are maximally contrastive. Only six vowels are contrastive in prosodically weak CV-syllables. Of those, $o$ only contrasts with $\supset$ in a specific pair that is illustrated in § 2.5.1.4. In prosodically weak positions the opposition between $[\varepsilon]$ and [e] is neutralized after some consonants and [i] occurs in free variation with [i], which is not the case in prosodically strong positions (cf. § 4.2.7). These are but two examples of many contrasts that are neutralized in prosodically weak positions. In closed syllables, even in strong position, many contrasts are similarly neutralized, including the distinction between [o] and [ 0 ] - only [ 0 ] occurs here. Notably, /ã/ occurs as the only nasal vowel in closed syllables, but only before $/ \mathrm{j} /$, where it is realized as [ $\tilde{\varepsilon}$ ] (cf. example (9) above). $/ \mathrm{i} /$, $\mathrm{u} /$ and $/ \mathrm{a} /$ are maximally contrastive and have the highest functional load of all vowel phonemes, occurring in all possible environments, including V-syllables and VN-syllables.

Table 8 - Syllabic and prosodic positions of vowels

|  | Strong CV syllables | Weak CV syllables | CVC syllables | V/VN syllables |
| :---: | :---: | :---: | :---: | :---: |
| u | + | + | + | + |
| a | + | + | + | + |
| i | + | + | $\begin{aligned} & \text { (except after } l, j, t, c, c, f, f, v, t, \\ & n \text { where } i \text { dominates with } \\ & \text { some free variation with } i) \end{aligned}$ | + |
| $\varepsilon$ | + | (except after $P, \mathrm{~K}, m, n, r, l, j$ where $e$ dominates with some free variation with $\varepsilon$ ) | + | $\varnothing$ |
| $\bigcirc$ | + | + | + | $\varnothing$ |
| o | + | + | $\varnothing$ | $\emptyset$ |
| a | + | $\emptyset$ | + | $\emptyset$ |
| e | + | only following $P, K, m, n,\ulcorner, l$, j | $\varnothing$ | $\varnothing$ |
| i | + | free variation with $i$ | only following $l, j, t f, d \zeta, \int, f, v$, <br> $t, n$ | free variation with $i$ |
| iẽ | + | $\varnothing$ | $\varnothing$ | $\varnothing$ |
| е | + | $\varnothing$ | $\varnothing$ | $\emptyset$ |
| I | + | $\varnothing$ | $\varnothing$ | $\varnothing$ |
| $\tilde{\mathbf{o}}$ | + | $\varnothing$ | $\varnothing$ | $\varnothing$ |

### 2.4 Evidence for contrasts: consonants

In the following survey of evidence for consonantal contrasts, minimal pairs, near-minimal pairs, and similar contexts are provided to illustrate the phonological status of each phoneme. Near-minimal pairs where the only confounding factor is a different tonal pattern are taken as near-equivalent to minimal pairs. These are provided without any comment. In other cases, where no minimal pairs are available, this is noted.

### 2.4.1 Manner of articulation contrasts

### 2.4.1.1 Voiceless stops and affricates $\mathbf{p}, \mathrm{kp}, \mathrm{k}, \mathrm{t}, \mathrm{ff}$

Minimal pairs with $/ \mathrm{kp} /$ are sometimes difficult to find due to the relative infrequence of this phoneme. For the $/ \mathrm{p} / \mathrm{vs}$. $/ \mathrm{f} /$ contrast no (near-)minimal pairs were found.

Table 9 - Contrasts: voiceless stops and affricates

|  | p | kp | k | t |
| :---: | :---: | :---: | :---: | :---: |
| kp | pâj 'axe' <br> kpējmī 'twenty' |  |  |  |
| k | ápú 'bag' <br> ákú 'cobra' | kpát 'to rain' <br> kát 'to accompany' |  |  |
| t | pàk 'kitchen’ tàk 'to lay' | ákpát 'near' àtáßí ‘fish’ | àkàt 'ear' àtảt 'stone' |  |
| t5 | àpàp àbàn 'beer kitchen' àtāgbbàn 'younger sister' | kpáp 'to mix' tyáp 'to knead' | kú 'snake, sp.' <br> tyū 'maternal uncle' | ǹtóy 'mountain' ǹtfón 'pig' |

### 2.4.1.2 Voiced stops and affricates $\mathbf{b}, \mathrm{gb}, \mathrm{g}, \mathrm{d}, \mathrm{d} \boldsymbol{d}$

Table 10 - Contrasts: Voiced stops and affricates

|  | b | gb | g | d |
| :---: | :---: | :---: | :---: | :---: |
| gb | àbák 'knife' àgbák 'stool' |  |  |  |
| g | àbák 'knife' àgák 'branch' | àgbák 'stool' àgák 'branch' |  |  |
| d | àbè̀t 'egg' àd $\grave{t}$ ' 'belly' | àgbét 'neck' àd $\grave{\text { tht }}$ 'belly' | àgòm 'forehead' àdóm 'beard' |  |
| ds | àbòk 'leg' àdjoेk 'ant, sp.' | gbèrí 'to scratch' dנ $\bar{\varepsilon} \mathrm{r} \overline{1}$ 'to look' | gúp 'to chase' <br> djùp 'six' | àdóm 'beard' àdsóy 'saliva' |

### 2.4.1.3 Nasals m, n, n, n

No minimal pairs were found for the contrast between $/ \mathfrak{y} /$ and $/ \mathrm{n} /$.
Table 11 - Contrasts: Nasals

|  | m | y | n |
| :--- | :--- | :--- | :--- |
| y | ǹtf'́m 'hoe' <br> ǹtf'́n 'pig' |  |  |
| n | àmí 'dew' <br> àní 'arm' | àyámtí 'yawn' <br> àpá 'person:REL' |  |
| n | àwám 'evil person' <br> àwàn 'king' | àgbán 'chin' <br> àgbàn 'wife' | àná 'person:REL' <br> ànā 'day' |

### 2.4.1.4 Voiceless fricatives $\mathbf{f}, \mathbf{s}, \boldsymbol{f}, \mathrm{h}$

No minimal pairs for the opposition between $\int$ and $h$ were found.
Table 12 - Contrasts: Voiceless fricatives

|  | f | s | ऽ |
| :---: | :---: | :---: | :---: |
| s | f $\grave{t g}$ 'to clean’ sı̀t 'room' |  |  |
| J | àfíp 'calf' àjip 'shit' | sàk 'basket' fảk 'to laugh' |  |
| h | fát 'to wrap' hár '(not) until' | sát 'to comb' <br> hár '(not) until' | Jàk 'laugh, n.' <br> hár '(not) until' |

### 2.4.1.5 Voiced fricatives $v$ and $z$

$v \varepsilon ̀ l$ 'to twist' vs. zèl 'to take from fire'

### 2.4.1.6 Approximants $\mathbf{w}$, $\mathbf{j}$, lateral approximant $l$, and tap r

No (near-)minimal pairs were found for the opposition between $/ \mathrm{w} /$ and $/ \mathrm{f} /$ because of the rarity of $/ \mathrm{f} /$ (cf. § 2.2.1). No minimal pairs were found for the distinction between $/ 1 /$ and $/ \mathrm{f} /$, but a near-minimal pair was found.

Table 13 - Contrasts: Approximants and the tap

|  | w | j | l |
| :--- | :--- | :--- | :--- |
| j | àwárî 'noise' <br> àjárî 'width' |  |  |
| l | wùbìrí 'to pour' <br> lùbìrí 'to remove' | jàk 'to carry' <br> làk 'to lick' |  |
| r | n/a | jī 'question marker' <br> -rí 'iterative suffix' | àlı́b â 'this head' bá 'like this' |

### 2.4.2 Place of articulation and voicing contrasts

### 2.4.2.1 Labials $p, b, k p, g b, m$ and $w$

No minimal pairs were found for the opposition between $/ \mathrm{p} /$ and $/ \mathrm{m} /$ and for the contrast between $/ \mathrm{kp} /$ and /m/.

Table 14 - Contrasts: Labials

|  | p | b | kp | gb | m |
| :---: | :---: | :---: | :---: | :---: | :---: |
| b | ápú 'bag' <br> àbù 'tree, sp.' |  |  |  |  |
| kp | pźj 'axe' <br> kp $\bar{\varepsilon} j m i ̄ ~ ' t w e n t y ' ~$ | bò 'ten' <br> kpò 'body' |  |  |  |
| gb | pòpsí 'to press together' <br> gbòrù 'stream' | àbāk 'branch' àgbāk 'stool' | àkp $\grave{\mathrm{c}} \mathrm{p}$ 'shoulder' àgbètt 'neck' |  |  |
| m | pè 'to come' mènsí 'to scatter' | àbì 'soil' <br> àmí 'dew' | kpètí 'to tire' mènsí 'to scatter' | gbst̀ 'to remove' mèt' 'to swallow' |  |
| w | ápú 'bag' <br> àwù 'seed' | àbù 'tree, sp.' <br> àwù 'seed' | kpò 'body' <br> wō 'dog' | àgbàn 'wife' àwàn 'king' | màr̀̀ 'river' <br> wàrì 'to dream' |

### 2.4.2.2 Labiodentals $f$ and $v$

(11) à fàm 'meat' àvàm 'clay'

### 2.4.2.3 Palatals $\mathbf{n}$ and $\mathbf{j}$

(12) j $\quad$ 追p ' $\mathrm{go}^{\prime}$
j $\varepsilon$ p 'fry'

### 2.4.2.4 Alveolars $\mathbf{t}, \mathrm{d}, \mathrm{n}, \mathrm{r}, \mathrm{s}, \mathrm{z}, \mathrm{l}$

Only near-minimal pairs were found for the distinction between $/ \mathrm{z} /$ and $/ \mathrm{f} /$.
Table 15 - Contrasts: Alveolars

|  | t | d | n | r | S | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d | t $\overline{\mathrm{p}} \overrightarrow{\mathrm{p}}$ 'to press' d $\varepsilon$ p 'to buy' |  |  |  |  |  |
| n | túk 'mortar' nũ̀구 'to have sex' | dúk 'to follow' nùk 'to have sex' |  |  |  |  |
| r | sètí 'to tear' djērī 'to look' | dîk' 'to hiccough' rìk 'emphasis' | mánî 'fish, sp.' <br> márî̀ 'river' |  |  |  |
| S | ǹtòk 'penis' ǹs ${ }^{2}$ ' 'salt' | dín 'to meet' sín 'to do' | nã̀p 'to cut' sàp 'to grab' | kàrí 'to keep' <br> kàsí 'to branch' |  |  |
| Z | tùp 'to press' zùp 'to steal' | dúk 'to follow' zùk 'grass' | nùk 'to have sex' zùk 'grass' | múrô 'maize' zùzó ${ }^{\downarrow}$ 'í 'bitter' | sáy 'to go' <br> zày 'to wrestle' |  |
| 1 | tc̀k 'to run' l $\stackrel{\rightharpoonup}{k}$ 'to hear' | dók 'to see' <br> loे̉ 'to deliver' | nìm 'to eat' <br> lìm 'to dive' | àŕ́ bá 'like this' àlı́b â 'this head' | sá 'monkey' <br> là 'skin' | zày 'to wrestle' <br> láy 'to cook' |

### 2.4.2.5 Postalveolars tf, d\}, $\boldsymbol{f}$

Table 16 - Contrasts: Postalveolars

|  | t | d3 |
| :---: | :---: | :---: |
| t5 |  |  |
| ${ }^{4}$ | t $\mathrm{f} \mathfrak{\mathrm { t }}$ 'to throw a spear' dj3̀t 'to descend' |  |
| J | t 5 jेk 'earthworm' <br> f j k 'monitor lizard' | djàk 'to whisper' fảk 'laugh, n.' |

### 2.4.2.6 Velars k, g, kp, gb, $\boldsymbol{y}$

No minimal pairs were found for the opposition between $/ \mathrm{h} /$ and other consonants, because of its rarity.
Table 17-Contrasts: Velars and glottal consonants

|  | k | g | kp | gb | y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| g | j̀kùròk 'throat' ńgúrôk ‘beetle, sp.' |  |  |  |  |
| kp | kát 'have' <br> kpát 'to rain' | gá 'trap, n.' <br> kpá 'grazing ground' |  |  |  |
| gb | àkírák 'fence' àgbìràk 'bird, sp.' | àgák 'branch' àgbák 'stool' | kpá 'wrapper' gbắ 'flute, sp.' |  |  |
| 1 | àdsíkífŕ' 'armpit' àḑ́tı́ńṛ̂̂ ‘foolish’ | àgùm 'hole' àwù 'seed' | kpá 'wrapper' yàtí 'to open' | gbàm 'to sew' <br> yàtí 'to open' |  |
| h | kát 'to have' <br> hár '(not) until' | gá 'trap, n.' <br> hár '(not) until' | kpát 'to rain' <br> hár '(not) until' | gbàm 'to sew' <br> hár '(not) until' | yàtí 'to open' <br> hár '(not) until' |

### 2.5 Evidence for contrasts: vowels

In the following survey of evidence for vowel contrasts, minimal pairs, near-minimal pairs, and similar contexts are provided to illustrate the phonological status of each phoneme. Near-minimal pairs where the only confounding factor is a different tonal pattern are taken as near-equivalent to minimal pairs. These are provided without any comment. In other cases, where no minimal pairs are available, this is noted.

### 2.5.1 Height contrasts

### 2.5.1.1 High (i, i, u) vs. low (a)

Table 18 - Contrasts: High and low vowels

| i vs. a | i vs. a | u vs. a |
| :--- | :--- | :--- |
| ḑ̀i 'bat' | nìm 'to eat' | bū ${ }^{\text {'to }}$ 'to pinch' |
| ḑá 'seed' | nám 'buffalo' | bàk 'to stab' |

### 2.5.1.2 High (i, i, u) vs. high-mid (e, o)

Table 19 - Contrasts: High and high-mid vowels

| i vs. e <br> àjì 'world' <br> àjè 'intestines' | i vs. e <br> dí rî 'to be with' <br> dèrí 'to draw' | u vs. e <br> àdéń 'yam' <br> àḑé 'moon' |
| :--- | :--- | :--- |
| i vs. o <br> nì 'thing' <br> nò 'you (plural)' | i vs. o <br> dí 'to be' <br> dó 'to insult' | u vs. o <br> zúrí 'to ululate' <br> zórî 'fish, sp.' |

### 2.5.1.3 High (i, i, u) vs. low-mid ( $\boldsymbol{\varepsilon}, \mathbf{\jmath}$ )

Table 20 - Contrasts: High and low-mid vowels

| i vs. $\varepsilon$ <br> àlíp 'head' <br> àlép 'evening' | ivs. $\varepsilon$ <br> kpit 'to brew' <br> $\operatorname{kpet}^{73}$ 'to shiver' | u vs. $\varepsilon$ <br> bùntí 'drive' <br> bèntí 'pants' |
| :---: | :---: | :---: |
| i vs. 3 <br> à fib 'shit' <br> àjı̀b 'wind' | i vs. $\quad$. <br> bitt 'to blow' <br> b̀t 'to go up' | u vs. 9 àgùm 'hole' àg̀̀m 'forehead' |

### 2.5.1.4 High-mid (e, o) vs. low-mid ( $\varepsilon, \mathfrak{o}$ )

These oppositions are fairly feeble, and only surface in some prosodic and syllabic contexts (cf. § 2.2.2). No minimal pairs are found for the opposition between $o$ vs. $\rho, e$ vs. $\rho$ and $o$ vs. $\varepsilon$.

[^30]
## Table 21 - Contrasts: High-mid and low-mid vowels

| e vs. $\boldsymbol{\varepsilon}$ | e vs. 9 | 0 vs. $\varepsilon$ | o vs. 0 |
| :---: | :---: | :---: | :---: |
| dèrí 'to draw' | fyèrí 'to chop' | jórú 'flood' | àbò?ò 'night' |
| dērī 'to snore' | ty ${ }^{\text {t }}$ 'to throw a spear' | jèrí 'to suffice' | àbゝ̀? ú 'his leg' |

### 2.5.1.5 Low (a) vs. high-mid (e, o)

Table 22 - Contrasts: Low and high-mid vowels

| a vs. e | a vs. o |
| :--- | :--- |
| mā 'to give you' | kpá 'wrapper', |
| $m \bar{e}$ 'to give them' | kpò 'body' |

### 2.5.1.6 Low (a) vs. low-mid ( $\varepsilon$, s)

Table 23 - Contrasts: Low and low-mid vowels

| a vs. $\boldsymbol{\varepsilon}$ | a vs. $\boldsymbol{s}$ |
| :--- | :--- |
| àbák 'Knife' | tfăt 'three' |
| àbèk 'jealousy' | tyj̀t 'to throw a spear' |

### 2.5.2 Backness contrasts

### 2.5.2.1 Front (i, e, $\varepsilon$ ) vs. back ( $\mathbf{u}, \mathbf{o}, \mathbf{o}, \mathbf{a})$

Table 24 - Contrasts: Front and back vowels

| i vs. u <br> àbì 'soil' <br> àbù 'mahogany tree' | e vs. u <br> àdsé 'moon' <br> àḑú 'yam' | ع vs. u <br> bèntí 'pants' <br> bùntí 'to drive' |
| :---: | :---: | :---: |
| i vs. $o$ <br> nì 'thing' <br> nò '2PL' | e vs. 0 <br> mē 'to give them' <br> mō 'to give him' | $\varepsilon$ vs. 0 <br> jórú 'flood' <br> jèrí 'to suffice' |
| i vs. 3 à $\int$ ip 'shit' àj̀̀p 'wind' | e vs. 3 <br> tyèrí 'to chop' <br> tfòr 'to throw a spear' | モ vs. $\quad 5$ <br> àt $f$ ' 'f 'fear, n.' <br> àt 'h't 't $^{\prime}$ 'bee' |
| i vs. a <br> àní 'person' <br> àná 'person:REL' | e vs. a <br> mē 'to give them' <br> mā 'to give you' | ع vs. a <br> àb $\vec{k}$ ' ${ }^{\text {jealousy }}$ ' àbák 'knife' |

### 2.5.2.2 Front (i, e, $\varepsilon$ ) vs. central (i)

The distinction between $i$ and $\bar{i}$ is difficult to illustrate. In many cases, they are in free variation (cf. chapters 3,5 and 6 ), but in some prosodically strong positions, such as the base of a reduplication, $i$ cannot alternate with $\dot{i}$. In such positions, $i$ contrasts with other instances where free variation between $\dot{i}$ and $i$ is possible in similar segmental contexts.

Table 25-Contrasts: Front and central vowels

| i vs. i <br> pìpírí 'astringent' <br> m̀p $\overline{\mathrm{r}} \mathrm{r} \overline{1}$ 'goat' | evs. ${ }^{i}$ <br> dèrí 'to draw' <br> dí fí 'to be with' | $\varepsilon$ vs. ${ }^{\text {i }}$ <br> àdég 'disease' <br> àdíg 'hiccough, n.' |
| :---: | :---: | :---: |

### 2.5.2.3 Back ( $\mathbf{u}, \mathbf{o}, \mathbf{o}, \mathbf{a}$ ) vs. central (i)

Table 26 - Contrasts: Back and central vowels

| u vs. $\mathbf{i}$ <br> kú 'magic, sp. <br> kí 'INSTR' | o vs. i <br> dó 'insult, v.' <br> dí 'be, exist' | ovs. i <br> bìt 'to go up' <br> bit 'to blow' | a vs. i <br> nám 'buffalo' <br> nìm 'to eat' |
| :---: | :---: | :---: | :---: |

### 2.5.3 Diphthong iẽ̀

The following examples illustrate contrasts with $\tilde{e} e$.

```
(13) àliè̀ 'armband'
    vs. i: àmálî'flower'
    vs. }u\mathrm{ : lù 'to sleep'
    vs. }e\mathrm{ : àlè 'fire'
    vs. \tilde{e}: àlè̀ 'cave'
    vs. o: kpòolò 'bath, noun'
    vs. \tilde{o}: àl\tilde{0}}\mathrm{ 'sling, noun'
    vs. }a\mathrm{ : là 'skin'
```

Because $i \tilde{e}$ has only been attested in one noun, contrasts with $\tilde{l}, \dot{i}, \varepsilon, \supset$ and $\tilde{a}$ cannot be illustrated.

### 2.5.4 Nasality contrasts

Nasal vowels are very rare in the lexicon (see § 2.3.1.2).
Due to positional constraints with nasal vowels, only minimal pairs with high vowels, high-mid vowels, and the low vowel $a$ are fairly easy to come by. For the /o/ vs. /õ/ contrast, however, only a nearminimal pair was found. For contrasts between nasal vowels and low-central vowels, only near-minimal pairs and similar environments could be found.

Table 27－Contrasts：Nasal vowels

| i vs．ĩ <br> àtfi＇child＇ <br> ǹy | e vs．$\tilde{e}$ <br> àdzé＇trousers＇ <br> àḑế＇shea tree＇ | 0 vs．$\tilde{0}$ <br> bō＇ten＇ <br> àb $\hat{\tilde{0}}$＇day after tomorrow＇ | a vs．${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: |
| i vs．ĩ <br> sćbút＇thorn＇ <br> bī̃＇one＇ | $\varepsilon$ vs．$\tilde{\mathbf{e}}$ <br> d $\bar{\zeta}_{\bar{\varepsilon}}$＇FOC＇ <br> àḑế＇shea tree＇ | ग vs．${ }^{0}$ <br> ŋmmkpo ${ }^{\dagger}$ kíróg＇tree，sp．＇ <br> àkpố kpéjmī ‘four hundred | sà̀＇to roof＇ |

## 2．6 Orthography decisions

In the remainder of this thesis，I have only distinguished fully contrastive sounds，unless where phonological analyses required more detail，especially in the chapters on phonology．In all cases，I used IPA symbols．

I write alveolar taps／ $\mathrm{f} /$ as $<\mathrm{r}>$ in the non－phonological parts of this grammar．
I write prepausal and pre－vocalic stops that neutralize the feature voice（previously indicated as $P$ ， $T$ and $K$ ）as their voiced stop（or tap）counterparts $b, r$ and $g$ ．Thus，＇to count＇pronounced as［ $\mathrm{t} \overline{\mathrm{c}} \overline{\mathrm{p}}$ ］before a pause is written as＜t $\bar{\varepsilon} \mathrm{b}\rangle$ ，＇the outside of the belly＇pronounced as［àd $\grave{\mathrm{c}}$ ］before a pause is written as＜àdèr＞， and＇disease＇pronounced as［àd $\varepsilon \hat{k}]$ before a pause is written as＜àd $\varepsilon ́ g$＞．When such stops occur before a consonant，their voice value depends on this following consonant．In such cases，I write the stop how it is realized（hence I write bj̀b＇to come out＇，but bj̀psí＇to take out＇）．

Bilabial approximants［ $\beta_{\downarrow}$ ］and glottal stops［？］，which are predictable from prosodic information， are written with the symbol of their voiced stop counterparts $b$ and $g$ respectively．The presentative demonstrative $[\beta \bar{\varepsilon}]$ is written as 〈b $\bar{\varepsilon}\rangle$ ，［àtá $\beta_{i}$ ］＇fish＇as＜àtábí＞，and［kpáجárák］＇tilapia＇as＜kpágárág＞．

The labial－velar nasal $[\mathfrak{\eta m}]$ only occurs before labial－velar stops．It can be considered as an allophone of any other nasal．It is represented in the orthography as＜ $\mathrm{m}>$ in the remainder of this grammar （cf．§ 6．1．2）．

In chapters on phonology，I represent／iz／with its IPA symbol＜i＞＞．In other chapters，I replace it with the schwa symbol＜a＞．

Where［ẽ］and［ĩ］are in free variation，they are represented as 〈ẽ〉（or as 〈e＞when the nasality is predictable）．Where only［ĩ］occurs，and there is no free variation，it is written as 〈ì＞．

I write H tones with an acute accent, as in <á>, L tones with a grave accent <à> and M tones with a macron <ā>. I represent HL tones with a circumflex <â>, LH tones with a caron <ă>, HM tones with an acute-macron accent <á> and ML tones with a macron-grave accent <à>. Tones are written as realized after the application of the tone rules. Where helpful, I provide the lexical tones on a second tier of examples, as illustrated in $\S 3.1$ below.

Since I do not apply a concept of word in this description, the orthography does not reflect any analysis of wordhood of particular elements. Morphemes are usually written as separate orthographic words, even if they are considered morphosyntactically or phonologically bound. Derivational markers that cannot occur by themselves, however, I write together with the stem they attach to, since they are part of the lexeme they help form. When two markers have merged in the course of history, I write them together. The parts of compounds, which can occur as separate utterances, I write as separate orthographic words.

In the future, I have plans to develop a practical orthography that is more accessible to Kam speakers and caters better for their needs and wishes. That orthography will abandon some IPA conventions in favor of Africanist conventions, such as representing [j] as $\langle\mathrm{y}\rangle$ and $[\mathrm{f}]$ as $\langle\mathrm{c}\rangle$. Other decisions, such as the representation of nasal vowels, how to write tones, and which phonological distinctions to preserve in the orthography, and how, will be discussed with speakers of the language.

## 3 Tones and tone rules

### 3.1 Contrasts: $L, M, H, L H, H L$ and $H M$

Kam is a tonal language where the tone-bearing unit is the syllable. Each syllable in a stretch of discourse gets assigned a pitch (or a combination of pitches) relative to other syllables. There are three contrastive tone levels in Kam: a low, mid and high referred to as $\mathrm{L}, \mathrm{M}$ and H respectively in the remainder of this text. These can be combined into different combinations of tones in the same syllable, called contour tones. The four contour tones found in Kam utterances are LH, HL, HM and ML. Of these four, ML is always predictable from the surrounding phonological context as a prepausal L tone affected by M tone spread. Only LH, HL and HM are thus contrastive, in that their occurrence is not wholly predictable from the surrounding tones. In Kam, contour tones can appear on heavy syllables (CVC) as well as light syllables (CV), hence why syllables and not morae are the tone-bearing unit.

```
(14) kp̌̌y 'illiterate person'
Jâg 'African pike (fish, sp.)'
kûb 'reedfish'
nǐ \({ }^{\star}\) zá 'nine'
kwî 'walking stick'
zầ 'frog'
bá 'this one, PROX'
```

In the lexicon, each syllable of a morpheme is specified as carrying a $\mathrm{L}, \mathrm{M}, \mathrm{H}, \mathrm{LH}, \mathrm{HL}$ or HM tone, except for the final vowel -i (cf. § 12.2). $-i$ is toneless and always takes the same tone as the preceding syllable. In context, a number of tone rules may apply to these lexical tone patterns, which I describe in § 3.2 below. Furthermore, some constructions have specialized tonal schemes that overwrite the lexical tones of morphemes. I discuss such grammatical tonal marking in the morphosyntax chapters of this grammar. The following example shows the occurrence of each tone in an utterance. The first line represents the surface realization of each morpheme in the utterance. The second line shows the lexical tones and a replacive grammatical tone (indicated with a backslash <br>). ${ }^{\star}$ marks downstep, ${ }^{\text {L }}$ indicates a floating low tone.
(15)
rí
$r^{\prime} \mathrm{t}^{\mathrm{L}}$
NEG.FUT

| ' kábírí <br> kàbírít'H |
| :---: |
|  |  |

rí
fì
NEG.FUT
hǹ
hǹ
NEG
'(Whatever you put in this bag,) (it) will not break.'
(session_290, David Mark, elicitation)

Table 28 provides examples contrasting L, M, H level tones as well as LH and HL contour tones. Since a lexical HM tone is only found in the proximal demonstrative $b a^{-}$, it is not included in this table. For level tones, it is possible to provide minimal pairs. For contour tones, this is more difficult. This is due in part to their low frequency. LH contours are attested in only three stems (see example (38)). On the surface, HL contours are widely attested but, similar to HM contours, these are often the cause of prepausal H tone spread over an L-tone carrying syllable (cf. § 3.2.1). To illustrate contrasts, I discarded these cases since they are predictable and thus not contrastive. Where they cannot be explained by means of tone spread, HL contours occur in only nine nouns (see example (39)). That it is difficult to find minimal pairs contrasting contour tones with level tones show that these contrasts have a lower functional load. LH and HL are complex combinations of tones rather than units in themselves (see below).

Table 28 - Evidence for tonal contrasts

|  | L | M | H | LH |
| :---: | :---: | :---: | :---: | :---: |
| M | m̀pı̀m 'rain, n.' <br> m̀p̄̄m 'wing' |  |  |  |
| H | wò 'blood' wó 'dog' | ànā 'today' àná 'father' |  |  |
| LH | này 'crybaby' kpı̌y 'illiterate person' | kpāb 'to mix' kpı̌y 'illiterate person' | kpáy ‘usually’ kp̌̌y 'illiterate person' |  |
| HL | kùb 'become weak' <br> kûb 'reedfish' | kpāb 'mix' <br> kûb 'reedfish' | fóg 'farm, n.' <br> kûb 'reedfish' | kp̌̌y 'illiterate person' <br> kûb 'reedfish' |

Kam also features floating low tones, indicated with a superscript ${ }^{\mathrm{L}}$ and more rarely a floating high tone, written as ${ }^{\mathrm{H}}$. A floating tone is a tone that does not belong to any syllable in the lexicon but that follows a syllable without attaching to it. It is only realized when that syllable is not prepausal, where its effects on syllables following the syllable in question can be observed. In example (15) above a floating ${ }^{\mathrm{L}}$ tone following the negative future morpheme $f_{t}^{L}$ causes downstep of following H tones, a process that lowers the register of these tones by one step - H tones are pronounced lower than preceding H tones and M tones are pronounced lower than preceding M tones. Floating ${ }^{\mathrm{H}}$ tones occur in only two morphemes, the interrogatives $b \dot{\varepsilon}^{H} \ldots b i{ }^{\prime}$ 'who' and $g \dot{\varepsilon}^{H} \ldots g i ̀$ 'what'.

Cross-linguistically, a floating tone is often the remnant of a lost syllable that carried this tone (cf. Lionnet \& Hyman 2018: 615-616, 622, 645). While this syllable has been lost, its tone has remained. In the absence of diachronic evidence, such an explanation is also assumed for floating tones in Kam.

Table 29 provides an overview of the positions in which different kinds of level and contour tones can occur. Level tones are not restricted to certain syllable shapes or to prosodically weak or strong positions. M tones occur fairly infrequently as a whole, and appear to be less frequent in weak syllables.

Lexical HL and HM tones only occur in prosodically strong syllables. Where they occur in prosodically weak positions, they are the result of H tone spread on a L or M tone before a pause. The same can be said for the occurrence of all ML contours, which are always the result of a $M$ tone spreading on a prepausal L tone.

Table 29 - Distribution of tones

|  | Strong syllables | Weak syllables |
| :--- | :---: | :---: |
| $\mathbf{L}$ | + | + |
| $\mathbf{H}$ | + | + |
| $\mathbf{M}$ | + | + (rare) |
| $\mathbf{L H}$ | + (rare) | $\varnothing$ |
| $\mathbf{H L}$ | + | following H tones <br> (due to H-spread on L) |
| $\mathbf{H M}$ | + (one case) | following H tones <br> (due to H-spread on M) |



### 3.2 Tone rules

### 3.2.1 H tone spread

A H tone usually spreads onto a following syllable. This happens anywhere, within stems and across all morphemes. H tone spread is in principle optional but occurs almost always. When it occurs, it delinks any following L and M tones, which may cause downstep (§ 3.2.3) or L-tone shift (§ 3.2.4). Occasionally, H tones spread one syllable further.

```
(16) sírá á álíb
sírá àlf́b
hair head
'head hair'
```

(17)

| ní | jó | łá | bā |
| :--- | :--- | :--- | :---: |
| ní | jō | á | bā |
| people | PL | PRSTT | PROX:ID |

'These are people.'

Tone spread is blocked by floating L tones, which occur, for example, on possessive indexes and on the existential quantifier $m i^{L}$.

| àti | bú |
| :---: | :---: |
| àt i | bú- ${ }^{\text {L }}$ |
| child | 3SG-POSS |

'his children'

| nì | mí | sìrí | kā, |
| :--- | :--- | :--- | :--- |
| nì | mí $^{\mathbf{L}}$ | sìrí | kā |
| thing | some | be.NEG | COND |

'If there is nothing ...'

If H tone spreads onto a syllable before a pause, the result is a HL or HM contour.

| àlćy | dág | â |
| :--- | :--- | :--- |
| àlćy | dág | à |
| sun | cool:PFV | PFV |

'The sun has cooled down.'

| àkpố | bĩ̃ |
| :--- | :--- |
| àkpố | bĩ̃ |
| twenty | one |
| 'Twenty' |  |

### 3.2.2 M tone spread

M tones also spread over following L tone syllables (but not over H tone syllables). Like H tone spread, M tone spread delinks any following non-final L tones. In (23), the M tone spreads beyond the first following syllable, spreading one syllable further, and, since the final syllable is prepausal, the result is a ML contour tone. I occasionally observed such spreading beyond the following syllable, both of H tones and of M tones.

| (22) | ǹtgã | fità |
| :---: | :---: | :---: |
|  | ǹt | àtàr |
|  | star | stone |
|  | 'star of the stone' |  |
| (23) | y ${ }_{\text {u }}$ | ¢itâr |
|  | tyū | àtà |
|  | uncle | stone |
|  | 'uncle of the stone' |  |

### 3.2.3 Downstep due to delinked L and M tones and floating ${ }^{\mathrm{L}}$ tones

When H tone spread or M tone spread delinks a L or M tone, the latter are typically pushed rightwards and cause downstep.

| (24) | lùbrí $\mathrm{in}^{\dagger}$ duí | fō! |
| :---: | :---: | :---: |
|  | lùbrí àduí | á-fō |
|  | uproot yam | ADJ-dry:ADJ |
|  | 'Uproot (the) cassava!' |  |
| (25) | tán | á $\quad$ jí |
|  | yáy | à jí |
|  | finish:PFV | PFV stand |
|  | 'It is finished' |  |

Figure 16 shows a downstepped M tone on $j \bar{o}$ that is pronounced lower than a L tone at the beginning of the utterance. M is downstepped because of a delinked L tone (from nùy 'eye') due to H tone spread.

| (26) | àmí | núy | ${ }^{\dagger}$ jō |
| :--- | :--- | :--- | :--- |
|  | àmí | nùy | jō |
|  | dew | eye | PL |
|  | 'teardrops' |  |  |



Figure 16 - Downstepped $M$ tone
Floating ${ }^{\text {L }}$ tones following segmental material (such as possessive pronominals and the existential quantifier $m i^{L}$ ) also cause downstep of following tones.

| àywà | ggwóg ím | ${ }^{\star}$ á |
| :---: | :---: | :---: |
| ànwà | àngwóg $\mathbf{m}^{\text {L }}$ | á |
| friend | house my | COP |

'It is my neighbor.'
(28)

| àwàn | í | ${ }^{\downarrow} \mathbf{d i ́ t}$ | mígkìm |
| :--- | :--- | :---: | :--- |
| àwàn | í- $^{\text {L }}$ | dí | míy $^{\text {L } k i ̀ m ~}$ |
| king | 3PL-POSS | be | different |

'Their king was different.'
(session_021, Yuguda Manti, narrative)


### 3.2.4 L-tone and M -tone shift due to H tone spread

Sometimes, a delinked L or M tone does not cause downstep but simply shifts to the next syllable.
In (30), for example, a L tone is delinked from the perfective aspect marker $\grave{a}$ because of a H tone spreading from wúri' 'answer'. Because of this delinked $L$ tone, one would expect the following $H$ tone in $i j i l^{L}$ to be realized as a downstepped ${ }^{\star} \mathrm{H}$ tone. Instead, the L tone shifts fully to the right, and the first syllable of $i j i^{L}$ is realized as $\mathrm{L}(i j i)$ instead of a downstepped ${ }^{\downarrow} \mathrm{H}\left({ }^{\downarrow} i j i\right)$. It is not clear whether the initial lexical H tone of $i j i^{L}$ is deleted.

| àní | mí | 'wúr | á | ìjí |
| :--- | :--- | :--- | :--- | :--- |
| àní | mí $^{\mathrm{L}}$ | wúrí | à | íji $^{\text {L }}$ |
| person | some | answer:PFV | PFV | QUOT:LOG.SG |

'Someone ${ }^{i}$ answered that he ${ }^{i}$ (is the one who opened the window).'

In (31), the 2SG.S.PFV STAMP-morph $\dot{a}$ is expected to be realized as a downstepped H tone because of the M tone that is delinked from $b a^{-}$. Instead, the M tone fully shifts to $\dot{a}$ and is realized with a M tone as $\bar{a}$. Again, it is not clear whether the initial lexical H tone of the STAMP-morph $a$ is deleted.

| (31) | duá | bá | $\bar{a}$ | $\operatorname{sín} \quad$ â |
| :--- | :--- | :--- | :--- | :--- |
| duá | bá | á | $\sin \quad$ à |  |
|  | reason | REL | 2SG.S.PFV | do:PFV REL |
|  | 'The reason why you did it ...' |  |  |  |

I have not investigated what dictates the choice between downstep and tone shift. It may, for example, have something to do with the pitch of the utterance, with the number of downsteps that have already occurred in the intonational phrase, or with personal preference.

### 3.2.5 Downdrift after L

H tones after L tones are pronounced on a lower pitch than previous H tones. Example (32) is illustrated in Figure 17.

| (32) | jìm | àwàn | ní | ywòm | á |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | jìm | àwàn | ní | àjwòm | á |
|  | 1SG.ID | king | people | Kam | PRSTT |
|  | 'I am the king of Kam.' |  |  |  |  |



Figure 17 - Downdrift

### 3.2.6 Phonetic lowering after a succession of L-L

After a succession of two or more L tones, a following L can be phonetically lowered. In (33), I indicate such phonetic lowering with extra low symbols (ä). The final example in (33) is illustrated in Figure 18. I only have controlled examples of this where the lowered tone is also prepausal. As such, this lowering may also be an effect of a boundary $L$ tone.
(33) [làmìkär] 'earwax'
[bèr ̀̀j゙öb] 'haunted tree'
[àà̀g fùrög] 'horn of elephant'
[ànùy ìbög] 'ankle'


Figure 18 - Phonetic lowering after L-L

### 3.2.7 M $\rightarrow$ L/M_\#

The following phonological rule is currently unexplained. When two M tones meet before a pause, the second M tone is realized as L . This does not occur everywhere. I have only observed this in two examples from a single elicitation session. Future elicitation should verify this rule and clarify why it operates in some cases and not in others.


(35) | $\mathrm{f} \overline{\mathrm{u}}$ | mè |  |
| :--- | :--- | :--- |
|  | $\mathrm{f} \overline{\mathrm{u}}$ | mē |
|  | uncle | mother |

'uncle of the mother'

### 3.3 Some internal reconstruction

### 3.3.1 Two reconstructed tones: $L$ and $H$

It is useful to take a step back and consider whether one of the three contrasting levels can be historically derived from (combinations of) the other two. And whether contours can be seen as sequences of level tones. Such diachronic hypotheses can help us to understand rules that are seemingly inexplicable on the surface. For Kam, the working assumption is that at an earlier stage of the language, there were only two tones, L and H . M tones as well as contour tones can be derived from just these two tones.

### 3.3.2 Contour tones as sequences of level tones

Two basic contrastive contour tones are observed: HL and LH. ${ }^{54}$ They consist of two tones and are not units in themselves. They are usually explainable as the result of resyllabification where two syllables merge into a single syllable. Note that $\mathrm{H}+\mathrm{L}$ sequences can also result in the formation of HL contours by means of prepausal tone spread (cf. § 3.2.1). Resyllabification leading to contour tones is illustrated for LH contours in the following examples. No synchronic examples resulting in HL tones have been observed in the data.

| (36) | zùg | $+\mathrm{a}^{\text {L- }}$ - ${ }_{\text {á }} \rightarrow$ | [zǔ ${ }^{\text {fáa }}$ ] |
| :---: | :---: | :---: | :---: |
|  | grass | ADJ-fresh | 'fresh grass' |
| (37) | nì | + á-gbàn | $\rightarrow$ [niígbàn] |
|  | person | ADJ-female | 'woman' |

There are a few contour tones in my data that are not explainable in this way, since it is not possible to find out whether a syllable has been lost. All of these examples could be lexicalized constructions and contour tones may be historically explainable by means of a similar process of historical resyllabification (cf. also § 6.2.2.2).

## Unexplained LH patterns

kpy̌n 'illiterate person'
nǐ zá 'nine'
mǎ 'to know'

[^31]
## (39) Unexplained HL patterns

$$
\begin{aligned}
& \text { gbê 'squirrel, sp.' } \\
& \text { kûb 'reedfish' } \\
& \text { kù̀rikî 'God' } \\
& \text { kwêj 'mudfish' } \\
& \text { kwî 'walking stick' } \\
& \text { pêj 'axe' } \\
& \text { sênssêy 'pointed' } \\
& \text { fâg 'african pike (fish) } \\
& \text { zầ 'frog' } \\
& \text { bô 'that, DIST' }
\end{aligned}
$$

### 3.3.3 M tones derive from LH sequences

In Kam, there are a few reasons to think that the three-tone $\mathrm{L}-\mathrm{M}-\mathrm{H}$ distinction goes back to a L vs. H distinction, and then specifically that M level tones derive from earlier LH contour tones.

One such indication is that M -tones are overall less frequent than L and H tones and are unevenly distributed across different word classes. Table 30 gives a count for M tones in different word classes in Kam. Note that it is only very late in the analysis of Kam (during my final fieldtrip) that I realized that M tones are distinctive. I did not have the opportunity to recheck all the items in my lexical database for the presence of a M tone. I included those stems that have not yet been checked for a possible M tone in the frequency counts. Some of those stems will turn out to have a M tone, some will turn out to have a H or L tone. Adjectives are not taken into account, since they are always morphologically complex, either synchronically or historically (cf. § 7.5).

Table 30 - Counts of stems with $M$ tones vs. other tones

|  | $\mathbf{M}$ | Possible M | $\mathbf{L}$ | $\mathbf{H}$ | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Nominal stems | $27(4 \%)$ | $25(4 \%)$ | $336(55 \%)$ | $224(37 \%)$ | 612 |
| Verbal stems | $4(3 \%)$ | $40(28 \%)$ | $76(54 \%)$ | $21(15 \%)$ | 141 |
| Other | $15(9 \%)$ | $58(34 \%)$ | $56(32 \%)$ | $44(25 \%)$ | 173 |
| Total | $\mathbf{4 6 ( 5 \% )}$ | $\mathbf{1 2 3}(\mathbf{1 3 \% )}$ | $\mathbf{4 6 8}(\mathbf{5 1 \% )}$ | $\mathbf{2 8 9}(\mathbf{3 1 \% )}$ | $\mathbf{9 2 6}$ |

M tones seem to appear very rarely in nouns. Possibly (given the 'possible M' counts) they occur more in verbs. They occur significantly more in 'other' elements, such as grammatical markers and adverbs. A possible explanation for the potentially skewed distribution with verbs is that verbal stems have historically
incorporated suffixes into current verb stems that used to be verb extensions. The original stems, then, would have had a L tone, and the extensions would have featured a H tone (as is usually the case with synchronic suffixes). When the suffixes were incorporated in and merged with the stem, the resulting L-H contour was simplified to a M tone. A similar explanation can be given for the skewed distribution in grammatical markers - which are often the target of shortening in historical processes - and in adverbs, which often appear historically complex, but cannot be synchronically segmented into parts in Kam.

Another reason to believe that LH contours and M tones are historically related is that in the surface realizations there is a big disparity between the frequencies of HL contours, which are fairly frequent, and LH contours, which are very rare. They occur in just three lexemes (38) and elsewhere, where they are the result of hiatus involving a L and a H syllable, they are often simplified (cf. (4)).

Thirdly, some instances of $L+H$ syllables merging into one syllable with an $M$ tone can be observed. The L-tone verb mà 'give', for example, has forms where different (H-tone) object indexes are phonologically fused to the verb. As the L syllables merge with the H syllables, the merged tones result in a M tone rather than a LH contour.

| mà + | ḿ | $\rightarrow$ | mām |
| :--- | :--- | :--- | :--- |
| give | 1SG.O | give:1SG.O |  |
| 'give it to me!' |  |  |  |


| mà $\quad+\quad$ á | $\rightarrow$ | mā |
| :--- | :--- | :--- | :--- |
| give | 2SG.O | give:2SG.O |
| 'give it to you!' |  |  |


| mà <br> give | + | ú | $\rightarrow$ |
| :--- | :--- | :--- | :--- |
| 3SG |  |  |  |$\quad$| mō |
| :--- |
| give:3SG |

'give it to him!'

| mà |
| :--- | :--- | :--- |
| give |$\quad+\quad$| ín |
| :--- |
| 3 PL |$\quad \rightarrow \quad$| mē |
| :--- |
| give:3PL |

'give it to them!'

## 4 Prosodic prominence

Syllables in a stretch of discourse in Kam can be prosodically prominent or prosodically weak. Such prominence is comparable to stress in many other languages. It goes together with a number of phonetic and phonological characteristics and understanding the prosodic structure of stems is essential to understanding the segmental phonology of Kam.

In § 4.1, the notions of prosodic prominence and prosodic stems are introduced. § 4.2 describes the phonetic and phonological characteristics of prosodically strong and prosodically weak syllables. A summary of where strong and weak syllables are found in the lexicon is also provided. Partial reduplication is analyzed as a special case of a construction where prominence asymmetries are realized in other ways than elsewhere in the language. In § 4.3.3, I give an overview of lexemes that are comprised of just one morphological stem but more than one prosodic stem.

### 4.1 Introduction: Prosodic prominence and stem structure in Kam

### 4.1.1 Prosodic prominence and 'stress'

Kam utterances are made up of sequences of syllables pronounced with higher and lower prosodic prominence. Prosodic prominence indicates the amount of energy with which a syllable is pronounced. One could say that syllables with higher vs. lower prosodic prominence in Kam are the equivalent of stressed vs. unstressed syllables in a language such as English. Prosodic prominence in Kam does not indicate exactly the same idea stress does in English, however. Whereas in English, stress may be characterized by a rise in pitch (Ladefoged and Johnson 2014: 250), this is not usually the case for prosodic prominence in Kam, simply because pitch is already controlled by the tonal structure of Kam utterances. Other phonetic and phonological features do correlate with various degrees of prosodic prominence in Kam, however, such as the following. These characteristics and others are discussed and exemplified more elaborately in § 4.2 below.

- a longer duration of (onset) stops, vowels and syllables in general,
- prosodically strong syllables are impressionistically louder than prosodically weak syllables,
- lenis variants of certain consonants only occur in prosodically weak positions; longer or stronger variants of certain vowels only occur in prosodically strong positions (e.g. in the form of optional diphthongization),
- in general, prosodically strong syllables can feature a wider variety of contrasts: some sounds, such as labial-velars and voiceless stops may only occur in prosodically strong syllables,
- when two consonants happen to become adjacent, a consonant in weak position assimilates to a consonant in prosodically strong position,
- free variation between certain sounds in prosodically weak positions that are contrastive in prosodically strong positions,
- underspecification or prespecification of some features in prosodically weaker positions, such as neutralization of the voice feature of stops and height of vowels in the copy part of reduplicated verbs,
- in some cases, prosodically weak syllables can be dropped.

The first two statements are based on impressions and await further measuring. Some are phonetic, such as duration of sounds, loudness, and occurrence of lenis variants of certain consonants. Others are phonological, such as assimilation, free variation of otherwise contrastive sounds and neutralization.

### 4.1.2 Morphological vs. prosodic stems

The morphological stem of a noun, verb, adjective or adverb in Kam is its form stripped of all other synchronically identifiable morphological operations. This also means that a stem features no tonal morphology and comes with its lexical tones. By way of example, the stem of the verb jisi' 'to put straight' is $j \bar{l}$ 'to stand up': $j \bar{l}$ is stripped off the replacive L tone and the $-s i$ suffix that turned it into a causative verb (see §12.4).

Sometimes, stems cannot occur by themselves as a separate utterance. fò, for example, is not a verb in itself, but is the stem of the attributive adjective áfó 'dry', which carries the prefix $\dot{a}^{L}$ - that elsewhere turns verbs into adjectives (§ 7.5).

Morphological structure is not discussed in this chapter, which targets issues related to phonology and does not go deeper into many morphosyntactic issues. Chapters 7 and 12 deal with the morphological makeup of different word classes in their respective sections.

A term related to, but not identical to morphological stem is prosodic stem. A prosodic stem consists of a strong syllable and all the prosodically weak syllables that follow it. In other words, a prosodic stem is a unit that runs from the beginning of one prosodically strong syllable to the beginning of the next one. There is a conceptual parallel between prosodic stems and morphological stems in the sense that in both cases the stem is a basic unit to which weaker or dependent items (such as affixes) attach. A prosodic stem typically coincides with the morphological stem of a lexeme, for example in many imperative
utterances, where a verb's morphological stem is typically used. Thus, núy 'drink!' is both a prosodic stem and a morphological stem. At the same time, there are also many cases where morphological stems do not coincide with prosodic stems. Many nouns, for example, feature an initial $\grave{a}$-segment that is not morphologically segmentable from its stem. In prosodic terms, however, this $\grave{a}$ should be considered a prefix, for reasons that are outlined in § 4.2.9 below. Another notable example is the presentative demonstrative $b \bar{\varepsilon}$, which has a prosodically weak variant of [b], namely [ $\beta$ ] , as its initial segment, but which can occur in many different slots in a sentence and in that sense is morphologically free (cf. § 18.3). The causative derivational suffix - $t i^{\prime}$ is an example of a suffix that always needs a verbal host and is not a morphological stem. In prosodic terms, however, it is a strong syllable, since [t] only occurs in prosodically strong positions in Kam. Since the coincidence of prosodic stems with morphological stems is the canonical situation, we could hypothesize that cases deviating from this pattern such as -tí are the result of recent or ongoing language change. In this instance, $t i$ was probably historically a separate morphological stem as well as a separate prosodic stem. Causative verbs such as $\lceil\supset p-t i$ 'to make hot, to boil' are probably the result of historical multi-verb constructions with a now defunct verb (or with the current verb $t i$ 'to hit').

Prosodic strength is specified in the lexicon for every syllable, in a similar fashion that stress can be specified for every stem in some languages, and in a similar way that tonal patterns are also encoded for stems in Kam.

### 4.1.3 Stem-initial prominence and stem-final weakening

Prosodic prominence is partly predictable from morphological structure. The first syllable with an onset is usually prosodically prominent in morphological stems, and most morphological stems feature just one prosodic stem. So, the prosodic stem of $\grave{m} p \bar{r} \bar{\imath}$ 'goat' is p $\bar{\imath} \bar{r}$, the prosodic stem of $\bar{a} l i b$ 'head' is líb, and the prosodic stem of kár 'to accompany' is simply kár. This system is in accordance with what has been found for many other languages in the Macro-Sudan belt (cf. § 1.1), where stem-initial prominence is identified as a salient areal phenomenon (Idiatov \& Van de Velde 2015; Lionnet \& Hyman 2018: 652-655). This initial prominence is also apparent in the fact that in all monosyllabic morphological CVC stems, the onset is prosodically stronger than the coda. This is most clearly shown by (a) the neutralization of voicing contrasts for stops in coda position and by (b) the general positional constraints on consonants and vowels in CVC-syllables. (a) and (b) have been treated to some extent in chapter II. They are treated in more detail and exemplified in § 5.2 below.

Prosodic prominence is not always predictable from the morphological structure of the lexeme alone, since there are many exceptions to the rule that (only) the first CV syllable of a morphological stem is prominent. Some exceptions have already been discussed in the previous paragraph, including the
morphosyntactically independent presentative demonstrative $b \bar{\varepsilon}$ that only consists of a prosodically weak syllable and is not a prosodic stem in itself. All other exceptions concern one morphological stem consisting of more than one prosodic peak. It is likely that such instances go back to historically complex morphemes, where the morphological-prosodic stem relationship was more regular. These exceptions are treated in § 4.3.3, following a discussion of the specific characteristics of prosodically prominent and prosodically weak syllables in § 4.2.

Finally, it should be mentioned that partial reduplication constructions behave exceptionally where prosodic prominence and stem structure are concerned. Such constructions are treated separately in § 4.3.2.

### 4.2 Characteristics of prosodically strong and weak positions

### 4.2.1 Overview

Prosodically weak positions are characterized by a number of features that set them apart from prosodically strong positions. Table 31 provides an overview of these characteristics and the following paragraphs further discuss each characteristic individually.

Table 31 - Characteristics of prosodically weak and strong syllables

|  |  | Prosodically weak positions | Prosodically strong positions |
| :---: | :---: | :---: | :---: |
|  | Length (duration) | Shorter (syllables, consonants, vowels) | Longer (syllables, consonants, vowels) |
|  | Loudness (intensity) | Less loud | Louder |
|  | Direction of assimilation in consonant clusters | Target of assimilation | Trigger of assimilation |
|  | Lenition of stops | Stops are lenited or in free variation with a lenis variant | Stops are not lenited |
|  | Free variation between [1] and [r] | Yes | No |
| $\begin{aligned} & \frac{n}{0} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Centralization of /i/ and /e/, leading to loss of the contrast between [i], [e] and [i] | Free variation between centralized and noncentralized variants | Usually no centralization. No neutralization. |
|  | Diphthongization | No | Optional |
|  | Dropping or centralization of /a/ | Yes | No |
|  | Phoneme inventory | Smaller | Larger |
|  | Complex onsets | No | Yes |
|  | Lexical contour tones | No | Yes |

### 4.2.2 Length (duration)

Prosodically weak syllables are impressionistically shorter. Consonants and vowels in prosodically weak syllables tend to be shorter that those in prosodically strong syllables. Measurements have yet to be provided in future investigations of this property.

Onsetless prosodic prefixes (§4.2.9) are a notable exception. When pronounced in isolation in citation speech, these are sometimes lengthened by informants (for example in session_018).

### 4.2.3 Loudness (intensity)

Prosodically weak syllables generally have lower intensity than the prosodically strong syllables within the same prosodic domain. This feature likewise requires instrumental confirmation.

### 4.2.4 Direction of assimilation in consonant clusters

Consonants in prosodically weak positions are usually the target of assimilation. Consonants in prosodically strong positions usually trigger assimilation.

Nasals in prosodic prefixes are always homorganic with the following consonant. The same goes for first person singular subject indexes (See § 8.2). This is not always the case for nasal codas, which are not necessarily homorganic. Only a stem-final $n$ assimilates to any following consonant. Before labial-velar stops, similarly, $m$ becomes a labial-velar nasal. Other stem-final nasals do not assimilate (see also § 6.1.2 and Table 33 on p. 127).
(44) Homorganic nasals in prosodic prefixes
m̀.pánírí 'monkey, sp.'
ǹ.tén ‘spear, sp.'
ý.kón ‘louse’
Øm. .gbs̀tè 'pouched rat'
án.twàb 'young'
à $\mathbf{y} . g$ wóg 'house'
$\boldsymbol{n}$ assimilates to following consonants
bén 'say' + mām 'give me' $\rightarrow$ [bémmắm] 'tell me'
mín 'thus' + kā 'conditional' $\rightarrow$ [mín $\mathbf{n k} \mathbf{k}]$ 'if (it) is like that ...'
tán 'stay' +p ' 'come' $\rightarrow$ [támp $\dot{\varepsilon}]$ '(they then) stood here'

## Assimilation before labial-velar onsets

nínnám 'flesh' + kpò 'body' $\rightarrow$ [nさ̂́nnáñmkpô] 'flesh of the body'

(47) Non-homorganic nasals in nasal codas
tám.kìn 'sparrow' (unanalyzable noun)
fàm-lí 'to feed someone' (cf. àfàm 'meat', possibly with a historical causative suffix)
kòm-sí 'to engage' (kóm 'to tie' + -sí 'causative' + LH replacive tone)
j̀kám sû 'bladder' ( $\mathfrak{y}$ kám 'under' + sù 'navel')
m̀púy đ̧óy 'ritual calabash' ( mpúy ‘calabash’ + ḑóy ‘magic, sp.’)
fòn.tí 'remove' (cf. -tí suffix)

### 4.2.5 Lenition of stops

The onset of prosodically weak syllables features lenis variants of bilabial, velar and alveolar stops (see also Table 6 in Chapter 2).

Voicing contrasts are neutralized in this position. The bilabial allophone in this position is the bilabial approximant $[\beta]$. The velar stop shows up lenited as the velar approximant [u] or the glottal stop [?]. In the case of the glottal stop, we can speak of debuccalization (cf. Harris 2009). The alveolar stop shows up lenited either as the tap [r] or the lateral approximant [1]. These allophones are generally in free variation, but some speakers prefer [r] in one item and [l] in other items. Different speakers have different preferences. Possibly, there is dialectal variation as well, although this needs to be confirmed.
sć $\boldsymbol{\beta}_{\underset{T}{\prime}}$ 'thorn, fin', with alternative pronunciation [sććbí] àtá $\boldsymbol{\beta}_{T}$ ' 'fish', with alternative pronunciation [àtábú] bāp̄̀ 'to lower your forehead', with alternative pronunciations [bāu $\overline{\mathrm{q}}]$ and [bāḡ̄ $]$ tàP'́ 'to happen', with alternative pronunciations [tàuýf and [tàǵ́] mìràsà 'python', with alternative pronunciation [mìlàsà] àtfárî 'wisdom', with alternative pronunciation [àtfálî]

When [b, g, d] are pronounced instead of the lenis variants, these are also produced with less energy than their prosodically strong counterparts. The following figures give an example of a prosodically strong
 same elicitation session with the same speaker (session_286, Babangida Audu, elicitation) in very similar environments. The prosodically strong $b$ is almost twice the length ( 100 ms ) of the prosodically weak $b$ (51ms).


Figure 19 - prosodically strong syllable bā - /b/ takes 100 milliseconds


Figure 20 - Prosodically weak syllable bà: /b/ takes 51 milliseconds

### 4.2.6 Free variation between [r] and [I] in prosodically weak positions

The free variation between [ r$]$ and [1] that can be observed in the last two examples of (48) is a characteristic of prosodically weak syllables. It does not occur in prosodically strong positions.
(49) /f/ and /l/ are not in free variation in prosodically strong positions
fì 'imperative marker' cannot be pronounced [lì]
jīrā̄ㄹk 'two' cannot be pronounced [jīlāk]
tè̀-rí 'to chop' cannot be pronounced [tè̀lí] (rí is a prosodically strong derivational suffix)
là 'skin' cannot be pronounced [rà]
àlíp 'head' cannot be pronounced [àríp]
àlúlù 'kneecap' cannot be pronounced [àlúrù]

In a few lexemes, [r] does not alternate with [l] in prosodically weak positions. In other lexemes, [1] does not alternate with [r]. These exceptions are treated as lexical exceptions. Those cases are listed in § 2.2.1.

### 4.2.7 Centralization of /i/ and /e/ in prosodically weak positions

The distinctions between /i/vs. /i/ and /e/ vs. /i/ are lost in prosodically weak syllables. This can be seen as an effect of centralization of $/ \mathrm{e} /$ and $/ \mathrm{i} /$ in prosodically weak syllables. $/ \mathrm{i} /$ is often realized more centrally as [ə] in this position.

```
(50) Prosodically weak syllables with [i]
    sと́ß́s' 'thorn, fin' (alternative pronunciations: séßé, séßí)
    àtá \(\boldsymbol{\beta}_{i}\) 'fish' (alternative pronunciations: àtáßé, àtá \(\mathbf{\beta i ́}^{\text {in }}\) )
    bā \(\overline{\mathbf{q}}\) 'to lower your head' (alternative pronunciations: bāpē, bā \(\overline{\mathbf{1}}\) )
    tà \(\mathbf{y}\) ' 'to happen' (alternative pronunciations: tà \(\mathbf{P e ́}\), tà 1 í)
```



```
    kùrìkî 'God' (alternative pronunciations: kùrìkî, kùr̀̀kî)
(51) Prosodically strong syllables with /i/ and /e/
    àbì 'song'
    àbè 'draw soup, sp.'
    tí 'to hit'
    fé 'to break (something long)'
    kùptí 'to kneel down'
    j̀mgbètè 'pouched rat'
    kùrìîî 'God’
    àdù̀rìkì 'epilepsy'
```

This effect is somewhat counteracted in certain environments. The alveolar tap $r$ can, for example, progressively or regressively centralize /i/ and /e/, an effect observed in the last two examples of (51). [i] also does not occur in CVC syllables (see § 5.2.2 below).

### 4.2.8 Optional diphthongization in prosodically strong positions

In a number of environments, specified in § 6.2.2.1, vowels are optionally diphthongized. This only happens in prosodically strong positions.
(52) sísé or [sísié] 'adder'
àleั̀ or [àlî̀̀̀ ] 'cave'
m̀pòm or [m̀pù̀m] 'rain, n.'
gó, or [gúó] 'guest, stranger'

### 4.2.9 Elision or centralization of $/ \mathrm{a} /$ in prosodically weak positions

In peripheral prosodically weak positions, that is, syllables at the boundary of prosodic stems, an /a/can be dropped or centralized to [i]. /a/ is never dropped in prosodically strong positions.

This is most apparent in prosodic $a$-prefixes on nouns. These are centralized to $\dot{i}$ or simply dropped when such nouns do not occur utterance-initially. (53)-(57) exemplify this process. The lexical form of each noun with the $a$-prefix is provided written on the second line of each example. In (53), (54) and (55), $a$ - is dropped. In the other examples, $a$ - is centralized to $i$-. When $a$ - has a L tone, this L tone is preserved when $a$ - is dropped and causes downstep of the following tones (54) or blocks tone spread if the following tone is $\mathrm{L}(53)$.
j̀kùm ibòg
ỳkùm àbòg
back foot
'back of the foot'
(57)

| àwàn | jág | f́̀ngwó? | á |
| :--- | :--- | :--- | :--- |
| àwàn | jàg $\backslash \mathrm{H}$ | àngwóg | à |
| king | carry\PFV | house | PFV |


| mà | yí | bú |
| :--- | :--- | :--- |
| mà | àtfí | bú- $^{\text {L }}$ |
| give | son | 3SG-POSS |

'The king has given the house to his son.'
(Tope_Bitrus_05, Garba Abubakar Bako, elicitation)

### 4.2.10 Larger phoneme inventory in prosodically strong positions

Prosodically strong positions host a higher diversity of phonemes. Onsets of prosodically strong syllables may feature more different consonant phonemes than those of prosodically weak syllables. Prosodically strong syllables similarly feature more different vowel phonemes than prosodically weak syllables. Many contrasts are neutralized in prosodically weak positions, including prosodically weak onsets, the nucleus of prosodically weak syllables and codas in general, which are always prosodically weak (see § 5.2.1 below).

Table 6 in § 2.2.2 shows all twenty-four different consonants that can occur in the onset of prosodically strong syllables. These are exemplified in (58). Note that there are no examples of /h/ occurring in CVsyllables. This is likely due to the very low frequency of this phoneme (§ 2.2.1)

Consonants in the onset of prosodically strong CV and CVC syllables

> pén 'to jump'
bō 'ten'
tí 'to hit'
dó 'to insult'
kà 'to harvest maize'
gó 'stranger'
mē 'mother'
nì.gí 'to stamp'
jí 'person'
yà.tí 'to open (one's mouth)'
fì 'comitative preposition'
fà 'to raise chickens'
và 'to mix'
sã̀ 'to roof a building'
zầ 'frog'
à. $\mathrm{jà}$ 'floodplain'
/h/: no example
là 'skin'
jé 'to enter'
wó 'dog'
tfè 'guinea corn'
àduè 'moon'
kpò 'body'
gbắ 'flute, sp.'
bèt 'tree'
t $\grave{\text { c̀ }}$ 'to run'
dèp 'to buy'
kìm 'to bite'
gìn 'to drum'
mèt 'to swallow'
nàp 'to cut'
nàt 'to drip'
yàn.sí 'to bend'
rik 'emphatic particle'
fàk 'to close'
vék 'to die'
sát 'to comb'
zày 'to wrestle'
fäk 'to laugh'
hwát 'to think'
làk 'to lick'
j $\varepsilon$ p 'to fry'
wàp 'to tie'
tyèm 'to burn'
djìp 'to fence a place'
kpát 'to rain'
gbèp 'to beat'

Only nine different consonants are attested in the onset of prosodically weak syllables (cf. in Table 6 in § 2.2.2):

```
ǹt́má 'sheep'
duā\etaè 'to crawl'
tfinè 'teeth gums'
mìràsà 'python'
àf́l ú 'his needle'
kằjú 'his falcon'
gàw ú 'his ribs'
àtábí [àtápí] `fish'
bāgī [bāp\overline{q}] 'to lower one's head'
```

In prosodically strong open syllables, all eight vowel qualities are attested (cf. Table 8 in § 2.3.2), as well as the four nasal vowels.


The diphthong ĩ̀̀ is also found in (just) one prosodically strong syllable (à.lì̀̀ 'armband', see § 2.3.1.4).

In prosodically weak positions, only six contrasting vowels are attested (cf. Table 8 in § 2.3.2).
(61) sć $\beta$ ị 'thorn, fin'
kằj ú 'his falcon'
mìràsà 'python'
àmìrēg 'nose'
mp $\overline{\mathrm{f}} \mathrm{r} \mathrm{g} \mathrm{g}$ 'rat'
á ${ }^{\downarrow}$ bó?órí 'black'

### 4.2.11 Complex onsets only occur in prosodically strong positions

Complex onsets are only found in prosodically strong syllables. Examples of this can be found in § 5.5. In § 6.2.2.2, it is argued that wV sequences in syllables with complex onsets could go back to sequences of two vowels that were merged into one syllable. The alternative possibility that wV -syllables should be analyzed as diphthongs is also briefly discussed there. In § 5.5.1, all possible Cw -sequences are given, and in § 6.2.2.2 all possible wV-sequences are given.

### 4.2.12 Lexical contour tones only occur in prosodically strong positions

Lexical contour tones (i.e. those that are not caused by H tone spread) can only occur in prosodically strong syllables. This is discussed and exemplified in Table 29 in chapter II.

### 4.3 Prosodically strong and weak syllables in their morphological contexts

### 4.3.1 Overview

Table 32 gives an overview of different types of syllables which can be prosodically strong or prosodically weak, and an indication in which morphological contexts they are found. Examples can be found in the sections referenced in the table.

The morphemes including prosodically strong syllables are all made up of at least one prosodic stem. These include:

- nominal and verbal stems, but also
- the verbal derivational suffixes -rt́, -sí and -tí,
- all subject indexes except for the first person singular indexes, which are always made up of a homorganic nasal $N$
- prepositions proper such as $k t$ 'INSTR' and $\kappa \grave{t}$ ' $\mathrm{COM}^{\prime}$,
- preverbal tense and aspect markers such as $r \grave{t}$ 'IPFV' and sì 'SEQ'
- clause-final markers such as $k \bar{a}$ ' COND ', ríg 'NEG.POSS', $h n{ }^{\prime}$ 'NEG'.

It is likely that some of the grammatical markers in this list have recently grammaticalized from nouns (e.g. through grammaticalization of possessive constructions) or verbs (e.g. through grammaticalization of multiverb constructions) but have retained the prosodically strong status of their lexical precedents.

The morphemes that do not contain prosodically weak syllables mostly occur following a lexical stem when they are used in utterances. They can be morphologically analyzed as suffixes (when they always occur after items of the same word class, e.g. the verbal extensions) or clitics (when they can occur following items of different word classes, e.g. the conditional $k \bar{a}$, the negative possessive $r$ ' $g$ and the negator $h \grave{n})$.

Table 32 - Types of prosodically strong and weak syllables

| (Morphemes with) prosodically strong syllables | (Morphemes with) prosodically weak syllables |
| :---: | :---: |
| The first syllable with an onset of morphological stems of nouns ${ }^{55}$, verbs, adjectives and adverbs (§ 4.1.3). | Stem-initial vowels, syllabic nasals, and VN-sequences ('prosodic prefixes' on nouns and adjectives, nominal derivation prefixes, subject indexes) (§ 4.2.9) |
| Non-initial syllables with (obligatory) non-lenited consonants as the onset in (hypothetically) historically complex lexemes, including proper names, compounds and apparent reduplications (§ 4.3.3). Non-initial syllables with an onset, in borrowed lexemes (§ 4.3.3) | Non-initial syllables with (optionally or obligatory) lenited consonants as the onset in many morphological noun, verb, adjective and adverb stems (§ 4.1.3). |
| Verbal derivational suffixes -rí, -sí and -tí (§ 12.4) | CV-syllables including a vocalic grammatical marker such as à 'PFV' (§ 13.5), the inflectional/derivational final vowel -i (§ 12.3.2), $\dot{u}^{L}$ '3SG:POSS', $i^{L}$ ‘3PL:POSS' (§ 8.4), à ‘PROX'. ò ‘DIST' (§ 9.2). |
| Most subject indexes (§ 8.2) | The first person subject indexes $\hat{N}$ and $\grave{N}(\S 8.2)$ |
| Prepositions proper such as $k \hat{t}$ 'instrumental', rì 'comitative' (§ 11.2.2) <br> Preverbal tense and aspect markers such as $r \grave{t}$ 'imperfective', si 'sequential' (§ 13.3.1, § 17.4.2) <br> Clause-final particles such as $k \bar{a}$ 'conditional' (§ 17.4), rīg 'negative possessive' (§ 13.6.2), hǹ 'negator’ (§ 13.6.2) <br> The nominal topicalizer $\not \subset \bar{e}$ (§ 18.2) | The presentative demonstrative $b \bar{\varepsilon}(\S 9.2 .2, \S 18.3)$, the quotative marker $i^{b} i^{L} / i j l^{L}$ (§ 17.6). |

### 4.3.2 Prosodic proclitics: the special case of partial reduplication

Partial reduplication is a productive morphological process in Kam for forming future, experiential perfect and resultative forms of verbs. There are also cases of apparently non-motivated reduplication: some lexemes in the language only exist in a reduplicated form or are found in a reduplicated form most of the time. An overview of the functions of partial reduplication constructions can be found in § 12.5. Partial reduplication is important for this chapter in that it shows a prominence asymmetry between the morphological stem that is used as the base and the copy of that stem. They contrast with other morphemes discussed in this chapter, however, in a few important ways.

[^32]Partial reduplications are phonologically exceptional in the following ways:
a) The most prominent syllable is not the initial but the second syllable of the construction.
b) The prosodically weaker syllable is characterized by a vowel prespecified for height: it is always a high vowel, either $/ \mathbf{i} /$ or $/ \mathrm{u} /$. Such dramatic neutralization and marking of prosodic weakness are not featured anywhere else in Kam.
c) The prosodically weaker syllable in reduplications can feature any onset consonant that elsewhere occurs in prosodically strong syllables.
d) The coda consonant of the copy of the reduplication assimilates more easily to the onset of the base than is generally the case at other morpheme boundaries. The result of such assimilation is usually a geminated consonant.

Resultative forms of verbs show the following additional characteristics that do not occur in other partial reduplication constructions.
e) The prosodically more prominent syllable is marked by a higher pitch than usual if the base has a L-H tonal pattern. Such raising is local: following H tones go back to the base level. Measurements have yet to be provided. Higher pitch is used nowhere else to mark prosodically strong syllables.
f) High vowels in the stronger syllable have more peripheral vowel formants. Their height is slightly more exaggerated. Measurements have yet to be provided. This is used nowhere else to mark prosodically strong syllables.

Characteristics a)-f) show that there clearly is a prominence asymmetry. However, this prominence asymmetry cannot be captured simply in terms of an opposition between prominent and weak syllables as elsewhere in the language. Prosodically weaker syllables in partial reduplications are in some ways stronger than generally prosodically weak syllables (they can feature any consonant in onset position), although they are weaker in other senses (they only feature high vowels and their coda is more prone to assimilation). Extending the 'morphology is phonology' metaphor that allows us to speak of 'prosodic stems' as opposed to 'morphological stems', we could say that the reduplicant in partial reduplications are in between 'independent' stems and 'dependent' affixes, thus qualifying as prosodic proclitics. It is possible that the phonologically exceptional character of such constructions is partly due to the expressiveness or even sound-symbolic potential of such forms (for example in resultative reduplications, which refer to property concepts, which may become the target of sound-symbolism).

The following examples illustrate some of the characteristics mentioned in a)-f) above. In all of these examples, characteristics (a) and (c) are apparent. They also illustrate the prespecification of vowels in the copy. An $e, \varepsilon$, or $a$ becomes an $\dot{i}$, an $o$ or $\supset$ becomes an $u$. Already high vowels remain identical. A few of
the examples show coda assimilation patterns that are not found in other morphemes, such as $/ \mathrm{m} /$ assimilating to $l, d$ assimilating to a $b$, a bilabial stop assimilating to a $g$, and $r$ assimilating to $z$. Characteristics (e) and (f) have yet to be confirmed instrumentally. The example with bùbbj̀d 'to be many' (resultative) shows that some differences between prosodically strong and prosodically weak syllables are also apparent between the reduplicant (which is weaker) and the base (which is stronger): only the base features optional diphthongization of $\supset$.

| kpèsí 'to be smooth' | $\rightarrow$ kpìkpé'sí 'to be smooth, resultative' |
| :--- | :--- |
| bòd 'to increase' | $\rightarrow$ bùbbbòd or [bùbbwòd] 'to be many, resultative' |
| lèm 'to be good' | $\rightarrow$ lìllèm 'to be good, resultative' |
| gàb 'to share' | $\rightarrow$ gìggàb 'to be cut, resultative' |
| kág 'to crunch' | $\rightarrow$ kíkkág 'to be crunched, resultative' |
| zò̀rí 'to be bitter' | $\rightarrow$ zùzzórī 'to be bitter, resultative' |
| tùb 'push' | $\rightarrow$ tùttùb 'to have holes, resultative' |

The reduced contrasts in copied syllables is a feature that is found in various other West African languages, such as Nupe (Hyman 1970) and Akan (Wilbur 1974, Marantz 1982) (cf. Lionnet \& Hyman 2018: 650; see also Ibirahim 2015).

### 4.3.3 Lexemes with one morphological stem but multiple prosodic stems

What follows is a list of examples where one morphological stem is made up of different prosodic stems. Only the lists in (63), (64), (65), (70) are exhaustive. Many more examples could be added to the lists in (66), (67), (68), (69).

- Two hypothetically historically complex stems ending in -kiri
àdsíkírí 'armpit'
àd ḱkírí 'sweat'
àbén ńzūk̄̄̄̄1 ‘proverb’ (àbén means 'talk')
- Three hypothetically historically complex stems ending in -tici.
(64) ǹtfätì̀ì 'stock'
j̀kwàt̀̀rì 'joint'
àlítírî 'hawk'
- Two hypothetically historically complex stems ending in -kwàb.
(65) àvìràkwàb 'mud'
kùrùkwàb 'bird, sp.'
- Names for fauna and flora and related items, hypothetically historically complex (also in previous examples).
(66) ká t $\mathbf{f}^{\prime}$ 'rí 'hedgehog'
pákpágìní 'giant water bug'
àbitfè 'tree, sp.'
duátfinîn 'fish, sp.'
kàtfírî 'weaver ant'
dùpsã̃ 'snake, sp.'
sùrùpắáj 'vulture'
j̀mgbètè 'pouched rat'
làpàtàr 'fish, sp.'
àdjìrìkì 'ground beetle, sp.', also 'epilepsy'
- Proper names, some historically complex, some borrowed.
màkpà 'muslim'
àkpàkánè 'person name'
àtàké 'person name'
đ̧úrkàkí 'person name'
kùrìkî 'God’ (cf. kú 'magic, sp.')
djùrùkí 'place name'
kávên 'person name'
sòvérí 'person name'
dùwásām 'person name'
tyiwántfà 'person name' (cf. àtî 'child' and diminutive marker)
- Official titles and some kinship terminology, some historically complex, some of which may be borrowed from a Central Jukunoid language (cf. § 1.1).
(68) tyáywádjè 'elder daughter of the traditional king'
t'óngádỳ̀m 'junior daughter of the traditional king'
tfikú 'priest, sp.' (cf. kú 'magic, sp.')
jàkú 'grandparent or grandchild', 'ancestor' (cf. kú 'magic, sp.', 'cobra')
ní đ̛̣ríkú 'clan responsible for magic' (cf. kú 'magic, sp.', 'cobra')
kùkú 'grandparent or grandchild', 'ancestor' (cf. kú 'magic, sp.', 'cobra')
m$f$ oั̀kú 'paternal relative' (cf. kú 'magic, sp.' and $\grave{m} f o \tilde{̀}$ 'forest' , 'cobra')
àbēní 'traditional king'
àlàs'śrá 'white person' (cf. là 'skin' and síŕá 'hair' or sìrit 'negative existential')
- Other hypothetically historically complex stems with various different prosodically strong endings.
(69) àtfikṕ́rág 'spoon' (cf. àtfí 'child', and diminutive morpheme, see § 7.2.1.2)
kúkwéj ‘stick used for communication across villages’ (cf. kwî ‘walking stick)
tìdJón ‘magic, sp.'
tókpár ‘near, adposition’
àbétfî 'malice'
tfipitfè 'ice'
t $\overline{\mathrm{p}} \mathrm{ptān}$ 'to stay'
bápty'́n 'a person that left'
kàpìrù 'flint'
kàpèj 'cutlass'
- Other borrowings
(70) tàlátà 'Tuesday', from Hausa (talata) - originally from Arabic at-talaata 'Tuesday' tàlàtín 'thirty', from Hausa (talatin) - originally from Arabic talaatiin 'thirty' súkò 'hello', from a Jukunoid language (cp. Kuteb súko, Koops 2007: 301) tàsò 'dish', from local Hausa (taso) - probably originally from Arabic ṭaasa 'bowl'


## 5 Syllable structure

### 5.1 Introduction

Kam has four main syllable shapes. The most basic ones are open syllables (CV) and closed syllables (CVC). Two minor syllable shapes are (a) monosegmental syllables, which may consist of either a syllabic nasal ( N ) or a vowel (V) as the sole nucleus, and (b) VN-syllables, consisting of only a vowel and a nasal coda. CV syllables and CVC syllables both have a minor subtype with a complex Cw onset (§ 5.5.1). Just a few examples of complex Cr and NC onset are attested in $\mathrm{Kam}(\S 5.5 .2, \S 5.5 .3$ ).

In chapter II, overviews are given of the positions each segment can occupy in each syllable shape in both prosodically weak and prosodically strong positions. I revisit these positional constraints here. The possibilities are also illustrated in the current section.

Prosodically strong CV-syllables show no significant constraints on segments. The possibilities are illustrated in § 4.2.10 above. The following issues are treated in the remainder of this chapter:
§ 5.2.1 discusses the constraints on consonants in closed syllables as well as neutralization of voicing contrasts. These are viewed as cases of stem-final weakening.
§ 5.2.2 treats neutralization of some vowel contrasts in closed syllables.
§ 5.3 gives an overview of constraints on segments occurring in monosegmental syllables.
$\S 5.4$ does the same for VN-syllables.
$\S 5.5$ considers the few types of complex onsets that have been found in Kam.

### 5.2 Constraints on segments in CVC syllables

### 5.2.1 Possible codas and neutralization of voicing contrasts

Almost all consonants are attested as the onset of CVC-syllables (cf. § 4.2.10). In coda-position, however, the consonant inventory is reduced to ten consonants. These include three nasals $-m, n$ and $\eta-$, three approximants $-j, l$ and $w-$, the tap $r$, and three stops $-P, T$ and $K$. Voicing contrasts are neutralized for stops occurring in coda-position. The limited inventory in coda position and reduction of voicing contrasts can be seen as instances of stem-final weakening.

```
(71) tyèm 'to burn'
bén 'to speak'
à.léy `sun'
týj 'jerboa`
àzćl 'granary`
gàw 'ribs'
hár '(not) until'
àlíb 'head'
fàd 'to suck'
àbz̀g 'jealousy`
```

The voicing value of stops in coda position is completely determined by what comes next. The following possibilities are attested. The different combinations are exemplified in Table 33. They are treated in more detail in § 6.1.3.

- If a pause follows, stops are unreleased.
- When a voiced consonant follows, stops may be voiced or may undergo assimilation, depending on the following consonant.
- If the following consonant is voiceless, the coda stop is also voiceless.
- Before palatal consonants ( $/ \mathrm{j}, \mathrm{n} /$ ), voicing of velar consonants is optional: $[\mathrm{g}]$ and $[\mathrm{k}]$ are in free variation.
- The velar stop may debuccalize before $/ \mathrm{m} /$ and $/ \mathrm{n} /$.
- Alveolar taps [r] are preferred to alveolar stops in most positions, except before $/ \mathrm{m} /, / \mathrm{n} /, / \mathrm{j} /, / \mathrm{v} /$, /kp/ and $/ \mathrm{gb} /$.

The following are just a few examples of what happens. More can be found in § 6.1.3.

$$
\begin{align*}
& \text { fóg 'farm' }+\diamond \quad \rightarrow \quad[\mathrm{f} \mathbf{0} \mathbf{k}] \text { 'farm' }  \tag{72}\\
& \text { néP'to go' + fóg 'farm' } \quad \rightarrow \quad \text { [nếffók] 'to go to the farm' } \\
& \text { tùP 'push' + -sí (applicative) } \rightarrow \quad \text { [tùpsí] 'to prick, to pierce' }
\end{align*}
$$

When a lexeme with an initial vowel follows, stops in coda position are resyllabified as the onset of the next syllable. In the same contexts, taps and nasals may be analyzed as ambisyllabic (and are often represented as such by consultants when tapping the rhythm of a lexeme while saying it): they are simultaneously the coda of one syllable and the onset of another. In (73), I indicate ambisyllabic nasals by underlining them.

$$
\begin{align*}
& \text { à. } \text {.àg 'tooth' }+ \text { à.dú 'angle' } \rightarrow \text { [à..à..ł̀̀.dú] 'molar' }  \tag{73}\\
& \text { à.fàm 'animal' + ày.gwóg 'house' } \rightarrow \text { [à.fàmì̀̀.gwók] } \\
& \text { à.fàr 'lung' + à.fàm 'animal' } \rightarrow \text { [à.fàrı̀̀.fàm] }
\end{align*}
$$

Exceptionally, in one noun, $s$ is found as a coda consonant: à.là.mî:s ‘Thursday'. This is a borrowing, likely from Hausa ( 'Alhamis - originally from Arabic yoom al-khamiis 'Thursday').

### 5.2.2 Possible vowels in nucleus position

The nucleus of a closed syllable (CVC) can only consist of the vowels $/ \mathrm{i} /, / \mathrm{u} /, / \mathrm{a} /, / \varepsilon /$ and $/ \rho /$. $\tilde{\mathrm{a}} /$ is the only nasal vowel that occurs in closed syllables (cf. § 2.3.2). Contrasts between $/ \mathrm{i} /$ and $/ \mathrm{i} /, / \varepsilon /$ and $/ \mathrm{e} /$, and $/ \mathrm{o} /$ and /o/ are neutralized.
(74) ri $\overrightarrow{\mathrm{k}}$ 'emphatic particle'
zùp 'to steal'
nàp 'to cut'
tè $\vec{k}$ 'to run'
yjेk 'earthworm'
sùcùpắj 'vulture'
pjắw 'proper name (village within Sarkin Dawa)'

There are apparent exceptions to the rule that /i/ cannot occur in closed syllables. However, all but one of these cases are captured by independent phonological rules, explained in § 6.3.

The remaining case where [i] occurs in a closed syllable is a borrowing, likely from Hausa: à.là.mî:s 'Thursday' ( 'Alhamis originally from Arabic yoom al-khamiis 'Thursday'). Note that /i/ is long here, which is also exceptional in Kam lexemes (cf. § 2.3.1.3).

### 5.3 Constraints on segments in monosegmental syllables: V-prefixes and syllabic nasals

The only vowels that can occur as monosegmental syllables are $a, \dot{i}$, and $u$.
Syllabic nasals are attested in many nouns, but also as the first person singular subject indexes $N$ and $\grave{N}$. In all cases, the nasals are homorganic with the following consonant. If the following consonant is labialvelar, the nasal is a labial-velar [ gm ]. Nasal syllables are never prosodically strong.

## Homorganic nasals in prosodic prefixes

m̀.pánífí 'monkey, sp.'
ǹ.tén 'spear, sp.'
ý.kón 'louse’
(76) First person singular subject index $N$
ḿ pf́râ

1SG.S.PFV come.PFV
'I have come.'

The most common V syllable is one that consists of $a$. Many nouns are found with an $a$ - prosodic prefix, and a morpheme $\dot{a}^{L}$ is used to derive attributive adjectives from verbs (cf. § 7.5). Some subject indexes are also made up by a simple vowel, e.g.á '2SG.S.PFV', ú ‘3SG' (a variant of àwú), ì '1PL' (a variant of jùrù) and $i$ '3PL' (a variant of $a j i$ ) (cf. § 8.2). $a$-prefixes on nouns and adjectives are prosodically weak (cf. § 4.2.9), the (non-first person) subject indexes are prosodically strong.
(77) a-prefixes in nouns and adjectives
àtfi 'child'
àdyén 'shea tree'
àkp $\grave{p}$ 'shoulder'
átwàp 'young'
á ${ }^{\text {b }}$ bóYórí 'black'
ámō 'good'


| á | ḑ́t | á | jī |
| :--- | :--- | :--- | :--- |
| 2SG.S.PFV | wake.up:PFV | PFV | Q |

'Did you wake up?'
ú fí ${ }^{\downarrow} f$ féd nî
3SG IPFV wash thing
'She was doing her laundry.'
ì néb bínúwè
1PL go:PFV Benue
'We went to Benue State'
í gbán wế foั̀ mi ${ }^{56}$
3PL arrive:PFV mouth forest some
'They arrived at the entrance of a certain forest.'
(session_191, Isa Sarkin Dawa, narrative)

### 5.4 VN syllables

Two adjectives and three nouns in the currently collected lexicon of Kam (1,550 entries) show an initial VN-syllable. In all cases it is made up of an $a$ followed by a nasal that is homorganic with the following consonant. These syllables may be the result of a derivational process with an $a$-prefix applied to lexemes starting with syllabic nasals. That they were historically complex is also suggested by the presence of downstep in some of these examples.

$$
\begin{equation*}
\text { án. }{ }^{\downarrow} \text { té 'small' } \tag{79}
\end{equation*}
$$

án. ${ }^{\star}$ déŕ1 'idiotic'
án. ${ }^{\downarrow}$ térí 'truth'
ày.gwár 'thirst'
à $\eta$.gwóg 'house'

### 5.5 Complex onsets

### 5.5.1 Cw-onsets, CwV and CwVC syllables

Kam features Cw-clusters as the onset of prosodically strong syllables. This arguably motivates the incorporation of two additional syllable structures for Kam. Alternatively, Cw sequences can be considered labialized consonants, or wV-sequences can be considered diphthongs. The first option inflates the number of consonants found in the phoneme inventory of Kam. The second option would require the addition of a number of diphthongs to the vowel inventory. In the current analysis, I choose to analyze them as complex Cw onsets, and I recognize that CwV and CwVC syllables are minor subtypes of typical CV and CVC

[^33]syllables. Cw clusters may go back to a process of hiatus resolution where an $/ \mathrm{u} /$ is reduced to a semivowel $/ \mathrm{w} /$ to avoid a sequence of two vowels (cf. § 6.2.2.2).

The following Cw onsets are attested:

- リw

| ywāb 'all' | ywám 'junior in-law’ | Øwàntíl 'to straighten' |
| :---: | :---: | :---: |
| ywàrí 'to be sad' | ywárí 'to mix' | ywàná 'you're welcome' |
| ŋwìnkí 'person name' | nwว́ |  |

- kw

| kwî 'walking stick' | kwêj 'mudfish' | kwàntírí 'to fold' |
| :---: | :---: | :---: |
| kwàntón 'Mumuye people' | kwàs 'hip, loins, waist' | kwár 'to make a rope' |
| kwàsí 'to pluck' | j̀kwàtìrì 'joint' | àkwān 'bean' |
| ákw亏̄) 'big one' | àkwók 'mushroom' | kùcùkwàp 'bird, sp.' |
| kúkwéj ‘stick, sp.' |  |  |

- gw
gwéj 'elsewhere’
àngwár 'thirst'
gwà̀j 'chest'
àngwók 'house'
gwó 'to be light'
àgwìp 'plant, sp.'
- t w
tfwē 'newborn child' ǹtfwé 'rainy season'
ńtffâ̂k 'striped grass mouse'
ǹtffà̀y 'bird, sp.'
- sw
swàptí 'to increase'
swàp 'to sing'
swác 'to live'
swõ̀ 'baboon'
- pw
m̀pwár ‘duck' pùpwàp 'liver'
- d 3 w
àḑwàn 'snake, sp.' àḑwã̃ 'cheek'
- tw
ántwāp 'young'
- hw
hwás 'to think'
- lw
lwàm 'hippopotamus'


### 5.5.2 Complex onsets due to $\mathfrak{+}$ - or u-deletion

$\dot{i}$ or $u$ can be dropped in the C_r(V) environment. In such cases, syllables can appear with complex onsets with an $r$ as the second consonant $(\mathrm{CrV})$.
(81) Syllables with complex onsets because of a deleted $\boldsymbol{i}$
mpī̀̄̄̄ or [mprī̀ 'goat'
kp̄̄̄̄ē or [kprē] 'to cough'
kìr̀biłł or [krìbìk] 'scorpion'
párâ or [prâ] 'come.PFV'
mìr̀̀ or [mrì] 'again'
bìr̀̀ or [brì] 'day, time'
wàtíćí or [wàtrí] 'to dream'

## Syllables with complex onsets due to the deletion of $\boldsymbol{u}$

pàtúrú or [pàtrú] 'cat'
sùrùpắj or [srùp ̂j $\left.^{j}\right]$ 'vulture'

These possibilities are not unexpected. Cross-linguistically, rhotics often behave in special ways in syllables (Ladefoged \& Maddieson 1996: 216).

### 5.5.3 Marginal types of complex onsets: NC and Cr clusters

The lexicon of Kam contains two types of consonant clusters that are limited to just a few items. Of these, I first discuss NC-onsets, which feature a non-syllabic nasal followed by a stop. The second type of cluster, C c -onsets, has been attested in just two lexemes so far.

In two lexemes, NC onsets are optional and freely alternate with the respective nasal as the onset. In another two lexemes, NC onsets are obligatory. I consider these clusters lexical irregularities. nḑámdí
 phonotactic possibilities in the language. The cluster may be preserved in this verb because of its soundsymbolic effect.

Optional NC clusters
ndák or nák 'cow'
ndàk or nàk 'to throw, to give a name, to lay eggs'

Obligatory NC clusters
ndjámdí 'iron' (borrowing from Fulfulde, where 'iron' is njamndi)
ŋmgbàp 'to shoot'

There are two nouns in the currently collected lexicon where a complex Cr onset is lexicalized and where it is no longer possible to insert a vowel (see the previous section). These nouns are consistently judged as disyllabic by my informants:
(85) ḿprîm 'okra'
àkprà 'plate'

## 6 Segmental phonological rules

This chapter describes the interaction between segments. It takes stock of the possible consonant sequences (§ 6.1.1) and the possible vowel sequences (§ 6.2.1) in Kam. Rules that determine the realization of such clusters are laid out. § 6.1 focuses on rules and constraints that operate when consonants meet. § 6.2 focuses on vowel clusters. § 6.3 describes the possible interaction between consonants and vowels.

### 6.1 Consonants

### 6.1.1 Consonant clusters and gemination

Consonant clusters occur at different levels of analysis. Some occur as complex onsets within prosodically strong syllables. Other clusters occur at the boundary between prosodically strong syllables, or at the boundary between a prosodic stem and a prosodic affix. Such combinations are more numerous. They also reveal various phonological rules in the language. An overview of such possible clusters is given in § 6.1.1.2. Finally, consonant clusters can occur in partly reduplicated verbs. Geminated consonants are also often found at the juncture between the copy and stem. As addressed in the previous chapter, reduplicated verbs are phonologically unusual in the language in various respects, including the consonant clusters. Some clusters that are possible at stem and affix-boundaries are not possible in reduplicated verbs. Consonant clusters in partial reduplication constructions are discussed separately in § 6.1.1.3.

### 6.1.1.1 Complex onsets in prosodically strong syllables

Complex onsets are exceptional in Kam. They include Cw-onsets, Cf-onsets and a few instances of NCclusters. All of these have been discussed and illustrated before in $\S 5.5$.

There are no consonant clusters in the weak portion of a prosodic stem.

### 6.1.1.2 Consonant clusters at prosodic stem boundaries

Table 33 provides an overview of all possible consonant clusters that can occur at the boundary between prosodic stems and at the boundary between prosodic stem and suffix. The rows list all stem-final consonants. The capitals P, T, K indicate stem-final stops. Capitals are used instead of lower-case letters to indicate that the voice feature is unspecified stem-finally. The columns list all stem- and suffix-initial consonants. When a cell is white and marked with an + , this indicates that the combination is possible without observed restrictions or notable phonological rules. When it is marked with a question mark, I have
not observed the combination because not all necessary examples to verify their absence or presence have been recorded. When it is colored grey, this means that there is an interaction affecting the first of the two consonants. The phonetic realization of that rule is written in square brackets within the relevant cells. Phonological representations are written with slashes. When only one sound is written in a cell, this means that the other sound is elided. Brackets indicate optional realizations.

The following generalizations can be made on the basis of the table:

- Nasals in NC clusters are often homorganic in that their place of articulation assimilates to that of the following sound. As discussed in § 4.2.4, this is particularly true for prosodic prefixes. At other types of boundaries, such assimilation is much less pervasive, especially affecting $/ \mathrm{n} /$. Not all consonants trigger this assimilation in stems: only stops and other nasals are concerned. Assimilation to labial-velar stops has no exceptions. Such assimilation is further discussed and exemplified in § 6.1.2.
- The voicing value of a stem-final consonant, which is always in coda-position, depends on the sound to its right. When there is a pause, it is unreleased. When it is followed by a consonant, the coda stop can be released into the next consonant: stops are often released nasally before nasals, an alveolar stop can be released into a labial-velar consonant, and any stop can be released glottally when they occur before a $h$. In other cases, it may be released as a voiced or as a voiceless stop. The place of articulation of the final consonant can assimilate to that of the following initial consonant. Final consonants can also be omitted in some circumstances. These rules are discussed in more detail in § 6.1.3.
- Specifically in the case of stem-final alveolar T, taps are preferred to stops in many contexts. They are often the only attested choice.
- When $/ \mathrm{r} /$ or $/ \mathfrak{y} /$ occur as the second sound of a consonant cluster, an epenthetic $\dot{i}$ is often inserted. Whereas synchronically, this vowel can be analyzed as epenthetic, it may historically be a retention.

Table 33 - Consonant clusters at prosodic stem boundaries

|  |  | Second consonant (stem-initial) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | m | n | リ | w | j | 1 | r | p | b | t | d | k | g | n | f | v | s | z | J | h | f | d3 | kp | gb |
|  | m | + | + | / m / $/$ | [mw] | + | + | (/mbr/) | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | [ $¢ \mathrm{~m} \mathrm{k} \mathrm{p}$ ] | [ [ymgb] |
|  | n | /mm/ | + | /9ŋ/ | + | + | + | (/nir/) | /mp/ | /mb/ | + | + | /.1/k/ | /ng/ | /n/ | + | + | + | + | + | + | + | + | [ $\overline{\mathrm{m}} \mathrm{k} \mathrm{p}$ ] | [ [ymgb] |
|  | y | + | + | + | + | + | + | (/yir/) | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | w | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | j | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 | + | + | /lin/ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | r | + | + | /rin/ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | P | [ $\mathrm{b}^{\mathrm{m} m}$ ] | [ $\mathrm{b}^{\mathrm{n}}$ ] | /bin/ | /bw/ | /bj/ | /bl/ | /br/ <br> /bir/ | /pp/ | /bb/ | /pt/ | /bd/ | /pk/ | /bg/ | /bn/ | /ff/ | /vv/ | /ps/ | /bz/ | /pf/ | [ph] | /pgt/ | /bd3/ | [pెkp] | ? |
|  | T | $\begin{gathered} {\left[\mathrm{d}^{\mathrm{m} \mathrm{~m}]}\right.} \\ / \mathrm{mm} / \end{gathered}$ | $\begin{aligned} & {\left[\mathrm{d}_{\mathrm{n}}^{\mathrm{n}}\right]} \\ & / \mathrm{rn} / \end{aligned}$ | /riy/ | /rw/ | /dj/ | /ri/ | /r/ | /rp/ | $\begin{aligned} & / \mathrm{db} / \\ & / \mathrm{rb} / \end{aligned}$ | /rt/ | /rd/ | /rk/ | /rg/ | $\begin{aligned} & \hline \mathrm{g} / \\ & / \mathrm{d} \mathrm{~g} / \\ & / \mathrm{rg} / \end{aligned}$ | /ff/ | /dv/ | /rs/ | ? | / 5 / | $\begin{aligned} & {[\mathrm{t} \mathrm{~h}]} \\ & / \mathrm{h} / \end{aligned}$ | /rgf/ | /rd3/ | $\begin{aligned} & {[\mathrm{rkp}]} \\ & {[\stackrel{\rightharpoonup}{\mathrm{k} k}]} \end{aligned}$ | [d]gb] |
|  | K | $\begin{gathered} {[\mathrm{Pm}]} \\ / \mathrm{m} / \end{gathered}$ | $\begin{aligned} & {[\mathrm{nn}]} \\ & / \mathrm{gn} / \end{aligned}$ | /n/ | /w/ | $\begin{aligned} & \text { /gj/ } / \\ & / \mathrm{kj} / \end{aligned}$ | $\begin{gathered} / \mathrm{g} 1 / \\ \mathrm{n} / \end{gathered}$ | $\begin{aligned} & / \mathrm{gr} / \\ & / \mathrm{gir} / \end{aligned}$ | /kp/ | /gb/ | /kt/ | /gd/ | /kk/ | /gg/ | $\begin{aligned} & \hline \mathrm{kn} / \\ & / \mathrm{gn} / \\ & {[\mathrm{Pn}]} \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { /kf/ } \\ \text { /ff/ } \end{array}$ | ? | /ks/ | /gz/ | /kj/ | [ ${ }^{\text {²h }}$ ] | /kg/ | /gd3/ | /kp/ | ? |

### 6.1.1.3 Consonant clusters and gemination in partial reduplications

As stated in § 4.3.2, consonant clusters are more restricted in partial reduplication constructions than across stem boundaries.

When the final consonant of the reduplicant is nasal, it is homorganic with the first consonant of the stem.

$$
\begin{align*}
& \text { búmbóm 'long' (resultative) }  \tag{86}\\
& \text { dìndàm 'clean' (resultative) } \\
& \text { fímfám 'light' (resultative) } \\
& \text { sùnsóy 'é 'sweet' (resultative) } \\
& \text { tíntám 'big' (resultative) } \\
& \text { wùmwòm 'hollow' (resultative) }
\end{align*}
$$

When the final consonant of the reduplicant is non-nasal, it completely assimilates to that of the following sound, creating geminates. /rp/-clusters become /pp/, /rb/ clusters become /bb/, /bd/ becomes /dd/, /gd/ becomes /dd/, etc. The result is usually a geminate consonant, except where affricates and labial-velar consonants are concerned.
$\begin{array}{lll}\sim \text { dı̀g } & \rightarrow & \text { dìdd } \grave{g} g \\ \text { STAT~be.painful } & & \text { STAT~be.painful }\end{array}$
'to be painful'
$\begin{array}{lll}\sim \text { ná } & \rightarrow & \text { nínnác } \\ \text { STAT~be.thick } & & \text { STAT~be.thick }\end{array}$
'to be thick'
(91)
$\sim \operatorname{lòg} \quad \rightarrow \quad$ lìllòg
STAT~give.birth
STAT~give.birth
'to be fertile'

| ~ḑ̇̀r | $\rightarrow$ | dusú $^{\downarrow}$ djór-f́ |
| :--- | :--- | :--- |
| FUT~descend |  | FUT~descend-í |
| 'will descend' |  |  |

### 6.1.2 Homorganic nasals and non-homorganic nasals

In the lexicon of Kam, nasals are overwhelmingly homorganic with the consonant to their right. This is most clearly the case with prosodic prefixes, which have been discussed in § 4.2.4:

```
(93) m̀.pánírí 'monkey, sp.'
ǹ.tén 'spear, sp.'
ǹ.tfwày 'bird, sp.'
ý.kóy 'louse'
̀̀m.kpóné 'thigh'
ỳm.gbc̀te 'pouched rat'
ántwàb 'young'
án}\mp@subsup{}{}{\dagger}\mathrm{ té 'small (size)'
án}\mp@subsup{}{}{\downarrow}\mathrm{ térí' 'truth'
àngwár 'thirst'
àygwóg 'house'
án}\mp@subsup{}{}{\downarrow}d\mathrm{ déríl 'idiotic'
```

Across stem boundaries, this rule applies to a lesser degree. Only $n$ undergoes such assimilation consistently. Other nasals retain their original places of articulation, except before labial-velar stops, where $m$ also assimilates. There are no examples in the data where $\eta$ is followed by a labial-velar stop.
$\boldsymbol{n}$ assimilating to following consonants
bén 'say' + mām 'give me' $\rightarrow$ [bémmắm] 'tell me' mín 'thus' + kā 'conditional' $\rightarrow$ [mínkā] 'if (it) is like that ...'
tán 'stay' $+\mathrm{p} \grave{\varepsilon}$ 'come' $\rightarrow$ [támp $\varepsilon$ ] '(they then) came and stood'

## (96) Non-homorganic nasals

tám.kj̀n 'sparrow' (unanalyzable noun)
fàm-lí 'to feed someone' (cf. àfàm 'meat', probably with a historical causative suffix)
kj̀m-sí 'to engage’ (kóm 'to tie' + -sí 'causative')
ற̀kám sû ‘bladder’ ( $\mathfrak{y}$ kám ‘under’’ sù ‘navel')
m̀púy đ̧óy ‘ritual calabash’ (m̀púy ‘calabash’ + ḑóy ‘magic, sp.')
fòj.tí ‘remove’ (cf. -tí suffix)
(97) Assimilation before labial-velar stops
nínnám 'flesh' + kpò 'body' $\rightarrow$ [nî́nnáñmkpô] ‘flesh of the body'


### 6.1.3 Realization of stops in coda position ${ }^{57}$

In § 6.1.1, I mentioned that voicing contrasts are neutralized in coda position, and that the realization of bilabial, alveolar and velar stops in that position completely depends on the following sound. The realization of each stem-final stop before each possible consonant is summarized in Table 33 above. The current section synthesizes the possible realizations. I found the following possibilities.

- Non-release, specifically before a pause, and sometimes before labial-velar stops.
- Voicing agreement: a stop in coda position receives the voicing value of the following stop.
- Release as a stop, with free variation regarding the voicing value.
- Assimilation to the following sound, with a geminate consonant as the result.
- For alveolar consonants specifically, realization as an alveolar tap [r] or lateral approximant [1].
- Nasal release before nasals.
- Labial-velar release before labial-velars.
- Glottal release before $h$.
- Debuccalization to a glottal stop.
- Elision of the consonant. The result is simply the initial consonant of the following syllable, or a pause if there is no following sound.

[^34]
### 6.1.3.1 Unreleased stops before a pause

Before a pause, velar consonants are realized as an unreleased velar stop [ $\vec{k}$ ], bilabial consonants as unreleased bilabial stops [ $\vec{p}]$, and alveolar consonants as unreleased alveolar stops [ $\overrightarrow{\mathfrak{t}}$ ]. Alveolars can also be realized as [1] or [r]. In many cases, there is free variation or variation across speakers. Speakers identify the use of [1] vs. [r] as dialectal differences between Highland Kam and Lowlands Kam, but this was not confirmed by a small scale investigation of relevant data.

$$
\begin{align*}
& \text { Prepausal [ }[\mathfrak{p}]  \tag{98}\\
& \text { àkpèP [àkpèp] 'shoulder' } \\
& \text { djiP [djip] 'to fence an area' } \\
& \text { ántwàP [ántwàp] 'young' } \\
& \text { Prepausal [ } \mathrm{k}]  \tag{99}\\
& \text { vék [vék] 'to die' } \\
& \text { àgbáK [àgbák] ‘stool’ } \\
& \text { jī̄āK [jīrāk] 'two' } \\
& \text { Prepausal [ } \mathrm{t}],[\mathrm{r}] \text { or [ }[1]  \tag{100}\\
& \text { yàT [fàr], [tât] or [tảal] 'three' } \\
& \text { àt'óT [àtór], [àt'ót] or [àt'ól] 'bee' } \\
& \text { bàr [bàt], [bàr] or [bàl] 'to farm' }
\end{align*}
$$

Very rarely, during elicitation sessions, these stops were released, with some delay, to make the contrast between the different places of articulation more obvious to me. In those cases, they always came out as voiceless stops [p], [t] and [k].

### 6.1.3.2 Voicing agreement (and non-release before labial-velar stops)

Bilabial consonants followed by a voiced consonant are often released as the voiced bilabial stop [b]. Alveolar consonants, when they are not realized as an alveolar tap [r] (§ 6.1.3.5), are realized as [d]. Velar consonants are realized as [ g ]. When a voiceless consonant follows, bilabial consonants are realized as [ p ] and velar consonants as [k]. Alveolar consonants in coda position are always realized as [r] before a voiceless stop (§ 6.1.3.5), except before $/ \mathrm{kp} /$, where an alveolar stop can be realized as [r] or can be an (unreleased) voiceless stop released into the labial-velar stop. More generally, before labial-velar stops, coda stops can be released into the labial-velar stop.

Voiced
àlíP 'head' + wó 'dog' $\rightarrow$ [àlíbwó] 'head of dog'
àbèT 'egg' + jō 'plural' $\rightarrow$ [àbèdjō] 'eggs'
fóK 'farm' + zú ${ }^{\star}$ zórē 'to be sour, resultative' $\rightarrow$ [fógzú ${ }^{\star}$ zórē] 'The farm is sour.'

## Voiceless

$$
\begin{align*}
& \text { àlíP 'head' }+ \text { tyî 'diminutive' }+\mathrm{fì} \text { 'comitative' }+ \text { àné 'hand' } \rightarrow \text { [àlíptfirì̀né] ‘fingernail' }  \tag{102}\\
& \text { léK 'to feel' + tàntfòn 'always' } \rightarrow \text { [léktàntfon] '(I) always feel (like this)' } \\
& \text { àtàT 'stone' }+ \text { kp } \bar{\varepsilon} j m \bar{i} \text { 'twenty' } \rightarrow \text { [àtàtkp } \bar{\varepsilon} j m i \overline{\tilde{i}} \sim \text { àtàrkp } \bar{\varepsilon} j m \bar{i}] \text { 'twenty stones' } \tag{103}
\end{align*}
$$

## Stops released into labial-velar stops

àj’̀P 'wind' + kpò 'body' + ú 'his' $\rightarrow$ [à ${ }^{\prime} \grave{\mathrm{j}} \mathrm{p} k$ pòwú] 'The wind, his body (was weak)' àtàT 'stone' + kp $\bar{\varepsilon} j m i ̄ ~ ' t w e n t y ' ~ \rightarrow ~[a ̀ t a ̀ t k p ~ \bar{\varepsilon} j m i \overline{\tilde{i}} \sim$ àtàrkp $\bar{\varepsilon} j m \overline{\overline{1}}]$ 'twenty stones' gúrôK ‘lion' + gbígí ‘shaked' $\rightarrow$ [gúróģ̀ ${ }^{\dagger}$ gbígí $]$ 'The lion shaked.'

The stem-final bilabial stop fully assimilates to a following labio-dental fricative (/f/, /v/). Preceding /h/, it is released glottally (§ 6.1.3.4).

Like P , K is not released as a stop before labio-dental fricatives and $/ \mathrm{h} /$. Before $/ \mathrm{w} /$ and $/ / /$ it is usually elided (§ 6.1.3.7). Before $/ \mathrm{j} /$, it is a stop with variable voicing values. Before $/ \mathrm{n} /$, it alternates between a released stop with free voicing value (§ 6.1.3.3) and a glottal stop (§ 6.1.3.6).

T can only be realized as a stop before $/ \mathrm{j} /, / \mathrm{b} /, / \mathrm{h} /, / \mathrm{v} /$ and labial-velar stops. Before $/ \mathrm{b} / \mathrm{and} / \mathrm{n} / \mathrm{such}$ a realization is optional, the alternative being an alveolar tap (§ 6.1.3.5). Before $/ \mathrm{j} /$ and $/ \mathrm{v} /$, only the realization as [d] is attested in my data.

### 6.1.3.3 Free variation between $/ \mathrm{k} /$ and $/ \mathrm{g} /$ before palatal consonants

When followed by a palatal consonant $/ \mathrm{j} /$ or $/ \mathrm{n} /$, velar consonants in coda position are realized as stops. The voicing value of these stops is free, so either $[\mathrm{k}]$ or $[\mathrm{g}]$ is a possible realization. Before $/ \mathrm{n} /$, velar consonants can also be realized as a glottal stop (§ 6.1.3.6).

$$
\begin{align*}
& \text { àmìrc̀k 'nose' }+ \text { jō 'plural' } \rightarrow \text { [àmìrèkjō ~ àm̀̀règjō] }  \tag{104}\\
& \text { tfùK ‘do' + nínáné ‘fast' } \rightarrow \text { [ffùknínáné ~ tyùgnínáyé] } \\
& \text { fóK ‘farm' + níjî ‘some' } \rightarrow \text { [fókníní ~ fógníní] }
\end{align*}
$$

### 6.1.3.4 Assimilation

When a bilabial or velar consonant in coda position is followed by a labiodental fricative (/v/ or /f/), it assimilates to the following fricative. The result is a geminated consonant.
(105) Assimilation with labialdental fricatives

$$
\begin{aligned}
& \text { kùP 'to wear' + àfú 'shirt' } \rightarrow \text { [kùffú] 'wear a shirt' } \\
& \text { gbèP 'to beat' }+ \text { vā 'to flog' } \rightarrow \text { [gbèvvā] 'to beat someone' } \\
& \text { tyùK 'to catch' + àfù 'pregnancy' } \rightarrow[\text { fyùffù }] \text { 'to become pregnant' } \\
& \text { No examples with K + v are attested. }
\end{aligned}
$$

### 6.1.3.5 T realized as [r] or [I]

The most commonly attested realization of an alveolar consonant in coda position is an alveolar tap [r]. In front of most consonants, such a realization is obligatory. Before $/ \mathrm{b} /, / \mathrm{h} /, \mathrm{h} /, / \mathrm{kp} /$ and $/ \mathrm{gb} /$, it is optional. Before $/ \mathrm{b} /$, and $/ \mathrm{gb} /$ it is in free variation with a voiced (unreleased) stop realization. Before $/ \mathrm{kp} /$, it is in free variation with a voiceless (unreleased) stop realization. Before $/ \mathrm{h} /$, it is in free variation with glottal release. Before $/ \mathrm{n} /$, all three possibilities ( $/ \mathrm{t} / / / \mathrm{f} /$ and $/ \mathrm{d} /$ ) are attested. Before $/ \mathrm{j} /$ and $/ \mathrm{v} /$, the only attested realization is a voiced stop [d].

```
(106)
tòT 'to fall' + mísí 'again' \(\rightarrow\) [tòrmísí] 'fall again'
bìT 'to slaughter' + ńtf'y 'pig' \(\rightarrow\) [bìrńtfón] 'slaughter a pig'
àtàT 'stone' + lìllغ̀m 'beatiful, resultative' \(\rightarrow\) [àtàrlìllèm] 'the stone is beautiful'
àtàT 'stone' + wūwū 'ripe, resultative' \(\rightarrow\) [àtàrwūwū] 'the stone is ripe'
tòT 'to fall' \(+\mathrm{pè}\) 'to come' \(\rightarrow\) [tòrpè ] 'fall (down)'
àtàT 'stone' + búbbōrē 'big, resultative' \(\rightarrow\) [àtàrbúbbōrē] 'the stone is big'
àtàT 'stone' + tíntám 'big, resultative' \(\rightarrow\) [àtàrtíntám] 'the stone is big'
àtàT 'stone' + dùddùb 'tall, resultative' \(\rightarrow\) [àtàrdùddùp] 'the stone is tall'
tòT 'to fall' + kã̃ 'here' \(\rightarrow\) [tòrkã̃] 'fall here'
àtàT 'stone' + fijób 'hot, resultative' \(\rightarrow\) [àtà \(\int j 1 j^{\prime}\) 'p] 'the stone is hot'
náT 'thick' + hǹ 'NEG' \(\rightarrow\) [nắrhn̂] 'thin, not thick'
àtàT 'stone' + kpố 'twenty' + bĩ̃ 'one' \(\rightarrow\) [àtà \(\mathbf{c k p o ̂ ́ b i \tilde { i n } ~}\) a àtàtkpốbī] 'twenty stones'
kàT 'to have' + àgbàn 'wife' \(\rightarrow\) [kád̉gbàn] '(He) had (three) wives.'
```

In all of these environments, T can also be realized as a lateral approximant [1].

### 6.1.3.6 Glottal release before $h$ and glottalization of $K$ before / $\mathbf{n} /$

Before $/ \mathrm{h}$ /, all coda consonants can be released glottally. Velar consonants can be released nasally before the palatal nasal $/ \mathrm{n} /$.
(107) Glottal release before /h/

$$
\begin{aligned}
& \text { dùP 'tall' + hǹ ‘NEG' } \rightarrow \text { [dùp’hǹ] 'not tall' } \\
& \text { lèb 'inside' + há 'Q' } \rightarrow \text { [... lèp’há] '(He will repeat what is) inside, eh?') } \\
& \text { náT 'thick' + hǹ ‘NEG' } \rightarrow \text { [nắt'hn̂] 'not thick' } \\
& \text { àngwóK ‘house' + hǹ ‘NEG' } \rightarrow \text { [... '́ngwók'hn̂̀] '(He did) not (build) a house.' }
\end{aligned}
$$

(108)

## Glottalization before / $\mathbf{n} /$

 zùK 'to put' + néb 'to go' $\rightarrow$ [zù? $\mathbf{j} \tilde{\text { éb }}$ ] 'to dip something in a fluid'
### 6.1.3.7 Nasal release before $/ \mathbf{n} /$ and $/ \mathrm{m} /$

Before $/ \mathrm{n} /$ and $/ \mathrm{m} /$, bilabial and alveolar consonants are formed as stops $[\mathrm{p}]$ and $[\mathrm{t}]$. They are not released orally, however. Instead, there is a nasal release.
(109) gúP 'to chase' + ńtfón 'pig' $\rightarrow$ [gúpnńtfón] '(The animal) chased a pig.' tùP 'to push' + mísí 'again' $\rightarrow$ [tùpmmísí] 'push again'
bèT 'tree' + mán '?' $\rightarrow$ [bèt ${ }^{\text {m }}$ mắn] 'bamboo' àtàT + nád 'thick' + hǹ 'NEG' $\rightarrow$ [àtàtnnańt'? $2 \hat{n}]$ 'The stone is not thick.'

### 6.1.3.8 Elision

A number of consonants in coda position can be elided before a following consonant. Alveolar consonants are often elided in front of a tap $/ \mathrm{r} /$ and in front of palatal nasals $/ \mathrm{n} /$. The vowel in the nucleus can be lengthened to compensate for the loss of the coda.

gbèT 'to scratch' + nì 'thing' $\rightarrow$ [gbènì] 'to scratch something'

Velar stops are elided before the velar nasal $/ \mathrm{y} /$ and the labiovelar approximant $/ \mathrm{w} /$. They are optionally elided before the lateral approximant $/ \mathrm{l} /$ and the bilabial nasal $/ \mathrm{m} /$.

$$
\begin{align*}
& \text { fóK 'farm' + àywāb 'all' } \rightarrow \text { [fónwāp] 'all farms' }  \tag{111}\\
& \text { dóK 'to see' + wó 'dog' } \rightarrow \text { [dówó] 'to see a dog' } \\
& \text { àngwóK 'house' + àwàn 'king' } \rightarrow \text { [àngwówàn] 'house of the king', } \\
& \text { jàK 'take' + mísí 'again' } \rightarrow \text { [jàmísí ~ jà?mísí] 'take again' } \\
& \text { líg bûK 'to dance a dance' + líǵt 'to dance, future' } \rightarrow \text { [lígbùlít́t́ ~ lígbùglít '(He) will dance } \\
& \text { a dance.' }
\end{align*}
$$

A coda alveolar consonant is also elided before the causative/iterative suffix -tí, (cf. § 12.4).

$$
\begin{array}{lll}
\text { dj̇̀T-tí } & \text { go.down-CAUS } & \rightarrow \text { ḑ̇̀tí 'to bring down' }  \tag{112}\\
\text { kpèT-tí } & \text { shiver- } t i ́ & \rightarrow \text { kpètí 'to be tired' }{ }^{58}
\end{array}
$$

Occasionally, bilabial and velar consonants are elided prepausally. Such elision is not frequent.

## Optional prepausal stops

$$
\begin{align*}
& \text { màn illíP } \rightarrow \text { [mànìíl 'brain (i.e. 'fat of the head')' }  \tag{113}\\
& \mathrm{n} \dot{\mathrm{P}} \mathrm{P} \rightarrow \text { [né́] 'go' } \\
& \text { ḑázúK } \rightarrow \text { [đ̧ázú] ‘rice’ }
\end{align*}
$$

In the emphatic particle, $r \bar{t} K$, the final velar stop is optional in prepausal position. Some speakers only accept the form without the velar stop. There may be dialectal variation, but I did not attempt a dialectological study of these phenomena.

### 6.2 Vowels

### 6.2.1 Hiatus and hiatus resolution

When two vowels from different syllables collide, they become adjacent. Such situations are generally known as hiatus. When hiatus arises in Kam, three outcomes are possible. (a) Nothing happens: hiatus is maintained. Alternatively, (b) hiatus may be resolved by inserting an extra consonant in between the vowel segments. Thirdly, (c) hiatus may be resolved by elision of one of the vowels. Note that all vowel sequences

[^35]across stem boundaries feature an $/ \mathrm{a} /, / \mathrm{u} /$ or $/ \mathbf{i} /$ as the second vowel, since those are the only vowels that can occur stem- or affix-initially in Kam.

The consonants used to resolve hiatus are the approximants $j, w$, or the glottal stop ?. The central vowel $\dot{i}$ is the only vowel that is regularly elided. All cases of hiatus can be resolved, but not all of them are obligatorily resolved.

One of the most common cases of hiatus resolution happens when a prosodic $a$-prefix is preceded by another vowel. In those cases, $\grave{a}$ is always dropped (see § 4.2.9).

| (114) | àtfi kùr |  |  |
| :---: | :---: | :---: | :---: |
|  | àt ${ }_{\text {İ }}$ àkùr |  |  |
|  | child tortoise |  |  |
|  | 'child of the tortoise' |  |  |
| (115) | àdué tyi |  |  |
|  | àdsé àtli |  |  |
|  | trousers child |  |  |
|  | 'trousers of the child' |  |  |
| (116) | ḿ | p ${ }^{\text {c }}$ | kàptì |
|  | Ń | pè̀H | àkàptì |
|  | 1SG.S.PFV | come\PFV | morning |
|  | 'I came in the m (session_034, S | (session_034, Samuel A. Adams, conversation) | conversation) |
| (117) | dí ${ }^{\text {l }}$ lib ${ }^{\text {u }}$ |  |  |
|  | be head | 3SG:POSS |  |
|  | 'It's on his head.' |  |  |
| (118) | sírá ${ }^{\text {l }}$ líb |  |  |
|  | sírá àlíb |  |  |
|  | hair head |  |  |
|  | 'head hair' |  |  |


| (119) | àkpò | làn |
| :---: | :---: | :---: |
|  | àkpò | àlày |
|  | food | pot |
|  | 'the food of the pot' |  |
| (120) | gbógó | zúb |
|  | gbógó | àzúb |
|  | shin | thief |
|  | 'the shin of the thief' |  |
| (121) | fyū | wàn |
|  | fyū | àwàn |
|  | uncle | king |
|  | 'uncle of the king' |  |

The following cases of hiatus are attested without obligatory resolution: /e $+u /$ / $/ a+u /$, $/ o+u /$, $/ e+a /$, /o $+a /, / u+a /$. They all end with either $/ \mathrm{u} /$ or $/ \mathrm{a} /$, and none start with $/ \mathrm{i} /$ /

```
    e+u
    mē ú
    mother 3SG:POSS
```

    'his mother'
    (session_052, Isa Sarkin Dawa, narrative)
    \(\mathrm{a}+\mathrm{u}\)
    àná ú
    father 3SG:POSS
    'his father'
    (session_052, Isa Sarkin Dawa, narrative)
    \(\mathrm{o}+\mathrm{u}\)
    wó ú
    dog 3SG:POSS
    'his dog'
    (session_047, Muhammad Bose Yuguda, elicitation)
    ```
(125) \(\mathrm{u}+\mathrm{a}\)
    sùnù á bá
    darter PRSTT PROX.ID
    'This is a darter.'
    (session_214, Babangida Audu, elicitation)
    e + a
    àduè á bá
    moon PRSTT PROX.ID
    'This is (the) moon.'
    (session_037, Solomon Ahmadu, elicitation)
(127) \(\mathrm{o}+\mathrm{a}\)
    wò á bá
    blood PRSTT PROX.ID
    'This is blood.'
    (session_037, Solomon Ahmadu, elicitation)
```

Sequences starting with $/ \mathrm{i} /$ or $/ \mathrm{i} /$ are always resolved, either by elision or by inserting /j/ before /a/. Elision happens when /i/ belongs to a prosodically weak syllable, or when it occurs in a (otherwise prosodically strong) suffix. Glide-insertion happens when /i/is part of a prosodically strong syllable of a morphological stem.
(128) Glide-insertion
àbì á bá $\quad \rightarrow$ [àbìjábā]
soil PRSTT PROX.ID
'This is soil.'
(session_068, Solomon Ahmadu, elicitation)
(129) Elision of /i/ or /i/
fámlí + ú $\rightarrow$ [fàmlú]
feed:PFV 3SG:POSS
'(the lion) fed him'
(session_252, anonymous, narrative)

| sámcí + á |  |
| :---: | :---: |
| bad:PFV PFV | stand |
| '(It is) spoiled' |  |
| (session_341, | um |

All other sequences are resolved by means of [j] before /i/ or /i/, [w] before /u/, and [j], [w] or [?] before /a/:
tyū $\quad+$ á bá $\quad \rightarrow$ [fyūábá $]$
uncle $\quad$ PRSTT PROX.ID
'This is (an) uncle.'
(session_128, Babangida Audu, elicitation)
àjí 'third person plural pronoun', postpausal variant of $i$
àwú 'third person singular pronoun', postpausal variant of ú

### 6.2.2 Diphthongization, CwV -clusters and more hiatus resolution

### 6.2.2.1 Phonetic diphthongs

Various diphthongs occur in free variation with corresponding monophthongs in prosodically strong positions. Such optional diphthongization occurs only after certain consonants.

- [ie] and [e], following coronals, $g b$, or $m$
sísé, [sísé] or [sísiée] 'adder'
mìntē, [miั̀ntē] or [mĭ̀ntiè ] 'small (quantity)'
àlè, [àlè] or [àlì̀̀] 'fire'
gbê, [gbê] or [gbiê] 'squirrel, sp.'
- [ĩẽ] and [ẽ], after coronals
àfế, [àfế] or [à 1
àleั̀, [àlề] or [àlıà̀ ] 'cave'
- [ĩẽ] and [ĩ], following $v$
(133) ǹ̀vìnvî̀, [ǹviั̀nvî̀] or [ǹviั̀nvî̀è] 'wasp'
àvî́, [àvî́] or [àviñíc] 'breast'
- [จ] and [ữ], following bilabial stops $p$ and $b$
(134) pòpsí, [pòpsí] or [pừ̀psí] 'to press together'
m̀pòm, [m̀̀̀̀m] or [m̀pừ̀m] 'rain, n.'
bòb, [bう̀p] or [bừे p ] 'to come out'
būbbōrē, [būbbōrē] or [būbbūōrē] 'big (quantity)'

There are four ways of accounting for the allophony between diphthongs and monophthongs:
(1) There is optional diphthongization in the specified contexts.
(2) There is optional synaeresis of underlying diphthongs, where a complex vowel sound is simplified into a simple vowel sound in the specified environments.
(3) It is possible that most of the instances of monophthongs being realized instead of diphthongs are the result of hiatus resolution: when two vowels occur in sequence, one of the two vowels has to be dropped.
(4) These diphthongs are sequences with a semivowel $/ \mathrm{w} /$ or $/ \mathrm{j} /(\mathrm{CwV}$ or CjV$)$ that are optionally simplified to CV.

Although different cases may be explained by any of the proposals in (1), (2), (3) or (4), I choose to analyze these cases as optional diphthongization. Such optional diphthongization may go back to historical long vowels, which synchronically either undergo diphthongization or shortening.

### 6.2.2.2 CwV sequences and hiatus resolution

A number of CwV sequences are attested in prosodically strong syllables in Kam. These are exhaustively inventorized and illustrated in $\S 5.5$. All of these examples can be alternatively analyzed as diphthongs with $u$ as the onglide. If this analysis is adopted, the following diphthongs are added to the inventory of Kam (examples are exhaustive):

- [una] (28 examples)

| ǹf wà ' 'water bird, sp.' | ńtfwâg 'striped grass mouse' | kwàsí 'to pluck' |
| :---: | :---: | :---: |
| àngwár 'thirst' | m̀pwár 'duck' | swár 'to live' |
| hwár 'to think' | kwàr 'hip, loins, waist' | kwár 'to make a rope' |
| kwàntóy 'Mumuye people' | kwàntífí 'to fold' | àkwán 'bean' |
| àḑwàn 'snake, sp.' | ỳkwàtì̀ì 'joint' | lwàm 'hippopotamus' |
| kùrùkwàb 'bird, sp.' | pùpwàb 'liver' | ántwāb 'young' |
| swàb 'sing' | swàptí 'to increase' | ywāb 'all' |


| ywám 'junior in-law' | ywàntí 'to straighten' | ywàrí 'to be sad' |
| :--- | :--- | :--- |
| ywárí 'to mix' | ywàná 'you're welcome' | ànwà 'friend' |
| ànwán 'senior in-law' |  |  |

- [ữ] (6 examples)
àngwóg 'house'
àkwóg 'mushroom'
- [ui] (5 examples)

| kwî 'walking stick' | ywì̀kkí 'person name' |
| :--- | :--- |
| ánwī ‘new' | àywī 'story' |

- [unc] (3 examples)
kúkwéj ‘stick, sp.’
kwêj 'mudfish'
gwéj 'elsewhere’
- [ũẽ] (2 examples)
ffwẽ 'newborn child' gwà̀j 'chest'
- [ue]
ǹtfwé 'rainy season'
- [ưo]
gwó 'to be light'
- [ữõ̀]
swõ̀ 'baboon'
- [ữã]
àḑwã 'cheek'
ákw̄̄g 'big one’ ywórí 'to tie a knot' àgẁ̀b 'plant, sp.' àyẁ̀m 'Kam'
kwî 'walking stick'
ánwī ‘new’
 -
swõ ‘baboon’
àḑawã 'cheek'

Since these diphthongs are fairly rare, it is more convenient to analyze the examples as CwV clusters. Such CwV clusters can, however, be treated as the result of hiatus resolution: an underlying $/ \mathrm{u} /$, when combined with another vowel, is reduced to a semivowel to avoid vowel sequences. A sequence of $/ \mathrm{u} / \mathrm{and} / \mathrm{o} /$, for example, is reduced to $/ \mathrm{wo} /$, and a sequence of $/ \mathrm{u} / \mathrm{and} / \mathrm{i} /$ to $/ \mathrm{wi} /$.

Sometimes (but not always) a complex HL tone is found on a $\mathrm{CwV}(\mathrm{C})$ syllable. Such complex tones may represent a H-L sequence of two erstwhile syllabic vowels: $\mathrm{C} u$ carried H tone, and the second vowel was part of a syllable carrying L tone:

$$
\begin{align*}
& \text { kú }+ \text { ì } \rightarrow \text { kwî 'walking stick' }  \tag{135}\\
& \text { kú }+ \text { غ̀j } \rightarrow \text { kwêj 'mudfish' }
\end{align*}
$$

$\mathrm{CwV}(\mathrm{C})$ syllables can also feature a M tone, which possibly goes back to a LH contour (see § 3.3.3). These syllables may go back to sequences of a Cu -syllable and a following syllable with H tone:

$$
\begin{align*}
& \text { àḑù + ắ } \rightarrow \text { àḑwã̃ 'cheek' } \tag{136}
\end{align*}
$$

### 6.3 Consonant-vowel interactions

### 6.3.1 Fronted / $\mathfrak{f} /$ after coronals, $\mathrm{l}, \mathrm{j}, \mathrm{n}, \mathrm{f}$ and v

[i] freely alternates with [i] after coronals ( $s, t, d, f, f), l, j, n, f$ and $v$. In these positions, [i] can be seen as an optional fronted allophone of /i/.

$$
\begin{align*}
& / \mathrm{i} / \rightarrow / \mathrm{i} / \quad \quad /\{\mathrm{s}, \mathrm{t}, \mathrm{~d}, \mathrm{~d}, \mathrm{f}, \mathrm{j}, \mathrm{j}, \mathrm{n}, \mathrm{f}, \mathrm{v}\}_{-}  \tag{137}\\
& \text {àlīlè vs. àlī̀ē 'yesterday' } \\
& \text { jī̄rāk vs. jīrāāk 'two' } \\
& \text { áffàrì vs. ásifiàrì 'first (one)' } \\
& \text { nìsīrī vs. nìsīrī 'money' } \\
& \text { sírá vs. sírá 'hair' } \\
& \text { mùsí vs. mùsí 'to fill something' } \\
& \text { víf́́ vs. víŕá ‘dirty’ } \\
& \text { f'rít́ vs. fíćc' 'to fly' } \\
& \text { àlíp týn cì nế vs. àlíp tyí rè nế 'finger' } \\
& \text { àdjı̀rìkì vs. àdjìrìkì 'epilepsy' }
\end{align*}
$$

This rule neutralizes the distinction between $/ \mathrm{i} /$ and $/ \mathrm{i} /$ in some open syllables in strong prosodic positions. In closed syllables and in weak prosodic positions, and after nasal consonants, this opposition is already neutralized (cf. § 5.2.2, § 4.2.7). Note that $/ \mathrm{n} /$ is both a nasal consonant that can centralize $/ \mathrm{i} /$ and a consonant that can cause fronting of $/ \mathrm{i} /$. It is my impression that after $/ \mathrm{n} /$, vowels are realized as [i] more often than as [i].

This rule is applied more consistently before a pause than between consonants. Prepausally, one very rarely finds an [i], except after /s/ (e.g. mùsi' 'fill' in (137)).

```
(138) fàmlí 'to feed someone' (not attested in isolation: [fàmlí])
    àmắlî` 'flower'(not attested in isolation: [àma\tilde{l\{f])}
j\overline{1}}\mathrm{ 'to stand' (not attested in isolation: [j\])
àji 'world' (not attested in isolation: [àji])
gùfi 'ground nut'(not attested in isolation: [gùfi])
àfí 'mat' (not attested in isolation: [àfi])
àtfi 'child'(not attested in isolation: [àti]]
dsì 'bat' (not attested in isolation: [djì])
```

There are no clear examples of fronting after $/ \mathrm{z} /$.
Historically, it is possible that there was a sound change where $i$ centralized to $\dot{i}$ in most environments. After coronals, palatals and labiodentals, $i$ was preserved. That the rule is applied more consistently before a pause than between consonants suggests that this was a process of utterance-internal vowel reduction. ${ }^{59}$

### 6.3.2 Fronted /u/ $\rightarrow$ [y] after coronals, palatals and /I/

$/ \mathrm{u} /$ can be fronted to [y] after coronals, palatals and $/ \mathrm{l} /$.
$/ \mathrm{u} / \rightarrow[\mathrm{y}] /\left\{\mathrm{s}, \mathrm{f}, \mathrm{d}, \int, \mathrm{l}, \mathrm{j}, \mathrm{n}, \mathrm{z}\right\}_{-}$
[duùti] vs. [duỳti] 'to gift something'
[zúzúrák] vs. [zýzýrák] ‘shadow'
[ffùtán] vs. [fyỳtán] 'to stop'
[sú ${ }_{1 i ́ l}^{]}$vs. [sýßín 'spear grass'
[ $\int$ ùròk] vs. [Jỳrı̀ेk] 'elephant'
[àlúlù] vs. [àlýlù] 'kneecap'
[jùrù] vs. [jỳrù] 'first person plural pronoun'

[^36]
### 6.3.3 Free variation between /ẽ/ vs. /ĩ/ following post-alveolars and I

Following post-alveolars $(t f, f)$ and the lateral approximant $(l)$, /ẽ/ often freely alternates with $/ \overline{\mathrm{I}} /$. So, the distinction between /ẽ/ and /i// is blurred in these contexts:

| àjế | /àjế/ or /à $\mathrm{I}_{\text {íl }}$ | 'bush' |
| :---: | :---: | :---: |
| ǹtgé | /ntyế/ or /ntifi/ | 'tendon' |
| àlè̀ | /àlè̀/ or /àl̀̀/ | 'cave' |

While /ẽ/ in this position can be realized as [ĩ], fî/ can never be realized as [ẽ]: ǹtyf 'bow' can never be pronounced as [ìtyék.

Interestingly, /ẽ/ also freely alternates with /î/ following $t / w$. Elsewhere (§ 5.5.1 and § 6.2.2), I analyzed $t w$ as a consonant cluster and $/ \mathrm{w} /$ as a phoneme. Since $t w$ as a whole triggers palatalization or fronting of /é/, it may also be analyzed as a labialized consonant instead of a cluster.

$$
\begin{equation*}
\mathfrak{t} \text { wē̃ } \quad / f \text { wẽ } / \text { or } / f \mathfrak{f} w \overline{\tilde{1}} / / \quad \text { 'newborn child' } \tag{141}
\end{equation*}
$$

### 6.3.4 Raising of /a/ before /w/ (a /_w $\rightarrow \wedge$ ) within stems

When a is followed by $/ \mathrm{w} /$ in a stem, it is raised and backed to $[\Lambda]$. The same happens to the nasal counterpart of a. /aw/ sequences do not occur often in Kam, and only two stems are affected by this rule in the lexicon:

$$
\begin{align*}
& \text { /gàw/ } \rightarrow[\mathrm{g} \grave{\mathrm{~N} w]} \text { 'ribs' }  \tag{142}\\
& / \text { pjấw/ } \rightarrow[\mathrm{piñ̂̃w]} \mathrm{'place} \mathrm{name'}
\end{align*}
$$

### 6.3.5 Optional dropping of $\ddagger$ and $u$ in C_rV position

In between most consonants and the alveolar tap $r$, the central vowel $\dot{i}$ and high back vowel $u$ can be dropped. The consonants where this does not happen are, $w, j, f, t, d s$ : glottal stops, approximants, and postalveolars. The following are some examples in position where $\dot{i}$ and $u$ can be dropped. Note that they are not dropped in monosyllabic stems. $n, r, l, h$ never occur as the cluster-initial consonant in these examples due to their phonotactic constraints.
(143) àgbı̀ràg vs. àgbràg 'francolin'
àkp ${ }^{\prime}$ ré vs. àkpré 'cough, n.'
m̀p̄̄ז̄̄g vs. m̀prōg 'rat'
bìr̀̀ vs. brì 'day’
pàtúrû vs. pàtrû 'cat'
àfén ${ }^{\dagger}$ dífŕ́ vs. àfén ${ }^{\dagger}$ drí ‘little grebe’
kìrìbìg vs. krìbìg 'scorpion’
gúrôg vs. grôg ‘lion’
vífí vs. vrí ‘dirt’
sùnùpắj vs. scùpấj 'vulture'
zúzúrág vs. zúzrág ‘shadow’

There are generally more examples of dropped $\dot{i}$ than dropped $u$. After $m$, $u$ cannot be dropped. When $\dot{i}$ is dropped after $m, m$ is usually released into $r$ through an epenthetic (or excrescent) bilabial stop $b$ :
(144) mìř̀g vs. m̀règ [m̀brèg] 'nasal mucus'
mìr̀̀ vs. mrè [m̀brì] 'again, to repeat'
àmírá vs. àmrá [àmbrá] 'brother'

## III Part three: Nominal morphosyntax

## 7 Nouns, numerals and attributive adjectives

### 7.1 Nouns: definition and general observations

Nouns prototypically refer to things, i.e. entities that can be conceptualized without reference to 'time' or to a period during which they exist or 'persist' (Givón 1984: 51). They are time-stable concepts. In this they differ from verbs, which prototypically refer to actions, events or states, which are always characterized by a certain time during which they take place or persist.

Nouns function as the head of a noun phrase and can fulfill the functions of a noun phrase by themselves, serving as the sole item expressing the subject or object of a clause. Other functions of nouns include complements of prepositions, modifiers of other nouns and vocatives. Formally, the head vs. complement or modifier status of a noun is indicated by its position in the noun phrase. The head of a noun phrase always comes first. Modifiers follow.

```
(145) núy í-bāg-ī
    bird ADJ-be.skinny-FV
    'skinny bird'
    (session_173, Babangida Audu, Elicitation)
àygwóg í
house 3PL:POSS
'their house'
(147) àbìràg bèr
leaf tree
'leaf of the tree'
(session_173, Babangida Audu, Elicitation)
```

Not the noun, but the noun phrase as a whole is marked for number in Kam. Apart from number and deictic distance (by means of demonstratives), no other grammatical categories (case, definiteness, etc.) are marked in non-pronominal noun phrases in Kam.

Gender is not a grammatical category in Kam, nor is there another grammatical system of nominal classification.

About half of all noun stems have a prosodic prefix, which can be either $\grave{a}$ - (one third of all stems), $\grave{N}$ - (one sixth of all stems), or more rarely ${ }_{N}-$ - (just ten stems) or $\dot{a}$ - (just four stems). ${ }^{60}$ These prosodic prefixes do not have a morphosyntactic function, although they may have had a function related to nominal classification in the past. Nasal prefixes are prosodically weak in that they are always homorganic with the following consonant (§ 4.2.4). The prosodic $a$-prefixes are prosodically weak in that they can be (and usually are) dropped or reduced to $\partial$ - when they occur utterance internally (§ 4.2.9). There are no examples where a nasal prefix precedes a palatal consonant.

```
(148) àbàn 'alcohol’
    àwù 'seed'
    àlíbírí 'grave'
    àduàr 'fishing net'
    àfù 'womb'
(149) m̀fồ 'forest'
    m̀kpálíl̂̌̂ [ [ym̀kpálíl̂̀j] 'butterfly'
    m̀ánírí monkey, sp.'
    ǹfày 'rat'
    ǹsé 'gazelle, sp.'
    ǹtfóm 'hoe'
    j̀kènsì 'razor'
    j̀kwān 'bean'
j̀kùròg 'voice'
```

[^37]```
(150)
```

```
ḿpírây 'fish, sp.'
```

ḿpírây 'fish, sp.'
ḿprîm 'okra'
ḿprîm 'okra'
ńsâ 'fish, sp.'
ńsâ 'fish, sp.'
ńtérî 'squirrel'
ńtérî 'squirrel'
ńtfón 'pig'
ńtfón 'pig'
ńtfwâg 'striped grass mouse'
ńtfwâg 'striped grass mouse'
ńgúrôg 'chameleon'
ńgúrôg 'chameleon'
ǵgúrôg 'goliath beetle'
ǵgúrôg 'goliath beetle'
ýkómî 'nile monitor lizard'
ýkómî 'nile monitor lizard'
ýkóy ‘louse’
ýkóy ‘louse’
(151) ápú 'bag’
ákú 'cult, sp.'
ákú 'cult, sp.'
ásúrá 'trail'
ásúrá 'trail'
áfífàrì ‘first (one)'

```
áfífàrì ‘first (one)'
```

The prosodic prefixes $\grave{a}$ - and $\dot{a}$ - are segmentally identical to the nominalizing prefix $\grave{a}$ - discussed in § 7.2.3 and the adjectivizing prefix $\dot{a}^{L}$ described in $\S 7.5$. These derivational prefixes are also prosodically weak and behave prosodically identically to the prosodic prefixes $\dot{a}$ - and $\dot{a}$-: they are also either dropped or centralized to $\partial$ - utterance-internally.

Derivational morphology operating on nouns includes the adverbializer $k$ - (e.g. in $k$-átwàb 'in a small way', from átwàb 'small', $k$-ánt $t \bar{\varepsilon} r \bar{\imath}$ 'truly' from ántēr $\overline{1}$ 'truth'). This $k$ - may as well be analyzed as an instrumental marker (cf. § 15.4.7). Nouns can be combined into nominal compounds, which are not structurally different from attributive possession constructions (§ 7.2.1). Productive diminutive and augmentative derivations exist (§ 7.2.1.2), and there are two productive strategies for deriving new nouns from verbs (§ 7.2.3).

Numerals can be considered a subcategory of nouns, since purely morphosyntactically there is nothing differentiating them from nouns. Numerals are discussed in § 7.4.

### 7.2 Compounding and derivation

### 7.2.1 Compound nouns

### 7.2.1.1 General observations

Compounds are complex lexemes consisting of two or more other lexemes. Binominal compounds are very common in the lexicon of Kam (see also Pepper 2020). In Kam, a binominal compound is formally identical to an associative construction (§ 10.3.3.1). One could argue that binominal compounds are binominal phrases with a classifying modifier, whereas binominal phrases that are not compounds have a descriptive modifier (cf. Rijkhof 2008 on the distinction between classifying modifiers and descriptive modifiers). ${ }^{61}$ For example, a binominal construction made up of the nouns àfàm 'animal' and àngwóg 'house' is a regular phrase if àygwj́g refers to a specific house, or to any hypothetical house that can be mentally invoked, as in (152). If àngwóg does not refer to any house in particular, but acts as a general concept that the referent is associated with, the binominal construction is a compound, as in (153). In (152), the modifier àngwóg describes a characteristic of the animal. In (153), the modifier àngw'g specifies the kind of the entity that being referred to (Rijkhoff 2008: 793), i.e. a 'house' type, as opposed to a 'bush' type (154). (153) and (154) are binominal phrases that behave like complex lexemes and can thus be considered binominal compounds. ${ }^{62}$
$\begin{array}{ll}\text { (152) àfàm àngwóg } \\ & \text { animal house } \\ & \text { 'animal of the house' or 'animal of (a/some/any) house' }\end{array}$

[^38]```
(153) àfàm òngwóg
animal house
    'house animal', or 'domestic animal'
(154) àfàm \grave{ jế}
animal bush
'bush animal', or 'wild animal'
```

Some compounds have a non-compositional or conventionalized meaning. In (155), for example, the meaning 'cancer' cannot be computed from the meanings 'disease' and 'bush' alone. This meaning has to be stored in a lexicon. In (156), the meaning 'cassava' is not the same as the literal interpretation of the phrase 'dry yam' from which it is derived.
$\left.\begin{array}{lllll}\text { (155) } & \begin{array}{l}\text { àdég } \\ \\ \text { disease }\end{array} & \text { ó }^{\downarrow} \text { fế } & & \\ & \text { bush }\end{array}\right]$

Some compounds contain elements that are no longer recognizable as independent nouns and may be considered similar to the so-called cranberry morphs in English. An interesting case of this is (160), which seems transparent to a linguist working on the language, although the analysis presented here is rejected by my informants.

```
(157) àtyî ség íłgún
    'younger brother'
(158) àtfî kpírág
    child(DIM) ?
    'spoon'
    àván ífàl
    ? ?
    'lung' (cf. another unanalyzable compound àván djíř́g 'heart')
```

| màn | ə̀líb |
| :--- | :--- |
| fat | head |
| 'brain' |  |

In Kam, compounds and phrases do not differ fundamentally in their morphosyntax. Rather, binominal compounds are a type of phrase with a classifying modifier rather than a descriptive one. Such binominal compounds can then by themselves operate as complex nouns. Binominal compounding is a productive way to form new, initially compositional nouns. These complex nouns can then, because of the classificatory, non-descriptive nature of the modifier, become non-compositional and lexicalized.

### 7.2.1.2 Noun + attributive adjective compounds with $\boldsymbol{n i}$ 'thing' or $\boldsymbol{n i}$ 'person'

New nouns can be formed with a noun followed by an attributive adjective. In this case, the noun is ni 'thing' or $n i$ 'person'. I discuss this construction, a type of compound noun, in its own subsection because it is a common and productive way of creating new nouns.

Adjectives in these $n i / n i ̀$ compounds are derived from verbs according to the scheme discussed in $\S 7.5$ : they have a prefix $\dot{a}^{L}$, replacive $M$ tone on the verb stem, ${ }^{63}$ and a final vowel $-i$ (in CVC-stems, cf. § 12.2). They could be considered minimal relative clauses. ${ }^{64}$

The ní/nì construction is used for basic lexical concepts such as 'food', 'elder', 'farmer' as well as for more specific concepts such as 'scratch', 'infected rash'.

```
(161) nì ì ínīm-ī
    nì á \({ }^{L}\)-nìmlM-i
    thing ADJ-eat\ADJ-FV
    'food'
(162) jí í-bōr-ī
    ní áL-bòrlM-i
    person ADJ-be.big \(\\) ADJ-FV
    'elder'
```

[^39]| (163) | ní | í-bār-1 |
| :---: | :---: | :---: |
|  | ní | ál $^{\text {L }}$ bàr ${ }^{\text {a }}$ ADJ-FV |
|  | person | ADJ-farm\ADJ-FV |
|  | 'farmer' |  |
| (164) | nì | í-gbēr-1 |
|  | nì | $\dot{a}^{\text {L }}$-gbèr ${ }^{\text {d }}$ M-i |
|  | thing | ADJ-scratch\ADJ-FV |
|  | 'scratch' |  |
| (165) | nì | í-bs̄b-rı̄ |
|  | nì | áL-bòblL-rílM |
|  | thing | ADJ-come.outlCAUS-CAUS\ADJ |
|  | 'infected |  |
| (166) | nì | í-dērī |
|  | nì | $\mathrm{a}^{\mathrm{L}}$-dèrílM |
|  | thing | ADJ-draw ${ }^{\text {a }}$ ADJ |
|  | 'school' |  |
| (167) | ní | í-fāg-ī |
|  | ní | $\dot{a}^{\mathrm{L}}$-fàg\M-i |
|  | person | ADJ-lock\ADJ-FV |
|  | 'prisoner |  |
| (168) | nì | 1 ío |
|  | thing | warm |
|  | 'living b | , ${ }^{\prime}$ |

### 7.2.1.3 Trinominal compounds: $n i ̀$ 'thing'/ni' 'person + noun + adjective

Kam also features many trinominal compounds where ni 'thing' or $n i$ 'person' is followed by a 'noun + attributive adjective' construction. These constructions involve an action, which is encoded by the final adjective (in (169) 'to close'). This action affects a thing, which is expressed by the following noun (an
'eye'). This action is executed by an agent, which is rendered by $n i$ 'thing' or $n i$ 'person'. A Christian, then, is 'a person who closes (their) eyes'.

```
(169)
\begin{tabular}{lll} 
ní & nùg & tīksī \\
ní & ànùn & L_tìiksílM \(^{\text {person }}\) \\
eye & ADJ-close\ADJ
\end{tabular}
'Christian' (literally: 'person of closed eyes')
(session_052, Isa Sarkin Dawa, narrative)
```

This type of compound is very productive. Like the nilni compounds discussed in § 7.2.1.2, they can express fairly basic concepts (e.g. 'tailor', 'hunter', 'deaf person'), but are also used for more recently introduced concepts ('toothbrush', 'Christian', 'cup'). The syntactic structure of the construction is akin to a complex associative construction (cf. § 10.3.3.1), where $n i$ ' 'person' or $n i$ 'thing' is modified by a 'noun + adjective' noun phrase (e.g. 'person of lowering of forehead'). It is notable that in this construction the segmental part of the prefix $\dot{a}^{L}$ that usually derives adjectives from verbs is always dropped in the final adjective. It is never retained or centralized to $\dot{\partial}^{L}$. Its floating ${ }^{\text {L }}$ tone remains, blocking H tone spread from preceding syllables (e.g. in (174) and (175)).


| (173) | nì | nùn b | b o - si |
| :---: | :---: | :---: | :---: |
|  | nì | ànùn ${ }^{\text {L }}$ | L_bòk-sílM |
|  | thing | eye | ADJ-be.black-CAUSINMLZ |
|  | 'shameful thing' (literally: 'thing of black eye') |  |  |
|  | (session_283, Babangida Audu, elicitation) |  |  |
| (174) | ní | nág $\quad$ n | nīmsī |
|  | ní | nág | L-nìmsíl M |
|  | person | cow | ADJ-feedINMLZ |
|  | 'cattle rearer' (literally: 'person of fed cow') |  |  |
| (175) | nì | mìnkáyá | á tūg-ī |
|  | nì | mìykáyá | á L-tùg\M-i |
|  | thing | water | ADJ-fetchlNMLZ-FV |
|  | 'cup' (literally: 'thing of fetched water') |  |  |
| (176) |  | ní | gbām-ī |
|  |  | nì | L-gbàmlM-i |
|  | person | thing | ADJ-sow/NMLZ-FV |
|  | 'tailor' (literally: 'person of sowed thing') |  |  |
| (177) | ní | kàr | fāg-ī |
|  |  | àkàr | ${ }^{\text {L-fàg }}$ \M-i |
|  | person | ear AD | ADJ-lock\NMLZ-FV |
|  | 'deaf person' (literally: 'person of closed ear') |  |  |
| (178) |  | ní | mgbāb-ī |
|  |  | nì | ${ }^{\text {L }}$-mgbàblM-i |
|  | person | thing | ADJ-shootINMLZ-FV |
|  | 'hunte | (literally: ' | 'person of shot thing') |

### 7.2.2 Diminutive and augmentative derivation

Diminutive markers express small size of the entity referred to by the noun. (a) $y f$ 'child' is used to form diminutives in Kam.
(179) a.
(à) $f$ fì mp̄̄r乞̄g
child rat
'young of rat'
b.
(à) ffi mpārōg
DIM rat
'mouse, small rat'

| àngwóg | á, | àt 1 i | ygwóg á |  |
| :--- | :--- | :--- | :--- | :--- |
| house | PROX | DIM | house | PRSTT |

'This house is a small house.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

Larger male animals are often modified with àná 'father' of mè 'mother', but I have no examples of it being used as an augmentative marker for inanimate nouns.
àná mkpòy
father agama.lizard
'male agama lizard'
àná số
father large.ape
'older male large ape'
mè soั̀
mother large.ape
'older female large ape'

### 7.2.3 Nominalization

### 7.2.3.1 Deverbal participant nominalization with $\grave{a}$ - and replacive $\mathbf{H}$ tone

The prefix $\grave{a}$ - can be found as a general nominalizer on verbs. The verb stem is almost always marked with a replacive H tone. The $\grave{a}$ - prefix is prosodically weak and behaves like other prosodic prefixes on nouns: it can be dropped utterance-medially or reduced to a central vowel $ə$ (§ 4.2.9). This nominalization strategy is not synchronically productive, as no new nouns can be made with it. In the currently collected lexicon of $1,550 \mathrm{Kam}$ lexemes, only 22 nouns are related to verbs in this way.

## Patient nominalization

à-jé
à-jélH
NMLZ-shout 1 NMLZ
'shout'
à-kpáré
à-kpə̄rē\H
NMLZ-cough $\backslash$ NMLZ
'cough'
(187) à-nám
à-nàm $\backslash \mathrm{H}$
NMLZ-grind 1 NMLZ
'flour'

## Agent nominalization

à-zúb
à-zùb\H
NMLZ-steal\NMLZ
'thief'
à-lóg
à-lòg\H
NMLZ-give.birth\NMLZ
'maternal relative'

Instrument nominalization
à-bág
à-bàg\H
NMLZ-stab【NMLZ
'knife'

Other nominalization types
(191) à-búr
à-búr\H
NMLZ-whitelNMLZ
'cloud'
(192) à-gág
à-gág\H
NMLZ-hanglNMLZ
‘branch’
(193) à-kúptí
à-kùptílH
NMLZ-kneel.downlNMLZ
'lazy person' or 'laziness'
(194) à-dég
à-dèg\H
NMLZ-be.sicklNMLZ
‘disease’

One example in the data unexpectedly shows a replacive L tone instead of a H tone on the verb stem.

$$
\begin{array}{ll}
\text { (195) } & \text { à-vèg } \\
& \text { à-vह́g } \backslash L \\
& \text { NMLZ-dielNMLZ } \\
& \text { 'death, corpse' }
\end{array}
$$

Another individual example shows no replacive tone whatsoever.

```
(196) à-lày
    à-lày
    NMLZ-cook
    'pot'
```


### 7.2.3.2 Abstract noun derivation with $\grave{a}$-... -rì and replacive $\mathbf{H}$ tone

Another nominalization pattern derives abstract nouns with a similar $\grave{a}$-prefix, replacive H tone on the verb stem, and a $r i$-suffix. When the abstract noun denotes a property, its meaning can be metonymically extended to a person having that property. This nominalization process is fully productive and can be applied to any verb.

```
(197) à-búní-rî
    à-būn̄̄\H-rì
    NMLZ-cross\NMLZ-NMLZ
    '(a) crossing', '(someone's) crossing (the road)'
(198) à-dzíy-rî
    à-djíy\H-rì
    NMLZ-be.foolish\NMLZ-NMLZ
    'foolishness' or 'fool'
    à-lćm-rî
    à-lèm\H-rì
    NMLZ-be.good\NMLZ-rì
    'goodness, beauty'
```

```
(200) à-sáy-rî
    à-sáy\H-rì
    NMLZ-golNMLZ-NMLZ
    '(the) going'
```


### 7.3 Proper names

Proper names refer to persons or characters, places, clans, ethnicities and traditional institutions, specific events, and weekdays. Some examples follow. I did not collect proper names of animals and songs.

Person names

| àkpàkán | àkpàkánì | ḑúrkàkí |
| :---: | :---: | :---: |
| màjíní | kìní | kìnkìndjírí |
| bòjí | nēwī | wàrkû |
| àtàk | gànsâ | zìmà |
| flòngà ${ }^{\text {aidjum }}$ | ỳkānfĩn | ànùyduál |
| kávên | dùwásām | ywìnkî |
| ỳk ${ }^{\text {àntòró }}$ | àjáwkánî | sòvírí |
| tyiwántyà | Jîgáw | mántì |
| àjùwí | vówî | àsàbé |

## Place names

## a. Villages

```
gàytú (Gangtu Kamajim)
sàmàrílîm (Sabongida Kamajim)
à\etawí bóg (Kamajim 1, where à\etawi is 'place')
àywí lí`lćb (Kamajim 2, literally 'middle place')
àywí fénsòg (Kamajim 3, where àywí is 'place')
wúrá (Wura)
gòptí (Gobti)
dzùrùkí (Kurugbe)
kpágárág (Bayaro, literally 'tilapia fish')
pjấw (a village within Sarkin Dawa)
àb\varepsilońn nd\varepsilońrí(Abanderi, literally 'spoiled talk')
àngwóg kádìrì (Garin Kadiri, literally 'house of Kadiri')
à\etagwóg á` kírág (Garin Zana, literally 'house of Akirag')
à\etagwóg góp}\mp@subsup{}{}{\downarrow}\mathrm{ tí (Gunduma B, literally 'house of Gobti')
à\etagwóg \intíq}\mp@subsup{}{}{\downarrow}\mathrm{ gáw (Garin Shingaw, literally 'house of Shingaw')
àywí né (Garin Tukura)
à\etawí bún "tí (Bunti)
kàm sírá (Kam Sira)
f&̀nty̌̆ (Fincon)
ywé nín dá`rá (Garin Hamza, literally: 'mouth of bottom of palm tree')
```

b. Lakes and mountains
ǹtóy sání (mountain Sani)
àsòm kwàn (lake Kwan)
àsòm àmàmbírí (lake Amambiri, literally 'lake coconut')
àsòm kpágárág (lake Kpagarag, literally 'lake tilapia fish’)
àsòm wúrá (lake Wura)
djìm (a culturally important place where traditional chiefs are buried, on the Kamajim
mountain)

## (203) Clan names

ní Jiríkú (Shiriku people)
ní mfố ${ }^{\downarrow}$ séj ('thorn tree forest' people) ${ }^{65}$
ní ntóní wêj ('mahogany tree mountain' people) ${ }^{66}$
ní ntóy sání ('people of mountain Sani')
tyíbá (the clan that takes care of the needs of the traditional chief)

## (204) Ethnicities and religions

ànwòm (Kam)
dàw (Jirim)
kwàntóy (Mumuye)
àkómlâ (Mumuye, alternative name)
màkpà (Hausa, also Muslim)
ní nág nīmsī (Fulani, literally 'cattle rearer')
ánīmsī (Fulani, alternative name, an adjectivized form of 'to feed')
nīmsī nág (Fulani, alternative name, literally ‘feeding of cow’)
ní ḑóy mé (followers of the traditional religion)
ní gòm bāgī (Muslim, alternative name)
ní nùg tīksī (Christian, literally 'people who close their eyes')

[^40]
## (205) Traditional institutions and titles ${ }^{67}$

a. Deities and cults
kùrìkî (God, this name is used for the Christian and Islamic God)
màm (deity, sp.)
àľ́y (deity, sp.)
ákú (cult, sp.)
đ̧óy (cult, sp.)
dàmpóy (cult, named after a historical hero-chief)
b. Types of magic
tìdsón (magic, sp., also the name for 'east')
kú (magic, sp., also the name for 'cobra')
c. Official titles
àbēní (traditional king, literally 'owner of people')
wànkú (traditional king, alternative name; literally 'king of $k u$ ', kú being a cult)
àwàn (king, general name)
mē tīdsón (the mother of the traditional chief, literally 'mother of tidzóy')
tyáywáḑè (elder daughter of the traditional chief)
t'óngáḑìm (younger daughter of the traditional chief)
yikú (priest, sp.)
àkìmpá (official, sp.)
tîwó (a group of people lead by the official called àkimpá)
bōnū (group of people responsible for opening traditional festivals)

[^41]Events and dances
ǹsúrón (traditional dance, sp.)
àkú bónû (festival, sp.)
(207) Weekdays

| Kam | English | Etymology notes |
| :--- | :--- | :--- |
| kà̀kánê | Monday | Name of a Jirim village that has a market event on Mondays. Also <br> Kankani. |
| tàlátà | Tuesday | Borrowed from Hausa (Talata) - originally from Arabic at-talaata <br> 'Tuesday', literally 'day the third (starting from Sunday)' |
| màjòkàm | Wednesday | Name of Mayo Kam, a Kam village with a market event on Wednesdays. |
| àlàmî:s | Thursday | Borrowed from Hausa (alhamis); originally from Arabic yoom al-khamiis <br> 'Thursday', literally 'day the fifth (starting from Sunday)' |
| djùmbàrè | Friday | Borrowed from Adamawa Fulfulde (jumbaare), originally from Arabic <br> yoom aj-jum'a 'Friday', literally 'day of the mosque' |
| àsábâr | Saturday | Borrowed from Hausa (Asabar), originally from Arabic yoom as-sabat <br> 'Saturday', literally 'day the seventh (starting from Sunday)' |
| láhàdì | Sunday | Borrowed from Hausa (Lahadi), originally from Arabic yoom al-ahad <br> 'Sunday', literally 'day the first' |

People in Kam often have more than one name, including (1) a traditional name in Kam, (2) a Christian or an Islamic name, (3) one's father's name, (4) one or more nicknames.

The traditional name is chosen shortly after one's birth by one's grandparents, and can be a phrase referring to an event during which someone was born, or to something special about the pregnancy (e.g. àjì $t \hat{i}$ 'generation of poverty' for someone who was born in times of poverty, kùrikî sin $\hat{a}$ ' $G o d$ has done it' when someone has given birth who was thought to be infertile). The name can also simply be the same name as a grandparent or an older relative.

The Christian or Islamic name is given in the presence of an imam or a priest. When the parents of a child are Christian, this is done during baptism. Christian names are generally borrowed from English, Islamic names are borrowed from Hausa. Some children receive a Hausa name regardless of their parents' religion.

Children automatically receive their father's name as their second name and are often referred to (or refer to themselves) by their father's name. People often get a nickname based on their attitude, behavior or on their speech (e.g. common phrases they use).

Some morphosyntactic operations on proper names have a different function than when they are applied to common nouns. Plural marking on person names, for example, elicits an associative plural reading: 'people associated with x ' rather than 'multiple instances of x ':

```
(208) Vówí jō
    Vówí PL
    'Vowi and his associates/family/friends'
    (session_353, Rahab Garba Precious, elicitation)
```

When a person name is combined with a proximal or distal demonstrative modifier, it usually expresses frustration about that person, or it at least implies that the person has done something wrong.

| (209) | Vówí ò |
| :--- | :--- | :--- |
|  | Vówí $\quad$ DIST |
|  | 'That Vowi! (Has he done something bad again?), |
|  | (session_353, Rahab Garba Precious, elicitation) |

Person names or titles serving as such often occur in the vocative construction:

| (210) | Bàbángídá | ooj! |
| :--- | :--- | :--- |
|  | Babangida $\quad$ VOC |  |
|  | 'Hey, Babangida!' |  |

(211)
àlàsírá
ooj!
white.person VOC
'Hey, white man!'

### 7.4 Numerals

### 7.4.1.1 Basic morphosyntax of numerals

Numerals are morphosyntactically like nouns. Like nouns, they can be the head or the sole member of the noun phrase. They can also be used in a possessive construction, modified with adjectives and used with prepositions.


```
(217) ká jírāg
    INSTR two
    'with two (e.g. hands)'
    (session_346, Danjuma Bello, elicitation)
```

When used as quantifiers, numerals always follow nouns.

| (218) | àwàn tfàr |
| :--- | :--- | :--- |
|  | king three |
|  | 'three kings' |
|  | (session_346, Danjuma Bello, elicitation) |
| (219) | m̀īirī jīrāg |
|  | goat two |
|  | 'two goats' |
|  | (session_346, Danjuma Bello, elicitation) |

### 7.4.1.2 Formation of cardinal numerals

### 7.4.1.2.1 Simplex numerals

Kam has a decimal (10-based) and vigesimal (20-based) counting system, possibly with a trace of a quinary (5-based) system in number seven: đ̧ùb jīrāg 'seven' can be segmented into đ̧ùb 'six' and jīrāg 'two'. Two diachronic interpretations of this are possible: either the compound expression is derived from a phrase meaning 'second six' (cf. Pozdniakov 2018: 150, 165), or ḑùb was the original term for 'five' and the original meaning was five-two. Apart from 'seven', numerals from one to ten are synchronically monomorphemic.

(220) | bĩ or bímbíní | 1 |  |
| :--- | :--- | :--- |
|  | jīrāg | 2 |
|  | tàr | 3 |
|  | ǹnár | 4 |
|  | j̀wún | 5 |
|  | ḑùb | 6 |
|  | ḑùb jīrāg | 7 (lit.: ‘six two') |
|  | sâr | 8 |
|  | jǐ̌zá | 9 |
| bō | 10 |  |

According to my current data, bimbiní is a free alternative to $b \overline{\tilde{\imath}}$ 'one'. bī appears to be the default, most frequently used form. Possibly, bimbiní is or was an emphatic form meaning 'exactly one'. ǹnár 'four' has an initial syllabic nasal followed by a non-syllabic nasal, a phenomenon that does not occur elsewhere in simplex lexemes in Kam, which points to possible historical morphological complexity. The syllabic nasals are dropped when these numerals are used in complex numerals (see below). $n i^{\downarrow} z a$, the numeral for nine, features internal downstep, which may also be indicative of historical complexity. For $n i{ }^{\downarrow} z a ́$, it should also be noted that the form found in isolation is different from the form found in complex numerals, which has an added velar stop in the final syllable's coda position ( $n i^{\downarrow}$ zág, see below).

There are two separate numerals for twenty. $k p \bar{c} j m \bar{l}$, which is synchronically monomorphemic, and $\grave{a} k p o \tilde{́}-b \hat{l}$ which is, by analogy with tens after twenty, analyzable into the bound stem àkpố 'twenty' that does not occur anywhere in isolation, and the numeral for one, $b \overline{\tilde{c}}$. Possibly, the initial part of both terms for 'twenty' are etymologically related to kpò 'body'. -mī in kp $\bar{\varepsilon} j m \bar{l}$ may be related to the indefinite article $m i^{L}$ (cf. § 9.4.4). Some informants preferred $\grave{a} k p o \tilde{-}-b \hat{i}$ over $k p \bar{c} j m \bar{l}$ in isolation, but both are attested. These numerals have different combinatory properties with other numerals to form complex numerals: kp $\bar{\varepsilon} j m \bar{\imath}$ is used to form numerals from twenty-one to twenty-nine, and àkpố-bî is used to form twenties above twenty, i.e. numbers that are multiples of twenty. Thirty can be formed with either numeral. See below for more on this.
$\begin{array}{lll}\text { (221) } & \text { kp } \bar{\varepsilon} j \text {-mī } & 20 \text { (kp } \bar{j} j[\text { body?]-mí [some?]) } \\ & \text { àkpố-bî̀ } & 20 \text { (àkpó́[body?]-one) }\end{array}$

In general, for many numbers, Hausa numerals can also be used by Kam speakers as simplex alternatives to the Kam complex numerals. Examples where simplex Hausa and complex Kam numerals can be used alongside each other are Hausa (originally Arabic) tàlàtín 'thirty' - alongside Kam àkpớ bû̀ ${ }^{\downarrow} r a ́ ~ g u ́ n ~ b o ̄ ~(o r ~$
kpàjmì gún bô, see below) 'thirty' and Hausa dàrí 'hundred' - alongside Kam àkpố ywún 'hundred'. Such alternative Hausa numerals can be used in complex Kam numerals, e.g. dârí bî (hundred one) 'one hundred'.

In some cases, only the numeral borrowed from Hausa is used, which is always simplex:
(222)
dúbú 'one thousand' (borrowing, likely from Hausa dubu)
mìljên 'one million' (borrowing, likely from Hausa miliyan, indirectly borrowed from
English million)

### 7.4.1.2.2 Complex numerals

Numerals from eleven to nineteen and twenty-one to thirty are formed according to a typical decimal system: with $b \bar{o}$ 'ten' or $k p \bar{c} j m \bar{l}$ 'twenty' in combination with the prepositional noun gún 'back, behind' and one of the numerals from one to nine. Note that, for twenty-one to twenty-nine, only kp $\bar{\jmath} m \bar{\imath}$ can be used to mean 'twenty', and never àkpố-bî, which is only used in isolation and in multiples of twenty (see below). For the number 'thirty', two forms are possible: one according to this pattern - kpèjmì gún bô (twenty behind ten) 'thirty', or one according to the pattern with àkpố-bî as discussed below.

## Formation of numerals from eleven to nineteen and twenty-one to thirty

| bō + gún $+1-9$ |  |
| :--- | :--- |
| bō gún bî̀ | 11 (ten behind one) |
| bō gún bímbíní | 11, alternative (ten behind one) |
| bō gún jírâg | 12 (ten behind two) |
| bō gún nár | 14 (ten behind four) |
| bō gúy wún | 15 (ten behind five) |
| bò gún nít zág | 19 (ten behind nine) |
| kpèjmì gún bĩ | 21 (twenty behind one) |
| kpèjmì gún bó | 30 (twenty behind ten) |
| àkpố-bĩ́ trá gún bō | 30, alternative (twenty-one COM behind ten, see below) |

In numbers from eleven to nineteen, $b \bar{o}$ is sometimes simply dropped, which results, for example, in gún jírâg for 'twelve', or gún wún for 'fifteen'.

Also note that, as mentioned above, the nasal prefixes of $\grave{n}$-nár 'four' and $\grave{\eta}$-wún 'five' are dropped in these complex numerals. In both cases, the tone of the prefix is also dropped. Also note the different form of $\mu i^{\downarrow} z a ́ g$, which has a final $-g$ in complex forms and a different tonal pattern.

The preposition gún 'behind' is a form of the prepositional noun àgún where, as often happens with prepositional nouns, the $\grave{a}$-prefix has been dropped as well as its tone (cf. § 11.2.3). In numerals, this $\grave{a}$ - or its tone never resurfaces.

Multiples of twenty are formed according to a vigesimal system, i.e. by means of the bound stem àkpố'twenty', followed by the number referred to by the complex numeral divided by twenty. Note that 400 is obligatorily formed by means of the two different numerals that exist for twenty: àkpós- followed by kp $\bar{\jmath} m \bar{\imath}$. The form *àkpố-á $k p p o ̂ ́-b i ̂ ́ ~ w a s ~ n o t ~ a c c e p t e d ~ b y ~ m y ~ i n f o r m a n t s ~ h e r e . ~$
(224) Formation of twenties

| àkpố | $+1-20$ |
| :--- | :--- |
| àkpố-bî́ | 20 (twenty one) |
| àkpố-jírāg | 40 (twenty-two) |
| àkpố nâr | 80 (twenty-four) |
| àkpố-ywún | 100 (twenty-five) |
| àkpố dúb | 120 (twenty-six) |
| àkpố-bóL | 200 (twenty-ten) |
| àkpố-kpéjmī | 400 (twenty-twenty) |

Numbers in between the twenties (41-59, 61-79, 221-239, etc.) are generally formed with the 'twenty', followed by a modified form of the comitative rá - which has H tone in this construction but L tone elsewhere in the language - followed by the preposition gún 'behind' also found in other numerals, and then followed by the appropriate numeral from one to nineteen. kp $\bar{j} j \bar{\imath}$ 'twenty' can also be used as the second part of this construction (instead of a numeral from one to nineteen), especially for numbers beyond 200, but in these cases no preposition gún is used, and the comitative rà receives its normal L tone. For thirty, as mentioned before, the numeral can be constructed according to this pattern, or it can be constructed according to the same pattern as numerals from one to thirty as described above.

## (225) Formation of numbers in between twenties

[àkpố + 1-20] + rá + gún + 1-30
àkpố-bî́ ${ }^{\downarrow}$ rá gún bō $\quad 30$ (twenty-one COM behind ten)
kp $\bar{j} j m i ̄ ~ g u ́ n ~ b o ́ ~ 30, ~ a l t e r n a t i v e ~(t w e n t y ~ b e h i n d ~ t e n) ~(~) ~$
àkpố-jírāg rá gún bō 50 (twenty-two COM behind ten)
àkpố-tyár rá gún bó 70 (twenty-three COM behind ten)
àkpố-bô rà kp $\overline{\mathrm{y}} \mathrm{j} \mathrm{i} \mathrm{i} \quad 220$ (twenty-ten COM twenty)
àkpố-bô rò kp $\bar{j} j m \overline{1}$ gùn bō $\quad 230$ (twenty COM thirty[twenty behind ten])

### 7.5 Attributive adjectives

Attributive adjectives are lexemes that typically function as adnominal modifiers. In that position, they describe a property of the head noun. Very sporadically, an attributive adjective occurs as the head of a noun phrase. In such cases, the adjective metonymically refers to something that has the expressed property. ${ }^{68}$

Adjectives modifying nouns
àtàr $\quad$ í-dūb-ī
stone ADJ-be.tall:ADJ-FV
'a tall stone'
àtàr $\quad$ í-būr- $\overline{1}$
stone ADJ-be.white:ADJ-FV
'a white stone'

Adjectives functioning as head nouns
ásūmrī ${ }^{~} \mathrm{jō}$
old PL
'old things'
áb̄̄gग̄rī ${ }^{\star} \mathrm{jo}$
black PL
'black things'
ád̄̄mrī ${ }^{\downarrow} \mathrm{jo}$
red PL
'red things'
ávān jō
male PL
'males'

[^42]```
ábōḡ̄ 'night, dark'
```

áwū 'ripe' or 'ripe fruit'

There are no unambiguously simplex adjectival stems in Kam. Most are derived from verbs. Some, listed in (231) below, have no corresponding verbal stem and are thus not synchronically derived from verbs.

The process deriving adjectives from verbs is morphologically complex, consisting of separate morphemes:

- Replacive $\mathbf{M}$ tone on the verb stem ${ }^{69}$
- $\quad a^{\mathrm{L}}$ - prefix (the floating ${ }^{\mathrm{L}}$ tone is evident from the fact that the H tone on $\dot{a}$ does not spread)
- -i final vowel (only if the verb ends in a consonant, cf. § 12.2)

This process is very productive. It is both visible in basic vocabulary and in the formation of neologisms. Adjectivized verbs are often found with the noun $n i$ 'thing' to create new nouns (cf. § 7.2.1.2).
(228) Examples of deverbal adjectives

```
á-bōr-1
áL
ADJ-climb\ADJ-FV
'big'
á-dūb\overline{1}
áL
ADJ-be.tall\ADJ-FV
'tall'
```

[^43]á-fām-1̄
áL $^{L}$-fám $\backslash M-i$
ADJ-be.light $\backslash$ ADJ-FV
'light'
á-būr-1̄
ád $^{\mathrm{L}}$-búrlM-i
ADJ-be.white\ADJ-FV
'white'
á-wū
á $^{L}-w u ̄ / M$
ADJ-be.ripe $\backslash$ ADJ
'ripe'
(229) Examples of $\boldsymbol{n} \boldsymbol{\imath}+$ adjectivized verbs forming basic and new nouns

```
nì í-nīm-ī
thing ADJ-eat:ADJ-FV
'food' (literally: 'thing of eating')
jì í-gbēr-\overline{1}
thing ADJ-scratch:ADJ-FV
```

'scratch, n.' (literally: 'thing of scratching')
jì 1 í-dēr-1̄
thing ADJ-draw:ADJ-FV
'school' (literally: 'thing of drawing')

| nì | í-zūg-1 | kàr |
| :--- | :--- | :--- |
| thing | ADJ-put:ADJ-FV | ear |

'earpiece' (literally an associative phrase: 'thing of putting of the ear')

As exemplified in (229) and in (230), the á ${ }^{L}$-prefix is prosodically weak and behaves similarly to the aprefixes found on nominal stems (§ 4.2 .9 and $\S 7.1$ ): they are omitted or reduced to /i/ utterance-internally.

In (229), this $/ \mathrm{i} /$ is raised to $/ \mathrm{i} /$ under the influence of a preceding /i/. Note that in examples such as (230), the a-prefix is never retained, but only the floating ${ }^{L}$ tone remains (cf. § 7.2.1.3). ${ }^{70}$

```
(230) ní nùy tīksī
    ní ànù\eta áL
    person eye ADJ-close:CAUS\ADJ
    `christian' (literally an associative phrase: 'person of closed eyes')
```

For a small number of attributive adjectives, their deverbal origin is no more transparent synchronically. Such exceptions may be of three different types, and some attributive adjectives are exceptional in more than one of these regards: (1) some attributive adjectives have no corresponding verbal stem, (2) others show a historical relation between the adjective and the verbal stem, but cannot be synchronically derived from them, (3) some adjectives show the characteristic $\dot{a}^{L}$-prefix, but are otherwise exceptional in that they do not show an expected final vowel -i, end in a -rì suffix, or their stem shows an unexpected tone. The following lists of examples provide all the cases found so far in my current lexical database.

## Adjectives without corresponding verbal stem

```
ábōgō 'night, dark'
ábēf\a` 'blue'
á\etaw\overline{1}
ámō 'good'
ántè 'small'
áfāa 'unripe'
ántwàb 'young, small'
ásūmrì 'old'
ágbàn 'female' (cf. àgbàn 'wife')
ák\grave{g 'oldest, dominant' (cf. kj̀gà ní 'old person')}
ávān 'male' (cf. àván 'husband')
```

[^44](232) Adjectives with historically related verbal stems
ádā 'cold, well' (cf. dág 'to be cold, to become cold')
áfō 'dry' (cf. fóg 'to be dry')
áfō 'warm’ (cf. Jób 'to be hot')
ádōmrī 'red' (cf. dìndòm 'to be red')
(233) Adjectives with unexpected morphology or tone
ágbàn 'female' (cf. àgbàn 'wife') - unexpected L tone + no final vowel ${ }^{71}$
ákòg 'oldest, dominant' (cf. kògà ní 'old person') - unexpected L tone + no final vowel
ávān ‘male’ (cf. àván ‘husband’) - no final vowel
ád̄̄mrì 'red’ (cf. dìndう̀m 'to be red') - unexpected -rì suffix
ásūmrì 'old' - unexpected -rì suffix
ábōgōrì 'black' - unexpected -rì suffix

[^45]
## 8 Pronominals

### 8.1 Overview

Pronominals refer to speech act participants (first and second persons) and other entities already introduced in the discourse (third persons). In Kam, there is also a singular logophoric personal pronoun $i^{L}$ that is used when a third person subject, object, or possessor in reported discourse has the same referent as the person whose discourse is being reported. There is no inclusive-exclusive distinction in the Kam pronominal system. Table 34 on p. 182 provides an overview of all the pronominals found in Kam.

Pronominals are a closed sub-class of nouns that can substitute other noun phrases. Pronominals and the pronominal system of Kam have the following features that set them apart from nouns:

- Number marking in pronominals is different from number marking in nouns. In pronominals, number is marked by means of suppletion: different stems are used, rather than a dedicated marker.
- Some pronominals feature argument marking. Subject pronominals are different from object pronominals and from possessive pronominals. The differences are mostly tonal: object pronominals have H tone, possessive pronominals have $\mathrm{H}^{\mathrm{L}}$ tone, and some subject pronominals have L tone.
- There are different subject pronominals for 1SG and 2SG depending on the tense, aspect and negation values of the clause. In the typological literature, these are referred to as STAMP morphs (portmanteau Subject-Tense-Aspect-Mood-Polarity morphemes, cf. Anderson 2011, 2012, 2015, 2016). I will not use this term for Kam, since mood is not encoded grammatically. The only difference between forms in Kam is tonal.
- Pronominals are not usually modified with adjectives or relative clauses. This is not attested, but no negative evidence is currently available to suggest that this is impossible either.

There is a distinction between independent pronominals and bound pronominals. This is only relevant for first person singular, second person singular and first person plural categories. Following Haspelmath (2013) I call bound pronominals person indexes or just indexes.

Speakers usually leave third person non-human arguments unexpressed. Like humans, they may, however, be referred to anaphorically with the demonstratives $b a^{-‘}$ PROX.ID, this one' or $b \hat{o}$ 'DIST.ID; that one'. An exception is found in many folktales, where animals may be personified.

Pronominals cannot co-occur with a noun phrase expressing the same argument in the clause. Such noun phrases have sometimes been called conominals in the literature, and the co-occurrence of a noun
phrase with a pronominal or index has been called conomination (Haspelmath 2013: 205-209). In Kam, conomination is impossible: pronominals and noun phrases are in complementary distribution. The examples in (234) to (236) demonstrate this. A noun phrase can occur by itself without a pronominal (àtfi ígbàn mí 'a certain girl' in (234). A pronominal can occur by itself without conominal (àwú '3SG' in (235)). (236) illustrates that a pronominal cannot be accompanied by a conominal: conomination renders the clause ungrammatical. Pronominals should thus not be considered agreement markers on verbs, but as noun phrases in their own right. There is no person or number agreement on verbs in Kam.

| (234) | àtfi | í-gbàn | mí | rò | fér | jî |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | girl | ADJ-female | some | IPFV | wash | thing |  |
|  | 'Some girl was doing her laundry.' |  |  |  |  |  |  |
|  | (session_007, Garba Abubakar Bako, narrative) |  |  |  |  |  |  |
| (235) | àwú | rə́ ${ }^{\text { }}$ f ¢́r | j1̂ |  |  |  |  |
|  | 3SG | IPFV wash | thing |  |  |  |  |
|  | 'She was doing her laundry.' |  |  |  |  |  |  |
|  | (constructed example) |  |  |  |  |  |  |
| (236) | * àtfi | í-gbàn | mí | àwú | rə́ | ${ }^{\downarrow} \mathrm{f}$ ¢́r | jî |
|  | girl | ADJ-female | some | 3SG | IPFV | wash | thing |
|  | 'Some girl was doing her laundry.' |  |  |  |  |  |  |
|  | (impossible, constructed example) |  |  |  |  |  |  |

(237) may appear as an example with conomination: the pronominal nim seems to co-occur with the noun àwàn within the same clause. The pronominal nìm, however, is syntactically separate from the clause, and is detached from it by an intonation break (indicated in the example with a comma). Although it is coreferential with the subject argument of the clause, nim does not encode an argument by itself (cf. Haspelmath 2013: 206).

```
(237) jìm, àwàn jí ywòm
    1SG.ID, king person Kam
    'I, the king of the Kam ...'
    (session_208, Babangida Audu, elicitation)
```

Another apparent exception to this rule are sentences with a relative clause, where a subject pronominal coreferential with the relativized noun is used after the relative clause. However, a pause is often inserted
between the relative clause and the subject pronominal. Like nim (237), the noun phrase with the relative clause is syntactically and intonationally separated from the rest of the clause.

| (238) | àwàn king | $\overline{\mathbf{a}}$ <br> REL | míy <br> build:PFV | ว́n ${ }^{\downarrow}$ gwóg <br> house | â, REL, |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ú | dó | rá nì | rīg |  |
|  | 3SG | be | with thing | POSS |  |

'The king who built the house is rich.' (lit.: 'The king who built the house, he is rich')
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

Table 34 provides an overview of all subject pronominals, object pronominals, possessive pronominals and independent pronominals in Kam. I include the independent demonstratives $b a^{-‘}$ 'PROX.ID, this one' or $b \hat{o}$ 'DIST.ID, that one' in the table, but I do not describe them in detail in this chapter. I treat them elsewhere, in § 9.2.

I discuss subject pronominals in § 8.2, object pronominals in § 8.3, possessive pronominals in § 8.4, independent pronominals in § 8.5 and the logophoric pronominal in § 8.6. I discuss other pronominals later in this chapter, including reflexive and reciprocal pronominals (§ 8.7), and the existential pronominal níni ${ }^{L}$ (§ 8.8).

Table 34 - Kam pronominals and demonstratives (grey cells indicate that there is no specialized form)

|  | Subject pronominal | Object pronominal | Possessive pronominal | Independent pronominal |
| :---: | :---: | :---: | :---: | :---: |
| 1SG | $\begin{aligned} & \text { Ń (PFV, FUT, NEG.FUT) } \\ & \text { Ǹ (IPFV, NEG:NFUT) } \end{aligned}$ | ḿ | $\mathrm{m}^{\mathrm{L}}$ | nìm |
| 2SG | á (PFV, FUT, NEG.FUT) <br> à (IPFV, NEG:NFUT) | á | já ${ }^{\text {L }}$ | nà |
| 3SG nonhuman | $\emptyset$ | $\emptyset$ | $\emptyset$ | $\emptyset$ |
| 3SG human | àwú ~ ú | ú (= subject pronominal) | ú $^{\text {L }}$ <br> (~ bú ${ }^{\mathrm{L}}$ after a vowel) | àwú (= subject pronominal) |
| 1PL | ì ~ jùrù | júrú | júrú ${ }^{\text {L }}$ | jùrù |
| 2PL | nò | nó | jó ${ }^{\text {L }}$ | nò (= subject pronominal) |
| 3PL nonhuman | $\emptyset$ | $\emptyset$ | $\emptyset$ | $\emptyset$ |
| 3PL human | àjí ~ í | í (= subject pronominal) | $i^{\mathrm{L}}$ <br> ( $\sim$ bi $^{\mathrm{L}}$ after a vowel) | àjí (= subject pronominal) |
| LOG.SG | $i^{\text {L }}$ | $\mathrm{i}^{\mathrm{L}}$ (= subject pronominal) | $\begin{aligned} & \mathrm{i}^{\mathrm{L}}(=\text { subject pronominal }) \\ & \left(\sim \text { bí }^{\mathrm{L}} \text { after a vowel }\right) \end{aligned}$ | $\mathrm{i}^{\mathrm{L}}$ (= subject pronominal) |
| Pronominal demonstratives | bā 'PROX.ID, this one' bô 'DIST.ID, that one' |  |  |  |

### 8.2 Subject pronominals

### 8.2.1 Overview

Table 35 provides an overview of the subject pronominals found in Kam along with some of their characteristics. Parameters along which different subject pronominals vary structurally are the following:
(1) Whether they also mark the tense, aspect and polarity value of the clause. 1SG and 2 SG subject pronominals have different forms according to tense, aspect and polarity. These are only different in terms of tone.
(2) Whether the subject pronominal has a different tone from the corresponding object pronominal. When this is the case, the subject pronominal always has a $L$ tone and the object pronominal has a H tone.
(3) Whether there is a difference between the subject pronominal and the corresponding independent pronoun. When there is a difference, the subject pronominal is considered a bound pronominal or an index, since it cannot occur on its own. Indexes precede verbs or any preverbal marker that may occur in a clause (see § 13.1). Object indexes, on the other hand, are suffixes: they always occur immediately after the verb, and not to any markers or verbs that follow the verb in multi-verb constructions or future tense constructions (cf. § 13.1).

Note that there are no non-human subject pronominals. Note also that there is variation between jùrù and $\grave{i}$ for the first person plural subject pronominal. $\grave{i}$ is much more frequent than jùrù and only occurs in elicited data, but other than that I have not been able to find any difference in use between the two forms and I treat them here as free variants.

Subject pronominals occur in the initial slot of a clause, after any clause-initial adverbial modification in declarative clauses.

| Table 35 - Subject pronominals |  |  |
| :---: | :---: | :---: |
| Category | Pronominal | Comments |
| 1SG | Ń (perfective aspect) <br> Ń (future tense) <br> Ǹ (imperfective aspect) <br> N (negative non-future) | Different from independent pronoun (nim) |
| 2SG | á (perfective aspect) <br> á (future tense) <br> à (imperfective aspect) <br> à (negative non-future) | Different from independent pronoun (nà) |
| 3SG nonhuman | $\emptyset$ |  |
| 3SG human | àwú ~ ú |  |
| 1PL | ì ~ jùrù | $i$ is different from the independent pronoun (jùrù) |
| 2PL | nò |  |
| 3PL nonhuman | $\emptyset$ |  |
| 3PL human | àjí ~ í |  |
| LOG.SG | $i^{\text {L }}$ |  |

Pronominals referring to speech participants (first and second persons) are different from those referring to non-speech participants (third persons) in a few ways. Firstly, third person pronominals (àwú '3SG' and àjí '3PL’) have a prosodic prefix $\grave{a}$ - that functions exactly like prosodic prefixes on nouns (§ 4.2.9). These prosodic prefixes only occur postpausally and are dropped utterance-internally. Even postpausally, they are optional. This $\grave{a}$ - prefix arguably makes them more like nouns than the other pronominals. Secondly, singular speech participant pronominals have different forms depending on tense, aspect and polarity. Thirdly, singular speech participant pronominals (1SG and 2SG) have different tones in subject and object functions. For these pronominals, $L$ tone indicates nominative arguments, $H$ tone indicates accusative arguments. Finally, three out of four categories expressing speech participants (1SG, 2SG and 1PL) feature (or in the case of 1PL can feature) a distinction between subject pronominals and independent pronominals. Such a distinction is not available for third person pronominals.

### 8.2.2 Tense, aspect, and polarity distinctions in 1SG and 2SG subject pronominals

Tense, aspect and polarity are expressed by different markers in different places in the clause. A more comprehensive overview of such marking is provided in Chapter 1. One of the places where these categories are marked is on subject pronominals, specifically first person singular indexes and second person singular indexes. There are different pronominals for these categories depending on the tense, aspect and polarity value of the clause. The differences between these forms are exclusively tonal. Table 36 gives an overview of those tones ( H or L tone) and the functions corresponding to each tone. Examples of these markers in context can be found in chapter 1 and throughout this dissertation.

Table 36 - Tonal tense, aspect and polarity distinctions in 1SG and 2SG pronominals

| Tense | Polarity | Aspect | Tone of the <br> pronominal |
| :--- | :--- | :--- | :--- |
| Non-future | Affirmative | Perfective | H |
|  |  | Imperfective | L |
|  | Negative | Any | L |
| Future | Any | Any | H |

While I analyze these forms as portmanteau morphemes, another description is possible, although arguably less elegant from a comparative perspective. 1SG and 2SG subject indexes could be analyzed as toneless morphemes, and completely dependent on the tense, aspect and polarity value of the clause for their tones. From this perspective, tense, aspect and polarity are marked by tonal morphology on pronominals: a H tone marks perfective aspect or future tense, and a $L$ tone marks imperfective aspect or negative non-future.

### 8.3 Object pronominals

Table 37 on p. 187 lists the object pronominals found in Kam.
Object pronominals express the object of a verb. They always immediately follow a verb and are never found in isolation. As such, they qualify as suffixes. I write them separately since they are not clearly phonologically bound to the verb.

Extended transitive clauses (e.g. ditransitive clauses) are expressed with multi-verb constructions, and goals or recipients are coded as the objects of individual verbs of multi-verb constructions (cf. § 14.5). It is not necessary to distinguish objects from indirect objects in Kam: they are morphologically and syntactically identical.
(239) Object pronominal júrú '1PL.O' used as an object

| nā | pā | kòsí | júrú | rò | jí | á |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| thing:REL | come | join:PFV | 1PL.O $C O M$ | 3PL | REL |  |

'the thing that happened to join us with them'
(session_191, Isa Sarkin Dawa, narrative)
(240) Object pronominal júrú '1PL.O’ used as a recipient

| àlén | má | júrú | kòm | d 3 | ə́mō, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| God | give | 1PL. 0 | place | ADJ:sit:ADJ | ADJ:good |
| má | júrú | jì | díní |  |  |
| give | 1PL.O | thing | ADJ: | et:ADJ |  |

'(That) God (may) give us a good place to live and give us prosperity.'
(session_048, Isa Sarkin Dawa, narrative)

Many object pronominals are segmentally identical to the corresponding subject pronominals, excepting

- the 1 SG pronominal $\dot{m}$ which may be pronounced as $\partial$ a following a consonant.
- the 1 PL pronominal júrú, which does not have $i$ as an alternative short form unlike its subject equivalent, and
- 3SG and 3PL object pronominals, which are identical to the short form of the subject pronominals but cannot be expressed with a long form (cf. àwú '3SG.S', àjí '3PL.S').

All object pronominals have H tone, and for all except the $3 \mathrm{SG}, 3 \mathrm{PL}$ and logophoric pronominals, this H tone distinguishes accusative from nominative arguments, except in some tense-aspect-polarity categories where 1 SG and 2 SG nominative pronominals also carry a H tone.

Table 37 - Object pronominals

| Category | Pronominal | Comments |
| :--- | :--- | :--- |
| 1SG.O | ḿ (~ óm after a consonant) | H tone indicates object function (only in some <br> tense-aspect-polarity contexts) |
| 2SG.O | á | H tone indicates object function (only in some <br> tense-aspect-polarity contexts) |
| 3SG nonhuman | $\emptyset$ |  |
| 3SG human | ú | = short form of subject pronominal |
| 1PL.O | nó | H tone indicates object function |
| 2PL.O | $\varnothing$ | H tone indicates object function |
| 3PL nonhuman | í |  |
| 3PL human | í | $=$ short form of subject pronominal |
| LOG.SG | $=$ subject and possessive pronominals |  |

These are further examples of object pronominals.


'He said that two people took him to the bush and started to beat him.'
(session_365, Babangida Audu, elicitation)

### 8.4 Possessive pronominals

Table 38 on p. 189 lists the possessive pronominals found in Kam. Possessive pronominals are found after nouns or prepositional nouns in Kam and do not occur in isolation. In noun phrases, they are found after adjectives.

Most possessive pronominals are segmentally identical to (subject and) object pronominals. There are four exceptions to this:

- The 2 SG possessive pronominal $n \dot{a}^{L}$ is segmentally identical to the 2 SG independent pronominal nà rather than the subject and object pronominals (à '2SG.S.IPFV', à '2SG.S.NEG.NFUT', á '2SG.S.PFV', á '2SG.S.FUT' and á '2SG.O').
- The 3 SG possessive pronominal $\dot{u}^{L}$, which has a free allomorph $b u^{L}$ (pronounced [ $\beta \mathbf{r}$ u]) when it occurs after vowels.
- The 3PL possessive pronominal $i^{L}$, which has a free allomorph $b i^{L}$ (pronounced [ $\beta$ rí]) when it occurs after vowels.
- The logophoric pronominal $i^{L}$, which has a free allomorph $b i^{L}$ (pronounced [ $\beta_{\mathrm{T}}$ ]) when it occurs after vowels.

The free allomorphs for 3SG, 3PL and logophoric possessive pronominals with initial $b$ - are not accepted by all informants, so they are not full exceptions. Specifically, my main consultant Babangida Audu did not accept them as alternative pronunciations (session_368). I have not yet investigated whether they are dialectal alternatives or whether their occurrence should be sought in individual variation across speakers. ${ }^{72}$

All possessive pronominals have $\mathrm{H}^{\mathrm{L}}$ tone. The floating ${ }^{\mathrm{L}}$ tone can be analyzed as a genitive case flag, except in the lophoric pronominal $i^{L}$, where both the subject pronominal and object pronominal also have a $\mathrm{H}^{\mathrm{L}}$ tone pattern.

Note also that the 3PL and logophoric possessive pronominals are identical.

| Table 38 - Possessive pronominals |  |  |
| :---: | :---: | :---: |
| Category | Pronominal | Comments |
| 1SG:POSS | $\dot{m}^{\text {L }}$ ( $\sim$ óm after a consonant) |  |
| 2SG:POSS | já ${ }^{\text {L }}$ | Segmentally different from S and O |
| 3SG nonhuman | $\emptyset$ |  |
| 3SG.human:POSS | $\dot{u}^{\text {L }}$ |  |
| 1PL:POSS | júrú ${ }^{\text {L }}$ |  |
| 2PL:POSS | nó ${ }^{\text {L }}$ |  |
| 3PL nonhuman | $\emptyset$ |  |
| 3PL:POSS | $i^{\text {L }}$ |  |
| LOG.SG | $i^{\text {L }}$ | = subject and object pronominals |

These are further examples of possessive pronominals.

[^46]

### 8.5 Independent pronominals

Kam has independent as well as bound pronominals. An independent pronominal can make up a clause by itself, syntactically and phonologically disconnected from another clause, as in (253). When independent pronominals make up a minimal utterance, they may be accompanied by a topic (254) or focus (255) marker. Indexes cannot occur in such examples (256), (257).
$\begin{array}{lllll}\text { (253) } & \text { nìm, } & \text { àwàn } & \text { ní } & \text { ywòm } \\ & \text { 1SG.ID, } & \text { king } & \text { person } & \text { Kam }\end{array}$

|  | 'I, the king of the Kam ...' <br> (session_208, Babangida Audu, elicitation) |
| :---: | :---: |
| (254) | nìm dis ? |
|  | 1SG.ID TOP |
|  | 'What about me?' |
| (255) | nà mā |
|  | 2SG.ID too |
|  | 'You too! '73 |
| (256) | *ǹ/ń dise |
|  | 1 SG TOP |
|  | 'What about me?' (not possible) |
| (257) | *à/á mā |
|  | 2SG too |
|  | 'You too!' |

The main functions of independent pronominals are the following:

- They are the form used in a nominal predication construction, as subjects of verbless clauses (cf. § 15.2.2).
- They are used as the complement of prepositions proper (cf. § 11.2.1 and § 11.2.2)
- They are used for focus and topic marking, as illustrated in (253) to (255) above.
- They are used as one word responses to content questions.

For most person categories, the independent pronominal and the subject pronominal are identical. Only 1SG, 2SG and 1PL categories have separate subject pronominals.

Table 39 lists the independent pronouns of Kam, and whether each of them is also used in subject function.

[^47]Table 39 - Independent pronominals

| Categories | Independent pronoun | Identical to subject pronominal? |
| :--- | :--- | :---: |
| 1SG.ID | nìm | - |
| 2SG.ID | nà | - |
| 3SG human | àwú | + |
| 1PL | jùrù | + |
| 2PL | nò | + |
| 3PL human | àjí | + |
| LOG.SG | íL | + |

The following examples illustrate some main functions of independent pronominals. I illustrated the topicalization and focus functions in examples (253), (254) and (255) above.

As subject of verbless clauses (cf. § 15.2.2)
$\begin{array}{llllll}\text { (258) } & \text { nìm } & \text { àwàn } & \text { ní } & \text { ywòm } & \text { á } \\ & \text { 1SG.ID } & \text { king } & \text { person } & \text { Kam } & \text { PRSTT }\end{array}$
'I am the king of the Kam people.'
(session_048, Isa Sarkin Dawa, narrative)
(259)
í já jì gbàn á hn̂
QUOT 2SG.ID person female PRSTT NEG
'(They say) that you are not a woman.'
(session_254, Shawuya, narrative)

## As complement of prepositions proper

jùrù rà nà

1PL COM 2SG.ID
'We and you' (also: ‘you and me')
(session_068, Solomon Ahmadu, elicitation)

First person singular and second person singular independent pronouns can never be used to express subjects of verbal clauses. In those cases, indexes are always used.

| ý | wátírí | wár | â |
| :--- | :--- | :--- | :--- |
| 1SG.S.PFV | dream:PFV | dream | PFV |

'I dreamt a dream.'
(session_150, Solomon Ahmadu, elicitation)
*nìm wátírí wár â
(session_150, Solomon Ahmadu, elicitation)

Use of the logophoric independent pronominal is illustrated in (263). In this example, the logophoric pronoun - merged with the quotative marker $i j i^{L}$ (see $\S 17.6$ ) serves as the subject of a verbless clause. The predicate of the verbless clause is a relative clause meaning 'the one who opened the window'.

| (263) àní | mí | ${ }^{\downarrow}$ wúr â |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| person | some | answer PFV |  |  |  |  |
|  |  |  |  |  |  |  |
| ijí |  | ${ }^{\star} \bar{a}$ | fárí | ywé | kòm intē | à |
| QUOT:LOG.SG | REL | open:PFV | mouth place | small | REL |  |

'Somebody answered (that) he was the one who opened the window.'
(session_054, Muhammad Bose Yuguda, elicitation)

### 8.6 The logophoric pronominal

Kam has a specialized logophoric pronominal, $i^{L}$. The logophoric pronominal is used in reported discourse. It indicates that its referent is the same entity as the entity whose speech is reported. Logophoric pronominals are only available for third person singular participants in Kam. In the plural, the regular 3PL pronominal is used (the possessive form of which is identical to the possessive logophoric pronominal). The examples in (264) and (265) illustrate the use of the logophoric pronominal. If the possessor of the knife in the reported discourse is the same person as the subject of the verb béni' 'say', the logophoric pronoun $i^{L}$ is used (264). If the possessor is another third person, the regular third person singular possessive pronoun $u^{L}$ is used (265).


| (265) | ú | bén-í | íbí ${ }^{\text {b }}$ bág | ú | ${ }^{\text {b }}$ wútír | á | ${ }^{\dagger} \mathrm{jí}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3SG | say:PFV-FV | QUOT knife | 3SG:POSS | lose:PFV | PFV | stand |
|  | ${ }^{\prime} \mathrm{He}_{\mathrm{i}}$ said that his $\mathrm{s}_{\mathrm{j}}$ knife was lost.' |  |  |  |  |  |  |
|  | (session_365, Babangida Audu, elicitation) |  |  |  |  |  |  |

Logophoric pronominals are most obviously found in possessor functions and in object functions. They are also found as subjects of verbless clauses and in subject positions, usually after the quotative marker $\hat{j} j i^{L} / i b i^{L}$ (267), (268).

'Then the man ${ }^{\mathrm{i}}$ who touched the fish said that it was him ${ }^{\mathrm{i}}$.'
(session_048, Isa Sarkin Dawa, narrative)
(267) ú

| ú | bén-í | íjí | ¿í | ¿né | rá | hn̂ |
| :--- | :--- | :--- | :---: | :---: | :--- | :---: |
| 3SG | say:PFV-FV | QUOT LOG.SG | go | EMPH | NEG |  |

' $\mathrm{He}^{\mathrm{i}}$ said that he ${ }^{\mathrm{i}}$ could not go (further).'
(session_021, Yuguda Manti, narrative)

Very often, however, when the logophoric subject pronoun follows the quotative marker $i j i^{L} / i b_{i}^{L}$, the pronoun merges with the quotative marker, as in (268), which makes the logophoric pronominal difficult to detect.
àwú bén-í
íbí ${ }^{\downarrow} \operatorname{sín}$ â
3SG say:PFV-FV QUOT:LOG.SG do:PFV PFV
'He said that he did it.'
(session_365, Babangida Audu, elicitation)

In (269) and (270), exceptionally, the logophoric pronoun is pronounced with a $L$ tone. This difference in tone is currently unexplained but is only observed in subject function.

| (269) àwú | bén-í | íbí | twós | á | jí, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | say:PFV-FV | QUOT:LOG.SG | worget:PFV <br> for | PFV | stand, |

'He said that he forgot to bathe.' or 'He said that he forgot, that he didn't take bath.'
(session_365, Babangida Audu, elicitation)
$\begin{array}{llllllllc}\text { (270) ì túsí } & \text { kpó } & \text { à } & \text { ká lóní } & \text { bē } & \text { kā; } \\ & \text { LOG.SG } & \text { show:PFV } & \text { body } & \text { PFV } & \text { TEMP day } & \text { PRSTT COND }\end{array}$
'(she $e_{i}$ says that) she $e_{i}$ then shows her ${ }_{i}$ body on that day'
(session_254, Shawuya, narrative)

The following examples show reported discourse introduced with other verbs of speech and thought: tùsí 'to show', tà̀r 'to tell', màsi 'to know', hwár 'to think', jib 'to ask', and wūrí 'to answer.

| (271) | $\begin{aligned} & \text { àwú } \\ & \text { 3SG } \end{aligned}$ | túsì <br> show:FUT |  | :LOG.SG | ${ }^{+}$líg <br> dance:FUT | bùg <br> dance | líg-í <br> dance-FV |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'He will show that he will dance.' (session_365, Babangida Audu, elicitation) |  |  |  |  |  |  |
| (272) | àwú | tár-í | íbí |  | kpìy~kpáyí |  |  |
|  | 3SG | tell:PFV-FV | QU | LOG.SG | PRED strong |  |  |
|  | 'He tells that he is strong.' (session_365, Babangida Audu, elicitation) |  |  |  |  |  |  |
| (273) | àwú | másí | íbí | ${ }^{\downarrow}$ bág-1́ | ${ }^{\downarrow}$ wútír | á | ${ }^{\text {j }}$ jí |
|  | 3SG | know:PFV |  | knife-LOG.SG | lose:PFV | PFV | stand |
|  | 'He knows that his knife is lost.' (session_365, Babangida Audu, elicitation) |  |  |  |  |  |  |

(274)

| àwú | hwár | íbí |
| :--- | :--- | :--- |
| 3SG | think:PFV | QUOT:LOG.SG |
|  |  |  |
| jí | ${ }^{+}$mí $\quad \bar{a}$ | lil~l̀̀m |
| thing | certain REL | PRED~beautiful |

'He thinks that he found something beautiful.'
(session_365, Babangida Audu, elicitation)
(275)
àwú jíb-í í
íbí
3SG
ask:PFV-FV
QUOT:LOG.SG
í gé ró ${ }^{\text {dín-í }}$ gì jì?
LOG.SG what COM meet:PRV-FV what Q?
'He asks what he will get if he does it.'
(session_365, Babangida Audu, elicitation)

| àwú | wúr | á | íbí | ním | ní | à |
| :--- | :--- | :--- | :--- | :---: | :--- | :--- |
| 3SG | answer:PFV | PFV | QUOT:LOG.SG | eat:PFV | thing | PFV |

'He answers that he has already eaten.'
(session_365, Babangida Audu, elicitation)

### 8.7 Reflexive and reciprocal pronouns

Reflexive meanings are expressed with a possessive construction including either the noun àlib 'head' or kpò 'body', along with the possessive pronoun that is coreferential with the subject. When the subject is first person singular, the contracted form àlim from àlib $+\dot{m}^{L}$ ' my head' ' is used.
$\begin{array}{llll}\text { (277) ń tígí } & { }^{\downarrow} \text { lím } & \text { à } \\ \text { 1SG.S.PFV cover:PFV } & \text { self:1SG:POSS } & \end{array}$
'I covered myself.'
(session_177, Babangida Audu, elicitation)


Reciprocal clauses may be expressed with a similar possessive construction. There are not many examples of this in my corpus. The clearest example does not feature a possessive construction, but simply the noun for 'body' (281). Examples with 'head' are not found in the data. Alternatively, object pronominals can also have reciprocal meanings without any additional marking (282). Note that in this example, which is the only example with an object pronominal, the pronominal is singular. More examples of this type of construction are needed to understand reciprocals in Kam.


## 8.8 níni' 'some': an existential pronominal

The existential pronominal nini ${ }^{L}$ is used for referring to non-specific entities, usually translated as 'some (people or things)' into English.

| (283) | níní <br> some | $\downarrow$ tfúg í nág do:PFV work | k-ámò, <br> ADVZ-good, | níní <br> some | ${ }^{\star}$ tfúg <br> do |  |  | hǹ <br> NEG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'Some (peo (session_187 | ople) can do this <br> 87, Babangida A | well, some (p Audu, elicitatio | ople) |  |  |  |  |
| (284) | ń | dóg | níní | à, | àmá | àjí | nánì | hǹ |
|  | 1SG.S.PFV | $V$ see:PFV | some |  |  | 3 PL | many | NEG |
|  | 'I can see s <br> (session_187 | some, but they ar 87, Babangida A | ren't many.' <br> Audu, elicitatio |  |  |  |  |  |

## 9 Nominal markers and quantifiers

### 9.1 Optional plural 'word' $j \overline{0}$

Kam distinguishes singular and plural number. Of these two, the plural can be marked by an optional segmentally invariable (or 'phonologically free') marker $j \bar{o}$, on the noun phrase.

That the marker is segmentally invariable and prosodically strong makes it qualify as a word or a particle as opposed to a clitic ('phonologically bound' markers occurring with stems of different word classes) in some typological studies (e.g. Dryer 2013). ${ }^{74}$ This is not a trivial fact, given that the presence of such plural words is a potential areal feature characteristic of languages in the Macro-Sudan belt (Dryer 2013; Güldemann 2018b: 481; 2019: 11).

Speakers accept utterances consisting exclusively of $j \bar{o}$ as grammatical with the meaning 'many', but I have not observed such uses in natural discourse. It is unclear how its meaning or function in isolation is different from the quantifier ninnān̄$(\S$ 9.4.3).

The plural marker $j \bar{o}$ is entirely optional, and there do not appear to be any restrictions related to a referent's animacy or humanness. When a noun is modified by a numeral, $j \bar{o}$ does not usually occur, but its use always remains possible. Future research could give a better idea of the frequency of plural marking in different grammatical contexts and different information structural settings. My impression is that marked plurals occur about as frequently as unmarked plurals. The plural marker is by no means rare.

| (285) | til | jō | ním | duì | gbánákā |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | child | PL | eat:FUT | bat | later |
|  | 'The | (session_288, Solomon Ahmadu, elicitation) |  |  |  |

[^48]```
(286) àwàn tär jō á
    king three PL PRSTT
    'These are three kings.'
    (session_339, Solomon Ahmadu, elicitation)
```

Like other adnominal modifiers, $j \bar{o}$ follows, never precedes, the noun it qualifies. Its position is generally noun-phrase final, before demonstrative modifiers (288).

| (287) àmírá | $\downarrow$ ná | ḿ | jō |
| :--- | :--- | :--- | :--- |
|  | brother | father | 1SG:POSS |
|  | PL |  |  |


| (288) | t 1 i | jō | $\overline{\mathbf{a}}$ | rà | ká | jé | kpôn | ká | bórì | míná | ywāb |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | child | PL | PROX IPFV | shout | shout | always | TEMP | time | PRSTT all |  |  | 'These children are always shouting'

(session_286, Babangida Audu, elicitation)
(289) àngwóg í-bōrī jō nìnnānē
house ADJ-big:FV PL many
'There are many big houses.'
(session_303, Solomon Ahmadu, elicitation)
$j \bar{o}$ cannot occur in between two nouns of an associative construction. This means that plurality marked on an associative construction pertains to either the head, the modifier, or to both at the same time - without further context, it is always ambiguous:

| mē | yū | ḿ | jō |
| :--- | :--- | :--- | :--- |
| mother | uncle | 1SG:POSS | PL |

'the mothers of my uncle', 'the mother of my uncles', or 'the mothers of my uncles'
(session_303, Babangida Audu, elicitation)
(291)

| *fyū | jō | mē $\quad$ ḿ |  |
| :--- | :--- | :--- | :--- |
| uncle | PL | mother | $1 S G: P O S S$ |


| *ty $\overline{\mathrm{u}}$ | mē jō | ḿ |
| :--- | :--- | :--- | :--- |
| uncle | mother PL | 1SG:POSS |

There are examples where $j \bar{o}$ occurs inside a noun phrase rather than at the end, without any obvious difference in meaning involved. These examples can be analyzed as two noun phrases in apposition, $j \bar{o}$ marking the end of the first noun phrase (cf. § 10.5). If this is the case, one may expect the position of $j \bar{o}$ to be sensitive to information structural differences. I do not currently have the right data to investigate such differences, since all examples of $j o \bar{o}$ in between nominals are elicited phrases with little discursive context. I did not yet discover any such uses in texts. There is currently not enough data to choose between one of these two analyses

| (293) | àngwóg jó | ${ }^{\text {¢ }}$ íbōr-1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | house PL | ADJ-big-FV |  |  |  |
|  | 'big houses' |  |  |  |  |
|  | (session_303, Solomon Ahmadu, elicitation) |  |  |  |  |
| (294) | àngwóg jó |  |  | á |  |
|  | house PL | ADJ- | g:ADJ-FV | PRS |  |
|  | 'These are big houses.' |  |  |  |  |
|  | (session_303, Solomon Ahmadu, elicitation) |  |  |  |  |
| (295) | àsìségí | $\downarrow$ gún | ə́m | jō | jīrāg |
|  | young.child | back | 1SG:POSS | PL | two |
|  | 'my two younger siblings' (or: 'my younger siblings, the two of them'?) |  |  |  |  |

For some speakers, $j \bar{o}$ has a variant $w \bar{o}$. Speakers who use $w \bar{o}$ also use $j \bar{o}$, but it is not clear whether all speakers using $j \bar{o}$ also use $w \bar{o}$.
(296) àḑwã̀ wō 'cheeks' (session_030, Babangida Audu)
àḑwã̀ jō 'cheeks' (session_010, Garba Abubakar Bako)
(297) àlíb wó 'heads' (session_030, Babangida Audu)
àlíb jó 'heads' (session_010, Garba Abubakar Bako)

Sometimes, a longer form, $j \bar{u} w \bar{o}$ is used without difference in meaning. It is used by speakers who use $w \bar{o}$ as a variant, but also by speakers who only use $j \bar{o}$ elsewhere. This form resembles reduplicated verbs and adjectives elsewhere in the language, in the sense that $/ \mathrm{u} /$ in the first syllable $j \bar{u}$ - features a high vowel, and
$w \bar{o}$ a lower vowel (compare: bə̀b 'to come out' $\rightarrow$ bùbbj̀b 'to be out'). $u$ could be seen as the prespecified high variant of $o$ (cf. § 4.3.2). This form is not entirely similar to reduplications, however, since the syllables have a different onset ( $j$ vs. $w$ ).
ǹtŷ́ júwō vs. ǹtŷ̃́ jō ‘tendons' (session_030, Babamngida Audu)
 people associated with him'. The people associated may be, family, friends, colleagues, or people who are physically around John.
àná jó, literally 'fathers', can refer to all relatives of the generation of one's parents and above (i.e. mother(s), father, uncles, aunts, and grandparents).

### 9.2 Demonstratives and demonstrative modifiers

Kam has two sets of demonstratives. One set contains deictic demonstratives, which single out a referent by specifying its distal deixis. The set includes adnominal modifiers ( $\grave{a}$ 'this' and $\dot{o}$ 'that') and independent, pronominal demonstratives ( $b a^{-\prime}$ 'this one' and bô 'that one'). The second set contains presentative demonstratives, which establish the presence or existence of a certain entity or action. I found three different presentative demonstratives in Kam. ${ }^{75}$

- $\dot{a}$, a marker used as a demonstrative identifier in identificational clauses (e.g. $\dot{a} m \grave{m} r \bar{q} g \dot{a}$ 'It is a nose.') and equational clauses (e.g. $n \bar{i} m \bar{\partial} r \bar{\varrho} g$ á 'The thing is a nose.').
- miná, a marker used as a nominal modifier drawing attention to an entity in discourse (e.g. ǹtèkù miná ló kpô 'See the toad (it) washes itself.'), as a demonstrative identifier in presentative clauses (e.g. àbén miná 'there's talk').
- $b \bar{\varepsilon}$, a marker used as a nominal modifier, in a similar way to $\min (\dot{a})$, but also often used to point out that an event happened rather than that an entity is present (e.g. í bóg ábày à kā $b \bar{\varepsilon}$ ‘There you go, after they prepared the beer...).


### 9.2.1 Deictic demonstratives

In Kam, the deictic demonstrative system distinguishes between nearby referents (the proximal demonstrative $\grave{a}$ or $b a^{-}$'this') and faraway referents (the distal demonstrative $\dot{o}$ or $b \hat{o}$ 'that'). $\grave{a}$ 'PROX' and

[^49]$\grave{o}^{\text {'DIST' }}$ are exclusively used as adnominal demonstrative modifiers. Speakers us $b a^{-}$and $b \hat{o}$ both as independent demonstratives, for example as arguments of clauses, and as adnominal modifiers.

Demonstrative modifiers, like all adnominal modifiers, follow the noun they modify. They usually come at the end of the noun phrase, following the plural marker $j \bar{o}$. They can also occur inside a noun phrase, and can even be marked simultaneously on different elements of the noun phrase, with no apparent difference in meaning (307). Like with the different positions of the plural marker $j \bar{o}$, it is possible to analyze noun phrase internal demonstrative modifiers as marking a break between noun phrases in apposition. As is the case with $j \bar{o}$, I do not have the necessary data to determine whether the position of demonstratives within the noun phrase (or in between different apposed noun phrases) is sensitive to other grammatical or information structural constraints. Note in this regard that I found more examples of the distal demonstrative modifier occurring in between nominals than I found of proximal demonstratives in this position. I only found multiple marking in a single noun phrase with distal demonstratives, not with proximal demonstratives. I did not find the longer forms $b a^{-}$and $b o \hat{o}$ inside of a noun phrase, only following the noun phrase.

Examples of the proximal demonstrative modifier $\grave{a}$.
(299) jí léb ó $\downarrow$ fế â
person in bush PROX
'the people in this bush'
(Tope_Bitrus_04_Garba Abubakar Bako, elicitation)


| (301) | ǹ | rà | wūrī | k | bá | àná |  | ${ }^{\text {s }}$ Sin | â |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ǹ | rò | wūrī | k̇́ | bá | àjí | à | sì̀\H | REL |
|  | 1SG.S.IPFV | IPFV | want |  |  | person |  | dolPFV | REL |

'I want this person to do it.'
(session_187, Babangida Audu, elicitation)

| jà |  | jō |
| :--- | :--- | :--- |
| nì | à | jō |
| thing | PROX | PL |
| 'these | things' |  |

(Tope_Bitrus_04, Saheed Kam Bala, elicitation)

Examples of the distal demonstrative modifier $\dot{o}$.

| jí | léb | $a^{\downarrow} \mathrm{fée}$ | $\hat{\mathbf{o}}$ |
| :--- | :--- | :--- | :--- |
| person | in | bush | DIST |

'the people in that bush'
(Tope_Bitrus_04_Garba Abubakar Bako, elicitation)

| nì | ígbàn | átām | jō |
| :--- | :--- | :--- | :--- |
| person | female | ADJ:big | PL |
| 'those big women' | DIST |  |  |

(Tope_Bitrus_02_Garba Abubakar Bako, elicitation)

| ú | déb | áqو gwóg | ó | bōrī | à |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | buy:PFV | house | DIST | big | PFV |

'He bought that big house.'
(Tope_Bitrus_02, Garba Abubakar Bako, elicitation)
(306) àmìrá ó jīrāg, àjí rá gbèb ú ${ }^{\downarrow}$ né
brother DIST two, 3PL IPFV beat 3SG hand
'Those two brothers, they were beating each other.'
(session_294, Babangida Audu, elicitation)
(307)

| nò |  | jō | ò |
| :--- | :--- | :--- | :--- |
| nì | ̀̀ | $: j \bar{o}$ | ò |
| thing | DIST | PL | DIST |

'those things'
(Tope_Bitrus_04, Saheed Kam Bala, elicitation)

Speakers use $b a^{\prime}$ and $b o ̂$ both as demonstrative modifiers and as independent demonstratives (e.g. as nominal arguments). The proximal demonstrative is also identical to the relativizer $b a^{-}$. They may be related to the numeral $b \bar{i}$ ' 'one', with the final vowels $a$ and $o$ being the demonstrative stems.

Examples of independent demonstratives.
(308)

| màm | bô |
| :--- | :--- |
| give:1SG.O | DIST.ID |

'Give me that one.'
(session_037, Solomon Ahmadu, elicitation)
$\begin{array}{llllllll}\text { (309) } & \text { bá } & \text { mà } & \text { ì } & \text { tfánírí } & \text { hń } & \text { à } & \text { jī? } \\ & \text { PROX.ID } & \text { also } & \text { 1PL } & \text { finish:PFV } & \text { NEG } & \text { REL } & \text { Q }\end{array}$
'This one too that we have not finished?'
(session_271, Solomon Ahmadu, conversation)

Examples of $b a^{-}$and $b o \hat{o}$ as demonstrative modifiers.

| (310) | àtábí | bā |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | fish | PRO |  |  |  |  |
|  | 'this fish' |  |  |  |  |  |
| (311) | níykā | àwú | pá | ${ }^{\text {t ká }}$ + ${ }^{\text {dué }}$ | mí | ${ }^{+}$bā |
|  | maybe | 3SG | come:FUT | TEMP month | some | PROX |
|  | 'Maybe he will come some time this month.' (session_285, Babangida Audu, elicitation) |  |  |  |  |  |
|  |  |  |  |  |  |  |
| (312) | wó | bô |  |  |  |  |
|  | dog | DIST |  |  |  |  |
|  | 'that dog' |  |  |  |  |  |
| (313) | kwí | bô |  |  |  |  |
|  | stick | DIST |  |  |  |  |
|  | 'that stick' |  |  |  |  |  |

I did not find contexts where independent demonstratives are obligatory. A type of construction that frequently features pronominal demonstratives is identificational clauses with $\dot{a} b a^{\text {"this }}$ is' or $\dot{a} b \hat{b}$ 'that is' (§ 15.2.2).

| (314) | djì á bá |
| :---: | :---: |
|  | bat PRSTT PROX.ID |
|  | 'This is a bat.' (literally: 'It is a bat this one.') (session_040, Solomon Ahmadu, elicitation) |
| (315) | ànwà ygwóg óm tá bô |
|  | friend house my PRSTT DIST:ID |
|  | 'That is my neighbor.' (literally: 'It is my neighbor that one.') (session_047, Muhammad Bose Yuguda, elicitation) |

### 9.2.2 Presentative demonstratives

There are three presentative demonstratives in Kam. Some of them have specialized functions in nominal predication constructions (§ 15.2), as adverbials, or in information structure. I briefly mention these functions here. Since those functions are only loosely tied to nominal morphosyntax, however, I treat them more elaborately in other sections in this grammar, together with the constructions they occur in.

The demonstrative identifier $\dot{a}$ occurs in identificational and equational clauses, where it is always clause final. I describe these constructions in § 15.2.2 and in § 15.2.3.
miná can also function as a demonstrative identifier, in presentative constructions. I illustrate this function in § 15.2.5.

Elsewhere, it occurs adnominally, where it draws attention to a certain entity in discourse

| (316) àlàsírá | míná pá dín | júrú â |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | white.man | PRSTT come | meet:PFV | 1PL.O PFV |

'See the white man (he) came and met us.'
(session_048, Isa Sarkin Dawa, narrative)

| àwú | míná bá | yiinátánì | gày | à |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | PRSTT REL | stand | up | REL |

'Here he is, standing up.'
(Context: my consultant was telling the frog story and came to a picture of a character standing up.)
(session_181, Babangida Audu, narrative)
(318)
tò, àjí míná bá kāmā mísí
so, 3PL PRSTT PROX here again
'So, here they are again.'
(session_181, Babangida Audu, narrative)
$b \bar{\varepsilon}$ occurs as an adnominal modifier, where it functions similarly to min(á), drawing attention to an entity in the discourse.

| mè | ǹtèkù | b $\bar{\varepsilon}$ | $d \leq \bar{\varepsilon}$ | míná | bá | kúb | á |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| mother | frog | PRSTTTOP | PRSTT PROX | become.weak | PFV |  |  |

lù rò j̀ j̀kám tyi bú jō à
lay.down COM rest child 3SG:POSS PL PFV
'The mother-frog lies down here like this with the rest of her children.'
(session_181, Babangida Audu, narrative)

| bàr | ò | b̄, | àwàn | rò | mín | ín ${ }^{\downarrow}$ gwóg | àléb | í $^{\downarrow}$ fé |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| time | DIST | PRSTT, | king | IPFV | build | house | in | bush |

'Earlier, the king was building a house in the bush.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

| àjí | rá | twó | bé | rò | ywāb |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | COM | dog | PRSTT | COM | all |

'(They are still looking for the frog,) he and the dog here, all of them.'
(session_181, Babangida Audu, narrative)
It frequently occurs as a complement of the copula d' 'to exist', as I illustrate in § 15.2.1.

Elsewhere, speakers use $b \bar{\varepsilon}$ to tie events together in discourse. Here, it can be translated as 'there you go'. I illustrate these uses in § 18.3.

### 9.3 Relativizers and relativizers fused to nouns

The default relative clause construction in Kam employs two markers, one following the modified noun and preceding the relative clause $\bar{a}$, and one following the relative clause $\dot{a}$. The second marker is optional. This section focuses on the morphology of the first relativizer, special relative forms of nouns and nominal markers. Relative clauses in general are discussed in more detail in § 17.2.

| (322) | àwàn | $\overline{\mathbf{a}}$ | míy | íg $^{\downarrow}$ gwóg | $\hat{\text { â, }}$ | ú | dá | rá | nì | rīg |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | king | REL | build | house | REL, | he | be | with | thing | EMPH |

'The king who built this house is rich (i.e. 'he really has things').'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

The first relativizer often fuses with the preceding element. The outcomes of these cases are predictable by means of regular phonological rules of hiatus resolution (§ 6.2.1) and tone simplification. A few such combinations occur so frequently that they merit some discussion here. Some may be viewed as relative pronouns, such as $n \bar{a}$ 'the thing that', $n a^{\prime}$ or àna' the person who'. Another marker that frequently merges with the relativizer is the existential quantifier $m i^{L}$, which results in $m \bar{a}$ 'some:REL'.

Examples where $n i \bar{i}$ 'thing' precedes a relative clause, where $n i$ and $\bar{a}$ merge into $n \bar{a}$ 'thing:REL'.

| (323) | jā |  | dá | bé | léb | à |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | jì | $\overline{\mathbf{a}}$ | dá | b $\bar{\varepsilon}$ | àlćb | à |
|  | thing | REL | be | PRSTT inside | REL |  |

'The thing that is inside'
(session_007, Garba Abubakar Bako, narrative)

| nā |  | pírá | ${ }^{\text {jí }}$ | à |
| :--- | :--- | :--- | :---: | :--- |
| jì | $\overline{\mathbf{a}}$ | pírá $^{\mathrm{L}}$ | jí | à |
| thing | REL | come.PFV | arrive | REL |

'The thing that came ...'
(session_019, Yuguda Manti, narrative)

| ànā | jnā |  | dín | óm | $\bar{a}$ | $\ldots$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ànā | jì̀ | $\overline{\mathbf{a}}$ | $\operatorname{din} \backslash \mathrm{H}$ | ḿ | $\overline{\mathrm{a}}$ | $\ldots$ |
| today | thing | REL | meet\PFV | 1SG.O | REL | $\ldots$ |

'What happened to me today (made me angry).'
(session_048, Isa Sarkin Dawa, narrative)

Examples with àná (àní 'person' $+\bar{a}$ 'relativizer'):

| àjná |  | $\downarrow$ ú | mgbáb | â |
| :--- | :--- | :--- | :--- | :--- |
| àjí | $\overline{\mathbf{a}}$ | ú | mgbàb $\backslash \mathrm{H}$ | à |
| person | REL | 3SG | shoot\PFV | REL |

'The person that he shot...'
(session_048, Isa Sarkin Dawa, narrative)

| àjá |  | ${ }^{\downarrow}$ gá | ${ }^{\downarrow}$ tábí | kár | â |
| :--- | :--- | :--- | :--- | :--- | :--- |
| àní | $\overline{\mathbf{a}}$ | gálH | àtábí | kàr | à |
| person | REL | trap $\backslash P F V$ | fish | keep | REL |

'the person that caught fish'
(session_048, Isa Sarkin Dawa, narrative)

Non-merged examples of $n i ́+\bar{a}$ are also occasionally attested.

| (328) | ní | á | pè | līlē | à, | àjí | sáy | â |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ní | $\overline{\mathbf{a}}$ | p̀̀ | àlīlē | à, | àjí | sáy $\backslash H$ | à |  |
| person | REL | come | yesterday | REL, | 3PL | go\PFV PFV |  |  |
|  | 'The people who came here yesterday have left.' |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

The indefinite quantifier $m l^{L}$ fused with the relativizer as $m \bar{a}$ 'some:REL' is special in that it can occur together with a noun already incorporating the relativizer, surprisingly resulting in relative clauses that are marked with two clause-initial relativizers.

| (329) | àjá |  | mā |  | gán | ú | ${ }^{+} \mathrm{i} j \mathrm{j}$ í | *** | à |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | àjí | $\overline{\mathbf{a}}$ | mí ${ }^{\text {L }}$ | $\overline{\mathbf{a}}$ | gán | ú- ${ }^{\text {L }}$ | $\mathrm{ij}_{1}{ }^{\text {L }}$ | *** | à |
|  | person | REL | some | REL | name | 3SG-POSS | QUOT | *** | REL |

'A certain person whose name is $* * *$...'
(session_051, Isa Sarkin Dawa, narrative)

| nā |  | mā |  | í | sín | á |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| jì | $\overline{\mathbf{a}}$ | mi ${ }^{\text {L }}$ | $\overline{\mathbf{a}}$ | í | sìn\H | à |
| thing | REL | certain | REL | LOG.SG | do\PF | REL |
| 'Something that he did.' <br> (session_051, Isa Sarkin Dawa, narrative) |  |  |  |  |  |  |
| nā |  | mā |  | kùrikí sín | á | ${ }^{\downarrow}$ míná |
| thing:REL |  | some:R |  | God do:P | REL | PRSTT |
| 'This is something God has done.' <br> (session_056, Muhammad Bose Yuguda, narrative) |  |  |  |  |  |  |

Some other relative markers may derive historically from combinations of a noun and the relativizer $\bar{a}$ but are no longer synchronically segmentable since part of the original segmental or tonal form of the noun is lost. These are $b a^{-}$'PROX:REL' (identical to $b a^{\prime}$ 'PROX'), $k \overline{\tilde{a}}$ 'the place where'. and min $\bar{a}$ 'which (interrogative relativizer)'.
$b a^{-‘}$ 'PROX:REL’ sometimes occurs as a regular relative clause marker.

| ḑá | bá | à | sín á | tdá | gé | gì | jī? |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| reason | PROX:REL | you | do\PFV REL | be | what | what | Q |

'What is the reason why you did it?' (lit.: ‘The reason that you did (it) is what?')
(session_357, Rahab Garba Precious, elicitation)
$k \overline{\tilde{a}}$ 'place:REL' is a contraction of kj̀m 'place' and the relativizer $\bar{a}$. It retains some nominal properties. It can still be modified by the existential quantifier $m i^{L}$ 'some', for example (334).

| (333) | ú | néb | kô | kã̃ | ú | rá | ḑı̀n | à |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ú | néb\H | kô | kı̀m-ā | ú | rà | ḋı̀n | à |
|  | 3SG | go | PURP | place:REL | 3SG | IPFV | sit | REL |

'She went to (for) the place where she would sit.'
(session_351, Solomon Ahmadu, elicitation)

| kã̃ | mā | í | námrí | sīsīrā | á | méhùlá |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |
| place:REL | some:REL | 3PL | call:PFV | now | QUOT Maihula |  |
| 'some place that they now call Maihula' |  |  |  |  |  |  |
| (session_191, Isa Sarkin Dawa, narrative) |  |  |  |  |  |  |

The following example demonstrates the fused form min $\bar{a}$ 'which:REL' of the interrogative modifier with the relative marker. This interrogative modifier is only used in interrogative clefts. For more on this construction, see § 16.1.2.2.

```
(335)
\begin{tabular}{lllll} 
àngwóg & mínā, àwàn & mín & â \\
àngwóg & mīnā, àwàn & míp\H & à
\end{tabular}
house which, king build\PFV REL
'Which house (is it) that the king built?'
(Tope_Bitrus_07, Garba Abubakar Bako, elicitation)
```


### 9.4 Quantifiers

Quantifiers are a semantically defined category in Kam: they indicate the relative amount of the referent of the noun they modify. There are no unifying morphosyntactic features setting them apart from other nominal modifiers as a separate morphosyntactic category. Some behave exactly like deverbal adjectives, others have some nominal or verbal characteristics but also have their own specific behavior. Only one quantifier, $m i^{L}$ 'some', is always an adnominal modifier. The other quantifiers are typically used outside of the noun phrase, separated from their semantic head noun by other clause elements. In other languages, such uses have sometimes been termed 'floating quantifiers' (cf. Hoeksema 1996). It may be more appropriate to treat them as unrelated adverbial uses of quantifiers rather than a subtype of adnominal modification. Adnominal uses of $\eta w a ̄ b$, minté, and nìnnānē have not been unambiguously attested.

The following quantifiers have been attested in Kam, the first three of which have also been found as 'floating quantifiers'. Note that there is no mass noun vs. count noun distinction in quantifiers.
ywāb 'all', adnominal universal quantifier
mīnté 'few, little'
nìnnáné 'many, much', multal quantifier
mí ${ }^{\mathrm{L}}$ 'some', existential quantifier

### 9.4.1 $\eta w a \bar{b}$ 'all': a universal quantifier

The only examples of possible adnominal use of $\eta w \bar{a} b$ in my data, such as (337), come from a simple lexical elicitation session, which has very little syntactic information. Example (338) features $\eta w a \bar{b} b$ in apposition with the noun phrase it precedes ('his sons'): it cannot be said with certainty that it is adnominal, since the plural marker (here: wō) may be interpreted as noun phrase final (cf. § 10.2). The other examples unambiguously feature $\eta w a \bar{b}$ as a 'floating quantifier'.


### 9.4.2 mīnté 'few, little'

The same remarks as for $\eta w a \bar{b} b$ also apply to mīnté: most of its uses are as a floating quantifier, and only a few elicited examples exist where it may be interpreted as an adnominal modifier. minté does not have many attestations in my corpus. Note that in (343), it is partly reduplicated.
ní mín ${ }^{\downarrow}$ té
person few
the people are few
(session_342, Isa Sarkin Dawa, elicitation)

| (343) | ń | nág | àtàr | nદ̀ | mīnté | mîn |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG.S.PFV | throw:PFV | stone | go | few | few |
|  | 'I threw a few stones (away).' |  |  |  |  |  |
|  | $($ session_342, Isa Sarkin Dawa, elicitation) |  |  |  |  |  |

### 9.4.3 nìnnānē 'numerous, many, much': a multal quantifier

Morphosyntactically, the multal quantifier ninnāne resembles a lexicalized predicative adjective (cf. § 12.5.2). As is the case with predicative adjectives, its affirmative form is reduplicated, and its simplex form is only used under negation ((346), (347)) (cf. § 12.5.2). There are no clear examples where it may be used adnominally.

| àtfî | ú | nìnnānē |
| :--- | :--- | :--- |
| child | 3SG:POSS | many |

'She has many children.' (lit.: 'Her children are numerous').
(session_187, Babangida Audu, elicitation)

| ní | á | Łwúrí bàn à ànnānē |  |  |
| :--- | :--- | :--- | :--- | :--- |
| person | REL | want | alcohol REL | many |

'The people that want alcohol are many.'
(session_286, Babangida Audu, elicitation)
(346)

| ń | dóg | níní | à, | àmā, àjí | nánī | hn̂ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG.S.PFV | see:PFV | some | PFV, | but, | they | many | NEG |

'I see some (monkeys), but they are not many.'
(session_286, Babangida Audu, elicitation)
(347)

| ní | nán ${ }^{\text {é }}$ | kấ | hǹ |
| :--- | :--- | :--- | :--- |
| person | many | place:PROX | NEG |

'Not many people live here'
(session_187, Babangida Audu, elicitation)

### 9.4.4 mi' as existential quantifier ('some, any') and as specificity marker ('a certain')

$m i^{L}$ is an existential quantifier. It indicates that the number of the noun it modifies is one or more. It covers both affirmative existential quantification (some in English) and negative existential quantification (any in English). Like other modifiers, it follows the noun it modifies. This is the only quantifier that must be used adnominally and cannot 'float'.

'If there is anything, tell us. But if there is nothing, this is how God has done it.'
(session_056, Muhammad Bose Yuguda, narrative)
$m i^{L}$ is very often used to introduce a specific entity in the discourse, which is then further specified.

| ázág | á | tKánô, kòm | mí | t dá | bé |
| :--- | :--- | :--- | :--- | :--- | :--- |
| side | PROX | Kano, place | some | be | EMPH |

'At this side of Kano, there is a place they call Nyakasai.'
(session_191, Isa Sarkin Dawa, narrative)

In (350), two different referents are introduced into the discourse, and $m i^{L}$ is used in the second clause to make clear that the dog in the second clause is different from the dog introduced in the first clause. There is no dedicated lexeme or marker meaning '(an)other' in Kam.

| (350) | ḿ | gbźb | wó | mí | à, |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG.S.PFV | beat:PFV | dog | some | PFV, |
|  |  |  |  |  |  |
|  | wó | mí | ${ }^{\text {tním }}$ | óm | à |
| dog | some | bite:PFV | 1SG.O | PFV | catch. |

'I beat one dog, and another bit me.' (or: 'I beat some dog, and some dog bit me.')
(session_339, Solomon Ahmadu, elicitation)

## 10 Noun phrases

### 10.1 Function and internal structure

Noun phrases typically function as arguments in a clause. For example, as illustrated in (351), they can function as subjects (àwàn ‘king') or as objects (àygw'́g 'the house', tî bú ‘his son') in (extended) transitive clauses.

| (351) | àwàn | jág | † $\quad$ gwógá | mà | ti | bú |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | king | carry:PFV | house PFV | give | son | 3SG:POSS |
|  | 'The king has given the house to his son.' |  |  |  |  |  |
|  | (Tope_Bitrus_05, Garba Abubakar Bako, elicitation) |  |  |  |  |  |

Noun phrases can also function as copula subjects or complements (352) or complements of prepositions in a prepositional phrase (353).
àkpò dázúg á
food rice PRSTT
'The food is rice.'
(session_071, Isa Sarkin Dawa, elicitation)

| (353) | ú |
| ---: | :--- |
| 3SG | mgáb |
| 3SGoot:PFV ú | 3SG |
|  | INSTR arrow |
|  | 'He shot him with an arrow' |
|  | (session_048, Isa Sarkin Dawa, narrative) |

Noun phrases can also modify other noun phrases within a complex associative construction, occur in apposition with other noun phrases (§ 10.5), or function as minimal clauses as vocatives (cf. § 7.3) or as the answer to a content question.

Internally, noun phrases in Kam minimally consist of a head noun, which occupies the leftmost position in the noun phrase. The head noun indicates the entity the whole noun phrase refers to and can be followed by modifiers qualifying the entity or describing additional properties of that entity.

The head slot can be filled by any type of noun (common noun, proper name, locative noun, pronoun, numeral or any other quantifier). Common nouns, locative nouns and numerals can be followed
by modifiers (cf. § 7.4.1.1 and § 10.3). Attributive adjectives sporadically occur as the head of a noun phrase (see § 7.5)

The modifier slots in a noun phrase can be filled by an attributive adjective ( $\$ 10.3 .1$ ), a relative clause (§ 10.3.2), a noun (§ 10.3.3) or a numeral (§ 10.3.3.2).

Noun phrases also contain a number of grammatical markers, including the plural marker $j \bar{o}$ (§ 9.1), proximal and distal demonstrative modifiers $\grave{a}$ and $\grave{o}$ (or $b a^{-}$and $b \hat{o}$ ) (§ 9.2), posessive indexes (§ 8.4 and § 10.3.3), an existential quantifier $m i^{L}$ (§ 9.4.4) and the interrogative modifier $m \bar{n} \bar{a}$ (§ 16.1.2.2). I discuss these markers and their position in the noun phrase in their respective sections. I only mention them in passing in this chapter.

I only found one example where a prepositional phrase may modify a noun phrase (354). This example is ambiguous, however, since the comitative phrase rà zirág ábìràg ('with vegetable soup') can also be analyzed as a comitative argument that links directly to the clause instead of to the noun phrase (cf. § 11.1.1). Alternatively, rà can be interpreted as a coordinator ('Do you like cow meat and vegetable soup') instead of a preposition, without clear 'modifier' and 'head' structure between the two coordinated noun phrases. I did not dedicate an elicitation session to the noun phrase modification with prepositional phrases, so it may still be possible. In any case, it is not a common strategy.

| (354) | à | rà | wūrī | àfàm | nág | rà | zírág | ábìràg | jī? |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2SG.S.IPFV | IPFV | like | meat | cow | COM | soup | leaf | Q |
|  | 'Do you like cow meat with vegetable soup?' |  |  |  |  |  |  |  |  |
|  |  | $($ session_285, Babangida | Audu, elicitation) |  |  |  |  |  |  |

### 10.2 Word order in the noun phrase

The order of elements in the noun phrase is always head-modifier. Adjectives, numerals and other modifiers follow the noun. Possessors follow their possessee. Relative clauses follow relativized nouns. When adjectives and numerals co-occur, the order is adjective-numeral. In general, the order of elements can be summarized as follows. It is more difficult to say where the plural marker $j \bar{o}$ can occur in the noun phrase and where demonstratives appear, but they generally appear at the end of the noun phrase, in the order 'plural marker + demonstrative modifier'. I discuss more complex cases in § 9.1 and § 9.2. Quantifiers are usually located outside of the noun phrase (cf. § 9.4). NOUN ${ }^{\text {MODIFER }}$ in (355) captures all nouns occurring as modifier in an associative construction.

$$
\begin{equation*}
\text { NOUN }{ }^{\text {HEAD }}+\text { NOUN }^{\text {MODIFIER }}+\text { ADJECTIVE }+ \text { NUMERAL }+j \bar{o} ‘ \text { 'PL' }+ \text { DEMONSTRATIVE } \tag{355}
\end{equation*}
$$

| (356) àmīr $\bar{\varepsilon} g$ | āwàn |  |
| :--- | :--- | :--- |
|  | nose | king |

'the king's nose'
(Tope_Bitrus_03, Garba Abubakar Bako, elicitation)

| jí | í- $\int a \bar{g}-\overline{1}$ |
| :--- | :--- |
| person | ADJ-be.ugly-FV |

‘ugly person'

| nì | ígbàn | átām | jō | $\bar{o}$ |
| :--- | :--- | :--- | :--- | :--- |
| person | female | ADJ:big | PL | DIST |

'those big women'
(Tope_Bitrus_02_Garba Abubakar Bako, elicitation)

| ànwóg | í-bōr-1 | ḿ | yăd |
| :--- | :--- | :--- | :--- |
| house | ADJ-big-FV | 1SG:POSS | three |

'my three big houses'
(Tope_Bitrus_03, Garba Abubakar Bako, elicitation)

The interrogative quantifier sìm likewise follows nouns it modifies.

| jí | sím |
| :--- | :--- |
| person | how.many |

'How many people (came to church yesterday)?'
(session_289, Babangida Audu, elicitation)

Possessive pronominals follow nouns and adjectives and precede the plural word $j \bar{o}$ (cf. § 9.1). I did not find them following an attributive numeral, only before numerals.

| (361) àmírá | ná | ḿ | jō |  |
| :--- | :--- | :--- | :--- | :--- |
|  | brother | father | 1SG:POSS | PL |
|  | 'my father's brothers', or 'my paternal uncles' |  |  |  |

### 10.3 Nominal modification

### 10.3.1 Modification with adjectives

Attributive adjectives modify nouns by ascribing a property to the noun. The morphological properties of adjectives are discussed in § 7.5. To briefly repeat what is said there: adjectives are typically derived from verbs with a prosodically weak $\dot{a}^{L}$-prefix, a replacive M tone on the stem, and a final vowel $i$. There are some synchronically underived adjectives that appear to be historically derived, but synchronically form a closed adjective class in the language. Adjectives rarely function as the head of a noun phrase. When they do, they function as nouns, metonymically referring to referents by means of their properties (cf. § 7.5).

When modifying head nouns, adjectives always follow the noun, conforming to the head-modifier word order in the noun phrase. In this position, the vowel of their initial $\dot{a}^{L}$-prefix is usually centralized to a (cf. § 7.1).

```
(362) àtàr í-būr-ī
    stone ADJ-white\ADJ-FV
    'white stone'
    àtàr í-fām-ī
    stone ADJ-light\ADJ-FV
    'light stone'
```


### 10.3.2 Modification with relative clauses

Nouns can be modified by a relative clause. Relative clauses describe a property of the noun that helps to identify its referent. The order of noun and relative clause is always head-modifier. The default relative clause used in Kam is introduced by the marker $\bar{a}$ and closed by the marker $\grave{a}$ indicating the end of the relative clause. Relative clauses are further described in § 17.2.

$$
\begin{equation*}
\left[\left[\left[\text { NOUN }{ }^{\text {HEAD }}+[\bar{a}+\text { RELATIVE CLAUSE }+\grave{a}]^{\text {RELATIVE CLAUSE }}\right]\right]^{\text {NP }}+\ldots\right]^{\text {MAIN CLAUSE }} \tag{364}
\end{equation*}
$$

| (365)àwàn $\bar{a}$ míy ín ${ }^{\downarrow}$ gwóg $\hat{a}$, <br> king REL build house REL, |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| ú | dá | rá | nì | ríg |  |
| 3SG | be | COM | thing | POSS |  |

'The king who built this house is rich.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

In Kam, ordinal numerals are usually expressed with a relative clause construction.

```
(366)
\begin{tabular}{llllc} 
kwí & \(\bar{a}\) & jīrāg & ká & ¿jí \\
stick & REL & two & break:PFV & stand
\end{tabular}
‘The second stick broke.' (literally: ‘The stick that is two was broken')
(session_346, Danjuma Bello, elicitation)
```


### 10.3.3 Modification with nouns

### 10.3.3.1 The associative construction

A construction where a noun or a possessive pronominal modifies another noun is called an associative construction. This construction often expresses a relation of possession, but it can also express various other relationships, including kin relationship, partnership, ethnicity or clan membership, relationship with a place, relationship with a certain time ('yesterday's work') product-resource relationship ('table of wood'), container-contents relationship ('a calabash of water'), part-whole relationship, etc. Some examples:

```
(367) Kin relationship
àt\i dắátyi
son Danaci
'The son of Danaci'
(session_019, Yuguda Manti, narrative)
```


## Place relationship

à̀tī gárbátédé
child $\quad$ Garba.Chede
'The boy(s) from Garba Chede.'
(session_020, Yuguda Manti, narrative)
(369) Ethnic membership
ní $\quad$ ywòm
person Kam
'Kam people'
(session_048, Isa Sarkin Dawa, narrative)
(370) Time relationship

| àjwóg | óm | ${ }^{\text {º́ng }}$ | $\hat{o}$ |
| :--- | :--- | :--- | :--- |
| house | 1SG:POSS | time | DIST |

'My house of that time', i.e. 'my earlier house'
(session_054, Muhammad Bose Yuguda, elicitation)

An associative construction is expressed by simple juxtaposition of nouns or noun phrases, with the regular head-modifier order. There is no morphosyntactic difference between alienable and inalienable possession constructions in Kam.
(371) àkùb wó
bone dog
'a dog bone' (inalienable) or 'a dog's bone' (alienable, a bone that a dog is chewing)

As is usually the case, utterance-internal nouns with a prosodic prefix $a$ - lose this prefix, or it is centralized to $a$, and the usual tone rules apply (cf. § 7.1).

| (372) | àkùb | àbòg |
| :--- | :--- | :--- |
|  | àkùb | àbòg |
|  | bone | leg |
|  | 'shin bone' |  |


| (373) | àd ${ }^{\text {g }}$ | $\partial^{\downarrow} \int_{\text {ér }}$ |
| :---: | :---: | :---: |
|  | àdég | àfế |
|  | disease | bush |
|  | 'cancer' |  |
| (374) | àlímíné | lè |
|  | àlímíné | àlè |
|  | tongue | fire |
|  | 'flame' |  |

The modifier in an associative construction can be a noun or a possessive pronominal.

| (375) | àywà $\quad$ ḿ |  |
| :--- | :--- | :--- |
|  | friend | 1SG:POSS |
|  | 'my friend' |  |

Prepositional phrases headed by prepositional nouns are structurally very similar to associative constructions (cf. § 11.2.1 and § 10.3.3.1). There is no formal difference between nominal compounds and associative constructions (see § 7.2.1).

### 10.3.3.2 Noun + numeral phrases

In § 7.4, I presented the morphological characteristics of cardinal numerals. I argued that numerals are morphosyntactically related to nouns in Kam. In a similar vein, a construction where a numeral modifies a noun may be seen as a kind of associative construction, except that the plural marker $j \bar{o}$ may occur in between a noun and a numeral (378), but not between a possessor and a possessee. The relationship between modifier and head in a 'noun-numeral' construction is restricted to 'unit-quantity'.

| (377) àság | ywùn |  |
| ---: | :--- | :--- |
|  | year | five |

'five years'
(session_019, Yuguda Manti, narrative)


As mentioned in § 10.3.3.2, ordinal numerals are expressed with relative clauses. Exceptionally, 'first' is expressed with a specialized form, áfifâari ${ }^{76}$ and 'last' with a deverbal nominalization àlógǵr̂̂ (from lj̀g 'to deliver, to give birth'). These are not derived from cardinal numerals.

### 10.4 Noun phrase coordination

Noun phrases in Kam can be coordinated with the conjunction $r \grave{\text { a }}$ 'and', which is identical to the comitative preposition rà discussed in § 11.2.2.2.

| jùrù | rò | nà |
| :--- | :--- | :--- |
| 1 PL | COM | $2 \mathrm{SG} . \mathrm{ID}$ |

'We and you.' or 'Me and you.'
(session_068, Solomon Ahmadu, elicitation)

Simple parataxis can also be used, in particular when the coordinator in English would be 'or'. There does not have to be a pause in between the coordinated noun phrases.

| (380) bàrì pà | gbán | jé, | jīrāg | tyār | hǹ | kā |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| day | come | arrive | enter, two | three | NEG | COND |
|  | 'When it wasn't (even) two or three days later ...' |  |  |  |  |  |
|  | (session_276, Anonymous, narrative) |  |  |  |  |  |

The meaning 'or' can also be marked by the conjunction kò, borrowed from Hausa ( $k o$ 'or'). In the following example, there is a brief pause after each coordinated noun, and each final vowel is lengthened with rising intonation. I do not know whether this intonation is a consistent characteristic of lists.

| (381) | á | lóm | tyè (é), | kò | múró | $\mathrm{b} \bar{\varepsilon}(\hat{\varepsilon})$, kò | djífō(ó) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2SG.S.FUT | plant:FUT | guinea.corn, | or | maize | PRSTT,or | cassava |
|  | 'You will pl (session 073, | inea corn, <br> i Bello, nar | ize, or cassav |  |  |  |  |

[^50]Often, when noun phrases are presented as alternatives, they will occur in separate short clauses. The noun phrases are not coordinated in these cases, but rather the clauses. Such coordination has been attested with kò 'or', or with simple parataxis.


### 10.5 Noun phrase apposition

Two noun phrases are in apposition if they refer to the same entity independently, while sustaining a syntactically independent status from each other. This means that there is no modifier-head relationship between the two noun phrases. In the vocative construction in (384), the second noun phrase identifies or more narrowly specifies the referent of the first noun phrase, but cannot be said to modify that noun phrase or to function as its head.

```
(384) àywá kùl!
    friend tortoise
    '(My) friend, tortoise!' (In a story, where the hare calls the tortoise.)
(session_277, Wesam, narrative)
```

In § 9.1, I addressed the free position of the plural word $j \bar{o}$ within the noun phrase. A possible analysis for examples where this marker is inserted (a) in between a noun and an attributive adjective or (b) before a quantifier is that we are dealing with independent noun phrases in apposition here. Since these examples are elicited without much context, it is not possible to verify in what discourse contexts they are used. This is a topic for further inquiry.

```
àygwóg jó \í-bōr-ī
house PL ADJ-big:ADJ-FV
'houses, big (ones)'
(session_303, Solomon Ahmadu, elicitation)
```

| (386) | àsìš́gí | + gún | óm | jō | jī̄āg |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | young.child | back | 1SG:POSS | P | two |
|  | 'my younger siblings, (the) two (of them)' |  |  |  |  |
|  | (session_004, Garba Abubakar Bako, elicitation) |  |  |  |  |

## 11 Prepositions and prepositional phrases

### 11.1 Prepositional phrases

### 11.1.1 Functions of prepositional phrases

One major way of introducing oblique or circumstantial arguments into a clause is by using prepositional phrases. These introduced arguments are locations (387), companions (388), instruments (389), and objects of comparison (390):


It is not clear whether prepositional phrases can also occur as modifiers complex noun phrases. I did not find clear examples of this (cf. § 10.1).

Some prepositional phrases occur in more specialized constructions. Comitative phrases with rà, for example, can function as the complement in a copula clause expressing predicative possession (§ 15.2.1), while no other prepositional phrase is found in that position, and prepositional phrases with $s \varepsilon$
'until' only occur as minimal clauses used for farewell biddings (§ 11.2.2.4). Similative prepositional phrases are often used in an equative construction (§ 11.2.2.3).

When prepositional phrases modify whole clauses as circumstantial modifiers, they occur peripherally. They may occur at the left periphery of a clause (391) or at the right periphery (392). They come before or after any other elements of a clause.

```
(391) àrí bá, àjì tán pé
    SIM PROX.ID world stand come
    'Like this, the world began.'
    (session_051, Isa Sarkin Dawa, narrative)
(392)
nā pé dúg ígún á \({ }^{\text {t }}\) pé ká bórí à
    thing:REL come follow behind REL come INSTR time PROX
    'That which came after came some days ago...'
    (session_051, Isa Sarkin Dawa, narrative)
```

Prepositional phrases may be nested more tightly into the clause when they are not just circumstantial modifiers of the whole clause but act as verbal modifiers. In those cases, they introduce an argument that is more central to the action expressed in the clause, such as the arrow that is being shot in (389) or the bush where the king's house has been built in (387). They fall within the scope of clausal negation and occur right after the object of a clause, or after the primary verb if the clause is intransitive.

### 11.1.2 Internal structure

Internally, prepositional phrases are structured like noun phrases. The leftmost element of the prepositional phrase is the head. This can be a preposition proper or a prepositional noun (cf. § 11.2.1). The second slot to the right is taken by a noun phrase that acts as the complement of the preposition.
(393) [HEAD] [COMPLEMENT]
[PREPOSITION] [NOUN PHRASE]
ká làn
INSTR pot
'(Heat it up) with a pot.'

| (395) | ỳkám ílày |  |
| :--- | :--- | ---: |
|  | under | pot |
|  | 'underneath the pot' |  |

### 11.2 Prepositions

### 11.2.1 Prepositional nouns and prepositions proper

There are two types of prepositions in Kam. One type corresponds to what have been called prepositional nouns and locational nouns in the literature (Elders 2000: 242-261; Anonby 2008: 428-430). The other type corresponds to the traditional notion of preposition and will be called here prepositions proper. Prepositional nouns and prepositions proper share a common syntactic function as prepositions, i.e. they are the head of a prepositional phrase, and they take a noun phrase as their complement (see § 11.1.2 above)11.1.2.

The three main characteristics of prepositional nouns are the following:
(1) They take possessive pronominals as complements. This makes prepositional phrases with prepositional nouns similar to the associative construction (cf. § 10.3.3.1). For example, in isolation, àgún ám (back 1SG:POSS) can be translated both as a prepositional phrase ('behind me') and as a a possessive noun phrase ('my back').
(2) They are phonologically similar, and sometimes identical to a set of corresponding nouns that they derive from, often featuring a prosodic $\grave{a}$-prefix (cf. § 7.1). Sometimes, this $\grave{a}$-prefix does not occur in prepositional nouns whereas it would occur in the corresponding nouns.
(3) They express prepositional meanings by means of the regular associative construction (cf. § 10.3.3.1), where the prepositional noun (àlib 'head, top') is the head noun and the noun expressing the argument of the preposition (àngw'g 'house') is the modifier.

$$
\begin{align*}
& \text { àlíb á }{ }^{\downarrow} \text { ggwóg }  \tag{396}\\
& \text { head house } \\
& \text { 'on the house', or 'the top of the house' }
\end{align*}
$$

Prepositional nouns retain their initial $\grave{a}$-prefix only sometimes. This is a characteristic that sets prepositional nouns apart as a separate morphosyntactic category from common nouns in Kam. Most prepositional nouns, when used utterance-internally, drop the $\grave{a}$-prefix, including its tone. This is apparent in the following examples, where the H tone of dá spreads to lèb 'in' (from àlèb 'inside, n.') and gún 'behind' (from àgún 'back side'). If the $\grave{a}$-prefix were present, we would expect léb in (397) to have a L tone (lı̀b) and gún in (398) to be realized with a downstepped H tone ( ${ }^{( }$gún) (cf. Chapter 3).
$\begin{array}{llll}\text { (397) } & \text { dá } & \text { léb } & \text { †ú } \\ & \text { be } & \text { inside } & \text { 3SG:POSS }\end{array}$
'It's inside of him.'
(session_354, Rahab Garba Precious, elicitation)
(398) dá gún ám
be behind 1SG:POSS
'It's behind me.'
(session_354, Rahab Garba Precious, elicitation)

In contrast to prepositional nouns, prepositions proper take independent pronouns as complements. In the following examples, àrí 'like' takes the independent pronoun nim '1SG.ID' as its argument, and the complex preposition hár rà 'including' takes the independent pronoun nà '2SG.ID'.

| (399) á | tyúg $\quad$ ó nág | àrí | nîm |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 2SG.S.PFV | do:PFV work | SIM | 1SG.ID |

'You work like me.'
(session_354, Rahab Garba Precious, elicitation)
(400)
hár rà nà
until COM 2SG.ID
'Including you.'
(session_354, Rahab Garba Precious, elicitation)

### 11.2.2 Prepositions proper

In my data on Kam, I distinguish seven prepositions proper (i.e. prepositions taking independent pronouns as complements). Most of the prepositions proper are monosyllabic, except for the similative àrí, which is derived from a noun àri' 'type'. Four out of seven prepositions are probably borrowed from Hausa: sé '(not) until', hár 'until', à ‘at/to' and dāk $\bar{a} / d \bar{a} g \bar{a}$ 'from'.
(401) Prepositions proper not borrowed from Hausa

ḱ́, instrumental and temporal preposition, 'with'
rà, comitative preposition, 'with, and'
àrí, similative preposition, 'like'
(402) Prepositions proper probably borrowed from Hausa
sé, temporal preposition, '(not) until' (Hausa sái)
hár, temporal preposition, 'until' (Hausa hár)
à, locative preposition, 'at/to' (Hausa à $)$
dākā/dāgā, locative preposition 'from' (Hausa dāk $\bar{a}$ )

The following sections give an overview of each of these prepositions, with some examples. The prepositions borrowed from Hausa are treated together in § 11.2.2.4.

### 11.2.2.1 $k$, instrumental and temporal

ká has both instrumental and temporal uses. It is commonly used to introduce an instrument. It can also, for example, introduce the language in which something is said.

| ú | ygbáb | ú | ká bùn |
| :--- | :--- | :--- | :--- |
| 3SG | shoot:PFV | 3SG | INSTR arrow |

'He shot him with an arrow'
(session_048, Isa Sarkin Dawa, narrative)

ḿ bímbén á rà mórá $m$
1SG.S.PFV speak PFV COM brother 1SG:POSS
${ }^{\dagger}$ kó ní nì íb̄̄n̄̄
INSTR thing thing ADJ:speak:FV
'I speak with my junior brother on the phone.'
(session_054, Muhammad Bose Yuguda, elicitation)
(405)

| kó | ywé | ní | りwòm |
| :--- | :--- | :--- | :--- |
| INSTR | language | person | Kam |

'(What is this word) in Kam?'
(session_034, Samuel U. Adams, conversation)

kź can also introduce a temporal argument:

| (410) | ká | lóyí | rá | hn̂ |
| :--- | :--- | :--- | :--- | :--- |
|  | TEMP | day | FUT:NEG | NEG |

'(You will not sleep in the same room with your wife) on that day.'
(session_076, Adamu S. Baka, narrative)
(411) ká bárí mīnā

TEMP time what
'When?'

### 11.2.2.2 rà, comitative

The comitative preposition rà encodes company, similar to the non-instrumental use of with in English. There is no difference between animate and inanimate comitative arguments. The comitative is also used for nominal coordination.

| (412) | àwú | lû | rà | ywá | ú |  | wō. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3SG | sleep:FUT | COM | friend | 3SG: | OSS | PL. |
|  | 'She will sleep with her friends.' <br> (session_076, Adamu S. Baka, narrative) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| (413) | nò | lú | sîm | rò | fònù |  | à? |
|  | 2PL | sleep:PFV | how | COM | harm |  | PFV? |
|  | 'How are you sleeping with the harmattan period?' (session_084, Yuguda Manti, conversation) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| (414) |  | pè tfúg | ə̀nág | á | kã | rà | jákúbû |
|  | 1PL | come do: | V work | PROX |  | COM | Jakob |
|  | 'We did this work here with Jakob.' <br> (session_053, Muhammad Bose Yuguda, narrative) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| (415) | $\left.\begin{array}{lccl}\text { tán } & \text { sìm } & \text { rà } & \text { nág } \\ \text { stand } & \text { how } & \text { COM } & \text { work }\end{array}\right] \begin{aligned} & \text { 'How is work?' (lit.: 'How does it stand with the work?') }\end{aligned}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| (416) | àfú rá bèntí <br> shirt COM trousers <br> 'shirt with trousers' or 'shirt and trousers' <br> (session_037, Solomon Ahmadu, elicitation) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

When coordinating two referents who are jointly participating in an action, an inclusory construction with $r \partial ̀ ~ i s ~ o f t e n ~ u s e d . ~ T h i s ~ i s ~ a ~ c o n s t r u c t i o n ~ w h e r e ~ a n ~ i n i t i a l ~ p l u r a l ~ p r o n o m i n a l ~(a ̀ j i ́ ~ ' t h e y ' ~ o r ~ j u ̀ r u ̀ ~ ' w e ') ~ r e f e r s ~ t o ~$ the group as a whole and a following noun or pronominal (wó 'dog' or nà 'you') picks out one of the two referents (cf. Singer 2001). This construction is ambiguous between an interpretation as 'they and N ' and 'he and N ' (when the relevant pronominal is 3PL) or 'we and N ' and ' I and N ' (when the pronominal is 1PL). A non-inclusory comitative construction (nìm rà nà 'me and you.SG'; àwú rá twó á 'he and the dog') can be used to disambiguate between these meanings.

```
(417) jùrù rà nà
    1PL COM 2SG.ID
    'I and you.' (or 'We and you') (lit.: 'we and you.SG')
    (session_068, Solomon Ahmadu, elicitation)
(418)
àjí rá `wó â
3PL COM dog PROX
'He and this dog.' (or, literally, 'they and this dog')
(session_181, Babangida Audu, narrative)
```

The comitative marker $r \grave{\partial}$ is also used in the predicative possession construction (cf. § 15.2.1). It is also identical to the preverbal imperfective aspect particle rà (cf. § 13.3.1):

| (419) | ú | dá | rá | gbàn |
| :--- | :--- | :--- | :--- | :--- |
|  | 3SG | be | COM | wife |

'He has a wife.' (lit.: 'He is with a wife')
(session_004, Garba Abubakar Bako, elicitation, slightly adapted)

| wó | rá | さgúb | ńtón |
| :--- | :--- | :--- | :--- |
| dog | IPFV | chase | pig |

'The dog is chasing the pig.'
(session_005, Garba Abubakar Bako, elicitation)

There is no privative preposition ('without') in Kam. The equivalent of a privative construction is not expressed with prepositions, but with a clause including a comitative preposition and clausal negation:

| à | né | rá | nìm hǹ |
| :--- | :--- | :---: | :--- |
| 2SG.S.NEG.NFUT | go:NEG.NFUT COM | 1SG.ID NEG |  |

'You did not go with me' or 'You went without me.'
(session_354, Rahab Garba Precious, elicitation)

| à | fúg | ó ${ }^{\star}$ nág | ré | nìm hǹ |
| :--- | :--- | ---: | :--- | :--- | :--- |
| 2SG.S.NEG.NFUT | do:NEG.NFUT work | COM | 1SG.ID NEG |  |

'You did not work with me' or 'You worked without me.'
(session_354, Rahab Garba Precious, elicitation)

The comitative preposition also occurs in complex numerals, where it sometimes has an unexplained H tone instead of a $L$ tone. § 7.4.1.2.2 contains examples of this.

### 11.2.2.3 àrí, similative

The similative preposition, equivalent to English 'like', has the same form as the noun àri' 'type'. It is often used in equative clauses.
á
tyúg à ánág àrí nîm
2SG.S.PFV do:PFV work like 1SG.ID
'You work like me.'
(session_354, Rahab Garba Precious, elicitation)

| Bàbángídá | ${ }^{\text {t.tfúg }}$ | ó ${ }^{\dagger}$ nág | àrí | jákûb |
| :--- | :---: | :--- | :--- | :--- |
| Babangida | do:PFV work | like | Jakob |  |

‘Babangida works like Jakob.' (alternatively: ‘Babangida works as much as Jakob’)
(session_291, Solomon Ahmadu, elicitation)

| mē | ḿ | kpìmkpáyī | àrí | ${ }^{\text {ná }}$ | m |
| :--- | :--- | :--- | :--- | :--- | :--- |
| mother | 1SG:POSS | STAT~strong | like | father | 1SG:POSS |

'My mother is strong like my father.' (or: 'My mother is as strong as my father.')
(session_291, Solomon Ahmadu, elicitation)

| àngwóg | ú | àrí | tgbáy |
| :--- | :--- | :--- | ---: |
| house | 3SG:POSS | like | palace |

'His house is like a palace.'
(session_291, Solomon Ahmadu, elicitation)

### 11.2.2.4 Borrowed prepositions proper: sć, hár, à and $d \bar{a} k \bar{a}$

Four commonly used prepositions proper in Kam are likely borrowed from Hausa: sé, from Hausa sái '(not) until, except'; hár '(up) to, including, until' and à 'in, at, on (stationary location) (cf. Jaggar 2001: 668670) and $d \bar{a} k \bar{a} / d \bar{a} g \bar{a}$ 'from'. They may also be borrowed from Fula or from another contact language.
sé is frequent in formulas for announcing departure ('until later, see you soon, until tomorrow'). It does not occur outside of these uses.

> sć lómó
until later
'See you later.'
(session_012, Garba Abubakar Bako, conversation)

$$
\begin{array}{ll}
\text { sć } & \text { gbánákā }  \tag{428}\\
\text { until } & \text { later }
\end{array}
$$

'See you later.'
(Constructed example, very frequently heard)

```
s\varepsiloń pí`káy
```

until tomorrow
'See you tomorrow.'
(Constructed example, very frequently heard)
hár is used in the same sense as it is used in Hausa, as a temporal preposition meaning '(up) until' and to introduce adverbial clauses (cf. § 17.5.1.2).

'Until today, even me, I have never climbed a horse.'
(session_191, Isa Sarkin Dawa, narrative)
(432) ì pà jóy á pè, hár à àléy ánā

1PL come sit:PFV PFV come, until sun today
'We are still settled here, up until today.'
(session_191, Isa Sarkin Dawa, narrative)
$\grave{a}$, like hár, is used the same way as it is in Hausa, as a locative preposition. It is widely attested in narratives, conversations, and in songs, but is not usually accepted by speakers in elicitation sessions. Equivalent locative phrases can also be constructed without prepositions.

| (433) | ú | jí | $\mathrm{p} \grave{\text { c }}$ | (a) | béldusûm |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3SG | leave:PFV | FV come | LOC | Belgium |  |  |
|  | 'He came here from Belgium.' <br> (session_053, Muhammad Bose Yuguda, narrative) |  |  |  |  |  |  |
| (434) | àtáb | á ${ }^{\text {² }}$ | ${ }^{+}$kósí | (a) | ywé |  |  |
|  |  | REL ga | gather:PFV | LOC | mouth |  |  |
|  | 'fish that was gathered at the bank of the river' (session_048, Isa Sarkin Dawa, narrative) |  |  |  |  |  |  |
| (435) |  | ywé yg | ygwóg, ń |  | dóg | ú, | mégádì |
|  | LOC | mouth houn | house, 1SG.S |  | see:PFV | 3SG |  |
|  | $\begin{aligned} & \text { 'At th } \\ & \text { (sessi } \end{aligned}$ | oor, I see h 156, Bebi, | him, a guard' <br> i, song) |  |  |  |  |

$d \bar{a} k \bar{a}$ 'from' is another locative preposition used in the same way as it is in Hausa. It can be pronounced $d \bar{a} k \bar{a}$ or $d \bar{a} g \bar{a}$.

| í | ḑí | ${ }^{\text {}}$ jág | dākā | kō̃ | kā |
| :--- | :--- | :---: | :---: | :--- | :--- |
| 1PL | TOP | carry | from | place:DIST | COND |

'If they, now, dug (earth) from that place (the river bank), (the water would gush away).'
(session_191, Isa Sarkin Dawa, narrative)

| ì | jí | pá | dāgā | māsàr |
| :--- | :--- | :--- | :--- | :--- |
| 1PL | arrive | come | from | Egypt |

'We came here from Egypt'
(session_021, Yuguda Manti, narrative)

| dākā | nàmátāmāndā, | á | né kj̀l bátímèrúwá |
| :--- | :--- | :--- | :--- |
| from | Nya.Matamanda, | 2SG.S.FUT | go:FUTsurpass Bati.Meruwa |

'From Nya Matamanda, you will go past Bati Meruwa.'
(session_335, Babangida Audu, narrative)

### 11.2.3 Prepositional nouns

The main defining characteristics of prepositional nouns are the following.

- Prepositional nouns take possessive pronominals as complements. This distinguishes them from prepositions proper, which take independent pronominals as complements.
- Each prepositional noun has a corresponding noun - often a body part term - in the lexicon.
- The weak prosodic prefix $\grave{a}$ - in prepositional nouns can be left out without trace. This distinguishes those prepositional nouns from regular nouns, where the segmental part of the prefix $\grave{a}$ - can be dropped, but its tone is retained.

Prepositional nouns are quite common in African languages and have been discussed at length elsewhere (e.g. Welmers 1973: 216-217; Ruelland 1992: 230-231; Elders 2000: 242-261; Anonby 2008: 428-430).

The following prepositional nouns have been attested in Kam:

- (à)líb 'on (top of)' from àlíb 'head', exemplified in (439), (440), (441)
- (à)lદ̀b 'in(side)', from àlèb 'inside (as in 'inside of belly'), exemplified in (442) and (443)
- (à)gàw 'beside', from gàw 'rib', exemplified in (444)
- (à)gún ‘behind, after', from àgún 'back side, behind’, exemplified in (445) and (446), cf. also § 7.4.1.2.2)
- (à)lím 'in front of’, from àlim 'front' (cp. àliminé 'tongue'), exemplified in (445)
- j̀kùm 'behind', means 'back' as a noun, exemplified in (448)
- j̀kám 'under', means 'rest' and 'space underneath' as a noun, exemplified in (449) and (450)

| àwú | dá | líb | jéýí |
| :--- | :--- | :--- | :--- |
| $3 S G$ | be | on | horse |

'He is on a horse.'
(session_181, Babangida Audu, narrative)

| àsúwá | j̀kā jí | tòr | p غ̀ | lib | bér |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | thunder arrive | fall | come | on | tree |  |  |

'Then (that) the thunder struck the tree.' (literally: 'fell down on the tree') (session_007, Garba Abubakar Bako, narrative)
ń
tyitàn líb ń ${ }^{\downarrow}$ tón
1SG.S.PFV stand on mountain
'I stand on (top of) the mountain.'
(session_187, Babangida Audu, elicitation)

| àgún | ú, | í | sí | ¿bén | "tò ..." |
| :--- | :--- | :--- | :--- | :--- | :--- |
| after | 3SG:POSS | 3PL | SEQ say | "so ..." |  |

'After him, they said "so ..." (Context: succession of different kings in Kam oral tradition;
'after him' refers to the time after the ruler Awan Sipiru died.)
(session_019, Yuguda Manti, narrative)

| ń | tyítàn | àlím | ygwóg |
| :--- | :--- | :--- | :---: |
| 1SG.S.PFV | stand | in.front.of | house |

'I stand in front of a house.'
(session_054, Muhammad Bose Yuguda, elicitation)

```
\begin{tabular}{lll} 
àdzẽ́ & dó & bé j̀kùm ygwóg \\
shea.tree be & EMPH behind house
\end{tabular}
'There is a shea tree behind (my) house.'
(session_098, Danjuma Bello, narrative)
(449)
dó \(\quad\) ý \({ }^{\downarrow}\) kám bêr
be under tree
'(It) is underneath the tree.'
(session_311, Danjuma Bello, elicitation)
(450) j̀kám tây
under lap
'(The rabbit told the tortoise to hide him) under (his) lap.'
(session_277, Wesam, narrative)

\section*{IV Part four: Verbal morphosyntax}

\section*{12 Verbs}

\subsection*{12.1 Introduction}

\subsection*{12.1.1 Definition and general remarks}

Verbs express actions (where an agent and/or patient is involved), experienced events (where an experiencer is involved), and states (where an entity is described as in a particular state). What connects these meanings semantically is that they are time-instable (Givón 1984: 51, 55): they persist for a certain amount of time. The meaning of a verb cannot be conceptualized without reference to a specific point in time during which the action, event or state persists. Functionally, verbs predicate something about one or more things (cf. Croft 2001): verbs say something about nouns.

The current chapter focuses on segmental and tonal morphology. Nominalization and derivation of adjectives were treated in § 7.2.3 and § 7.5. Where relevant, they are discussed only in passing here. I treat multi-verb constructions, which can be used to express aspectual distinctions, direction, valency change and comparison, in Chapter 1 below. Chapter 1 brings together all issues relevant to tense, aspect and polarity marking, which involves both morphological marking on verbs and other markers dispersed across the clause.

Segmental morphology on verbs includes
- Causative and iterative derivational suffixes (§ 12.4)
- Some derivational prefixes and suffixes that turn verbs into nouns (cf. § 7.2.3)
- The final vowel -i that occurs in some constructions, both derivational and inflectional (§ 12.2)
- Different types of reduplication that play a role in adjectival derivation and future tense marking (§ 12.5), and
- Object indexes (cf. § 8.3)

Other morphology is tonal, marking various tense and aspect functions, polarity, and playing an important role in verbal derivation and nominalization. I treat tonal morphology in § 12.3.

\subsection*{12.1.2 Verb structure}

Verbs in Kam are made up of a verb stem that has a CVC, CV or CVCi shape, CVC being the most canonical stem shape. Some verb stems have a free CVC and a CVCi allomorph, captured here under CVC(i). I
observed such allomorphy in 14 instances, which I list in (452). It is possible that more verb stems show this pattern than I have uncovered so far. I also found one root with a CCVC structure, mgbàb 'to shoot'.

Each root has a lexical tone. Monosyllabic verbs have L, M or H tone. CVCi stems have L-H or M-M tone. CVC(i) stems have L-L and \(\mathrm{H}-\mathrm{H}\) tones, depending on the tone of their CVC-stem. The verbs in question can be analyzed as a combination of CVC stem + a final vowel \(i\), where the tone of the stem is copied onto the toneless final vowel. One such verb, tán(i) 'to stand', has an irregular HL tonal pattern. This verb is peculiar in other ways and is discussed in some more detail in § 12.6.2. The final vowel \(i\) in these verbs may be related to the final vowel -i found in several grammatical constructions in Kam, although it is synchronically different (see § 12.2 below).
\begin{tabular}{ll} 
CV (18 stems) & fé 'to harvest (maize)', lù 'to lie down', wū 'to be ripe' \\
CVC (131 stems) & vín 'to mould', wàb 'to tie', būm 'to spoil' \\
CVC(i) (14 stems) & gúb(í 'chase', dèb(i) 'buy' \\
CVCi (15 stems) & bāgī 'to bend one's head', gbìgí 'to shake' \\
CCVC (1 stem) & mgbàb 'to shoot'
\end{tabular}
(452) CVC stems with CVCi allomorphs
\begin{tabular}{|c|c|c|}
\hline gúb(í) 'chase' & t \({ }^{\text {úg(i) 'catch, carry' }}\) & jàg(i) 'take, carry' \\
\hline dèb(i) 'buy' & dóg(í) 'see' & vég(í) 'die' \\
\hline néb(í) 'go' & gòm(i) 'pay' & tàb(i) 'touch' \\
\hline swàb(i) 'sing' & jib(i) 'ask' & sìn(i) 'do' \\
\hline tán(i) 'stand' & din(í) 'find, meet' & kòr(i) 'surpass' \\
\hline
\end{tabular}

Some examples of such verbs with CVC and CVCi allomorphs are given in (453) to (455).
\begin{tabular}{lllll} 
àní & mínā & túgí & jág & â? \\
person & which & carry:PFV & catch & REL
\end{tabular}
'(Who is) the person who took it?'
(session_271, anonymous, conversation)
\begin{tabular}{llll} 
tyúg & ú & á & jàgì \\
carry:PFV & him & PFV & catch
\end{tabular}
\begin{tabular}{llllll} 
ká & ní & sāmrī & \({ }^{\text {a }}\) a & àwú & sín \(\quad\) â \\
INSTR & thing & bad & REL & 3 3SG & do:PFV REL
\end{tabular}
'It (the investigation) caught him (with the bad things that he did).'
(session_051, Isa Sarkin Dawa, narrative)
\begin{tabular}{llllll} 
lámé & \({ }^{\downarrow}\) ḑág & níy & ú & à & dògì \\
hare & spy:PFV & private.parts & 3SG:POSS & PFV & see
\end{tabular}
'The hare gleans at his private parts.'
(session_254, Shawuya, narrative)

Grammatical tones may overwrite the lexical tone of a verb stem, and derivational suffixes may be attached to the stem.

Jób 'to be hot'
Jòp-tí 'to boil' (replacive L tone on the verb + causative suffix -tí)

Object indexes are phonologically free but cannot occur in isolation. They may be considered verbal suffixes (cf. § 8.3). Object indexes follow any derivational suffixes. Rules of hiatus resolution apply (cf. § 6.2.1 e.g. \(i+u \rightarrow u\) ).
gbèb 'to beat'
gbèb-rí 'to beat repeatedly' (replacive L tone + iterative suffix -rí)
gbèb ú 'beat him' (object index \(u\) u)
gbèb-r ú 'beat him repeatedly' (replacive L tone + iterative suffix -rí + object index \(u\) )

When a verb is reduplicated, it involves a copy of the first syllable of the verb stem. This copy has a vowel that is prespecified for height: the vowel is always a high vowel. An \(e, \varepsilon\), or \(a\) in the stem becomes \(i\) in the copy. An \(o\) or \(\rho\) becomes an \(u\).

The tone of reduplications depends on the construction (cf. § 12.5). One construction involves full reduplication of the tone of the stem. Another construction applies a replacive tone to the copy but leaves the base with its lexical tone. And yet another construction completely overwrites the tone of the whole reduplication.
(458)
lèm 'to be good'
lil~lèm 'good' (predicative adjective, the tone is repeated)
líl~lغ̀m-ì 'It will be good’ (future tense, copy gets HL replacive tone, base keeps its lexical tone)


\subsection*{12.2 Inflectional and derivational final vowel -i on CVC-stems}

\subsection*{12.2.1 General remarks}

Several constructions feature an inflectional or derivational final vowel -i on CVC verbs and CVC(i) verbs. \(-i\) is toneless and it copies the tone of the preceding syllable. I call \(-i\) a final vowel and gloss it as FV, to draw attention to its similarities to final vowels in Bantu languages (see e.g. Grégoire 1979). In Bantu languages, like in Kam, a final vowel may co-express various morphosyntactic functions (e.g. a certain tense, aspect or mood distinction), together with other markers, but is never the sole dedicated marker of a function. In Kam, the vowel occurs in seven different constructions. It is impossible to attribute a single function to it.

The constructions it occurs in are the following:
- Deverbal attributive adjectives
- Future tense constructions
- The affirmative future tense construction (the construction with an object and the construction without an object)
- The negative future tense construction
- Speech and thought reporting clauses
- The 'intensity' construction with partial reduplication

Each of these constructions are exemplified in the following sections. Except for the 'intensity' construction, which I discuss briefly in § 12.5 .4 below.

In § 12.1.2, I listed a number of verbs that have a CVCi structure or a CVC(i) structure, with optional final \(i\). The inflectional final vowel \(-i\) and the optional final \(i\) in these stems are synchronically different morphs: the inflectional \(-i\) has a morphosyntactic function; the optional \(i\) does not. In these verbs, the \(i\) does not serve any of the functions listed in § 12.2.2 to § 12.2.4. They also occur outside of the relevant constructions. Nonetheless, it is likely that this final \(i\) and the final vowel in these constructions are
historically related. Stems ending in \(i\) may be historically complex. Alternatively, the constructions in § 12.2.2 to § 12.2.4 may retain a final \(i\) that was historically more widespread in verb stems.

\subsection*{12.2.2 Deverbal adnominal adjectives}

When they are derived from a stem ending in a consonant, deverbal adnominal adjectives always carry the final vowel -i. The final vowel co-expresses this derivational function with a prefix \(\dot{a}^{L}\) and a replacive M tone on the verb stem (cf. § 7.5).
```

(459) á-b̄̄r-ī
áL ${ }^{\text {L }}$ bòrlM-i
ADJ-go.up\ADJ-FV
'big'
not possible: *á-bı̄r
á-dūb-ī
áL-dùb\M-i
ADJ-be.talllADJ-FV
'tall'
not possible: *á-dūb
(461) á-fām-ī
á $^{L}$-fámlM-i
ADJ-be.light $\$ ADJ-FV
'light'
not possible: *á-fām

```

\subsection*{12.2.3 Future tense constructions}

There are three different future tense constructions in Kam: an affirmative construction with object, an affirmative construction without object, and a negative future tense construction. In each of these constructions, the final vowel -i plays a role, but always in a different manner.

The affirmative construction with object is formed with optional repetition of the verb after the object (cf. § 13.6.3). It is possible to omit the repeated verb, but consultants prefer repetition, at least in
elicitation. I did not detect any pragmatic or information structural differences. The copy, located after the object, receives the final vowel \(-i\). Other markers co-expressing future tense in this construction are pronominal H tone (only in 1 SG and 2 SG pronominals) and HL tone on the verb preceding the object.
```

(462)
àwú dóg ǹtèkù dóg-í
àwú dóg\HL ǹtèkù dóg-i
3SG seelFUT toad see-FV
'(whether) he will see the toad (or not)'
(session_181, Babangida Audu, narrative)
(463)

| ḿ | búg | à | būg-ī |
| :--- | :--- | :--- | :--- |
| Ń | būg\HL | á | būg-i |
| 1SG.S.FUT | pinchlFUT | 2SG.O pinch-FV |  |

'I will pinch you.'
(session_345, Danjuma Bello, elicitation)

| (464) | àwàn | míy | àngwóg | mīn-ī | àléb ó ${ }^{\text {J }}$ eé |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | àwàn | mī\} \backslash \mathrm { HL } | àngwóg | mīn-i | àlćb àjế |
|  | king | build\FUT | house | build-FV | middle bush |

'The king will build a house in the bush.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

| wó | gúb | ù | gūb-ī |
| :--- | :--- | :--- | :--- |
| wó | gūb\HL | ú | gūb-i |
| dog | chase\FUT | 3SG | chase |

'the dog will chase him'
(session_218, anonymous, narrative)

```

Affirmative future constructions without an object are not expressed with repetition of the verb, but with a partially reduplicated verb and HL tone on the copy (§ 13.4.2). The subject pronominal is the same as in affirmative future constructions with an object. The reduplicated verb carries the final vowel \(-i\).
\begin{tabular}{lll} 
(466) & ń & tyîtàr-ì \\
& Ń & tfílHL~fàr-i \\
& 1SG.S.FUT & telllFUT~tell-FV \\
& 'I will tell (it).' & \\
& (session_365, Babangida Audu, elicitation)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{4}{*}{(467)} & ḿ & búgbūg-ī \\
\hline & Ń & búg\HL būg-i \\
\hline & 1SG.S.FUT & pinch\HL pinch-FV \\
\hline & \multicolumn{2}{|l|}{'I will pinch (it).'} \\
\hline \multirow[t]{4}{*}{(468)} & ń & \(\mathrm{fiff}^{\downarrow} \mathrm{f}\) ¢́r-1́ \\
\hline & Ń & fíflHL~fér-i \\
\hline & 1SG.S.FUT & wash\HL wash-FV \\
\hline & 'I will wash (Constructed & \[
\text { mple) }{ }^{77}
\] \\
\hline
\end{tabular}

The negative future tense construction does not have verbal repetition or reduplication. Instead, it features a H pronominal (if it is 1 SG or 2 SG ), H verbal tone, a preverbal particle \(r z^{L}\) and an optional post-verbal, post-object particle rò. Like in affirmative future tense constructions, the verb features a final vowel - \(i\).
\begin{tabular}{|c|c|c|c|}
\hline í & rá & \({ }^{\downarrow}\) ḑón-í & kı̀m \\
\hline í & rà \({ }^{\text {L }}\) & dзò \({ }^{\text {¢ }}\) \H-i & kòm \\
\hline 3PL & FUT.NEG & livelFUT.NEG-FV & place \\
\hline
\end{tabular}
'They will not (be able to) live here.'
(session_052, Isa Sarkin Dawa, narrative)
(470)
\begin{tabular}{llll} 
á & rá & Łnéb-í & hn̂? \\
á & rá \(^{\text {L }}\) & nćb\H-i & hǹ? \\
2SG.S.FUT & FUT.NEG & go\FUT.NEG-FV & NEG?
\end{tabular}
'Won't you go?'
(session_357, Rahab Garba Precious, elicitation)
\begin{tabular}{llllll} 
àjí & rá & \({ }^{\text {dóg-í }}\) & ntèkù & rà & hǹ \\
àjí & rá \({ }^{\text {L }}\) & dóg\H-i & ǹtèkù & rà & hǹ \\
3PL & FUT.NEG & seelFUT.NEG-FV & toad & FUT.NEG & NEG
\end{tabular}
'They will not see the toad.'
(session_359, Garba Rahab Precious, elicitation)

\footnotetext{
\({ }^{77} \mathrm{I}\) do not have examples of future verbs with a lexical H tone in my corpus.
}

One exception was found in the data, where an affirmative future tense construction without object did not have a final vowel. Here, the future tense construction was also part of a sequential construction with the preverbal marker sì (§ 17.4.3). It is not clear why no final vowel is present in this example.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (472) & ń & fứg ón \({ }^{\text {ª́g }}\) & nānkō, & & sì & bín \({ }^{+} \mathrm{b}\) ¢́n \\
\hline & N & ffúg\H ànág & nāpkō, & & sì & bín\HL - bén \\
\hline & 1SG.S.PFV & do\PFV work & first, & 1P & SEQ & talk\FUT~talk \\
\hline
\end{tabular}
'I work first, then we will talk.'
(session_351, Solomon Ahmadu, elicitation)

\subsection*{12.2.4 Speech and thought reporting constructions}

When a speech/thought verb introduces reported speech or thought with the quotative marker \(i j i^{L} L i b i^{L} / \dot{\text { a }}\) (cf. § 17.6), it has a final vowel. It is sometimes optionally dropped due to hiatus resolution, since the quotative marker typically starts with an identical vowel \(i\). However, a pause can be left between the verb and the quotative marker, and in those cases the final vowel is unmistakable. Note that the final vowel \(i\) is segmentically identical to the logophoric pronominal \(i^{L}\). It is not clear whether or how they may be related.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(473)} & àwú & bén-í & & ijí & & & \({ }^{\downarrow}\) sáy & â & fóg & \\
\hline & 3SG & say:P & -FV & QUOT & :LOG.SG & & go: & LOC & farm & \\
\hline & \multicolumn{10}{|l|}{\multirow[t]{2}{*}{' \(\mathrm{He}_{\mathrm{i}}\) said that he \(\mathrm{e}_{\mathrm{i}}\) went to the farm.' (session_363, David Mamuda, elicitation)}} \\
\hline & & & & & & & & & & \\
\hline \multirow[t]{4}{*}{(474)} & & sí & \({ }^{\downarrow} \mathrm{b}\) ¢́n-í & & á & g ¢́ & sín & gì & jī? & \\
\hline & 3PL & SEQ & say-FV & & QUOT & what & do & what & Q & \\
\hline & \multicolumn{10}{|l|}{\multirow[t]{2}{*}{'They then said: "What happened?" (session_020, Yuguda Manti, narrative)}} \\
\hline & & & & & & & & & & \\
\hline \multirow[t]{4}{*}{(475)} & \multicolumn{10}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{lll} 
àní & mí & \({ }^{\star}\) jíb-í \\
person & some & ask:PFV-FV
\end{tabular}}} \\
\hline & & & & & & & & & & \\
\hline & à & gá & & gì & ú & ró & sìn & à & sīsīrā & jī? \\
\hline & QUOT & what & EL & what & 3SG & IPFV & do & REL & now & Q? \\
\hline
\end{tabular}
'Somebody asks what it is that he is doing right now.'
(session_054, Muhammad Bose Yuguda)
\begin{tabular}{llll} 
àwú & tár-í & íbí & kpì̀ \(\sim\) kpání \\
3SG & tell:PFV-FV & QUOT:LOG.SG & PRED~strong
\end{tabular}
'He tells that he is strong.'
(session_365, Babangida Audu, elicitation)

The verb hwár has not been found with a final vowel in thought reporting constructions. This observation is based on only one example. More examples are needed to understand whether this is an exceptional omission, if \(h w a ́ r\) is a lexical exception, or if something else is going on here.
\begin{tabular}{lllll} 
àwú & hwár & íbí & \\
3SG & think:PFV & QUOT:LOG.SG
\end{tabular}
'He thinks that he found something beautiful.'
(session_365, Babangida Audu, elicitation)

\subsection*{12.3 Tonal morphology}

\subsection*{12.3.1 Inflectional tone}

\subsection*{12.3.1.1 Overview}

Verbal tone plays an important role in the expression of tense, aspect and polarity. Each type of replacive tone is discussed in the following sections. By way of overview, Table 40 summarizes which tone patterns occur in which types of clauses, form to function. A function-to-form overview can be found in § 13.4.1.

Table 40 - Tonal morphology on verbs, form to function
\begin{tabular}{|l|l|}
\hline Tone pattern & Grammatical value \\
\hline Lexical tone (= unmarked) & \begin{tabular}{l} 
Most imperatives \\
Imperfective aspect (affirmative) \\
Negative non-future without object \\
Secondary verbs in multi-verb constructions \\
Second verb of future tense constructions with object
\end{tabular} \\
\hline H & \begin{tabular}{l} 
Perfective aspect (affirmative) \\
Negative future \\
Negative non-future with object
\end{tabular} \\
\hline HL & Affirmative future (in case of reduplication: only the copy) \\
\hline Free variation & Some imperatives \\
\hline
\end{tabular}

\subsection*{12.3.1.2 Lexical tones}

The citation form of verbs, from which all other forms can be predicted, is characterized by a lexical distinction between L, M, H, L-L, M-M, H-H and L-H patterns. Derived forms (discussed in § 12.4) always have a lexical L-H pattern when uninflected. Lexical tones are found in a subset of tense, aspect, and mood constructions, i.e. in most imperatives, affirmative imperfective aspect constructions, in negative non-future constructions without object, in secondary verbs in multi-verb constructions, and in the second verb of future tense constructions with an object. Each of these are exemplified as follows:
(478) Lexical tone: imperatives

> bòb 'come out'
> bìr 'blow'
> kpāb 'mix'
> tz̄b 'count'
> fé 'harvest (maize)'
> vín 'mould (clay)'
> gùrì 'vomit'
> d \(\overline{\text { rin 'snore' }}\)
> fīrī 'jump'
> gúbí 'chase away'
> ywórí 'tie (a knot)'
```

gbìgí 'shake'
tàgí 'affect'
bùsí 'bow (down)'
bòrsí 'add'

```
(479) Lexical tone: affirmative imperfective aspect constructions
a.
wó rá \({ }^{\text {gúb nútón }}\)
dog IPFV chase pig
'The dog is chasing the pig'
(session_005, Garba Abubakar Bako, elicitation)
b.
m̀pò̀m rà kpàr
rain IPFV rain
'It is raining.'
(session_007, Garba Abubakar Bako, narrative)
c.
jùrù jí ywòm rò wūrī gwó
we person Kam IPFV like stranger
'We Kam like strangers.'
(Isolated_Items_01, Yuguda Manti, conversation)
(480) Lexical tone: negative non-future constructions without object

(481) Lexical tone: non-initial verbs of multi-verb constructions
a.
\begin{tabular}{llll} 
tfúg & ú & á & jàg-ì \\
tfúg\H & ú & à & jàg-i \\
catch\PFV & \(3 S G\) & PFV & catch-FV
\end{tabular}
'It (the investigation) caught him (with the bad things that he did).'
(session_051, Isa Sarkin Dawa, narrative)
b.
\begin{tabular}{llll} 
wó & rá & làb & djērı̄ \\
dog & IPFV & hide & look
\end{tabular}
'The dog is secretly looking.'
(session_181, Babangida Audu, narrative)
(482) Lexical tone: second verb of future tense constructions with object
a.
\begin{tabular}{llll} 
í & líg & bùg & líg-í \\
í & líg \(\backslash H L\) & bùg & líg-i \\
LOG.SG & dance\FUT & dance & dance-FV
\end{tabular}
'(He showed that) he could dance.'
(session_365, Babangida Audu, elicitation)
b.
\begin{tabular}{lll} 
ḿ & fá & tkúmé fâ \\
Ń & fàlHL & kúmé fà \\
1SG.S.FUT & raise.chickenlFUT & chicken raise.chicken \\
'I will raise chickens. \({ }^{\text {78 }}\) & \\
(session_365, Babangida Audu, elicitation)
\end{tabular}

\subsection*{12.3.1.3 Replacive \(\mathbf{H}\) tone: various functions}

In other tense, aspect and polarity constructions, verbal tonal patterns are determined by the construction rather than by the lexical tone of verbs. Verbs have a H tone in many constructions, viz. affirmative perfective clauses, negative perfective clauses with an object and negative future constructions.

\footnotetext{
\({ }^{78}\) fà 'to raise chickens' is realized with HL tone due to H tone spread
}
(483) Perfective aspect construction
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline ikā & \multicolumn{3}{|l|}{m̀nīrōg bób} & á & p ¢ & àl̀b & ìgùm, \\
\hline ikā & m̀pīrōg & bj̀b\H & & a & pغ̀ & àlèb & àgùm, \\
\hline then & rat & come.o & utlPFV & PFV & come & inside & hole, \\
\hline ním & ú & â & jàg-ì & & jwé. & & \\
\hline nìm\H & ú & à & jàg-i & & ywé & & \\
\hline bitelPFV & 3SG & PFV & catch-F & & mouth & & \\
\hline
\end{tabular}
'Then, a rat came from inside the hole and bit him on the mouth.'
(session_181, Babangida Audu, narrative)
(484) Negative perfective aspect with an object
\begin{tabular}{|c|c|c|c|}
\hline m & gbéb & ú & hn̂ \\
\hline Ǹ & gbèb\H & ú & hn̂ \\
\hline 1SG.S.NEG.NFUT & beat\PFV & 3SG & NEG \\
\hline \multicolumn{4}{|l|}{'I did not beat him.'} \\
\hline nò góm & ú hn̂ & & \\
\hline nò gòm\H & ú hn̂ & & \\
\hline 2PL pay\PFV & 3SG NE & & \\
\hline \multicolumn{4}{|l|}{\begin{tabular}{l}
'You people did not pay him.' \\
(David Mamuda, session_364, elicitation)
\end{tabular}} \\
\hline
\end{tabular}
a.
\begin{tabular}{llll} 
ń & rá & \({ }^{\downarrow}\) góm-í & hǹ \\
Ń & rá \(^{\text {L }}\) & g̀̀mlH-i & hǹ \\
1SG.S.FUT & NEG.FUT & paylNEG.FUT-FV & NEG
\end{tabular}
'I will not pay.'
(session_364, David Mamuda, elicitation)
b.
\begin{tabular}{llllll} 
ń & rá & gbéb & ú & rá & hǹ \\
Ń & ráL & gbèblH & ú & rò & hǹ \\
1SG.S.FUT & NEG.FUT & beatLNEG.FUT3SG & NEG.FUT & NEG
\end{tabular}
'I will not beat him.'
(session_364, David Mamuda, elicitation)

\subsection*{12.3.1.4 Replacive HL tone: future tense constructions}

In affirmative future tense constructions, verbs have a HL tone scheme. As described in § 12.2.3 and § 13.6.3, future tense with a specific object can be partly expressed by means of repetition of the verb after the object. The repetition of the verb is expressed with the lexical tone of the verb (cf. § 12.3.1.2). Future tense without an object is expressed with partial reduplication of the verb (cf. § 12.2.3 and § 13.4.2). In this case, the copy gets a HL tone and the base receives the lexical tone of the verb. The partially reduplicated form can be analyzed as a contracted form of the future tense construction with a repeated verb: without the intervening object, the verbs are merged into a partial reduplication construction. Under this analysis, the tone of both the original and the repeated verbs are the same in both constructions.

ḿ
Ń
1SG.S.FUT
fá
fàlHL
raise.chickens\FUT
\({ }^{\star}\) kúmé fâ
kúmé fâ
chicken raise.chickens
'I will raise chickens.'
(session_365, Babangida Audu, elicitation)
\begin{tabular}{ll} 
ḿ & fí-fà \\
Ń & fàlHL-fà
\end{tabular}

1SG.S.FUT raise.chickens\FUT-raise.chickens
'I will raise (chickens).'
(session_365, Babangida Audu, elicitation)

\subsection*{12.3.1.5 Free variation: some imperative verbs}

For a few monosyllabic verbs, there is a free choice of tones in imperative forms. This free variation is not consistent across speakers, and in my current dataset 15 verbs have been identified with such free choice by at least one speaker.

Most examples of such free variation occur in isolation. I checked some examples in a frame, with the adverb misi 'again', where they also showed such free variation (session_323, David Mamuda, elicitation).

Some examples of imperative verb forms that can have both a L and a H realization:
(488) bìr, bīr or bír (lexical tone \(=\mathrm{H}\) ) 'to cut, to slaughter'
\(\begin{array}{lll}\text { a. } & \text { mèr mísí } & \text { 'swallow again!' } \\ \text { b. } & \text { mér mísí } & \text { 'swallow again!' }\end{array}\)
a. gbèb mísí 'beat again!'
b. gbéb mísí 'beat again!'
a. bàr mísí 'farm again!'
b. bár mísí 'farm again!'

\subsection*{12.3.2 Derivational tone}

Derivation is partly accomplished with tonal morphology. The following derivational patterns make use of replacive tone on verbs. Note that these patterns are overwritten by inflectional replacive tones in certain grammatical contexts (§ 12.3.1).
- Causative and iterative derivation with -ti, -si or -rí suffixes: replacive L tone on the verb stem. More examples can be found in § 12.4 below.
\begin{tabular}{llll} 
JóblL & + tí & \(\rightarrow\) & Jòp-tí \\
be.hotlCAUS & CAUS & & become.hot:CAUS-CAUS \\
'to boil' & & &
\end{tabular}
- Deverbal participant and action/state nominalization with \(\grave{a}\) - prefixes and with -rì suffixes: replacive H tone on the verb stem. See § 7.2.3.1 and § 7.2.3.2 for more examples.
\begin{tabular}{llll} 
à & + zùb\H & \(\rightarrow\) & à-zúb \\
NMLZ & steallNMLZ & & NMLZ-steal:NMLZ
\end{tabular}
'thief'
(497) à + lèm\H + rì \(\rightarrow \quad\) à-lém-rî

NMLZ be.goodINMLZ NMLZ NMLZ-good:NMLZ-NMLZ 'goodness, beauty'
- Deverbal adjectivization with the prefix \(\dot{a}^{L}\) - and final vowel -i include a replacive M tone on the verb stem (see § 7.5). \({ }^{79}\)
á-dūb-ī
ál \(^{\text {L }}\)-dùblM-i
ADJ-be.tall\ADJ-FV
'tall'

\subsection*{12.4 Derivational suffixes: causative -tí and -sí, iterative -rí, and other meanings}

I found three marginally productive derivational suffixes on verbs: -sí and - \(t i\) derive causative verbs and \(-r i\) expresses an iterative meaning. In at least one case, \(-s i\) and \(-t i\) are interchangeable (bj̀mtí = bj̀msí 'to lengthen something'). Although I present \(-t i\) and \(-s i\) as suffixes because of their bound nature (they cannot occur as an utterance by themselves) and their derivational semantics, from a phonological point of view they are prosodic stems as their initial consonants are consonants that occur only in the prosodically strong stem-initial position (cf. § 4.2.10). Suffixes cannot be stacked to make more complex forms. All derivations

\footnotetext{
\({ }^{79}\) This M could be a downstepped H, cf. footnote 69 on p. 174.
}
applying these suffixes also feature replacive L tone on the verb stem, which will not be explicitly marked in this section but has been discussed in § 12.3.2.

\section*{Iterative -rí}
\begin{tabular}{lll} 
gbèb-rí & beat-IT 'to beat repeatedly' & (gbèb 'to beat') \\
tùb-rí & push-IT 'to put holes in something' & (tùb 'to push') \\
wòm-rí & break-IT 'to hit repeatedly' & (wòm 'to break') \\
bà-rí & remove-IT 'to rinse' & (bà 'to remove')
\end{tabular}
(500) Causative -tí and -sí
\begin{tabular}{lll} 
Jòp-tí & be.hot-CAUS 'to boil' & \begin{tabular}{l} 
(fób 'to be hot') \\
mòm-tí
\end{tabular} \\
(mòm 'to laugh') \\
wòm-tí & break-CAUS 'to break something', & (wòm 'to break') \\
lù-tí & lie.down-CAUS 'to lay something down' & (lù 'to sleep') \\
tàm-sí & grow-CAUS 'to nurture something' & (tám 'to grow') \\
jì-sí & leave-CAUS 'to take something' & (jī 'leave') \\
dàk-sí & be.cold-CAUS 'to cool something down' & (dág 'to be cold') \\
lèk-sí & be.sharp-CAUS 'to sharpen something' & (lèg 'to be sharp' \\
mìlàk-sí & be.soft-CAUS 'to make something soft' & (mílág 'to be soft') \\
jàr-sí & be.wide-CAUS 'to make something wide' & (jár 'to be wide') \\
bòm-sí ~ bòm-tí & be.long-CAUS 'to make something long' & (bóm 'to be wide')
\end{tabular}

In two cases, \(-t i\) and \(-s i\) have a meaning related to physical contact or penetration. I have called this function 'applicative', but it is difficult to accurately characterize.
(501) Applicative -tí and -sí
jè-tí enter-APPL 'to lean against something' (jé 'to enter')
tùp-sí push-APPL 'to pierce, to prick' (tùb 'to push')

These suffixes are only marginally productive in the sense that they are found only with a limited subset of verbal roots. Causatives are very productive in stative verbs, as illustrated in (500) above, but elsewhere it is impossible to make new verbs with these suffixes.
\[
\begin{align*}
& \text { mèl 'to swallow’ } \rightarrow \text { *mèlsí, *mèltí, *mèlrí }  \tag{502}\\
& \text { déy 'to roast' } \rightarrow \text { *dènsí, *dèntí, *dènrí } \\
& \text { gòm 'to pay' } \rightarrow \text { *gòmsí, *gòmtí, *gòmrí } \\
& \text { bén 'to speak' } \rightarrow \text { *bènti̊ }{ }^{\text {º }}, \text { *bènsí, *bènrí } \\
& \text { sằ 'to roof' } \rightarrow \text { *sằtí, *sã̀sí, *sằrí } \\
& \text { fà 'to raise chickens' } \rightarrow \text { *fàtí, *fàsí, *fàrí }{ }^{81}
\end{align*}
\]

In many verbs with these suffixes, the related source verb has disappeared from the language or the semantic relationship between the derived verb and the original is too opaque for the derivation to be analyzable as synchronic. Where the simplex stem has disappeared, there are usually still derived forms in the language that attest its former presence, for example in lexicalized resultative derivations or in adjectives.
(503) Opaque semantic relationships
\begin{tabular}{lll} 
pèntírí 'to barter' & compare & pèntí 'collect rest of crops' \\
lògrí 'to finish' & compare & lòg 'to deliver a child' \\
djibrí 'to change' & compare & djìb 'to fence a place' \\
fàgrí 'to gather' & compare & fàg 'to close, to cover, to lock'
\end{tabular}
(504) No simplex stem in the language
\begin{tabular}{lll} 
mènsí 'to scatter' & compare & mén á 'jí 'scattered' (lexicalized resultative) \\
pỳpsí 'to press together' & compare & pūpp̄̄b 'pressed together' (lexicalized adjective) \\
yànsí 'to fold/bend' & compare & yī̄̄ān 'bent' (lexicalized adjective) \\
vìykrí 'to make round', & compare & víy á 'jí 'moulded' (lexicalized resultative) \\
vèrí 'to kill' & compare & vèg 'to die'? \\
nàmrî 'to name' & & \(?\) \\
kwàntrí 'to fold' & & \(?\) \\
gbàsí 'to loosen' & & \(?\)
\end{tabular}

\footnotetext{
\({ }^{80}\) bèntí exists as a verb meaning 'to cut' and as a noun meaning 'trousers'.
\({ }^{81}\) fàr' exists as a verb meaning 'to fold' and a verb meaning 'to open'.
}
(505) shows two cases where there is an obvious relationship between a form with a suffix and a source verb. Their derivation is, however, historical rather than synchronic.
(505)
\begin{tabular}{lll} 
kùptí 'to bend something' compare & kùb 'to be weak' \\
tiksí 'to blink' & compare & tīgī1 'to cover'
\end{tabular}

In other cases, there is no observable syntactic or semantic difference between the derived verb and the source verb, or between the same verb root used with different derivational suffixes.
lùb 'to remove/uproot'
\(=\) lùp-sí 'to remove/uproot' (e.g. lùp-sí pírí m kã̃ 'remove it and come to me')
\(=\) lùb-rí 'to remove/uproot' (e.g. lùb-rí \({ }^{\downarrow}\) djí fō 'uproot the cassava')
(session_358, David Mamuda, elicitation)
(510)
```

gāg 'to hang' (e.g. jàg gāg kā nह̄b gàn 'Go hang it up.')
gàg-rí 'to hang' (e.g. jàg gàg-rí ká nćb gàn 'Go hang it up.')

```
(session_358, David Mamuda, elicitation)
wārī 'to dream'
= wàt-rí 'to dream'
(session_358, David Mamuda, elicitation)

\subsection*{12.5 Reduplication (and repetition)}

\subsection*{12.5.1 Overview}

There are three different types of verbal reduplication in Kam, each with their own inflectional or derivational functions. Related to but distinct from reduplication is verb repetition.
- Predicative adjectives are derived by means of partial segmental reduplication with full tonal reduplication. \({ }^{82}\) This process involves repetition of the first syllable of a verb with a vowel prespecified for height, but full repetition of the tonal pattern of the verb. Predicative adjectives do not have tense and aspect distinctions and cannot be negated directly. To negate them and to indicate tense and aspect distinctions, underived verb stems are used. Examples are gìggàb 'shared', from gàb 'to share' kpikpésī 'slippery, smooth', from kpèsi 'to be slippery, smooth' and fijób 'hot', from fób 'to be hot'. I discuss this construction in § 12.5.2.
- The future tense construction without object employs partial reduplication with replacive tone on the copy (which is the first syllable of the construction) and lexical tone on the base. A final vowel \(-i\) occurs on this construction. I discuss this future tense construction in § 12.2.3 and § 13.4.2.
- The future tense construction with an object employs repetition of the whole verb after the object. Since other lexemes can occur between the verb and its copy, they are not phonologically or morphologically linked to one another. The verb before the object receives replacive HL tone. The copy occurs with the final vowel \(-i\) and features the verb's lexical tone. § 12.2.3 and § 13.6.3 deal with this type of construction.
- There is an 'intensity' construction in Kam that uses partial segmental reduplication, where the first syllable of the verb is copied and the whole reduplicated verb receives a HM replacive tone as well as a final vowel -i. This intensity construction also features the negator hì. I discuss it in § 12.5.4.
- I also found examples of unmotivated reduplication in Kam. That is, instances, where a verb can be reduplicated without any difference in meaning. Such reduplications are also partial, involving a copy of the first syllable of the verb. They also feature replacive HM tone, and for some verbs a final vowel -i. I discuss these cases in § 12.5.5.

\footnotetext{
\({ }^{82}\) I analyze these as predicative adjectives, since they are not marked for tense and aspect. Another possibility would be to analyze them as a type of stative verb, since they are always derived from verbal stems.
}

\subsection*{12.5.2 Predicative adjectives}

Predicative adjectives are always derived from a verb stem by means of reduplication. The reduplication process involves (1) making a copy of the first syllable of the stem, (2) assimilation of the final consonant of the copy to the first consonant of the base (cf. § 6.1.1.3), and (3) full reduplication of the tone of the stem. As discussed in § 4.3.2, the vowel in the copy of partial reduplications are always high. An \(e, \varepsilon, i\) or \(a\) becomes an \(i\), an \(o\) or \(\supset\) becomes an \(u\).

Thus, a predicative adjective derived from the verb pár 'to be tight' is pippár 'tight'. the first syllable is copied, and the vowel in the copy is high. The final consonant of the copy assimilates to the first consonant of the stem, and merges with it into a geminated \(p p\). The tone is simply copied.

Some examples:
\[
\begin{align*}
& \text { dàm 'to be clean' } \rightarrow \text { dìndàm 'clean' }  \tag{511}\\
& \text { būm 'to rot' } \rightarrow \text { būmbūm 'rotten, spoiled' } \\
& \text { kág 'to crunch' } \rightarrow \text { kíkkág 'crunched' } \\
& \text { lèm 'to be good' } \rightarrow \text { lillèm 'good' } \\
& \text { gàb 'to share' } \rightarrow \text { gìggàb 'shared' } \\
& \text { tùb 'to push' } \rightarrow \text { tùttùb 'holed' } \\
& \text { bóm 'to be long' } \rightarrow \text { búmbóm 'long' } \\
& \text { fám 'to be light' } \rightarrow \text { fímfám 'light' } \\
& \text { gáy 'to bend' } \rightarrow \text { gíngáy 'bent' } \\
& \text { tám 'to grow' } \rightarrow \text { tíntám 'big' } \\
& \text { wòm 'to be hollow' } \rightarrow \text { wùmwòm 'hollow' } \\
& \text { wū 'to be ripe' } \rightarrow \text { wūwū 'ripe' }
\end{align*}
\]

All examples in (511) derive from monosyllabic verbs. When a predicative adjective is derived from a disyllabic verb, the realization of tones can be more complicated. When sìyi 'to be sweet' is reduplicated, for example, the resulting reduplication has only three syllables, whereas there are four tones that have to be attached: L H L H. The result is sùnsíy \(\bar{\imath}\) : the first L tone attaches to the copy; the following H tone attaches to the first syllable of the base, and the final L and H tone simultaneously attach to the final syllable, resulting in a M tone. Some more examples of this, where the process is identical, are the following.
```

(512)
kpèsí 'to be slippery' $\rightarrow$ kpìkpésī ‘slippery'
kj̀ktí 'to be smooth' $\rightarrow$ kùkj́ktī 'smooth'
fòrí 'to be sour' $\rightarrow$ füfórī 'sour'
kpàní 'to be strong' $\rightarrow$ kpìnkpánī ‘strong'
ŋwàntí 'to be straight' $\rightarrow$ ŋywìnwántī 'straight'
pìrí 'to be astringent' $\rightarrow$ pàpírī 'astringent'
mùsí 'to fill' $\rightarrow$ mùmúsī ‘full'
zòrí 'to be bitter' $\rightarrow$ zùzórí 'bitter'

```

No tense, aspect or negation distinctions can be marked on predicative adjectives. When such distinctions must be expressed, the regular verb stem is used with the relevant morphology and clausal marking. For example, if a speaker wants to say that 'the place is hot', they can use a predicative adjective as in (513). If they want to code such a situation in the past that is no longer the case, they could use the same construction, or choose to code it in the perfective aspect (514). If they want to emphasize that the place is not hot now, but will be hot in the future, a future tense construction can be used with the regular verb stem (515). If they want to negate that it is hot, they would use the regular verb stem with a negative construction (516).
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(513)} & \multicolumn{4}{|l|}{kòm Jij \(\int\) ¢ób} \\
\hline & \multirow[t]{2}{*}{\begin{tabular}{l}
kı̀m \\
place
\end{tabular}} & \multicolumn{3}{|l|}{Jij \(\sim\) Jób} \\
\hline & & \multicolumn{3}{|l|}{PRED be.hot} \\
\hline & \multicolumn{4}{|l|}{'the place is hot'} \\
\hline \multirow[t]{4}{*}{(514)} & kòm & Jób & & â \\
\hline & kòm & Jób\H & & à \\
\hline & place & be.ho & PFV & PFV \\
\hline & \multicolumn{4}{|l|}{'the place was hot'} \\
\hline \multirow[t]{4}{*}{(515)} & kı̀m & \multicolumn{3}{|l|}{Jij \({ }^{\dagger}\) Jóbí} \\
\hline & kòm & \multicolumn{3}{|l|}{Ji〕ML \(\sim\) jób-i} \\
\hline & place & \multicolumn{3}{|l|}{FUT\FUT~be.hot-FV} \\
\hline & \multicolumn{4}{|l|}{'the place will be hot'} \\
\hline \multirow[t]{3}{*}{(516)} & kòm & \multicolumn{3}{|l|}{Jób hn̂} \\
\hline & place & \multicolumn{3}{|l|}{be.hot NEG} \\
\hline & \multicolumn{4}{|l|}{'the place is not hot'} \\
\hline
\end{tabular}

\subsection*{12.5.3 Future tense constructions}

I treat future tense constructions elsewhere in this grammar, in § 12.2.3, § 13.1, § 13.4.2 and § 13.6.3.

\subsection*{12.5.4 The 'intensity' construction with partial reduplication and the negator hì}

A rare intensity construction features a partially reduplicated form of verbs with HM replacive tone together with the clause-final negator \(h \grave{n}\). This construction expresses emphatically affirmative meaning rather than negation (which would be expected given the presence of the negator). I only found this construction in elicited data, not in texts, songs or conversation. This may be an artefact of the relatively small size of the corpus. The functions of this construction are not well understood. The construction can be schematized as follows:

The intensity construction
\(\mathrm{NP}+\mathrm{INT} \sim \mathrm{V} \backslash \mathrm{HM}-\mathrm{i}+\) hǹ
\begin{tabular}{llllllll} 
ànàván & á & dúb & hn̂, & àmá, & àwú & dúddūb-ī & hñ. \\
man & PROX & be.tall & NEG & but & 3SG & INT~be.tallINT-i & NEG.
\end{tabular}
'This man is not (just) tall, but he is very tall.'
(session_287, Babangida Audu, elicitation)
àngwóg á tíntām-ī hñ.
house PROX INT~grow/INT-í NEG.
'This house is very big.'
(session_071, Isa Sarkin Dawa, elicitation)
àngwóg mō \(\bar{a} \quad\) díddāg- \(\overline{1} \quad h n ̄\).
house good PROX INT~cold\INT-í NEG.
'The good house was very cold.'
(session_342, Isa Sarkin Dawa, elicitation)

A negative future tense interpretation for these examples ('The man will not grow.', 'The house will not cool down.') is not possible. Negative future tense clauses are expressed with another construction that does not involve reduplication but tonal morphology and some clausal markers instead (cf. § 13.1).

It is possible that the negator hǹ originally was an intensity marker, which was used with other negators in the clause \({ }^{83}\) and later acquired a negative meaning. The intensity construction, then, preserves the earlier non-negative meaning of hǹ which may have been something like 'really, truly, absolutely'. This would be an example of the Jespersen Cycle that has been described for many other languages across the world (Jespersen 1917; Dahl 1979; van der Auwera 2009). \({ }^{84}\)

Alternatively, this construction derives from a so-called ironic negative construction, where a negative clause may be used to express an emphatically positive proposition. \({ }^{85}\) This ironic negative construction could have conventionalized and entirely lost its negative meaning to an emphatic positive one (cf. Shmelev 2016 on the conventionalization of irony and other pragmatic effects).

\subsection*{12.5.5 Unmotivated reduplication}

Sometimes, reduplication appears completely optional in any tense-aspect configuration. In these cases, I failed to identify a clear function of reduplication, and my consultants said simplex forms are equally acceptable as reduplicated forms.

In all these cases, partial segmental reduplication applies, overlayed with replacive \(\mathrm{H}-\mathrm{M}\) tone. Some reduplications involve a final vowel \(-i\), some do not. Note that the examples I found in imperatives are all verbs connected to bodily functions.
(521) Some examples in imperatives
bíbīrī 'whistle' (cf. bìr 'whistle')
ทíjāmtī ‘yawn’ (cf. nàmtí ‘yawn’)
kpíkpīrī 'cough' (cf. kpīrī 'cough')


\footnotetext{
\({ }^{83}\) The optional preverbal negator màg may have been obligatory at some stage in the language (see § 13.3.3). There are various other non-final negation markers in Kam. These are all discussed in Chapter 1.
\({ }^{84} \mathrm{I}\) wish to thank Dmitry Idiatov for this suggestion.
\({ }^{85}\) See the Lingtyp discussion on Ironic negative constructions in January 2020 at http://listserv.linguistlist.org/pipermail/lingtyp/2020-January/007568.html. I wish to thank Mark Van de Velde for pointing me in this direction and sharing with me the Lingtyp post on ironic negative constructions. I also wish to thank Pascal Boyeldieu for sharing his ideas on this type of antiphrasis.
\({ }^{86}\) The tone of \(\int_{\varepsilon m}\) 'to sneeze' is uncertain.
}

\section*{Imperfective aspect}
\begin{tabular}{|c|c|c|c|}
\hline í & rá & \({ }^{\dagger}\) bímbēn & kā, \\
\hline í & rà & bín~bén\HM & kā, \\
\hline 3 PL & IPFV & UNM~saylUNM & COND, \\
\hline í & rá & \({ }^{\downarrow}\) dàk-sí & tédìndày. \\
\hline í & rà & dág\L-sí & têe-dindàn \\
\hline 3 PL & IPFV & coldICAUS-CAUS & guinea.corn-?. \\
\hline
\end{tabular}
'When they are talking, they are cooling beer.'
(session_271, Danjuma Bello, conversation)

\section*{(523) Perfective aspect}
\begin{tabular}{|c|c|}
\hline ń & djídjāgī \\
\hline ń & djì~djàg/HM-i \\
\hline 1SG.S.PFV & UNM~do.secretlylUNM-FV \\
\hline
\end{tabular}
'I spied.'
(session_361, David Mamuda, elicitation)

\subsection*{12.6 Irregular verbs}

\subsection*{12.6.1 Copulas}

The copula dá has an affirmative existential and locational meaning. It also occurs in predicative possession clauses. It fills the verb slot in a clause, but does not behave like other verbs. It does not inflect for tense or aspect and it does not occur with tense or aspect particles. In locational predication clauses, the copula dá takes a circumstantial (adverbial) argument as its complement. In existential clauses, it takes the presentative demonstrative \(b \bar{\varepsilon}\) as its complement. \(b \bar{\varepsilon}\) may derive from an adverbial or demonstratival element meaning 'here' or 'there'. dá is a special interrogative existential form of the copula, but it is not obligatory. I only occasionally observed it in informal settings but did not record data on it. Interrogative and conditional clauses can be formed in the regular way, by means of the regular interrogative and conditional particles \(j \bar{\imath}\) and \(k \bar{a}\) (cf. § 16.1 and § 17.5.1.6).

The negative equivalent of the copula dá is siri 'not to be'. It is always used with the clause-final particle rigg, which forms an essential part of the negative locational and existential predication
constructions. The sirī ... rīg construction is used as the negative counterpart of any affirmative construction with d́ .

Further description and examples of constructions with dá and sìrı̄ can be found in § 15.2.1 and in § 13.4.3.

\subsection*{12.6.2 Irregular conjugations}

There are very few verbs that have irregular conjugations in Kam. Just three verbs have been identified that behave irregularly:
(1) \(p \grave{\varepsilon}\) 'come', which has a special perfective aspect form;
(2) táni 'stand, stay', which as a primary verb is only attested in a special uninflected complex form tiná \({ }^{\downarrow}\) táni 'stand' as a primary verb. This is also the only verb with a H-L pattern in the language.
(3) mà 'give', which has different forms depending on the object it takes

The verb pغ̀ 'come' has a special perfective aspect form pirâ that is often used when it is the only verb in a clause. The exact function of this special form is not yet clear, and I have not checked whether it can always be substituted by the regular forms pè or pд̀.
\begin{tabular}{ll} 
àlàsírá & míná \(\quad\) pírâ \\
white.person & PRSTT come.PFV
\end{tabular}
'The white man came like this.'
(session_052, Isa Sarkin Dawa, narrative)
(525)
\begin{tabular}{llllll} 
gó & pírá & kā, & & \\
guest & come.PFV & COND, & & \\
& & & & & \\
ì & tfúg & ú & ká \({ }^{\dagger}\) né & jírág & jī̄āg \\
1PL & take & 3SG & INSTR:hand & two & two
\end{tabular}
'When a stranger comes, we cooperate with him.'
(session_056, Muhammad Bose Yuguda, narrative)
\begin{tabular}{lllll} 
sù & ní & ní & mgbāb-ī & pírâ \\
section & person & thing & ADJ:hunt-FV & come.PFV
\end{tabular}
'(Then, when a certain year came,) a group of hunters came. (They came and met the Kam people)'
(session_191, Isa Sarkin Dawa, narrative)

The verb táni 'stay, stand' (alternative forms: tán \({ }^{L}\) or tán) is rarely found outside of multi-verb constructions (§ 14.3.2), except in the greeting tán sìm 'how are things?' (527). Elsewhere, where it means 'to stand' as a primary verb, it is accompanied by an unanalyzable morpheme \(t i\) ina \(^{L}\) (or its short form \(t i\) ), which is not found anywhere else in the currently collected lexicon of Kam. The complex verb tináa \({ }^{\downarrow}\)-tán \((i)\) (and \(t i_{i}\) tán(i)) is not marked for tense or aspect ((527)(528)-(530)).
\begin{tabular}{lllll} 
tán & sìm & òléy & á & jī? \\
tán \(^{\mathrm{L}}\) & sìm & àléy & á & \(\mathrm{jī} ?\) \\
stand & how & sun & PROX & Q
\end{tabular}
'How do (things) stand today?' (i.e. 'How are things?)
(session_003, Garba Abubakar Bako, elicitation)
\begin{tabular}{lllll} 
awu & mina ba & tinatani & gay & a \\
3SG & PRSTT REL & stand & up & REL
\end{tabular}
'Here he stands up.'
(session_181, Babangida Audu, narrative)
ń
ffi \({ }^{\downarrow}\) tán gây
1SG.S.PFV stand up
'I stand up'
(session_049, Muhammad Bose Yuguda, elicitation)
\begin{tabular}{llll} 
ń & tfi \({ }^{\downarrow}\) tán & àlím & ngwòg \\
1SG.S.PFV & stand & front & house
\end{tabular}
'I stand in front of the house.'
(session_054, Muhammad Bose Yuguda, elicitation)

The verb \(m a ̀\) 'give' has irregular forms for different objects, except in the first person plural and second person plural. The irregular forms are the result of possessive indexes merging with the verb.
\begin{tabular}{lll} 
(531) & mām & 'give me' \\
mā & 'give you' \\
mō & 'give him' \\
mà júrú & 'give us' \\
mà jó & 'give you' \\
mē & 'give them'
\end{tabular}

\section*{13 Aspect, tense and negation}

\subsection*{13.1 Introduction and overview}

Different tense, aspect and negation values are marked cumulatively in Kam. There is no one dedicated morpheme that expresses perfective aspect, imperfective aspect, or future tense, for example. These categories are expressed through a combination of morphemes co-occurring in a clause. Such combinations of morphemes are referred to in the literature as multiple exponence and sometimes as hypermorphemes (e.g. Payne 1997: 234).

Firstly, the tone of the primary verb in the clause plays an important role, as well as the tone of its accompanying subject pronominal (if they are singular speech act participants, i.e. 1SG and 2SG). I discussed such tonal marking in § 8.2.2 and § 12.3. They are briefly summarized in this chapter. There are some specialized preverbal markers expressing tense, aspect and polarity. I also identified two post-verbal (and post-object) tense, aspect and polarity markers. The final vowel \(-i\), already discussed in \(\S 12.2\), is found in all future tense constructions. Reduplication and repetition of verbs also co-express future tense in a clause. All these markers are summarized in Table 41. I discuss each of them in more detail in the remainder of this chapter. I observed many of the same markers in subordinate clauses, although I did not study these in detail and there may be differences in subordinate clauses that I have not identified yet.

Time, aspect, polarity and modality can also be lexically expressed, by adverbial modifiers (§ 15.4), multi-verb constructions (§ 12.5.5), prepositional phrases (cf. § 11.1) and complex sentences (Chapter 1). The current chapter is only concerned with grammatical marking of these categories, and not with lexical or adverbial expressions.

Kam distinguishes the following tense, aspect, and polarity categories:
- Future vs. non-future tense
- Perfective vs. imperfective aspect
- Positive vs. negative polarity

These terms refer to the typical functions of each construction, and their meanings are straightforward. The only value that needs some more definition is the distinction between perfective and imperfective aspect. Perfective aspect constructions describe an event as viewed as a whole, without focusing on their internal structure. Imperfective aspect constructions, on the other hand, construe an action as ongoing. Perfective aspect is the most common aspectual value in the current Kam corpus, and it is the default aspectual value used to translate a basic English past or present tense clause.

Table 41 introduces the different markers used for expressing tense, aspect and polarity in Kam and gives an overview of the different slots they occur in. A few general observations can be made:
- Tense and aspect marking is very different in affirmative and negative clauses. Every construction and most individual markers simultaneously mark a tense/aspect and negation value.
- Out of four pre-verbal markers in the table, only one belongs to the affirmative construction set. Most pre-verbal markers are negators.
- The only clause-final markers are negators.

Table 41 - Tense, aspect and polarity marking in Kam clauses
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Construction & 1SG and 2SG subject index tone & Immediately pre-verbal markers & Copula and primary verb & Final vowel & Transitive object or copula object & Immediately postobject position & Secondary verbs & \begin{tabular}{l}
Clause- \\
final \\
markers
\end{tabular} \\
\hline Affirmative perfective & H & & H tone & & Any object & à & \multirow{10}{*}{Any secondary multi-verb component (see § 12.5.5)} & \\
\hline Affirmative imperfective & L & rə̀ & Lexical tone & & Any object & & & \\
\hline Affirmative future with object & H & & HL tone & & Any object & (Repeated verb with lexical tone and -i) & & \\
\hline Affirmative future without object & H & & Reduplication with HL tone (see § 12.5.3) & -i & & & & \\
\hline Affirmative copula clause & H & & dó & & (adverbial) & & & \\
\hline Negative nonfuture with object & L & (màg) & H tone & & Any object & & & hǹ \\
\hline Negative nonfuture without object & L & (màg) & Lexical tone & & & & & hǹ \\
\hline Negative future & H & rá \({ }^{\text {L }}\) & H & -i & & (rà) & & hǹ \\
\hline Negative imperative & & kə́ & Lexical & & Any object & & & gà \\
\hline Negative copula clause & H & & sìrə̄ & & Any object & & & rīg \\
\hline Negative continuative & \multicolumn{7}{|c|}{Any of the affirmative constructions} & djēn \\
\hline
\end{tabular}

The following clauses show cumulative marking. Each marker is highlighted. Subsequent sections further discuss and exemplify each position.

\section*{Affirmative imperfective}
\begin{tabular}{llll} 
à & rà & bén & ánt \(\bar{r} r i ̄ . ~\) \\
2SG.S.IPFV & IPFV & say & truth.
\end{tabular}
'You are telling the truth.'
(session_159, Solomon Ahmadu, elicitation)

Affirmative future without object
\begin{tabular}{llll} 
ḿ & búg & \({ }^{\text {á }}\) & būg-ī. \\
Ń & būg \(\backslash \mathbf{H L}\) & á & būg-i.
\end{tabular}

1SG.S.FUT pinch\FUT 2SG.O pinch-FV.
'I will pinch you.'
(session_345, Danjuma Bello, elicitation)

Negative non-future with object
\begin{tabular}{llllll} 
̀̀ & (màg) & ním & àfàm & nág & hn̂. \\
Ǹ & (màg) & nìm\H & àfàm & nág & hǹ. \\
1SG.S.NEG.NFUT & (NEG.NFUT) & eatlNEG.NFUT & meat & cow & NEG.
\end{tabular}
'I did not eat cow meat.'
(session_285, Babangida Audu, elicitation)

Negative future
\begin{tabular}{llll} 
rá & kábírí & rá & hǹ. \\
rá \(^{\text {L }}\) & kàbìílH & rà & hǹ. \\
NEG.FUT & breaklNEG.FUT & NEG.FUT & NEG.
\end{tabular}
'(Whatever you put in this bag,) (it) will not break.'
(session_290, David Mark, elicitation)

\section*{Future negative continuative}
\begin{tabular}{lllll} 
ráháb & gbán-ì & gárínhāmzà & pí \({ }^{\neq}\)káy & ḑén. \\
Rahab & arrive:FUT-FV & Garin.Hamza & tomorrow & NEG.CONT.
\end{tabular}
'Rahab will not yet arrive in Garin Hamza tomorrow.'
(session_288, Solomon Ahmadu, elicitation)

Negative imperative
\begin{tabular}{llccc} 
nò & ká & néb & \({ }^{\text {t }}\) ygwóg wàn & nと̀ \(\quad\) gà \\
2PL & NEG.IMP & go & house king & EMPH NEG.IMP \\
'Don't go to the house of the king!' (to more than one person) \\
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
\end{tabular}

\subsection*{13.2 1SG and 2SG subject pronominals (Subject-Tense-Aspect-Polarity morphemes)}

A clause has different first person singular and second person singular subject pronominals depending on the tense, aspect and polarity value of a clause. Specifically, the tone of these pronominals is different. Segmentally, their forms remain the same. Other pronominals are constant, both segmentally and tonally. Pronominals are discussed in detail in § 8.2.2. Table 42 repeats the facts that are relevant to tense, aspect and polarity marking. Such portmanteau morphemes are never the sole markers of tense, aspect, or polarity in the clause, but are always combined with markers elsewhere in the clause.

Table 42 - Tense, aspect and polarity distinctions in 1SG and 2SG subject pronominals
\begin{tabular}{|l|l|l|l|l|l|}
\hline Tense & Polarity & Aspect & Pronominal tone & 1SG form & 2SG form \\
\hline \multirow{3}{*}{ Non-future } & \multirow{2}{*}{ Affirmative } & Perfective & H & Ń & á \\
\cline { 2 - 6 } & & Imperfective & L & N̉ & à \\
\cline { 2 - 6 } & Negative & Any & L & Ǹ & à \\
\hline Future & Any & Any & H & Ń & á \\
\hline
\end{tabular}

While I analyze these forms as portmanteau morphemes, another description is possible, although arguably less elegant from a comparative perspective. 1SG and 2SG subject indexes could be analyzed as toneless morphemes (respectively \(N\) and \(a\) ), and completely dependent on the tense, aspect and polarity value of the clause for their tones. From this perspective, tense, aspect and polarity are marked by tonal morphology on pronominals: a H tone marks perfective aspect or future tense, and a L tone marks imperfective aspect or negative non-future.

\subsection*{13.3 Pre-verbal markers}

\subsection*{13.3.1 rà, màg, rá \({ }^{\text {L }}\) and kź}

Preverbal markers include the imperfective aspect marker rà, the optional non-future negator màg, the negative future marker \(r \partial^{L}\), and the negative imperative marker \(k \dot{z}\) (discussed in § 16.2). They follow subject pronominals and precede the first verb of a clause. The sequential marker sì (discussed in § 17.4.2) also
occurs in this slot, but since it is not directly relevant to tense, aspect, modality and polarity, it is not discussed here. All of these preverbal markers may derive from initial verbs in multi-verb constructions that grammaticalized into preverbal markers.

\subsection*{13.3.2 Imperfective rà and homophonous markers}

The imperfective marker \(r \grave{z}\) also serves as (or is homophonous with) the comitative/temporal preposition, (§ 11.2.2.2). It is also used in predicative possessive constructions (§ 15.2.1) and in complex sentences expressing wishes (§ 17.3). It is possible that one of these constructions served as the source construction for the other constructions (e.g. the use of \(r\) ra could have started as comitative/possessive, and could have been extended to acquire both the imperfective and the modal 'wish' function). It is also possible that a single verb was grammaticalized at different times into different grammatical markers.

A marker -rà is also used as a deverbal nominalizer (cf. § 7.2.3.2), and an identical optional rà marker co-expresses the negative future after objects (§ 13.6.2). Furthermore, the marker is segmentally similar to the iterative/causative suffix -rí (§ 12.4), the preverbal negative future marker \(r \partial^{L}\) (§ 13.3.1), the emphatic marker \(r \bar{l} g\) (§ 18.4) and the negative possessive marker \(r \bar{l} g\) (§ 13.7). Some of these similarities may be coincidental but they may also indicate divergent grammaticalization paths of a single marker.

The imperfective particle rà is one of the only markers in Kam that can express a certain tense, aspect or polarity value by themselves (the only other such markers are the verbal declarative negator hì and the affirmative copula dá). When the subject is expressed by anything other than a 1 SG or 2 SG pronominal, there is no other marking present in the clause.

\subsection*{13.3.3 mà \((g)\), an optional preverbal negation marker}

Negative non-future constructions may feature an optional pre-verbal negator màg. It has an alternative pronunciation as mà where the final velar is elided. This pronunciation is homophonous with the Hausa marker mà 'also, too', which is also sometimes found in Kam discourse (see example (255)). It is interesting to note that when my consultants were confronted with this pronunciation in a clause in isolation, they often could not tell for certain which mà was intended when not presented with the English translation. Leaving it in or omitting it does not change the semantics of a proposition. One could speculate that it serves an important function as an early signal of negation in those clauses where the only obligatory negation marker
is the clause-final particle \(h \grave{n} .{ }^{87}\) Some (but not all) of my informants said that màg is never obligatory but that it is always preferable, yet in elicited clauses it only occasionally occurs. Its frequency in different constructions in natural discourse remains to be studied.


\footnotetext{
\({ }^{87}\) See also § 12.5.4, where the possibility is suggested that \(h \grave{n}\) originated as an intensifier that grammaticalized into a negator. màg may have been an obligatory pre-verbal negator in the past which has now become optional, and the function of which has been completely taken over by \(h \grave{n}\) in some constructions. A similar process has been described in a wide variety of languages across the world as part of the Jespersen cycle (cf. Van der Auwera 2009; Dahl 1979; Van Gelderen 2008)
\({ }^{88}\) mâg has HL tone in this example because Babangida Audu left a pause in between mâg and kim.
}

\subsection*{13.4 Verbal morphology}

Verbal morphology is discussed in detail in Chapter 12. For understanding tense, aspect and negation distinctions, four types of verbal morphology are relevant (1) tonal morphology, (2) reduplication, (3) the (toneless) final vowel \(-i\), and (4) suppletion, specifically for copulas.

\subsection*{13.4.1 Tonal morphology}

Verb tones in declarative clauses are summarized from a function-to-form perspective in Table 43.
Table 43 - Tonal morphology on verbs, function to form
\begin{tabular}{|l|c|c|c|}
\hline \multirow{2}{*}{ Polarity value } & \multirow{2}{*}{ Future } & \multicolumn{2}{|c|}{ Non-future } \\
\cline { 3 - 4 } & & Perfective & Imperfective \\
\hline \multirow{2}{*}{ Positive polarity } & HL & H & Lexical tone ( \(\varnothing\) ) \\
\hline \multirow{2}{*}{ Negative polarity } & \multirow{2}{*}{H} & \multicolumn{2}{|c|}{ Object present: H } \\
\cline { 3 - 4 } & & \multicolumn{2}{|c|}{ No object present: Lexical tone \((\emptyset)\)} \\
\hline
\end{tabular}

For ease of reference, verbal tones are summarized from a form-to-function perspective in Table 44.
Table 45 - Tonal morphology on verbs, form to function
\begin{tabular}{|l|l|}
\hline Tonal pattern & Value \\
\hline Lexical tone & \begin{tabular}{l} 
Imperfective aspect (affirmative) \\
Negative non-future without object
\end{tabular} \\
\hline H & \begin{tabular}{l} 
Perfective aspect (affirmative) \\
Negative future \\
Negative non-future with object
\end{tabular} \\
\hline HL & Affirmative future (in case of reduplication: only the copy) \\
\hline
\end{tabular}

\subsection*{13.4.2 Partial reduplication}

The affirmative future tense construction without an object is co-expressed by means of partial reduplication of the verb. This type of reduplication takes the verb stem as the base and copies the first syllable. The copy, which is the first syllable of the reduplicated construction, takes a HL tone, as explained in the previous section. It features a vowel that is prespecified for height. An \(i, e, \varepsilon\), or \(a\) becomes an \(/ \mathrm{i} /\), an \(o\) or \(\supset\) becomes an \(u\). Already high vowels remain identical. The base retains its lexical tone. When the verb stem is a monosyllabic CVC-syllable, the final vowel - \(i\) is added at the end of the reduplication (cf. § 12.2). Other phonological details of partial reduplication constructions are described in § 4.3.2. The future partial
reduplication construction can be schematized as follows. (542) covers reduplication of monosyllabic CV stems and polysyllabic stems. (543) covers reduplication of monosyllabic CVC-stems.
\[
\begin{align*}
& {\left[\sigma_{1}\left(\sigma_{2}\right)\right] \rightarrow\left[\mathrm{CV}^{\mathrm{HIGH}}(\mathrm{C})_{1} \backslash \mathrm{HL}\right]^{\mathrm{COPY}} \sim\left[\sigma_{1}\left(\sigma_{2}\right)\right]^{\mathrm{BASE}}}  \tag{542}\\
& {\left[\sigma_{1}\right] \rightarrow\left[\mathrm{CV}^{\mathrm{HIGH}} \mathrm{ClHL}\right]^{\mathrm{COPY}} \sim\left[\sigma_{1}\right]^{\mathrm{BASE}}-i} \tag{543}
\end{align*}
\]

Some examples:
\begin{tabular}{ll} 
fà 'to raise chickens' \\
ḿ & fí~fà \\
Ń & fV \(^{\text {HIGH }} \mathrm{HL} \sim\) fà
\end{tabular}

1SG.S.FUT raise.chickens\FUT~raise.chickens
'I will raise (chickens).'
(session_365, Babangida Audu, elicitation)
(545) tfàbrí 'to finish'
\begin{tabular}{ll} 
ń & gĩn \(\sim\) ffàgrí \\
Ń & fV \(^{\text {HIGH }} \mathrm{N}\) UHL~ffànrí
\end{tabular}

1SG.S.FUT FUT~finish
'I will finish (it)'
(session_345, Danjuma Bello, elicitation)
(546) tàb 'to touch'
ń tít~tàb-ì
Ń \(\quad \mathrm{tV}^{\text {HIGH }_{\text {t }} \backslash \mathrm{HL} \sim \text { tàb- }}\)
1SG.S.FUT FUT~touch-FV
'I will touch it'
(session_365, Babangida Audu, elicitation)

\subsection*{13.4.3 Suppletion in copulas}

Although there are no aspectual and temporal differences in non-verbal constructions, there are two different locational-existential copulas. The first, \(d\) ' 'to be', expresses presence and often co-occurs with the presentative demonstrative \(b \bar{\varepsilon}\). The second, sìr 'not to be', expresses absence and is always accompanied by the clause-final existential negator \(r \bar{\imath} g\). \(d \grave{\partial}\) and sirī take the same slot in the clause.
\begin{tabular}{lll} 
ànág & dá & b \(\bar{\varepsilon}\) \\
work & be & PRSTT
\end{tabular}
'There is work.'
nì sìrī ríg
thing be.NEGNEG
'There is nothing.'
(session_253, Anonymous, narrative)

'The house is inside the bush.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
(550) àngwóg mí sìrī léb ó \(\downarrow\) Jế rîg.
house certain be.NEGinside bush NEG.
'There is no house in the bush.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

\subsection*{13.5 Final vowel -i (future tense)}

The final vowel -i is discussed in more detail in § 12.2. It is found on CVC-stems and CVC(i)-stems (but not on CV-stems) in all future tense constructions, both affirmative and negative. Future constructions differ, however, in where the final vowel -i occurs.

In negative future constructions, it appears on the primary verb:
\(\begin{array}{lllllll}\text { (551) } & \text { àjí } & \text { ró } & \text { dóg-í } & \text { ntèkù } & \text { rò } & \text { hǹ } \\ & \text { 3PL } & \text { FUT.NEG } & \text { see:FUT.NEG-FV } & \text { toad } & \text { FUT.NEG } & \text { NEG }\end{array}\)
'They will not see the toad.'
(session_359, Garba Rahab Precious, elicitation)
\begin{tabular}{llllll} 
(552) & kòm & lèm & hǹ & kõ̃ & kā, \\
place & good & NEG & place:DIST & COND, \\
& & & & \\
í & rá & & \({ }^{+ \text {duj́n-í kòm }}\) & hǹ \\
& 3PL & FUT.NEG & live-FV place & NEG
\end{tabular}
'If the place isn't safe, they will not (be able to) live here.'
(session_052, Isa Sarkin Dawa, narrative)

In the affirmative future construction with an object, it occurs on the verb that is repeated after the object.
\begin{tabular}{lllll} 
(553) & ḿ & búg & tá & būg-ī. \\
& Ń & būg\HL & á & būg-ī. \\
& 1SG.S.FUT & pinch\FUT & 2SG.O & pinch-FV. \\
& 'I will pinch you.'
\end{tabular}
(session_345, Danjuma Bello, elicitation)

In the affirmative future construction without object, it comes after the reduplicated verb (§ 13.4.2).
```

(554) tàb 'to touch'
ń tít~tàb-ì
Ń títHL~àb-i
1SG.S.FUT FUT\FUT~touch-FV
'I will touch it'
(session_365, Babangida Audu, elicitation)

```

\subsection*{13.6 Immediately post-object position}

\subsection*{13.6.1 Affirmative perfective marker à}

The marker \(\grave{a}\) co-expresses perfective aspect in affirmative clauses. It occurs after the primary verb in clauses without an object, and immediately after the object in clauses with an object. I have never observed this marker in relative clauses.

\begin{tabular}{llllll} 
(560) àwú & ' né & tàb & bèl & óm & à \\
àwú & àné & tàb & bèl & m. \(^{\text {L }}\) & à \\
3SG & hand & touch & wood & 1SG:POSS & PFV \\
& 'He touched my wood.' & & \\
& (session_301, David Mamuda, elicitation)
\end{tabular}

There are also examples without \(\grave{a}\). It is not clear when \(\grave{a}\) can be omitted. Very often, a prepositional phrase or other types of adverbial modification are present in such clauses ((561)-(567)). Example (558), however, shows that it can still occur in such clauses. And (568) and (569) show that it is optional even in clauses where no adverbial modification or circumstantial arguments are present.



\subsection*{13.6.2 Optional marker rà in the negative future tense construction}

Negative future tense is marked with a combination of markers, including a H tone subject pronominal (only when the subject is 1 SG or 2 SG ), a dedicated pre-verbal marker \(r \dot{a}^{L}, \mathrm{H}\) tone on the verb, the final vowel -i, the standard negator hì, and an optional marker rà that appears immediately after the verb, or if there is an object, after the object. The following examples show the occurrence of \(r\).
\(\left.\begin{array}{llllll}\text { (570) á } & & \text { pá } & \text { náyá hn̂, } \\ \text { 2SG.S.PFV } & \text { come:PFV } & \text { quickly NEG, }\end{array}\right]\)
'You came too late. She will not get up (again.)' (context: The addressee arrived late for an appointment. The woman waiting for the addressee has already gone to bed.)
(session_288, Solomon Ahmadu, elicitation)


\footnotetext{
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
}

My informants told me that leaving the marker in or leaving it out does not impact the semantics of the clause.
a. with \(\boldsymbol{r} \boldsymbol{\partial}\)
àjí \(\quad\) bén

3PL say:PFV
\begin{tabular}{llllll}
\({ }^{\star} i ́ l\) & ró & pá & rá & \({ }^{\star}\) píkāy & hñ \\
3PL & NEG.FUT & come:NEG.FUT & NEG.FUT & \begin{tabular}{c} 
tomorrow
\end{tabular} & NEG
\end{tabular}
'They said that they would not come tomorrow.'

\section*{b. without rà}
àjí bén
3PL say:PFV
\begin{tabular}{lllll}
\({ }^{\prime}\) í & rá & \({ }^{\text {p }}\) pá & píkāy & hñ \\
3PL & NEG.FUT & come:NEG.FUT & tomorrow & NEG
\end{tabular}
'They said that they would not come tomorrow.'
(Tope_Bitrus_05, Garba Abubakar Bako, elicitation)
rà may be an emphatic marker, or an information structural marker indicating contrast. Most examples where it occurs were elicited, so no inferences could be made from discourse context. More examples where it does not occur are the following.
\begin{tabular}{llllll} 
(576) & kòm & lèm & hǹ & kõ̃ & kā, \\
place & good & NEG & place:DIST & COND, \\
& & & & \\
í & rá & & \({ }^{+ \text {duj́n-í kòm }}\) & hǹ \\
& 3PL & FUT.NEG & live-FV place & NEG
\end{tabular}
'If the place isn't safe, they will not (be able to) live here.'
(session_052, Isa Sarkin Dawa, narrative)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(577)} & nà & d \(3 \bar{\varepsilon}\), & á & & rá & & \({ }^{+}\)nébí & hn̂? & \\
\hline & \multicolumn{9}{|l|}{\begin{tabular}{l}
'What of you, won't you go?' \\
(session_357, Rahab Garba Precious, elicitation)
\end{tabular}} \\
\hline \multirow[t]{4}{*}{(578)} & jì & í-sāmr & \(\overline{1}\) & sī & bób & á & du \(\bar{\varepsilon}\) & à & kā. \\
\hline & thing & ADJ-s & poil:ADJ & SEQ & come.out & PFV & TOP & EMPH & COND \\
\hline & rá & & \(\downarrow\) sín & né & hn̂." & & & & \\
\hline & NEG.FUT & T & do & EMP & NEG." & & & & \\
\hline
\end{tabular}
'If something bad comes out, it won't work.'
(session_051, Isa Sarkin Dawa, narrative)

It is likely that \(r\) à is related to the clause-final emphatic marker \(r \bar{\imath} g\) (§ 18.4), and it may (directly or indirectly) be related to the imperfective and comitative marker rà (cf. § 11.2.2.2 and § 13.3.1).

\subsection*{13.6.3 Repeated verbs in the future tense construction with an object}

There are two affirmative future constructions in Kam, depending on whether there is an object in the clause or not. The construction without object involves partial reduplication of the primary verb and is discussed in § 13.4.2. The construction with object involves optional repetition of the primary verb after the object. Whereas the first occurrence of the primary verb has HL tone, the copy occurs with its lexical tone and with the final vowel -i (§ 12.2).
(579) Future tense construction with an object

Ń (1SG.S.FUT), á (2SG.S.FUT), or other Subject + V\HL + NP \(_{\text {object }} \quad(+V-F V)\)
\begin{tabular}{lllll} 
(580) & ḿ & búg & \(\downarrow\) á & būg-ī. \\
& Ń & būg\HL & á & būg-i. \\
& 1SG.S.FUT & pinch\FUT & 2SG.O & pinch-FV.
\end{tabular}
'I will pinch you.'
(session_345, Danjuma Bello, elicitation)
\begin{tabular}{llllll} 
(581) & ý & wóm & łú & wòm-ì & jàg-ì \\
& Ń & wòm\HL & ú & wòm-i & jàg-i \\
& 1SG.S.FUT & slap & 3SG & slap-FV & carry-FV
\end{tabular}
'I will slap him.'
(session_360, Babangida Audu, elicitation)

Such repetition is optional. When I asked my consultants if the second verb could be left out, they agreed but maintained that the construction with repetition is preferred. Leaving the second verb out does not change the meaning of the clause.

\subsection*{13.7 Clause-final negators hǹ, ḑēn, gà and rīg.}

There are four different clause-final negators. hì is the standard negator used to negate non-imperative verbal clauses. dj \(\bar{\varepsilon} n\) 'not yet' is a negative continuative marker and is exemplified in § 15.4.5. gà is a negative imperative marker, part of the negative imperative construction ká ... gà (see § 16.2). Finally, rīg is a negative existential marker and part of the construction \(\operatorname{sir} \bar{\imath}\)... \(r \bar{l} g\) (cf. § 15.2.1).

Since the other clause-final negators are exemplified elsewhere, I only provide exemples of the standard negator hì here.
\begin{tabular}{llllrl} 
(582) & rá & kábrí & rá & hǹ. & \\
& rà \({ }^{\text {L }}\) & kàbrílH & rà & hǹ. & \\
& NEG.FUT & breaklNEG.FUT & NEG.FUT & NEG.
\end{tabular}
'(Whatever you put in this bag,) (it) will not break.'
(session_290, David Mark, elicitation)
ŋ̀
1SG.S.NEG.NFUT pay NEG.
'I did not pay.'
(session_364, David Mamuda, elicitation)
(584) à

2SG.S.NEG.NFUT
\(\begin{array}{ll}\mathrm{p} \text { と̀ } & \text { hǹ. } \\ \text { come } & \text { NEG. }\end{array}\)
'You did not come.'
(session_364, David Mamuda, elicitation)
\begin{tabular}{lllll} 
(585) & nò & gbźb & ú & hǹ. \\
nò & gbèb \(\backslash \mathrm{H}\) & ú & hǹ. \\
2PL & beatlNEG.NFUT & 3SG & NEG \\
& 'You people did not beat him.' & \\
& (session_364, David Mamuda, elicitation)
\end{tabular}

\section*{14 Multi-verb constructions}

\subsection*{14.1 Overview}

A multi-verb construction consists of a series of verbs where each verb expresses a facet of a complex event. It can, for example, include a verb of motion and a verb expressing the direction in which the motion occurs (jàg ... pè 'carry ... come', meaning 'bring' or 'carry here'), or one verb can qualify another, much like adverbs can modify verbs in other languages (e.g. màrà pè 'return come', meaning 'come again' or 'come back'). These are only two instances of various types of multi-verb constructions currently identified in Kam. This overview sketches general properties of such constructions and lists the multi-verb constructions I found in Kam so far. \({ }^{89}\)

I prefer here the broader term multi-verb construction (cf. Aikhenvald \& Muysken 2011) to the term serial verb construction to steer clear of terminological debates that in the past two decades have been conducted in the typological literature (c.f. Aikhenvald \& Dixon 2006, 2019; Bisang 2009; Foley 2010; Haspelmath 2016; Paul 2008; Seiss 2009; Senft 2008; Stewart 2015). The structures identified here as 'multi-verb constructions' will be of interest to researchers of serial verb constructions as well as related concepts such as light verbs, auxiliaries, complex predicates, verb compounding and coordination.

Multi-verb constructions are morphosyntactically different from complex sentences in two main ways. \({ }^{90}\)
- In complex sentences, subject pronominals can be repeated. In multi-verb constructions, the subject is expressed only once in the beginning of a clause.
- In complex sentences, each separate clause has a verb that is inflected for tense and aspect. In multiverb constructions, only one verb is inflected. This is mostly apparent in the tone of verbs: when a

\footnotetext{
\({ }^{89}\) Further research will likely uncover more multi-verb constructions. For example, Dmitry Idiatov observed a potential construction involving the verb \(n \dot{\varepsilon}(b)\) 'to go', which may express an inceptive or sequential meaning 'start, begin (doing something, to do something), proceed to, move on to (doing something)'. Examples of this construction, which I did not investigate in further detail, are found in (586) on p. 294, (589) on p. 298, (830) on p. 369 and (882) on p. 394.
\({ }^{90}\) I did not study the prosodic properties of multi-verb constructions. In other languages, serial verb constructions often have a single intonation contour, as opposed to multi-clausal constructions (Aikhenvald 2006: 7; cf. Givón 1991).
}
verb is inflected, it often features grammatical tone replacing the verb's lexical tone. In multi-verb constructions, secondary verbs occur with their lexical tone.

I call the inflected verb in a multi-verb construction the primary. I call the non-inflected verbs the secondary verbs.

These morphosyntactic properties are illustrated in (586). In this example, three clauses are coordinated, and in each of them the subject, \(u\) 'he' is repeated at the beginning of the clause. Each of them also has one inflected verb (ló 'wash', jé 'enter' and \(n e ́ ~ ' g o ') . ~ E a c h ~ o f ~ t h e ~ c l a u s e s ~ a l s o ~ f e a t u r e s ~ a ~ m u l t i-v e r b ~ c o n s t r u c t i o n, ~\) where the subject is not repeated before every verb (ló ... lゝgrí 'wash ... finish'; jé sày 'enter go' and né kúb 'go wear'). The second verb in each construction is not inflected.
\begin{tabular}{lllll} 
(586) & ú & ló & kpô & lògrí, \\
3SG & wash:PFV & body & finish
\end{tabular}
'He finished washing his body, went inside the room, and went to put on a shirt.'
(session_351, Solomon Ahmadu, elicitation)

There are various kinds of multi-verb constructions, each with their own functions and specialized verbs. These constructions and their properties are summarized in Table 46. Each of the constructions are further discussed and illustrated in the remainder of this chapter.

Specific characteristics of different constructions include the following:
- Secondary verbs have a restricted position in the clause. Different verbs have different positions depending on the construction.
- Most secondary verbs always occur after the object of the clause (or, in case there is no object, right after the primary verb).
- Two secondary verbs, viz. pà, a reduced form of pè 'come' and màr̀̀ 'return', always occur right before the primary verb.
- One secondary verb, tán(i) 'to stand', can occur either before the primary verb or after the object.
- In a multi-verb construction linking a sequence of events, the order of verbs is iconic: a verb expressing an earlier event comes before a verb expressing a later event (cf. Haspelmath 2016: 18).
- Some secondary verbs have a specific shape in multi-verb constructions.
- pà 'come' has a reduced vowel when it precedes a primary verb. Its citation form is pè.
- \(j i\) ' (stand [up])' has a H tone in a resultative construction, whereas its citation form has a M tone ( \(j \bar{l}\) )
- tánì 'stand' only occurs in this form in multi-verb constructions. As a primary verb it always occurs in a complex but unanalyzable form tîná \({ }^{\downarrow}\)-tán(i) or \(t i\)-tán(i) (cf. § 12.6.2). It also has a reduplicated form titta \(\bar{n} \overline{1}\). It is not clear whether the reduplicated form has a different function.
- dúdd \(\bar{g} \bar{\imath}\) 'see’ always occurs in its reduplicated form in an experiential construction.

Table 47 - Multi-verb constructions
\begin{tabular}{|c|c|c|c|}
\hline Function & Relevant secondary verb(s) & Position of secondary verb(s) & Comments on the form of the secondary verb \\
\hline Link a sequence of events & Any & Sequence-iconic order & \\
\hline Repetitive & màrà 'return' & Before primary verb & \\
\hline Persistive & tánì 'stand, stay' (alternative forms: tán, tittàni) & Before the primary verb or after the object & This verb is only found in multi-verb constructions; elsewhere, it is part of a complex lexeme (cf. § 12.6.2) \\
\hline Resultative & jí 'stand (up)' & After the primary verb & jí always has H tone in this construction. \\
\hline Completive & lògri' 'end' & After the object & \\
\hline Ventive & pè 'come' & After the object & \\
\hline Andative & sáy 'go' & After the object & \\
\hline Benefactive & \(m a ̀ ~ ' g i v e ' ~\) & After the object & mà takes its own object; this construction forms a ditransitive clause \\
\hline Comparative & kj̀r(i) 'surpass' & After the object & kj̀r(i) takes its own object; this construction forms a ditransitive clause \\
\hline Perfect aspect & dúddग̄gì 'see' & After the object & dúdd \(\bar{\sigma} g \bar{\imath}\) is the reduplicated form of \(d \grave{g} g\) 'see' \\
\hline Unclear & pà 'come' & Before the primary verb & \(p \grave{\partial}\) is a reduced form of \(p \grave{\varepsilon}\) \\
\hline
\end{tabular}

Different types of multi-verb constructions may co-occur in a single clause, and various examples of this can be found throughout this grammar. In (587), for example, a benefactive construction with \(m \dot{a}\) 'give' is combined with a ventive construction with \(p \varepsilon\) 'come'. I did not verify whether there are any co-occurrence restrictions or whether all multi-verb constructions can be combined freely.
\begin{tabular}{lllll} 
sétí & pírán & ó & \({ }^{\dagger}\) mām & p \(̀ ~\) \\
tear & cloth & DIST & give:1SG. 0 & come
\end{tabular}
'Come tear that cloth for me.'
(session_301, David Mamuda, elicitation)
Sometimes an example is ambiguous between different kinds of multi-verb constructions. The sáy léb d̀ \(\mathfrak{j}\) é ('go in bush') part in (588), for example, can be seen as part of the longer sequence multi-verb construction in the clause (i.e. 'they catch him, carry him, and go to the bush'). But sáy can also be seen as a directional verb which indicates that the king was carried away ('they catch him, carry him away into the bush').
\begin{tabular}{llllllll} 
(588) í & týg & áwàn & jàg & sáy & léb & ə̀jé́ \\
& 3PL & catch:PFV & king & carry & go & in & bush
\end{tabular}
'They caught the king and went to the bush.' or 'They caught the king off into the bush.'
(session_143, Anonymous, song)

The following sections analyze and illustrate the different kinds of multi-verb constructions each in turn. The constructions are divided into five categories, depending on their functions.
- The sequence construction forms a category on its own
- Aspectual multi-verb constructions
- Repetitive construction, with màrà 'return'
- Persistive construction, with tán(i) 'stand'
- Resultative construction, with \(j i\) 'stand up'
- Completive construction, with lıgg̀̀rí 'end, finish'
- Directional constructions: ventive with pè 'come' and andative with sáy 'go'
- Constructions that add an argument to the clause
- Benefactive construction, with mà 'give'
- Comparative construction, with kjr (i) 'surpass'
- A poorly understood perfect aspect construction with dúdd \(\bar{\jmath} g \bar{\imath}\) 'see', only found in negative and interrogative clauses.
- A poorly understood construction with pre-main-verbal pà 'come'.

This chapter is largely based on discourse data with little elicitation, so not all co-occurrence restrictions with grammatical marking were investigated. Any possible interactions between multi-verb constructions and different tense, aspect, mood and polarity constructions are topics for further research.

\subsection*{14.2 Linking a sequence of events: sequence construction}

Sequence constructions can be used to express a sequence of events or to arrange the parts of a complex event into a sequence of simple events. The verbs are ordered iconically: verbs encoding events that occur first come first and verbs encoding events that come later, occur later in the sequence (cf. Haspelmath 2016: 18). In (589), the subject went, gathered stones, then carried them away and then kept them. In (590), the object was first carried to the bush, and then beaten there. In (591), an event is broken up into separate facets that logically succeed each other: lightning first arrived and then struck the tree. This construction is similar to the linking serial verb construction in Bamgbose (1982) and the construction Elders (2000: 505507) calls 'construction liante' in his description of Mundang.
\(\left.\begin{array}{llllllll}\text { (589) } & \text { ú } & \text { né } & \text { kòsí } & \text { tàrì } & \text { jàg } & \text { kàr } \\ & \text { 3SG } & \text { go:PFV gather } & \text { stone } & \text { carry } & \text { keep }\end{array}\right]\)
' \(\mathrm{He}_{\mathrm{i}}\) said that two people took \(\mathrm{him}_{\mathrm{i}}\) to the bush and beat \(\mathrm{him}_{\mathrm{i}}\).'
(session_365, Babangida Audu, elicitation)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline àsúwá & j̀kā jí & tòr & \(\mathrm{p} \grave{\text { c }}\) & líb & bér & à \\
\hline when:REL & thunder enter:PFV & fall & come & head & tree & REL \\
\hline \multicolumn{7}{|l|}{'When lightning struck the tree (she died).'} \\
\hline \multicolumn{7}{|l|}{(session_007, Garba Abubakar Bako, narrative)} \\
\hline
\end{tabular}

As in other multi-verb constructions, tense and aspect are only marked on the primary verb. If two or more transitive verbs follow each other and they share the same object, the object follows the first transitive verb and is not repeated afterwards. This applies to (589), for example, where the stones are first gathered and then carried and kept, but they are only explicitly expressed after kosi 'gather'. If two verbs share the same referent as object, but they do not follow immediately after one another, then the object is repeated. This is
the case in (590) which literally reads that two people 'caught him, went (to the) bush, and (went to) beat him'. 'went to the bush' intervenes in between the 'catching him' and 'beating him', so the pronominal referring to 'him' has to be repeated after gbèb 'beat'.

Some examples were found that are ambiguous between a directional multi-verb construction (cf. § 14.3.4) and a multi-verb construction expressing a sequence of events. (592) contains the secondary verb pè 'come', and can be interpreted either as a sequence construction, i.e. ‘They carried him (and) came to the palace of the king.' or as a directional construction where pè indicates movement towards a certain point (cf. § 14.4.1): ‘They carried him here to the palace of the king.' (593) gives a similar example, this time with the verb sáy 'go', which in a directional construction expresses movement away from a certain point (cf. § 14.4.2). This example can either be translated as 'They caught the king, carried (him) and went in(to) the bush.' or as 'They caught the king and carried him away into the bush.'
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(592)} & ìkā & sí & \({ }^{\dagger} \mathrm{jág}\) & ú & pé & àgbáy & \\
\hline & then & 3PL SEQ & carry:PFV & 3SG & come & palace & king \\
\hline & \multicolumn{7}{|l|}{'Then, they brought him to the palace of the king.' (session_051, Isa Sarkin Dawa, narrative)} \\
\hline \multirow[t]{3}{*}{(593)} & í & túg & áwàn jàg & ság & léb & à \({ }^{\text {¢ }}\) ế & \\
\hline & 1PL & catch:PFV & king carry & & in & bush & \\
\hline & \multicolumn{7}{|l|}{'They took the king to the bush.' (context: a song about the king being kidnapped) (session_143, Anonymous, song)} \\
\hline
\end{tabular}

\subsection*{14.3 Constructions with aspectual functions}

\subsection*{14.3.1 Repetitive with màrà 'return'}

The repetitive multi-verb construction expresses that an action is repeated once. Such repetition is indicated with an uninflected form of the verb màr̀̀ 'return', which is placed before the primary verb of a clause. Most of the examples in texts were about the repetition of a movement from one place to another (e.g. 'to go again' in (594) and (595), (596), 'to meet someone again' in (594) and 'to descend again' in (596)). Some elicited clauses also show uses with verbs that do not indicate such movement: 'to say again' in (597), 'to do again' in (598), 'to push again' in (599), and 'to beat again' in (600).
\[
\begin{array}{ll}
\text { ḿ } & \text { mórà sáy. }  \tag{595}\\
\text { 1SG.S.PFV } & \text { return go. }
\end{array}
\]

'[Yesterday,] I went back [home]. Today, I returned here [to continue the work].'
(session_053, Muhammad Bose Yuguda, narrative)
í gáb kpó łí,
3PL separate:PFV body 3PL:POSS,
í mórá \({ }^{\downarrow}\) đ̧̧́r sáy pê.
3PL return descend:PFV go come
'They separated and they descended again [to] go [here].'
(session_191, Isa Sarkin Dawa, narrative)
(597)
sàhídú márá \(b\) b́ní "m̀̀àm"
Saheed return say:FV:PFV "m̀̀àm"
'Saheed said "m̀fàm" again.'
(Tope_Bitrus_01, Saheed Bala, elicitation)
màrà sín
return do
'Repeat (it)!' or 'Do (it) again!'
(Tope_Bitrus_08, Saheed Bala, elicitation)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(599)} & àjí & mórá & \({ }^{\star}\) túb & â \\
\hline & person & return & push:PFV & PFV \\
\hline & \multicolumn{4}{|l|}{'A person pushed again.'} \\
\hline & \multicolumn{4}{|l|}{(Tope_Bitrus_09, Saheed Bala, elicitation)} \\
\hline \multirow[t]{3}{*}{(600)} & ú & móró & \({ }^{\dagger}\) gbéb & óm \\
\hline & 3SG & return & beat:PFV & 1SG.O \\
\hline & \multicolumn{4}{|l|}{'He beat me again.'} \\
\hline
\end{tabular}
(session_296, Solomon Ahmadu, elicitation)
màrà 'return' is also found as non-initial verb in other examples of multi-verb constructions, following the primary verb instead of preceding it. Those instances should be interpreted as instances of the sequence construction (§ 14.2), and are different from the aspectual construction treated here.
\begin{tabular}{llllllll} 
(601) í & bór & mórò & pè & zág & áwú & â \\
& 3PL & descend:PFV & return & come & side & north & PROX
\end{tabular}
'They [should] descend and return to the north side.'
(session_191, Isa Sarkin Dawa, narrative)

\subsection*{14.3.2 Persistive aspect construction with táni 'stand'}

Persistive aspect constructions emphasize that an event is still going on at the reference point. Such constructions use the verb tán(i) 'stand', which can come before (602) or after (603), (604) the primary verb of a clause. I did not find many examples of this construction in my data, and I could not determine what may condition this ordering variation. It appears to be used mostly to indicate ongoing states ('it is still on') rather than actions ('they are still searching'), although (602) shows that actions can also feature the persistive aspect construction. The verb tánì only occurs in its monomorphemic form in these persistive aspect constructions. As a primary verb it always occurs in a complex but unanalyzable form tîná \({ }^{\downarrow}\)-tán(i) or \(t \hat{l}\)-tán \((i)\) (cf. § 12.6.2). It also sometimes has a reduplicated form tittān̄̄ when used in persistive aspect constructions. It is not clear whether the reduplicated form has a different function.
\begin{tabular}{llllll} 
(602) & ǹtèkù & á, & àjí & tánì & sóg. \\
& toad & PSTT, 3PL & stand & search
\end{tabular}
'They (are) still search(ing) for the frog.' (lit.: 'It is the frog they are still searching for'.) (session_181, Babangida Audu, narrative)
\begin{tabular}{llllc} 
(603) àjí & ywár & á & t tán \\
& 3PL & mix:PFV & PFV & stand
\end{tabular}
'(That is why) we are still mixed.' (context: a historical explanation of why different tribes live together in Kam villages)
(session_191, Isa Sarkin Dawa, narrative)
\begin{tabular}{llll} 
(604) & àliè & títtīḡ̄ & tánì \\
& light & on & stand
\end{tabular}
'The light is still on.'
(session_288, Solomon Ahmadu, elicitation)

\subsection*{14.3.3 Resultative or stative aspect construction with jí 'stand up'}

A form of the verb \(j \bar{\imath}\) 'stand up' can occur as a secondary verb in multi-verb construction. It indicates that the situation described by the clause is a state resulting from the action denoted by the primary verb. The result of 'tiring' (kpètí 'to tire') is being tired (605). The result of 'finishing' ( \(t \bar{a} \bar{y} \bar{\imath}\) 'to finish') is being finished (606). Specific to this construction is that \(j i\) always has a H tone, whereas the lexical tone of \(j \bar{\imath}\) 'to stand up' is M.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(605)} & \multicolumn{2}{|l|}{ḿ k} & \multicolumn{2}{|l|}{á \(\quad{ }^{\text {j }}\) jí} \\
\hline & \multicolumn{2}{|l|}{1SG.S.PFV} & \multirow[t]{2}{*}{PFV} & \multirow[t]{2}{*}{stand.up} \\
\hline & 'I am tis & & & \\
\hline \multirow[t]{3}{*}{(606)} & táy & á \(\quad{ }^{\text {ji }}\) & \({ }^{\text {j }}\) jí & \\
\hline & finish & PFV sta & & \\
\hline & \multicolumn{4}{|l|}{'It is finished.'} \\
\hline \multirow[t]{4}{*}{(607)} & duón & túsí & \({ }^{+}\)márá & ú \\
\hline & John & show:PFV & brother & 3SG:POSS \\
\hline & \({ }^{\text {ng }}\) ¢gwó & & á & jì \\
\hline & house & burn:PFV & PFV & stand.up \\
\hline
\end{tabular}
'John showed his brother (that) the house had burned down.'
(session_337, Isa Sarkin Dawa, elicitation)


\subsection*{14.3.4 Completive aspect construction with ljgrí 'end, finish'}

The completive aspect construction can be formed by adding lıgrí 'to end, to finish' as a secondary verb at the end of a multi-verb construction.
\begin{tabular}{lllll} 
(610) ú & ló & kpô & lògòrí, \\
& 3SG & wash:PFV & body & finish
\end{tabular}
'He finished washing his body.'
(session_351, Solomon Ahmadu, elicitation)
(611) ń ním ní à lògòrí

1SG.S.PFV eat:PFV thing PFV finish
'I finished eating.'
(session_288, Solomon Ahmadu, elicitation)

\subsection*{14.4 Directional constructions}

\subsection*{14.4.1 The ventive construction with \(p \varepsilon\) 'come'}

Ventive multi-verb constructions indicate that the action described in a clause is centripetal: it moves towards a certain goal. Such constructions feature an uninflected form of the verb pè 'come', which is placed after a transitive object in transitive clauses, or directly after an intransitive verb.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (612) & bìr time & à, PROX, & \[
\begin{aligned}
& \text { àjí } \\
& \text { 3PL }
\end{aligned}
\] & \begin{tabular}{l}
ḑór \\
descend:PFV
\end{tabular} & \begin{tabular}{l}
á \\
PFV
\end{tabular} & pè, come. \\
\hline & ì & pà & díní & zázówà & & \\
\hline & 1PL & come & meet:PFV & Zazowa. & & \\
\hline
\end{tabular}
'[The Kam were travelling ...] This time, they descended (in that direction). We came and met Zazowa.'
(session_191, Isa Sarkin Dawa, narrative)
\begin{tabular}{llll} 
ikā & ỳkā \(\quad\) tór & á & pè \\
then & thunder fall: \(\mathbf{P F V}\) & PFV & come
\end{tabular}
'Then, thunder fell down.'
(session_007, Garba Abubakar Bako, narrative)
\begin{tabular}{lllll} 
sétí & 'pírán & ó & \({ }^{\dagger}\) mām & pè \\
tear & cloth & DIST & give:1SG. \(O\) & come
\end{tabular}
'Tear that cloth for me here.'
(session_301, David Mamuda, elicitation)

In examples (612), (613) and (614), the goal of the movement is left implicit. But the goal can also be expressed right after the verb pè with a prepositional phrase or a noun referring to a location. In (615), the goal is the tree. In (616), an intonation break separates pè from the goal, which is Kam country.
\begin{tabular}{lllllllll} 
(615) & àsúwā & ỳkā & jí & tòr & pè & líb & bér & à \\
when: REL & thunder enter:PFV & fall & come & on & tree & REL
\end{tabular}

\subsection*{14.4.2 The andative construction with sáy 'go'}

The andative construction indicates movement away from a certain point, i.e. movement that is centrifugal. This construction features an uninflected form of the verb sáy 'go', placed in the same position that pè 'come' is placed in the ventive construction. The point that is moved away from is always implicit in the examples I found in my data. In (617), the 'source' the dog runs away from is the path it was walking before. In (618), the source is the the room of a compound where the conversation takes place. In (619), the source is the subject's friends' house. And in (620), it is the village from which the king was kidnapped.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline ná \({ }^{\text {líb }}\) & wó á & rò & kàsí & ság & á & \(\ldots\) \\
\hline because & dog REL & IPFV & branch & & REL & ... \\
\hline \multicolumn{7}{|l|}{'Because the dog that was branching away ...' (session_048, Isa Sarkin Dawa, narrative)} \\
\hline \multicolumn{7}{|l|}{\begin{tabular}{ll} 
bòb sáy & gêr \\
come.out go & outside
\end{tabular}} \\
\hline \multicolumn{7}{|l|}{'Go outside!' (Context: Telling someone to leave a room) (session_049, Muhammad Bose Yuguda, elicitation)} \\
\hline àwú & lû & rò & ywá & ú & & wō. \\
\hline 3SG & sleep:FUT & COM & friend & 3SG & OSS & PL \\
\hline k & mágárí & kàptì, & & & & \\
\hline TEMP & taste:NMLZ & & & & & \\
\hline ú & bób & \({ }^{\text { }}\) sáy & ànwók & \({ }^{\text {ná }}\) & ú & \\
\hline 3SG & come.out:FUT & & house & & 3SG: & \\
\hline
\end{tabular}
'She will sleep with her friends. In the early morning (lit. 'taste of the morning'), she will go away to her parents' house.' (context: a description of traditional marriage practices)
(session_076, Adamu S. Baka, narrative)
```



In (618), (619) and (620), a locative noun phrase (in (618) gèr 'outside', in (619) àngẃg á áná ú jō 'her parents' house') or a prepositional phrase (léb nn tóg 'in the mountain') follows the andative verb sáy. These phrases do not indicate the source from where the movement originates, but a direction that the movement goes towards. A ventive construction, with pè, could express roughly the same proposition as expressed in these andative examples. However, a ventive construction would put the emphasis on the arrival at the goal location, and background the source of the movement. An andative construction puts emphasis on the fact that the entity in question leaves its previous location (which is kept implicit), and can express a direction into which it moves, but it does not imply that this is the ultimate goal that will be or has been reached.

### 14.5 Valency increasing constructions

### 14.5.1 The benefactive construction with mà 'give'

A benefactive construction express that something is done for someone's or something's benefit. In Kam, this construction is expressed with a multi-verb construction including the verb mà. The benefactive argument is expressed following $m a ̀ . m a ̀ ~ h a s ~ s p e c i f i c ~ f o r m s ~ w h e n ~ i t ~ t a k e s ~ 1 S G ~(~ m a ̄ m), ~ 2 S G ~(~ m a ̄), ~ 3 S G ~(~ m o ̄) ~$ and 3PL ( $m \bar{e}$ ) pronominal objects. In these specific forms, the pronominal objects have merged with the verb.

| (621) í | sóg | néyí | mō |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 3PL | search:PFV | horse | give:3SG |

'They searched the horse for them'
(session_191, Isa Sarkin Dawa, narrative)


When the benefactee of the action is the speaker, the benefactive construction is often combined with a ventive multi-verb construction with pè 'come' (cf. § 14.4.1).

| (623) | sétí $\quad$ pírán ó | mām | p ̀̀ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | tear $\quad$ cloth DIST | give:1SG. $O$ | come |

### 14.5.2 The comparative construction with kj̀r(i) 'surpass'

Comparison of inequality is expressed with a multi-verb construction with the secondary verb kjr $(i)$ 'surpass'. The subject of a comparative construction typically refers to the comparee. The object of kjr(i) indicates the standard to which the subject is compared.

```
(625) àwàn bén 向wòm kòrì tyisé?í
    king speak:PFV Kam surpass child
    'The king speaks Kam better than the children.'
    (session_291, Solomon Ahmadu, elicitation)
\begin{tabular}{lll} 
ń & nín \(\bar{b}\) & kór á \(\quad\) â \\
1SG.S.PFV & walk & surpass \\
2SG.O PFV
\end{tabular}
'I walk faster than you.'
(session_291, Solomon Ahmadu, elicitation)
```

The comparee can also be the object.

| ń | dóg | â | kórí níní |
| :--- | :--- | :--- | :---: |
| 1SG.S.PFV | see:PFV | 2SG.O | surpass other |

'I see you more than (I see) other people.'
(session_291, Solomon Ahmadu, elicitation)

When two actions are being compared (i.e. ' X does action A more than they do action B ), the second action (action B) cannot be expressed with a simple verb, but it has to be referred to by a noun.

| á | lísí | lú | ${ }^{\text {¿ }}$ kórí $\quad{ }^{~}$ nág |
| :--- | :--- | :--- | :--- |
| 2SG.S.PFV | sleep:PFV | sleep | surpass work |

'You sleep more than you work.'
(session_291, Solomon Ahmadu, elicitation)
àjí swábí kòrì bén

3PL sing:PFV surpass speech
'They sing better than they speak.'
(session_291, Solomon Ahmadu, elicitation)

If there is no noun or nominalization that can refer to the action, a relative clause can be used.

| ànàgbàn person:female | bímbēnī <br> UNM~speak | k $\bar{r} r$ surpa | nā <br> thing:REL |  |  | $\begin{align*} & { }^{{ }^{n} \text { ním }}  \tag{630}\\ & \text { eat } \end{align*}$ | REL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'The woman speaks more than she eats.' (session_291, Solomon Ahmadu, elicitation) |  |  |  |  |  |  |  |
| ḿ 1SG.S.PFV | bímbēn nā $1 \overline{1}$ <br> speak fast | nāȳ̄̄ <br> fast | kōrī surpass |  |  |  |  |
| bā à | rà | dúb | â |  |  |  |  |
| this:REL 2SG. | IPFV IPFV | write | REL |  |  |  |  |

(session_291, Solomon Ahmadu, elicitation)

### 14.6 Poorly understood constructions

### 14.6.1 The experiential construction with dúddכ̄gī 'to see'

I found three examples in my data where a dúdd $\bar{g} g \bar{\imath}$, a partially reduplicated form of dj́g 'to see' (cf. § 12.5), acts as a secondary verb in a multi-verb construction. Because of the scarcity of data, the exact function of this construction with dúdd $\bar{g} g \bar{\imath}$ is not entirely clear, but it appears linked with past experience, and hence is preliminarily called the experiential construction here. All three examples were translated using either ever or never in English. Two examples are questions and one is a negative continuative construction. More examples and elicitation are needed to arrive at a better understanding of dúdd $\bar{\jmath} g \bar{\imath}$ in this multi-verb construction.

| á | zúz ${ }^{+}$ |  | dúddōgī |  | kìm <br> place |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2SG.S.FUT | FUT | teal:FV:FUT |  |  |  |
| 'Would you ever steal from the government?' (session_286, Babangida Audu, elicitation) |  |  |  |  |  |
| á.S.PFV |  | - |  | légós | jī? |
| 2SG | go:P | PFV EXP | -see | Lagos | Q |

'Have you ever visited Lagos?'
(session_286, Babangida Audu, elicitation)

| m̀ | mà | dóg | ú | dúdd̄̄ḡ̄ | ḑ $\varepsilon ̄ n ~$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG.S.NEG.NFUT | NEG.NFUT | see:NEG.NFUT3SG | EXPA~see | not.yet |  |

'[I have heard his name, but] I have not seen him yet.'
(session_271, Danjuma Bello, conversation)

### 14.6.2 Suddenness, spontaneity, or absence of intention, with pà 'come'

pà often occurs before a primary verb, forming a multi-verb construction with it. It is a reduced form of the verb pè 'come'. pà is not inflected for tense or aspect, and it retains its lexical tone. In all examples I found, the primary verb is inflected for perfective aspect. All these examples describe something that 'just happened', or that 'someone happened to do X', without specific intentionality. Elsewhere in the literature (e.g. for Chadic languages and for some Senufo languages), serial verb constructions involving a verb for 'come’ or 'go' are sometimes described as expressing suddenness, unexpectedness, or surprise (e.g. Dombrowsky-Hahn 2012: 103-104; Ebert 1987: 56; 2003: 115). Unexpectedness is a possible meaning of these constructions in Kam, although it is not present in all examples given here. The different possible meanings of this 'pre-verbal' pà remain to be disentangled.
ì pò sáy á kòróròfā.
1PL come go:PFV LOC Kororofa.
'We happened to go to Kororofa.'
(session_021, Yuguda Manti, narrative)

Context: "The Kam and the Jukun met together in Kano. We continued our journey, and passed some place called Yakafiye (?) in Jukun. This is what our ancestors told us. We slept and left from there. Then, nothing happened (for a while). We happened to go to
Kororofa. There were no problems. But then, something happened. A king killed a man.
And that made the Kam people bitter."

| àlàsírá | míná | pá | †dín | júrú | â |
| :--- | :--- | :--- | :--- | :--- | :--- |
| àlàsírá | míná | pà | dín\H | júrú | à |
| white.person | PRSTT come | meet:PFV | 1PL.O | PFV |  |

'The white person happened to meet us.'
(session_048, Isa Sarkin Dawa, narrative)

Context: "In Kam, we do not do bad things that cause violence. We do not do things that make people angry. We live in peace. The white man happened to meet us, because in our land, his forefathers came and lived with us. Today, he comes back to talk again, in this peaceful settlement. So, now, our prayer is that God keep us in peace."
(637)

| àjì | ḿ | $\bar{a}$ |
| :--- | :--- | :--- |
| àjì | ḿ- $^{\text {L }}$ | $\bar{a}$ |
| land | 1SG-POSS | REL |


| í | pá | ł jág | óm | lùtí | kó | wàn | à |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| í | pà | jàg\H | óm | lùtí | kó | àwàn | à |
| 3PL | come | carry\PFV | 1SG.O | appoint with | king | REL |  |

'This land where they happened to appointed me king.'
(session_052, Isa Sarkin Dawa, narrative)

Context: "So, now, see the land. This land where they happened to appoint me king. The land has become big. We see it. Eyes have seen it. Progress has entered our land."

| ḿ | pá | Łdín | nó | k-ádā? |
| :--- | :--- | :--- | :--- | :--- |
| ḿ | pà | dín\H | nò | kə-ádā? |
| 1SG.S.PFV | come | meet\PFV | 2PL.O | ADVZ-cold |

‘Did I happen to meet you well?’ (literally: ‘Did I meet you with the cold?') (session_084, Yuguda Manti, narrative)

Context: A greeting used in the harmattan period.

## V Part five: Clausal morphosyntax

## 15 Simple clauses

I consider a simple clause to be a string of segments (along with their suprasegmental materials) that can make up an utterance, expressing at least a communicative reaction or an emotion and at most a single proposition (which may be requested or questioned). This can be a verb with its essential arguments, together forming a basic verbal clause (§ 15.1). Such basic verbal clauses may be extended with less essential circumstantial (or adverbial) modifiers (§ 15.4). But clauses can also be less elaborated, consisting of just a nominal predication in non-verbal clauses, copula constructions, identificational, equational or presentative clauses (§ 15.2). An utterance (and hence a simple clause) can be as minimal as a simple verbal, nominal or adverbial stem, or an interjection (Chapter 1).

I discuss much of the basic verbal clause structure of Kam in other chapters of this book, especially the chapters in Part IV of this thesis, which is dedicated to verbal morphosyntax. I provide a summary of basic clause structure with cross-references to relevant sections in § 15.1 The current chapter focuses on topics that have not received full attention elsewhere, such as adverbial modification (§ 15.4), nominal predication (§ 15.2), some special clausal constructions for expressing sensations and emotions (§ 15.2), and interjections (Chapter 1). § 15.1 brings together the basics of verbal clauses in Kam that are already covered, referring to sections where I provide more complete descriptions.

### 15.1 Basic verbal clauses

Verbs are the core of a verbal clause. They can receive various types of morphological marking for perfective aspect, future tense and positive and negative polarity. There is never just one morphological marker dedicated to marking one aspect-tense-polarity value. Rather, every value is expressed simultaneously by a variety of markers in the clause. Conversely, various markers also have more than one function and occur in different constructions (such as the final vowel - $i$, as described in § 12.2). Apart from the inflectional final vowel -i and partial reduplication, verbs can also be inflected for tense, aspect and polarity value by means of tone. Inflectional verbal morphology is treated in § 12.2, § 12.3 and § 12.5.

Core arguments are expressed by noun phrases, which contain either a pronominal or a nominal head (§ 10.1). There are two types of core arguments in the clause, subject and object. Constituent order is SVO and it is fixed. Pronominals have a different tone according to their argument function. 1SG and 2SG subject indexes are also (tonally) different depending on the tense, aspect and polarity value of the clause (§ 8.2.2).

## Simple clauses

New participants can be added to the clause, forming extended transitive clauses, by means of benefactive (§ 14.4.2) and comparative (§ 14.5.2) multi-verb constructions. Benefactive participants are introduced with the verb mà 'give' and comparative participants with the verb kìrì 'surpass'. The participants are coded as regular object arguments of these verbs.

To the basic 'verb + arguments' structure of a verbal clause can be added a variety of clausal markers and modifiers. Aspect, tense and negation is marked, in addition to verbal morphology, with preverbal markers (the imperfective marker rà, the optional negator màg, the negative future marker $r i^{L}$ and the negative imperative marker ká), an optional affirmative perfective marker $\grave{a}$ that is placed after the object of a verb, a repeated future tense form of the primary verb (with the marker -i), a future negator rà that comes immediately after an object, and three clause-final negators (the standard negator hǹ, the negative continuative marker (dJ $\bar{\varepsilon} n$ and the negative imperative marker gà). I discussed all of these markers in Chapter 1 , and a summary overview, including relative ordering of markers, can be found in § 13.1.

Circumstances surrounding the proposition may be highlighted in a variety of ways in clauses. Circumstantial noun phrases may attach to a clause with prepositional phrases (§ 11.1.1). Various multiverb constructions express circumstantial meanings that would in English be expressed with adverbial modifiers (§ 12.5.5). Finally, Kam also features adverbial modifiers, which I describe in § 15.4).

Clauses with multi-verb constructions can be analyzed as consisting of two types of verbal components. The first type, which I call primary verbs, are marked for tense, aspect and polarity. The other type, secondary verbs, may precede a primary verb or follow a primary verb and its object if there is one. Secondary verbs are not inflected. A clause typically has one primary verb and may have one or more secondary verbs.

Quantifiers, although semantically part of the noun phrase, are perhaps best seen as clause-level constituents, since they are typically syntactically separated from the noun phrase in their semantic scope (§ 9.4).

There are some specific simple clause constructions for expressing sensations and emotions, which I discuss in § 15.2 below. One construction encodes the experiencer as the object and the sensation or emotion as the subject of the clause. These are then linked with the generic verb tàgi' 'to affect'. Another construction uses an affected body part as the subject, the experiencer as either a possessor of the body part or the object of the clause, and a verb specifically encoding the experience. Some experiences are encoded with idiomatic expressions.

I analyze non-declarative utterances, such as questions and commands, in Chapter 16.

Other markers than the ones discussed so far may also occur in a clause. These include topic markers, focus markers and emphasis markers. I discuss four such information structure sensitive markers in Chapter 17.6: the topic marker $d \delta \bar{\varepsilon}$, the presentative demonstrative $b \bar{\varepsilon}$ that may derive from a spatial adverbial, the emphatic marker $r \bar{l} g$, and an emphatic marker nè that is probably borrowed from Hausa (ne).

### 15.2 Nominal predication: copula clauses and verbless clauses

Nominal predication covers copula clauses, identificational clauses, equational clauses and presentative clauses. These clauses are different from verbal clauses in that they are not marked for tense or aspect.

Copula clauses with the copula da' 'be' (§ 15.2.1) express existence, presence in a certain location, predicative possession, or the attribution of a quality to an object or situation. Identificational clauses include the presentative demonstrative $\dot{a}$ and, optionally, a demonstrative that marks distance contrasts ('It is a bird; this is a bird; that is a bird’) (§ 15.2.2). In equational clauses ('The bird is a guinea fowl’), nominals are juxtaposed and the clause is marked with the presentative demonstrative $\dot{a}$ (§ 15.2.2). The quotative marker ijí serves as a copula for attributing proper names to things, people or places (§ 15.2.4). Presentative clauses ('see N ', 'here is N ') are formed with the presentative demonstrative miná (§ 15.2.4).

### 15.2.1 Predication of existence, location, possession and quality with dá

Clauses that express that something or someone exists are existential clauses. Clauses that say where something is are locational clauses. Predicative possession clauses say that something belongs to someone or to something else ('I have a house'). Predication of quality says something about the state something is in ('good', 'different'). In Kam, all these expressions use the copula dá 'to be', followed by the presentative demonstrative $b \bar{\varepsilon}$ (in the existential construction) or a relevant adverbial expression (a location, a quality, a comitative phrase).

In the existential construction, $d \dot{\partial}$ is always accompanied by the presentative demonstrative $b \bar{\varepsilon}(\S$ 18.3). Given the semantically empty nature of $b \bar{\varepsilon}$ in the existential construction, $d$ d $b \bar{\varepsilon}$ can synchronically be seen as a complex existential marker. Elsewhere, $b \bar{\varepsilon}$ has presentative and information-structural functions. It is likely to derive from a demonstrative marker meaning 'here' or 'there', which would imply that the existential marker dá $b \varepsilon$ ' is lexicalized from a locational construction meaning 'to be here/there'. (639) is a schematic representation of the existential construction, followed by some examples.
(639) $\mathrm{S}($ ubject $)+\mathrm{d} \grave{a}+\mathrm{b} \bar{\varepsilon}$
(640) kùrìkí dá bē

God be PRSTT
'God exists.' or 'God is there.'
(session_020, Yuguda Manti, narrative)
(641)

| nì̀ | mí | $\downarrow$ dá | bé $\quad$ kā, bén | má | ¿júrú |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| thing | some | be | PRSTT COND, say | give | 1 PL.O |

'If there is anything, tell us.'
(session_056, Muhammad Bose Yuguda, narrative)

Apart from expressing that something exists, existential clauses are also the default construction used to express that something exists in abundance or in excess. I did not identify another construction dedicated to this.
$\begin{array}{llll}\text { (642) } & \text { sùnsòg } & \text { dá } & \text { b } \bar{\varepsilon} \\ & \text { salt } & \text { be } & \text { PRSTT }\end{array}$
'There is (too much) salt.'
(constructed example)
(643)
jìsīrī dá bé
money be PRSTT
'There's (plenty of) money.'
(constructed example)
(644) ànág dó b $\bar{\varepsilon}$
work be PRSTT
'There is (a lot of ) work.'
(constructed example)

Locational clauses are simply marked with the copula dó
àngwóg á t dó léb ̀̀ àé́
house PROX be inside bush
'This house is in the bush.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

Any adverbial argument can be in the 'location' slot, allowing predication of quality or possession with a similar construction.

| (646) | àngwóg já |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | house 2S | 2SG:POSS | be |  | -cold |
|  | 'Is your house fine?' (literally: ‘Is your house cold?') |  |  |  |  |
| (647) | àwàn í | í | ${ }^{\downarrow}$ dá | m |  |
|  | king 3P | 3PL:POSS | be | diff |  |
|  | 'Their king was different.' (session_021, Yuguda Manti, narrative) |  |  |  |  |
| (648) | Májókàm | dá | kpár |  |  |
|  | Mayo.Kam | $m$ be | close |  |  |
|  | 'Mayo Kam (session_068 | 'Mayo Kam is close.' |  |  |  |
| (649) | ń da | ró | +wó |  |  |
|  | 1SG be COM |  |  |  |  |
|  | 'I have a dog.' |  |  |  |  |
| (650) | dá | dá rá | ${ }^{+}$tóm rig |  |  |
|  | 1SG be | be COM |  | EMPH |  |
|  | 'I have a hoe.' (session_071, Isa Sarkin Dawa, elicitation) |  |  |  |  |
| (651) | ǹtèkù | dá rá | fù |  | rīg |
|  | toad be | be COM | pregnancy |  | EMP |
|  | 'The toad is pregnant.' |  |  |  |  |

Possessor and possessee can occur in any order in this construction, although the order 'possessor + possessee' is most frequently used. I did not check this, but word order choice may depend on information structure. I illustrate 'possessee + possessor' order in (652).

```
(652)
\begin{tabular}{lcll} 
wó & dá & rá & nìm \\
dog & be & COM & 1SG.ID \\
'I have a dog.' & &
\end{tabular}
(session_071, Isa Sarkin Dawa, elicitation)
```

Copula clauses with $d z$ are negated with the negative copula sìī, not with the standard clause-final negator $h \grave{n}$. The emphatic morpheme $r \bar{g} g$ also obligatorily occurs clause-finally. The presentative demonstrative $b \bar{\varepsilon}$ does not occur in negative copula clauses, and there is no comitative marker $r$ r in the negative predicative possession construction.

| nìsīr̄̄ | $\mathrm{s}^{\downarrow}{ }^{\downarrow} \mathrm{r} \overline{\mathrm{a}} \quad$ rīg |
| :--- | :--- |
| money | be.NEGNEG |
| 'There's no money.' |  |

(Constructed example)

| àngwóg | mí | sìrī | léb | ə̀fé́ | rīg |
| :--- | :--- | :--- | :--- | :--- | :--- |
| house | some | be.NEG | inside | bush | NEG |

'There is no house in the bush.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)

| ń | sí 1 rō | wó | rīg |
| :--- | :--- | :--- | :--- |
| 1SG | be.NEG | dog | NEG |

'I don't have a dog.'
(session_071, Isa Sarkin Dawa, elicitation)

### 15.2.2 Identificational clauses with the presentative demonstrative á (+ bā/bô)

Identificational clauses can be formed with a noun followed by the presentative demonstrative $\dot{a}$, or $\dot{a}$ followed by one of the independent demonstratives $b a^{-}$'this one' or $b \hat{o}$ 'that one'. The presentative demonstrative $\dot{a}$ is similar to the relativizer $\bar{a}$ (§ 9.2.2, § 17.2), to the perfective marker $\grave{a}$ (§ 13.6.1) and to the proximal demonstrative modifier $\grave{a}$ (§ 9.2). $b a^{-}$and $b \hat{o}$ are respectively proximal and distal demonstratives that can also be used as demonstrative modifiers (§ 9.2).

Identificational clauses are used to identify an entity in one's surroundings in the same way as one would use 'it is an x ', 'this is an x ', or 'that is an x ' in English. $\dot{a} b a$ ' is used for talking about close-by entities or when the closeness of an entity is not specified, $\dot{a}$ bô is used for distant entities. The construction
with simply the presentative demonstrative $\dot{a}$ does not specify distance but simply identifies the presence of an entity or provides an answer to a question (e.g. 'Who/what is it?').

| duì á bá |  |
| :--- | :--- | :--- |
| bat | PRSTTT PROX.ID |

'This is a bat.' (lit.: 'It is a bat this one.')
(session_040, Solomon Ahmadu, elicitation)
ànwà ygwóg óm ${ }^{\text {tá bô }}$
friend house 1SG:POSS PRSTT DIST:ID
'That is my neighbor.' (lit.: 'It is my neighbor that one.')
(session_047, Muhammad Bose Yuguda, elicitation)
Sólómón ${ }^{\downarrow}$ á
Solomon PRSTT
'It is Solomon.' (e.g. as an answer to the question: ‘Who is it? Babangida or Solomon?') (session_351, Solomon Ahmadu, elicitation)

Identificational clauses are negated with the regular verbal negator $h \dot{n}$.
(659)

| mìjkáyá | mìrèg | á $\quad$ hn̂ |
| :--- | :--- | :--- | :--- |
| water | nose | PRSTT NEG |

'It is not snot.'
(session_030, Babangida Audu, conversation)

### 15.2.3 Equational clauses with the clause-final presentative demonstrative á

A nominal predication clause where noun phrases are juxtaposed, without a verb, establishes the identity of the referents of those noun phrases (the same way English is does in 'That man is my father.'). In all cases, the presentative demonstrative $\dot{a}$ follows the nominal predicate. A pause can be left between the two nominals. Tone rules and other prosodic rules do apply over the border.

When a nominal predicate is a proper name (e.g. 'His name is Babangida'), the quotative marker $i j i$ is used in between the noun phrases (see § 15.2.4).

```
àkpò ḑázúg `á
food rice PRSTT
'The food is rice.'
```

(session_071, Isa Sarkin Dawa, elicitation)
(661) àwú jí juwòm á

3SG person Kam PRSTT
'He is Kam. ${ }^{91}$
(session_284, Saheedu, conversation)
ànà kànkáné +á
today Monday PRSTT
'Today is Monday'
(session_048, Isa Sarkin Dawa, narrative)
(663) nìm àwàn ní ywòm á

1SG.ID king person Kam PRSTT
'I am the king of the Kam'
(session_048, Isa Sarkin Dawa, narrative)

Verbless clauses undergo the same negation as verbal clauses, with the clause-final negator hǹ.

| àkpò duázúg á | hn̂ |  |
| :--- | :--- | :--- |
| food | rice | PRSTT NEG |

'The food is not rice.'
(session_071, Isa Sarkin Dawa, elicitation)

### 15.2.4 The quotative marker $i j i^{l}$ as a copula for proper names

The quotative marker $i j L^{L}$ is used to identify proper names.

| gán | óm | ${ }^{\text {ºjijí }}$ | bùbàkàr |
| :--- | :--- | :--- | :--- |
| name | 1SG:POSS | QUOT Abubakar |  |

'My name is Abubakar'
(session_003, Garba Abubakar Bako, elicitation)
(666)

| àjá | mà | gán | ú | ${ }^{\text {ijíí }}$ | bùbàkàr | à |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| person:REL | some:REL | name | 3SG:POSS | QUOT Abubakar | REL |  |

'A certain person whose name is Abubakar ...'
(adapted from session_051, Isa Sarkin Dawa, elicitation)

[^51]
### 15.2.5 Presentative clauses with the presentative demonstrative míná

When the presentative demonstrative miná is combined with a preceding noun phrase, they form a presentative clause. Presentative clauses are used to draw attention to something, or to re(introduce) an entity into the discourse. Such clauses are generally translated into English by consultants as 'see X', e.g. àngwóg miná 'see the house'.
(667) àfàm míná
meat PRSTT
'See (this) meat.'
(session_029, Solomon Ahmadu, elicitation)
(668)

| tò, | bá | tán | á | $(\ldots)$ |
| :--- | :--- | :--- | :--- | :--- |
| so, | REL | stand | REL | $(\ldots)$ |

àjì míná.
country PRSTT.
àjì ḿ à
country 1SG:POSS REL

| í | pá | jág | ám lùtí ká | wàn | à. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL | come | carry:PFV | 1SG.O | appoint $\operatorname{INSTR}$ | king | REL. |

kòm tám â.
place grow:PFV PFV.
'So, now ('as it stands') ... See the country. My country where they have appointed me king. The place has grown.'
(session_052, Isa Sarkin Dawa, narrative)
(669) ǹtàm míná ká ...
poison PRSTT COND
'Since it is poison (that he used to kill people, the king spoke to him and said ...)'
(session_051, Isa Sarkin Dawa, narrative)
(670)

| nā | mā |
| :--- | :--- |
| thing:REL | some:REL |


| ì | rà | wúr | á | ${ }^{\downarrow}$ míná! |
| :--- | :--- | :--- | :--- | :--- |
| 1PL | IPFV | want | REL | PRSTT! |

'That is how we like things!' (literally: ‘See something that we like!')
(session_089, Yuguda Manti, conversation)

### 15.3 Clauses expressing sensations and emotions

In Kam, some sensations (e.g. hunger, thirst, pains, cramps, etc.) and emotions (anger, joy) are expressed with specific constructions, and sometimes idiomatic expressions. I identified the following three ways how such experiences can be coded.

- A construction with tàgi' 'to affect: the generic verb tàgi' 'to affect' takes the experience (a noun) as subject and the experiencer as an object (e.g. féb tágí $m \hat{a}$ ' $I$ am angry', literally 'anger affects me)
- A construction with a body part term as the subject, a verb specifically encoding the experience, and the experiencer as the object of the verb and/or as the possessor of the body part (e.g. àlib rá dغ̀g д́m 'I have a headache', literally 'my head is hurting me').
- An idiomatic construction specialized for a specific experience (e.g. lù rà déy ám 'I am sleepy'),


Table 48 summarizes the different uncontrolled experiences I came across featuring these constructions. The tàgi-construction occurs in most cases. Five experiences have their own specific construction, often using metaphors for describing certain feelings (sharp $=$ suffering; sweet $=$ happy; dead $=$ numbness/weakness). The 'body part + verb' construction is used in three cases. Some examples follow the table.

Table 48 - Expressions of sensations and emotions ${ }^{92}$

| Experience | Construction type | Template | Literal translation |
| :---: | :---: | :---: | :---: |
| feeling (generic) | tàgí-construction | àám + tàgí + EXP | feeling affects EXP |
| anger | tàgí-construction | féb + tàgí + EXP | anger affects EXP |
| urge to defecate | tàgí-construction | à ${ }_{\text {job }}$ + tàgí + EXP | shit affect EXP |
| hunger | tàgí-construction | àbób + tàgí + EXP | hunger affects EXP |
| thirst | tàgí-construction | ànwár + tàgí + EXP | thirst affects EXP |
| pain in body | body part + specific verb | body part + dèg + EXP | body part pains EXP |
| cramp | body part + specific verb | body part + wàb + tfúgí | body part ties (and) catches |
| itch | body part + specific verb | body part + jágí | body part itches |
| suffer | idiomatic construction | kpò + EXP + lègì | body of EXP is sharp |
| joy | idiomatic construction | kpò + EXP + sùnsógī | body of EXP is sweet |
| sleepiness | idiomatic construction | lù + déy + EXP | sleep roasts EXP |
| paresthesia (numbness of hand or leg, 'sleeping leg') | idiomatic construction | body part + vég á ${ }^{\text {jí }}$ | body part has died |
| food or drink going down the wrong way | idiomatic construction | THING dúg sáy ká ýkùròg ófō | thing follows goes with the dry throat |

[^52]Examples with tàgi' 'to affect':

| féb | tágí | $\mathrm{m} \quad$ â |
| :--- | :--- | :--- |
| anger | affect:PFV | 1SG.O PFV |

'I was angry.' (lit. ‘Anger affected me.')
(session_320, Babangida Audu, elicitation)

| àjib | rò | tàgí | m |
| :--- | :--- | :--- | :--- |
| shit | IPFV | affect | 1 SG. $O$ |

'I want to use the toilet.' (lit. 'Shit is affecting me.')
(session_324, Anonymous, elicitation)
(673)

| àbób | rá | tàgí | m |
| :--- | :--- | :--- | :--- |
| hunger | IPFV | affect | 1SG.O |

'I am hungry.' (lit. 'Hunger is affecting me.')
(session_324, Anonymous, elicitation)

Examples with body parts and specific verbs. Note that sometimes, a possessive pronominal is used with the body part (675), (676), (677), (678), and sometimes no possessive pronominal is used (674). I could not determine when it is used and when it is left out.

| àlíb | rá | dèg | óm |
| :--- | :--- | :--- | :--- |
| head | IPFV | pain | 1SG. $O$ |

'My head hurts.'
(session_324, Anonymous, elicitation)

| àbòg | óm | rò | dèg | óm |
| :--- | :--- | :--- | :--- | :--- |
| leg | 1SG:POSS | IPFV | pain | 1SG.O |

'My leg hurts.'
(session_324, Anonymous, elicitation)
'I have a cramp in my stomach' (lit. 'My stomach ties.')
(session_305, Danladi Baleri, elicitation)

| ǹtyí | bòg | ám | ${ }^{\text {twáb á }}$ | ${ }^{\text {t tfúg-í }}$ |
| :--- | :--- | :--- | :--- | :--- |
| muscle | leg | 1SG:POSS | tie:PFV PFV | do-FV |

'I have a cramp in my leg.' (lit. ‘My leg muscle ties’)
(session_305, Danladi Baleri, elicitation)

| àní | ám | rà | nág-í |
| :--- | :--- | :--- | :--- |
| arm | 1SG:POSS | IPFV | itch-FV |

'My arm itches.'
(session_150, Solomon Ahmadu, elicitation)

Examples of idiomatic expressions:

| àbòg | óm | tvég | á | ${ }^{\text {ºjí }}$ |
| :--- | :--- | :--- | :--- | :--- |
| leg | 1SG:POSS | die:PFV | PFV | stand |

'My leg is sleeping.' (lit. 'My leg has died.')
(session_305, Danladi Baleri, elicitation)
(681)

| mì̀káyá | dúg | sáy | ká $\quad$ ýkùlòg ófō |
| :--- | :--- | :--- | :--- | :--- |
| water | follow:PFV | go | INSTR throat dry |

'The water went down the wrong pipe.' (lit. 'water followed went with the dry throat') (session_305, Danladi Baleri, elicitation)

### 15.4 Adverbial modifiers

### 15.4.1 Overview

A clause or a verb can be modified by an adverbial modifier. Such modifiers provide a spatial, temporal, aspectual, modal, sequential or polar frame for the state of affairs described in the clause. I outlined the grammatical means of expressing tense, aspect and polarity in Chapter 1. Adverbial modifiers presenting temporal, aspectual, and polar meanings are different from grammatical markers in terms of (1) frequency and obligatoriness, (2) position, (3) morphological complexity, and (4) morphosyntactic independence.
(1) Obligatoriness: most grammatical items are obligatory and leaving them out renders the clause ungrammatical ${ }^{93}$. Adverbial modifiers can always be left out. This has no consequences for the grammaticality of a clause.
(2) Position: adverbial modifiers can occur peripherally, preceding or following a clause or a verb. Grammatical markers have a fixed position within a clause and are not peripheral.
(3) Complexity: adverbial modifiers are rarely monomorphemic. When they are, they are longer than the typical morpheme in Kam and are probably historically complex.
(4) Morphosyntactic independence: grammatical markers do not usually form an utterance by themselves. Adverbial modifiers can be meaningfully used as separate utterances.

Some of the meanings similar to the ones expressed by adverbial modifiers can also be expressed in Kam by verbs in multi-verb constructions (see § 12.5.5). The relevant verbs in multi-verb constructions share with adverbial modifiers their morphosyntactic independence (they also occur as independent verbs) and the fact that they are not strictly obligatory (although they are very frequent). They are structurally different from adverbial modifiers in that they are not morphosyntactically complex (excepting derivational suffixes) and they occur in a fixed set of multi-verb constructions.

Different types of lexemes and phrases can be used as adverbial modifiers. These include prepositional phrases ((682), (683)), adverbial clauses (684), nouns (685) and special adverbial expressions, including a small set of adverbial lexemes. Prepositional phrases are discussed in § 11.1 and adverbial clauses in § 17.5. The focus of the rest of this section is on adverbial lexemes and some frequently recurring specialized adverbial expressions.


[^53]

In what follows, I discuss spatial adverbial modifiers first (§ 15.4.2). Next, I illustrate temporal (§ 15.4.3) and aspectual (§ 15.4.4) adverbial modifiers. The expression of phasal polarity receives separate treatment in § 15.4.5. The only attested modal adverbial expression, nínk 'maybe', is illustrated in § 15.4.6, and a few adverbials encoding manner are presented in § 15.4.7.

### 15.4.2 Space

I found the following spatial adverbial modifiers in Kam:
(686) kə̄mā or kā̃ 'here'
kāmō or kõ̃ 'there'

Some examples:

| (687) á | párá | kã |  |
| :--- | :--- | :--- | :--- |
|  | 2SG.S.PFV | come.PFV | here |

'You came here.'
(688) dá kỗ
be there
'(It) is there.'
$\left.\begin{array}{lllllllll}\text { (689) } & \text { nì } & \text { mí } & \overline{\mathrm{a}}, & \text { àwú } & \text { rá } & \text { tàg } & \overline{\mathrm{a}} & \text { kāmā } \\ \text { thing } & \text { some } & \text { REL, } & \text { 3SG } & \text { IPFV } & \text { touch } & \text { REL } & \text { here }\end{array}\right] \begin{array}{llll} & \text { 'It is something that he is touching, here.' (when reading a book) }\end{array}$
$k \overline{\tilde{a}}$ and $k \bar{o}$ are short forms of $k \bar{z} m \bar{a}$ and $k \bar{\partial} m \bar{o}$ respectively. These adverbial modifiers derive from the noun $k \grave{m}$ 'place', combined with the demonstrative modifiers $\grave{a}$ and $\grave{o}$. The short forms are currently used more frequently than the long forms. $k \tilde{\tilde{a}}$ and $k \overline{\tilde{o}}$ can be combined with the nouns àgà ${ }^{\prime}$ 'sky' and àbì 'ground' to form complex adverbial modifiers. I have not observed this with the long forms.
(691) àgày kõ̃ 'up there'
àbì kõ̃ 'down there'
àgàn kã̃ 'up here'
àbì kã̃ 'up there'

### 15.4.3 Time (and sequence)

When referring to a time in the past, an adverbial modifier can be used consisting of the distal demonstrative ò combined with a noun referring to a unit of time (bàrì 'time, day', àl’́n 'day') to signal a certain distance in time from the present moment.

| (692) | bàr time | $\begin{array}{ll} \mathbf{o} & \mathrm{b} \bar{\varepsilon}, \\ \text { DIST } & \text { PRS } \end{array}$ | àwàn <br> rà ,king IP | mín <br> build | í ${ }^{\downarrow}$ gwóg <br> house | àlćb in | $\begin{aligned} & \text { ít }^{\text {fế }} \\ & \text { bush } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'Earlier, the king was building a house in the bush.' <br> (Tope_Bitrus_06, Garba Abubakar Bako, elicitation) |  |  |  |  |  |  |
| (693) | àlóy <br> day | ô, bàrì DIST, time | mà <br> some:REL | ì <br> 1PL | jí grow.up\PFV | â, REL, |  |
|  | jí | bэ̄r-1 | jō | jág | ágbàn | n ì: |  |
|  | person | ADJ:big:ADJ | V PL |  |  |  |  |

'In those days, the time when we grew up, the elders married like this: ...
(session_076, Adamu S. Baka, narrative)

Other temporal adverbial modifiers include the following.
(694) kpānī 'before’
sīsirā 'now'
àlūkō 'just now'
pí ${ }^{\star}$ káy 'tomorrow'
gbánákā ‘later’
bàtànâ 'right now'
àlīlè 'yesterday'
nànkò 'first(ly)'
$k p \bar{a} n \bar{l}$ 'before' is often followed by the conditional particle $k \bar{a}$.
(695) kpānī kā, àngwóg bé ${ }^{\text {tíntám }}$
before COND, house PRSTT big
'Before, the house was tall.'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
(696) kpānī kā, á dín gúróg jàg rè jī?
before COND,2SG.S.PFV meet lion catch where Q
'Where could you find lions before?'
(session_293, Babangida Audu, elicitation)

Some more examples with temporal adverbials:
ń
1SG.S.PFV do:PFV work first, 1PL SEQ FUT~talk
'I work first, then we will talk.'
(session_351, Solomon Ahmadu, Danladi Baleri, elicitation)

| bàtànâ, | nā | $\overline{1}$ | rà | tòg | à | kā, |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| now, | thing:REL | 1 PL | IPFV | beg | REL | ?, |  |  |
|  |  |  |  |  |  |  |  |  |
| kùrùkîı́ | jág | júrú | kã̄ |  | kó | kóm | jōy | ímō |
| God | take:PFV | 1PL.O | place:PROX | INSTR place | sit | good |  |  |

'Right now, the thing that we are praying for, is that God may keep us in peace.'
(session_048, Isa Sarkin Dawa, narrative)

| àl̄īē óm | párá | kã̃ |
| :--- | :--- | :--- |
| yesterday | 1SG.S.PFV | come.PFV |

'Yesterday, I came here.'
(session_053, Muhammad Bose Yuguda, narrative)
àwú dá ré sīsīrā?
3SG be where now?
'Where is he now?'
(session_187, Babangida Audu, elicitation)

### 15.4.4 Aspect

The two main aspectual adverbs that I identified in Kam are misí 'again' and sī̀ 'completely'. Other expressions of repetition are made with a multi-verb construction with màrд̀ 'repeat, return' (cf. § 14.3.1), or with a noun phrase including the noun àbj̀g 'leg' modified by a quantifier or a numeral (àbj̀g tàr 'three legs', for example, meaning 'three times').
misí 'again' expresses repetition:
(701)

| ú | rá | mə̀rə̀ | p $̀ ~$ | mísí |
| :--- | :--- | :--- | :--- | :--- |
| 3SG | IPFV | return | come | again |

'He is coming back again.'
(session_052, Isa Sarkin Dawa, narrative)
(702)
tò, àjí míná bá kāmā mísí
so, 3PL PRSTT PROX here again
'So, here they are again.'
(session_181, Babangida Audu, narrative)
sirī 'all of it, completely' expresses that an object has been affected by an action in its entirety.
(703)

| àwú | djáng | á | sīr̄ | ywāb |
| :--- | :--- | :--- | :--- | :--- |
| 3SG | read:PFV | PFV | completely | all |

'He read it completely.' (or: 'He read all of it.')
(session_054, Muhammad Bose Yuguda, elicitation)

| ḿ | fárí | ywé | kòm | ńté | á | sīri. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG.S.PFV | open:PFV | mouth | place | small | PFV | completely |

'I opened the window completely.'
(session_054, Muhammad Bose Yuguda, elicitation)
(705) àwú méns á sīrī

3SG scatter PFV completely
'He scattered it completely.' (or: 'He scattered all of it.')
(session_189, Babangida Audu, elicitation)
(706)

| wó | kásí | kwí | à | sīr̄̄ |
| :--- | :--- | :--- | :--- | :--- |
| dog | break:CAUS:PFV | stick | PFV | completely |

'The dog broke the stick completely.' (or: 'The dog broke the whole stick.')
(session_301, David Mamuda, elicitation)
(707) bàrí tásò à sīrī
clean plate PROX completely
'Clean this plate completely.' (or: 'Clean the whole plate.')
(session_301, David Mamuda, elicitation)

| àná | ${ }^{\downarrow}$ pâ, |
| :--- | :--- |
| person:REL | come:REL, |

àwú jág jí tīg ú rī sīr̄.

3SG carry:PFV thing cover:ADJ 3SG:POSS EMPH completely
'The man that came, he took off all of his cloak.' (or: 'He completely took off his cloak.')
(session_314, Danjuma Bello, narrative; from 'The North Wind and the Sun')

### 15.4.5 Phasal polarity

Phasal polarity constructions include those expressions that can be translated into English with 'not yet', 'already', 'still' and 'no longer'. The current section briefly illustrates how these meanings are expressed in Kam. Van der Auwera's (1998) terminology is used in this overview.

Positive phasal polarity expressions do not have a dedicated construction in Kam. Continuative
 'always, usually’ or kpèn 'always, usually'.

| Bàbángídá | tfúg $\quad$ í jág | tántyòn |
| :--- | :--- | :--- |
| Babangida | do:PFV work | always/still |

'Babangida is still working.' or 'Babangida is always working.'
(session_288)

| àliè | tít $\sim$ tīgī | tán-ì | kpว̀y |
| :--- | :--- | :--- | :--- |
| light | PRED~be.off | stand-FV | always/still |

'The light is always off.' or 'The light is still off.'
(session_288)

| (711) | àwú | dúb | àtóm | dùbì | kpèn |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3SG | write:FUT | message | write | usually |

'He will usually write a letter.'
(session_288)
(712) ú rá ${ }^{\text {u }}$ dúbf́ ní kpèn

3SG IPFV write thing usually
'He is usually writing letters.'
(session_041)

Inchoative constructions (English 'already', cf. Kramer 2017: 10, 11) are either left unexpressed or can be expressed with a coordinated clause with tà̀yrí 'to finish' or l̀̀grí 'to end'.

| (713) | ń | ním | jí | à | ń | lógrî. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG.S.PFV | eat:PFV | thing | PFV | 1SG.S.PFV | end |
|  | 'I finished eating.', 'I have already eaten' (lit.: 'I ate, I finished') (session_288) |  |  |  |  |  |
| (714) | ń | ním | á | *tánı |  |  |
|  | 1SG.S.PFV | eat:PFV | PFV | finish |  |  |
|  | I finished eating', ‘I have already eaten’ (lit.: ‘I ate, it is finished’) (session_288) |  |  |  |  |  |

Negative phasal polarity constructions are more grammaticalized and feature dedicated clause-final markers in complementary distribution with the clause-final negator $h \grave{n}$ (cf. § 13.6.3). ${ }^{94}$

The negative continuative ('not yet') is usually expressed with standard negative clauses, optionally including the preverbal negator màg. Instead of the clause-final particle hì, however, the clause-final negation marker $d \zeta \bar{\varepsilon} n$ is used.
(715) àjí mág dògí ǹtèkù ḑēn.

3PL NEG.NFUT see toad NEG.CONT.
'(It is the toad they are looking for,) they haven't seen the toad yet.'
(session_181, Babangida Audu, narrative)

[^54]| (716) | m̀ | màg | dóg |
| :--- | :--- | :--- | :--- |
|  | 1SG.S.NEG.NFUT | NEG:NFUT | see:NEG.NFUT3SG |

'I have never seen it before.' (Literally: 'I have not ever seen it yet.')
(session_271, Danjuma Bello, conversation)

Unlike standard negation clauses, which may be completely different depending on tense and aspect values, clauses with dु $\bar{\varepsilon} n$ can combine with different affirmative aspect and future constructions without transforming the whole construction. This implies that it does not belong to the same syntactic category as the regular negator hì. In this sense, it is similar to such adverbs as tánt $\hat{\partial} \eta$ 'still' and kpày 'always, usually', although such adverbs can also occur in other positions and can occur as independent clauses while ḑ $\bar{\varepsilon} n$ only occurs clause-finally.


A discontinuative action ('no longer') is expressed with regular negation constructions with the marker này preceding the clause-final negator $h \grave{n}$. What makes this marker interesting is that nà $\eta$ has only been attested in affirmative constructions as part of the complex adverb nàjkò 'first(ly)', and nowhere else. The exact function and full distributional properties of này are matters for further research.

| mérí | ním | ní | này | hǹ. |
| :--- | :--- | :--- | :--- | :--- |
| Mary | eat:NEG.NFUT | thing | no.longer | NEG. |

'Mary is no longer eating.'
(session_288, Solomon Ahmadu, elicitation)
déjvíd tyúg íl nág này hǹ.
David do:NEG.NFUT work nay NEG.
'David is no longer working.'
(session_288, Solomon Ahmadu, elicitation)
này also occurs in negative existential and locational negation constructions.

| (722) | bàbáygídá | sírī | dsàlìngò | này |
| :--- | :--- | :--- | :--- | :--- |
| Babangida | be:NEG | Jalingo | nay | NEG. |
|  | Babangida is no longer in Jalingo.' |  |  |  |
|  | $($ session_288, Solomon Ahmadu, elicitation) |  |  |  |

### 15.4.6 Modality

The only modal adverb I have found in my corpus is níjk $\bar{a}$ 'maybe'. It seems historically complex, but it is synchronically impossible to segment into different morphemes. Historically, it may contain the conditional marker $k \bar{a}$ (cf. § 17.5.1.6). Or, given its tonal structure, it may be a lexicalized noun phrase or compound with $n i$ 'thing' and a currently unidentified adjectivized verb (cf. § 7.2.1.2).

| níykā mérì másí | rə̄ |
| :--- | :--- | :--- | :--- |
| maybe Mary know:PFV | EMPH |
| 'Maybe Mary knows.' |  |
| (session_187, Babangida Audu, elicitation) |  |


| nínkā | àwú | pá | ${ }^{\downarrow}$ kó ${ }^{\downarrow}$ djé mí | ${ }^{\text {º }}$ bã |
| :--- | :--- | :--- | :--- | :--- |
| maybe | $3 S G$ | come:FUT | TEMP month some | PROX |

'Maybe he will come some time this month.'
(session_285, Babangida Audu, elicitation)

### 15.4.7 Manner

$\min$ is a manner adverb that and can usually be translated as 'like this' or 'thus'. It may be related to the presentative demonstrative míná (§ 9.2.2).

| (725) | àní | ígbàn dućlí | mín |
| :--- | :--- | :--- | :--- |
|  | person $\quad$ female see:PFV | thus |  |
|  | 'The woman sees it, like this.' |  |  |

Adverbial modifiers of manner are often formed from adjectives with the instrumental preposition ḱ. Unlike in other positions where they occur, the $\dot{a}^{L}$ - prefixes of adjectives are not dropped but retained after $k$ '. The vowel of the instrumental preposition is dropped instead. In these cases, the instrumental preposition can be analyzed as an adverbializing prefix.

| (727) | í | lútí | m | k-ágwī | à |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | '(while) they have crowned me newly' (session_052, Isa Sarkin Dawa, narrative) |  |  |  |  |
| (728) | ú | ró $\quad \downarrow \mathrm{din}$ | í | k-ámō |  |
|  | 'He is meeting them well.' (session_052, Isa Sarkin Dawa, narrative) |  |  |  |  |
| (729) | k-ántērī |  |  |  |  |
|  | ADV 'reall (sessi | uth <br> uly' <br> 254, Shawuya | narrative |  |  |

## 16 Questions and commands

### 16.1 Questions

### 16.1.1 Polar questions

Polar questions can be formulated in one of two ways. One involves the use of a specific interrogative marker, $j \bar{\imath}$, which also occurs in content questions. The second method involves a M or H tone marker at the end of the clause. Polar questions are sometimes pronounced on a higher pitch than corresponding declarative clauses. I did not investigate intonation in much detail. It is not clear how often questions are produced on a higher pitch or whether this may be obligatory in some cases.

The interrogative marker $j \bar{\imath}$ is clause-final and sentence-final, and occurs after other clause-final markers such as the negator $h \grave{n}$. Aspect and tense values are preserved in questions. Most polar questions are formed with $j \bar{i}$.


| (734) á | dógí | mpō | mí | à | jī, | Bábàngídá? |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2SG.S.PFV | see:PFV | monkey | some | PFV | Q | Babangida |

'Do you see any monkeys, Babangida?'
(session_286, Babangida Audu, elicitation)

I did not investigate questions without $j \bar{\imath}$ but with a clause-final $\mathrm{H} / \mathrm{M}$ tone marker in detail. It is possible that this construction is derived from the construction with clause-final $j \bar{\imath}$ where $j \bar{\imath}$ is dropped but its tone retained. Since the only examples I currently have involve clauses that would end in a L tone if they were declarative, I do not know whether the question marker is M or H , since either M or H could result in a M if merged with a preceding L - which is the case in all of the observed instances.

| àkpố | ywún, | àkpố | ywún | á | hn̄? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| àkpố | ỳwún, | àkpố | ỳwún | á | hǹ-M |
| twenty | five, | twenty | five | PRSTT NEG-Q? |  |

One hundred, isn't it one hundred?
(session_034, Isa Sarkin Dawa, conversation)
(736) a.
ú dúddūb?
ú dùd~dùb-M
3SG STAT~be.tall-Q
'Is he tall?'
vs.
b.
ú dúddûb
ú dùd~dùb
3SG STAT~be.tall
'He is tall.'
(session_350, Solomon Ahmadu, elicitation)

| (737) | á |  | dín |  | $\overline{\text { à }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | á |  | dín\H | àmórá ḿ- $^{\text {L }}$ | à-M |
|  | 2SG. |  | meet:PFV | brother 1SG-POSS | PFV-Q |
|  | Have you met my brother? |  |  |  |  |
|  | (session_054, Muhammad Bose Yuguda, elicitation) |  |  |  |  |
| (738) | á |  | fár | ā? |  |
|  | á |  | fàrílH | à-M |  |
|  | 2SG.S.PFV |  | open\PFV | PFV-Q? |  |
|  | m, | ḿ | fár | â. |  |
|  | m | Ń |  | à |  |
|  | yes, |  | PFV op | FV PFV |  |

'Did you open it (the door)? Yes, I opened it.'
(session_056, Muhammad Bose Yuguda, elicitation)

### 16.1.2 Content questions

Content questions are formed in two major ways in Kam. One method involves the use of a specific content interrogative marker, referring to the questioned element as a human ( $b \grave{\varepsilon}^{H} \ldots b i$ ' 'who?'), a non-human object ( $g \grave{\varepsilon}^{H}$... gì 'what'?), a place (rè 'where?'), or a manner or quantity (sim 'how [much/many]?'). The question particle $j \bar{l}$ may also occur clause-finally. The other method involves modifying a noun phrase with a relative clause with min $\bar{a}$ 'which'. This noun phrase and relative clause together stand as a full content question.

### 16.1.2.1 Content interrogatives

There are four content interrogatives in Kam.

$$
\begin{array}{ll}
b \grave{c}^{H} \ldots & \text { who? }  \tag{739}\\
g \grave{\varepsilon}^{H} \ldots g i ̀ & \text { what? } \\
r \grave{\varepsilon} & \text { where? } \\
\text { sìm } & \text { how? or how much/many? }
\end{array}
$$

Two out of four content interrogatives are morphologically simple. Two are complex and involve quasirepetition of the initial element at the end of the clause, a quite unusual strategy for forming content
questions cross-linguistically. The two content interrogatives (the initial one and its repetition) enclose the clause. The whole of the clause is optionally followed by the question particle $j \bar{j}$. In (742), the tone of the initial gè is LH because the floating ${ }^{\mathrm{H}}$ tone (exceptionally) attaches to the preceding syllable and the tone of the final $g i$ is H because of tone spread of the preceding H tone.

| (740) | bè |  | ró dsêrī | bì | jī? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | who | 3PL | IPFV look | who | Q |  |  |
|  | 'Who are they looking for?' |  |  |  |  |  |  |
|  | (session_020, Yuguda Manti, narrative) |  |  |  |  |  |  |
| (741) | g غ̀ | ú | rá sin | gì | jī? |  |  |
|  | what | 3SG | IPFV do | what | Q |  |  |
|  | 'What is he doing?' (session_054, Muhammad Bose Yuguda, elicitation) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| (742) |  | àwàn | mín | kã́ | lèb |  | gí? |
|  | $\mathrm{g} \hat{\varepsilon}^{\mathrm{H}}$ | àwàn | mín\PFV | kã̃ | àlèb | àfế | gì |
|  | what | king | build\PFV | here | inside | bush | what |
|  | 'What did the king build inside the bush?' <br> (Tope-Bitrus_07, Garba Abubakar Bako, elicitation) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

In (743) and (744), the bipartite content interrogatives $b \dot{c}^{H} \ldots b i{ }^{\text {' }}$ who' and $g \dot{\varepsilon}^{H} \ldots g \dot{i}$ 'what' are not separated. As a result, the floating ${ }^{H}$ tones of $b \dot{\varepsilon}^{H}$ and $g \grave{\varepsilon}^{H}$ attach to the second part of the interrogative. Therefore, $b \grave{c}$ and $g i$ are realized with a high tone.

```
(743) bè bí jī?
    bè \({ }^{\mathrm{H}} \quad\) bì \(\quad \mathrm{j} \overline{1}\)
    who who Q
    'Who (is it)?' (Who will ascend the throne?)
    (session_020, Yuguda Manti, narrative)
```

$g \varepsilon ̀ \quad$ gí $\quad \mathrm{j} \overline{1}$ ?

```
\(g \varepsilon ̀ \quad\) gí \(\quad \mathrm{j} \overline{1}\) ?
\(g \hat{\varepsilon}^{\mathrm{H}} \quad\) gì \(\quad \mathrm{j} \overline{1}\)
\(g \hat{\varepsilon}^{\mathrm{H}} \quad\) gì \(\quad \mathrm{j} \overline{1}\)
what what Q
what what Q
'What (is it)?'
```

'What (is it)?'

```

When used as possessors or as complements of prepositions, simplex forms of the complex content interrogatives are used. In such cases, \(b \grave{\imath}\) and \(b \grave{\varepsilon}\), and \(g \grave{~ a n d ~} g \grave{~}\) are used interchangeably. I do not have many examples of this sort, but in all examples the tone of \(b i\), \(b \grave{\varepsilon}\), \(g \grave{\imath}\) and \(g \grave{\varepsilon}\) is L .
\begin{tabular}{|c|c|c|c|c|}
\hline (745) & \multicolumn{4}{|l|}{àtfi bì} \\
\hline & \multicolumn{4}{|l|}{child who?} \\
\hline & \multicolumn{4}{|l|}{'whose child?'} \\
\hline & \multicolumn{4}{|l|}{(session_271, Saheedu, convers} \\
\hline \multirow[t]{3}{*}{(746)} & ú & dá & rá & bè? \\
\hline & ú & dá & rò & bè \\
\hline & 3SG & be & & who \\
\hline
\end{tabular}
'He is with whom?'
(Tope-Bitrus_06, Saheed Bala)

The interrogatives \(r\) と̀ 'where' and sìm 'how (much/many)' occur where locative and manner/quantity arguments would occur in clauses. Their use is illustrated as follows.
\begin{tabular}{lllll} 
àt \(f i ̂\) & dẫãt \(f i ́\) & dá & ré & \(j \overline{1} ?\) \\
child & Dan.Aci & be & where & \(Q\)
\end{tabular}
'Where is the son of Dan Aci?'
(session_019, Yuguda Manti, narrative)
\begin{tabular}{llllll} 
ń & dín & gúróg & jàg & rè & jī? \\
1SG.S.PFV & find:PFV & lion & catch & where & Q
\end{tabular}

Where can I find lions?
(session_286, Babangida Audu, elicitation)
\begin{tabular}{llllllll} 
á & núy & míy \({ }^{\text {ª́ná }}\) & sîm? ń & núy & ká & ywé. \\
you & drink:PFV & water & how? I & drink:PFV & with & mouth.
\end{tabular}
'How do you drink water? I drink with (my) mouth.'
(session_302, David Mamuda, elicitation)
(750)
\begin{tabular}{lllllll} 
nò & lú & sîm & rà & bàrì & fònù & \(\bar{a} ?\) \\
you & sleep:PFV & how & with & time & harmattan & PFV:Q?
\end{tabular}
'How did you sleep with the harmattan period?'
(session_084, Yuguda Manti, conversation)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(751)} & \multicolumn{7}{|l|}{dărí bî̃ sim à?} \\
\hline & hundred one how & COP:Q & & & & & \\
\hline & \multicolumn{7}{|l|}{'One hundred is how much?'} \\
\hline & \multicolumn{7}{|l|}{(session_034, Samuel U. Adams, conversation)} \\
\hline \multirow[t]{3}{*}{(752)} & nisìī1̄ sim à & tyū & ná & mā & àlīlē & à & jī? \\
\hline & money how REL & uncle & your & give:you & yesterday & REL & Q? \\
\hline & \multicolumn{7}{|l|}{'How much money (is it) that your uncle gave you yesterday?' (session_286, Babangida Audu, elicitation)} \\
\hline
\end{tabular}

\subsection*{16.1.2.2 Cleft structures with the interrogative modifier mīnā 'which/what?'}

In elicitation sessions, my informants often preferred a cleft construction with the interrogative modifier \(m \bar{n} \bar{a}\) and a generic noun, such as 'person' or 'thing', over the constructions with interrogative pronominals described in § 16.1.2.1 This construction can be summarized as follows, where the elements in round brackets (the relative clause marker \(\grave{a}\) and the question marker \(j \bar{l}\) ) are optional. The construction can be analyzed as a verbless clause including only a relativized noun phrase without copula, and an optional question marker. I discuss clefts more generally in § 18.1.
\[
\begin{equation*}
[\mathrm{N}]+\text { mīnā }+ \text { [relative clause }](+\mathrm{a}) \quad(+\mathrm{j} \overline{\mathrm{j}}) \tag{753}
\end{equation*}
\]
\(m \bar{n} \bar{a}\) is a historically complex modifier that has incorporated the relativizer \(\bar{a}\) (cf. § 17.2). It also bears formal resemblance to the presentative demonstrative miná ('there you go', 'like this’) (§ 9.2.2).

The noun modified by min \(\bar{a}\) refers to an argument of the relative clause. This argument is what the question is about. It can be a circumstantial argument such as a place (754) or time (755), and it can also be a core argument such as a subject ((756), (757)) or an object (758). In (754), for instance, the speaker enquires about the place (kj̀m) that ( \(m \bar{n} n \bar{a}\) ) the hearer went to (á néb áa). The interrogative is not selective (unlike English 'which', which implies the selection between different alternatives). The relative clause does not repeat the argument about which information is requested.
\begin{tabular}{llllll} 
(754) & kòm \(\quad\) mīnā & á & néb & á & jī? \(?\) \\
& place \(\quad\) which:REL & 2SG.S.PFV & go:PFV REL & Q \\
& 'Where did you go?' (lit.: ‘Which place (is it) that you went?') \\
& (session_286, Babangida Audu, elicitation)
\end{tabular}
bàrì mīnā àwàn mín áng \({ }^{\star}\) wóg ú kắ lèb ò ế á?
time which:REL king build:PFV house his here in bush REL:Q?
'When did the king build his house in the bush?' (lit.: 'Which time (is it) that the king ...?'
(Tope-Bitrus_07, Garba Abubakar Bako, elicitation)
\begin{tabular}{lll} 
àní & mínā & sín \(\quad\) â \\
people & which:REL & do:PFV REL
\end{tabular}
'Who did it?' (lit.: 'Which person (is it) that did it?')
(session_169, Babangida Audu, elicitation)
\begin{tabular}{lllll} 
àní & mínā & fúgí & jág & â? \\
person & which & carry & take & REL
\end{tabular}
'Who took it?' (lit.: 'Which person (is it) that took it?')
(session_271, anonymous, conversation)
\begin{tabular}{lllllll} 
àní & mínā & nìjẽ́ & ním & ú & jàg & à \\
person & which:REL & snake & bite:PFV & 3SG & carry & REL
\end{tabular}
'Who did the snake bite?' (lit.: 'Which person (is it) that the snake bit?')
(session_350, Solomon Ahmadu, elicitation)

\subsection*{16.2 Commands and prohibitions}

In imperative clauses, most verbs occur with their lexical tone. For some monosyllabic verbs there is a free choice between high, mid or low tone for verbs in imperatives. This could be an indication that tonal contrasts in imperatives are fairly weak and are in a process of being neutralized in this construction. My informants mentioned that the tone of these imperative verbs is determined by extralinguistic factors such as emotions, importance of the command or urgency of the task. I did not check all verbs for such free variation, but out of 46 monosyllabic verbs that I did check, 15 allowed any tone.
\begin{tabular}{clll} 
(759) & bìr, bīr or bír & (lexical tone \(=\mathrm{H})\) & 'cut, slaughter' \\
& sìn, sīn or sín & (lexical tone \(=\mathrm{H})\) & 'do, make' \\
& dèb, dēb or déb & (lexical tone \(=\mathrm{L})\) & 'buy' \\
bàr, bār or bár & (lexical tone \(=\mathrm{L})\) & 'farm, weed'
\end{tabular}

Most examples of such free variation occur in isolation. I checked some examples in a frame, with the adverb misi' 'again', where they also showed such free variation (session_323, David Mamuda, elicitation).

More elicitation is needed in different contexts to further establish the robustness and the limits of this somewhat puzzling variation.
a. mèr mísí 'swallow again'
b. mér mísí 'swallow again'
a. gbèb mísí 'beat again'
b. gbéb mísí 'beat again'
a. bàr mísí 'farm again'
b. bár mísí 'farm again'

When a command is directed at one hearer, no pronominal is used. When it is directed at more than one person, the second person plural subject pronominal nò is used.
néb ngwóg wàn nè
go house king EMPH
'Go to the house of the king!'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
(764) nò néb ygwóg wàn nè

2PL go house king EMPH
'Go to the house of the king!' (to more than one person)
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
(765) lòm
'Plant (it)!'
(session_170, Babangida Audu, elicitation)
(766) ḑs̄rrī núy
look bird
'Look at the bird!'
(session_137, Babangida Audu, elicitation)

Negative imperatives or prohibitions are formed with a discontinuous marker ká ... gà̀: kź is inserted before the verb, following any possible pronominals, and gà comes at the end of the clause.
\begin{tabular}{lllllll} 
nò & kó & jéb & ngwóg wàn & nè & gà \\
2PL & NEG & go & house & king & EMPH NEG
\end{tabular}
'Don't go to the house of the king.' (to more than one person)
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
\begin{tabular}{lllll} 
(768) & ká & ḑćrī & nūy & gà \\
& NEG & look & bird & NEG
\end{tabular}
'Don't look at the bird.'
(session_137, Babangida Audu, elicitation)
\(\begin{array}{lllll}\text { (769) } & \text { ká } & \text { ním } & \text { ḑõ̀ } & \text { gà } \\ & \text { NEG } & \text { eat } & \text { fly } & \text { NEG }\end{array}\)
'Don't eat the fly.'
(session_137, Babangida Audu, elicitation)

\section*{17 Complex sentences}

\subsection*{17.1 Introduction}

Complex sentences include any sentence that is composed of more than one clause. Relative clauses (§ 17.2), complement clauses (§17.3) and adverbial clauses (§ 17.5) are subordinate clauses: they are clauses embedded into another clause (the main clause) as a constituent. Complement clauses function as an argument in the clause (e.g. a subject or object - only the latter in Kam). Relative clauses function as attributive modifiers of noun phrases. Adverbial clauses function as adverbial modifiers, provide information about the circumstances surrounding the presented state of affairs. Coordinated clauses (§ 17.4) are clauses with equal syntactic status. One is not embedded in the other, they are simply linked. I also briefly discuss some speech and thought reporting constructions in this chapter (§ 17.6). I discuss quotatives separately from complement clauses since there is no reason to assume that clauses in reported discourse are automatically object complements of a higher 'main clause' (cf. Idiatov 2011).

\subsection*{17.2 Relative clauses}

A relative clause is a clause that prototypically functions as a modifier within a noun phrase. In accordance with the regular head-modifier order in the noun phrase, relative clauses in Kam follow the head noun they modify. This noun phrase then typically fills an argument slot in another clause, which is called the main clause. Other cases where relative clauses do not occur in argument functions is when they function as complement clauses (§ 17.3) or as clausal adverbial modifiers (§ 17.5). Relative clauses can also function as clefts, focusing a certain entity in the discourse (§ 18.1).

The main strategy for forming relative clauses in Kam includes the use of a relativizer \(\bar{a}\) preceding the relative clause, right after the modified head noun, and a relativizer \(\grave{a}\) following the relative clause. A pause can be inserted after the relativizer \(\bar{a}\). This strategy can be summarized as follows:
\[
\begin{equation*}
\left[\left[\left[\mathrm{NOUN}_{\mathrm{HEAD}}+\overline{\mathrm{a}}+[\text { RELATIVE CLAUSE }+\mathrm{à}]_{\text {ReLATIVE CLAUSE }}\right]\right]_{\mathrm{NP}}+\ldots\right]_{\text {MAIN CLAUSE }} \tag{770}
\end{equation*}
\]

When a relative clause modifies a human noun that refers to the subject of the main clause, a pause is inserted between the relative clause and the main clause. A pronominal coreferential with that noun is used in the main clause. The relativized noun phrase and the pronominal could be viewed as noun phrases in apposition, and the relative clause can be analyzed as a correlative relative clause.
\begin{tabular}{lllll} 
àwàn & \(\overline{\mathbf{a}}\) & míy & án \(^{\downarrow}\) gwóg & â, \\
king & REL & build:PFV & house & REL, \\
ú & dá & ró & nì & rīg
\end{tabular}
'The king who built this house is rich.' (lit. 'The king who built this house, he is rich')
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
(772)

'The man who touched the fish said it was him.' (lit. 'The man who touched the fish, he said it was him.')
(session_048, Isa Sarkin Dawa, narrative)
\begin{tabular}{lllll} 
ní & á & \({ }^{\text {º }} \mathbf{p}\) ź & līlè & à, \\
person & REL & come & yesterday & REL \\
& & & & \\
àjí & sáy & â & & \\
3PL & go:PFV PFV & &
\end{tabular}
'The people who came here yesterday left.' (lit.: '’ The people who came here yesterday, they left.)
(session_351, Solomon Ahmadu, elicitation)

When an object is relativized, a human object index co-referential with the relativized noun occurs in the relative clause. The same applies to relativized possessors (779).


The second relativizer, \(\grave{a}\), is optional and is often omitted. In elicitation sessions, my consultants always accepted such omission. It is not clear whether there are any restrictions in natural discourse.
\begin{tabular}{llll} 
(776) & àjì & ḿ & \(\bar{a}\) \\
& country & 1SG:POSS & REL
\end{tabular}
\begin{tabular}{lllllll} 
í & pá & łjág & ám & lùtí ká & wàn & (à) \\
3PL & come & carry:PFV & 1SG.O & appoint INSTR king & (REL)
\end{tabular}
'(In) my country where they appointed me king.'
(session_052, Isa Sarkin Dawa, narrative)


In § 9.2.2, I provided an overview of how the relativizer \(\bar{a}\) can be fused to different nouns and nominal markers. Some of these instances are synchronically transparent. Others are lexicalized but were clearly derived from such combinations. Some examples of relative clauses with a fused \(\bar{a}\) are presented here. I describe the individual properties of each of these combinations in § 9.2.2.
\begin{tabular}{llll} 
ànā & n̄̄ & dín & óm \(\quad\) â \\
today & thing:REL & meet:PFV & 1SG.O REL \\
féb & tág & óm à & \\
anger & affect:PFV & 1SG.O PFV &
\end{tabular}
'What happened to me today made me angry.'
(session_048, Isa Sarkin Dawa, narrative)
(779)
\begin{tabular}{lllll} 
àná & mā & gán & ú & \({ }^{\text {¿íbí }}\) á \\
person:REL & certain:REL & name & 3SG:POSS & QUOT QUOT
\end{tabular}
N. à, ú sín jí *ísāmrī
N. REL, 3SG do:PFV thing ADJ:bad:ADJ
'Some person whose name is N. did something bad.' (lit.: 'Some person that his name is N., he did something bad.')
(session_051, Isa Sarkin Dawa, narrative)
\begin{tabular}{lllllll} 
nā & mā & ì & rà & wūr & \(\bar{a}\) & míná \\
thing:REL & certain:REL & 1PL & IPFV & like & REL & PRSTT
\end{tabular}
'We like this like this.' (presentative clause (cf. § 15.2.4))
(session_089, Yuguda Manti, conversation)
\begin{tabular}{lllllllll} 
djá & bá & & á & sín á & \(\downarrow\) dá & gé & gì & jī? \\
reason & REL & 2SG.S.PFV & do:PFV REL & be & what & what & Q
\end{tabular}
'The reason why you did it is what?'
(session_357, Rahab Garba Precious, elicitation)
\(\begin{array}{lllllllll}\text { (782) } & \text { ú } & \text { nćb } & \text { kô } & \text { kã̃ } & \text { ú } & \text { rá } & \text { dзòn } & \text { à } \\ & \text { 3SG } & \text { go:PFV PURP } & \text { place:REL } & 3 S G & \text { IPFV } & \text { sit } & \text { REL }\end{array}\)
'She went to the place where she would be living.'
(session_351, Solomon Ahmadu, elicitation)
\begin{tabular}{lllllll} 
àní & mánā & nìé̛ & ním & ú & jàg & à \\
person & which:REL & snake & bite:PFV & 3SG & carry & REL \\
'Which person is it that the snake bit?' & & & \\
(session_350, Solomon & Ahmadu, elicitation) & & &
\end{tabular}
\begin{tabular}{lllllll} 
ikā, & māmbá & sùm & gím & jí & á & kā \\
then, & that.is.why:REL & lake & tear & stand & REL & COND
\end{tabular}
'Then, that is why the water gushed (down from the lake)' (lit. 'that is why the lake tore.') (session_191, Isa Sarkin Dawa, narrative)

I have not encountered any restrictions on the accessibility of different arguments to relativization. The relative clause in (773), for example, targets a subject. In (785) and (786), an object is relativized. The relative clause in (787) relativizes a questioned copula subject. (788) relativizes a location, (789) an instrumental argument, (790) a benefactor. I have no data on whether a possessor or possessed in an attributive possession construction can be relativized. The role of a relativized noun within the relative clause itself is also flexible, including subject (773), object (785), various oblique roles (787), (788) and possessor roles (779).

\begin{tabular}{lllll} 
tyúg & ú & á & jàgì & \\
catch:PFV & 3SG & PFV & carry & \\
& & & & \\
ká & ní & 'sámrí á & àwú & sín \(\quad\) â \\
INSTR & thing & bad & REL & \(3 S G\) \\
do:PFV REL
\end{tabular}
'It (the trial) confirmed his guilt' (lit. 'it caught him with the bad things that he had done'.)
(session_051, Isa Sarkin Dawa, narrative)
\begin{tabular}{llllll} 
àní & mánā & á & jág & nísīr̄ mō? \\
person & which:REL & 2SG.S.PFV & take:PFV & money give:3SG
\end{tabular}
'Whom did you give money to?' (lit. 'Which person (is it) that you gave the money to him')
(session_350, Solomon Ahmadu, elicitation)

\section*{17.3 ká bá, a complementizer introducing wishes}

Complement clauses are clauses functioning as core arguments in another clause, which is called the main clause. In Kam, I only found complement clauses functioning as objects, specifically complement clauses expressing wishes. The complementizer ká báintroduces such wishes and is used after the verb wūrí 'want'. Morphologically, it is a combination of the instrumental/temporal preposition kz and the relativizer \(b a^{-‘}\) (the one) that'. It is also used as a temporal adverbial conjunction translating into English as 'when' or 'while' (§ 17.5.1.1).

Kam features a periphrastic modal construction for expressing wishes and needs. It consists of an imperfective construction with the verb wū\(r \bar{l}\) 'want, accept, like', followed by a complement clause with the complementizer \(k b^{\prime} b a^{\prime}\) (TEMP REL). The complement clause takes the form of a relative clause. The construction exemplified in (791), for example, literally translates to 'I want with this that I drink my medicine.'


\subsection*{17.4 Parataxis and coordination}

Independent main clauses can be linked together in discourse in two main ways in Kam. One method involves the use of a coordinator (§ 17.4.1). The other way is simple juxtaposition or parataxis (§ 17.4.2). I also discuss the use of the sequential preverbal marker si 'then' (§ 17.4.3), which marks sequentiality (vs. simultaneity) of events in linked clauses. si functions similar to a coordinator, but I treat it separately here because it is syntactically different. Rather than occurring in between two clauses, it occurs before the verb of a coordinated clause.

Subject pronominals are repeated when linked clauses share the same subject referent. This is one of the main distinctions setting linked clauses apart from multi-verb constructions in Kam (cf. § 12.5.5).

\subsection*{17.4.1 Coordinators}

The following three coordinators are found in my current corpus of Kam, two of which are found in neighboring languages and are probably borrowed from Hausa. Most coordinators are also used as floor holders in conversations. More coordinators will appear in a more extensive analysis of Kam texts and natural discourse.
- ikā 'then'
- àmā 'and' and 'but', borrowed from Hausa (àmmā).
- kō 'or', borrowed from Hausa (ko)

Some examples of each coordinator in use:
ikā 'then'
(794) m̀pwòm rà kpàr, ìkā ỳkā tór á pè
rain IPFV rain, then thunder fall PFV come
'Rain was falling, (and) then thunder came down.'
(session_007, Garba Abubakar Bako, narrative)
(795)
\begin{tabular}{lll} 
ú & sín jí & sāmrī \\
3SG & do:PFV thing & bad
\end{tabular}
\begin{tabular}{llllllll} 
ikā & í & sí & \({ }^{\downarrow}\) jág & ú & pé & àgbàn & àwàn \\
then & 3PL & SEQ & carry & 3SG & come & palace & king
\end{tabular}
'He did something bad. (And) then they brought him (here) to the palace of the king.'
(session_051, Isa Sarkin Dawa, narrative)
\(\grave{a} m \bar{a}\) 'and', 'or' The \(\grave{a}\)-syllable in this coordinator is a weak prosodic prefix and is often dropped.
\begin{tabular}{lllllllll} 
(796) & ń & dóg & níní & à, & àmā & àjí & nánì & hǹ \\
& 1SG.S.PFV & see:PFV & some & PFV, & but & 3PL & many & NEG
\end{tabular}
'I can see some, but they aren't many.'
(session_187, Babangida Audu, elicitation)

'The king came out and his people greeted him.'
(session_351, Solomon Ahmadu, elicitation)
(798)
\begin{tabular}{llllll} 
à & rà & dín & ní & nīm & kā, \\
2SG.S.IPFV & IPFV & find & thing & ADJ:eat & COND,
\end{tabular}
dàmūwā júrú hǹ,
problem 1PL:POSS NEG
\begin{tabular}{lllllllll} 
mā, & á & másí & rīg, nì & mí & ¿dá & bé kā, \\
but, & 2SG.S.PFV & know & EMPH, thing & some & be & PRSTT COND,
\end{tabular}
\begin{tabular}{lllllll} 
bén & má & ¡ júrú, & mā & nì & mí & sìrī kā \\
say & give & 1PL.O & and & thing & some & be.NEGCOND
\end{tabular}
\begin{tabular}{llllll} 
nà & mì & kùrikí & sín & á & \({ }^{\text {tíná }}\) \\
thing:REL & some & God & make:PFV & REL & PRSTT
\end{tabular}
'If you find food to eat, we don't have a problem. But, you know, if there is anything, tell us. And if there is nothing, that is how God has made it.'
(session_056, Muhammad Bose Yuguda, conversation)
kō 'or'
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline bàbángídá & á & jī, & kō & \multicolumn{2}{|l|}{sólómón} & \multicolumn{2}{|l|}{à \(\quad \mathrm{j}\) i ?} \\
\hline Babangida & & Q & or & Solo & & & \\
\hline \multicolumn{8}{|l|}{'Is it Babangida or is it Solomon?'} \\
\hline ú & ním & á & jī, & kō & ú & & \\
\hline 3SG & eat:PFV & PFV & Q & or & & & \\
\hline
\end{tabular}
'Did he eat or did he refuse?'
(session_351, Solomon Ahmadu, elicitation)

\subsection*{17.4.2 Parataxis: no coordinator}
\(\grave{a} m \bar{a}\), which is borrowed from Hausa ( \(\grave{a} m m \bar{a}\) ), is the only coordinator corresponding to English 'and' and 'but' in Kam. When the Hausa-borrowed strategy is not applied, coordinated clauses are simply juxtaposed without a coordinator.

'He washed his body, entered the room, and put on a shirt.'
(session_351, Solomon Ahmadu, elicitation)
\begin{tabular}{llllllll} 
(804) & m̀ & & màg & ním & àfàm & nág & hǹ, \\
& 1SG.S.NEG.NFUT & NEG & eat:NEG.NFUT meat & cow & NEG, \\
& & & & & & & \\
& m̀fàm & m̀pīrī1 & \(\overline{\mathrm{a}}\) & ý & & kím & \\
& meat & goat & REL & 1SG.S.PFV & eat:PFV & &
\end{tabular}
'I did not eat cow meat, (but it is) goat meat that I ate.'
(session_285, Babangida Audu, elicitation)

\subsection*{17.4.3 Sequential clauses with the preverbal marker sì}

In Kam, it is possible to signal that two events happen in sequence, as opposed to simultaneously, by inserting the preverbal particle sì in the second clause. When the subject of the second clause is a first person singular pronominal or a second person singular pronominal, its tone is L, regardless of the aspectual value of the clause (cf. § 8.2.2). The exact functional difference between coordination with ika 'then' and marking with sì is currently unclear. There may be information structural or pragmatic differences involved. It should be noted that, in most examples here, the proposition marked with sì may be presupposed and may have already been a topic of the conversation. In a conversation where (805) is used, the topic may have been 'when will you marry?'. (806) could be the response to a question 'When will we talk?' and (807) to 'When are you meeting the king?'. (808), from a report of a trial at the king's palace, lists the events leading up to the trial that was held (see also (854)). So the fact that the perpetrator was brought to the palace was elready known. (809) is more difficult to frame in this explanation. For more context on this particular example, see the text in the appendix of the dissertation.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline ń & \multicolumn{2}{|l|}{táárí} & jí & í-dērī & ḿ & à & kā \\
\hline Ń & \multicolumn{2}{|l|}{tầrílPFV} & nì & \(\mathrm{i}^{\text {L }}\)-dèríl ADJ & \(\mathrm{m}^{-}{ }^{\text {L }}\) & à & kā \\
\hline 1SG.S.PFV & \multicolumn{2}{|l|}{finish} & thing & ADJ:draw & 1SG-POSS & PFV & COND \\
\hline ǹ & sì & \multicolumn{2}{|l|}{jág} & \multicolumn{2}{|l|}{ágbàn} & & \\
\hline N & sì & \multicolumn{2}{|l|}{jàg\H} & \multicolumn{2}{|l|}{àgbàn} & & \\
\hline 1SG.S.SEQ & \multicolumn{3}{|l|}{SEQ carry \(\ P F V\)} & wife & & & \\
\hline
\end{tabular}
'After I finish school, I (will) marry.' (possibly: 'It is after I finish school that I (will) marry.')
(session_119, Jauro Babangida Tukura, elicitation)
\begin{tabular}{lllllll} 
ń & fứg án \({ }^{\star}\) ág & nàgkò, ì & sì & bín \({ }^{\star}\) bén \\
1SG.S.PFV & do:PFV work & first, & 1PL & SEQ & talk:FUT
\end{tabular}
'I work first, and then we will talk.', (possibly: 'It is after I worked that we will talk.') (session_351, Solomon Ahmadu, elicitation)
\begin{tabular}{lllllllll} 
ń & fúg & á t nág & nàgkò, ǹ & sì & rà & mòmtí wàn \\
1SG.S.PFV & do:PFV work & first, & 1SG.SEQ & SEQ & IPFV & greet & king
\end{tabular}
'I work first, and then I am meeting the king.' (possibly: 'It is after I worked that I will be meeting the king.')
(session_351, Solomon Ahmadu, elicitation)
(808) ú sín jí sāmrī

3SG do:PFV thing bad
\(\begin{array}{llllllll}\text { īkā } & \text { í } & \text { sí } & { }^{\downarrow} \text { jág } & \text { ú } & \text { p } \text { é } & \text { àgbàn } & \text { àwàn } \\ \text { then } & \text { 3PL } & \text { SEQ } & \text { carry } & \text { 3SG } & \text { come } & \text { palace } & \text { king }\end{array}\)
'He did something bad. And then they brought him (here) to the palace of the king.'
(session_051, Isa Sarkin Dawa, narrative)
\begin{tabular}{|c|c|c|c|c|}
\hline ní & ity & ḑór & \multicolumn{2}{|l|}{p \(\hat{\varepsilon}\)} \\
\hline person & ADJ:war & descend:PFV & come & \\
\hline í & sî \(\quad \mathrm{b} \bar{\varepsilon}\) & tór & í & tyifūgī \\
\hline 3PL & SEQ PR & fall:PFV & 3PL & catch \\
\hline
\end{tabular}
'Warriors came down. Then, they (the Kam) fell on them (the warriors) and caught them.'
(session_191, Isa Sarkin Dawa, narrative)

\subsection*{17.5 Adverbial clauses}

Adverbial clauses are essentially complex adverbial modifiers. Just like complement clauses are substitutes for simplex nominal core arguments in a clause, and just like relative clauses are complex adjective-like modifiers within a noun phrase, adverbial clauses are the clausal equivalents of peripheral clause modifiers (cf. § 15.4).

In this section, I distinguish two morphosyntactic types of adverbial clauses: those that are introduced by an adverbial conjunction (17.5.1) and conditional clauses, which are marked with a clausefinal conditional marker (17.5.1.6) instead of a conjunction. The main difference between the two is thus where the clause-linking marker occurs: in the beginning of a clause, or at the end of a clause.

\subsection*{17.5.1 Adverbial conjunctions}

I collected a variety of adverbial conjunctions in Kam, some of which are widely attested and some of which are fairly rare in the current corpus. It is expected that more conjunctions and more examples will be found after more texts are analyzed. Adverbial conjunctions often have other functions in other parts of the grammar. One conjunction, \(k\) b́ ba' (TEMP REL) 'when, temporal; since, reason' is also used as a complementizer (see § 17.3 above). hár 'until, temporal' - borrowed from Hausa (har) - is also used as a preposition (cf. § 11.2.2). àrí ba' (SIM PROX.ID) 'like, manner', àmin̄ā 'like, manner' and māmbá 'that is how, reason' are also used as floor holders in conversations. Other conjunctions, which have not been found in other functions, include the purposive marker kô, àsúmà 'when/after', àsúwá 'when/after', àná \({ }^{\downarrow} l i b\) 'because, since, reason' sīk \(\bar{a}\) 'if not, lest, conditional/apprehensive'.

\subsection*{17.5.1.1 Temporal clauses with \(k\) á \(b a^{\prime}\) ('when', 'while')}
\(k\) b́ ba'introduces temporal clauses ('when', 'while'), and by extension reasons ('since, because') for an earlier mentioned state of affairs. When it introduces a temporal clause, it often signals co-occurrence of the events described in the linked clauses (like English 'while'). \(k\) á \(b a^{\prime}\) is probably a combination of the temporal preposition \(k \dot{a}\) (§ 11.2.2.1) with the relativizer \(b a^{-}(\S\) 9.2.2).

'What will your older brother be doing when you arrive?'
(session_288, David Mark, elicitation)
\begin{tabular}{lll} 
jí & ná \({ }^{\downarrow}\) ní & hn̂, \\
person & many & NEG,
\end{tabular}
\begin{tabular}{llllllll} 
ká & bá & àjí & nág & á & kõ̃ & kã & sīsīr̄ā \\
TEMP & REL & 3PL & leave:PFV & PFV & place:DIST & place:PROX & now
\end{tabular}
'There are not many people, since they left this place here now.' \({ }^{95}\)
(session_187, Babangida Audu, elicitation)

\footnotetext{
\({ }^{95}\) The use of both a distal form and a proximal form of 'place' in this clause is peculiar and currently unexplained.
}
\begin{tabular}{lllllll} 
lillèm & ká & bá & łá & jútí & ní & â \\
good & when & REL & 2SG.S.PFV & give & thing & REL
\end{tabular}
'It is good to give things (away).' (lit.: 'It is good when you give things.')
(session_187, Babangida Audu, elicitation)
\begin{tabular}{llllll} 
ú & pé & ¿tór & á & à & kòm \\
3SG & come & fall:PFV & PFV & LOC & place
\end{tabular}
\begin{tabular}{lllllll} 
ká & ba & \({ }^{\text {íí }}\) & lútí & m & k-áywī & à \\
TEMP & REL & 3PL & lay.down:CAUS:PFV & 1SG.O & ADVZ-new & REL
\end{tabular}
'He has come to visit the place during the time that I am appointed king.'
(session_052, Isa Sarkin Dawa, narrative)

\subsection*{17.5.1.2 Temporal clauses with àsúmà 'when', às \(\bar{u} w \bar{a}\) 'when' and hár 'until'}
àsúmà and às \(\bar{u} w \bar{a}\) have both been found introducing adverbial clauses with a temporal meaning (functioning like English 'when'). It is not clear how these adverbial clauses are different from clauses introduced with the complementizer \(k\) ba \(^{b a} a^{-}\)(§ 17.3). àsúmà and àsū\(w a ̄\) may be historically complex but cannot be segmented synchronically. In (814), the adverbial clause is expressed by a relative clause, so the final vowel \(\bar{a}\) of \(a ̀ s \bar{u} w \bar{a}\) seems to be related to the relative marker \(\bar{a}\). No evidence of a relative clause is found in (815): the final vowel has a L tone, and there is no clause-final \(\grave{a}\). Given that this clause-final marker is optional in relative clauses, it is still possible that àsúmà contains a relativizer and that (815) contains a relative clause. Since this is the only example of a temporal clause with àsúmà in my data, I cannot provide a definitive analysis.
\begin{tabular}{lllllll} 
àsūwā & ỳkā \(\quad\) jí & tòr & p \(\varepsilon \quad\) & líb & bér & â \\
when: REL & thunder arrive:PFV & fall & come & on & tree & REL
\end{tabular}
'When lightning struck the tree (she died).'
(session_007, Garba Abubakar Bako, narrative)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
àsúmà \\
when: R
\end{tabular} & & \begin{tabular}{l}
àlén \\
sun
\end{tabular} & jí arriv & & \begin{tabular}{l}
+ \({ }^{+}\)ób \\
be.hot
\end{tabular} & \begin{tabular}{l}
tán \\
stay
\end{tabular} & pغ̀ come & \begin{tabular}{l}
àgèr \\
outside
\end{tabular} & \begin{tabular}{l}
k-á 50 \\
ADVZ-hot
\end{tabular} \\
\hline nāŋ̄̄̄ quickly & \begin{tabular}{l}
nāŋ̄̄, \\
quick
\end{tabular} & \begin{tabular}{l}
àná \\
y,person:
\end{tabular} & & & & & & & \\
\hline àwú & jág & ní & tīg & & ú & & rə̄ & sīrī & \\
\hline 3SG & take & thing & cove & & 3SG:P & OSS & EMPH & comple & tely \\
\hline
\end{tabular}
'When the sun quickly shone out with warmth, the man that had come took off all of his cloak.'
(session_314, Danjuma Bello, narrative)
hár also has only one clear example in the data where it introduces a temporal clause.
\begin{tabular}{llllll} 
í & jág & ní & ¿dyí & á & w \(\bar{\varepsilon}\) \\
3PL & take:PFV & thing & dig & PFV & EMPH
\end{tabular}
\begin{tabular}{lllllll} 
hár & í & pá & \({ }^{\text {g }}\) gbó & p \(\varepsilon ́\) & \({ }^{\downarrow}\) ywé & sùm \\
until & 3PL & come:PFV & stream come & mouth & lake
\end{tabular}
'They dug until they came to the stream, to the mouth of the lake.'
(session_191, Isa Sarkin Dawa, narrative)

\subsection*{17.5.1.3 Reasons and consequences (māmbá 'that is why' and à̀ná líb 'because, since')}

The conjunction \(m \bar{a} m b a^{-}\)'that is why' also serves as a discourse marker. As a conjunction, it is attested in only a few examples in the current corpus. It introduces consequences of an earlier mentioned action. Its last syllable ( \(b a\) ) likely derives from the relativzer \(b a^{\text {a }}\), since the adverbial clauses that go together with this conjunction are relative clauses. It is unclear where the first syllable (mām) stems from.
\begin{tabular}{lllllll} 
ìkā & māmbá & sùm & gím & jí & á & kā \\
then & that.is.why:REL & lake & tear:PFV & stand & REL & \(?^{96}\)
\end{tabular}
'(They dug the banks of the river away.) That is why the lake tore.'
(session_191, Isa Sarkin Dawa, narrative)
àná \({ }^{\downarrow}\) líb (analyzable as 'thing:REL head') introduces adverbial clauses that signal reasons why the event described in the previous clause happened.
\begin{tabular}{llllll} 
àná & \({ }^{\dagger}\) líb & sòm & ò & \(\ldots\) \\
thing:REL & head & lake & DIST & \(\ldots\) \\
& & & & & \\
gè̀r & rà & duór & & sāy & kā \\
outside & IPFV & descend & go & \(?^{96}\)
\end{tabular}
'(They dug the banks of the river away) so that the lake would be gushing down.'
(session_191, Isa Sarkin Dawa, narrative)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
ànว̀ván \\
man
\end{tabular}} & \multirow[t]{2}{*}{\begin{tabular}{l}
mí \\
some
\end{tabular}} & ā & dín & \multicolumn{4}{|l|}{ywá \({ }^{\text {ú }}\)} \\
\hline & & REL & meet & friend & 3SG:POSS & & \\
\hline já & \({ }^{+}\)líp & \({ }^{\downarrow} \mathrm{b}\) ¢́n & \({ }^{\dagger}\) táb & á & \({ }^{\downarrow}\) kósí à & ywé & márê \\
\hline thing:REL & head & talk & fish & REL & gather:PFV & LOC & mouth river \\
\hline
\end{tabular}
'A man met his friend because of an issue of fish gathered at the river bank.'
(session_048, Isa Sarkin Dawa, narrative)

\subsection*{17.5.1.4 Manner clauses with àrí báand àmīnā}

Both of these items have a similar meaning and are often translated by my consultants as 'like this'. They are fairly poorly attested in my data as conjunctions. àrí báis composed of the similative preposition àrí 'like' and the relativized demonstrative \(b a^{-}\). \(̀\) m \(\bar{n} n \bar{a}\) is synchronically unalyzable but is probably related to the presentative demonstrative miná. They are frequently found as floor holders, similar to 'like' in English.

\footnotetext{
\({ }^{96}\) The function of \(k \bar{a}\) here is unclear. It appears to be semantically empty.
}

In those contexts, they can be literally translated as 'like this'. The following two examples show them as conjunctions.
\begin{tabular}{llllllll} 
ú & pá & Ł dóg & rá & nùy & ú & rā, \\
3SG & come:PFV & see & COM & eye & 3SG:POSS & EMPH \\
& & & & & & & \\
àrí & bá & jàkú & jō & tán & pé & \\
like & this:REL & ancestor & PL & stay & come &
\end{tabular}
'He came to see it with his eyes, how (his) ancestors stayed here.'
(session_052, Isa Sarkin Dawa, narrative)
\begin{tabular}{lllllll} 
àmīnā & í & rá & jàg & kùb & sày & máré \\
like.this & 3PL & IPFV & take & be.weak & go & river
\end{tabular}
'(The lake flooded ...) and like that they were drowning in the river.'
(session_191, Isa Sarkin Dawa, narrative)

\subsection*{17.5.1.5 Purposive clauses with \(\boldsymbol{k} \hat{\boldsymbol{o}}\)}

The following examples illustrate the use of the purposive conjunction \(k \hat{o}\). Note that in examples (823) and (824) the subject is not repeated after kô and that the verb after kô is not marked for tense or aspect in those examples. This makes the construction in these examples syntactically similar to a multi-verb construction (cf. § 12.5.5). This may be a hint that kô, which is not currently found as a lexical verb in Kam, may derive from a verb, and that this purposive adverbial clause construction may be a grammaticalized instance of a multi-verb construction. Example (822), unambiguously shows kô as a conjunction. To corroborate or reject this hypothesis, we need more examples than what is available in the current corpus.
\begin{tabular}{llllllll} 
(822) & nì & mí & \(\bar{a}\) & ú & rá & làb & d了 \(\bar{r} \overline{1}\), \\
thing & certain & PROX & 3SG & IPFV & hide & look,
\end{tabular}
'He was secretly looking at something, so that he would see the toad.'
(session_181, Babangida Audu, narrative)
\begin{tabular}{lllllllr} 
ì & rò & pà & rà & kồ & dóg & rá & tmísí \\
1PL & IPFV & come & EMPH & PURP & see & EMPH again
\end{tabular}
'We are coming to see it again.'
(session_052, Isa Sarkin Dawa, narrative)
\begin{tabular}{lllclll} 
ì & pá & kô & tūbī & nág & á & rā \\
1PL & come:PFV & PURP & start & work & PROX & EMPH
\end{tabular}
'We came to start the work (where we left yesterday).'
(session_053, Muhammad Bose Yuguda, narrative)

\subsection*{17.5.1.6 Negative conditional and apprehensive clauses (sīk \(\bar{a}\) 'if not, lest')}
sīk \(\bar{a}\) can be used both as a negative conditional coordinator meaning 'if this is not the case' (825) and as an apprehensive coordinator corresponding to English 'lest’ (825), (827). It is not synchronically analyzable but may be related to the conditional marker \(k \bar{a}\) (cf. § 17.5.2).
\begin{tabular}{lllllll} 
mā & nò & béní & & & \\
and & 2PL & say:PFV & & & \\
& & & & & \\
ijí & tbàn & sìrī & kā, & \(\ldots\) & \\
QUOT & alcohol be.NEG & \(?^{97}\) & & \\
& & & & & \\
sīkā & í & né & kô & sógí & pĉh & sùwā? \\
if.not & 3PL & go:PFV PURP & search & come & TAG
\end{tabular}
'And you people say that the alcohol is finished, right? ... If not, they should go and search for it.'
(session_271, Danjuma Bello, conversation)

\footnotetext{
\({ }^{97}\) The function of \(k \bar{a}\) here is unclear. It appears to be semantically empty.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(826)} & ì & wóg & & & & sīkā & & & \({ }^{\text {dfúg }}\) & ə̀màn ... \\
\hline & 1PL & hide & & king & PROX & lest & 3PL & come & catch:FUT & king ... \\
\hline & \multicolumn{10}{|l|}{'We will hide the king, lest they will come and catch (our) king.' (session_191, Isa Sarkin Dawa, narrative)} \\
\hline \multirow[t]{4}{*}{(827)} & í & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
tín \\
move:PFV
\end{tabular}}} & \multicolumn{7}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
gópsí, \\
separate,
\end{tabular}}} \\
\hline & 3 PL & & & & & & & & & \\
\hline & sīkā & àjí & sámrì & & \multicolumn{6}{|l|}{kòm sámrí.} \\
\hline & lest & 3PL & spoil: & UT & \multicolumn{6}{|l|}{place spoil} \\
\hline
\end{tabular}
'(The Kam say that) they moved away, lest they (the Jukun) will ruin the place.'
(session_191, Isa Sarkin Dawa, narrative)

\subsection*{17.5.2 Conditional clauses with the clause-final conditional marker \(k \bar{a}\)}

Conditions are coded with the clause-final particle \(k \bar{a}\). \(k \bar{a}\) follows all other particles, including the negator \(h \grave{n}\). No examples have been observed where it co-occurs with the interrogative marker \(j \bar{l}\), so their relative positions are uncertain. In a construction where a condition is given for a certain situation to actualize, the order is usually condition then situation. Other orders are possible too, however.

'If you people do not see food, you people will not go to school.'
(session_271, Wesam, conversation)
\begin{tabular}{llllllllll} 
gì & jī1 & nà & bòrì & ná & rà & síníl & ĝ̂, & ànā, \\
what & Q & person & ADJ:climb & 2SG:POSS & IPFV & do-i & what, & today,
\end{tabular}
'What is your brother doing today, if you don't go see him, do you think?'
(session_290, David Mark, elicitation)
\(k \bar{a}\) is often used to mark the first event in a chronological sequence of two events. In that sense, it is not just a conditional marker but also a sequential marker:
\begin{tabular}{lllclll} 
àwú & sáy & án \({ }^{\downarrow}\) gwóg & án \(^{\downarrow}\) á & ú & jò & kà, \\
father & \(3 S G^{\mathrm{NS}}\) & PL & COND, \\
3SG & golPFV house
\end{tabular}
\begin{tabular}{llll} 
ú & jâg & mísí & p \(\hat{\varepsilon}\) \\
3SG & carry\FUT & again & come
\end{tabular}
'When she goes back to her parents' house, in the evening, she will prepare food and she will bring it back (to you).'
(session_076, Adamu S. Baka, narrative)

\subsection*{17.6 Reported speech and thought}

\subsection*{17.6.1 The quotative marker \(i j i^{L}\)}

Reported speech and thought can be introduced with the quotative marker \(i j j^{L}\). It most commonly follows the verb bén 'to say' but can also occur with other reporting verbs. It has been attested with tùsi 'to show', tfàr 'to tell', màsi 'to know', hwár 'to think', jib 'to ask', and wūrī 'answer, accept', agree?' (see examples in § 8.6). Most verbs preceding this quotative marker feature a final vowel -i (cf. § 12.2), except if they are followed by the optional perfective marker \(\dot{a}\). There are a number of alternative forms of the quotative marker. One form, \(i b i^{L}\) (a prosodically weak stem, pronounced as [ \(\left.{ }^{\prime}{ }_{1}{ }^{\prime}\right]\) ) is an idiolectal variant, used by some speakers (such as Babangida Audu) but not by others (such as Solomon Ahmadu). It may be dialectal, but I do not have the relevant data to confirm this. There are also two reduced forms, \(i\) and \(\dot{\text { á. The tone of }}\) the quotative marker also varies between \(\mathrm{H}-\mathrm{H}^{\mathrm{L}}\) and \(\mathrm{H}-\mathrm{H}\) (for disyllabic forms) and between HL and L (for reduced forms). It is not clear whether Kam distinguishes direct from indirect speech.
\begin{tabular}{|c|c|c|c|}
\hline àwú & béní ijí & \({ }^{\star}\) sáy & fóg \\
\hline 3PL & say:FV QUOT:LOG.SG & go:PFV LOC & farm \\
\hline \multicolumn{4}{|l|}{'He \(\mathrm{e}_{\mathrm{i}}\) said that he \({ }_{\mathrm{i}}\) went to the farm.'} \\
\hline àwú & béní íbí & *sáy & fóg \\
\hline 3SG & say:FV QUOT:LOG.SG & go:PFV LOC & farm \\
\hline
\end{tabular}
'He said that he went to the farm'
(session_363, Babangida Audu, elicitation)
\begin{tabular}{lllllll} 
lámé & ¿bén & â & í kùl tór & néb. \\
hare & say:PFV & PFV & QUOT tortoise fall:PFV & go
\end{tabular}
'The hare said that the tortoise should fall inside (the pond).'
(session_277, Wesam, narrative)
\begin{tabular}{llllllll} 
í & sí & ¿ béní & á & gé & sín & gì & jī? \\
3PL & SEQ & say:PFV:QUOT & QUOT what & do & what & Q &
\end{tabular}
'They then said: "What happened?"
(session_020, Yuguda Manti, narrative)

The reporting verb can be left out, leaving only the quotative marker followed by the reported discourse.
\begin{tabular}{lllll} 
íjí & vág & júrú & sīr̄̄ \(\quad\) kõ & b \(\bar{\varepsilon}\) \\
QUOT & border & 1PL.O & be.NEGplace:DIST & PRSTT
\end{tabular}
'(They said) that our boundary is not there.'
(session_191, Isa Sarkin Dawa, narrative)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{ijí QUOT:3PL} & \multirow[t]{2}{*}{\begin{tabular}{l}
\({ }^{\star}\) sóg \\
search:PFV
\end{tabular}} & \multirow[t]{2}{*}{\begin{tabular}{l}
pà \\
come
\end{tabular}} & \multirow[t]{2}{*}{bā, EMPH,} & \\
\hline & & & & \\
\hline í & \({ }^{\text {né }}\) ¢ ko & sóg & pá & \(\mathrm{b} \bar{\varepsilon}\) \\
\hline QUOT:3PL & go:PFV PURP & search & come & PRSTT. \\
\hline
\end{tabular}
'(We suggested) that they look for it, that they go searching for it.'
(session_191, Isa Sarkin Dawa, narrative)

Example (837) shows that, when \(i j i^{L}\) is followed by the third person plural pronoun àjí, the pronoun merges with the quotative marker. The same is true when the quotative marker is followed by the singular logophoric pronoun \(\grave{i}\) (cf. § 8.6).
\begin{tabular}{lllll} 
ú & béní \(\hat{1}\) & rà & pà & pí \({ }^{\dagger}\) káy \\
3SG & say:FV QUOT:LOG.SG & IPFV & come & tomorrow
\end{tabular}
'He said that he is coming tomorrow.'
(Tope-Bitrus_03, Garba Abubakar Bako, elicitation)
(839)
\begin{tabular}{lll} 
àní & mí & twúr \(\hat{a}\) \\
person & some & answer PFV
\end{tabular}
\begin{tabular}{llllll} 
ìjí á & Łfárí & ywé & kòm & óntē & à \\
QUOT:LOG.SG REL & open:PFV & mouth & place & small & REL
\end{tabular}
'Someone \({ }_{i}\) answered that he \(e_{i}\) is the one who opened the window.'
(session_054, Muhammad Bose Yuguda, elicitation)

The quotative marker is also used to identify proper names (cf. § 15.2.4).
\begin{tabular}{llll} 
gán & ə́m & \({ }^{\downarrow}\) ijí & bùbàkàr \\
name & 1SG:POSS & QUOT Abubakar
\end{tabular}
'My name is Abubakar'
(session_003, Garba Abubakar Bako, elicitation)
\begin{tabular}{llllll} 
àjá & mà & gán & ú & \({ }^{\text {ijíí }}\) & bùbàkàr \\
person:REL & some:REL & name & 3SG:POSS & QUOT Abubakar & REL
\end{tabular}
'A certain person whose name is Abubakar ...'
(adapted from session_051, Isa Sarkin Dawa, elicitation)

\subsection*{17.6.2 Reported speech without overt quotative marker}

In just a few instances, the quotative marker was omitted and a pause was left between the reporting verb and the reported speech. In a few examples, both the verb and the quotative marker are dropped. It is not clear how natural such omissions are or whether they have something to do with the distinction between direct and indirect speech. This distinction has not been investigated in Kam.

\begin{tabular}{lll} 
àt \(f i ̄\) & bú & bĩ, \\
child & 3SG:POSS & one,
\end{tabular}
\begin{tabular}{llllll} 
Gàmbó & mág & \({ }^{\text {}}\) kímí & mfàm & ú & hǹ \\
Gambo & NEG & eat:PFV & meat & 3SG:POSS & NEG
\end{tabular}
'One of his children (says): "Gambo did not eat his meat".'
\begin{tabular}{llllll} 
Gàmbō, & m̀ \(\overline{\mathrm{m}}\), & àbìràg & \(\overline{\mathrm{a}}\) & ý & kím \\
Gambo, & no, & vegetable & REL & 1SG.S.PFV & eat:PFV \\
(ím. & only.
\end{tabular}
"Gambo (says): "No, I only ate vegetables.""

\section*{18 Information structure}

A comprehensive analysis of information structure in Kam is beyond the scope of this dissertation. Here, I present a basic description of a number of markers and constructions. These were difficult to analyze in terms of traditional nominal, verbal or adverbial categories. I focus on presenting relevant data. Terminology and specific analyses are preliminary. The topics I consider in this chapter are clefts, which can mark focus (§ 18.1), the marker \(d \bar{\varepsilon}\) marking topic and emphasis (§ 18.2), discourse-cohesive uses of the presentative demonstrative \(b \bar{\varepsilon}(\S 18.3)\) and two emphatic markers with currently little understood functions: \(r \bar{\imath} g\) (§ 18.4) and \(n \grave{\varepsilon}\) (§ 18.5).

\subsection*{18.1 The cleft construction marking focus}

Clefts may introduce new referents which may be contrasted with earlier introduced referents or which may provide new information about an already introduced state of affairs. (846) shows the basic structure of relative clauses, which form the basis of cleft constructions (cf. § 17.2)
\[
\begin{equation*}
[\mathrm{N}]+\overline{\mathrm{a}}+[\text { relative clause }](+\grave{\mathrm{a}}) \tag{846}
\end{equation*}
\]

A cleft construction allows referents utterance-initially that would occur utterance-finally or utterancemedially in main clauses not preceded by clefts. For instance, main clauses always have SVO order ('I washed a shirt', (847))a. A cleft strategy allows the object referent of a main clause ('a shirt') to be encoded utterance-initially in its corresponding cleft construction ('It is a shirt that I washed', (847))b.). I did not find any instances of a cleft construction introducing new subjects. New subjects may be introduced by other means.
a.
ḿ fér \begin{tabular}{l} 
á fú
\end{tabular}

1SG:PFV wash:PFV shirt
'I washed a shirt.'
b.
àfú ā, ḿ fér
shirt REL, 1SG wash:PFV
'It is a shirt that I washed.'
(constructed examples)

Example (848) shows a clear case of contrastive focus. The first clause describes what type of meat the speaker did not eat, and the second clause, a cleft construction, introduces a new referent contrasting with the subject of the first clause: the type of meat that the speaker did eat.
\begin{tabular}{lllllll} 
m̀ & & màg & ním & ààa & nág & hn̂. \\
1SG.S.NEG.NFUT & NEG & eat & meat & cow & NEG. \\
m̀fàm & m̀pīrī & \(\overline{\mathrm{a}}\), & ý & & kím & \\
meat & goat & REL, & 1SG.S.PFV & eat:PFV &
\end{tabular}
'I did not eat cow meat. It was goat meat that I ate.'
(session_285, Babangida Audu, elicitation)

In (849), a state of affairs is introduced where a group of jihadi raiders were taken prisoner by the Kam and held as slaves. The second and third clauses, instances of the cleft construction, introduce supplementary information about who exactly was taken slave.
\begin{tabular}{llllll} 
í & tyúg & í & jág & \({ }^{\text {t }}\) k \(\quad\) pínî. \\
3PL & catch:PFV & 3PL & take & INSTR slave.
\end{tabular}
\begin{tabular}{lllllll} 
zág & ní & gbàn & jō, & í & týg & â. \\
side & person & female & PL:REL, & 3PL & catch:PFV & REL. \\
& & & & & & \\
zág & ní & vān & mā, & í & týg & â. \\
side & person male & some:REL, & 3PL & catch:PFV & REL.
\end{tabular}
'They (the Kam) captured them (the intruders) as slaves. They captured women. They captured some men.'
(session_191, Isa Sarkin Dawa, narrative)

Example (850) is taken from the description of a criminal trial in which the political king of Kam judges someone who has committed various murders. The king calls the perpetrator to him, subjects him to a test which verifies his guilt, and then banishes him. The cleft construction, "It is in this land that we don't want bad things", has to be understood within the perspective of this banishment. The king says that he does not want evil things to happen in this land, that the murderer and his actions do not fit in the society he wants to represent, and that he should move to another place, away from the Kam country. The focus construction introduces the decision to banish the murderer.

'The king said: "In this land, we don't want bad things. This world that has been developing (lit. 'growing'). And now, if something bad comes out, it won't work."'
(session_051, Isa Sarkin Dawa, narrative)

In § 16.1.2.2, I introduced a cleft structure with the interrogative modifier min̄ 'which [N]?, what [N]?', which is a variation of the cleft constructions discussed in this section.

\subsection*{18.2 Topic shift and emphasis with dз \(\bar{\varepsilon}\)}

The marker \(d_{\zeta} \bar{\varepsilon}\) has a variety of different uses. It can also be found as \(d_{\zeta} \bar{l}, d \xi \bar{\alpha}\) and \(d_{j} \bar{e}\).
Speakers use \(d \bar{\delta} \bar{\varepsilon}\) to introduce or change a topic in discourse. \(d_{j} \bar{\varepsilon}\) follows noun phrases that are introduced as a new topic. (851) is a question where a new person gets involved in the discourse situation. This person becomes the new topic of the conversation as information is inquired about them.
\(\begin{array}{lllllcl}\text { (851) } & \text { jà } & \text { ḑ } \bar{\varepsilon}, & \text { á } & \text { rá } & \text { nébí } & \text { hn̂? } \\ & \text { 2SG.ID } & \text { TOP, } & \text { 2SG.S.FUT } & \text { NEG.FUT } & \text { go:NEG.FUT:FUT } & \text { NEG }\end{array}\)
'What of you, won't you go?'
(session_357, Rahab Garba Precious, elicitation)

In (852), a speaker is recounting events that happened the day before, and in the third clause shifts the topic and time frame from yesterday's (àl \(\bar{l} l \bar{e})\) course of events to today's (ànā) plans.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(852)} & \multicolumn{2}{|l|}{ń} & & á & & \multicolumn{2}{|l|}{\(\bar{a}^{\star} 1 \overline{1} 1 \mathrm{e}\)} & & & jīrāk. \\
\hline & \multicolumn{2}{|l|}{1SG.S.PFV} & leave:PFV & LOC & here & yester & & TEMP & hour & two. \\
\hline & ḿ & & \multicolumn{3}{|l|}{márò sáy.} & & & & & \\
\hline & \multicolumn{2}{|l|}{1SG.S.PFV} & \multicolumn{3}{|l|}{return go:PFV.} & & & & & \\
\hline & ànā & djē & ḿ & mór & & á & pغ̀. & & & \\
\hline & today & TOP & 1SG.S.PFV & return & & PFV & & & & \\
\hline & ì & pò & kô & túbí & & \({ }^{\dagger}\) nág & á & rā & & \\
\hline & 1PL & come: & FV PU & start:P & & work & PF & EMPH & & \\
\hline
\end{tabular}
'I left here yesterday at two o' clock. I went back (home). Today I came back. We came here to start the work.'
(session_053, Muhammad Bose Yuguda, narrative)
(853) comes from a narrative where the king of Kam recounts a disagreement between two men that has escalated into violence. After he explains the case, he briefly takes a step back and focuses on the stability that he thinks should be upheld in Kam land. Here, the topic marker dse also distances the Kam from the troublemakers, who are apparently from another ethnic group.

'So, as for us, the Kam land: when we live here in this place - it is the land of our ancestors -, there will be no bloodshed. We cannot do anything bad. So, that thing (that we discussed), they are another ethnicity. We do not want their blood to be shed.'
(session_048, Isa Sarkin Dawa, narrative)

Finally, (854) gives a fragment of a story where a criminal is brought to the king's court to be judged. The first three clauses tell the sequence of events of his arrival at the palace: he is accused, he is brought to the palace, and he is trialed. Then, the topic shifts to the result of the trial, and the outcome is presented
\begin{tabular}{lllll} 
í & pá & t bír & ú & nùy. \\
3PL & come:PFV & blow:PFV & 3SG & eye
\end{tabular}
\begin{tabular}{llllllll} 
ànùy & \(\bar{a}\) & í & pá & \({ }^{\downarrow}\) bír & ú & á & ds \(\bar{\varepsilon}\), \\
eye & REL & 3PL & come:PFV & blow:PFV & 3SG & REL & TOP,
\end{tabular}
\begin{tabular}{lllll} 
tfúg & ú & á & jàgì & kó \\
catch:PFV & 3SG & PFV & take & INSTR
\end{tabular}
\begin{tabular}{lllll} 
ní & sāmrī & \(\bar{a}\) & àwú & sín \(\hat{a}\) \\
thing & spoil:ADJ & REL & \(3 S G\) & do:PFV REL
\end{tabular}
'They came and brought him to trial. That trial that they brought him to, it confirmed his guilt (lit. 'They came and blew into his eye. The eye that they blew, it caught him with the bad things that he had done'.)'

Context: 'He did something bad. Then they took him here to the palace of the king. They came and brought him to trial. That trial that they brought him to, it confirmed his guilt.'
(session_051, Isa Sarkin Dawa, narrative)

I also found \(d_{j} \bar{\varepsilon}\) in some unrelated syntactic contexts following verbs. In (855), d \(\bar{y}_{\bar{e}}\) occurs after an imperative verb and urges the hearer to start telling his story. In (856), it is used after a simple clause. My informants translated dsì here as 'finally'. Like the examples given above, both (855) and (856) mark a shift in topic. The difference is that here the topic is not present in the clause as a noun phrase. It is implicit: in (855) the hearer is urged to start the new topic, and in (856) the following chapter of a story is announced.
\begin{tabular}{ll} 
bímbēn & ḑē \\
\(\sim\) say & TOP
\end{tabular}
'go ahead, start talking'
(session_019, Awunu Yakubu, conversation)
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(856) \grave{m, gbán á djī kā}
mm, arrive PFV TOP COND
'so, when (the day) finally arrives ...'
(session_254, Shawuya, narrative)

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\subsection*{18.3 Emphatic uses of the presentative demonstrative b \(\bar{\varepsilon}\)}

In § 9.2.2, I discussed the presentative demonstrative \(b \bar{\varepsilon}\). It is mostly used as an emphatic marker in clauses.

\begin{tabular}{lllcllll} 
mè & ǹtèkù & b \(\bar{\varepsilon}\) & d \(\bar{\varepsilon}\) & míná & bá & kú & bá \\
mother & frog & PRSTTTOP & PRSTT & PROX & become.weak & PFV
\end{tabular}
\begin{tabular}{lllllll} 
lù & rò & ỳkám & tyì & bú & jò & à \\
lay.down & COM & rest & child & 3SG:POSS & PL & PFV
\end{tabular}
'The mother frog here is laying down with the rest of her children.'
(session_181, Babangida Audu, narrative)
\(b \bar{\varepsilon}\) can also occur immediately following verbs, however. Here, it can also be translated as 'then', 'now', or 'there you go'. It highlights what happens next, after what came before in a narrative, for example.
\begin{tabular}{llllllllll} 
àwú & fírí & wūrī & kībá & jág & bé & tyòr & fùg & jàg & à \\
3SG.S & jump & want & COMP grab & PRSTTbee & catch & grab & PFV
\end{tabular}
'Then/now/there you go, he jumps and wants to grab and catch the bee here.'
(session_181, Babangida Audu, narrative)
\(\begin{array}{lllllllll}\text { (861) } & \text { àlítírî } & \text { d了 } \bar{\varepsilon} & \text { būbb } \bar{b} & \mathrm{p} \bar{\varepsilon} & { }^{\dagger} \mathbf{b} \bar{\varepsilon} & \text { l } \bar{\varepsilon} b & \text { gùm } & \text { bèr } \\ & \text { hawk } & \text { TOP } & \text { ?~come.out } & \text { come } & \text { PRSTTinside } & \text { hole } & \text { tree }\end{array}\)
(When the dog fell out of the tree,) then (suddenly) a hawk came out of the tree hole.'
(session_181, Babangida Audu, narrative)

In (862) and (863), \(b \bar{\varepsilon}\) follows entire clauses. If it is left out, my consultants explained, the soaking of the alcohol does not entail any link with the return of the person mentioned in the first part of the sentence. In (863), \(b \bar{\varepsilon}\) appears to link back in some way to the alcohol or the event of soaking the alcohol, for which the participants of a certain festival have to take off their clothes.
\begin{tabular}{llllllll} 
àwú & rá & mə̀rə̀ & pè, & í & bóg & ábày à à & bē. \\
3SG & IPFV & return & come & 3PL & soak:PFV & alcohol PFV & PRSTT
\end{tabular}
'(As) he's coming back, there you go, they brewed the beer.'
(session_357, Shawuya, narrative)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline í & bóg & ábàn & à & kā & bes, & àb & túttūbī \\
\hline 3 PL & soak:PFV & alcohol & PROX & COND & PRSTT, & alcoh & FUT~start \\
\hline í & túsì & kpò & b \(\bar{\varepsilon}\). & & & & \\
\hline 3PL & show:FUT & body & PRSTT & & & & \\
\hline
\end{tabular}
'There you go, after they soaked the alcohol, the alcohol will then start ... and then they will show their body.'
(session_357, Shawuya, narrative)

\subsection*{18.4 Emphatic marker rīg (or rā)}

The emphatic marker \(r \bar{l} g\) (or \(r \bar{z}\) ) occurs clause-finally before any clausal adverbials and negators. I have found \(r \bar{l} g\) in many different functions, for example stressing that something is the case, counter to expectation (864), or as a modal particle that can be translated as 'also' into English (865).
\begin{tabular}{lll} 
ḿ & másí & ríg \\
1SG.S.PFV & know:PFV & EMPH
\end{tabular}
'I do know.' (countering some assumption or expectation that the speaker doesn't know.) (session_357, Rahab Garba Precious, elicitation)
\begin{tabular}{lll} 
ń & fúg & ànág \\
rá \\
1SG.S.FUT & do:FUTwork & EMPH
\end{tabular}
'I also want to work.'
(session_357, Rahab Garba Precious, elicitation)

Other examples include the following.
\begin{tabular}{lllllll} 
(866) àwú & jág & ní & tīg & ú & rā & sīr̄ī \\
& 3SG & take & thing & cover:FV & 3SG:POSS & EMPH completely
\end{tabular}
'[When the sun quickly shone out with warmth,] he took of all of his cloak.'
(session_314, Danjuma Bello, narrative)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (867) & ú & pá & \({ }^{+}\)dóg & rá & nùn & ú & rā \\
\hline & 3SG & come:PFV & see & COM & eye & 3SG:POSS & EMPH \\
\hline & 'He c
(sessi & to see it with 052, Isa Sark & \begin{tabular}{l}
eyes. \\
Dawa,
\end{tabular} & rrative) & & & \\
\hline
\end{tabular}
tāmbā dó lèb ní ywòm rā
Chamba be inside person Kam EMPH
There are Chamba among the Kam people.
(session_191, Isa Sarkin Dawa, narrative)
\begin{tabular}{llllcll} 
ì & pà & kô & túbí & \({ }^{\downarrow}\) nág & á & rā \\
1PL & come & PURP & start:PFV & work & PFV & EMPH
\end{tabular}
'We came to start the work.'
(session_053, Muhammad Bose Yuguda, narrative)
\(r \bar{g} g\) is very often found in an affirmative predicative possession construction. There is no semantic difference between clauses that have \(r \bar{l} g\) and those that do not (871). Such clauses do occur more frequently with \(r \bar{l} g\) than without, however, and consultants express that the construction with \(r \bar{l} g\) is preferred.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(870)} & ń & dá & rá & + t ¢ \({ }^{\text {ám }}\) & & \\
\hline & 1SG & be & COM & hoe & EM & \\
\hline & \multicolumn{6}{|l|}{'I have a hoe.'} \\
\hline \multirow[t]{3}{*}{(871)} & ǹtèkù & dó & r'́ & fù & & (rīg) \\
\hline & toad & be & COM & pregna & & EMPH \\
\hline & \multicolumn{6}{|l|}{'The toad is pregnant.' (session_357, Rahab Garba Precious, elicitation)} \\
\hline
\end{tabular}
\(r \bar{l} g\) is obligatory in the negative predicative possessive construction (cf. § 15.2.1). It is also likely that the postverbal negative future marker \(r \bar{\partial}\) is related to the emphasis marker \(r \bar{l} g\), although it probably does not have any emphatic meaning in that context (cf. § 13.1 and § 13.6.2).

\subsection*{18.5 Emphatic marker nغ̀}

Kam allows the use of \(n \grave{\varepsilon}\), an emphatic marker borrowed from Hausa (ne) (cf. Jaggar 2001: 508-510). \({ }^{98}\) This marker appears in both affirmative and negative, imperative and declarative clauses. It has scope over the whole clause. In negative clauses, I have currently only found \(n \grave{\varepsilon}\) in the slot before negators ((873), (874)). In Hausa, it can also occur after clause-final negators.

\footnotetext{
\({ }^{98}\) Hausa also has a feminine emphatic marker, \(c e\), which is not borrowed into Kam.
}
\begin{tabular}{llll} 
néb & ygwóg wàn & nè \\
go & house & king & EMPH
\end{tabular}
'Go to the house of the king!'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
\begin{tabular}{llll} 
ká néb & ygwóg wàn nè gà & né \\
NEG:IMPgo & house & king & EMPH NEG:IMP
\end{tabular}
'Don't go to the house of the king!'
(Tope_Bitrus_06, Garba Abubakar Bako, elicitation)
(874)
\begin{tabular}{llll} 
rò & sìn & n & hǹ \\
IPFV & do & EMPH & NEG
\end{tabular}
'It is not doing (it)', i.e. 'It cannot work like this.'
(session_051, Isa Sarkin Dawa, narrative)

\section*{19 Minimal clauses: interjections}

Interjections form a word class that cannot combine with other syntactic items to form a clause \({ }^{99}\). They are always a separate utterance. Functionally, they are characterized by expressive and socio-pragmatic functions rather than propositional meaning. Most of them can be described as backchannels. They are by no means a 'minor' linguistic category in the language, since they are so frequent and are so important in natural conversation, in terms of turn-taking and discourse-related functions.

Each interjection has a wide variety of specific functions that differ according to the discourse context in which it is used, and it is difficult to abstract across these functions to find a general meaning for each. Functions of interjections include the expression of surprise, disbelief, endorsement, disagreement, humility, hesitance, delight, insistence, encouragement, discouragement, understanding, misunderstanding and a request for repair, anger, fear, relief, etc. At some times, they express emotions. At other times they are essential discourse tools and serve as expected cues to show that someone is following a conversation. In some cases, they may be considered formulaic.

Probably because of their important social and expressive functions, their generally high salience in speech, their flexibility to be used in many different contexts and their high frequency, they are very memetic, very easy to mimic and very easy to pick up and integrate into one's own speech. As a result, interjections are very easily borrowed from one language into another (cf. e.g. Matras 2007; Andersen 2014). Most of the interjections found in Kam are also found in many other languages in the region. Some items are identified by my consultants as not Kam (although they are frequently used in Kam discourse), and some items are identified as purely Kam, not borrowed from or occurring in any other languages (although some of these interjections generally do occur elsewhere, such as \(m\) for 'yes' and \(m m\) for 'no' according to my consultants, these do not have a fixed tone).

A list of general interjections is given here. It is not exhaustive, but it exemplifies the range of items and emotions and functions that are expressed by interjections, as well as some typical phonological

\footnotetext{
\({ }^{99}\) I do not specifically discuss any other minimal utterances than interjections. Any noun phrase, prepositional phrase, verb and adverbial modifier can occur on its own, forming a minimal utterance. These are all described in their respective sections. At a later stage in the description and documentation of Kam, I plan to include a fuller discussion of such minimal clauses as vocatives, insults, greetings, other formulaic expressions and elliptic clauses (cf. Elders 2000:584-600).
}
properties. All of these interjections are also found in other languages in the area, possibly with different shades of meaning.
\(\varepsilon \varepsilon \quad\) (no associated tone) agreement, compliance (identified as Hausa by consultants)
\(a a \quad\) (no associated tone) agreement, compliance
PaPa (no associated tone) disagreement, noncompliance (identified as Hausa by consultants)
\(\varepsilon \downarrow \quad\) (ingressive \(\varepsilon\); can also be other sounds, sometimes \(m \downarrow\), an ingressive bilabial nasal; both eyebrows are raised while inhaling, and head is tilted lightly backwards for a moment) agreement, confirmation
y (back-released uvular click with closed lips) agreement, compliance (see also Lionnet [to appear]),

भッ (two back-released uvular clicks with closed lips) disagreement, noncompliance
ع́ \(\dot{\varepsilon} \quad\) insistence while offering something
Pà Pá surprise, disbelief, endorsement of a previous statement
\(\grave{m} \tilde{h} \hat{m}\) strong agreement with and endorsement of a previous statement, encouragement, delight, relief
\(m m m\) (no associated tone) doubt, reluctance to answer, reluctance to agree or disagree with a statement
\(k a ̀ \quad\) agreement, satisfaction, generally translatable as 'OK'
wéjjj endorsement, agreement, delight, humor, empathy
wájjj endorsement, agreement, delight, humor, empathy
wàné delight, humor
غ̀hêj endorsement, agreement, empathy
jáwwàà endorsement, agreement, delight (from Hausa or Fulfulde, where it has the same form).
wájjòò empathy
ójjòo empathy
kaj (no associated tone) surprise, disbelief, anger, dissatisfaction, frustration, empathy (a Hausa or Adamawa Fulfulde borrowing, where it has the same form). This item can also be repeated many times in a row quietly (kaj kaj kaj kaj kaj) to express agreement and empathy call for attention

The following interjections are identified as Kam, and not (borrowed from) any other language, by my consultants.
\(m\) (no associated tone) agreement, compliance
\(m ? m\) (no associated tone) disagreement, noncompliance
óóój agreement, call for attention
o?o (no associated tone) disagreement, noncompliance
\(\dot{j} \quad\) insistence
\(\grave{\eta} \grave{\eta} \quad\) hesitant acceptance to receive something
támîn agreement, probably a short form of táPá mîn 'It happened like that.'
dàr humility, apology, translatable as "sorry"
nùg frustration, anger, dissatisfaction, translatable as 'fuck!'

VI Part six: texts and lexicon

\section*{Texts}

\section*{A fable}

This fable tells the story of a man who dresses up like a woman. The king notices him, takes interest in him, and wants to marry him. The hare, however, spies on the man and notices that he is, in fact, male. When the hare tells the king about his discovery, the king is dismayed and decides to put the man to the test. He organizes a festival where each participant has to take off their clothes in order to receive traditional beer. The cross-dressing man hears about this plan, is afraid, and goes to the toad for help. The toad, who is female, agrees to exchange her sex with the man, who makes his transition into a woman. When the festival takes place and the participants have to take off their clothes, the woman appears to be female. Everybody turns on the hare, who fears for his life and runs off. The story then goes back to the toad, who turns out to have been pregnant when he exchanged his sex with the woman. He is unable to give birth to his children and dies.

I collected this fable in Sabongida Kamajim on October \(18^{\text {th }}\), 2017, during a storytelling session with around twenty-five participants. The story was performed by a lady called Shawuya. The participants, mostly male, urged her to tell a story so that the recordings would not just represent the men of Kam but all of Kam society (session_254).


Figure 21 - Storytelling session with Shawuya in Sabongida Kamajim, 18th of October 2017
\begin{tabular}{lll} 
àt \(f i\) & ívān & bīnī \\
child & male & one
\end{tabular}

One boy,
\begin{tabular}{llllllll} 
àwú & jág & kpá & kôm & kǒ & né & ní & ígbàn \\
3SG & carry:PFV & wrapper & tie & PURP & go & person & female
\end{tabular}
he wears a wrapper to walk (like) a woman.
\begin{tabular}{lllll} 
kpáyí & ḑī, & kpáyí & ḑī & hàkā, \\
hang.out & FOC & hang.out & FOC & like.that
\end{tabular}

Moving around, moving around like this.
wáj! àwàn jélí ká: wàné
EXCL king see:PFV COND it.is.good
Hey! When the king sees them, (he thinks) it is good.
\begin{tabular}{lllllll} 
àgbàn & á & àwàn & tyiní & gbàn & à & jàg \\
woman & REL & king & betroth:PFV & wife & REL & carry
\end{tabular}

This is the woman that the king wants to marry.
\begin{tabular}{lllllll} 
ú & tyiní & ú & ḑī & à & dsè & kā \\
3SG & betroth:PFV & 3SG & FOC & PFV & FOC & COND
\end{tabular}

When he has paid the dowry, \({ }^{100}\)
(881) tò
so
then
\begin{tabular}{llllll} 
bàrì & bā & í & néb & kpáy & fijè \\
time & REL & 3PL & go & hang.out:PFV & washing.place
\end{tabular}

The time that they (the women) go hang out at the river,

\footnotetext{
\({ }^{100}\) The tone of \(d 3 e ̀\) is unexpected here. M tone is expected.
}
\begin{tabular}{lll} 
"ə́ & k-ántērī & wá? " \\
QUOT & ADVZ-truth & eh
\end{tabular}
(The king:) "Is that true?"
(892)
"m"
yes
(The hare:) "Yes."
\(\begin{array}{lllll}\text { "i } & \text { sín } & \text { ḑá } & \text { ò } & \text { sim?" } \\ \text { 1PL } & \text { do } & \text { reason } & \text { DIST } & \text { how }\end{array}\)
(The king:) "What can we do about it?" \({ }^{101}\)
\begin{tabular}{llllllll} 
"nā & \(\overline{1}\) & rà & sìn & r & \(\overline{\mathrm{a}}\) & kà & há" \\
thing:REL & \(1 P L\) & IPFV & do & EMPH & REL & \(?\) & eh
\end{tabular}
(The hare:) "What we are going to do (is this):"
(895) "jág ábày, jág ábày bòg"
carry beer, carry bear soak
"Take beer, take beer, (and) soak it"
(i.e. prepare beer, organize a festival)
\begin{tabular}{llllllll} 
"á & jág & ábày & bòg & kā, í & túsí & kpô" \\
2SG.S.PFV & carry:PFV & beer & soak & COND & \(3 P L\) & show:PFV & body
\end{tabular} "When you prepare beer, they show their body."
(i.e. for the festival, they have to take off their clothes)
(897) tò
so
So,
(898)
\begin{tabular}{llllllll} 
í & jág & ábày à, & í & jág & bòg & ḑī & kā \\
3PL & carry:PFV & alcohol PFV & 3PL & carry:PFV & soak & FOC & COND
\end{tabular}

They take the alcohol, and they soak it.
(899)
\begin{tabular}{llll} 
í & jág & óbày & à, \\
3PL & carry:PFV & beer & PFV
\end{tabular}

When they take the beer

\footnotetext{
\({ }^{101}\) The translation of \(d \zeta a ́\) is not entirely clear here.
}
\begin{tabular}{llllll} 
í & jág & dsī & bòg & djī & kā \\
3PL & carry:PFV & FOC & soak & FOC & COND
\end{tabular}
and they soak it,
\begin{tabular}{llll} 
àní & ígbàn dúćlí & mín \\
person & female & see:PFV & thus
\end{tabular}

The woman sees it.
àwú dué, 丸ú másí hn̂
3SG TOP, 3SG know:PFV NEG
He does not know (of the plan).
\begin{tabular}{llll} 
ní & ḑé & má & rā \\
person & TOP & know & EMPH
\end{tabular}
(Other) people do know.
(904)
"á ḑóy álèb ywóg á hā"
"(as) you sit inside this house, eh"
\begin{tabular}{lllllll} 
"í & dá & kó & bímbēnī & kpóy \({ }^{\downarrow}\) líb & ná & wànē" \\
3PL & be & PURP & talk & always on & 2SG:POSS & it.is.good
\end{tabular}
"They are always talking about you."
\begin{tabular}{ll} 
"í & nâ ..." \\
QUOT & 2 SG.ID
\end{tabular}
"That you ..."
\begin{tabular}{llllllllll} 
"í & nâ jí & vān & á, í nâ ní ígbàn á & ân" \\
QUOT & 2SG.ID person & male & PRSTT QUOT & 2SG.ID person & female & PRSTT NEG
\end{tabular}
"They say that you are a man, they say that you are not a woman."
\begin{tabular}{lllll} 
"í & nâ ní & vān & á" \\
QUOT & 2SG.ID person & male & PRSTT
\end{tabular}
"They say that you are a man."
\(\begin{array}{lllllll}\text { (912) "í } & \text { bóg } & \text { óbày } & \text { à } & \text { kà } & \text { b } \bar{\varepsilon} . " ~ \\ & \text { 3PL } & \text { soak } & \text { beer } & \text { PFV } & ? & \text { PRSTT }\end{array}\)
"Then they soak the alcohol,"
\begin{tabular}{lllll} 
"àbày & tùtúbí, & í & túsì & kpò" \\
alcohol & FUT~start & 3PL & show:FUT & body
\end{tabular}
"the alcohol will start, and they will show their body." \({ }^{102}\)
(914)
\begin{tabular}{lll} 
ḿ & bén & mā, \\
1SG.S.PFV & say:PFV & give:2SG.O
\end{tabular}
"I tell you (this)"
(915)
\begin{tabular}{llll} 
à & màsí & hń & kā \\
2SG.S.NEG.NFUT & know & NEG & COND
\end{tabular}
"in case you did not know."
(916)
\begin{tabular}{llllllll} 
àní & ígbàn & jág & á & ḑòn & kò & dèr & jībī \\
person & female carry:PFV & PFV & sit & \(?\) & belly & \(?\)
\end{tabular}

The woman sits and is worried. \({ }^{103}\)

\footnotetext{
\({ }^{102}\) The tone of tùttúbi 'to start' is unexpected here.
\({ }^{103}\) The analysis of this clause is unclear. kò dèr \(r \bar{j} \bar{b} \bar{c}\) appears to mean something like 'with a worried belly'.
}
\begin{tabular}{llllllll} 
(917) ú & láy & ókpò & kā, ú & ním & hǹ \\
& 3SG & cook:PFV & food & COND & 3SG & eat & NEG
\end{tabular}
\begin{tabular}{llllll} 
nì & ívān & \(\bar{a}\) & mā & ní & ígbàn á \\
person & man & PRSTT but & person & woman & PRSTT \\
It is a man, but also a woman.
\end{tabular}
\begin{tabular}{llllll} 
(919) & ú & pá & ¿jág & á & ḑòy \\
& 3PL & come & carry:PFV & PFV & sit
\end{tabular}

She sits down
\begin{tabular}{lllllllll} 
kò & dèd & jībī, & kò & dèd & jībī & dgī & kā & hàkà \\
\(?\) & belly & \(?\) & \(?\) & belly & \(?\) & FOC & \(?\) & like.that
\end{tabular} and is worried. \({ }^{104}\)
(921) àléy mí, māmbā,
day some that.is.how.
That is how, one day,
(922) ú fyúg áł né bú

3PL do:PFV arm 3SG:POSS
she takes her arm. \({ }^{105}\)
(923) ú sáy, ú néb néb,

3SG walk:PFV, 3SG go:PFV go
She goes for a walk, she goes and goes.
(924) ú gbáy kā, ǹtè̀kù míná tánì ló kpó à 3SG arrive:PFV COND, toad PRSTT stand wash body PFV When she arrives, a toad is washing itself.

\footnotetext{
\({ }^{104} k \grave{o}\) dèd \(j \bar{j} b \bar{\imath}\) appears to mean something like 'with a worried belly'. The analysis of this phrase is unclear.
\({ }^{105}\) I am not certain of the analysis of this clause.
}
(925)
"tán sìm jī?"
stand how Q
(The woman:) "How are you?"
(929)
\begin{tabular}{lll} 
"tán & jí & hǹ." \\
stand & thing & NEG
\end{tabular}
(The toad:) "There's nothing." (i.e. 'I'm fine.')
\begin{tabular}{lll} 
í & \(\downarrow\) néb á, & í \\
LOG.SG & go: PFV & PFV
\end{tabular}\(\quad\) LOG.SG
(The woman says that) she has gone here (because)
\begin{tabular}{lllll} 
í bóg & òbàn & kā b \(\bar{\varepsilon}, \quad\) í \\
3PL & soak:FUT & beer COND PRSTT, 3 \\
when they will soak beer, they will show their body
\end{tabular}

Then, that she is a man.
(933)
\begin{tabular}{llll} 
ǹtèkù & rò & ló & kpó \\
toad & IPFV & wash & body
\end{tabular}

The toad is washing itself.
\begin{tabular}{lllllll} 
ú & kúntí & bì, ú & jīb & ywé & rá & ǹtèkù \\
3SG & bend:PFV & ground, 3SG & greet:PFV & mouth & COM & toad
\end{tabular}

She bends down, and she greets the toad.
ǹtèkù: "m̌?"
toad yes
(The toad:) "Yes?"
(933)
\begin{tabular}{llllcll} 
ní & ívān & pò & gíní & ḿ & á & jàg \\
person & male & come & pay.dowry:PFV & 1SG.O & PFV & carry
\end{tabular}
(The woman:) "A man has paid my dowry."
\begin{tabular}{llccl} 
á & í & \({ }^{\downarrow}\) ní & ígbàn á \\
QUOT & LOG.SG & person & female & PRSTT
\end{tabular}
(That she says) that she is a woman.
\begin{tabular}{lll} 
tyíní & jág & hàkā, \\
pay.dowry:PFV & carry & like.that
\end{tabular}

Since he paid the dowry,
\begin{tabular}{lllll} 
nā & mā & ì & wúrí & kā \\
thing:REL & certain:REL & LOG.SG & want & \(?\)
\end{tabular}
what she wants is that
\begin{tabular}{llllllc} 
àwú & péntrí & kpó & kóm & mē & rə̄ & \({ }^{\text {º̄ }}\) kā, \\
3SG & exchange:PFV body & tie & give:LOG.SG & EMPH COND
\end{tabular}
that if she (the toad) exchanges her body with her (the woman) \({ }^{106}\)
\begin{tabular}{lllll} 
ǹtfè & ú & mē & r̄̄ & kā, \\
vagina & 3SG:POSS & give:LOG.SG & EMPH COND
\end{tabular}
if she (the toad) gives her (the woman) her vagina,
\begin{tabular}{lllllll} 
ì túsí & kpó & à & ká lóní & b \(\bar{\varepsilon}\) & kā; \\
LOG.SG & show:PFV & body & PFV & TEMP & day & PRSTT COND
\end{tabular}
if she (the woman) then shows her body on that day,
\begin{tabular}{lll} 
ní & dôg & \(b \bar{\varepsilon}, \quad\) tò \\
person & see:FUT & PRSTT so
\end{tabular}
then people will see it.
(941) ú péntrí jág mìn,

3SG exchange:PFV carry thus
So, she exchanges it (her sex), like this.

\footnotetext{
\({ }^{106}\) It is not clear what the verb kj́m 'to tie, to complete' does in this clause.
}
\begin{tabular}{lllllll} 
ǹtèkù & jéní & hn̂. & ǹtèkù & péntrí & á & mō \\
toad & refuse & NEG & toad & exchange:PFV & PFV & give:3SG
\end{tabular}

The toad does not refuse. The toad exchanges it (her sex) with her.
\begin{tabular}{llllllll} 
í & kpén, & í & túbí & óbày. & í & pír & óbày \\
3PL & hang.out:PFV & 3PL & start:PFV & beer & 3PL & brew & beer
\end{tabular}

They go, they start (preparing) the beer. They brew the beer. \({ }^{107}\)
\begin{tabular}{llllllllll} 
gbán & á & ḑī & ká & ¿ lóní & ywāb & ywāb & ŋwāb & ywāb & ywāb \\
arrive:PFV & PFV & FOC & TEMP day & all & all & all & all & all
\end{tabular}

Then everyone arrived on the day. \({ }^{108}\)
\begin{tabular}{lllll} 
í & túsí & kpô & djī & kā \\
3PL & show:PFV & body & FOC & COND
\end{tabular}

When everybody shows their body,
\begin{tabular}{lllll} 
jí & míná & ywāb & p \(\varepsilon\) & tùsí, \\
person & PRSTT all & come:PFV & show
\end{tabular}

Everyone comes to show it.
\begin{tabular}{lllll} 
ní & míná & ywāb & pé & tùsí, \\
person & PRSTT all & come:PFV & show
\end{tabular}

Everyone comes to show it.
\begin{tabular}{llllll} 
àní & míná & ywáb & \({ }^{\downarrow}\) lárín & kpá & ú, \\
person & PRSTT all & open:PFV & wrapper & 3SG:POSS
\end{tabular}

So, everyone opens their wrapper.


Everyone takes off their pants.

\footnotetext{
\({ }^{107}\) This is the only place where I found the verb pir 'to brew'.
\({ }^{108}\) I am not certain about the translation of this sentence.
}
\begin{tabular}{llllll} 
màmúwà gbán & á & dsī & îf & ò \\
turn? & arrive:PFV & PFV & TOP & child & DIST
\end{tabular}

When it is finally that child's turn (who is now a woman) \({ }^{109}\)
\begin{tabular}{llllllll} 
"jī & gán", ú & néní, & "jī & gán", & ú & néní \\
stand & up & 3SG & refuse:PFV & stand & up & 3SG & refuse:PFV \\
"Stand up!", but she refuses, "Stand up!", but she refuses.
\end{tabular}
\begin{tabular}{llll} 
àsūwā & ú & jí & gáy, \\
when & 3SG & stand:PFV & up,
\end{tabular}

When she stands up
\begin{tabular}{llll} 
ú & gbásí & kpá & míná kā, \\
3SG & loosen:PFV & wrapper & PRSTT ?
\end{tabular}
and when she loosens her wrapper,
(954) àwú ní ígbàn á

3SG person female PRSTT
(they see that) she is a woman.
\begin{tabular}{lllllll} 
í lápsí & lámê, í & tí & vèrí & hàkā, \\
they & sneak:PFV & hare & 3PL & hammer:PFV & kill & like.that
\end{tabular}

When they sneek up to the hare to kill him,
\begin{tabular}{llll} 
í & dín & ú & hǹ, \\
3PL & meet:PFV & 3SG & NEG
\end{tabular}
they do not find him.
(957)
\begin{tabular}{lllllllll} 
í & tí & vèrí & á & kā, í & dín & ú & hn̂ \\
3PL & hammer:PFV & kill & ? & COND & 3PL & meet:PFV & 3SG. & NEG
\end{tabular} When they (want to) kill him, they do not find him.

\footnotetext{
\({ }^{109}\) The analysis of this sentence is not entirely clear.
}
(960)
\begin{tabular}{lllc} 
àfú & ntèkù & dó & \({ }^{\star}\) jí. \\
pregnancy & toad & grow.old:PFV & stand
\end{tabular}

The toad's pregnancy is old. (i.e. 'it is ready to give birth')
\begin{tabular}{lllllllll} 
àlén & \(\bar{a}\) & n̄tèkù & rò & lóg & ó \(^{\downarrow}\) tì & jō & \(\bar{a}\) & \({ }^{\downarrow}\) kā \\
day & REL & toad & IPFV & give.birth & child & PL & REL & COND
\end{tabular}

On the day that the toad is giving birth to its children,
(964) ǹtèkù jí ívān á
toad person male PRSTT
the toad is a man.
(965)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline àdèr & ú & \({ }^{\downarrow}\) f ¢́b & f \({ }^{\prime}\) b & f \({ }^{\prime}\) b & f \({ }^{\prime}\) b & féb. \\
\hline belly & 3SG:POSS & swell:PFV & swell & swell & swell & swel \\
\hline
\end{tabular}

His belly swells and swells and swells.
(966) ǹtèkù végí
toad die:PFV
The toad dies.
(967) yáy á \({ }^{\text {jí }}\)
finish PFV stand
It is finished.

\section*{A fragment of oral tradition}

This fragment of oral history presents a scene where the Kam are raided by an alliance of Chamba and Fulani invaders. The story mentions a historical character, Burba dan Hamman (Buruba in the text). Burba was the Fulani chief of Bakundi \({ }^{110}\) in 1860 and the Emir of Muri \({ }^{111}\) from 1869 to 1873 (cf. Meek 1931b,c; Kirk-Greene 1958, 1972). Since the fragment begins in the middle of a scene, it needs some context to be understood.

The narrative is set in the time of Fulani jihads, where people are captured and forced to convert to Islam. In the narrative that came before, the Kam decide to hide their king so that he is safe from these raids. To keep the king safe, they build a platform covering a lake. With the help of their gods, they manage to make the water from the lake dry up, to set poles in the lake, and to create a platform. On this platform, they construct a compound for the king and his family. Once everything is finished, they pray to their deities to fill up the lake again. When the intruders arrive, they try to shoot the Kam with arrows, but these fail to hit their mark. Since the Kam are better marksmen and enjoy protection by their deities, their arrows do hit their targets. They manage to fend off the intruders without casualties of their own. Now, Burba's men go to a nearby village where they meet some people of the Chamba ethnic group. The invaders convince the Chamba to join them in their pursuit of the Kam. Together, they make a plan to dig into the main river that drains the lake. By making the river broader, they hope to empty the lake so that they can catch the Kam. At this point, the fragment begins.

I did not collect this text myself. Babangida Audu recorded it with his phone on June \(9^{\text {th }}\), 2017. The speaker is Isa Sarkin Dawa, the political king of Kam. The whole text is a thirty-minute compilation of various episodes from Kam traditional history (session_191). This is one fragment.

\footnotetext{
\({ }^{110}\) Bakundi is a district in Bali Local Government area. Around 1875, the Fulani of Bakundi gained power in Bali town, which had been independent Jukun territory until then (Meek 1931b: 507). The emir of Bali is still known today as the chief of Bakundi. For a while, the Kam speaking area fell within the Bakundi district, but today there is an independent Kam district, headed by Sarkin Dawa, the Kam political king.
\({ }^{111}\) Muri was an emirate in the \(19^{\text {th }}\) century spanning much of present-day Taraba State. Today, it is a town in northwestern Taraba.
}

Note that the construction of a "pile village" on a lake in defense of a Chamba invasion is also mentioned in discussions of the history of the Wurbo people, who speak a few different Jukunoid languages (Temple 1919: 364) \({ }^{112}\).
\begin{tabular}{lll} 
(968) dākā & ywé márê \\
from mouth river
\end{tabular}

From the mouth of the river
\begin{tabular}{llll} 
(969) & í & djí & jág \\
& 3PL & dig:PFV & carry
\end{tabular}
they (the Chamba/Fulani invaders) dug.
(970) dākā ŋjwé márê
from mouth river
From the mouth of the river ...
(971) dākā ŋुwé máré `ní ywòm
from mouth river person Kam
From the mouth of the river of the Kam people,
(972)
\begin{tabular}{lllll} 
bā & mā, & í & námrí & sīsīrā \\
PROX:REL & certain:REL, & 3PL & call:PFV & now
\end{tabular}
the one (river) that is now called
(973) íjí májó kàm à

QUOT Mayo Kam REL
Mayo Kam.
\begin{tabular}{llllll} 
í & djí & jág & dákā & kõ̃ & kā, \\
3PL & dig:PFV & carry & from & place:DIST & COND,
\end{tabular}

They dug from that place so that ...

\footnotetext{
\({ }^{112}\) These languages together form the Wurbo subgroup of Central Jukunoid (Hammarström et al. 2019). They are Como Karim [Glottocode: como1258], Jiru [Glottocode: jiru1238] and Shoo-Minda-Nye [Glottocode: shoo1247]. Documentation of these languages is currently limited to the lexical data presented in Shimizu (1980).
}
\begin{tabular}{llllll} 
rá & gbó & sáy & ywé & sòm & kā \\
because? stream & go & mouth & lake & COND
\end{tabular}

So that a stream would flow from the mouth of the lake. \({ }^{113}\)
\begin{tabular}{lllllll} 
àyá \({ }^{\downarrow}\) líb & sòm & ò & gèr & rò & ḑ̄̄r & sāy \\
because & lake & DIST & outside & IPFV & descendgo & COND
\end{tabular} So that (the water of) that lake would gush away.
\begin{tabular}{lllllll} 
sòm & ní & ywòm & nág & á & kàr & kā \\
lake & person & Kam & leave:PFV & PFV & have? & COND
\end{tabular}
(So that) the lake of the Kam people would empty \({ }^{114}\)
\begin{tabular}{lllrll} 
mā & í & ró & \({ }^{\downarrow}\) fúg & í & jàg \\
and & 3PL & IPFV & catch & 3PL & carry
\end{tabular}
and they (the invaders) would (be able to) catch them (the Kam),
\begin{tabular}{lllll} 
àlíb & kámtìrà & í & ò & wè \\
on & platform & 3PL:POSS & DIST & there
\end{tabular}
on their platform there.
\(\begin{array}{llllllll}\text { (980) } & \text { ìkā } & \text { í } & \text { jág } & \text { jí } & { }^{\downarrow} \text { djí } & \text { á } & \text { w } \bar{\varepsilon} \\ & \text { then } & 3 P L & \text { carry } & \text { thing } & \operatorname{dig} & \text { PFV } & \text { there }\end{array}\)
So, they dug,
(981)
\begin{tabular}{lllcll} 
í & jág & ní & \({ }^{\downarrow}\) djí & á & \(w \bar{\varepsilon}\), \\
3PL & carry & thing & \(\operatorname{dig}\) & PFV & there
\end{tabular}
and they dug,
\(\begin{array}{lllllll}\text { (982) í } & \text { jág } & \text { ní } & { }^{\downarrow} \text { djí } & \text { á } & w \bar{\varepsilon}, \\ & \text { 3PL } & \text { carry } & \text { thing } & \operatorname{dig} & \text { PFV } & \text { there }\end{array}\)
and they dug,

\footnotetext{
\({ }^{113}\) The translation of \(r\) 'a is uncertain, and the tense and aspect marking of this clause is unclear.
\({ }^{114}\) The function of kàr 'to have' in this sentence is unclear.
}
\begin{tabular}{lllllll} 
ikā & māmbá & sùm & gím & jí & á & kā \\
then & that.is.how:REL & lake & tear:PFV & stand & REL & COND
\end{tabular}

Then it happened that the lake tore,
\begin{tabular}{lllllll} 
mámbá, & í & jágí & lárí & sày & djór sày \\
that.is.how:REL, & \(3 P L\) & carry:PFV & open & go & descendgo
\end{tabular} and then it happened that they (the invaders) were carried down (by the water) \({ }^{115}\)
\begin{tabular}{llllll} 
ámínà & rò & jàg & kùb & sày & máré \\
that.is.why & IPFV & carry & weak & go & river
\end{tabular} and they were drowning.
\begin{tabular}{lllll} 
bā & mā & Jór bób & â, & Jór bôb \\
PROX:REL & some:REL & survive come.out & REL, & survive come.out
\end{tabular} Those who survived, survived.
\begin{tabular}{lllclll} 
bā & mā & Jór & hń & à, & tò & ... \\
PROX:REL & some:REL & survive NEG & REL, & so & ...
\end{tabular}

Those who did not survive, well ...
(990)
\begin{tabular}{llllll} 
tò, & zágá & kã́ & mā, & ní & ywòm \\
so, & side & place:REL & some:REL & person & Kam
\end{tabular}

So, from the side where the Kam ...

\footnotetext{
\({ }^{115}\) The analysis of this sentence is unclear.
}
í ḑór djí \(p \hat{\varepsilon}\), jí \({ }^{\text {ty fé }}\) djór:PFV \(p \hat{\varepsilon}\) 3PL descend:PFV dig come, person war descend come they came down, warriors came down.
\begin{tabular}{llll} 
í & sì & b̄\(\quad\) tórí & tyífūḡ̄ \\
3PL & SEQ & PRSTT fall:PFV & ?~catch:FV
\end{tabular}

Then they (the Kam) fell on them and caught them (the intruders).
\begin{tabular}{lllll} 
nā \(\quad\) mā & ijí & \({ }^{\downarrow}\) ywár & á & tàn, \\
thing:REL some:REL & 3PL & mix:PFV & PFV & stand
\end{tabular}

That is how they (our groups) are mixed,
á dôg
2SG.S.PFV see:PFV
you see,
(995) tāmbā dá lèb ní ywòm rá

Chamba be inside person Kam EMPH
there are Chamba within the Kam people.
(996)
\begin{tabular}{lllllll} 
ámīnā & sù tyāmbā & dá & lèb jí & ywòm rá \\
that.is.why & section Chamba & be & inside & person & Kam & EMPH
\end{tabular}

That is why a section of Chamba is inside of Kam.
(997) dòy íjí \({ }^{\text {t túgí jàg kó pínî }}\)
? 3PL catch carry INSTR slave
They caught them as slaves.
(998) zágí ní gbàn, í tyúg â
side person female, 3PL catch:PFV PFV
The women, they caught.
(999)
\begin{tabular}{lllllll} 
zágí & ní & vān & mā, & í & túg & á \\
side & person & male & also, & 3PL & catch:PFV & PFV
\end{tabular}

The men, they caught.



So, that is why he, the man with the iron shirt, went
\begin{tabular}{llllll} 
(1013) & né & kòsí & tàrì & jàg & kàr \\
& go & gather & stone & carry & keep
\end{tabular}
and gathered stones.
(1014) àtàr á dá b \(\bar{\varepsilon}\),
stone PRSTT be PRSTT
There are stones there,
\begin{tabular}{llllll} 
(1015) àmīnā & dù̀n & ijì & á ká & júrú \\
& that.is.why & sit & world & PRSTT ? & 1PL:POSS
\end{tabular}
now, it is our boundary area \({ }^{116}\)
(1016)
\begin{tabular}{lllllll} 
í & rá & kã̃ & mī & í & námr & á \\
3PL & COM & place:PROX & some & 3PL & call:PFV & PFV
\end{tabular}
with the place they call

\footnotetext{
\({ }^{116}\) The analysis of this clause is uncertain.
}
```

(1017)

| í | táwrítàb | á |
| :--- | :--- | :--- |
| QUOT | Tauri.Chab | PR | Tauri Chab.

(1018) ká bá tán à kó ${ }^{\downarrow}$ léb bìr à mà INSTR REL stand REL ? inside time REL some:REL Now, even in our time - recently
(1019) àjí jé á pè
3PL enter:PFV PFV come
they (some intruders) came into our land.
(1020) ijií vág júrú sirā kố b b
QUOT border 1PL:POSS be.NEGplace:DIST PRSTT
They said that our boundary is not there.
(1021) àmìnà
that.is.why
That is why

| (1022) ń | jág | tákàdà | bób | p $\varepsilon$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1SG.S.PFV | carry:PFV | document | come.out | come |

I brought out the document.
(1023) ḿ mórò tár kóm jàg
1SG.S.PFV return collect:PFV tie carry
I collected it again, tied it and carried it,
(1024) mē kã̃ àtàr à
give.3PL place:PROX stone PROX
and showed them the place of these stones.

```
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline (1025) & \begin{tabular}{l}
kō \\
place:DIST
\end{tabular} & \multicolumn{7}{|l|}{\[
\begin{aligned}
& \text { kã } \\
& \text { place:PROX (?) }
\end{aligned}
\]} \\
\hline & \multicolumn{8}{|l|}{This place. \({ }^{117}\)} \\
\hline \multirow[t]{3}{*}{(1026)} & í bén & ká & & & & & & \\
\hline & 3PL say & ? & & & & & & \\
\hline & \multicolumn{8}{|l|}{They said that} \\
\hline \multirow[t]{2}{*}{(1027)} & \multicolumn{8}{|l|}{\multirow[t]{2}{*}{ní jwòm, person Kam the Kam people ...}} \\
\hline & & & & & & & & \\
\hline \multirow[t]{3}{*}{(1028)} & jùrù ní & ywòm & & & & & & \\
\hline & 1PL person & Kam & & gathe & PFV & keep & NEG & \\
\hline & \multicolumn{8}{|l|}{We, the Kam people, did not gather and keep the stones.} \\
\hline \multirow[t]{3}{*}{(1029)} & \[
\text { nì } \quad \bar{a}
\] & & & & & & mīnā kósí & \\
\hline & person REL & 1PL & do:PF & war & & REL & which gather & keep \\
\hline & \multicolumn{8}{|l|}{It's the people that we were fighting who gathered them.} \\
\hline \multirow[t]{2}{*}{(1030)} & \multicolumn{8}{|l|}{sábòdà hákà,} \\
\hline & \multicolumn{8}{|l|}{Because of this (the document?) \({ }^{118}\),} \\
\hline \multirow[t]{3}{*}{(1031)} & káùjè dàbà & & rá & & \multicolumn{2}{|l|}{¢sín} & rò & hǹ \\
\hline & village differen & & NEG & & & G.FUT & NEG.FUT & NEG \\
\hline & a different village & (to set & he bou & & & & & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{117}\) This use of two nouns phrases with seemingly incompatible meanings is puzzling.
\({ }^{118}\) This is Hausa.
\({ }^{119}\) káuijè dàbà is Hausa, with some slight differences. In Standard Hausa, it would be written kauye dabam. I want to thank Lora Litvinova for helping me understand this phrase.
}


\footnotetext{
\({ }^{120}\) Literally: "With now, I collected it."
\({ }^{121}\) This sentence is incomplete.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(1040)} & tò, í & sí & \({ }^{\text {jí }}\) & & ó & ḑıi & jī \\
\hline & so 3P & 3PL SEQ & arrive & PFV & ? & dig & stand \\
\hline & \multicolumn{7}{|l|}{So, they then arrived, dug and stayed} \\
\hline \multirow[t]{3}{*}{(1041)} & b & bór & á & \(\mathrm{p} \grave{\varepsilon}\), & à & zág & ówù \\
\hline & 3PL d & descend:PFV & PFV & come, & LOC & side & north \\
\hline & \multicolumn{7}{|l|}{They descended toward the north side.} \\
\hline \multirow[t]{3}{*}{(1042)} & àmìnà & í & pá & \({ }^{\downarrow}\) ḑón & á & p \(\grave{\text { c }}\) & \\
\hline & that.is.why & y 3PL & come & sit & PFV & come & \\
\hline & \multicolumn{7}{|l|}{That is why they settled here,} \\
\hline \multirow[t]{3}{*}{(1043)} & à \(\quad\) a & kã̃ & mā & & & & \\
\hline & LOC p & place:REL & some: & EL & & & \\
\hline & \multicolumn{7}{|l|}{at the place} \\
\hline \multirow[t]{3}{*}{(1044)} & í n & námrí & sīsīrā & á & \multicolumn{3}{|l|}{méhùlá} \\
\hline & 3PL c & call:PFV & now & QUOT & Maih & & \\
\hline & they now c & call Maihula. & & & & & \\
\hline
\end{tabular}

\section*{A song}

I recorded this song with Bèbí in Garin Hamza, in the room of Hamza, the village head, during a short visit there on May \(22^{\text {nd }}\) (session_156).

The song laments that the traditional and ritual places of Kam are no longer as well protected as they used to be. It makes reference to a former political king selling pieces of Kam land to people of other groups (sárkín dáwà jág jì à dèbì "Sarkin Dawa has sold the world."). My consultants mentioned that at some point a piece broke off the Kamajim mountain, and in this song, they connect this natural event with the sale of traditional land.


Figure 22 - Session in Garin Hamza with Bèbí


\section*{Kam-English lexicon}

A a
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline a & Interjection & yes & positive response word & This marker does not have a fixed tone. o:j is the preferred positive response word. \\
\hline á & Pronoun & 2SG.O; you & second person singular object index & \\
\hline á & Pronoun & 2SG.S; you & second person singular subject index, used in future tense and perfective aspect constructions & \\
\hline à & Pronoun & \begin{tabular}{l}
2SG.S.IPFV; \\
you
\end{tabular} & second person singular subject pronominal, used in imperfective constructions & \\
\hline à & Derivational affix & NMLZ & a synchronically unproductive nominalizing prefix that derives patientive and agentive nouns from verbs & \\
\hline à & Particle & PFV & perfective aspect marker & This marker follows the object if one is present. The marker is optional. \\
\hline à & Particle & PROX; this & proximal demonstrative marker & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline à á & Interjection & EXCL; aha & an expression of surprise, disbelief, or endorsement of a previous statement & \\
\hline àbág & Noun & knife & & \\
\hline àbà & Noun & alcohol; beer; wine & & \\
\hline àbśb & Noun & hunger & & \\
\hline àbòg & Noun & foot; leg & & \\
\hline àbı̀g & Noun & time & & Used when counting the number of times something happened (e.g. àbòg jīrāg 'two times, twice') \\
\hline àbśmrî & Noun & length & & cf. bóm 'to be long' \\
\hline àbóy & Noun & breath; life & & \\
\hline àbóyó & Noun & breath; life & & \\
\hline áb̄̄rı̄ & Adjective & big & & cf. bòr 'to go up, to mount' \\
\hline àbàràg & Noun & leaf & & \\
\hline àbárég & Noun & bag, sp. & a bag where harvested crops are stored & \\
\hline àbźrég & Noun & locust bean tree & & \\
\hline àbə̀règ & Noun & antelope, sp. & red-flanked duiker & \\
\hline àbórí & Noun & grave & & \\
\hline ábētfā & Adjective & blue & & \\
\hline àbég & Noun & termite hill, sp. & a small type of termite hill, made "as if there is a cap on it" & \\
\hline àbèg & Noun & jealousy & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àbćlî & Noun & belch & & \\
\hline àbén & Noun & talk & & cf. bén 'to speak, to tell, to, say, to talk' \\
\hline àbén ndérí & Proper Noun & place name & a place name, referring to a village commonly known as Abanderi. & The name literally translates to 'curse' or 'idiotic talk'. \\
\hline àbén tyê & Noun & lie & & cf. àbén 'talk' and yeje 'to lie' \\
\hline àbēpí & Noun & traditional king & & Literally 'the owner of people' (?). \\
\hline àbèr & Noun & egg & & \\
\hline àbèr à \({ }^{\text {a gwóg }}\) & Noun & host; householder & & cf. àngwóg 'house' \\
\hline àbì & Adposition & down & & cf. àbì 'soil' \\
\hline àbì & Noun & soil & & cf. àbìbí 'soil' \\
\hline àbì & Noun & song & & \\
\hline àbìbí & Noun & down & & cf. àbìbí 'soil' \\
\hline àbìbí & Noun & soil & & cf. àbì 'soil' \\
\hline àbìm & Noun & steam & & \\
\hline àbìtfè & Noun & tree, sp. & an unidentified tree that looks similar to the kiriya tree or iron wood tree & \\
\hline àbỗ & Noun & day after tomorrow & & \\
\hline ábōgō & Adjective & dark & & cf. ábōgō 'night', ábōgōrí 'night' \\
\hline ábōgō & Noun & night & night time, when it is dark, roughly from 7 p.m. to 5 a.m. & cf. ábōgō 'dark', ábōgōrī 'night' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ábōgōrī & Adjective & black & & cf. ábōgō 'night, dark' \\
\hline àbù & Noun & mahogany tree & & \\
\hline àbùn & Noun & arrow & & \\
\hline àbúnrî & Noun & crossing & a crossing over a road, or over a river & cf. būnī 'to cross, to be across' \\
\hline àbúr & Noun & cloud & & cf. būr 'to become white' \\
\hline ábūrī & Adjective & white & & cf. būr 'to become white' \\
\hline àbúrú & Adverb & day after tomorrow & & \\
\hline àbúrú & Noun & tree, sp. & a very common tree with black fruit that looks like a bambara nut & \\
\hline ádā & Adjective & cold & & cf. dág 'to be cold' \\
\hline ádā & Adjective & well & & cf. ádā 'cold' \\
\hline àdágrî & Noun & coldness & & cf. dág 'to be cold' \\
\hline àdágrî & Noun & wetness & & cf. dág 'to be cold' \\
\hline àdàm & Noun & menstruation & & \\
\hline àdóm & Noun & beard & & \\
\hline ádōmrì & Adjective & red & & cf. dìndòm 'red' \\
\hline àdı̀ & Noun & south & & \\
\hline àdèbòg & Noun & sole of foot & & cf. àdèr 'outside of the belly', àbòg 'leg, foot' \\
\hline àdég & Noun & disease & & \\
\hline àdég & Noun & pain & & \\
\hline àdég \({ }^{\downarrow}{ }^{\text {fễ }}\) & Noun & cancer & & cf. àdég 'disease' \\
\hline àdègà & Noun & sky & & cf. àdèr 'outside of the belly', àgày 'up(side)' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àdégrî & Noun & pain & & cf. àdég 'pain' \\
\hline àdèjé & Noun & palm of hand & & cf. àdèr 'outside of the belly', àné 'hand, arm' \\
\hline àdèr & Noun & outside of belly & & \\
\hline àdérı̂ & Noun & snore & & cf. dērī 'to snore' \\
\hline àdíkźrí & Noun & sweat & & cf. àduíkórí 'armpit' \\
\hline àdìm & Noun & deep water & & cf. lìm 'dive' \\
\hline àdú & Noun & angle & & \\
\hline àḑár & Noun & gate, backdoor & & \\
\hline àḑàr & Noun & fishing net & & \\
\hline àḑòg & Noun & driver ant, sp. & a type of army ant that makes temporary anthills with big colonies & cf. àḑ̇̀gbórí 'driver ant, sp.' \\
\hline àḑ̇̀gbźrí & Noun & driver ant, sp. & red ant & cf. àdù̀g 'driver ant, sp.' \\
\hline àḑóy & Noun & saliva & & \\
\hline àḑór & Noun & pinch & & \\
\hline àḑé & Noun & trousers & & \\
\hline àdjè & Noun & month, moon & & \\
\hline àdsế & Noun & shea tree & shea tree & \\
\hline àḑế làsírá & Noun & coconut tree & & cf. àḑế 'shea tree' \\
\hline àdsí fō & Noun & cassava & & cf. àḑú 'yam', áfō 'dry' \\
\hline àḑíkórí & Noun & armpit & & cf. àdíkórí 'sweat' \\
\hline àdsínrî & Noun & \begin{tabular}{l}
fool, \\
foolishness
\end{tabular} & & cf. djíy 'to be foolish' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àḑıır̀̀̀ı̀ & Noun & epilepsy & & \begin{tabular}{l}
cf. àḑìròkì 'ground-beetle, \\
sp.'; probably related to this meaning: a beetle, when turned upside down shakes his legs in the air like someone with epilepsy
\end{tabular} \\
\hline àḑırı̀̀̀ı̀ & Noun & \begin{tabular}{l}
ground-beetle \\
sp .
\end{tabular} & a type of saber-toothed ground beetle that can spray acid to defend itself & \\
\hline àdsú & Noun & yam & & \\
\hline àḑwã & Noun & cheek & & \\
\hline àduwã̃ ŋwé & Noun & lip & & cf. àdswā̃ 'cheek', ŋwé 'mouth' \\
\hline àḑwàn & Noun & \begin{tabular}{l}
short, \\
poisonous \\
snake
\end{tabular} & a type of short, poisonous snake & \\
\hline àfàm & Noun & animal & & cf. àfàm 'meat'; generally refers to mammals and not to insects, fish, birds and reptiles \\
\hline àfàm & Noun & meat & & cf. àfàm 'animal'; food from an animal \\
\hline àfàm ò ògwóg & Noun & \begin{tabular}{l}
farm animal, \\
domestic \\
animal
\end{tabular} & & cf. àfàm 'animal', àngwóg 'house' \\
\hline àràm ̀̀jế & Noun & bush animal, wild animal & & cf. àfàm 'animal', àjế 'bush' \\
\hline àfár & Noun & sugar & & \\
\hline àfàr & Noun & lung & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àfárámkpằ & Noun & sugar cane & & cf. àfár 'sugar'; tone is uncertain. \\
\hline àfí & Noun & mat & & \\
\hline àfíb & Noun & calf & & \\
\hline àfíb \({ }^{\text {ábòg }}\) & Noun & calf & & cf. àfíb 'calf' \\
\hline àfijjè & Noun & water fetching place & a water fetching place, such as a river or a lake & \\
\hline àfír & Noun & foam & & \\
\hline àfír & Noun & needle & & \\
\hline áfō & Adjective & dry & & cf. fóg 'to be dry' \\
\hline àfú & Noun & shirt & & \\
\hline àfù & Noun & pregnancy & & cf. àfù 'womb' \\
\hline àfù & Noun & womb & & cf. àfù 'pregnancy' \\
\hline àgág & Noun & branch & & cf. gág 'to hang' \\
\hline àgàm ̀̀bòg & Noun & ankle & & cf. àbòg 'leg' \\
\hline àgàm líp tyí rà jé & Noun & knuckle & & cf. àlíp tyí rò né 'finger' \\
\hline àgà & Noun & dry season & & \\
\hline àgà & Adposition & up & & \\
\hline àgà & Noun & upside & & \\
\hline àgàtìnà & Noun & hat & & \\
\hline àgàw & Adposition & beside & & Tone is uncertain. \\
\hline àgàw & Noun & ribs, side & & Tone is uncertain. \\
\hline àgbág & Noun & stool & & \\
\hline àgbām & Noun & fig tree & & \\
\hline ágbàn & Adjective & female & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àgbàn & Noun & wife & & \\
\hline àgbàn ókwòg & Noun & first wife & & cf. ákòg 'biggest one, dominant one' \\
\hline àgbàn óntfwẽ̃ & Noun & co-wife & & cf. ffwẽ̃ 'newborn child' \\
\hline àgbānē & Noun & plant sp. & a type of crinum, a plant with a leafless stem that develops from bulbs & This plant is used for medicinal purposes. Its name in Hausa is gadeli. Tone is uncertain. \\
\hline àgbáy & Noun & chin & & \\
\hline àgbáy & Noun & palace & & \\
\hline àgbáy ŋ̧wé & Noun & jaw & & cf. àgbáy 'chin' \\
\hline àgbáyásù & Noun & market & & cf. àgbáyásùb 'market' \\
\hline àgbáyásùb & Noun & market & & cf. àgbáyásù 'market' \\
\hline àgbàràg & Noun & francolin & clapperton's francolin, double-spurred francolin & \\
\hline àgbér & Noun & neck & & \\
\hline àgbér á \({ }^{\downarrow} \mathrm{j}\) né & Noun & wrist & & cf. àgbér 'neck', àné 'arm, hand' \\
\hline àgゝ̀b & Noun & plant sp. & a type of crinum, a plant with a leafless stem that develops from bulbs & This plant is used for medicinal purposes. Its name in Hausa is gadeli. \\
\hline àgゝ̀m & Noun & forehead & & \\
\hline àgòrù & Noun & heron & & \\
\hline àgèr & Noun & outside & & \\
\hline àgíníy & Noun & buttocks & & cf. gínéné 'round' \\
\hline àgùm & Noun & hole & a pit, hole (in the ground) & \\
\hline àgùm àmə̀rēg & Noun & nostril & & cf. àgùm 'hole', àmə̀rēg 'nose' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àgùm ə̀jîb & Noun & toilet & & cf. àgùm 'hole', à \({ }^{\text {a }}\) ib 'shit' \\
\hline àgùm fẫ & Noun & flood plain hole & a hole that is dug in a flood plain in order to get fresh water & \\
\hline àgún & Adverb & backwards & & cf. àgún 'behind' \\
\hline àgún & Noun & behind & & \\
\hline àgúy ábòg & Noun & heel & & cf. àgún 'behind', àbòg 'leg, foot' \\
\hline àgùrì & Noun & vomit & & cf. gùrì 'vomit' \\
\hline àjárî & Noun & width & & cf. jár 'to be wide' \\
\hline àjáwkánî & Proper Noun & person name & & \\
\hline àjé & Noun & cry, shout & & \\
\hline àjè & Noun & gut & & \\
\hline àjè & Noun & intestines & & \\
\hline àjé kà & Noun & shout & & cf. àjé 'cry, shout', ká 'to shout' \\
\hline àjé tfò & Noun & cry & & cf. àjé 'cry, shout'. Tone is uncertain. \\
\hline àjén & Noun & wound & & \\
\hline àjí & Pronoun & 3PL.S; they & third person plural subject pronominal & \\
\hline àjì & Noun & era, generation & & \\
\hline àjì & Noun & world & & \\
\hline àjírí & Noun & draw soup ingredient & soup ingredient for draw soup, a type of traditional soup & \\
\hline àkàptì & Noun & morning & time of the day from 6 to 10 a.m. & cf. àkáptílíbílíbì \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àkáptílíbílíbì & Noun & dawn, early morning & time of the day from 4 to 6 a.m. & cf. àkàptì 'morning' \\
\hline àkár & Noun & snake, sp. & & \\
\hline àkàr & Noun & ear & & \\
\hline ákòg & Adjective & biggest one, oldest one, dominant one & & Used with peoples (e.g. the oldest of two wives) or 'higher' mammals (e.g. the leader of a band of gorillas). \\
\hline àkóg & Noun & mushroom & & \\
\hline àkj̀k swồ & Noun & large ape & a type of large ape, used for a variety of species, e.g. gorillas and chimpanzees & cf. ákòg 'biggest one, oldest one, dominant one', swồ 'baboon' \\
\hline àkómlâ & Proper Noun & Mumuye & & \\
\hline àkźrág & Noun & fence & & \\
\hline àkòràg & Noun & soldier termite & & \\
\hline àkèrè & Noun & pumpkin & & \\
\hline àkìmpá & Noun & official, sp. & & \\
\hline àkpág & Noun & bottom & & \\
\hline àkpág ŋ̣wé bî & Noun & bottom of mouth & & cf. àkpág 'bottom', ŋwé 'mouth' \\
\hline \begin{tabular}{l}
àkpág ŋwé \\
gà
\end{tabular} & Noun & palate & & cf. àkpág ŋwwé 'palate', àgàn 'upside' \\
\hline àkpàkán & Proper Noun & person name & & cf. àkpàkánì \\
\hline àkpàkánì & Proper Noun & person name & & cf. àkpàkán \\
\hline àkpóré & Noun & cough & & cf. kpārī 'to cough' \\
\hline àkpèb & Noun & shoulder & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àkpèb à àé & Noun & shoulder & & cf. àkpèb 'shoulder', àné 'arm, hand' \\
\hline àkp ćtí & Noun & tiredness & & cf. kpètí 'to become tired' \\
\hline àkpímkpáyá & Noun & force, strength & & cf. kpìmkpáyī 'strong, hard' \\
\hline àkpò & Noun & tuwo & & \\
\hline àkpố bî̃ & Cardinal numeral & twenty & & cf. bī 'one' \\
\hline \[
\begin{aligned}
& \text { àkpố bí }{ }^{\text {trá }} \\
& \text { gún bō }
\end{aligned}
\] & Cardinal numeral & thirty & & cf. àkpố bî̃ 'twenty', bō 'ten' \\
\hline àkpố bó & Cardinal numeral & two hundred & & cf. àkpố bî̃ 'twenty', bō 'ten' \\
\hline \begin{tabular}{l}
àkpố bó rà \\
kpējmī
\end{tabular} & Cardinal numeral & two hundred and twenty & & cf. àkpố bĩ 'twenty', kpējmī 'twenty' \\
\hline \begin{tabular}{l}
àkpố bó rà \\
kpājmī gún \\
bó
\end{tabular} & Cardinal numeral & two hundred and thirty & & cf. àkpố bĩ 'twenty', kpējmī 'twenty', bō 'ten' \\
\hline àkpố duúb & Cardinal numeral & one hundred and twenty & & cf. àkpố bî̃ 'twenty', đ̧ùb 'six' \\
\hline àkpố jíràg & Cardinal numeral & forty & & cf. àkpố bî̀ 'twenty', jīrāg 'two' \\
\hline \begin{tabular}{l}
àkpố jírāg rā \\
gún bō
\end{tabular} & Cardinal numeral & fifty & & cf. àkpố jíràg 'forty', bō 'ten' \\
\hline àkpố kpźjmī & Cardinal numeral & four hundred & & cf. àkpố bĩ 'twenty', kpējmī 'twenty' \\
\hline àkpố nâr & Cardinal numeral & eighty & & cf. àkpố bî̃ 'twenty', ìnár 'four' \\
\hline \begin{tabular}{l}
àkpố nár \({ }^{\downarrow}\) rá \\
gún bō
\end{tabular} & Cardinal numeral & ninety & & cf. àkpố nâr 'eighty', bō 'ten' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àkpố y wún & Cardinal numeral & hundred & & cf. àkpố bĩ̃ 'twenty', ŋ̀wún 'five' \\
\hline àkpố ţár & Cardinal numeral & sixty & & cf. àkpố bĩ̃ 'twenty', tàr 'three' \\
\hline àkpố tár rā gún bō & Cardinal numeral & seventy & & cf. àkpố tfár 'sixty', bō 'ten' \\
\hline àkprà & Noun & plate & & \\
\hline ákú & Proper Noun & cult, sp. & & cf. kú 'magic, sp., deity, cobra' \\
\hline àkùb & Noun & bone, skeleton & & \\
\hline àkùb ə̀bòg & Noun & shin & & cf. àkùb 'bone, skeleton', àbòg 'leg, foot' \\
\hline àkùb gwằj & Noun & chestbone & & cf. àkùb 'bone, skeleton', gwằj 'chest' \\
\hline àkùb lántí gwà̀j & Noun & breastbone & & cf. àkùb 'bone, skeleton', lántí 'joint' gwà̀j 'chest' \\
\hline àkùb ŋ̀kù̀m & Noun & spine & & cf. àkùb 'bone, skeleton', j̀kùm 'back' \\
\hline àkùp tábé & Noun & fishbone & & cf. àkùb 'bone, skeleton', àtábé 'fish' \\
\hline àkúptí & Noun & laziness & & cf. kùb 'to become weak' \\
\hline àkúptí & Noun & lazy person & & cf. kùb 'to become weak' \\
\hline àkùr & Noun & tortoise, turtle & & \\
\hline àkúrî & Noun & smell & & cf. kúr 'to stink' \\
\hline àkúrú & Noun & noon & & \\
\hline àkwān & Noun & bean & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline \(\mathbf{a ́ c}^{\mathbf{L}}\) - & Derivational affix & NMLZ & a prefix that turns verbs into adnominal adjectives & This prefix is part of a larger construction that also involves a toneless suffix -i in case the verb has a CVC shape, and replacive M tone on the verb root. \\
\hline àlàmî:s & Noun & Thursday & & Borrowed from Hausa (alhamis); originally from Arabic yoom al-khamiis 'Thursday’, literally 'day the fifth (starting from Sunday) \({ }^{\prime}\) \\
\hline àlámíné & Noun & tongue & & \\
\hline àlání & Noun & spider & & \\
\hline àlà & Noun & pot & any type of pot, e.g. for cooking or for carrying water & cf. láy 'to cook' \\
\hline àlày ̀̀ \({ }^{\text {bì }}\) & Noun & bowl & & cf. àlày 'pot', cf. àbì 'soil, down' \\
\hline àlà \(\mathfrak{y}\) ə́dā & Noun & fridge & & cf. àlày 'pot', ádā 'cold' \\
\hline àlày pjắw & Noun & heavy container & a container that is used as a basin to keep water & cf. àlàn 'pot', pjắw 'subvillage inside Sarkin Dawa' \\
\hline àlàsíné & Noun & sand & a type of sand found by the riverside & cf. àlàfíné 'sand' \\
\hline àlà \({ }^{\text {ciné }}\) & Noun & sand & a type of sand found by the riverside & cf. àlàsíné 'sand' \\
\hline àlàsírá & Noun & moringa tree & & cf. àlàsírá 'white person' \\
\hline àlàsírá & Noun & white person & & cf. àlàsírá 'moringa tree' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àlàwàn & Noun & west & & \\
\hline àlóg & Noun & maternal relative & & cf. lóg 'to deliver a child' \\
\hline àl̀̀g & Noun & bamboo bed & & \\
\hline àlógórî & Noun & birth & & cf. lóg 'to deliver a child' \\
\hline àlógórî & Noun & end & & cf. lògòrí 'to finish, to end' \\
\hline àlógórî & Noun & last, final one & the last one in a sequence & cf. lògòrí 'to finish, to end' \\
\hline àlógórî & Noun & root (of plant) & the root of a plant & cf. lògòrí 'to finish, to end'. The root of a plant is the 'final' part when looked from the perspective 'above ground'. \\
\hline àlè & Noun & fire, light, electricity & & \\
\hline àlè̀ & Noun & cave & & \\
\hline àlè̀ & Noun & gun & & cf. àlè 'fire' \\
\hline àlè Ə́fã & Noun & light bulb & & cf. àlè 'fire, light, electricity', áafā 'fresh, unripe' \\
\hline àlćb & Noun & late afternoon, evening & time of the day from 4 p.m. to 7 p.m. & cf. àlèb 'inside', àlilı́b 'middle', àléy ólદ̀b 'afternoon' \\
\hline àlc̀b & Adposition & in & & \\
\hline àlèb & Noun & inside & & \\
\hline àlc̀b ə̀dèr & Noun & inside of the belly & & cf. àlèb 'inside', àdèr 'outside of the belly' \\
\hline àlćbrî & Noun & fruit & & cf. àlèb 'inside', bèr 'tree' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àlémrî & Noun & beauty, goodness, correctness & & cf. lèm 'good, beautiful, correct' \\
\hline àlég & Noun & deity, sp. & & cf. àléy 'sun'. This word is dispreferred by some speakers, who prefer the word kùrìkî for 'God'. \\
\hline àlén & Noun & sun & & \\
\hline àlćg dág â & Noun & late afternoon, evening & time of the day from 4 p.m. to 7 p.m. & Literlaly 'the sun has cooled off'. cf. àléy 'sun', dág 'to become cold', à 'PFV' \\
\hline àlég ólćb & Noun & late afternoon, evening & time of the day from 4 p.m. to 7 p.m. & cf. àlćy 'sun', àlદ́b 'evening', àlèb 'inside', àlilćb 'middle' \\
\hline àlég kúrú & Noun & noon & time of the day from 11 a.m. to 3 p.m. & cf. àlćy 'sun', àkúrú 'noon' \\
\hline àlèsèr & Noun & room & & cf. àlèb 'inside', sèr 'room' \\
\hline àlíb & Noun & head & & \\
\hline àlíb & Adposition & on & & \\
\hline àlíbórí & Noun & grave & & \\
\hline àliè̀ & Noun & armband & & This word used to refer only to an armband that was traditionally given when a man wanted to marry a woman. Now, it refers to any kind of armband. Tone is uncertain. \\
\hline àlīlē & Noun & yesterday & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & Definition & \\
\hline àlìľ́b & Adposition & \begin{tabular}{l} 
in between, in \\
the middle of
\end{tabular} & & cf. àliléb 'middle'
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline àlūk̄̄m & Noun & road & & \begin{tabular}{l} 
cf. àlūk̄̄m 'through'. Tone \\
is uncertain.
\end{tabular} \\
\hline àlūk̄̄m & Adposition & through & vein & cf. àlūk̄̄m 'road'. Tone is \\
uncertain.
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àná & Noun & father & & \\
\hline ànā & Noun & day & & \\
\hline ànā & Adverb & today & & \\
\hline àná áb̄̄rī & Noun & elder brother of father & & cf. àná 'father, ábэ̄rī 'big' \\
\hline àná ántē & Noun & \begin{tabular}{l}
younger brother \\
of father
\end{tabular} & & cf. àná 'father, ántē 'small' \\
\hline ànà bòrì & Noun & older sibling & & \begin{tabular}{l}
cf. àní 'person', ábōrī 'big'. \\
Tone is uncertain.
\end{tabular} \\
\hline àjà mə̀r \(\bar{\varepsilon} \mathrm{g}\) & Noun & left hand & & cf. àní 'hand, arm', àmə̄rēg 'nose'. Literally 'nose hand', the hand used for blowing one's nose, as opposed to the right hand, which is used for eating. \\
\hline ànâ mkpı̂̀ & Noun & male agama lizard & male agama agama & cf. àná 'father', m̀kpø̄y 'agama lizard' \\
\hline àjà nīmī & Noun & right hand & & cf. ànà 'hand, arm', nìm 'to eat'. Literally 'eating hand', the hand used for eating. \\
\hline àná swỗ & Noun & older male large ape & the largest or oldest male ape in a troop & cf. àná 'father', swờ 'baboon'. Used for different species. \\
\hline àjág & Noun & work & & \\
\hline àjàgbàn & Noun & woman & & cf. àní 'person', ágbàn 'female' \\
\hline ànám & Noun & flour & & cf. nàm 'to grind' \\
\hline \begin{tabular}{l}
ànám \\
ýkànsīrān
\end{tabular} & Noun & \begin{tabular}{l}
grinded \\
charcoal
\end{tabular} & & cf. ànám 'flour', ŋ̀kà̀sī̄rāy 'charcoal' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àjná \({ }^{\text {líb }}\) & Connective & because & & Tone is uncertain. \\
\hline àjé & Noun & arm, hand & & \\
\hline àní & Noun & person, people & & \\
\hline àní & Noun & owner & & \\
\hline àní sét tùr & Noun & blacksmith & & cf. àní 'person', sèt tùr 'forge' \\
\hline àjlì vān & Noun & man & & cf. àní 'person', ávān 'male' \\
\hline ántē & Adjective & small & & cf. ffwē 'newborn child, newborn animal' \\
\hline ánt \(\bar{\varepsilon} \mathrm{r}\) ī & Noun & truth & & \\
\hline ántwàb & Adjective & small, young & & \\
\hline ànùg & Noun & eye & & \\
\hline ànùg ə̀bòg & Noun & front of heel & & cf. ànùg 'eye', àbòg 'leg, foot' \\
\hline ànùg ádşibī & Noun & faintness, dizziness & & cf. ànùy 'eye', djìb 'to turn' \\
\hline ànùg ə̀ \({ }^{\text {né }}\) & Noun & wrist & & cf. ànùy 'eye', àné 'arm, hand' \\
\hline ànù \({ }^{\text {djuál }}\) & Proper Noun & person name & & \\
\hline à \({ }^{\text {ámtí }}\) & Noun & yawn & & cf. yàmtí 'to yawn' \\
\hline àygwóg & Noun & house & & \\
\hline àygwóg áb̄̄rī & Noun & city & large town, city & cf. àngwóg 'house', ábэ̄rī 'big' \\
\hline àygwóg à \({ }^{\dagger}\) kórág & Proper Noun & Garin Zana & Kam village, called Garin Zana in Hausa & cf. àngwóg 'house', àkə́rág 'fence' \\
\hline \[
\begin{aligned}
& \text { àngwóg } \\
& \text { góp }{ }^{\downarrow} \text { tí }
\end{aligned}
\] & Proper Noun & Gunduma B & Kam village, called Gunduma B in Hausa & cf. àngwóg 'house' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline \begin{tabular}{l}
àngwóg \\
kádìrì
\end{tabular} & Proper Noun & Garin Kadiri & Kam village, called Garin Kadiri in Hausa & cf. àngwóg 'house' \\
\hline \begin{tabular}{l}
àngwóg \\
Jíg \({ }^{\downarrow}\) gáw
\end{tabular} & Proper Noun & Garin Shingaw & Kam village, called Garin Shingaw in Hausa & cf. àngwóg 'house' \\
\hline àjwà & Noun & friend & & \\
\hline  & Noun & neighbor & & cf. àywà 'friend', àngwóg 'house' \\
\hline à̀wán & Noun & in-law & & \\
\hline àywár & Noun & thirst & & \\
\hline ànwòm & Noun & Kam & & \\
\hline áywī & Adjective & new & & cf. àywī 'story' \\
\hline ànwí & Noun & village & & \\
\hline à̀ \(\mathbf{w i ̄}\) & Noun & story & & cf. áywī 'new' \\
\hline à \({ }^{\text {wí bóg }}\) & Proper Noun & Kamajim 1 & \begin{tabular}{l}
Kam village, called \\
Kamajim 1 in Hausa
\end{tabular} & cf. àywí 'village', bog 'to prepare alcohol' (tone uncertain) \\
\hline à̀wwí bún \({ }^{\dagger}\) tí & Proper Noun & Garin Lah & Kam village, called Garin Lah in Hausa & cf. ànwí 'village', bùntí 'to drive, to ride (a horse)' \\
\hline ànwí fénsìg & Proper Noun & Kamajim 3 & Kam village, called Kamajim 3 in Hausa & cf. à \(\mathrm{m}_{\mathrm{w}}\) ' 'village', ǹsòg 'salt' \\
\hline  & Proper Noun & Kamajim 2 & Kam village, called Kamajim 2 in Hausa & cf. àywí 'village', àlilḱb 'middle' \\
\hline à̀wí né & Proper Noun & Garin Tukura & & cf. ànwí 'village'. Tone is uncertain. \\
\hline àpírájî & Noun & cloth, blanket, clothing, handkerchief & any piece of cloth or clothing & \\
\hline ápú & Noun & bag & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ápú dèr & Noun & stomach & & cf. ápú 'bag', àdèr 'outside of belly' \\
\hline àrí & Adposition & like & similative preposition & \\
\hline àrí bá & Adverb & like this & & cf. àrí 'like', bā 'this one' \\
\hline áfã̃ & Adjective & unripe & & \\
\hline à \(\int\) à & Noun & floodplain, swamp & & In Nigerian English it is called a 'fadama area'. The term refers to an area that is fit for agriculture and can be irrigated. It usually refers to low-level plains close to water sources. \\
\hline àsábâr & Noun & Saturday & & Borrowed from Hausa (Asabar), originally from Arabic yoom as-sabat 'Saturday', literally 'day the seventh (starting from Sunday). \\
\hline àsàbé & Proper Noun & female name & & \\
\hline àság & Noun & year & & \\
\hline à \(\mathrm{àg}\) & Noun & tooth & & \\
\hline àjàg àdú & Noun & last teeth & & cf. àjàg 'tooth', àdú 'angle' \\
\hline àfàg àgáy & Noun & upper teeth & & cf. àfàg 'tooth', àgày 'up' \\
\hline àfàg àví́ & Noun & milk teeth & & cf. àfàg 'tooth', àvín 'breast, milk' \\
\hline à \(a ̀\) à \({ }^{\text {álí }}\) léb & Noun & incisor teeth & & cf. àfàg 'tooth', àlìléb 'middle' \\
\hline àfàg fùrı̀g & Noun & horn of an elephant & & cf. à \(\int a ̀ g\) 'tooth', fùròg 'elephant' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àjám & Noun & feeling & & \\
\hline àjśb & Noun & fly, sp. & fly that often disturbs people, usually in the bush & cf. àfòb 'air, wind, apparition, possessed person' \\
\hline àjòb & Noun & air, wind & & \\
\hline àjùb & Noun & apparition, ghost & & \\
\hline àjùb & Noun & possessed person & & \\
\hline àss̀m & Noun & lake & & \\
\hline \begin{tabular}{l}
àss̀m \\
àmàmbórí
\end{tabular} & Proper Noun & lake Amamberi & a lake within the Sarkin Dawa area & cf. àsòm 'lake', àmàmbórí 'coconut' \\
\hline \begin{tabular}{l}
àsı̀m \\
kpágárág
\end{tabular} & Proper Noun & lake Kpagarag & a lake close to Bayaro & cf. àsòm 'lake', kpágárág 'tilapia fish' \\
\hline àsı̀m kwàn & Proper Noun & lake Kwàn & a lake close to Ardo Sonvini & cf. àsòm 'lake', kwàn 'Jukun' \\
\hline às̀̀m wúrá & Proper Noun & lake Wura & a lake close to Wura & cf. àsòm 'lake' \\
\hline àsé & Noun & tail & & \\
\hline àjế & Noun & bush & & \\
\hline à áćm & Noun & sneeze & & cf. \(\int \mathrm{\varepsilon m}\) 'to sneeze' (tone uncertain) \\
\hline àjib & Noun & shit, excrement & & \\
\hline àsín & Noun & fart, flatulence & & \\
\hline àfirə̀mán & Noun & pepper & & \\
\hline áfíjàrì & Noun & first (one) & & Tone is uncertain. \\
\hline áfō & Adjective & warm & & cf. Jób 'to be hot' \\
\hline àjùgə̀rı̀ & Noun & termite's nest & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àjùkù & Noun & rooster & & \\
\hline àsúm & Noun & digging tool & \begin{tabular}{l}
any tool used for digging \\
holes, e.g. boreholes
\end{tabular} & \\
\hline àsúmà & Connective & when & & cf. àsūwā 'when'. Tone is uncertain. \\
\hline ásūmrì & Adjective & old & & \\
\hline àjúr & Noun & hit & & \\
\hline ásúrá & Noun & trail & & Tone is uncertain. \\
\hline àsūwā & Connective & when & & cf. àsúmà 'when'. Tone is uncertain. \\
\hline àjùwí & Proper Noun & person name & & Name of Hamza, the village head of Garin Hamza. \\
\hline àtábé & Noun & fish & & \\
\hline àtàḱ́ & Proper Noun & person name & female person name & \\
\hline àtámrî & Noun & growth, greatness & & cf. tám 'to grow' \\
\hline àtàr & Noun & stone & & \\
\hline àtàr kàpìrù & Noun & fire stone & & cf. àtàr 'stone', cf. kàpìrù 'match' \\
\hline àtàr nīnnāmī & Noun & grinding stone & & cf. àtàr 'stone', cf. nínnám 'flesh' \\
\hline àtàr tfế & Noun & grinding stone, sp . & a stone used to make holes while grinding & cf. àtàr 'stone' \\
\hline àtóm & Noun & message & & cf. tóm 'to send' \\
\hline àţàgbàn & Noun & younger sister & & cf. àtfi 'child', ágbàn 'female' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àtfárî & Noun & wisdom, wise person & & cf. fàr 'to tell (a story)' \\
\hline àtfóm & Noun & hoe & & \\
\hline àţj́r & Noun & bee & & cf. for 'to throw a spear (tone uncertain). Also used for bee-flies. \\
\hline àţ̧̇r & Noun & propeller & a propeller used to throw spears & cf. for 'to throw a spear (tone uncertain). Also used for bee-flies. \\
\hline àţ́r \({ }^{\text {ǵgáy }}\) & Noun & beehive & & cf. àtór 'bee', àgàn 'up' \\
\hline àţé & Noun & war, fighting & & cf. inteé 'war' \\
\hline àtýr & Noun & fear & & \\
\hline àtfí & Noun & poverty & & \\
\hline àtyì & Noun & child, boy & & \\
\hline àtyì & Particle & DIM & diminutive marker & cf. àtif 'child' \\
\hline àtyí ígbàn & Noun & daughter & & cf. àtyí 'child', ágbàn 'female' \\
\hline àtyí ígbàn & Noun & girl & & \begin{tabular}{l}
cf. àtfi 'child', ágbàn \\
'female'
\end{tabular} \\
\hline àtyí ígbàn & Noun & girlfriend & & \begin{tabular}{l}
cf. àtfi 'child', ágbàn \\
'female'
\end{tabular} \\
\hline àtyí ígbàn ónt fwẽ & Noun & baby girl & & cf. àt 1 ígbàn 'girl', fwẽ̃ 'newborn child' \\
\hline àtfi íntē & Noun & baby, child & & cf. àtî 'child', ánte 'small' \\
\hline àtyí ívān & Noun & bachelor & & cf. àtî 'child', ávān 'male' \\
\hline àtyí ívān & Noun & boy & & cf. àtî 'child', ávān 'male' \\
\hline àtyí ívān & Noun & son & & cf. àtii 'child', ávān 'male' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline àtfi ívān óntfwẽ̃ & Noun & baby boy & & cf. àtyí ívān 'boy', ffwẽ 'newborn child' \\
\hline àţì kpírág & Noun & spoon & & cf. àtyi 'diminutive' \\
\hline àtfì kùrìkî & Noun & Jesus & & cf. àtyì 'child', kùrìkî 'God' \\
\hline àtfi fòb & Noun & stubborn boy & & cf. àtfi 'child', àfòb 'possessed person' \\
\hline àtyĩ wà \({ }^{\text {a }}\) & Proper Noun & person name & & cf. àtyi 'child', wànkú 'traditional king' \\
\hline àtfíŕng & Noun & bitterleaf & & \\
\hline àtfisćgé & Noun & boy & & cf. àtyi 'child' \\
\hline àtjisćgé & Noun & child & & cf. àtyi 'child' \\
\hline àţisisćgé \({ }^{\downarrow}\) gún & Noun & younger brother & & cf. àtisisćgé 'boy', àgún 'behind' \\
\hline àtúkúrú & Noun & hill & & \\
\hline átwàb & Adjective & small, young & & \\
\hline àvàm & Noun & clay & & \\
\hline ávān & Noun & male & & cf. àván 'husband' \\
\hline àván & Noun & husband & & cf. ávān 'male' \\
\hline àván ə́fàr & Noun & lung & & Tone is uncertain. \\
\hline àvándjírég & Noun & courage & & cf. àvánḑírég 'heart' \\
\hline àvánḑírég & Noun & heart & & cf. àvánḑírég 'courage' \\
\hline àvèg & Noun & corpse & & cf. àvèg 'death', vég 'to die' \\
\hline àvèg & Noun & death & & cf. àvèg 'corpse', vég 'to die' \\
\hline àví & Noun & breast, nipple & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \\
\hline & & & \begin{tabular}{l} 
West African lungfish, an \\
air-breathing fish with an \\
eel-like body that can \\
reach 1m in length and \\
àví
\end{tabular} & \\
\hline âves in riverbeds
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & Definition & Notes \\
\hline àzònù & Noun & sickle & & \\
\hline àzér & Noun & granary & & \\
\hline àzíré & Noun & calabash & & cf. zùb 'to steal, to deceive' \\
\hline àzúb & Noun & thief & & \\
\hline
\end{tabular}

B b
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{|c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline bà & Verb & \begin{tabular}{l} 
remove by \\
cutting
\end{tabular} & & \\
\hline bá & Particle & this (one) & proximal demonstrative & \begin{tabular}{l} 
cf. à 'proximal \\
demonstrative'
\end{tabular} \\
\hline bàbâ & Noun & father & & Borrowing, likely from \\
uncertain.
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline bòjí & Proper Noun & person name & & \\
\hline bóm & Verb & long & to be or to become long & \\
\hline bìmsí & Verb & lengthen & to make something long & \\
\hline bìmtí & Verb & lengthen & & \\
\hline bōnū & Noun & festival openers & \begin{tabular}{l}
group of people \\
responsible for opening \\
the traditional festivals
\end{tabular} & Tone is uncertain. \\
\hline bòr & Verb & go up & to climb or go up an elevated surface & \\
\hline bòr & Verb & mount & to mount an animal or a vehicle & \\
\hline bòrsí & Verb & add & to add to something, to make something increase or grow & \\
\hline bàrì & Noun & day, period, time & & \\
\hline b \(\bar{\varepsilon}\) & Particle & PRSTT, here is & presentative demonstrative & \\
\hline bèd màmbírí & Noun & coconut tree & & cf. bèr 'tree', àmàmbórí 'coconut' \\
\hline bèd mán & Noun & bamboo tree & & cf. bèr 'tree', àmán 'bamboo' \\
\hline bè \({ }^{\text {H }}\)... bì ( \(\mathbf{j} \mathbf{1}\) ) & Interrogative proform & who & & \\
\hline bén & Verb & say, speak, talk, tell & & Tone is uncertain. \\
\hline bèntí & Verb & cut nails & to cut one's nails & \\
\hline bèntí & Noun & pants & & \\
\hline bèr & Noun & tree & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline bèr & Noun & wood & & \\
\hline bèr \({ }^{\text {àjòb }}\) & Noun & haunted tree & & cf. bèr 'tree', àfòb 'ghost, apparition' \\
\hline bètúg & Noun & \begin{tabular}{l}
pestle (to \\
pound food \\
with)
\end{tabular} & & cf. bèr 'tree', túg 'mortar' \\
\hline bĩ & Cardinal numeral & one & & cf. bímbíní 'one' \\
\hline bíbīrī & Verb & blow & to blow & cf. bìr 'to blow'. Tone is uncertain. \\
\hline bìgè & Noun & quiver & & \\
\hline bi \({ }^{\text {L }}\) & Pronoun & 3PL:NS, them & Third person plural nonsubject pronominal & \\
\hline bímbíní & Cardinal numeral & one & & cf. bī̀ 'one'. Tone is uncertain. \\
\hline bír & Verb & cut & to cut & Tone is uncertain. \\
\hline bír & Verb & slaughter & to slaughter & Tone is uncertain. \\
\hline bìr & Verb & blow & & \\
\hline bír ánù̀ & Verb & stand trial & literally 'swear on one's eyes' & cf. bìr 'to blow', ànùg 'eye'. Literally 'to blow one's eye'. Tone is uncertain. \\
\hline bô & Particle & that & distal demonstrative & cf. ò 'distal demonstrative' \\
\hline bō & Cardinal numeral & ten & & \\
\hline bō gún bĩ & Cardinal numeral & eleven & & cf. bō 'ten', bī̀ 'one' \\
\hline \begin{tabular}{l}
bō gún \\
bímbíní
\end{tabular} & Cardinal numeral & eleven & & cf. bō 'ten', bímbíní 'one' \\
\hline bò gún duâb & Cardinal numeral & sixteen & & cf. bō 'ten', ḑùb 'six' \\
\hline bō gún ḑúb jīrāg & Cardinal numeral & seventeen & & cf. bō 'ten', ḑùb jīrāg 'seven' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline bō gún jírāg & Cardinal numeral & twelve & & cf. bō 'ten', jīrāg 'two' \\
\hline bō gún nár & Cardinal numeral & fourteen & & cf. bō 'ten', ǹnár 'four' \\
\hline bò gún jízàg & Cardinal numeral & nineteen & & cf. bō 'ten', nî̀ zá 'nine' \\
\hline bò gún sâr & Cardinal numeral & eighteen & & cf. bō 'ten', sâr 'eight' \\
\hline bō gún tyâr & Cardinal numeral & thirteen & & cf. bō 'ten', ffàr 'three' \\
\hline bò gún wún & Cardinal numeral & fifteen & & cf. bō 'ten', ỳwún 'five' \\
\hline bùbbj̀d & Adjective & \begin{tabular}{l}
big, heavy, \\
large
\end{tabular} & & cf. bòr 'to go up, to mount' \\
\hline búbbōrī & Adjective & many & & cf. bìr 'to go up, to mount' \\
\hline búbbúr & Adjective & white & & cf. búr 'to become white' \\
\hline būg & Verb & pinch & & \\
\hline búgbág & Adjective & skinny & & Tone is uncertain. \\
\hline bú \({ }^{\text {L }}\) & Pronoun & 3SG:NS, him, her, them (singular) & third person singular nonsubject pronominal & \\
\hline būm & Verb & rot, spoil & to rot, to spoil & \\
\hline búmbóm & Adjective & long & & cf. bóm 'to be long' \\
\hline būmbūm & Adjective & spoiled, rotten, decayed' & rotten, spoiled, decayed & cf. būm 'rot, spoil' \\
\hline būnī & Verb & be across, cross & & \\
\hline bùntí & Verb & drive, ride (a horse) & & cf. būnī 'to be across, to cross' \\
\hline búr & Verb & become white & & \\
\hline búr á \({ }^{\text {joí }}\) & Verb & whitened & to be whitened & cf. búr 'to become white' \\
\hline bùsí & Verb & bow & to bow down to someone, for example to the king & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{|c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline bùsí & Verb & carry & \begin{tabular}{l} 
to carry something or \\
someone on one's back
\end{tabular} & \\
\hline bùsí & Verb & close & to close something & \\
\hline bùsí ๆkùm & Verb & \begin{tabular}{l} 
carry on your \\
back
\end{tabular} & \begin{tabular}{l} 
to carry something or \\
someone on one's back
\end{tabular} & cf. bùsí 'to carry' \\
\hline
\end{tabular}

\section*{D d}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline dáb & Verb & to be far & & \\
\hline dág & Verb & to be cold, to become cold & & \\
\hline dāgā & Adposition & from & & cf. dākā 'from'. Borrowed from Hausa. \\
\hline dākā & Adposition & from & & cf. dāgā 'from'. Borrowed from Hausa. \\
\hline dàksí & Verb & cool down & to make something colder, to cool something down & cf. dág 'to be cold' \\
\hline dàm & Verb & clean & to be clean & \\
\hline dàmpóy & Proper Noun & cult, sp. & a cult that involves secret rituals performed by the traditional chief & \\
\hline dáyâ & Noun & termite hill & a big termite hill consisting of dry sand & \\
\hline dàr & Interjection & sorry & An apology, sorry & Tone is uncertain. \\
\hline dàrá & Noun & palm tree & & \\
\hline dàw & Proper Noun & Jirim & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline dóg & Verb & see & & Tone is uncertain. \\
\hline dá & Verb & to be, to exist & & \\
\hline dèrí & Verb & draw & & \\
\hline dèb & Verb & buy & & \\
\hline dèg & Verb & to be sick & to be or to become sick & \\
\hline dév & Verb & press clothes & & \\
\hline dét & Verb & roast & to roast something, e.g. maize & \\
\hline déy & Verb & scrape & to scrape something & \\
\hline dét & Verb & whet a knife & & \\
\hline dév & Verb & wipe & & \\
\hline dēr \({ }^{\text {in }}\) & Verb & snore & & \\
\hline díddáb & Adjective & far & & cf. dáb 'to be far' \\
\hline díddág & Adjective & cold & & cf. dág 'to be cold' \\
\hline díddág & Adjective & wet & & cf. dág 'to be cold' \\
\hline dìddèg & Adjective & painful & & cf. dèg 'to be sick' \\
\hline dìddèg & Adjective & sick & & cf. dèg 'to be sick' \\
\hline díg & Noun & hiccough & & \\
\hline díg & Noun & drum, sp. & & \\
\hline dìgì & Noun & fish, sp. & Senegal bichir, an eel-like fish with a serrated dorsal fin, found in lakes, swamps and close to rivers. Reaches about 30 cm in length. & \\
\hline dílóg & Noun & shrew & & \\
\hline dín & Verb & find & & Tone is uncertain. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline dín & Verb & meet & & Tone is uncertain. \\
\hline dìnà & Noun & mosquito & & \\
\hline dìndàm & Adjective & clean & & cf. dàm 'to be clean' \\
\hline dìndòm & Adjective & red & & cf. ádōmrī 'red' \\
\hline dírág bêr & Noun & root of a tree & & cf. bèr 'tree' \\
\hline dó & Verb & insult & to insult someone & Tone is uncertain. \\
\hline dùb & Verb & deep & & \\
\hline dùb & Verb & high, tall & & \\
\hline dúbú & Cardinal numeral & thousand & & \begin{tabular}{l}
Borrowed from Hausa. \\
Tone is uncertain.
\end{tabular} \\
\hline dùddùb & Adjective & deep & & cf. dùb 'deep, high, tall' \\
\hline dùddùb & Adjective & high & & cf. dùb 'deep, high, tall' \\
\hline dùddùb & Adjective & tall & & cf. dùb 'deep, high, tall' \\
\hline dúg & Verb & follow & & Tone is uncertain. \\
\hline dùwásām & Proper Noun & person name & & Tone is uncertain. \\
\hline
\end{tabular}

D3 ds
\begin{tabular}{|l|l|l|l|l|}
\hline Kam & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{|c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline dzá & Noun & blade & \begin{tabular}{l} 
the blade of something, \\
e.g. a knife, an axe, a hoe, \\
a key, or a tooth
\end{tabular} & \\
\hline dzá & Noun & grain, seed & & \begin{tabular}{l} 
cf. dzá 'grain, seed, \\
situation'
\end{tabular} \\
\hline dzá & Noun & reason & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline djá & Noun & situation & & cf. duá 'grain, seed, reason' \\
\hline đ̧á gúfì kpò & Noun & kidney & & cf. đ̧á 'grain, seed', kpò 'body' \\
\hline dá ntjè & Noun & clitoris & & cf. dzá 'grain, seed', ìtfè 'vagina' \\
\hline ḑá Jàg & Noun & tooth blade & the part of a tooth that can be considered its blade & cf. dsá 'blade', àjàg 'tooth' \\
\hline dáa zûg & Noun & rice & & cf. đ̧á 'grain, seed', zùg 'grass' \\
\hline duá \({ }^{\text {iilb }}\) & Noun & brains & & cf. dsá 'reason', àlíb 'head' \\
\hline djàg & Verb & hide, do secretly & to do something secretly & cf. duàg 'whisper' \\
\hline duàg & Verb & whisper & & cf. djàg 'hide' \\
\hline djám & Adverb & well & & Borrowed from Hausa or Fulfulde. Tone is uncertain. \\
\hline ḑán & Verb & plant & to plant a tree or fruit & \\
\hline djàngìrìgò & Noun & school & & Borrowed from Fulfulde (janngirde). \\
\hline djā̧ı̄ & Verb & crawl & & \\
\hline ḑátyinûy & Noun & fish, sp. & an unidentified fish; it looks similar to species of Africa tetras, but grows much bigger (up to 2 m ) than the (other) tetras found in the area & cf. ḑá 'grain, seed' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ḑázỗ & Noun & fish, sp. & Cromeria, a small (ca. 4 cm ) type of freshwater fish that is often eaten smoked and dried & cf. djá 'grain, seed' \\
\hline ḑón & Noun & deity, sp. & & \\
\hline ḑı̀̀ & Verb & sit & & \\
\hline ḑı̀ & Verb & live, settle & & \\
\hline ḑóy ágbàn & Noun & female magic & the magic for which women are responsible & cf. ḑóy 'deity, sp.', ágbàn 'female' \\
\hline ḑı̀̀ wór & Verb & guard & & cf. ḑòy 'sit' \\
\hline djòn wór & Verb & wait & & cf. djòy 'sit' \\
\hline djòr & Verb & decrease & & \\
\hline ḑı̀r & Verb & descend & & \\
\hline ḑòtí & Verb & bring down & to bring something down & cf. duı̀r 'to descend' \\
\hline djòtí & Verb & wake up & to wake up & cf. djòr 'to descend' \\
\hline djē & Particle & TOP, wat about & \begin{tabular}{l}
a topicalizer that affects \\
the event or object \\
described by the phrase or \\
clause it is postposed to.
\end{tabular} & cf. ḑ \(\bar{\partial}\), dנ \(\bar{\varepsilon}\). In English, it can be paraphrased as "What about X?", X being this event or object. Such topicalization often occurs as a cohesive device in storytelling, to tie the discourse together. When used in natural interaction, it also functions as a question marker, pointing the hearer to an entity or topic they have neglected in his discourse. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline d3ā & Particle & TOP, wat about & a topicalizer that affects the event or object described by the phrase or clause it is postposed to. & cf. dsē, duç. In English, it can be paraphrased as "What about X ?", X being this event or object. Such topicalization often occurs as a cohesive device in storytelling, to tie the discourse together. When used in natural interaction, it also functions as a question marker, pointing the hearer to an entity or topic they have neglected in his discourse. \\
\hline d \(3 \bar{\varepsilon}\) & Particle & TOP, wat about & a topicalizer that affects the event or object described by the phrase or clause it is postposed to. & cf. ḑā, djē. In English, it can be paraphrased as "What about X?", X being this event or object. Such topicalization often occurs as a cohesive device in storytelling, to tie the discourse together. When used in natural interaction, it also functions as a question marker, pointing the hearer to an entity or topic they have neglected in his discourse. \\
\hline descrî̀ & Noun & guinea fowl & & \\
\hline duçr \({ }^{\text {ci }}\) & Verb & look & to look at something & \\
\hline djù & Noun & bat & & \\
\hline djù & Verb & dig & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline djib & Verb & fence & to fence a place & \\
\hline djib & Verb & round & to make something round & \\
\hline djib & Verb & turn & to turn around & \\
\hline djùbrí & Verb & change & & cf. dsib 'to turn' \\
\hline djìbrí & Verb & exchange & & cf. djib 'to turn' \\
\hline djùbrí & Verb & turn & & cf. djib 'to turn' \\
\hline djòm & Proper Noun & place name & the place where all past chiefs are buried & \\
\hline djíncjín & Adjective & foolish & & cf. dsín 'to be foolish' \\
\hline djíy & Verb & be foolish & & \\
\hline dsồ & Noun & fly & & \\
\hline dờ nág & Noun & tsetse fly & & cf. dsò̀ 'fly', nág 'cow' \\
\hline djùb & Cardinal numeral & six & & \\
\hline ḑùb jīrāg & Cardinal numeral & seven & & cf. duùb 'six', jirrāg 'two' \\
\hline đjúdjúrág & Noun & shade & & cf. đúúdúrág 'shadow', zúzúrág 'shade' \\
\hline đJúdjúrág & Noun & shadow & & cf. duúúúúrág 'shade', zúzúrág 'shadow' \\
\hline duı̀mbàrè & Noun & Friday & & Borrowed from Adamawa Fulfulde (jumbaare), originally from Arabic yoom aj-jum'a 'Friday', literally 'day of the mosque' \\
\hline đ̧úná & Noun & face & & \\
\hline djúná & Noun & structure & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline đjúrkàkí & Proper Noun & person name & & cf. đ̧ùtí 'dash, give', kùríkî 'God' \\
\hline duı̀rùkí & Proper Noun & place name & \begin{tabular}{l}
name of the place also \\
known as kurugbe
\end{tabular} & \\
\hline đ̧úrú \({ }^{\dagger}\) jé & Noun & claw & & cf. zùr 'to pull', àné 'hand, arm' \\
\hline đ̧úrú \({ }^{\dagger}\) jé & Noun & finger & & cf. zùr 'to pull', àgé 'hand, arm' \\
\hline djùtí & Verb & dash, give & to give a present or a
(pre-)tip & cf. zùr 'to pull' \\
\hline đjùtí & Verb & hand over & & cf. zùr 'to pull' \\
\hline
\end{tabular}

\section*{Ә ә}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline á & Particle & \begin{tabular}{l} 
QUOT, (say) \\
that
\end{tabular} & \begin{tabular}{l} 
quotative marker, \\
introduces reported speech
\end{tabular} & \begin{tabular}{l} 
cf. íbíL 'quotative', íL \\
'quotative', ijí 'quotative'
\end{tabular} \\
\hline
\end{tabular}

\section*{Ff}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline fà & Verb & raise chickens & to raise animals; this verb is specifically used for chickens & \\
\hline fàd & Verb & suck & & \\
\hline fàg & Verb & close, cover, lock & & \\
\hline fág á \({ }^{\text {ji }}\) í & Verb & closed & to be closed & cf. fàg 'close, cover, lock' \\
\hline fàgrí & Verb & gather & to gather things & cf. fàg 'close, cover, lock' \\
\hline fam & Verb & plait hair & to plait someone's hair & cf. fam 'to squeeze, to wring out'. Tone is uncertain. \\
\hline fam & Verb & squeeze & to squeeze something & cf. fam 'to plait hair, to wring out'. Tone is uncertain. \\
\hline fam & Verb & wring out & to wring something out & cf. fam 'to squeeze, to plait hair'. Tone is uncertain. \\
\hline fàr & Verb & blow nose & to blow one's nose & \\
\hline fàr & Verb & fold, wrap & to fold something or wrap something in & \\
\hline fàr & Verb & think & & \\
\hline fàrí & Verb & fold & to fold something & cf. fàr 'to fold, wrap' \\
\hline fàrí & Verb & open & to open a door & cf. fàr 'to fold, wrap' \\
\hline fàtórí & Verb & fold & to fold something & cf. fàr 'to fold, wrap' \\
\hline fóg & Verb & dry & & \\
\hline fóg & Noun & farm & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline fòg & Noun & fish, sp. & grass-eater, a fish found in rivers that can grow to more than 60 cm & \\
\hline fònù & Noun & harmattan & & \\
\hline fé & Verb & break & to break something long, such as maize or an arm & \\
\hline féb & Noun & anger & & cf. féb 'to swell' \\
\hline féb & Verb & swell & & cf. f \(\varepsilon\) b 'anger'. Tone is uncertain. \\
\hline fèntjố & Proper Noun & Fincon & & cf. ǹtyõ 'coco yam' \\
\hline f \(¢\) ¢ & Verb & clean, wash & & \\
\hline fímfám & Adjective & light & & cf. fam 'to squeeze, wring out' (tone uncertain). \\
\hline fîrī & Verb & fly & & cf. fīrī 'to jump' \\
\hline fîrī & Verb & jump & & cf. fîrī 'to fly' \\
\hline fúffóg & Adjective & dry & & cf. fóg 'to be dry' \\
\hline fúrû & Noun & mission grass & mission grass or foxtail, a very widespread type of grass & \\
\hline fú \({ }^{+}\)kúnú & Noun & grass, sp. & an unidentified type of grass & \\
\hline
\end{tabular}

Gg
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline gág & Verb & hang & to hang & \\
\hline gàgrí & Verb & hang up & to hang something up & cf. gág 'to hang' \\
\hline gằj & Noun & beginning of spine & the piece of the spine that meets the neck & \\
\hline gán & Noun & name & & \\
\hline gànsâ & Proper Noun & person name & & \\
\hline gàntú & Proper Noun & \begin{tabular}{l}
Gangtu \\
Kamaajim
\end{tabular} & the place where the people closest to the traditional king live & \\
\hline gàpsí & Verb & divorce & to divorce people & cf. gàb 'to separate' \\
\hline gàpsí & Verb & separate & to separate things & cf. gàb 'to separate' \\
\hline gàpsí & Verb & share & to share something, to divide something among one another & cf. gàb 'to share' \\
\hline gàrí & Verb & undress & to take off one's clothes, to undress & \\
\hline gàw & Noun & ribs & & \\
\hline gàw ḑwã̃ & Noun & jaw & & cf. gàw 'ribs', àdswã̃ 'cheek' \\
\hline gàm & Verb & pay & & \\
\hline gàpsí & Verb & separate & to separate things & \\
\hline gòptí & Proper Noun & Gobti & & \\
\hline gè \({ }^{\text {H }}\)... gì jī & Interrogative proform & what & content interrogative for non-humans & \\
\hline gèr & Noun & outside & & cf. àgèr 'outside' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline gìgà̀ & Adjective & cut & & cf. gàb 'to share, to separate' \\
\hline gím á \({ }^{\text {jí }}\) & Adjective & broken & & cf. gìmsí 'to tear' \\
\hline gím á \({ }^{\text {jí }}\) & Adjective & torn & & cf. gìmsí 'to tear' \\
\hline gimsí & Verb & tear & cutting or breaking a part from, e.g., bread or tuwo & \\
\hline gìn & Verb & drum & to beat drums & Tone is uncertain. \\
\hline gín ánûy & Noun & eyebrow & & cf. gínéné 'round', àgíníy 'buttocks', ànùn 'eye' \\
\hline gínéné & Adjective & round & & cf. àgíníg 'buttocks', gín ánûy 'eyebrow'. Tone is uncertain. \\
\hline gintí & Verb & knock & to knock, e.g. on wood or on a door & cf. gìn 'to drum' \\
\hline gíggáy & Adjective & bent & not straight & \\
\hline gìngà & Noun & drum, sp. & & \\
\hline gìrè & Noun & grasshopper & & \\
\hline gó & Noun & stranger, guest & & \\
\hline gúb & Verb & chase, chase away & to chase something or someone away, to pursue something or someone & \\
\hline gúbí & Verb & chase, chase away & to chase something or someone away, to pursue something or someone & cf. gúb 'to chase'. Tone is uncertain. \\
\hline gùm & Noun & grunt & & \\
\hline gúrôg & Noun & lion & & \\
\hline gùrì & Verb & vomit & & cf. àgùrì 'vomit' \\
\hline gúrú & Noun & dust & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & Word class & \multicolumn{1}{|c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & Definition & Notes \\
\hline gùfì & Noun & \begin{tabular}{l} 
ground nut, \\
peanut
\end{tabular} & & \\
\hline \begin{tabular}{l} 
gùfì \\
kpímkpáyá
\end{tabular} & Noun & bambara nut & & \begin{tabular}{l} 
cf. gùfì 'ground nut', \\
kpìmkpánī 'hard, strong'
\end{tabular} \\
\hline gwà̀j & Noun & chest & & \\
\hline
\end{tabular}

\section*{GB gb}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline gbắ & Noun & type of flute & a flute used for communication & \\
\hline gbàm & Verb & sew & & \\
\hline gbán & Verb & arrive & & Tone is uncertain. \\
\hline gbánákā & Adverb & later & in the same day, or generally later, but not much later & \\
\hline gbàsí & Verb & loosen & & \\
\hline gbógó & Noun & shin & & \\
\hline gbòrù & Noun & stream & & \\
\hline gbòrù & Noun & valley & & \\
\hline gbê & Noun & squirrel, sp. & & \\
\hline gbèb & Verb & beat & & cf. gbèb 'to kick' \\
\hline gbèb & Verb & kick & & cf. gbèb 'to beat' \\
\hline gbèb vā & Verb & to flog & & cf. gbèb 'to beat' \\
\hline gbèbrí & Verb & beat repeatedly & to beat or kick someone repeatedly & cf. gbèb 'to beat' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{|c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline gb̄̄nī & Verb & & \begin{tabular}{l} 
carve carve something inside \\
something else (e.g. to \\
carve text in a tree), to \\
ridge something
\end{tabular} & \begin{tabular}{l} 
cf. gbèr 'to remove, to \\
scratch'
\end{tabular} \\
\hline gbēn̄̄ & Verb & dig open & \begin{tabular}{l} 
to dig open yam heaps, or \\
to dig for groundnuts
\end{tabular} & \begin{tabular}{l} 
cf. gbèr 'to remove, to \\
scratch'
\end{tabular} \\
\hline gbè̀r & Verb & remove & scratch & \\
\hline gbèr & Verb & shake & & \\
\hline gbìgí & Verb & striped polecat & & \\
\hline gbùgbúrû & Noun & & \\
\hline
\end{tabular}

H h
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline hár & Adposition & (not) until & & borrowed from Hausa or Fulfulde \\
\hline hǹ & Particle & INT, very & intensifier & cf. hǹ 'negator'. Used in an 'intensity construction', together with a reduplicated form of the verb, to indicate a high presence of a certain quality. \\
\hline hǹ & Particle & NEG, not & clause-final negator & \\
\hline hwár & Verb & think & & Tone is uncertain. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline i & Affix & FV, final vowel & final vowel, which is an optional part of some verb stems and part of a variety of constructions, but does not have one specific morphosyntactic function & It is toneless and takes the tone of the preceding syllable. \\
\hline í & Pronoun & 3PL.O, them & third person plural object pronominal & \\
\hline í & Particle & \[
\begin{aligned}
& \text { QUOT, (say) } \\
& \text { that }
\end{aligned}
\] & quotative marker, introduces reported speech & cf. à 'quotative', íbíL 'quotative', ijij' 'quotative' \\
\hline ì & Pronoun & 1PL:S, we & first person plural subject pronominal & \\
\hline \(\mathrm{ib}^{\text {i }}\) & Particle & \[
\begin{aligned}
& \text { QUOT, (say) } \\
& \text { that }
\end{aligned}
\] & quotative marker, introduces reported speech & cf. á 'quotative', \(\mathrm{I}^{\text {L }}\) 'quotative', ijil 'quotative' \\
\hline ídjíb & Proper Noun & Egypt & & Borrowed from English. \\
\hline iji \({ }^{\text {L }}\) & Particle & \[
\begin{aligned}
& \text { QUOT, (say) } \\
& \text { that }
\end{aligned}
\] & quotative marker, introduces reported speech & \\
\hline ikā & Particle & then & conjunction, linking clauses & \\
\hline \(\mathbf{i n}^{\text {L }}\) & Pronoun & 3PL.POSS, their & third person plural possessive pronominal & \\
\hline \(\mathbf{i n}^{\text {L }}\) & Pronoun & LOG.SG, that they & logophoric pronominal & \\
\hline
\end{tabular}

J j
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline jàg & Verb & carry & & \\
\hline jàg & Verb & take & & \\
\hline jág ágà̀ & Verb & pick up & to pick something up, to lift something up & cf. jàg 'to carry, to take', àgày 'up'. Tone is uncertain. \\
\hline jág ágbàn & Verb & marry & to marry a woman & cf. jàg 'to carry, to take', àgbàn 'wife'. Tone is uncertain. \\
\hline jág ýkùròg & Verb & record & to record something & \begin{tabular}{l}
cf. jàg 'to carry, to take', j̀kùròg 'voice, throat'. \\
Tone is uncertain.
\end{tabular} \\
\hline jàkú & Noun & ancestor & & cf. jàkú 'grandparent/grandchild', kùkú 'ancestor'. It is not clear what the difference is between kùkú and jàkú. \\
\hline jàkú & Noun & \begin{tabular}{l}
grandparent \\
/grandchild
\end{tabular} & & cf. jàkú 'ancestor', kùkú 'grandparent/grandchild'. It is not clear what the difference is between kùkú and jàkú. \\
\hline jár & Verb & to be wide & to be or to become wide & \\
\hline jārı̄ & Verb & announce & to announce something & \\
\hline jàrsí & Verb & widen & to make something wider & cf. jár 'to be wide' \\
\hline jáwwà & Interjection & yes! & exclamation of agreement or delight & This is a common exclamation in the area. \\
\hline jé & Verb & cry, shout & & Tone is uncertain. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline jé & Verb & enter & & Tone is uncertain. \\
\hline jé kôm & Noun & door, entrance & & cf. ŋnwé 'mouth', kj̀m 'place' \\
\hline jèsí & Verb & bring inside & & cf. jé 'enter' \\
\hline jètí & Verb & lean & to lean against something & \\
\hline jéb & Verb & fry & & Tone is uncertain. \\
\hline jéné & Noun & horse & & \\
\hline jéní ntē & Noun & foal & & cf. jéngé 'horse', ántè 'small' \\
\hline jèrí & Verb & be plenty & to be plenty, to be sufficient, to be too much & \\
\hline jī & Verb & arrive & & cf. jī 'leave' \\
\hline jī & Verb & leave & & cf. jī 'arrive' \\
\hline jī & Particle & Q, ? & question marker & \\
\hline jī & Verb & stand & & \\
\hline jī & Verb & wake up & & \\
\hline jib & Verb & ask & & \\
\hline jib & Verb & greet & greet & \\
\hline jíb wé & Verb & greet & to greet someone & \begin{tabular}{l}
cf. jib 'greet', „wé 'mouth'. \\
Tone is uncertain.
\end{tabular} \\
\hline jifúrû & Noun & stingray & Niger stingray, a stingray found in rivers in the area & \\
\hline jíjár & Adjective & wide & & cf. jár 'to be wide' \\
\hline jīrāg & Cardinal numeral & two & & \\
\hline jisí & Verb & put straight & to put something straight & cf. jī 'to stand' \\
\hline jití & Verb & carry up & to carry something up & cf. jī 'to stand' \\
\hline jō & Particle & PL, -s & Plural marker & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \begin{tabular}{l} 
Glosses and \\
translations
\end{tabular} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline júrú & Pronoun & 1PL.O, us & \begin{tabular}{l} 
first person plural object \\
pronominal
\end{tabular} & \\
\hline jùrù & Pronoun & 1PL, we & \begin{tabular}{l} 
first person plural subject \\
pronominal
\end{tabular} & \\
\hline júrú \({ }^{\text {L }}\) & Pronoun & 1PL.POSS, our & \begin{tabular}{l} 
first person plural \\
possessive pronominal
\end{tabular} & \\
\hline
\end{tabular}

\section*{K k}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & Word class & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline ká & Verb & shout & & Tone is uncertain. \\
\hline kà & Verb & break & to break something & \\
\hline kà & Verb & harvest maize & \begin{tabular}{l} 
to harvest maize by \\
breaking it
\end{tabular} & \\
\hline kāa & Particle & \begin{tabular}{l} 
COND, if, \\
when
\end{tabular} & \begin{tabular}{l} 
postclausal conditional \\
particle
\end{tabular} & \\
\hline kã̃ & Adverb & here & this place, here & \\
\hline kã̃ & Noun & place & & cf. kág 'to crunch' \\
\hline kág & Verb & crunch & to crunch (intransitive) & This interjection does not \\
\hline kág á \(\mathbf{\text { tjí }}\) & Verb & crunched & have a fixed tone. \\
\hline kaj & Interjection & hey & & \\
\hline kà̀j & Noun & falcon & & \\
\hline kà̀ksàg & Noun & basket & & cf. kág 'to crunch' \\
\hline kàksí & Verb & crunch & to crunch something & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline kàm sírá & Proper Noun & place name & name of Kam Sira, a Kam village & \\
\hline kàndà & Noun & grasshopper, sp. & a big type of grasshopper & \\
\hline kàndàgà & Noun & insect, sp. & & \\
\hline kántô & Noun & sugar & & \\
\hline káyálí & Noun & ant, sp. & an unidentified type of red ant & \\
\hline káýááy & Noun & hanging basket & & \\
\hline kànkánê & Noun & Monday & & Name of a Jirim village that has a market event on Mondays. Also Kankani. \\
\hline káykājā & Adjective & empty & & Tone is uncertain. \\
\hline kàpèj & Noun & cutlass & & \\
\hline kàpìrù & Noun & match & & \\
\hline kár & Verb & accompany & & Tone is uncertain. \\
\hline kàr & Verb & have & & \\
\hline kàr & Verb & keep & & \\
\hline kár jí mī hǹ & Clause & there are no problems & a response in a greeting, used to say that one is doing well & cf. kàr 'to have', nì 'thing', mil 'some', hǹ 'not'. Literally: 'I don't have anything.' \\
\hline kàsí & Verb & branch & to branch off, to take a different path & cf. kà 'break' \\
\hline kàsí & Verb & break & & cf. kà 'break' \\
\hline kàţírî & Noun & weaver ant & & \\
\hline Kávên & Proper Noun & person name & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline ká ṭírí & Noun & hedgehog & grinding place & a mill, a grinding place
\end{tabular} \begin{tabular}{l} 
cf. kòm 'place', nàm 'to \\
grind'
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ká bá & Particle & when, that & complementizer used for expressing wishes & cf. kó 'temporal preposition, instrumental preposition', bā 'this' \\
\hline kó bórí mīnā & Interrogative proform & when & question word used to ask for a certain time & cf. ká 'temporal preposition', bárí 'time', mīnā 'which' \\
\hline kə̄mā & Adverb & here & & cf. kòm 'place', à 'this' \\
\hline kz̀mò & Adverb & there & & \begin{tabular}{l}
cf. kòm 'place', ò 'that'. \\
Tone is uncertain.
\end{tabular} \\
\hline kz̀ràbìg & Noun & scorpion & & \\
\hline kàràbìg mìŋkáyá & Noun & lobster & & cf. kə̀rə̀̀bìg 'scorpion', mìykáyá 'water' \\
\hline \begin{tabular}{l}
kòràbìg \\
fùgàrì
\end{tabular} & Noun & black scorpion & & cf. kə̀ràbìg 'scorpion', àfùgə̀rì 'termite's nest' \\
\hline kàràbìg tfè & Noun & earwig & & cf. kə̀ràbìg 'scorpion', tfè 'guinea corn' \\
\hline kéb & Verb & blow (wind) & to blow, of the wind & Tone is uncertain. \\
\hline kíkkág & Adjective & crunched & to be crunched & kág 'to crunch (intransitive)' \\
\hline kìm & Verb & bite, chew & & \\
\hline kīmpōnī & Noun & boat & & cf. Adamawa Fulfulde koombooje 'boat' \\
\hline kīmpōnī & Noun & airplane & & cf. Adamawa Fulfulde koombooje 'airplane' \\
\hline kìní & Proper Noun & person name & & \\
\hline kìjkìndsírí & Proper Noun & person name & & \\
\hline kó & Connective & or & & Borrowed from Hausa (ko) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline kō̃ & Particle & place & that place, there & cf. kàmò 'there'. Tone is uncertain. \\
\hline kò ósō & Noun & sweat & & cf. kò \(\partial \int \overline{\text { ó 'sweat' }}\) \\
\hline kò \(\mathrm{g}_{\text {¢ }}\) & Noun & sweat & & cf. áfō 'hot' \\
\hline kò gòm bāgī & Noun & mosque & & cf. kòm 'place', àgòm 'forehead', bāgī 'to lower one's head', ní gòm bāgī 'Muslim' \\
\hline kú & Noun & cobra & & cf. kú 'deity, magic' \\
\hline kú & Noun & deity & generic name for all gods & cf. kú 'cobra, magic' \\
\hline kú & Noun & magic & & cf. kú 'deity, cobra' \\
\hline kúb & Verb & wear & & \\
\hline kùb & Verb & rain lightly & to rain lightly & \\
\hline kùb & Verb & weaken & to become weak & \\
\hline kûb & Noun & reed fish & reed fish or snakefish, a snake-like fish that can grow more than 30 cm in length & \\
\hline kúbárî & Noun & dustbin & & \\
\hline kùkóktī & Adjective & smooth & & cf. kj̀ktí 'to smoothen' \\
\hline kúkj́rú & Noun & donkey & & \\
\hline kùkkùb & Adjective & weak & to be weak & cf. kùb 'to become weak' \\
\hline kúkkúr & Adjective & smelly & to be smelly & cf. kúr 'to stink' \\
\hline kùkú & Noun & ancestor & & cf. jàkú 'ancestor', kùkú 'grandparent/grandchild'. It is not clear what the difference is between kùkú and jàkú. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline kùkú & Noun & \begin{tabular}{l}
grandparent \\
/grandchild
\end{tabular} & & cf. jàkú 'grandparent/grandchild', kùkú 'ancestor'. It is not clear what the difference is between kùkú and jàkú. \\
\hline kúkwźj & Noun & stick, sp. & a stick that is used to send messages from village to village, carried around by messengers, e.g. to call meetings & cf. kwî 'walking stick' \\
\hline kúmé & Noun & chicken & & \\
\hline kúmé vān & Noun & rooster & & cf. kúmé 'chicken', ávān 'male' \\
\hline kùnì & Noun & dirt & & cf. kùnì 'dustbin', kúr 'to stink' \\
\hline kùnì & Noun & dustbin & & cf. kùnì 'dirt', kúr 'to stink' \\
\hline kùntí & Verb & bend down & & cf. kùptí 'to bow down, to kneel down, to squat' \\
\hline kùptí & Verb & bow down, kneel down, squat & & cf. kùntí 'to bend down' \\
\hline kúr & Verb & stink & to stink, to be smelly & \\
\hline kùrìkî & Proper Noun & God & term used for both the primary traditional deity and the Abrahamic deity & cf. kú 'magic, deity' \\
\hline kùrúkùrù & Noun & \begin{tabular}{l}
grasshopper, \\
sp.
\end{tabular} & a big grasshopper & \\
\hline kùrùkwàb & Noun & bird sp & an unidentified big type of non-water bird & \\
\hline kùsí & Verb & smell & to smell something & cf. kúr 'to stink' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline kwàn & Proper Noun & Jukun & & \begin{tabular}{l} 
cf. j̀kwān 'bean', àkwān \\
'bean'
\end{tabular} \\
\hline kwàntóy & Proper Noun & Mumuye & & \begin{tabular}{l} 
cf. kwàn 'Jukun', ǹtón \\
'mountain'
\end{tabular} \\
\hline kwàntórí & Verb & bend & \begin{tabular}{l} 
to bend something, such as \\
the branch of a tree
\end{tabular} & \\
\hline kwàntórí & Verb & fold & \begin{tabular}{l} 
to fold something, such as \\
clothes
\end{tabular} & \\
\hline kwár & Verb & make a rope & & Tone is uncertain. \\
\hline kwàr & Noun & hip, loins, waist & & \\
\hline kwàsí & Verb & pluck & walking stick & \\
\hline kwêj & Noun & mudfish & \begin{tabular}{l} 
mudfish, an airbreathing \\
type of catfish that can \\
grow up to 1m in length.
\end{tabular} & \\
\hline kwî & Noun & cf. kúkwéj 'stick, sp.' \\
\hline
\end{tabular}

\section*{KP kp}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & Word class & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline kpá & Noun & grazing ground & \begin{tabular}{l} 
a path cattle follow to go \\
to water
\end{tabular} & \\
\hline kpá & Noun & wrapper & \begin{tabular}{l} 
a colorful piece of clothing \\
worn by women
\end{tabular} & \\
\hline kpà & Noun & claw & & cf. kpà 'cover, nail' \\
\hline kpà & Noun & cover & & \\
\hline kpà & Noun & nail & & cf. kpà 'cover, claw' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline kpà bèr & Noun & bark & & cf. kpà 'cover', bèr 'tree' \\
\hline kpà líp tyí rà bう̀g & Noun & toe nail & & cf. kpà 'cover, claw, nail', àlíp tyí rà bòg 'toe' \\
\hline kpà líp tyí rà né & Noun & fingernail & & cf. kpà 'cover, claw, nail', àlíp tyí rà né 'finger' \\
\hline kpāb & Verb & mix & & \\
\hline kpágárág & Proper Noun & place name & name of Bayaro, a Kam village. & cf. kpágárág 'tilapia'. \\
\hline kpágárág & Noun & fish, sp., tilapia & & \\
\hline kpānē & Adverb & before & at least one year ago & cf. kpānēkā 'before' \\
\hline kpānēkā & Adverb & before & at least one year ago & cf. kpānē 'before' \\
\hline kpáy & Adverb & usually & & Tone is uncertain. \\
\hline kpà \({ }^{\text {í }}\) & Verb & strong & to be strong & \\
\hline kpà \(\mathrm{rin}^{\prime}\) & Verb & hang out & to go outside without a particular goal in mind & \\
\hline kpár & Verb & rain & & Tone is uncertain. \\
\hline kpáfinè nág & Noun & bird, sp. & an unidentified type of bird; it is white and is often seen moving along with cow herds & cf. nág 'cow'. Tone is uncertain. \\
\hline kpàtíbá & Noun & north & & \\
\hline kpı̌y & Noun & illiterate person & & Tone is uncertain. \\
\hline kpə̄rī & Verb & cough & & \\
\hline kpèsí & Verb & slippery & to be slippery & cf. kpèsí 'to be smooth' \\
\hline kpèsí & Verb & smooth & to be smooth & cf. kpèsí 'to be slippery' \\
\hline kp \(\mathbf{\varepsilon} \mathbf{j} \mathbf{m i}\) & Cardinal numeral & twenty & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline kpējmī gún bĩ & Cardinal numeral & twenty-one & & cf. kpējmī 'twenty', bī 'one' \\
\hline kpājmī gún bó & Cardinal numeral & thirty & & cf. kpējmī 'twenty', bō 'ten' \\
\hline kpét á \({ }^{\text {joí }}\) & Adjective & tired & & cf. kpètí 'to tire' \\
\hline kpètí & Verb & tire & to become tired & \\
\hline kpìkpésī & Adjective & slippery & & cf. kpèsí 'to be slippery'. Tone is uncertain. \\
\hline kpìkpésī & Adjective & smooth & & \begin{tabular}{l}
cf. kpèsí 'to be smooth'. \\
Tone is uncertain.
\end{tabular} \\
\hline kpìmkpáyī & Adjective & difficult, hard, strong & & \begin{tabular}{l}
cf. kpàní 'to be strong'. \\
Tone is uncertain.
\end{tabular} \\
\hline kpír & Verb & brew & to brew something, to prepare a liquid & Tone is uncertain. \\
\hline kpò & Noun & body & & \\
\hline kpò & Particle & REFL, self & reflexive marker & cf. kpò 'body' \\
\hline kpò bèr & Noun & tree trunk & & cf. kpò 'body', bèr 'tree' \\
\hline
\end{tabular}

\section*{L 1}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & Definition & \\
\hline là & Noun & skin & & \\
\hline là kpò̀ & Noun & skin & cf. là 'skin', kpò 'body' \\
\hline là kúmé & Noun & \begin{tabular}{l} 
book, paper, \\
tissue
\end{tabular} & & cf. là 'skin', kúmé 'chicken' \\
\hline là nùy & Noun & eyelid & & cf. là 'skin', ànùy 'eye' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \begin{tabular}{c} 
Glosses and \\
translations
\end{tabular} & \multicolumn{1}{c|}{ Definition } & \\
\hline làb & Verb & dotes
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \\
\hline lèg Notes
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline lù & Noun & \begin{tabular}{l}
worm-like \\
insect
\end{tabular} & & \\
\hline lù bì & Verb & lie down & & cf. lù 'to sleep, to lie down', àbì 'down' \\
\hline lùb & Verb & uproot & & \\
\hline lúb á \({ }^{\text {jíj}}\) & Verb & removed & to be removed & cf. lùb 'to uproot' \\
\hline lùbrí & Verb & remove & to remove something & cf. lùb 'to uproot' \\
\hline lùbrí & Verb & uproot & to uproot a crop & cf. lùb 'to uproot' \\
\hline lùmò & Noun & market & & cf. lùmò 'week' \\
\hline lùmò & Noun & week & & cf. lùmò 'market' \\
\hline lùpsí & Verb & remove & & cf. lùb 'to uproot' \\
\hline lùtí & Verb & appoint somebody & to appoint someone, to crown someone & cf. lù 'to sleep, to lie down' \\
\hline lùtí & Verb & lay something down & to lay something down & cf. lù 'to sleep, to lie down' \\
\hline Iwàm & Noun & hippopotamus & & \\
\hline
\end{tabular}

\section*{M m}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \begin{tabular}{c} 
Glosses and \\
translations
\end{tabular} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline \(\mathbf{m}\) & Interjection & yes & & \begin{tabular}{l} 
This interjection does not \\
have a fixed tone.
\end{tabular} \\
\hline \(\mathbf{m}\) & Pronoun & 1SG.O, me & \begin{tabular}{l} 
first person singular object \\
pronominal
\end{tabular} & \begin{tabular}{l} 
This interjection does not \\
have a fixed tone.
\end{tabular} \\
\hline \(\mathbf{m m}\) & Interjection & no & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline má & Connective & and & connects clauses, not noun phrases (which are conjoined with the comitative marker rò 'with') & cf. àmá 'and' \\
\hline má & Connective & but & connects clauses & cf. àmá 'but' \\
\hline mà & Particle & also & additive marker & borrowed from Hausa (ma) \\
\hline mà & Verb & give & to give something to someone & Tone is uncertain. \\
\hline má \({ }^{\downarrow} \mathbf{f}\) ¢́b & Verb & make angry & to make someone angry & cf. mà 'to give', féb 'anger' \\
\hline mag & Verb & measure & to measure something & Tone is uncertain. \\
\hline mag & Verb & taste & to taste something & Tone is uncertain. \\
\hline màgàrí & Verb & imitate, act & to imitate something or someone; to act in a play & \\
\hline mágárí káptì & Noun & early morning & time of the day from 4 a.m. to 5 a.m. & cf. màgàrí 'to imitate', àkàptì 'morning' \\
\hline màjòkàm & Nominal & Wednesday & & Name of Mayo Kam, a Kam village with a market event on Wednesdays. \\
\hline màkpà & Noun & muslim & & \\
\hline málâm & Noun & teacher & & Borrowed from Hausa. \\
\hline mām & Verb & give me & & cf. mà 'to give', m'me' \\
\hline màn & Noun & fat & & cf. màn 'oil' \\
\hline màn & Noun & fuel & & cf. màn 'oil' \\
\hline màn & Noun & oil & & cf. màn 'fat' \\
\hline màn d̀líb & Noun & brains & & cf. màn 'fat', àlíb 'head' \\
\hline màn ə̀tfór & Noun & honey & & cf. màn 'fat', àtfór 'bee' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline mánî & Noun & fish, sp. & an unidentified greasytasting fish that looks similar to a tarpon but is found in freshwater & cf. màn 'fat' \\
\hline mántì & Proper Noun & person name & & \\
\hline màngóró & Noun & mango & & Borrowed from Hausa \\
\hline màrè & Noun & river & & \\
\hline màrè fòb & Noun & haunted river & & cf. màrè 'river', àjòb 'ghost, apparition' \\
\hline màsàr & Proper Noun & Egypt & Egypt & Borrowed from Hausa \\
\hline màsí & Verb & know & & cf. mǎ 'to know', màsí 'to notice' \\
\hline màsí & Verb & notice & & cf. màsí 'to know' \\
\hline màjíní & Proper Noun & person name & & \\
\hline mòg & Noun & smoke & & \\
\hline mòm & Verb & laugh & & \\
\hline mòmtí & Verb & greet & & cf. mòm 'to laugh' \\
\hline mē & Noun & mother & & \\
\hline mē & Verb & give them & & cf. mà 'to give', í 'them' \\
\hline mè dágâ & Noun & queen termite & & cf. mè 'mother', dáyâ 'termite hill'. Tone is uncertain. \\
\hline mè swồ & Noun & \begin{tabular}{l}
older female \\
large ape
\end{tabular} & older female in a troop of apes & cf. mè 'mother', swõ̀ 'baboon'. Used for different species of apes (e.g. baboons, chimpanzees, gorillas). \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline \begin{tabular}{l}
mè tàr \\
nīnnāmī
\end{tabular} & Noun & \begin{tabular}{l}
big grinding \\
stone
\end{tabular} & & cf. mè 'mother', àtàr 'stone', nàm 'to grind. Tone is uncertain. \\
\hline mê tiousóg & Noun & official, sp. & the mother of the traditional king; she's responsible for the magic called tìdún & cf. mè 'mother', tìdsón 'magic, sp., east' \\
\hline mèlı́g & Noun & insect, sp. & & cf. mè 'mother' \\
\hline màràsà & Noun & python & & \\
\hline màrà & Verb & return & & \\
\hline mòrèg & Noun & ant, sp. & an unidentified type of ant that stings & \\
\hline mòrèg & Noun & nasal mucus & & cf. àmə̄rēg 'nose' \\
\hline mén \({ }^{\text {a }}{ }^{\text {jíí }}\) & Verb & scattered & to be scattered & cf. mènsí 'to scatter', mìnsí 'to scatter \\
\hline mènsí & Verb & scatter & to scatter things & cf. minsí 'to scatter' \\
\hline mer & Verb & swallow & & Tone is uncertain. \\
\hline m̀fàm & Noun & animal, meat & & cf. àfàm 'animal, meat' \\
\hline m̀tò̀ & Noun & forest & & \\
\hline m̀̀ồ kú & Noun & \begin{tabular}{l}
paternal \\
relative
\end{tabular} & & cf. m̀fò̀ 'forest', jàkú 'ancestor', kùkú 'ancestor' \\
\hline mgbàb & Verb & shoot & & \\
\hline m̀gbètè & Noun & pouched rat & & \\
\hline mījírág & Adjective & alone & & cf. jirāg 'two'. Tone is uncertain. \\
\hline mi \({ }^{\text {L }}\) & Particle & some, any, a certain & existential quantifier & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline mílágmílág & Adjective & soft & & \begin{tabular}{l}
cf. milàksi 'to soften'. \\
Tone is uncertain.
\end{tabular} \\
\hline milàksí & Verb & soften & to make something soft & \\
\hline mìljên & Cardinal numeral & one million & & \begin{tabular}{l}
Borrowed from Hausa. \\
Tone is uncertain.
\end{tabular} \\
\hline mín & Adverb & like this & & \\
\hline míná & Particle & PRSTT, see it & presentative demonstrative & cf. mín 'like this' \\
\hline mīnā & Interrogative proform & which & interrogative modifier & \\
\hline mìnsí & Verb & scatter & to scatter things & cf. mènsí 'to scatter' \\
\hline mīnté & Adjective & few & & cf. ántè 'small' \\
\hline mīnté & Adjective & little & little, only used for mass nouns (fluids, food, fruit) & \\
\hline mín & Verb & build & & \\
\hline mì̀káyá & Noun & water & & \\
\hline \begin{tabular}{l}
mìjkáyá bèr \\
ábūrī
\end{tabular} & Noun & egg white & & cf. mìjkáná 'water', àbèr 'egg', ábūr̄̄ 'white' \\
\hline mìjkáyá bèr ádōmrì & Noun & yolk, egg yolk & egg yolk & cf. mìjkáņá 'water', àbèr 'egg', ád̄̄mrī 'red' \\
\hline mìjkáná mārēg & Noun & nasal mucus & & cf. mìnkáná 'water', àmə̄rēg 'nose' \\
\hline mìjkáyá nùy & Noun & iris (of the eye) & & cf. mìnkáná 'water', ànùy 'eye' \\
\hline mìjkáyá nùy & Noun & tears & & cf. mìnkáyá 'water', ànùy 'eye' \\
\hline mìnkáyá \(\mathbf{n}^{\downarrow}\) tı̀g & Noun & semen & & cf. mị̀káná 'water', ìtòg 'penis' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline \begin{tabular}{l}
mìjkáyá \\

\end{tabular} & Noun & honey & & cf. mìjkáyá 'water', àtýr 'bee' \\
\hline mìjkáyá \({ }^{+}\)vî́ & Noun & milk & & cf. mì̀káná 'water', àvî́ 'bee' \\
\hline míjkìm & Adjective & different & & \\
\hline mìsàg & Noun & broom & & \\
\hline mísí & Adverb & again & & \\
\hline m̀kpákár & Noun & back of head & & \\
\hline m̀kpálílî̀j & Noun & butterfly & & \\
\hline m̀kpàtì & Noun & plant, sp. & a leaf that is used for the preparation of draw soup & \\
\hline m̀kpòkóróg & Noun & tree, sp. & an unidentified type of tree that is used for making traditional toothbrushes & Its name in Hausa is dada toka. \\
\hline m̀kpón & Noun & mute & someone who cannot speak & \\
\hline m̀kp̄̄n & Noun & agama lizard & agama lizard & \\
\hline m̀kpóyé & Noun & thigh & & \\
\hline m̀kpè̀ & Noun & benniseed & sesame seed, benniseed & \\
\hline m̀kpìntàrì & Noun & banana & & cf. m̀kpìnṫ̀rì 'banana' \\
\hline m̀kppìntàrì & Noun & lame person & & cf. m̀kpintı̀ri 'lame person' \\
\hline m̀kpò & Noun & tuwo & & \\
\hline ǹ̀kp̀o đuú & Noun & pounded yam & & cf. m̀̀kpò 'tuwo', àduú 'yam' \\
\hline \(\dot{\mathbf{m}}^{\text {L }}\) & Pronoun & 1SG.POSS, my & first person singular possessive pronominal & \\
\hline mō & Verb & give him & & cf. mà 'to give', ú 'him' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline mpã̃j & Noun & lutefish, sp. & a type of lutefish, living on the bottom of lakes and growing to around 60 cm in length. It goes upstream to lay eggs. & \\
\hline m̀pànḑóy & Noun & mouse, sp. & possibly a jerboa & \\
\hline m̀páyárí & Noun & monkey, sp. & & \\
\hline m̀pı̀g & Noun & male goat & & \\
\hline m̀pı̀m & Noun & rain & & \\
\hline ¢ mpōm & Noun & wing & wing of a bird & \\
\hline ḿpárây & Noun & fish, sp. & featherback, a type of fish with slender and long bodies that has a knife-like shape and is also called knifefish & \\
\hline m̀pə̄rゝ̄g & Noun & rat & & \\
\hline mipàrè & Noun & bird, sp. & & \\
\hline m̀pàrèt & Noun & testicle & & \\
\hline m̀pārı̄ & Noun & goat & & \\
\hline m̀pàrìmì & Noun & dung beetle & & \\
\hline m̀pàrìmì Jîb & Noun & cockroach & & cf. m̀pàrìmì 'dung beatle', à a ib 'shit' \\
\hline m̀pèrè & Noun & leopard & & \\
\hline m̀pō & Noun & monkey, sp. & & Tone is uncertain. \\
\hline ḿprîm & Noun & okra & & \\
\hline m̀púy & Noun & jug, calabash & & \\
\hline mpúy đ̧óy & Noun & ritual calabash & & cf. m̀púy 'calabash', đ૩óy 'deity, sp.' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline m̀púr & Noun & spring & a spring, a point where groundwater reaches the surface & \\
\hline mpwár & Noun & duck & & \\
\hline múg & Verb & lick & e.g. to taste soup, to eat sugar or flour & Tone is uncertain. \\
\hline mùmúsī & Adjective & full & & \begin{tabular}{l}
cf. mùsí 'to fill something'. \\
Tone is uncertain.
\end{tabular} \\
\hline mùjà & Noun & patience & & \\
\hline mùrı̀ & Noun & pearl millet & harvested in august or september & \\
\hline múrô & Noun & maize & & \\
\hline mùrù & Noun & neighbor & & \\
\hline mùrù & Noun & peer & someone in the same social group & \\
\hline mùsí & Verb & fill & to fill something, such as a cup, or a dictionary & \\
\hline
\end{tabular}

N n
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ń & Pronoun & 1SG.S.PFV, I & first person singular perfective and future STAMPmorph/pronominal & \\
\hline ǹ & Pronoun & 1SG.S.IPFV, I & first person singular imperfective STAMPmorph/pronominal & \\
\hline nà & Pronoun & 2SG.ID, you & second person singular independent pronominal & \\
\hline nàb & Verb & cut & to cut something with a cutlass or an axe & \\
\hline nág & Noun & cow & & \\
\hline nàg & Verb & give a name & to give something or someone a name & Tone is uncertain. \\
\hline nàg & Verb & lay eggs & to lay eggs & Tone is uncertain. \\
\hline nàg & Verb & throw & to throw something & Tone is uncertain. \\
\hline nág á \({ }^{\text {hbóg }}\) & Verb & be alive & & cf. nàg 'to throw', àbón 'breath' \\
\hline nág á \({ }^{\text {hbóg }}\) & Verb & breathe & & cf. nàg 'to throw', àbón 'breath' \\
\hline nág á \({ }^{\text {b }}\) bóy & Verb & rest & & cf. nàg 'to throw', àbón 'breath' \\
\hline nám & Noun & buffalo & & \\
\hline nàm & Verb & grind & to grind something & Tone is uncertain. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline námbógórî & Noun & elephantfish & freshwater elephantfish, a family of fish that encompasses a wide range of species with widely varying sizes and different colors (dark and light), all characterized by a big head, and some characterized by an elephant-trunk-like mouthpart. & \\
\hline nāpkō & Adverb & first & & Tone is uncertain. \\
\hline nár & Verb & thick & to be thick & \\
\hline nòr & Noun & spear, sp. & & Tone is uncertain. The final <r> may represent a trill rather than a tap. \\
\hline nojámdí & Noun & iron & & Borrowing from Fulfulde (njamndi) \\
\hline nojámdí & Noun & time & time on a clock & Borrowing from Fulfulde (njamndi) \\
\hline ǹḑìndjènàkù & Noun & mantis & & \\
\hline nēwī & Proper Noun & Person name & & \\
\hline ǹfày & Noun & rat & & \\
\hline nìgí & Verb & stamp & to stamp with one's feet on the ground & cf. nìgí 'to trample'. Tone is uncertain. \\
\hline nigí & Verb & trample & to trample someone or something & cf. nigí 'to stamp'. Tone is uncertain. \\
\hline nìm & Verb & eat, bite & to eat something that you can bite; to bite (e.g. of a dog) & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline nìmsí & Verb & feed & & cf. nìm 'to eat' \\
\hline nìmtím & Noun & tumbu fly & & \\
\hline nínnám & Noun & flesh & & cf. nám 'buffalo', nàm 'to grind' \\
\hline nìnnān̄̄ & Quantifier & many & multal quantifier, expressing that there is a large quantity of something & There is no distinction for count or non-count nouns. \\
\hline nínnár & Adjective & thick & & Used only for things, not for animate nouns. \\
\hline ǹnár & Cardinal numeral & ¢four & & \\
\hline ńsâ & Noun & fish, sp. & African arowana, a species of fish belonging to the bonytongue family with a long body and large scales that can reach up to 1 m in length & \\
\hline ǹsàgà & Noun & fish, sp. & an unidentified type of fish that could be a tigerfish or the Niger tetra & \\
\hline ǹs̀̀g & Noun & salt & & \\
\hline ǹsé & Noun & gazelle, sp. & & \\
\hline ǹsìrā & Noun & bird, sp. & an unidentified mediumsized type of bird that comes to feed on maize on farms during harvest period & \\
\hline ǹsúrín & Noun & dance, sp. & a traditional dance, performed in september & \\
\hline ǹtāb & Noun & darkness & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ǹtàm & Noun & medicine, chemicals & & \\
\hline ǹtàm zùg & Noun & herbicide & & cf. ǹtàm 'chemicals', zùg 'grass' \\
\hline ǹt̄̄g & Noun & penis & & \\
\hline ǹtóy & Noun & mountain & & \\
\hline ǹtóy sání & Proper Noun & place name & A mountain in Sarkin Dawa & cf. ǹtóy 'mountain' \\
\hline ǹtów \({ }^{\text {j }}\) & Noun & south & & cf. jí ntóyí wêj 'clan, sp.' \\
\hline ǹtèkù & Noun & toad & & cf. ántē 'small', kú 'magic, deity, cobra' \\
\hline ǹtén & Noun & spear, sp. & & \\
\hline ńtérî & Noun & squirrel & & \\
\hline ǹtímá & Noun & sheep & & \\
\hline ǹtfã̃ & Noun & star & & \\
\hline ǹtfàtàrì & Noun & stock & A stock that is used to make fences & \\
\hline ǹtfóm & Noun & hoe & & \\
\hline ńtjón & Noun & pig & & cf. ǹt'óy 'pig' \\
\hline ǹtfóy & Noun & pig & & cf. ńfóy 'pig' \\
\hline ńtfón à \({ }^{+}\)jế & Noun & wart hog & & cf. ńt'ón 'pig', à aje 'bush' \\
\hline ǹtfè & Noun & vagina & & \\
\hline ǹtfế & Noun & war & & cf. àtyé 'war' \\
\hline ǹtfír & Noun & bow & & \\
\hline ǹtgír & Noun & tendon & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ǹt & Noun & vein & & \begin{tabular}{l}
cf. intyí 'tendon'; \\
alternative: àlùk̀̀m wò 'vein'
\end{tabular} \\
\hline ǹtgīmā & Noun & crab & & Tone is uncertain. \\
\hline ǹtfîrò \({ }^{\text {g }}\) & Noun & insect, sp. & unidentified insect, elicited with a picture of an ensign fly & Its name in Hausa is rina. \\
\hline ǹt f 厄̃ & Noun & coco yam & & \\
\hline ǹtfùy & Noun & rope & & \\
\hline ńtfwâg & Noun & striped grass mouse & & Also called a 'bad-luck rat'. If you catch one, you shouldn't kill it, because you won't ever be able to catch any rat again. \\
\hline ǹtfwà & Noun & bird, sp. & an unidentified type of waterbird that resembles a storm petrel. It is frequently heard as it has a loud and frequent screech & \\
\hline ǹtfwé & Noun & rainy season & & \\
\hline ǹ̀túýdè̀̀r & Noun & outside of belly & & cf. àdèr 'outside of belly' \\
\hline ǹtútú & Noun & Senegal coucal & Centropus senegalensis & \\
\hline nùg & Verb & copulate & & \\
\hline núy & Noun & bird & & \\
\hline núy & Verb & to drink & & \\
\hline núy & Verb & to smoke & & \\
\hline nùnsí & Verb & feed water & to feed someone a fluid, e.g. milk or water & cf. núy 'to drink' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \begin{tabular}{l} 
Glosses and \\
translations
\end{tabular} & \multicolumn{1}{|c|}{ Definition } & Notes \\
\hline ǹvìnvẽ̀ & Noun & wasp & & \\
\hline
\end{tabular}

Nn
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline já \({ }^{\text {L }}\) & Pronoun & \begin{tabular}{l}
2SG.POSS, \\
your
\end{tabular} & second person singular possessive pronominal & \\
\hline jà̀ & Noun & crybaby & & \\
\hline jáyí & Adverb & quickly & & Tone is uncertain． \\
\hline jàr & Verb & drip & & \\
\hline jàsí & Verb & pour & pour something into or onto a target with a wide opening，e．g．the floor or a large pot & cf．nàr＇to drip＇ \\
\hline jé rá gàw & Verb & limp & to limp，to walk with difficulty & cf．néb＇to go＇，rà＇with＇， gàw＇side，ribs＇ \\
\hline j & Verb & go & & Tone is uncertain． \\
\hline jéní & Verb & refuse & to refuse something & Tone is uncertain． \\
\hline jí & Noun & people，person， man & & \\
\hline jì & Noun & thing， something & & \\
\hline jií bārī & Noun & farmer & & cf．ní＇person＇，bàr＇to farm＇ \\
\hline jí bȳrī & Noun & big man & & cf．ní＇person＇，áb亏̄rī＇big＇ \\
\hline jí bōrī & Noun & elder person & & cf．ní＇person＇，áb戸̄rī＇big＇ \\
\hline jí bōrī & Noun & forefather & & cf．ní＇person＇，áb戸̄rī＇big＇ \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline jì díní & Noun & progress & & cf. nì 'thing', dín 'to meet, to find' \\
\hline jí dūgī & Noun & drunk person & & cf. ní 'person'. Tone is uncertain. \\
\hline jì djùtí & Noun & gift & & cf. nì 'thing', ḑùtì' 'to give a present' \\
\hline ní fāgī & Noun & prisoner & & cf. ní 'person', fàg 'to close, to cover' \\
\hline jí gbàn & Noun & woman, women & & \\
\hline ní gòm bāgī & Noun & Muslim & & cf. ní 'person', àgòm 'forehead', bāgī 'to lower one's forehead', kò gòm bāgī 'mosque' \\
\hline nì ídērī & Noun & school & & cf. nì 'thing', dèrí 'to draw' \\
\hline jì íjnāgē & Noun & itch & & cf. nì 'thing' \\
\hline jì íjòb tūrī & Noun & pump & & cf. nì 'thing', àfòb 'air', tùr 'to pump' \\
\hline nì ífō & Noun & creature & creature, living being & cf. nì 'thing', áfō 'hot' \\
\hline jí kàr fāgī & Noun & deaf person & & cf. nì 'person', àkàr 'ear', 'fàg 'to close, to cover' \\
\hline nì làkı̀m & Noun & termite & & cf. nì 'thing' \\
\hline  & Noun & potter & & cf. ní 'person', àlày 'pot' \\
\hline jí mfố \({ }^{\downarrow}\) sćj & Proper Noun & royal clan that brings the king & & cf. ní 'person', m̀̀ồ 'forest', séj 'tree, sp.' \\
\hline jì mìŋkágá tūgī & Noun & cup & & cf. nì 'thing', mìŋkáyá 'water', tùg 'fetch' \\
\hline jí nág nīmsī & Noun & cattle rearer & & cf. ní 'person', nág 'cow', nìmsí 'to feed' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c}{ Definition } & \multicolumn{1}{c|}{ Notes }
\end{tabular}\(|\)\begin{tabular}{llll|}
\hline ní jí bārī & Noun & farmer & \\
\hline ní jí dūbī 'person', nì 'thing', \\
bàr 'to farm'
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline jì sín rà jí & Proper Noun & person name & & cf. nì 'thing', ní 'person', sin 'to do, to make', rò 'with', ní 'person' \\
\hline jí Jíríkú & Proper Noun & clan, sp. & clan responsible for magic in general & cf. ní 'person' \\
\hline ní tábé tfūgī & Noun & fisherman & & cf. ní 'person', àtàbé 'fish', fyúg 'to catch' \\
\hline jí vān & Noun & man, men & & cf. ní 'person', ávān 'male' \\
\hline jí \({ }^{\text {²0 }}\) g & Noun & lazy person & lazy person & cf. ní 'person', àzóg 'lazy person' \\
\hline jìm & Pronoun & 1SG.ID, me, I & first person singular independent pronoun, also used for focus & \\
\hline jíjı̂́ & Pronoun & other one & another one (both used for people and objects) & \\
\hline jíjî & Pronoun & some & some (indefinite pronoun, used for both people and objects) & \\
\hline jíjkā & Particle & maybe & & This is probably a complex word, but the parts are not clear. Perhaps \(k \bar{a}\) is the conditional marker. Tone is uncertain. \\
\hline nìjế & Noun & snake & & cf. jì 'thing', àjế 'bush' \\
\hline nìsīrī & Noun & money & & cf. nì 'thing', sīr̄̄ 'completely' (?) \\
\hline jî \({ }^{\downarrow}\) zá & Cardinal numeral & nine & & cf. nì 'thing' \\
\hline jó & Pronoun & 2PL.O, you & second person plural object pronominal & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline nò & Pronoun & 2PL.S, you & Second person plural subject pronominal & \\
\hline nó \({ }^{\text {L }}\) & Pronoun & 2PL.POSS, your & second person plural possessive possessive pronominal & \\
\hline nù \̀gūbī & Noun & urine & & cf. nì 'thing', ngub 'to urinate' (uncertain tone) \\
\hline
\end{tabular}
ng
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ¢ & Interjection & come have it & an interjection used for presenting something to someone, urging them to take it & \\
\hline yàmtí & Verb & yawn & & cf. ŋ̀àtí 'to open one's mouth' \\
\hline yànsí & Verb & bend & to bend something, e.g. the branch of a tree & cf. yànsí 'to fold', yán 'to be bent' \\
\hline gànsí & Verb & fold & to fold something, such as clothes & cf. yànsí 'to bend', yán 'to be bent' \\
\hline yág & Verb & to be bent & & \\
\hline Đáy á \({ }^{\text {jí }}\) & Verb & bent & to be bent & cf. yán 'to be bent' \\
\hline yàtí & Verb & open (mouth) & to open one's mouth & cf. yàmtí 'to yawn' \\
\hline ggub & Verb & urinate & & Tone is uncertain. \\
\hline ýgúrôg & Noun & chameleon & & cf. ng gúrôg 'goliath beetle' \\
\hline ńgúrôg & Noun & goliath beetle & & cf. ńgúrôg 'chameleon' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline yíjāmtī & Verb & yawn & & cf. yàmtí 'to yawn'. Tone is uncertain. \\
\hline yílán & Adjective & bent & & cf. yán 'to be bent' \\
\hline ŋ̀ká & Noun & crocodile & & \\
\hline ¢̀k \(\bar{a}^{\text {a }}\) & Noun & thunder & & \\
\hline ŋ̀k \({ }^{\text {a }}{ }^{\text {a }}{ }^{\downarrow}\) líb & Noun & skull & & cf. àlíb 'head' \\
\hline ற̀k \({ }^{\text {ám }}\) & Noun & rest (of something) & & cf. j̀kám 'underneath' \\
\hline ற̀k \({ }^{\text {ám }}\) & Adposition & underneath & & cf. ỳkám 'rest (of something)' \\
\hline ற̀kám sû & Noun & bladder & & cf. ŋ̀kám 'underneath', sù 'navel' \\
\hline ỳkànsīrā\ & Noun & charcoal & & \\
\hline ŋ̀káy & Noun & tick & & \\
\hline ŋ̀kà̀ & Noun & edge & & Tone is uncertain. \\
\hline ỳkáy wó & Noun & tick & & cf. ykáy 'tick', wó 'dog' \\
\hline j̀kā¢fīn & Proper Noun & person name & & \\
\hline ỳkázárî & Noun & ostrich & & \\
\hline ற́kśmî & Noun & \begin{tabular}{l}
nile monitor \\
lizard
\end{tabular} & West Africa nile monitor, an aquatic type of monitor lizard that grows to one or two meters in length; it is called water monitor lizard in English by Kam speakers & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline ற̀̀kòmpánē & Noun & fish, sp. & a type of fish that is dried and smoked before it is eaten; the exact species is not clearly identified & Tone is uncertain. \\
\hline j̀kı̀ntòró & Proper Noun & person name & & \\
\hline ¢́kón & Noun & louse & & \\
\hline j̀kènsì & Noun & razor & & \\
\hline j̀kímá & Noun & milliped & & \\
\hline ற̀kùm & Noun & back & & \\
\hline j̀kùm àgbèr & Noun & nape of neck & & cf. ற̀̀kùm 'back', àgbèr 'neck' \\
\hline j̀kùm \({ }^{\text {àbòg }}\) & Noun & upper part of foot & & cf. j̀kùm 'back', àbòg 'leg, foot' \\
\hline ŋ̀kùm ว̀mə̀rēg & Noun & bridge of nose & & cf. j̀̀kùm 'back', àmə̄rēg 'nose' \\
\hline ற̀kùm ə̀ \({ }^{\text {jé }}\) & Noun & back of hand & & cf. ỳ̀kùm 'back', àné 'hand, arm' \\
\hline ற̀jkùr̀̀g & Noun & throat & & cf. j̀kù̀ròg 'voice' \\
\hline j̀kù̀ròg & Noun & voice & & cf. j̀kù̀ròg 'throat' \\
\hline ̀̀kūrū & Noun & cane rat & & \\
\hline ̀̀kwān & Noun & bean & & \\
\hline j̀kwàtòrì & Noun & joint & & \\
\hline ற̀jkwàtòrì bòg & Noun & knee & & cf. j̀̀kwàt̀̀r̀ 'joint', àbòg 'leg' \\
\hline j̀kwàtòrì jé & Noun & elbow & & cf. ìkwàt̀̀̀rì 'joint', àné 'arm' \\
\hline Øwāb & Quantifier & all & & Tone is uncertain. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline Øwàjá & Phrase & welcome & & Tone is uncertain. \\
\hline jwàntí & Verb & straighten & & \\
\hline Đwwárí & Verb & mix & to mix small things that can still be separated, such as seeds, beans, rice or pepper & Tone is uncertain. \\
\hline „w wórí & Verb & tie a knot & & Tone is uncertain. \\
\hline gwé & Noun & language & & cf. „wé 'mouth' \\
\hline ywé & Noun & mouth & & \\
\hline ywé & Noun & place & & \\
\hline ywé & Noun & river bank & & cf. ŋwé 'mouth' \\
\hline nıwé bûn & Noun & arrow point & & cf. ŋwé 'mouth', àbùn 'arrow' \\
\hline gwé lầ & Noun & mouth of a pot & & cf. „wé 'mouth', àlày 'pot' \\
\hline ywé márê & Noun & river bank & & cf. ŋjwé 'mouth', màrè 'river' \\
\hline Đwé nín dá \({ }^{\downarrow}\) rá & Proper Noun & place name & Garin Hamza, a Kam village & cf. ŋwé 'mouth', àgíníy 'buttocks', dàrá 'palm tree' \\
\hline ywé jupôm & Noun & Kam language & & cf. ŋwé 'language', ànwòm 'Kam' \\
\hline ywì̀kî & Proper Noun & person name & & \\
\hline ywì̀wántī & Adjective & straight & & \begin{tabular}{l}
cf. ŋुwàntí 'to straighten'. \\
Tone is uncertain.
\end{tabular} \\
\hline ̀̀ wún & Cardinal numeral & five & & \\
\hline
\end{tabular}

\section*{O o}
\begin{tabular}{|l|l|l|l|l|}
\hline Kam & \multicolumn{1}{|c|}{ Word class } & \begin{tabular}{l} 
Glosses and \\
translations
\end{tabular} & Definition & \\
\hline \(\mathbf{o}\) & Particle & DIST & & \\
\hline \(\mathbf{0} \mathbf{o}\) & Interjection & no & cf. o:j 'yes' \\
\hline \(\mathbf{0}: \mathbf{j}\) & Interjection & hey & & \\
\hline \(\mathbf{0}: \mathbf{j}\) & Interjection & yes & & \\
\hline
\end{tabular}

Pp
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline pàg & Noun & kitchen & & \\
\hline pàg àbày & Noun & wine kitchen, brewery & literally 'wine kitchen'; a place where alcohol is made, a (small) brewery & cf. pàg "kitchen', àbày 'beer, alcohol, wine' \\
\hline pákpágìní & Noun & giant water bug & & \\
\hline pár & Verb & to be tight & & \\
\hline pàtàrí & Noun & skirt & & \\
\hline pátárí tàr & Noun & cave & & cf. pàtàrí 'skirt', àtàr 'stone'. Tone is uncertain. \\
\hline pàtúrû & Noun & cat & & \\
\hline páb & Verb & to be compressed & & \\
\hline páb á \({ }^{\text {jí }}\) & Verb & pressed together & to be pressed together & cf. pób 'to be compressed' \\
\hline pı̀m & Noun & venom & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline pı̀psí & Verb & press together & to press something together (e.g. a can of soda) & cf. pób 'to be compressed' \\
\hline pà & Verb & come & & cf. pè 'to come' \\
\hline pàpírī & Adjective & astringent & astringent, rough, harsh; the taste one gets when biting an unripe banana or other types of raw fruit or vegetables; it is sometimes translated as 'too dry' into English, because of the dry feeling it leaves in the tongue and mouth; it is closely associated with bitterness but still different from it & \begin{tabular}{l}
cf. pìrí 'to be astringent'. \\
Tone is uncertain.
\end{tabular} \\
\hline pı̀ & Verb & come & & cf. pà 'to come' \\
\hline pâj & Noun & axe & big axe used to cut trees & \\
\hline pén & Verb & jump & to jump across trees & Tone is uncertain. \\
\hline pén & Verb & replace & to replace something & \\
\hline pèntárí & Verb & barter & & cf. pén 'to replace something' \\
\hline pèntórí & Verb & exchange & & cf. pén 'to replace something' \\
\hline pèntórí & Verb & pass & & cf. pén 'to jump across trees' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline pínî & Noun & non-believer & someone who does not believe in a certain deity & This word is used in the context of the jihadi raids that happened in the nineteenth century, where 'infidels' were captured and/or forcibly converted to Islam. \\
\hline pínî & Noun & slave & & \\
\hline pìpèj & Noun & shoulder blade & & \\
\hline píppár & Adjective & tight & & cf. pár 'to be tight' \\
\hline pirí & Verb & astringent & astringent, rough, harsh; the taste one gets when biting an unripe banana or other types of raw fruit or vegetables; it is sometimes translated as 'too dry' into English, because of the dry feeling it leaves in the tongue and mouth; it is closely associated with bitterness but still different from it & \\
\hline pisí & Verb & dry & to dry something & \\
\hline pisí & Verb & spray & to spray something & \\
\hline pí̀ \({ }^{\text {a }}\) ág & Adverb & tomorrow & & \\
\hline pjắw & Proper Noun & village inside Sarkin Dawa & one of the sub-villages within the larger central village of Sarkin Dawa & \\
\hline púppśb & Noun & can & & cf. pób 'to be compressed' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{|c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline púppób & Adjective & \begin{tabular}{l} 
pressed \\
together
\end{tabular} & cf. pób 'to be compressed' & cf. ṕ́b 'to be compressed' \\
\hline pùpwàb & Noun & liver & & \\
\hline
\end{tabular}

\section*{R r}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline rà̀ & Adposition & COM, with & comitative preposition & cf. rà 'imperfective' \\
\hline rà & Particle & \begin{tabular}{l} 
IPFV, to be \\
V-ing
\end{tabular} & \begin{tabular}{l} 
imperfective aspect \\
marker that indicates that \\
the action referred to by \\
the verb is viewed as \\
ongoing
\end{tabular} & cf. rà 'with' \\
\hline rà & Adposition & TEMP, during & \begin{tabular}{l} 
temporal preposition
\end{tabular} & cf. rà 'with' \\
\hline rí & Derivational & ITER & \begin{tabular}{l} 
This suffix conveys the \\
meaning that an action is \\
executed multiple times or
\end{tabular} & \\
\hline affix & repeatedly
\end{tabular}

S s
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline sá & Noun & monkey, sp. & & \\
\hline sã̀ & Verb & roof & to roof a building & \\
\hline sàb & Verb & grab & & \\
\hline sábórág & Noun & spear, sp. & & cf. sàb 'to grab' \\
\hline sàg & Noun & basket & & \\
\hline sàg àtfór & Noun & beeswax & & cf. sàg 'basket', àtfór 'bee' \\
\hline sàmàrí lîm & Proper Noun & place name & Sabon Gida Kamajim, a Kam village & cf. àlím 'front'. Tone is uncertain. \\
\hline sàmbògòrì & Noun & porcupine & & cf. ábōgōrì \\
\hline sámr á \({ }^{\text {ºjí }}\) & Adjective & rotten & & cf. sámrí 'to be bad, cruel' \\
\hline sámrí & Adjective & bad, cruel & & Tone is uncertain. \\
\hline sánígâw & Noun & ribs & & cf. gàw 'ribs' \\
\hline ság & Verb & go, walk & to go, to walk & Tone is uncertain. \\
\hline sár & Verb & comb & & Tone is uncertain. \\
\hline sàr & Noun & \begin{tabular}{l}
rest after \\
filtering
\end{tabular} & something that remains behind after filtering a liquid or mass & \\
\hline sâr & Cardinal numeral & eight & & \\
\hline sàrí & Verb & peel & & \\
\hline sóg múnà & Phrase & plead & to plead with someone & cf. sóg 'to search', mùnà 'patience'. Tone is uncertain. \\
\hline sìj & Noun & iron & & \\
\hline s \(\mathbf{j} \mathbf{j}\) & Noun & spear, sp. & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline sı̀j áfã̃ & Noun & aluminium & & cf. sòj 'iron', áfā̃ 'fresh, unripe' \\
\hline són & Verb & remove & to remove something & Tone is uncertain. \\
\hline sòvírí & Proper Noun & person name & & \\
\hline s¢́ & Adposition & until & & Borrowed from Hausa sái '(not) until, except'. \\
\hline sćbí & Noun & fin & & cf. sćbí 'thorn' \\
\hline sćbí & Noun & thorn & & cf. sćbí 'fin' \\
\hline sćj & Noun & tree, sp. & an unidentified tree with thorns & Its name in Hausa is kaya. \\
\hline sêtusêt & Adjective & pointed & & Tone is uncertain. \\
\hline sc̀r & Noun & room & & \\
\hline sèt tùr & Noun & forge & & cf. sèr 'room', tùr 'to pump' \\
\hline sètí & Verb & tear & to tear a fabric & \\
\hline sí & Derivational affix & CAUS & causative suffix & \\
\hline sì & Particle & SEQ, then & preverbal sequential particle indicating that the action denoted by the clause happens after an earlier mentioned event & \\
\hline sí & Noun & weed, sp. & red sorrel, sheep's sorrel, sour weed, field sorrel, a type of weed that is also called yakuwa in Hausa & \\
\hline sìbı̀g & Noun & shoe & & cf. àbòg 'foot', silibòg 'shoe' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline sīkā & Connective & lest & apprehensive clause connector & cf. sì 'then', kā 'if' \\
\hline sìm & Interrogative proform & how much /many, how & quantity content interrogative, used for enquiring after the quantity of something; quality interrogative & \\
\hline sìn & Verb & do & & cf. sìn 'to make' \\
\hline sìn & Verb & make & & cf. sin 'to do' \\
\hline sírá & Noun & hair & & \\
\hline sírá kpô & Noun & body hair & & cf. sírá 'hair', kpò 'body' \\
\hline sírá núg & Noun & feather & & cf. sírá 'hair', núy 'bird' \\
\hline sírá nùg & Noun & eyelash & & cf. sírá 'hair', ànùy 'eye' \\
\hline sírá guvé & Noun & whiskers & & cf. sírá 'hair', ywé 'mouth' \\
\hline sírá \({ }^{\downarrow}\) dóm & Noun & beard & & cf. sírá 'hair', àdóm 'beard' \\
\hline sírá \({ }^{\text { }}\) líb & Noun & head hair & & cf. sírá 'hair', àlíb 'head' \\
\hline sìrā ... rīg & Particle & be.NEG, is not, does not exist & negative existential construction, expresses that something does not exist or is not present & cf. rīg 'emphasis' \\
\hline sìràkìn & Noun & frankfish & Gymnarchus niloticus, frankfish, freshwater tailrat, or African knifefish, a long, eel-like electric fish found in swamps, lakes, and rivers. It can grow up to 1.5 m & Its name in Hausa is youni. \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline sīrī & Adverb & & \begin{tabular}{l} 
completely, altogether, \\
indicates that the state or \\
action that has been \\
applied to an object has \\
reached its end state
\end{tabular} & Tone is uncertain.
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline swàb & Verb & sing & & \\
\hline swàptárí & Verb & add & \begin{tabular}{l} 
to make something \\
increase, to add to \\
something
\end{tabular} & cf. swàptí 'to increase' \\
\hline swàptí & Verb & increase & to increase (intransitive) & cf. swàptárí 'to add' \\
\hline swár & Verb & live & & \\
\hline swoั̀ & Noun & baboon & & \\
\hline
\end{tabular}
\(\Sigma \int\)
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline Jág & Verb & to be ugly & & \\
\hline fàg & Noun & laugh & & \\
\hline fâg & Noun & fish, sp. & African pike, a type of gamefish that has a pikelike body shape that usually lives in deep water. It grows up to 40 cm in length. & \\
\hline Jób & Verb & to be hot & to be or to become hot & \\
\hline Jób á \({ }^{\text {j}} \mathbf{j}\) í & Verb & heated & to be heated & cf. Jób 'to be hot' \\
\hline sóg & Verb & search & & Tone is uncertain. \\
\hline fòg & Noun & savannah monitor lizard & savannah monitor, a large type of lizard & \\
\hline fòntí & Verb & remove & to remove something & cf. són 'to remove' \\
\hline fòptí & Verb & boil & to boil something & cf. Jób 'to be hot' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline Jór & Verb & survive & & \\
\hline Jè̀ & Noun & ash & & \\
\hline fem & Verb & sneeze & & Tone is uncertain. \\
\hline Jìgáw & Proper Noun & person name & & \\
\hline Jíjág & Adjective & ugly, disgusting & to be ugly or disgusting & cf. Jág 'to be ugly' \\
\hline Jíjób & Adjective & hot & to be hot & cf. Jób 'to be hot' \\
\hline Jòrí & Verb & sour & to be sour, e.g. of milk that has spoiled & \\
\hline fùrı̀g & Noun & elephant & & \\
\hline fù \({ }^{\text {órī }}\) & Adjective & sour & to be sour, e.g. of milk that has spoiled & cf. Sòrí 'sour'. Tone is uncertain. \\
\hline
\end{tabular}

\section*{T t}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline tàb & Verb & breastfeed & to feed on a breast & cf. tàb 'to touch' \\
\hline tàb & Verb & touch & to touch something & cf. tàb 'to breastfeed' \\
\hline tàgàrí & Verb & forbid & to forbid something & cf. tàgí 'to happen' \\
\hline tàgàrí & Verb & save & to keep safe & \\
\hline tàgí & Verb & happen & \begin{tabular}{l} 
to happen, to affect \\
something or someone
\end{tabular} & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline tàlátà & Nominal & Tuesday & & Borrowed from Hausa (Talata) - originally from Arabic at-talaata 'Tuesday', literally 'day the third (starting from Sunday) \({ }^{\prime}\) \\
\hline tám & Verb & grow & to grow (intransitive) & \\
\hline tàmsí & Verb & grow & to make something or someone grow & cf. tám 'to grow' \\
\hline tàmsí & Verb & nurture & to nurture something or someone & cf. tám 'to grow' \\
\hline tánì & Verb & stand, stay & & \\
\hline tán juì hǹ & Phrase & no problem & a response in a greeting, used to say that one is doing well. & cf. tánì 'to stand, to stay', nì 'thing', hǹ 'not'. Literally 'There is nothing.' \\
\hline tán sìm & Phrase & how are you & a question in a greeting & cf. tánì 'to stand', sìm 'how much, how' \\
\hline tántfò & Adverb & still & & cf. tánì 'to stand, to stay' \\
\hline tàyà & Noun & traditional bell & bell used in traditional dances & \\
\hline tárê & Noun & fish net & fishing net & \\
\hline táríhî & Noun & history & & Borrowed from Hausa. \\
\hline tàsí & Verb & drag & to drag something or someone along & cf. tàsí 'to lead' \\
\hline tàsí & Verb & lead & to lead something or someone & cf. tàsí 'to drag' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline tàsò & Noun & dish & & Borrowed from local Hausa (taso) - probably originally from Arabic taasa 'bowl'. \\
\hline to & Particle & so, thus & & \\
\hline tòg & Verb & beg, pray & & cf. tòg 'to request' \\
\hline tòg & Verb & request & & cf. tòg 'to beg, to pray' \\
\hline tòg & Verb & shine & shining or burning of a light, the sun, the moon, fire & \\
\hline tòg & Verb & spit & & \\
\hline tókpár & Adposition & at, near & & \\
\hline tòksí & Verb & light & to light a fire & cf. tòg 'to shine' \\
\hline tòksí & Verb & turn on & to turn on the light & cf. tòg 'to shine' \\
\hline tóm & Verb & send & & Tone is uncertain. \\
\hline tòmsí & Verb & message & & cf. tóm 'to send' \\
\hline tòmsí & Verb & send & & cf. tóm 'to send' \\
\hline tōnī & Verb & swear, promise & & used both as in promising as in saying bad words \\
\hline tòr & Verb & fall & & \\
\hline t \(\overline{\boldsymbol{c}} \mathbf{b}\) & Verb & count & & cf. tēb 'to press' \\
\hline t \(\overline{\boldsymbol{c}} \mathbf{b}\) & Verb & press & & cf. t̄̄b 'to count' \\
\hline tèg & Verb & run & & \\
\hline tí & Derivational affix & CAUS & causative suffix & cf. tí 'to hit' \\
\hline tí & Verb & hit & to hit something, e.g. with a hammer & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline tí Jîb & Verb & defecate & & cf. tí 'to hit', àjib 'shit' \\
\hline tibá & Noun & tobacco & & Borrowed from English, possibly through Hausa. \\
\hline tìdóng & Noun & east & & cf. ḑóy 'deity, sp.' \\
\hline tìdjón & Noun & magic, sp. & & cf. dzón 'deity, sp.' \\
\hline tig & Verb & roof & to roof a place, to cover a room & \\
\hline tíg á \({ }^{\text {jofí }}\) & Verb & be off & to be turned off, of light or of equipment & cf. tīgī 'to cover' \\
\hline tīgī & Verb & cover & to cover or close something & cf. tig 'to roof a place' \\
\hline tīgī & Verb & roof & to roof a building, to cover a room & cf. tīgī 'to cover' \\
\hline tīgī & Verb & turn off (light) & to turn off light & cf. tīgī 'to cover' \\
\hline tiksí & Verb & close & to close one's eyes & cf. tīgī 'to cover' \\
\hline tiksí & Verb & turn off & to turn something off, such as light or fire & cf. tīgī 'to cover' \\
\hline tíntám & Adjective & big, fat, great, large & & cf. tám 'to grow' \\
\hline tintám & Noun & rank & & cf. tám 'to grow' \\
\hline tùb & Verb & push & & \\
\hline túb á jí & Verb & be holed & to have a hole & cf. tùb 'to push' \\
\hline tūbī & Verb & start & to start doing somtehing & cf. tùb 'to push' \\
\hline tùbrí & Verb & gut & to gut a fish before cooking it & cf. tùb 'to push' \\
\hline tùbrí & Verb & put holes & to put holes in something & cf. tùb 'to push' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline túg & Noun & \begin{tabular}{l} 
mortar (in \\
which to pound \\
food)
\end{tabular} & & \\
\hline tùg & Verb & fetch & & Tone is uncertain. \\
\hline tún & Noun & forest & & \\
\hline túy & Noun & hunchback & a person with a hunchback & \\
\hline tùpsí & Verb & pierce & & cf. tùb 'to push' \\
\hline tùpsí & Verb & prick & cf. tùb 'to push' \\
\hline & Verb & pour inside & \begin{tabular}{l} 
target with a narrow \\
mouth, like a bottle or a \\
calabash
\end{tabular} & \\
\hline tùr & Verb & \\
\hline tùr & Verb & pump & & cf. tùsí 'to teach' \\
\hline tùsí & Verb & show & cf. tùsí 'to show' \\
\hline tùsí & Verb & teach & & cf. tùb 'to push' \\
\hline tùttùb & Adjective & gape & to gape, to have a hole & \\
\hline
\end{tabular}
\(T \Sigma\) t
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline t āb & Verb & knead & to knead something & \\
\hline t \({ }_{\text {äb }}\) & Verb & mould & to mould something with one's hands & \\
\hline tyámkı̀n & Noun & sparrow, bird, sp. & northern grey-headed sparrow & \\
\hline táa á \({ }^{\text {jí }}\) & Verb & finished & to be finished & cf. tà̀ri' 'to finish' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline tà̀ & Verb & finish & to finish (something) & \\
\hline táywádjè & Noun & elder daughter of the traditional chief & the first or second born daughter of the traditional chief & Tone is uncertain. \\
\hline tàr & Verb & tell & to tell (e.g. a story) & \\
\hline tyàr & Cardinal numeral & three & & \\
\hline tjog & Noun & earthworm & & \\
\hline tfóygádjùm & Noun & junior daughter of the traditional chief & \begin{tabular}{l}
one of the younger \\
daughters of the traditional chief
\end{tabular} & Tone is uncertain. \\
\hline tfòngàduìm & Proper Noun & person name & & cf. tóngáḑı̀m 'junior daughter of the chief' \\
\hline tfor & Verb & throw a spear & & Tone is uncertain. \\
\hline tyè & Verb & block & & cf. fee 'to lie' \\
\hline tjè & Noun & guinea corn & & \\
\hline tyè & Verb & lie & & cf. fee 'to block' \\
\hline tyéa \({ }^{\text {ºjí }}\) & Verb & be cut & to have been cut & cf. tyesí 'to cut' \\
\hline tyè dìndày & Noun & alcohol & & cf. teè 'guinea corn' \\
\hline tyèrí & Verb & chop & to cut something into pieces & cf. yèsis 'to cut' \\
\hline tyèrí & Verb & turn into & & \\
\hline tyèsí & Verb & cut & to cut something with a knife & cf. tyèrí 'to chop' \\
\hline tféj & Noun & jerboa & & \\
\hline tyèm & Verb & burn & to burn (intransitive) & \\
\hline tfìmsí & Verb & burn & to burn (transitive) & cf. fyèm 'to burn' \\
\hline tis & Noun & child, boy & & cf. àfy ' 'child, boy' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline tyî díg & Noun & drum, sp. & & cf. fy 'diminutive', díg 'drum, sp.' \\
\hline tribá & Noun & clan, sp. & & \\
\hline tikú & Noun & priest & a type of traditional priest & cf. tyi 'child', kú 'magic, deity, cobra' \\
\hline tinè & Noun & teeth gums & & \\
\hline tyini & Verb & betroth & & \\
\hline tintẫj & Noun & twin & & Used to refer to one of the twins. \\
\hline tointfág & Noun & dragonfly & & \\
\hline tjiwántyà & Proper Noun & person name & & cf. tyi 'child', àwàn 'king' \\
\hline tyiwó & Noun & group of people under akimpa & a traditional group of people under the leadership of an official called akimpa & cf. ffi 'child' \\
\hline t f u & Noun & \begin{tabular}{l}
maternal uncle \\
/sister's child
\end{tabular} & & \\
\hline tú jè & Verb & cry & & cf. jé 'to cry, to shout' \\
\hline tfúg & Verb & carry & & cf. fúg 'to catch, to do' \\
\hline tfúg & Verb & catch & & cf. fúg 'to carry, to do' \\
\hline tfúg & Verb & do & & cf. túg 'to catch, to carry' \\
\hline tfùg & Verb & choke & to choke (intransitive) or to choke someone or something (transitive & cf. fúg 'to catch, to carry, to do' \\
\hline t fúg à \({ }^{\text {ª́ág }}\) & Verb & work & & cf. fuúg 'to do', ànág 'work' \\
\hline tfòtán & Verb & stand & & cf. tánì 'to stand, to stay' \\
\hline tfìtán & Verb & stop & & cf. tánì 'to stand, to stay' \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & Word class & \begin{tabular}{l} 
Glosses and \\
translations
\end{tabular} & Definition & Notes \\
\hline t \(\mathbf{w e ̃}\) & Noun & \begin{tabular}{l} 
newborn \\
animal
\end{tabular} & & \\
\hline t. \(w \bar{e} \mathbf{e}\) & Noun & newborn child & & \\
\hline
\end{tabular}

U u
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & Word class & \begin{tabular}{l} 
Glosses and \\
translations
\end{tabular} & \multicolumn{1}{c|}{ Definition } & Notes \\
\hline ú & Pronoun & \begin{tabular}{l} 
3SG.O, him, \\
her, them \\
(singular)
\end{tabular} & \begin{tabular}{l} 
third person singular \\
object pronominal
\end{tabular} & \\
\hline \(\mathbf{u ́ u}^{\text {L }}\) & Pronoun & \begin{tabular}{l} 
3SG.POSS, his, \\
her, their \\
(singular)
\end{tabular} & \begin{tabular}{l} 
Third person singular \\
possessive pronominal
\end{tabular} & \\
\hline
\end{tabular}

V V
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline vànd́́ŕŕg & Noun & heart & & cf. àvándśŕ̌́g 'heart' \\
\hline vég & Verb & die & & Tone is uncertain. \\
\hline vèr & Verb & envelop & & \begin{tabular}{l} 
cf. vèr 'to roll up, twist, \\
wrap'
\end{tabular} \\
\hline vèr & Verb & roll up & to roll up a rope & \begin{tabular}{l} 
cf. vèr 'to envelop, twist, \\
wrap'
\end{tabular} \\
\hline vèr & Verb & twist & to twist something & \begin{tabular}{l} 
cf. vèr 'to envelop, to roll \\
up, wrap'
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline vèr & Verb & wrap & to wrap something & cf. vèr 'to envelop, to roll up, to twist' \\
\hline vèrí & Verb & kill & to kill someone or something & cf. vég 'to die' \\
\hline vî̀ & Noun & pot & a specific type of traditional pot & \\
\hline vín \({ }^{\downarrow}\) tfíní & Noun & lizard & & \\
\hline vít & Verb & mould & to mould something into a shape; to give shape to a shapeless material & \\
\hline vìjkźrí & Verb & make round & to make something round & cf. víy 'to mould' \\
\hline vìgkə́rí & Verb & mould & to mould something, to form something & cf. vín 'to mould' \\
\hline vírí & Noun & dirt & & \\
\hline vitórí & Verb & stumble & to stumble & \\
\hline vówî & Proper Noun & person name & & \\
\hline vùmvònù & Noun & tsetse fly, sp. & & \\
\hline
\end{tabular}

W w
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{|c|}{ Word class } & \multicolumn{1}{|c|}{\begin{tabular}{l} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline wàb & Verb & embrace & to embrace somebody & \\
\hline wàb & Verb & tie & to tie something & \\
\hline wà̀kú & Noun & traditional king & & \begin{tabular}{l} 
cf. àwàn 'king', kú 'magic, \\
deity, cobra'
\end{tabular} \\
\hline wár & Noun & dream & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline wárí & Noun & dream & & cf. wár 'dream'. Tone is uncertain. \\
\hline wàrkû & Proper Noun & person name & & \\
\hline wàtárí & Verb & dream & & cf. wár 'dream' \\
\hline wóg & Noun & malaria & & \\
\hline wògí & Verb & hide & to hide someone or something & \\
\hline wòkórí & Verb & hide & to hide someone or something & cf. wògí 'to hide' \\
\hline wòm & Verb & slap & to slap someone & \\
\hline wòmrí & Verb & hit repeatedly & to hit or slap something or someone repeatedly & cf. wòm 'to slap' \\
\hline wòmtí & Verb & break & to break something & cf. wòm 'to slap' \\
\hline wòr & Verb & be careful & & cf. wòr 'to guard' \\
\hline wòr & Verb & guard & to guard something & cf. wòr 'to be careful' \\
\hline wórû & Noun & snake, sp. & a type of snake; various types of snakes are subsumed under this name, including the speckled shovel-snout snake, the northern (or irregular) green bush snake, and the spotted blind snake & \\
\hline wòsí & Verb & forget & to forget something & \\
\hline wéċèj & Interjection & EXCL & an exclamation of endorsement of another speaker's opinion & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline wと́j & Noun & tree, sp. & a large shade tree that grows in the bush & Its name in Hausa is kawo. \\
\hline wó & Noun & dog & & \\
\hline wò & Noun & blood & & \\
\hline wū & Verb & to be ripe & to be ripe & \\
\hline wùbrí & Verb & pour & to pour something & \\
\hline wùmwòm & Adjective & broken & to be broken & cf. wòm 'to slap' \\
\hline wùmwòm & Adjective & hollow & to be hollow & cf. wòm 'to slap' \\
\hline wúrá & Proper Noun & Wura & & \\
\hline wūr̄̄g & Noun & handle & & \\
\hline wūrī & Verb & accept & & cf. wūrī 'agree, answer, love, need, want' \\
\hline wūrī & Verb & agree & & cf. wūrī 'accept, answer, love, need, want' \\
\hline wūrī & Verb & answer & & cf. wūrī 'accept, agree, love, need, want' \\
\hline wūrī & Verb & love & & cf. wūrī 'accept, agree, answer, need, want' \\
\hline wūrī & Verb & need & & cf. wūrī 'accept, agree, answer, love, want' \\
\hline wūrī & Verb & want & & cf. wūrī 'accept, agree, answer, love, need' \\
\hline wùsí & Verb & rub & & cf. wùsí 'to sweep' \\
\hline wùsí & Verb & sweep & & cf. wùsí 'to rub' \\
\hline wùtrí & Verb & lose & & \\
\hline wūwū & Adjective & done & ready to be harvested & cf. wū 'to be ripe, done' \\
\hline wūwū & Adjective & ripe & & cf. wū 'to be ripe, done' \\
\hline
\end{tabular}

Z z
\begin{tabular}{|c|c|c|c|c|}
\hline Kam & Word class & Glosses and translations & Definition & Notes \\
\hline zâ & Noun & frog & & \\
\hline zág & Noun & side & & \\
\hline zág ágbàn & Noun & left side & & cf. zág 'side', ágbàn 'female" \\
\hline zág áwû & Noun & north side & & cf. zág 'side', àwù 'north' \\
\hline zág áwû & Noun & upwards & & cf. zág áwû 'north side' \\
\hline zánê & Noun & cricket & & \\
\hline zàg & Verb & snatch & to snatch something; to take something and quickly steal away & \\
\hline zày & Verb & wrestle & & \\
\hline zìm & Verb & shave & & \\
\hline zímá & Noun & fencing wood & wood used for fencing & \\
\hline zìmà & Proper Noun & person name & & \\
\hline zírág & Noun & \begin{tabular}{l}
soup, soup \\
ingredient
\end{tabular} & & \\
\hline zírág á \({ }^{\text {j }}\) jírí & Noun & draw soup & & cf. zírág 'soup', àjírí 'draw soup ingredient' \\
\hline zórî & Noun & fish, sp. & an unidentified small fish that tastes bitter & cf. zòrí 'to be bitter' \\
\hline zòrí & Verb & be bitter & & \\
\hline zùb & Verb & deceive & to deceive people, to scam people, to participate in fraud & \\
\hline zùb & Verb & steal & & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|l|l|}
\hline \multicolumn{1}{|c|}{ Kam } & \multicolumn{1}{c|}{ Word class } & \multicolumn{1}{c|}{\begin{tabular}{c} 
Glosses and \\
translations
\end{tabular}} & \multicolumn{1}{c|}{ Definition } & \multicolumn{1}{c|}{ Notes } \\
\hline zùg & Noun & grass & & \\
\hline zùg & Verb & put & \begin{tabular}{l} 
to put something \\
somewhere
\end{tabular} \\
\hline zùg áfã̃ & Noun & fresh grass & & cf. zùg 'grass', áã̃̆ 'fresh, \\
unripe'
\end{tabular}

\section*{English-Kam lexicon}

1PL.O Pronoun júrú
1PL:POSS Pronoun júrú \({ }^{\text {L }}\)
1PL Pronoun jùrù; ì
1SG.ID Pronoun jìm
1SG.O Pronoun ḿ
1SG:POSS Pronoun \(\mathbf{m}^{\text {L }}\)
1SG.S.FUT Pronoun ń
1SG.S.IPFV Pronoun ì
1SG.S.NFUT Pronoun ì
1SG.S.PFV Pronoun ń

2PL. \(O\) Pronoun jó
2PL:POSS Pronoun jó \({ }^{\text {L }}\)
2PL.S Pronoun jò
2SG.ID Pronoun jà
2SG. O Pronoun á
2SG:POSS Pronoun já \({ }^{\text {L }}\)
2SG.S.FUT Pronoun á

\title{
2SG.S.IPFV Pronoun à \\ 2SG.S.NFUT Pronoun à \\ 2SG.S.PFV Pronoun á
}

\title{
3PL:POSS Pronoun \(\mathbf{1}^{\text {L }}\)
}

3PL Pronoun àjí; í
3SG Pronoun ú
3SG:POSS Pronoun úL \(^{\text {L }}\)
3SG.S Pronoun àwú

\section*{A a}

\begin{abstract}
Abanderi Proper Noun àbén ndérí A place name, referring to a village commonly known as
Abanderi. The name literally translates to 'curse' or 'idiotic talk'.
accept Verb wūrī
accompany Verb kár (tone is uncertain)
add Verb bòrsí to add to something, to make something increase or grow; swàptórí
adder Noun sísé
additive marker Particle mà likely a borrowing from Hausa ( \(m \bar{a}\) 'too, also')
ADJ Verb \(>\) Adjective ál \(^{\mathbf{L}}\) - adjectivizer
adjectivizer Verb \(>\) Adjective á \(^{\text {L }}\) -
adverbializer Adjective \(>\) Adverb \(\mathbf{k}\) -
ADVZ Adjective \(>\) Adverb \(\mathbf{k}\) - adverbializer
\end{abstract}

African pike Noun \(\int\) âg African pike, a type of gamefish that has a pike-like body shape that usually lives in deep water. It grows up to 40 cm in length.
afternoon Noun àlég áléb 4 to 7 pm
again \(A d v e r b\) mísí
agama lizard Noun m̀̀kp̄̄y
agree Verb wūrī
air Noun àjòb
alcohol Noun àbày; tfè dìndày
all Quantifier ywāb
alligator Noun lágá'sô
alone Adjective mījírág
also (too) Particle mà additive marker, likely borrowing from Hausa (mā'too, also')
aluminium Noun sòj á \(\int \tilde{a}\)
ancestor Noun jàkú; kùkú
and Connective àmā clause linking marker, likely borrowing from Hausa (àmmā). Not used for linking noun phrases. For this, the comitative marker \(r\) à is used.
anger Noun \(\mathbf{f} \mathbf{\varepsilon ́ b}_{1}\)
angle Noun àdú
animal Noun àfàm refers to mammals and not to insects, fish, birds and reptiles
ankle Noun àgàm ə̀bòg
announce Verb jārī
answer Verb wūrī
ant, sp. Noun àgàg driver ant, a type of army ant that makes temporary anthills with big colonies. It rarely stings. It is called karkwasa in Hausa; káyálí an unidentified type of red ant; mə̀règ an unidentified type of ant that stings
antelope, sp. Noun àbə̀règ red-flanked duiker
anus Noun jí §ìb
apparition Noun àऽว̀b
appoint someone Verb lùtí to appoint someone, to crown someone
argue Verb zùr
arm Noun àné
armband Noun àlĩè an armband that was traditionally given when a man wanted to marry a woman.
Now, it refers to any kind of armband.
armpit Noun àdíkźrí
arrive Verb gbán; \(\mathbf{j} \mathbf{i}\) (tone is uncertain)
arrow Noun àbùn
arrow point Noun gwé bûn
\(\operatorname{ash}\) Noun \(\int \mathbf{e ̀}\)
Ashuwi Proper Noun à \({ }^{\text {ùwíní Name of Hamza, village head of Garin Hamza. }}\)
ask Verb jìb
astringent Adjective pə̀pírī Astringent, rough, harsh. The taste one gets when biting an unripe banana or other types of raw fruit or vegetables. It is sometimes translated as 'too dry' into English, because of the dry feeling it leaves in the tongue and mouth. It is closely associated with bitterness but still different from it.
astringent (be astringent) Verb pìrí
at Adposition tśkpár
axe Noun pếj big axe used to cut trees; lénî a small axe used for fighting

\section*{B b}
baboon Noun swồ
baby Noun àtfî íntē
baby boy Noun àtfì ívān óntfwẽ̃
baby girl Noun àtfì ígbàn óntfwẽ
bachelor Noun àtfî ívān
back Noun ŋ̀kùm
back of hand Noun ŋ̀kùm ə̀né
back of head Noun m̀kpákár
backdoor Noun àdár
backwards Adverb àgún
bad Adjective sámrí (tone is uncertain)
bag Noun ápú
bag, sp. Noun àbárég a bag where harvested crops are stored
bambara nut Noun gùjì kpímkpáyá
bamboo Noun àmán
bamboo bed Noun àl̀̀g
bamboo tree Noun bèd mán bamboo tree
banana Noun m̀kpìntə̀rì
bark Noun kpà bèr
barter Verb pèntórí
barwood Noun àvāykày
basket Noun kàksàg; sàg
bat Noun Gì
Bayaro Proper Noun kpágárág a Kam village
be Verb dá
be across Verb būnī
be alive Verb nág áłbón
be bitter Verb zòré
be careful Verb wòr
be holed Adjective tùttùb to gape, to have a hole
be plenty Verb jèrí to be plenty, to be sufficient
be.NEG Particle sìrə̄ ... rīg Negative existential construction. This construction expresses that something is not present, either in general or in a specific place.
bean Noun àkwān; ŋ̀ \(\mathbf{k w a ̄ n}\)
beard Noun àdóm; sírá \({ }^{\text {d }}\) dóm
beat Verb gbèb
beat repeatedly Verb gbèbrí to beat or kick someone repeatedly
beautiful Adjective lìllèm
beautiful (be beautiful); Verb lèm to be beautiful
beautify Verb lèmsí
beauty Noun àlémrî
because Connective ànálíb
become long Verb bám to be or to become long
become weak Verb kùb
become white Verb búr to become white
bed Noun kòm lù
bee Noun àtfór Also used for bee-flies.
beehive Noun àtfór ágáy
beer Noun àbày
beeswax Noun sàg àtfór
before Adverb kpānēkā; kpānē At least one year ago.
beg Verb tìg
beginning of spine Noun gà̀j the piece of the spine that meets the neck
behind Noun àgún behind
belch Noun àbélî
bell, sp. Noun tàyà bell used in traditional dances
bellows Noun jì sèt tùd bírí
bend Verb yànsí to bend something, such as the branch of a tree; kwàntźrí to bend something, such as the branch of a tree
bend down Verb kùntí to bend down
benniseed Noun m̀̀kpeั̀ sesame seed, benniseed
bent yíyán Adjective to be bent; yáy á ‘jí Verb to be bent
bent (be bent) Verb yáy to be bent
beside Adposition àgàw (tone is uncertain)
betroth Verb tfīnī
big Adjective tíntám; búbb̄̄rī; ábōrī; bùbbòd
big grinding stone Noun mè tàr nīnnāmī
big man Noun jí bȳrī
big one Adjective ákı̀g of a person, for example the oldest in the family
bird Noun núy \({ }_{1}\)
bird, sp. Noun kùrùkwàb an unidentified big type of non-water bird; ǹtfwà \(\mathbf{y}\) an unidentified type of waterbird that resembles a storm petrel. It is frequently heard as it has a loud and frequent screech; m̀pàrè; ǹsìrāy an unidentified medium-sized type of bird that comes to feed on maize on farms during harvest period; kpáfìnè nág an unidentified type of bird. It is white and is often seen moving along with cow herds (tone is uncertain)
birth Noun àlógórî

\section*{bite Verb kìm}
bitter Adjective zùzórī
bitterleaf Noun àtfíróg
black Adjective ábōgōrì
black scorpion Noun kə̀ràbìg Jùgàrì
blacksmith Noun àní sét tùr
bladder Noun ỳkám sû
blade Noun dá the blade of something, e.g. a knife, an axe, a hoe, a key, or a tooth
blanket Noun àpírájî
blind person Noun láyî
block Verb t5è
blood Noun wò
blow Verb bìr; kéb of the wind (tone is uncertain); bíbīrī to blow
blow nose Verb fà \(\mathrm{r}_{2}\) to blow one's nose
blue Adjective ábētfā
boat Noun kīmpȳnī
body Noun kpò
body hair Noun sírá kpô
boil something Verb Jòptí to boil something
bone Noun àkùb
book Noun là kúmé
border Noun vág
Bosc's monitor Noun 〔òg savannah monitor, a large type of lizard
bottom Noun àkpág
bottom of mouth Noun àkpág ywé bî
boundary Noun vág
bow Noun ǹt \(\mathbf{f i n}^{\text {ín }}\)
bow down Verb kùptí; bùsí to bow down to someone, for example to the king bowl Noun àlày àbì
boy Noun àtfìségé; àtfì ; àtfì ívān
brain Noun màn òlíb
brains Noun đá \({ }^{\text {ºíb }}\)
branch kàsí Verb to branch off, to take a different path; àgág Noun
break Verb kàsí
break (maize) Verb kà to break something
break (maize) Verb fé to break something long, such as maize or an arm
break (something long) Verb fé to break something long, such as maize or an arm break something Verb kà; wòmtí
breast Noun àvî́
breastbone Noun àkùb lántí gwầj
breastfeed Verb tàb
breath Noun àbóyó
breathe Verb nág áłbón
brew Verb kpír brew, make a liquid (tone is uncertain)

bring down Verb đ̧̀̀tí to bring something down
bring inside Verb jèsí
broken Adjective gím á \({ }^{\text {jíí; wùmwòm }}\)
broom Noun mìsàg Used to sweep floors
buffalo Noun nám
build Verb míy
bulrush millet, sp. Noun àwàr a type of bulrush millet that is harvested during the dry season
burn Verb tfèm
burn something Verb tfèmsí
bush Noun àjế
bush animal Noun àfàm ̀̀ jế
but Connective àmā
butterfly Noun m̀kpálíl̂̂̀j
buttocks Noun àgíníy
buy Verb dèb
calabash Noun àzíré
calf Noun àfíb ábòg; àfíb
calm yourself down Phrase dá á’vándírég ná bì
can Noun púppśb
cancer Noun àdég à' \({ }^{\text {fế }}\)
cane rat Noun \(\mathfrak{y}\) kūrū
carry Verb jàg; tfúg
carry (on one's back) Verb bùsí \(\mathfrak{y k u ̀ m}\) to carry something on one's back
carry something Verb bùsí to carry something or someone on one's back
carry up Verb jìtí to carry something up
carve something Verb \(\mathbf{g b} \bar{\varepsilon} \overline{\mathrm{E}}_{\boldsymbol{n}}\) to carve something inside something else (e.g. to carve text in a tree), to ridge something
cassava Noun àdí fō
cat Noun pàtúrû
catch Verb tfúg
cattle rearer Noun jí nág nīmsī
CAUS Verb>Verb -lí Possible historical causative suffix. Not synchronically productive.; -sí Causative suffix; -tí causative suffix: this conveys that the action is caused to happen to the object by a subject
causative suffix Verb>Verb -tí causative suffix: this conveys that the action is caused to happen to the patient by an agent; -lí Possible historical causative suffix. Not synchronically productive.; -sí causative suffix
cave Noun pátárí tàr; àlề
centipede Noun àzàntí
chair Noun kj̀m đ̄̄̄ \(\mathbf{y}\)
chameleon Noun ýgúrôg
change Verb dìbrí
charcoal Noun ỳkànsīrāy
chase Verb gúb
chase away Verb gúbí
cheek Noun àḑwã̃
chemicals Noun ǹtàm
chest Noun gwã̀j
chestbone Noun àkùb gwà̀j
chew Verb kìm
chicken Noun kúmé
chief (traditional) Noun àbēní literally "the owner of people"
child Noun àtfìségé ; àtfì ; àtfì íntē
chill something Verb dàksí to make something colder, to cool something down
chin Noun àgbáy
choke Verb tfùg to choke (intransitive) or to choke someone or something
choke someone or something Verb tfùg to choke (intransitive) or to choke someone or something chop Verb t5èrí to cut something into pieces
christian Noun jí nùy tīksī a christian
ciciyawa (Hausa) Noun fỳg grass-eater, a fish found in rivers that can grow to more than 60 cm
city Noun àygwóg áb̄̄rī large town, city
clan Noun sù
clan, sp. Noun jí ntóy sání one of the clans within Kam
claw Noun kpà; đúrú' \({ }^{\text {né }}\)
clay Noun àvàm
clean dìndàm Adjective; fér Verb
clean (be clean) Verb dàm to be clean
clitoris Noun dá ntfè
close Verb fàg
close one's eyes Verb tìksí to close one's eyes
close something Verb bùsí to close something
closed Verb fág á \({ }^{\mathbf{j} i ́ ~ t o ~ b e ~ c l o s e d ~}\)
clothing Noun àpírájî any piece of clothing
cloud Noun àbúr
cobra Noun kú
cockroach Noun m̀pàrìmì Jìb
coco yam Noun ìtfõ
coconut Noun àmàmbárí
coconut tree Noun bèd màmbírí; àdế làsírá
coil (rope) Verb vèr to roll up a rope
cold dé Noun; díddág Adjective ; ádā Adjective
cold (be cold) Verb dág to be cold, to become cold
coldness Noun àdágrî
COM Adposition rà comitative preposition, with
comb (hair) Verb sár (tone is uncertain)
come Verb pè
come out Verb bı̀b
comitative marker Adposition rà comitative preposition, with
commit fraud Verb zùb to deceive people, to scam people, to participate in fraud
comparative verb Particle kı̀r to surpass someone or something
complementizer (for wishes) Particle ká bá complementizer used for expressing wishes
complete something Verb kóm to complete, finish something
completely Adverb sīrī completely, altogether, indicates that the state or action that has been applied to an object has reached its end state (tone is uncertain)
compressed (be compressed) Verb páb to be compressed
conditional particle Particle kā postclausal conditional particle, roughly equivalent to 'if' and 'when' in English
content interrogative (non-human) Interrogative pro-form \(\mathbf{g} \grave{\varepsilon}^{\mathbf{H}}\)... gì jī Content interrogative for nonhumans
content interrogative (quantity) Interrogative pro-form sìm Quantity content interrogative, used for enquiring after the quantity of something.
cook Verb láy (tone is uncertain)
cool down Verb dág to be cold, to become cold
copulate Verb nùg
corpse Noun àvèg
correct Adjective lìllèm
cough kpārī Verb; àkpáré Noun
count Verb \(\mathbf{t} \overline{\mathbf{\varepsilon}} \mathbf{b}\)
courage Noun àvánđ́́rég
cover fàg Verb; kpà Noun ; tīgī Verb to cover or close something
cow Noun nág
co-wife Noun àgbàn ántfwẽ̃
crab Noun ǹtsīmā
crave Verb ntfag to crave something, to really feel like eating something
crawl Verb \(\mathbf{~ C a} a ̄ \mathbf{y}\) ī to crawl
creator deity Proper Noun màm
creature Noun jì í íō creature, living being
cricket Noun zánê
crinum Noun àgòb a type of crinum, a plant with a leafless stem that develops from bulbs. It is used for medicinal purposes. Its name in Hausa is gadeli.
crinum, sp. Noun àgbānē A type of crinum, a plant with a leafless stem that develops from bulbs. It is used for medicinal purposes. Its name in Hausa is gadeli. (tone is uncertain)
crocodile Noun ̀̀ká
cromeria Noun đ̧ázỗ Cromeria, a small (ca. 4 cm ) type of freshwater fish that is often eaten smoked and dried
cross Verb būnī
crossing Noun àbúnrî a crossing over a road, or over a river
cruel Adjective sámrí (tone is uncertain)
crunch Verb kág
crunch something Verb kàksí to crunch something
crunched kíkkág Adjective to be crunched; kág á \(\mathfrak{j} \mathbf{j}\) í Verb to be crunched
crush (with a stick) Verb sùr to crush something with a stick
cry t fú \(\operatorname{Verb}\) jè \(\operatorname{Verb}\) (tone is uncertain); jé \(\operatorname{Verb}\) (tone is uncertain); àjé tfò Noun (tone is uncertain);

> àjé Noun
crybaby Noun jày
cult, sp. Proper Noun ákú; dàmpóy
cup Noun juì mìykáyá tūgī
cut Verb nàb with a cutlass or axe; bír to cut (tone is uncertain)
cut (be cut) tfé á \({ }^{\ell} \mathbf{j}\) í Verb to have been cut (resultative derivation of 'to cut'); gìggàb Adjective to be cut
cut (into pieces) Verb t5èrí to cut something into pieces
cut (with knife) Verb tfèsí to cut something with a knife
cut nails Verb bèntí to cut one's nails
cutlass Noun kàpèj

\section*{D d}
dabchick Noun àfén¹dírí little grebe or dabchick, a small waterbird that is often found in and around lakes; ǹfén \({ }^{\perp}\) dírí little grebe or dabchick, a small waterbird that is often found in and across lakes
damo (Hausa) Noun 〕̀̀g savannah monitor, a large type of lizard
damu (Hausa) Noun J̀̀g savannah monitor, a large type of lizard
dance Verb lig (tone uncertain), lîg gbîg
dance, sp. Noun ǹsúrón A dance that is done in September
dark Adjective ábōgō
darkness Noun ǹtāb
darter Noun sùnù
dash (Nigerian English) Verb đ̧ùtí
daughter Noun àtfì ígbàn
dawn Noun àkáptílíbílíbì
day Noun ànā
day Noun bàrì
day after tomorrow Noun àbúrú
day after tomorrow Noun àbỗ
deaf person Noun jí kàr fāgī
death Noun àvèg
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deceive Verb zùb
decrease Verb \$jòr
deep Adjective dùddùb
deep (be deep) Verb dùb
deep water Noun àdìm
defecate Verb tí \ìb
deity Noun kú generic name for all gods
deity, sp. Noun dóy
deliver Verb lòg to deliver a child
demonstrative (distal) Particle bô
demonstrative (presentative) Particle b\overline{\varepsilon}; mîná; á presentative demonstrative
demonstrative (proximal) Particle bá
descend Verb dj̀̀r
dew Noun àmí
die Verb vég (tone is uncertain)
different Adjective míykìm
difficult Adjective kpìmkpáyī
dig Verb dì
dig something open Verb gbēnī
digging tool Noun àsúm
DIM Particle àtfì
diminutive marker Particle àtfì
dirt Noun kùnì
dirt Noun vírí

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disease Noun àdég
disgusting Adjective \í`ág
dish Noun tàsò - from local Hausa (taso), probably originally from Arabic țaasa 'bowl'
DIST Particle ò
DIST Particle bô
distal demonstrative marker Particle ò
distal demonstrative marker Particle bô
dive Verb lìm
divide Verb gàpsí to share something, to divide something among one another
divorce Verb gàpsí to divorce someone
dizziness Noun ànùy ádiibī
do Verb tfúg
do Verb sìn
do secretly Verb làb (tone is uncertain)
do something secretly Verb daàg
doctor Noun jí séd ntàm
document Noun tákàdà (tone is uncertain)
dog Noun wó
done Adjective wūwu
donkey Noun kúkórú
door Noun jé kôm
down Noun àbìbí
down Noun àbì
drag something Verb tàsí

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dragonfly Noun tfìntfáy
draw Verb dèrí
draw soup Noun zírág á`jírí
draw soup ingredient Noun àjírí
dream wàtórí Verb wár Verb wárí Noun (tone is uncertain)
drink Verb núy
drip Verb nàr
drive Verb bùntí
driver ant Noun àđ\grave{g}
driver ant Noun àgàgbárí
drop, or rain Verb kùb
drum Verb gìn (tone is uncertain)
drunk person Noun jí dūgī (tone is uncertain)
dry Adjective áfō
dry Adjective fúffóg
dry (be dry) Verb fóg
dry season Noun àgày
dry something Verb pìsí
dry tasting Adjective pàpírī
duck Noun m̀pwár
dung beetle Noun m̀pàrìmì
during Preposition rò
dust Noun gúrú
dustbin Noun kúbórî

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\section*{dustbin Noun kùnì}

D d
data (Hausa) Noun làgàtàr Ansorge's Neolebias, a small (max. 2.6cm) fish that lives close to stones and tastes bitter. It is called data in Hausa; zórî A small fish that tastes bitter. It is not precisely identified.

\section*{E e}
ear Noun àkàr
early morning Noun àkáptílíbílíbì 5 to 6 a.m.; mágárí káptì 4 to 5 a.m.
earthworm Noun t〔j̀g
earwax Noun làmìkàr
earwig Noun kàràbìg tfè
east Noun tìđóy
eat Verb nìm
edge Noun ŋ̀kày (tone is uncertain)
egg Noun àbèr
egg white Noun mìykáyá bèr ábūrī
egg yolk Noun mìykáyá bèr ádラ̄mrì egg yolk
Egypt Proper Noun ídíb; màsàr Egypt
eight Cardinal numeral sâr
eighteen Cardinal numeral bò gún sâr
eighty Cardinal numeral àkpố nâr
elbow Noun j̀kwàtàrì jné; àlúlù jé
elder brother of father Noun àná ábȳrī
elder daughter of the king Noun tfáywádè the first or second born daughter (tone is uncertain)
elder person Noun jí bōrī
electricity Noun àlè
elephant Noun Sùròg
elephantfish Noun námbógórî freshwater elephantfish, a family of fish that encompasses a wide range of species with widely varying sizes and different colors (dark and light), all characterized by a big head, and some characterized by an elephant-trunk-like mouthpart.
eleven Cardinal numeral bō gún bĩ̃; bō gún bímbíní
embrace Verb wàb to embrace somebody
EMPH Particle rīg emphatic marker
emphatic marker Particle rīg emphatic marker
empty Adjective káykā \(\mathfrak{\jmath}\) ā (tone is uncertain)
end àlógórî Noun; lògòrí Verb
engage Verb kj̀msí to be engaged to someone or to be betrothed
enhance Verb lèmsí
enlarge Verb bı̀rsí to add to something, to make something increase or grow
enter Verb jé (tone is uncertain)
entrance Noun jé kôm
envelop Verb vèr
epilepsy Noun àgìròkì
era Noun àjì
ethnic group Noun sù
evening Noun àléb (4 p.m. to 7 p.m.)
evil person Noun àwám
EXCL Interjection wééèj an exclamation of endorsement of another speaker's opinion
exclamation of disbelief Interjection à?á an expression of surprise, disbelief, or endorsement of a previous statement
exclamation of endorsement Interjection wééèj an exclamation of endorsement of another speaker's opinion; à?á an expression of surprise, disbelief, or endorsement of a previous statement
exclamation of surprise Interjection à?á an expression of surprise, disbelief, or endorsement of a previous statement
excrement Noun à \(\int\) ìb
exist Verb dá
existential quantifier Particle mí \({ }^{\text {L }}\)
eye Noun ànùy
eyebrow Noun gín ánûy
eyelash Noun sírá nùy
eyelid Noun là nùg

\section*{F f}

\section*{face Noun đúná}
fadama area hole Noun àgùm fẫ A hole that is dug in a flood plain in order to get fresh water.
faintness Noun ànùy áduībī faintness, dizziness
falcon Noun kầj
fall Verb tòr
far Adjective díddáb
far (be far) Verb dáb to be far
farm Verb bàr to farm Noun fóg field, farm
farm animal Noun àfàm ə̀ngwóg
farmer Noun jí bārī; jí ní bārī
fart Noun àsíy
fat màn Noun; tíntám 3 Adjective
father Noun àná; bàbâ (borrowing, likely from Hausa, baba; tone is uncertain)
fear Noun àtfér
feather Noun sírá núy
featherback Noun ḿpə́rây featherback, a type of fish with slender and long bodies that has a knifelike shape and is also called knifefish
feed Verb nìmsí; tàmsí to nurture something or someone
feed water Verb nùysí to feed someone a fluid, such as milk or water
feel angry Verb féb tà?è to feel angry, literally "anger happens" (tone is uncertain)
feeling Noun à \(\int\) ám
female Adjective ágbàn
female magic Noun đóy ágbàn the magic for which women are responsible
fence đì̀ Verb to fence a place; àkźrág Noun
fencing wood Noun zímá wood used for fencing
fertile Adjective lìllòg to be fertile
fertile area Noun àjằ 1 In Nigerian English it is called a 'fadama area'. The term refers to an area that is fit for agriculture and can be irrigated. It usually refers to low-level plains close to water sources.
festival, sp. Noun àkú bónû festival for màm, the creator deity, held during the dry season, around march, after they finish harvesting
fetch Verb tùg (tone is uncertain)
few Adjective mīnté
field fóg field, farm
field sorrel Noun sí red sorrel, sheep's sorrel, sour weed, field sorrel, a type of weed that is also called yakuwa in Hausa
fifteen Cardinal numeral bò gún wún
fifty Cardinal numeral àkpố jírāg rā gún bō
fig tree Noun àgbām
fill Verb mùsí to fill something, such as a cup, or a dictionary
fin Noun sébí
final vowel \(v\) :Any -i Final vowel, which is an optional part of some verb stems; Inflectional/derivational Final vowel, which is part of a variety of constructions, but does not have a dedicated morphosyntactic function.

Fincon Proper Noun fèntfố
find Verb dín (tone is uncertain)
finger Noun G \(^{\text {úrú }}{ }^{\downarrow}\) né
fingernail Noun àlíp tfí rà né; kpà líp tfí rà né
finish Verb tfàyrí
finished Verb tfáy á \(\mathbf{~ j i ́ ~ t o ~ b e ~ f i n i s h e d ~}\)
fire Noun àlè
fire stone Noun àtàr kàpìrù
first Adverb nā⿹k \(\mathbf{k}\) (tone is uncertain)
first one Noun á \({ }^{\prime}\) ífàrì first, ordinal numeral (tone is uncertain)
first person plural object pronominal Pronoun júrú
first person plural possessive pronominal Pronoun júrú \({ }^{\text {L }}\)
first person plural subject pronominal Pronoun ì

\section*{first person plural subject pronominal Pronoun jùrù \\ first person singular future subject index Pronoun ń}
first person singular imperfective subject index Pronoun ì
first person singular non-future subject index Pronoun ì
first person singular object pronominal Pronoun ḿ
first person singular perfective subject index Pronoun ń
first person singular possessive pronominal Pronoun \(\mathbf{m}^{\mathrm{L}}\)
first person singular subject pronominal Pronoun àwú
first wife Noun àgbàn ákwòg
firstly \(A d v e r b \mathbf{n a ̄} \boldsymbol{y} \mathbf{k o}\) (tone is uncertain)

\section*{fish Noun àtábé}
fish, sp. Noun ḿpárây featherback, a type of fish with slender and long bodies that has a knife-like shape and is also called knifefish; \(\int a ̂ g\) African pike, a type of gamefish that has a pike-like body shape that usually lives in deep water. It grows up to 40 cm in length.; Gátfìnûy an unidentified fish. It looks similar to species of Africa tetras, but grows much bigger (up to 2 m ) than the (other) tetras found in the area; mánî An unidentified greasy-tasting fish that looks similar to a tarpon but is found in freshwater; làgàtàr Ansorge's Neolebias, a small (max. 2.6 cm ) fish that lives close to stones and tastes bitter. It is called data in Hausa; ŋ̀k̀̀mpánē a type of fish that is dried and smoked before it is eaten. The exact species is not clearly identified. (tone is uncertain); ǹsàyà an unidentified type of fish that could be a tigerfish or the Niger tetra; fòg grass-eater, a fish found in rivers that can grow to more than 60 cm ; dìgì Senegal bichir, an eel-like fish with a serrated dorsal fin, found in lakes, swamps and close to rivers. Reaches about 30 cm in length.; sìrèkìy, frankfish, freshwater tail-rat, or African knifefish, a long, eel-like electric fish found in swamps, lakes, and rivers. It can grow up to 1.5 m ; đázỗ Cromeria, a small (ca. 4 cm ) type of freshwater fish that is often eaten smoked and
dried; zórî A small fish that tastes bitter. It is not precisely identified.; ńsâ African arowana, a species of fish belonging to the bonytongue family with a long body and large scales that can reach up to 1 m in length.
fishbone Noun àkùp tábé
fisherman Noun jí tábé t fūgī
fishing net Noun àdà̀r; tárê fishing net
five Cardinal numeral ⿹̀̀wún
flame Noun àlímíné lè
flesh Noun nínnám
\(\mathbf{f l o g}\) Verb \(\mathbf{g b} \mathbf{b} \mathbf{b} \mathbf{v a ̄}\)
flour Noun ànám
flower Noun àmálî
fly firì \(\mathbf{1}\) Verb; \(\mathbf{~} \mathbf{0} \mathbf{0}\) Noun
fly, sp. Noun à \(\mathbf{S O}^{\mathbf{s} \mathbf{b}} \mathrm{A}\) fly that disturbs people in the bush.
foal Noun jéní ntē
foam Noun àfír \(_{1}\)
fold Verb fàtárí to fold something; fàrí \(\mathbf{1}\) to fold something
fold Verb kwàntórí \(\mathbf{1}\) to fold something, such as clothes; yànsí \(\mathbf{2}\) to fold something, such as clothes
fold something Verb fàr \(\mathbf{r}_{\mathbf{1}} \mathbf{1}\) to fold something
follow Verb dúg (tone is uncertain)
fool Noun àdíņrî
foolish Adjective díndín
foolish (be foolish) Verb díy to be foolish
foolishness Noun àdíńprî
foot Noun àbòg
forbid Verb tàgàrí \(\mathbf{1}\) to forbid
force Noun àkpímkpáyá
forefather Noun jí bȳrī
forehead Noun àgòm
forest Noun m̀foั̀; tún
forge Noun sèt tùr
forget Verb wàsí to forget something
forty Cardinal numeral àkpố jíràg
four Cardinal numeral ǹnár
four hundred Cardinal numeral àkpố kpéjmī
fourteen Cardinal numeral bō gún nár
foxtail Noun fúrû mission grass or foxtail, a very widespread type of grass
francolin Noun àgbàràg Clapperton's francolin, double-spurred francolin
freeze something Verb dàksí to make something colder, to cool something down
fresh grass Noun zùg á \(\int_{\tilde{a} ; ~ z u ̌ f a ̃ ~}^{\text {an }}\)
Friday Noun duàmbàrè Borrowed from Adamawa Fulfulde (jumbaare), originally from Arabic yoom aj-jum 'a 'Friday', literally 'day of the mosque'
fridge Noun àlày ádā
friend Noun àywà
frog Noun \(\mathbf{z a}\) ã
from Adposition dāgā; dākā
front Noun àlím
front of heel Noun ànùy àbòg

\section*{fruit Noun àlébrî}
fruit, sp. Noun àmùl an unidentified type of fruit that becomes yellow when ripe. Its leaf is used for relieving throat ache (tone is uncertain)
fry (food) Verb jéb (tone is uncertain)
fuck Verb nùg
fuel Noun màn
full Adjective mùmúsī
FV \(v\) :Any-i Final vowel, which is an optional part of some verb stems; Inflectional/derivational Final vowel, which is part of a variety of constructions, but does not have a dedicated morphosyntactic function.

\section*{G g}
gadeli (Hausa) Noun àgbānē A type of crinum, a plant with a leafless stem that develops from bulbs. It is used for medicinal purposes. Its name in Hausa is gadeli. (tone is uncertain); àg̀̀b a type of crinum, a plant with a leafless stem that develops from bulbs. It is used for medicinal purposes. Its name in Hausa is gadeli
gall bladder Noun àwám fàr
Gangsa Proper Noun gàysâ
Gangtu Kamajim Proper Noun gàytú this is the place where the king's people live gape Adjective tùttùb to gape, to have a hole

Garin Hamza Proper Noun ywé nín dá'rá a Kam village
Garin Kadiri Proper Noun àygwóg kádìrì a Kam village
Garin Shingaw Proper Noun àygwóg Jíy \({ }^{\text {ª }}\) gáw a Kam village
Garin Tukura Proper Noun àywí né a Kam village (tone is uncertain)
Garin Zana Proper Noun à \(\mathbf{y}\) gwóg á'kórág Kam village, called Garin Zana in Hausa
gate Noun àdár
gather Verb kòsí ; fàgrí to gather things
gazelle, sp. Noun ǹsé
generation Noun àjì
generosity Noun àjé đđūtī
get Verb tùg (tone is uncertain)
giant water bug Noun pákpágìní
gift Noun jì đuàtí
girl Noun àtfì ígbàn 1
girlfriend Noun àtfî ígbàn
give Verb mà (tone is uncertain)
give him Verb mō
give me Verb mām
give them Verb mē
go Verb \(\boldsymbol{\jmath}\) ع́b (tone is uncertain); sáy to go, to walk (tone is uncertain)
go up Verb bìr \(\mathbf{1}\) to climb or go up an elevated surface
goat Noun m̀̀p̄̄rī
Gobti Proper Noun gòptí
God Proper Noun kùrìkî; àléy
goliath beetle Noun ýgúrôg \({ }_{1}\)
good Adjective lìllèm; ámō
good (be good) Verb lèm to be good
goodness Noun àlémrî
grab Verb sàb
grain Noun dá
granary Noun àzér
grandparent/grandchild Noun kùkú; jàkú 1
grass Noun zùg
grass, sp. Noun fút \({ }^{1}\) kúnú an unidentified type of grass
grass-eater Noun fàg grass-eater, a fish found in rivers that can grow to more than 60 cm
grasshopper Noun kùrúkùrù big grasshopper; gìrè; kàndà the big one
grave Noun àlíbárí; àbə́rí
grazing ground Noun kpá \({ }_{1}\) a path cattle always follow to go to water
great Adjective tíntám
greatness Noun àtámrî
greet Verb mòmtí; jìb greet; jíb ywé to greet someone (tone is uncertain)
grind Verb nàm to grind something (tone is uncertain)
grinded charcoal Noun ànám ǵkànsīrān grinded charcoal. Literally 'flour of charcoal'.
grinding place Noun kò nīnnāmī mill, grinding place
grinding stone Noun àtàr nīnnāmī
grinding stone, sp. Noun àtàr tfế a stone used to make holes while grinding; mè tàr nīnnāmī;
àwóg a type of grinding stone
ground nut Noun gù \(\mathbf{f i ̀}\)
ground-beetle, sp. Noun àł̇̀r̀̀̀kì a type of saber-toothed ground beetle that can spray acid to defend itself
group of people under akimpa Noun tfìwó
grow Verb tám to grow (intransitive); b̀̀rsí to grow (transitive), to add to something, to make something increase or grow
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growth Noun àtámrî
grunt Noun gùm
guard Verb dj\grave{y wór; wòr}
gugale (Hausa) Noun t{ámk\grave{n northern grey-headed sparrow}
guinea corn Noun tfè
guinea corn pap Noun àlísírí
guinea fowl Noun đćrî
gun Noun àlề
Gunduma B Proper Noun àygwóg góp``tí
gut Noun àjè
gut (fish) Verb tùbrí to gut a fish before cooking it

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Hh
hair Noun sírá
hammer tí Verb to hit something, e.g. with a hammer; jí jí tī Noun
hand Noun àjé
hand over Verb dù̀tí
handkerchief Noun àpírájî
handle Noun wūrōg
hang Verb gág to hang
hang out Verb kpàyrí to go out without a particular goal in mind
hang up Verb gàgrí to hang something up
hanging basket Noun káyáláy
happen Verb tàgí to happen
hard Adjective kpìmkpáyī not soft
hare Noun lámê
harmattan Noun fỳnù
harsh tasting Adjective pàpírī Astringent, rough, harsh. The taste one gets when biting an unripe banana or other types of raw fruit or vegetables. It is sometimes translated as 'too dry' into English, because of the dry feeling it leaves in the tongue and mouth. It is closely associated with bitterness but still different from it.
harvest (maize) Verb fé to break something long, such as maize or an arm
harvest (maize) Verb kà to harvest maize by breaking it
hat Noun àgàtìnà
haunted river Noun màrì \(\int\) j̀b
haunted tree Noun bèr àjòb
have Verb kàr
hawk Noun àlítórî
head Noun àlíb
head hair Noun sírá 'líb
hear Verb lèg
heart Noun àvánđírég; vànđírég
heat up (intransitive) Verb \(\int \mathbf{~}^{\mathbf{b}} \mathbf{b}\) to be or to become hot
heated Verb \(\int\) ób á á \(\mathbf{~ j i ́ ~ t o ~ b e ~ h e a t e d ~}\)
heavy Adjective bùbbòd
heavy container Noun àlày pjấw a container that is used as a basin to keep water
hedgehog Noun ká'tfírí
heel Noun àgúy ə́bòg
hello Phrase, súkò
help grow Verb tàmsí to make something or someone grow
herbicide Noun ǹtàm zùg
here \(A d v e r b\) kə̄mā; kã̃ this place, here
here you go Interjection \(\overline{\mathfrak{y}}\) an interjection used for presenting something to someone, urging them to take it; Particle \(\mathbf{b} \bar{\varepsilon}\) presentative demonstrative
heron Noun àgòrù
hey Interjection, o:j
hey! Interjection kaj
hiccough Noun díg
hide Verb wògí; làpsí to do something secretly; wòkźrí
hide oneself (while doing something else) Verb làb to do something secretly, to hide oneself while doing something
hide oneself (while doing something) Verb \&àg to do something secretly (tone is uncertain)
high Adjective dùddùb
high (be high) Verb dùb to be high
hill Noun àtúkúrú
hip, loins, waist Noun kwàr
hippopotamus Noun lwàm
history Noun táríhî
hit àfúr Noun; tí Verb to hit something, e.g. with a hammer
hit repeatedly Verb wòmrí to hit or slap something or someone repeatedly
hoe Noun àtfóm; ìtfóm
hole Noun àgùm a pit, hole (in the ground)
holed Verb túb á 'jí to have a hole
hollow Adjective wùmwòm
honey Noun mìykáyá \(\mathfrak{t}\) tjór; màn \(\grave{t}\) fór
hook gágí Verb; ìgàlím Noun
horn Noun àlímíné
horn of an elephant Noun àfàg fùròg
horse Noun jéyé
host Noun àbèr à ygwóg
hot Adjective Sí \(^{\text {Sób }}\)
hot (be hot) Verb 〔áb to be or to become hot
house Noun àygwóg
householder Noun àbèr à \(\mathbf{g}\) wóg
how Interrogative pro-form sìm Quantity content interrogative, used for enquiring after the quantity of something.
how are you Phrase tán sìm?
how many Interrogative pro-form sìm Quantity content interrogative, used for enquiring after the quantity of something.
how much Interrogative pro-form sìm Quantity content interrogative, used for enquiring after the quantity of something.
hunchback Noun túy
hundred Cardinal numeral àkpố ywún
hungry Noun àbśb
hunter Noun jí \({ }^{\text {t }}\) 'ế kārī; jí ní mgbābī
husband Noun àván
hyena Noun bàgàràg
i.e. Connective wàtò that is to say, in other words, i.e.
idiotic Adjective ándērī about talk, about a person, a very insulting word to use
if not Connective sīkā
illiterate person Noun kpว̌y (tone is uncertain)
imperfective marker Particle rò Imperfective aspect particle, indicates that the action referred to by the verb is viewed as ongoing
improve Verb lèmsí
in between Adposition àlìléb
in front of Adposition àlím
in other words, Connective wàtò that is to say, in other words, i.e.
in the middle Adposition àlìléb
incisor teeth Noun à \(\int\) àg álílléb
increase Verb swàptí
infidel Noun pínî
in-law Noun àywán
insect, sp. Noun ìtfìrı̀̀; mèléy; kàndàgà
inside àlèb Adposition; àlèb Noun
inside of the belly Noun àlèb ə̀dèr
INSTR Particle ká Some oblique prepositional sense that has yet to be discovered. Possibly instrumental.
insult Verb dó (tone is uncertain)
INT Particle hǹ intensifier, used in the intensity construction
intensifier Particle hǹ intensifier, used in the intensity construction
interrogative modifier Interrogative pro-form mīnā interrogative modifier
interrogative relativizer Interrogative pro-form mīnā interrogative modifier
intestines Noun àjè
IPFV Particle rò Imperfective aspect particle, indicates that the action referred to by the verb is viewed as ongoing

\section*{iron Noun ndaámdí; s s̀̀j}
iron wood tree Noun tfítfág iron wood tree, African mesquite, or iron tree. It is called kiriya in Hausa.
is not Particle sìrə̄ ... rīg Negative existential construction. This construction expresses that something is not present, either in general or in a specific place.
it is good for me. Phrase lém má â an expression of delight. Literally 'it is good for/to me'.
itch Noun jì ínāgē
IT Verb>Verb -rí This suffix conveys the meaning that an action is executed multiple times or repeatedly
iterative suffix Verb>Verb-rí This suffix conveys the meaning that an action is executed multiple times or repeatedly

\section*{J j}

\section*{jaw Noun àgbáy Đwé; gàw đ̧wã̃}
jealousy Noun àbèg
jerboa Noun tféj
Jesus Noun àtfî kùrìkî
join Verb kìsí
joint Noun \(̀\) j̀kwàtə̀rì̀; lántí
jug Noun m̀púy
juju Noun kú
jump Verb firī
jump (across trees) Verb \(\mathbf{p e ́ n}_{2}\) jump across trees (tone is uncertain)
junior daughter of the chief Noun t fóygádìm (tone is uncertain)

\section*{K k}

\section*{Kam Noun àywòm}

Kam language Noun ŋwé ŋwôm
Kam people Noun jí ywòm
Kam Sira Proper Noun kàm sírá. Place name, name of a Kam village
Kamajim 1 Proper Noun àywí bóg Place name, Kam name of Kamajim 1
Kamajim 2 Proper Noun àywí lílléb Place name, Kam name of Kamajim 2
Kamajim 3 Proper Noun àywí fénsòg Place name, Kam name of Kamajim 3
kamsuwa (Hausa) Noun fúrû mission grass or foxtail, a very widespread type of grass
karkwasa (Hausa) Noun àḑ̀̀g driver ant, a type of army ant that makes temporary anthills with big colonies. It rarely stings.
kawo (Hausa) Noun wéj A larger shade tree that grows in the bush.
kaya (Hausa) Noun séj A tree that has thorns.

\section*{keep Verb kàr}
keep chickens Verb fà to raise animals; this verb is specifically used for chickens
kick Verb gbèb
kick repeatedly Verb gbèbrí to beat or kick someone repeatedly
kidney Noun Gá gúfì kpò
kill Verb vèrí to kill someone or something
kind Adjective ámō

\section*{king Noun àwàn}
king (traditional) Noun àbēní the owner of people
kiriya (Hausa) Noun tfítfág iron wood tree, African mesquite, or iron tree.
kitchen Noun pàg
knead Verb \(\mathbf{t} \mathbf{f} \mathbf{a} \mathbf{b}\) to knead something
knee Noun ŋ̀kwàtàrì bòg
kneecap Noun àlúlù
kneel down Verb kùptí
knife Noun àbág
knifefish Noun ḿpárây featherback, a type of fish with slender and long bodies that has a knife-like shape and is also called knifefish
knock Verb gìntí to knock, e.g. on wood or on a door
know Verb màsí; mǎ
knuckle Noun àgàm líp tfí rò né
Kurupbe Proper Noun đù̀rùkí

\section*{L 1}

\section*{lake Noun àsòm}
lake amamberi Proper Noun àsı̀m àmàmbárí a lake within the Sarkin Dawa area
lake kpāTārāg Proper Noun àsı̀m kpágárág a lake close to Bayaro
lake Kwàn Proper Noun àsı̀m kwàn a lake close to Ardo Sonvini
lake Wura Proper Noun àsı̀m wúrá Close to Wura
lame person Noun m̀̀kpìntz̀rì
language Noun ywé
large Adjective tíntám; bùbbòd
large ape Noun àkj̀k swồ
last àlógórî Noun the last one in a sequence
last teeth Noun à ààg àdú
late afternoon Noun àléy dág â from 4 pm to 7 p.m.
later Adverb gbánákā in the same day, or general
laugh mòm Verb; ऽàg Noun
lay eggs Verb nàg to lay eggs (tone is uncertain)
lay something down Verb lùtí to lay something down; to appoint someone
laziness Noun àkúptí
lazy person Noun àkúptí ; àzóg lazy person; jí \({ }^{\text {ºńg }}\) lazy person
lead someone Verb tàsí to lead something or someone
lead something Verb tàsí to lead something or someone
leaf Noun àbàràg
leak Verb zùr to leak
lean Verb jètí to lean against something
leave Verb \(\mathbf{j i}\)
left hand Noun ànà mòrēg left hand, literally 'nose hand', the hand used for blowing your nose, as opposed to the right hand, which is used for eating
left side Noun zág ágbàn
leg Noun àbòg
length Noun àbśmrî
lengthen (intransitive) Verb bı̀mtí; bám to be or to become long
lengthen something Verb bòmsí to make something long
leopard Noun m̀pèrè
lest Connective sīkā
lick Verb múg e.g. to taste soup, to eat sugar or flour (tone is uncertain); làg

lie down Verb lù; lù bì to lie down
life Noun àbóyó; àbóy
lift Verb jìtí to carry something up
light àlè Noun; fímfám Adjective; gwó Verb e.g. to light a match (tone uncertain)
light (fire) Verb tı̀ksí to light a fire
light bulb Noun àlè áfã
like àrí bá Adverb; àrí Adposition
like this mín Adverb; míná Particle
\(\operatorname{limp}\) Verb jé rá gàw to limp, to walk with difficulty
lion Noun gúrôg
lip Noun àđ̧wã̃ ywé
listen Verblèg
little Adjective mīnté little, only used for mass nouns (fluids, food, fruit)
little grebe Noun àfén \({ }^{\text {dírí́ little grebe or dabchick, a small waterbird that is often found in and around }}\) lakes; ǹfén \({ }^{\downarrow}\) dírí little grebe or dabchick, a small waterbird that is often found in and across lakes
live Verb swár; đ̧̀̀y settle
liver Noun pùpwàb
living being Noun jì í íō creature, living being
lizard Noun vín't tfíní
lobster Noun kə̀ràbìg mìykáyá
lock Verb fàg
locust bean tree Noun àbórég
LOG.SG Pronoun íi logophoric pronominal
logophoric pronominal Pronoun \(\mathbf{1}^{\mathrm{L}}\) logophoric pronominal
long búmbóm \({ }_{1}\) Adjective; bśm Verb to be or to become long
look Verb \(\mathbf{~ d e} \bar{\varepsilon} r \overline{1}\)
loosen Verb gbàsí
lose Verb wùtrí
louse Noun ýkóy
love Verb wūrī
lower one's head Verb bāgī to lower one's head (tone is uncertain)
lung Noun àfàr; àván áfàr (tone is uncertain)
lungfish Noun àví West African lungfish, an air-breathing fish with an eel-like body that can reach 1 m in length and lives in riverbeds.
lutefish, sp. Noun m̀pãj A type of lutefish, living on the bottom of lakes and growing to around 60 cm in length. It goes upstream to lay eggs

\section*{M m}
madman Noun jí kāysī
madrid Noun àvāykày
magic, sp. Noun tìdóy
mahogany tree Noun àbù
maiwa (Hausa) Noun àwàr a type of bulrush millet that is harvested during the dry season maize Noun múrô
make Verb māmī to make or create something; sìn
make a rope Verb kwár (tone is uncertain)
make angry Verb má \({ }^{\mathbf{~ f e ́ b}}\)
make beautiful Verb lèmsí
make good Verb lèmsí
make grow Verb tàmsí to make something or someone grow
make holes in something Verb tùbrí to put holes in something
make round Verb vì̀kźrí to make something round; dìb to make something round
make something cold Verb dàksí to make something colder, to cool something down
make something long Verb bòmtí
make wide Verb jàrsí to make something wider
malaria Noun wóg
male Noun ávān
male agama lizard Noun ànâ mkpı̂y male agama agama
male goat Noun m̀̀pòg
malice Noun àbésí malice
man Noun jí; ànì vān; jí vān; àní
mango Noun màygóró
mantis Noun ǹđìndè̀nàkù
many Quantifier nìnnānī multal quantifier, expressing that there is a large quantity of something.
There is no distinction for count or non-count nouns
market Noun lùmò; àgbáyásùb
marry Verb jág ágbàn to marry a woman (tone is uncertain)
mat Noun àfí
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match Noun kàpìrù
maternal relative Noun àlóg
maternal uncle/sister's child Noun tfu
matoni (Hausa) Noun àsúm any tool used for digging holes, e.g. boreholes
maybe Particle jí\etakā (tone is uncertain)
me Pronoun jìm me, first person singular independent pronoun, also used for focus
measure Verb mag to measure something (tone is uncertain)
meat Noun àfàm meat, food from an animal
medicine Noun ǹtàm
meet Verb dín (tone is uncertain)
men Noun jí vān
menstruation Noun àdàm
message àtóm Noun; t\grave{msí Verb}\mp@code{}\mathbf{N}
middle Noun àlìlćb
millipede Noun \grave{kímá}
milk Noun mì\etakáyá +ví
milk teeth Noun à Jàg àví́
mill Noun k\grave{ nīnnāmī mill, grinding place}
millet, sp. Noun àwàr a type of bulrush millet that is harvested during the dry season
mission grass Noun fúrû mission grass or foxtail, a very widespread type of grass
mix Verb kpāb

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mix (small things) Verb ywárí to mix small things that can still be separated, such as seeds, beans, rice or pepper (tone is uncertain)

Monday Noun kàykánê Name of a Jirim village that has a market event on Mondays. Also Kankani.

\section*{money Noun jìsīrī}
monitor lizard Noun ऽذ̀g savannah monitor, a large type of lizard
monkey Noun mō (tone is uncertain); sá
monkey, sp. Noun dìm; m̀páyárí
month Noun àdè
moon Noun àdè
moringa tree Noun àlàsírá
morning Noun àkàptì from 6 to 10
mortar (in which to pound food) Noun túg
mosque Noun kò gòm bāgī
mosquito Noun dìnà
mother Noun mē
mould Verb víy to mould something into a shape; to give shape to a shapeless material; vìykźrí to mould something, to form something; tfāb to mould something with one's hands
mount Verb bòr to mount an animal or a vehicle
mountain Noun ǹtóy
mouse, sp. Noun m̀pàndóy
mouth Noun ŋwé; mwé
mouth of a pot Noun ywé lây; mwé lây
much Quantifier nìnnānī multal quantifier, expressing that there is a large quantity of something.
There is no distinction for count or non-count nouns
mud Noun àvìràkwàb
mudfish Noun kwêj mudfish, an airbreathing type of catfish that can grow up to 1 m in length.
Mumuye Proper Noun kwàntóy; àkómlâ

\author{
mushroom Noun àkóg \\ Muslim Noun màkpà; jí gòm bāgī \\ mute Noun m̀̀kpóy
}
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                        N n
    nail Noun kpà
name Noun gán
name something or someone Verb nàg to give something or someone a name (tone is uncertain)
nape of neck Noun ŋ̀kùm àgbèr
nasal mucus Noun mìykáyá mə̄ř̄g; mə̀rと̀g
navel Noun sù
near Adposition tśkpár
neck Noun àgbér
need Verb wūrī
needle Noun àfír
NEG Particle hǹ Clause-final negation marker
negative existential Particle sìrə̄ ... rīg Negative existential construction. This construction expresses
that something is not present, either in general or in a specific place.
negator Particle hì Clause-final negation marker
neighbor Noun mùrù; àywà ygwóg
new Adjective áywī
newborn animal Noun $\mathfrak{t}$ fwẽ
newborn child Noun $\mathbf{t}$ fwẽ
night Noun ábōgō nighttime, when it is dark, roughly from 7 p.m. to 5 a.m.

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Nile monitor Noun \(\mathfrak{\text { j́k}} \mathbf{k} \mathbf{m i ̂}\) West Africa Nile monitor, an aquatic type of monitor lizard that grows to one or two meters in length. It is called water monitor lizard in English by Kam speakers nine Cardinal numeral jǐ̀ \({ }^{\text {zá }}\)
nineteen Cardinal numeral bò gún jízàg
ninety Cardinal numeral àkpố nár 'rá gún bō
nipple Noun àví
NMLZ Verb>Noun à- a synchronically unproductive nominalizing prefix that derives patientive and agentive nouns from verbs; -rì Nominalizing suffix, part of some nominalization constructions

\section*{no Interjection \(\mathbf{0} \mathbf{0} ; \mathbf{m} \mathbf{m}\)}
no problem Phrase tán jì hǹ
noise Noun àwárî
nominalizing affix Verb>Noun à- a synchronically unproductive nominalizing prefix that derives patientive and agentive nouns from verbs; -rì Nominalizing suffix, part of some nominalization constructions
noon Noun àkúrú; àléy kúrú 11 a.m. to 3 p.m.
north Noun àwù; kpàtíbá
north side Noun zág áwû
nose Noun àmə̀r \(\bar{\varepsilon} \mathrm{g}\)
nostril Noun àgùm àmèrēg
notice Verb màsí
now Adverb sīsīrā
Ntoy sani Proper Noun ǹtóy sání A mountain in Sarkin Dawa
nurture Verb tàmsí to nurture something or someone
ní mfố \(\downarrow\) s éj Proper Noun a clan of Kam
nyi shiriku Proper Noun jí Jíríkú clan responsible for magic in general
Nyintongwei Proper Noun jí ntóyí wêj the clan that is responsible for rainfall

\section*{O o}
official, sp. Noun àkìmpá; mē tīđóng the mother of the traditional king; she's responsible for the magic called tìbóy
oil Noun màn
okra Noun ḿprîm
old Adjective ásūmrì
old person Noun kòg̀̀ní
older female large ape Noun mè swõ̀ (tone is uncertain)
older male large ape Noun àná swồ
older sibling Noun ànà bòrì (tone is uncertain)
on top of Adposition àlíb
one Cardinal numeral bĩ̃; bímbíní (tone is uncertain)
one hundred and twenty Cardinal numeral àkpố đúb
one million Cardinal numeral mìljên (tone is uncertain)
open (cloth) Verb làrí to unwrap something that is covered with cloth, also to open curtains
open (door) Verb fàrí to open a door
open (mouth) Verb yàtí to open one's mouth
open something (by digging) Verb \(\mathbf{g} \mathbf{b} \bar{n} \mathrm{n}\) ī to dig open yam heaps, or to dig for groundnuts
openers of the traditional festivals Noun b̄̄nū people responsible for opening the traditional festivals (tone is uncertain)
or kó Connective ; mi Particle
ostrich Noun ற̀ kázárî
other Quantifier nínî
outside àgèr Noun; àgèr Adverb
outside of belly Noun ǹtúŋ́́dèr; àdèr
owner Noun àní

\section*{P p}
pain Noun àdégrî; àdég
painful Adjective dìddèg
palace Noun àgbáy
palate Noun àkpág Đwé gày
palm of hand Noun àdèné
palm tree Noun dàrá
pants Noun bèntí
paper Noun là kúmé paper
pass Verb pèntórí
paternal relative Noun m̀fồ kú
patience Noun mùnà
pay Verb gòm
pearl millet Noun mùrì harvested in august or September
peel Verb sàrí
peer Noun mùrù
penis Noun ǹtōg
people Noun jí; àní
pepper Noun àfìrə̀mán
perfective aspect marker Particle \(\mathbf{a}_{2}\) Perfective aspect marker.
perfective marker
period Noun bàrì
person Noun jí; àní



ற̀̀kòntı̀ró; dùwásām; mántì; jì sín rò jí; vówî; nēwī; s \(\grave{\text { vírí; }}\) àjáwkánî
pestle (to pound food with) Noun bètúg
PFV Particle à Perfective aspect marker.
pick it Verb lèsí
pick something up Verb jág ágày to pick something up, to lift something up (tone is uncertain)
pieces Noun àmùgù a collection of broken pieces of something (e.g. dry fish)
pierce Verb tùpsí
pig Noun ńtfóv
pinch būg Verb; àḑór Noun
pinky Noun àlíp tfí rà jé ntwàb
PL Particle wō; jō Plural marker
place kı̀m Noun; kã Noun place; zùg Verb to put something somewhere; ŋwé Noun
place name Proper Noun àywí bún'tí Garin Lah; dìm This is the place where all the past chiefs are buried.; àbén ndérí A place name, referring to a village commonly known as Abanderi. The name literally translates to 'curse' or 'idiotic talk'.; àygwóg á'kórág Kam village, called Garin Zana in Hausa
place with flat stones Noun àwár \({ }_{1}\) A place with many flat stones.
plait hair Verb fam to plait someone's hair
plant (crops) Verb lòm to plant crops
plant (fruit) Verb đ̧án to plant a tree or fruit
plant (tree) Verb dán to plant a tree or fruit
plant, sp. Noun m̀̀kpàtì A leaf that is used for the preparation of draw soups.; àgbānē A type of crinum, a plant with a leafless stem that develops from bulbs. It is used for medicinal purposes. Its name in Hausa is gadeli. (tone is uncertain)
plate Noun àkprà
platform Noun kámtìrà (tone uncertain)
plead Phrase sóg múnà to plead with someone; literally: to look for patience (tone is uncertain)
pluck Verb kwàsí; gàbrí to pluck something, such as a blade of grass
plural marker Particle jō Plural marker
plural word Particle jō Plural marker
pointed Adjective sêţŝ̂y (tone is uncertain)
porcupine Noun sàmbògòrì
positive response word Interjection a; o:j
POSS Particle rīg Possessive marker.
possessed person Noun àj̀̀b
possessive marker Particle rīg
pot Noun àlày
pot cover Noun jì ywé lây
pot, sp. Noun vì̀ a kind of traditional pot
potter Noun jí lày mȳŋī

\section*{pouched rat Noun m̀gbètè}
pound Verb sùr pound with a mortar
pounded yam Noun m̀̀kp̀o dú
pour Verb tùr to pour something inside a target with a narrow mouth, like a bottle or a calabash
pour something Verb wùbrí to pour something
pour something (into something large) Verb jàsí pour something into or onto a target with a wide opening, e.g. the floor or a large pot
poverty Noun àtfí
praise someone Verb kòrí to praise someone
pregnancy Noun àfù
presentative demonstrative Particle \(\mathbf{b} \overline{\mathbf{\varepsilon}}\); mîná; á
press Verb \(\mathbf{t} \overline{\mathbf{\varepsilon}} \mathbf{b}\)
press clothes Verb déy
press together Verb pìpsí
pressed together púppáb Adjective to be pressed together; páb á \({ }^{\text {jí }}\) Verb to be pressed together
prick Verb tùpsí
priest Noun t \(\mathfrak{j} \mathbf{i ̀ k u ́}\)
prisoner Noun jí fāgī
progress Noun jì díní
promote Verb lèmsí
propeller Noun àtfòr
proverb Noun àbén ə́zūkə̄rī
PROX Particle à; bá
proximal demonstrative marker Particle bá
proximal demonstrative marker Particle à
PRSTT Particle b̄̄ presentative demonstrative; mîná presentative demonstrative; á presentative demonstrative
pull Verb zùr
pump tùr Verb to pump; nì íj̀̀b tūrī Noun
pumpkin Noun àkə̀rè
puncture Verb tùbrí to put holes in something
push Verb tùb
put Verb zùg to put something somewhere
put straight Verb jìsí to put something straight
python Noun mə̀ràsà

\section*{Q q}

Q Particle jī polar question particle
queen termite Noun mè dáyâ (tone is uncertain)
question Particle g̀̀ \(^{\mathrm{H}}\)
question marker Particle jī
quickly Adverb jáyí (tone is uncertain)
quiver Noun bìgè
quotative marker Particle íjíl \(^{\mathbf{L}}\) quotative marker, introduces reported speech; í; á; íbí

R r
rag Noun àpíránî a piece of cloth
rain kpár Verb (tone is uncertain); m̀pı̀m Noun
rain lightly Verb kùb to rain lightly
rainy season Noun ìtfwé
raise chickens Verb fà to raise animals; this verb is specifically used for chickens
rank Noun tìntám
rat Noun ǹfày; m̀pə̄rōg
rattle (traditional) Noun tfítfág traditional rattle used in traditional dances
razor Noun ŋ̀kènsì
reason Noun dá
record Verb jág ýkùròg to record something (tone is uncertain)
red Adjective ádȳmrì; dìndı̀m
red ant Noun káyálí an unidentified type of red ant
red sorrel Noun sî́ red sorrel, sheep's sorrel, sour weed, field sorrel, a type of weed that is also called yakuwa in Hausa
red-flanked duiker Noun àbòrèg red-flanked duiker
reedfish Noun kûb reedfish or snakefish, a snake-like fish that can grow more than 30 cm in length
reflexive Particle kpò reflexive pronoun
refrigerate something Verb dàksí to make something colder, to cool something down
refuse Verb jéní to refuse something (tone is uncertain)
remove Verb sóy (tone is uncertain); lùpsí; gbèr; đòntí; lùbrí
remove (by cutting) Verb bà
removed Verb lúb á \(\mathfrak{~ j i ́ ~ t o ~ b e ~ r e m o v e d ~}\)
repair something Verb kìyí to repair something
replace something Verb pén to replace something
request Verb tòg
rest Verb nág átbóy
rest (of something) Noun ỳkám
rest after filtering Noun sàr
Resultative marker
return Verb màrà
ribs Noun sánígâw; gàw; àgàw (tone is uncertain)
rice Noun đá zûg
ridge something Verb \(\mathbf{g b} \bar{\varepsilon} n \bar{n}\) to carve something inside something else (e.g. to carve text in a tree), to ridge something
ridi (Hausa) Noun m̀kpè̀ sesame seed, benniseed
right hand Noun ànà nīmī
right side \(A d v e r b\) ázág ávān
rinse Verb bàrí
ripe Adjective wūwū
ripe (be ripe) Verb wū to be ripe
ripe fruit Noun áwū
ritual calabash Noun m̀púy đóy
river Noun màrè
riverbank Noun ŋwé márê; ŋ̣wé
road Noun àlūk̄̄m (tone is uncertain)
roast Verb déy
rodent, sp. Noun bárí
roll up (rope) Verb vèr to roll up a rope
roof Verb sã̀ to roof a building
roof tìg Verb to roof a place; tīgī Verb to roof a building; àlíp sêr Noun; kámtìrà Noun (tone uncertain)
room Noun sèr; àlèsèr
rooster Noun kúmé vān; à à̀ùù
root (of a plant) Noun àlógórî
root of a tree Noun díráy bêr
rope Noun ǹtfùy
rot Verb būm to rot, to spoil
rotten Adjective sámr á \({ }^{\mathbf{j} \mathbf{j}}\)
rough Adjective dàm hǹ
rough tasting Adjective pàpírī Astringent, rough, harsh. The taste one gets when biting an unripe banana or other types of raw fruit or vegetables. It is sometimes translated as 'too dry' into English, because of the dry feeling it leaves in the tongue and mouth. It is closely associated with bitterness but still different from it.
round gínéné Adjective (tone is uncertain); đìb Verb to make something round
rub Verb wùsí
run Verb tèg

\section*{S s}
saber-toothed ground beetle Noun àđìròkì a type of saber-toothed ground beetle that can spray acid to defend itself

Sabon Gida Kamajim Proper Noun sàmàrí lîm, a Kam village, part of Kamajim (tone is uncertain) safari ant Noun àdò̀g driver ant, a type of army ant that makes temporary anthills with big colonies. It rarely stings. It is called karkwasa in Hausa
saliva Noun àđóy
salt Noun ǹsı̀g; sùnsìg
same Adverb tántfò̀
sand Noun àlà fíné a type of sand found by the riverside
Saturday Noun àsábâr Borrowed from Hausa (Asabar), originally from Arabic yoom as-sabat
'Saturday', literally 'day the seventh (starting from Sunday)'
savannah monitor Noun 〔j̀g savannah monitor, a large type of lizard
save Verb tàgàrí to keep safe
say Verb bén (tone is uncertain)
scam Verb zùb to deceive people, to scam people, to participate in fraud scatter Verb mènsí
scatter something Verb mìnsí to scatter things
scattered (be scattered) Verb mén á \({ }^{\text {joí }}\)
school Noun đàygìrìgò; jì ídērī
scorpion Noun kàràbìg
scrape Verb déy
scratch Noun jì ígbērī̄
scratch something Verb gbèr
search Verb sóg (tone is uncertain)
second person plural object pronominal Pronoun jó
second person plural possessive pronominal Pronoun jól \({ }^{\text {L }}\) pronominal
second person plural subject pronominal Pronoun jò
second person singular future subject index Pronoun á
second person singular imperfective subject pronominal Pronoun à
second person singular independent pronominal Pronoun jà
second person singular object pronominal Pronoun á
second person singular perfective subject index Pronoun á
second person singular possessive pronominal Pronoun jál pronominal
secret Verb làpsí to do something secretly
section Noun sù
see Verb dóg (tone is uncertain)
seed Noun àwù \(\mathbf{u}_{2}\); àwù jù a generic noun used for any type of seed; Gá
semen Noun mìykáyá ntı̀̀g
send Verb tóm (tone is uncertain); t̀̀msí
Senegal coucal Noun ìtútú Centropus senegalensis
separate Verb gòpsí to separate things; gàpsí to separate things
separated Verb gáb á \({ }^{\text {jí }}\)
SEQ Particle sì preverbal sequential particle indicating that the action denoted by the clause happens
after an earlier mentioned event
sequential marker Particle sì preverbal sequential particle indicating that the action denoted by the
clause happens after an earlier mentioned event
sesame seed Noun m̀kpeè sesame seed, benniseed
seven Cardinal numeral đuùb jīrāg
seventeen Cardinal numeral bō gún đúb jīrāg
seventy Cardinal numeral àkpớ tJár rā gún bō
sew Verb gbàm
shade Noun GúGúrág
shadow Noun đúdúrág
shake Verb gbìgí
shame Noun ànù̀ á'bágé
shape Verb víy to mould something into a shape; to give shape to a shapeless material
share Verb gàb to share something; gàpsí to share something, to divide something among one another
sharp Adjective lìllèg
sharp (be sharp) Verb lèg to be sharp
sharpen Verb lèksí to make something sharp
shave Verb zìm
shawo (Hausa) Noun m̀̀pàrè
shea tree Noun àdế shea tree
sheep Noun ǹtímá
sheep's sorrel Noun sî́ red sorrel, sheep's sorrel, sour weed, field sorrel, a type of weed that is also called yakuwa in Hausa
shin Noun àkùb ə̀bòg; gbágá
shine Verb tòg shining or burning of a light, the sun, the moon, fire
shirt Noun àfú; àpírájî any piece of clothing
shit Noun à \(\mathbf{J i b}\)
shoe Noun sìbòg
shoot Verb mgbàb
short, poisonous snake Noun àłwàn A type of short, poisonous snake.
shoulder Noun àkpèb ə̀né; àkpèb
shoulder blade Noun pìpèj
shout àjé Noun; ká Verb (tone is uncertain); àjé kà Noun; jé Verb (tone is uncertain)
shout for attention Interjection o:j
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show Verb tùsí
shrew Noun dílóg
sick Adjective dìddèg
sick (be sick) Verb dèg to be or to become sick
sickle Noun àzònù
side Noun zág; àgàw (tone is uncertain)
sing Verb swàb
sit Verb G\`̀\ situation Noun dá six Cardinal numeral duìb sixteen Cardinal numeral bò gún dûb sixty Cardinal numeral àkpo\tilde{ tfár} skeleton Noun àkùb skin Noun là; là kpò skinny Adjective búgbág (tone is uncertain) skirt Noun pàtàrí skull Noun \̀kāgā`líb
sky Noun àd\varepsiloǹgà\eta
slap Verb w\grave{m} to slap someone
slaughter Verb bír (tone is uncertain)
slave Noun pínî
sleep Verb lù; lùsí
sling Noun àlo\tilde{0}
slippery Adjective kpìkpésī

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slippery (be slippery) Verb kpèsí to be slippery
small Adjective átwàb; ántē; ántwàb
smell àkúrî Noun; kùsí Verb to smell something; kúkkúr Adjective
smell (intransitive) Verb kúr to stink, to be smelly
smoke Noun mòg Verb núy to smoke (tobacco)
smooth Adjective kpìkpésī; kùkśktī
smooth (be smooth) Verb kpèsí to be smooth; kj̀ktí to be smooth
snake Noun jì \({ }^{\text {ế }}\)
snake, sp. Noun sísé; àkár; wórû a type of snake. various types of snakes are subsumed under this name, including the speckled shovel-snout snake, the northern (or irregular) green bush snake, and the spotted blind snake; zùp \(\int \tilde{a}\) A type of green snake that lives in green grasses.
snatch Verb zày to snatch something; to take something and quickly steal away
sneeze Noun à \(\int\) ém
snore dērī Verb; àdérî Noun
so Particle t̀̀
soft Adjective mílágmílág (tone is uncertain)
soften Verb mìlàksí to make something soft
soil Noun àbìbí ; àbì \({ }_{1}\)
soldier termite Noun àkòràg
sole of foot Noun àdèbòg
some Pronoun jínî
some Particle mí \({ }^{\text {L }}\) existential quantifier
something Noun jì
somewhere Noun gwéj
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son Noun àtfì ívān
song Noun àbì
sorry Interjection dàr an apology (tone is uncertain)
soup Noun zírág
soup ingredient Noun zírág
sour Adjective \intù\intórī taste of something that is spoiled, something that has become sour
sour (be sour) Verb Sòrí to be sour
sour weed Noun síi red sorrel, sheep's sorrel, sour weed, field sorrel, a type of weed that is also called
yakuwa in Hausa
south Noun àd\grave{y; ǹtówéj}
sparrow Noun tfámkòn northern grey-headed sparrow
speak Verb bén
spear Noun sábárág; s⿱亠j
spear grass Noun súbí
spider Noun àlání
spine Noun àkùb ỳkùm
spit Verb tòg
spoil (intransitive) Verb būm to rot, to spoil
spoiled Adjective būmbūm rotten, spoiled, decayed
spoon Noun àtfì kpírág
spray something Verb pìsí to spray something
spring Noun m̀púr
squat Verb kùptí
squeeze Verb fam to squeeze something

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squirrel Noun ńtérî
squirrel, sp. Noun gbê
stab Verb bàg
stamp (on the ground) Verb nìgí to stamp with one's feet on the ground (tone is uncertain)
stand Verb jī; tfùtán
stand trial Verb bír ánùy literally 'swear on one's eyes' (tone is uncertain)
star Noun ìtf(̄̃
start Verb tūbī
steal Verb zùb
steam Noun àbìm
stick Noun kwî
stick used for communication Noun kúkwéj a stick that is used to send messages from village to
village
stick, sp. Noun kúkwéj a stick that is used to send messages from village to village
stingray Noun jìfúrû Niger stingray, a stingray found in rivers in the area
stink Verb kúr to stink, to be smelly
stock Noun ǹtfàt̀̀rì A stock that is used to make fences
stomach Noun ápú dèr
stone Noun àtàr
stool Noun àgbág
stop Verb tsùtán
story Noun àywī
straight Adjective ywìywántī
straighten something Verb ywàntí

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stranger, guest Noun gó
stream Noun gbòrù; gbó
strength Noun àkpímkpáyá
stretch (rubber, plastic) Verb zùr to stretch rubber or plastic
striped grass mouse Noun ńtfwâg It is also called a 'bad-luck rat'. If you catch one, you should not kill
it, because you won't ever be able to catch any rat again.
striped polecat Noun gbùgbúrû
strong kpìmkpáyī Adjective; kpàyí Verb
structure Noun đúná
stubborn boy Noun àtfì 〕òb
stumble Verb vìtórí to stumble
suck Verb fàd
sugar Noun kántô; àfár
sugar cane Noun àfárómkpã̀ (tone is uncertain)
sun Noun àléy
Sunday Noun láhàdì Borrowed from Hausa (Lahadi), originally from Arabic yoom al-ahad 'Sunday', literally 'day the first'
surpass Particle kj̀r to surpass (someone or something)
survive Verb 〔ór
swallow Verb mer (tone is uncertain)
swamp Noun à \(\int a \check{~ a}\)
swear Verb tȳnī both as in promising as in saying bad words
sweat Noun àdíkórí; kò á \(\int o ̄\)
sweep Verb wùsí
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sweet Adjective sùnsó\ī
swell Verb féb to swell (tone is uncertain)

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\section*{Tt}
tail Noun àsé
tailor Noun jí jí gbāmī
take Verb jàg
take bath Verb lò kpò to take a bath, to have a shower
talk bén Verb (tone is uncertain); àbén Noun
tall Adjective dùddùb
tall (be tall) Verb dùb to be tall
taste Verb mag (tone is uncertain)
teach Verb tùsí
teacher Noun málâm; jí ní dūbī
tear Verb gìmsí cutting or breaking a part from, e.g., bread or tuwo; sètí to tear a fabric
teardrop Noun àmí nûy
tears Noun mànkáyá nùy
teeth gums Noun tfìnè
tell Verb tfà \(\mathbf{r}_{2}\) to tell (e.g. a story); bén (tone is uncertain)
TEMP Adposition ká Used as NP conjunction in time reference. Possibly a preposition in this use.
Possibly only used together with quantified time indications.; rà temporal preposition, during
temporal preposition Adposition rà temporal preposition, during
ten Cardinal numeral bō
tendon Noun ìt \(\mathbf{f}_{1}^{\text {in }}\)
termite Noun jì làkòm
termite hill Noun dáyâ a big one, made with dry sand
termite hill, sp. Noun àbég A small type of termite hill, made as if there is a cap on it
termite, sp. Noun àzání an unidentified type of termite
termite's nest Noun àfùgàrì
testicle Noun m̀pə̀rè̀
that Particle ò distal demonstrative marker
that Particle bô distal demonstrative
that (complementizer expressing wishes) Particle ká bá complementizer used for expressing wishes that is (to say) Connective wàtò that is to say, in other words, i.e.
the clan that takes care of the chief Noun tfíbá
the sun has gone down Phrase àléy jí â This phrase is used when the chief has died. Mentioning it explicitly is taboo.
then Particle ìkā (tone is uncertain)
there kı̀mò Adverb (tone is uncertain); k \(\overline{\mathbf{o}}\) Particle that place, there
there are no problems Particle kár jí 'mí hǹ A response in a greeting, used to say, 'I am doing alright'. Literally: 'I don't have anything.'
there you go Particle b \(\overline{\mathbf{\varepsilon}}\) presentative demonstrative
thick Adjective nínnár (only for things)
thick (be thick) Verb nár to be thick
thief Noun àzúb
thigh Noun m̀̀kpóyé
thing Noun jì
think fàr Verb to think; hwár Verb (tone is uncertain)
third person plural possessive pronominal Pronoun bíL
third person plural object pronominal Pronoun í
third person plural possessive pronominal Pronoun \(\mathbf{1}^{\text {L }}\) third person plural possessive pronominal Pronoun bí \({ }^{\text {L }}\)
third person plural subject pronominal Pronoun àjí
third person singular possessive pronominal Pronoun bú \({ }^{\text {L }}\)
third person singular object pronominal Pronoun ú
third person singular possessive pronominal Pronoun \(\mathbf{u}^{\text {L }}\)
third person singular possessive pronominal Pronoun búa \({ }^{\text {L }}\)
thirst Noun àywár
thirteen Cardinal numeral bō gún tfâr
thirty Cardinal numeral àkpố bí 'rá gún bō; kpējmī gún bó
this Particle bá proximal demonstrative; à proximal demonstrative marker
thorn Noun sébí
thousand Cardinal numeral dúbú (tone is uncertain)
three Cardinal numeral tfàr
throat Noun ỳkùròg
throw Verb nàg to throw something (tone is uncertain)
throw a spear Verb tfor (tone is uncertain)
thumb Noun àlíp t fí rà né bōrī
thunder Noun \(\mathfrak{y} k \mathbf{k}\)
Thursday Noun àlàmîts From Hausa (Alamis), originally from Arabic yoom al-khamiis 'Thursday’
thus Particle t̀̀; Adverb mín
tick Noun ŋ̀káy; ŋ̀káy wó
tie Verb wàb to tie something
tie (a knot) Verb ywórí to tie a knot (tone is uncertain)
tie (wrapper) Verb kóm to tie a wrapper
tigerfish Noun ǹsàyà an unidentified type of fish that could be a tigerfish or the Niger tetra
tight Adjective píppár
tight (be tight) Verb pár
tighten (intransitive) Verb pár
tilapia Noun kpágárág
till Adposition hár
time Noun àbòg used when counting a number of times something happened; bə̀rì; nđámdí time, as read on a watch
tired kpètí Verb; kpét á 'jí Adjective
tiredness Noun àkpétí
tissue Noun là kúmé tissue
to Adposition hár
toad Noun ǹtèkù
tobacco Noun tìbá
today Adverb ànā
toe Noun àlíp t tí rà bòg
toenail Noun kpà líp tfí rà bòg
toilet Noun àgùm ̀̀ àìb
tomorrow Adverb píłkáy
tongue Noun àlímíné; àlámíné
too (also) Particle mà \(\mathbf{a}_{1}\) additive marker, likely borrowing from Hausa ( \(m \bar{a}\) 'too, also')
tooth Noun à à̀g
toothblade Noun đá fàg the part of a tooth that can be considered its blade.
TOP Particle あē A question-like marker that topicalizes the event or object described by sentence it is postposed to. In English, it can be paraphrased as "What about X?", X being this event or object. Such topicalization often occurs as a cohesive device in storytelling, to tie the discourse together. When used in natural interaction, it also functions as a question marker, pointing the hearer to an entity or topic he has neglected in his discourse.
torn Adjective gím á \(\mathbf{~ j i ́ ~}\)
tortoise Noun àkùr
touch Verb tàb
tough Adjective tfítfár e.g. of a vein in meat
town Noun àygwóg ábȳrī large town, city
traditional bell Noun tàyà bell used in traditional dances
traditional chief Noun àbēní lit. the owner of people
traditional king Noun àbēní lit. the owner of people
traditional rattle Noun tfítfág traditional rattle used in traditional dances
trail Noun ásúrá (tone is uncertain)
trample Verb nìgí to trample someone or something (tone is uncertain)
tree Noun bèr
tree trunk Noun kpò bèr
tree, sp. Noun àbìtfè an unidentified tree that looks similar to the kiriya tree or iron wood tree; tfítfág iron wood tree, African mesquite, or iron tree. It is called kiriya in Hausa; m̀kppòkə́róg an unidentified type of tree that is used for making traditional toothbrushes. Its Hausa name is dada toka.; àgbām; àvāŋkày; séj A tree that has thorns. It is called kaya in Hausa.; wéj A larger shade
tree that grows in the bush. In Hausa it is called kawo.; àbúrú \(\mathbf{A}_{2} \mathrm{~A}\) very common tree with black fruit that looks like a bambara nut.
trousers Noun àgé
truth Noun ántērī
tsetse fly Noun Gờ nág
tsetse fly, sp. Noun vùmvìnù
Tuesday Nominal tàlátà Borrowed from Hausa (Talata) - originally from Arabic at-talaata 'Tuesday', literally 'day the third (starting from Sunday)'
tumbu fly Noun nìmtím
turn Verb Gìbrí
turn into Verb tfèrí
turn off Verb tìksí to turn something off, such as light or fire
turn off (light) Verb tīgī to turn off light
turn on light Verb tòksí to turn on the light
turned off Verb tíg á \({ }^{\text {jí }}\) to be turned off
turtle Noun àkùr
tuwo Noun àkpò; m̀kppò
twelve Cardinal numeral bō gún jírág
twenty Cardinal numeral àkpố bĩ̃; kpējmī
twenty-one Cardinal numeral kpējmī gún bĩ̃
twin Noun tfìntã̃j (one of them)
twist Verb vèr
two Cardinal numeral jīrāg
two hundred Cardinal numeral àkpố bó
two hundred and thirty Cardinal numeral àkpố bó rà kpējmī gún bó two hundred and twenty Cardinal numeral àkpố bó rà kpējmī
type of drum Noun díg \({ }_{2}\); gì̀gà̀y; tfî díg
type of flute Noun gbấ a flute used for communication
type of spear Noun ǹtén; nòrr (tone is uncertain)

U u
udder Noun àví nág
ugly Adjective \(\mathbf{I i ́}^{\text {I }}\) ág
ugly (be ugly) Verb Ság to be ugly
underneath Adposition ỳkám
undress Verb gàrí to take off one's clothes, to undress
unripe Adjective á \(\mathbf{a n ̃}_{\tilde{a}}\)
until Adposition sé
unwrap Verb làrí to unwrap something that is covered with cloth, also to open curtains
up Adposition àgày
upper part of foot Noun ŋ̀kùm z̀bòg
upper teeth Noun àfàg àgáy
uproot Verb lùb
uproot (a crop) Verb lùbrí to uproot a crop
upwards Noun zág áwû
urinate Verb \(\mathbf{y g u b}\) (tone is uncertain)
urine Noun jù \(\mathbf{y g} \mathbf{g u} b i ̄\)
usually \(A d v e r b\) kpáy (tone is uncertain)
\(\qquad\) V v
vagina Noun ǹtfè
valley Noun gbòrù \(\mathbf{~}\) gbó
vein Noun àlùkòm wò; ìtfî́
venom Noun pı̀m
veranda Noun àkìmpég back of the house
village Noun àywí
village inside Sarkin Dawa Proper Noun pjắw
voice Particle \(\mathbf{b} \bar{\varepsilon}\) presentative demonstrative
voilà Noun ŋ̀kùròg
vomit Verb gùrrì to vomit Noun àgùrì
vulture Noun sùrùpấj

W w
wa Noun ìt \(f\) ế
wait Verb đ̧òy wór
wake up Verb đ̇̀tí to wake up
wake up Verb \(\mathbf{j} \mathbf{i}\)
want \(V e r b\) wūrī
war, fighting Noun àtfế
warm Adjective á \(\mathbf{S o}_{0}\)
wart hog Noun ńtfóy à à ế
wash Verb fér

\section*{wasp Noun ǹvìnvè̀}

\section*{water Noun mìykáyá}
water fetching place Noun àfijè a water fetching place, such as a river or a lake
water monitor lizard Noun ǵǵśmî West Africa Nile monitor, an aquatic type of monitor lizard that grows to one or two meters in length. It is called water monitor lizard in English by Kam speakers water snail Noun kòntfìnì May be a water snail or a land snail
weak Adjective kùkkùb to be weakened
wear (clothes) Verb kúb
weaver ant Noun kàtfírî
Wednesday Nominal màjòkàm Name of Mayo Kam, a Kam village with a market event on
Wednesdays.
weed Verb bàr to weed an area, to remove unwanted plants
weed, sp. Noun sí red sorrel, sheep's sorrel, sour weed, field sorrel, a type of weed that is also called yakuwa in Hausa
week Noun lùmò
welcome Phrase ywàná (tone is uncertain)
well àbùndù Noun; đám Adverb (tone is uncertain); ádā Adjective
west Noun àlàwàn

West Africa Nile monitor Noun ŋ́kómî West Africa Nile monitor, an aquatic type of monitor lizard that grows to one or two meters in length. It is called water monitor lizard in English by Kam speakers
wet Adjective díddág
wetness Noun àdágrî
what? Interrogative pro-form \(\mathbf{g} \grave{\varepsilon}^{H}\)... gì jī Content interrogative for non-humans
when Particle àsūwā (tone is uncertain); àsúmà (tone is uncertain)
whet a knife Verb déy
which Interrogative pro-form mīnā interrogative modifier
whiskers Noun sírá ywé
whisper Verb đàg to whisper
white Adjective búbbúr; ábūrī
white man Noun àlàsírá
whitened Verb búr á \({ }^{\text {jíí to be whitened }}\)
who? Interrogative pro-form \(\mathbf{b} \grave{\varepsilon}^{\mathrm{H}}\)... bì jī
wide Adjective jíjár
wide (be wide) Verb jár to be or to become wide
widen Verb jàrsí to make something wider
widen (intransitive) Verb jár to be or to become wide
width Noun àjárî
wife Noun àgbàn
wind Noun à \({ }^{\text {j̀̀ }}\)
wine Noun àbày
wine kitchen Noun pàg àbày literally 'wine kitchen'; a place where alcohol is made, a (small) brewery
wing Noun \(\mathbf{~ m} p \overline{\mathrm{y}} \mathrm{m}\) wing of a bird
wipe Verb déy
wisdom Noun àtfárî
wise person Noun àtfárî
with Adposition rà comitative preposition, with
woman Noun jí gbàn; àjàgbàn
womb Noun àfù
women Noun jí gbàn
wood Noun bèr
work àjág Noun; tfúg à'nág Verb
world Noun àjì
worm-like insect Noun lù
wound Noun àjén
wrap Verb vèr
wrap something Verb fàr
wrapper Noun kpá \({ }_{2}\) a colorful piece of clothing worn by women
wrestle Verb zày
wring out Verb fam to wring something out
wrist Noun àgbér á'né; ànùg àné
Wura Proper Noun wúrá, a Kam village
Y y
yakuwa (Hausa) Noun sî́ red sorrel, sheep's sorrel, sour weed, field sorrel yam Noun àdú
yawn ŋíyāmtī Verb; à áámtí Noun; yàmtí Verb
year Noun àság
yes Interjection \(\mathbf{~ m ; ~ a ~ P o s i t i v e ~ r e s p o n s e ~ w o r d . ; ~ o : j ~}\)
yes! Interjection jáwwà an exclamation of agreement or delight.
yesterday Noun àlīlē
yolk Noun mìykáyá bèr ádōmrì egg yolk
young Adjective átwàb; ántwàb
younger brother Noun àt tì̀ségé \({ }^{\text {tgún }}\)
younger brother of father Noun àná ántē
younger relative Noun àmárá
younger sister Noun àtfàgbàn

\section*{Appendix: Main consultants}

\section*{Introduction}

Many people helped me to collect the data that formed the basis of the current description. The pool of people I worked with was diverse, including men and women, people from various age groups, and from different religious backgrounds. The people I ended up spending the most time with was heavily skewed, however. Six main consultants are Christian men in their mid to late twenties who finished their secondary education, are comfortable speaking English and who want to continue their studies. The majority of my consultants were part of the Kam royal family, the ní mfố \({ }^{\text {¿ séj clan. Four main consultants were Muslim. }}\) None of my main consultants practices the traditional religion, although I collected some texts from speakers who do. One main consultant is female, but I collected data from other women over the course of my field work. Four main consultants are considered elders in the community.

To provide some relevant background information, but also to duly acknowledge their share of work, I want to briefly discuss the Kam speakers who have worked with me most intensively during the last couple of years. I include some information that may be sociolinguistically relevant or that is important to speakers, such as age, religious background, other languages they speak, and in some cases the clan in which they were born. Many more speakers than I mention here have contributed, and the metadata to the individual recordings mention the speakers that provided them (see also the Acknowledgements at the beginning of this dissertation). Where possible, I also provide the name of the individuals who contributed each example in this grammar.

For each speaker, I include a picture. I took most of these pictures. I asked each speaker for permission to use their picture, and in some cases, speakers provided their own preferred pictures.

\section*{Isa Sarkin Dawa}

Isa Sarkin Dawa is the head of the Kam district, also considered the political king of the Kam community, and he carries the title àwàn. He was born in Fincon in the summer of ' 69 into the Kam royal family. He was 47 years old when we started working on this grammar book. His birth name is Isa Yakubu Kini and his traditional Kam name is ḑúrkàkī. Isa Sarkin Dawa finished his secondary school and received his diploma for a certificate course in Tractor Operation and Maintaining in Jalingo. His father was the former political king, Yakubu Sarkin Dawa, whom he succeeded in 2014 when he was turbaned by the Emir of Bali. He currently lives in Sarkin Dawa where he exercises his daily responsibilities, mostly from his palace (see pictures in Chapter 1). He practices Islam and his linguistic repertoire includes Kam, Jirim, Hausa and English.

Isa Sarkin Dawa worked with me almost every evening during my first field trip in December 2016 and January 2017 and again during the last field trip in November 2018. We worked on every aspect of the language and culture that found its way in this thesis: vocabulary, basic and more advanced morphosyntax, various texts and history, adding up to 34 sessions. He also provided the ideal conditions under which I could work and gave crucial advice throughout the project about safety and logistics. When necessary, he organized trips from the village to Jalingo, Bali and Sabongida Kamajim.


Isa Sarkin Dawa


Isa Sarkin Dawa

\section*{Babangida Audu}

Babangida Audu was born in Kamajim in 1987. His traditional Kam name is jì sín rà ní, possibly translated as 'thing/person who does [something] with people', and his nickname among friends is Pharmacy. He was 29 years old when we met and started working on this grammar together. His parents moved to Sarkin Dawa when he was three years old. He completed his secondary school in Garba Chede and studied in Bali to obtain his Computer Training diploma. He lived in Abuja for two years when he was 18 years old and lived in Jalingo for three years in his early twenties. He is a farmer, practices Christianity, and speaks Kam, Hausa and English. The traditional chief in Kamajim and Maigandi Kaigama, the chief of Garba Chede, are his uncles.

Babangida is the person who spent the most time working with me. I collected vocabulary data with him, a few texts and a variety of grammatical data. Babangida features in 85 data collecting sessions in my corpus. He orally annotated a lot of the texts that were used for this project in SayMore, and he provided preliminary written transcriptions for stories and spontaneous conversations. He also helped me get around in Sarkin Dawa and in other Kam villages. When I was in Sarkin Dawa, I stayed at his house during most of the field trips. We spent a lot of time working in Jalingo, where Babangida's network helped us to settle and travel around the town easily. We occasionally worked remotely through WhatsApp when I was in Europe.


Babangida Audu

\section*{Solomon Ahmadu}

Solomon Ahmadu was born in Sarkin Dawa in 1992. He is part of the royal family and was 24 years old when he started working as my consultant. He finished class three in secondary school and started to work as a carpenter, a trade for which he has traveled around the country. He is also a farmer. In 2018 he married and started a family in Sarkin Dawa. He practices Christianity and his linguistic repertoire includes Kam, Hausa, English and some Jirim.

Solomon started working with me on vocabulary collection and tone analysis in December 2016 and continued to work intensively with me every following visit, visiting Jalingo twice for a few weeks when I could not stay in Sarkin Dawa. We worked on many different aspects of the language, including specific grammatical topics such as comparison, phasal polarity, tense and aspect, reported speech and complex sentences. He features in 36 of the data collection sessions in my corpus. Solomon also helped me by slowly respeaking and translating a number of stories. He showed me around in Sarkin Dawa and in other villages. He accompanied me to other villages for data collection sessions, together with babangida and Danjuma, and he provided assistance with solar energy, generators and other electronic equipment.


Solomon Ahmadu
(picture provided by Solomon)

\section*{Rahab Garba Precious}

Rahab Garba Precious is my main female consultant. She was born in 1993 in Garin Hamza into the royal family and was 25 years old when she began working on this project. She moved to Kaduna and Abuja from ages 10 to 18 to go to school. She completed her NYSC assignment with Taraba TV in Jalingo in 2017 and 2018, after which she stayed in Jalingo to teach at a primary school. Currently, she lives in Gunduma where she helps relatives to take care of their children. She practices Christianity and speaks Kam, Hausa and English.

While Rahab was fulfilling her corper duties for the NYSC, she often came to visit me in Jalingo to work on this project. She spent much of her time translating texts and spontaneous conversation, and helped me with glossing and grammatical analysis based on texts. Her help was invaluable in understanding those topics where contextual data is essential such as information structure and multi-verb constructions. She also helped me understand the history texts that were collected by Babangida from Isa Sarkin Dawa (session_191) and often helped me through WhatsApp and Facebook messenger when I was not in Nigeria.


Rahab Garba Precious
(Picture provided by Rahab)

\section*{Danjuma Bello}

Danjuma Bello was born around 1993 in Sarkin Dawa where he also grew up. He went to school in the Zing College of Education. He is a farmer and a health worker, distributing vaccines every year to remote Kam villages. His father was a traditional doctor, and Danjuma has some knowledge of traditional medicine and what different kinds of plants are used for. He practices Islam and his linguistic repertoire includes Kam, Hausa and English.

Danjuma briefly worked with me the during the first few field trips. He also came to Jalingo to work on this project in May 2018. He worked on various tasks, recording vocabulary data and collecting grammatical data on topics such as complex sentences, numerals and general nominal grammar as well as translating and annotating texts. He provided crucial assistance during interviews and story collecting sessions we conducted in Sabongida Kamajim. Danjuma features in a total of 34 sessions in the corpus.


Danjuma Bello

\section*{Garba Abubakar Bako}

Garba Abubakar Bako was born in 1977 into the Kam royal family as the younger cousin of Isa Sarkin Dawa, the political king. Yakubu Sarkin Dawa, Isa Sarkin Dawa's father, was Abubakar's uncle. When I started working with Abubakar, he was 39 years old. Currently, he is the secretary of the political king. He practices Islam and his linguistic repertoire includes Kam, Hausa, Fulfulde, English and Tiv. He lives in Mayo Kam, where he also grew up.

Garba Abubakar Bako was the first Kam speaker I met. He came to visit when I stayed in Ilorin during my first trip to Nigeria in November 2016 (cf. § 1.5.3) and introduced me to Isa Sarkin Dawa, the political king of Kam, and the Kam community as a whole. When we met in Ilorin, we worked together for 4 days, during which we recorded thirteen sessions on basic vocabulary, basic morphosyntax and basic expressions to prepare me for my trip to the Kam community. Abubakar also provided two short texts which were the first two samples of natural Kam discourse recorded for this project. When I arrived in Jalingo a few days later, he escorted me to the Kam community. His efforts were instrumental to the early progress of this project.


Garba Abubakar Bako

\section*{Muhammad Bose Yuguda}

Muhammad Bose Yuguda was born into the royal family of Kam in 1965 and is the older cousin of the political king, Isa Sarkin Dawa. He was raised in Mayo Kam, finished his secondary school and afterwards added an additional diploma. He currently works as a civil servant in Bali, where he also lives with his two wives and seventeen children. He practices Islam and his linguistic repertoire includes Kam, Hausa, English and

Muhammad was one of the first speakers to volunteer to work with me in the Kam community. After a few vocabulary elicitation sessions in a larger group, we arranged regular one-on-one meetings discussing specific topics. Over the course of a month, Muhammad frequently made time in his busy schedule to visit me in Sarkin Dawa from Bali. We recorded thirteen sessions covering vocabulary, basic clausal grammar, tense, aspect and mood, possession, greetings and basic conversation, and two short texts.


Muhammad Bose Yuguda

\section*{David Duwasam Mamuda}

David Mamuda was born in Sarkin Dawa into the ní mfố \({ }^{\text {s }}\) séj in 1991 and is currently 29 years old. His traditional Kam name is Dìwásām. Since he finished his secondary education he often moves between Sarkin Dawa and Jalingo, where he works various jobs. He is currently training to become a professional driver. David practices Christianity and his linguistic repertoire includes Kam, Hausa, English and Jenjo.

David frequently came to visit me in Jalingo. He helped me with tone analysis, elicitation of data on various grammatical topics such as tense, aspect and negation, comparative constructions and the expression of sensations and emotions. He also helped translate and annotate texts, correct vocabulary data in the dictionary, and provided much appreciated logistic support. He also helped me with remote data collection when I was in Europe.


David Duwasam Mamuda
(Picture provided by David)

\section*{David Mark}

David Mark (also Markus) was born in Garin Baba in 1995 and is currently 25 years old. He moved between various Kam villages when he was young, living in Garin Hamza when he was 9, then moving to Garin Lah to go to school. After that, when he was 17 years old, he left for Lagos and travelled to Imo State for a year. He went to secondary school in Yorro Local government and finished the rest of his education in Jalingo. His mother was Kam but his father was Hausa and was adopted into different families throughout his youth. He is currently a student, shoemaker and farmer. He practices Christianity and speaks Kam, Hausa and English.

While he was training to become a shoemaker in 2017, David often came to visit me in the evenings in Jalingo. When he came, he helped me to translate and transcribe texts, check my dictionary and elicit data on comparison, tense and aspect.


David Mark
(picture provided by David)

\section*{Adamu S. Baka}

Adamu S. Baka was born in Sarkin Dawa in 1957 into the royal family. He is currently 63 years old. He is the maternal nephew of the late political king, Yakubu Sarkin Dawa. Adamu's father was considered the 'king of hunters'. Adamu is the former secretary of the king of Kam. He went to primary school in Garba Chede and continued his studies in Gembu and Jalingo. He obtained his National certificate of education and was head teacher of Sarkin Dawa for a while but currently holds a position as school supervisor in Garba Chede. He practices Christianity. His wife is Wurkun and, apart from Kam, Adamu speaks Jirim, Hausa, English, Fula, Chamba Leko, Mumuye and Wurkun.

In the framework of this project, Adamu taught me the basics of Kam conversation, provided some early texts and worked with me on vocabulary elicitation in December 2016. He features in 11 sessions in the current corpus of Kam.


Adamu S. Baka

\section*{Jauro Babangida Tukura}

Jauro was born in 1984 in Sarkin Dawa, where he was also raised and where he currently lives. He went to school in both Garba Chede and in Jalingo. He finished his secondary school in 2010. He is part of the Kam royal family and is a civil servant and a farmer. He practices Christianity and his linguistic repertoire includes Kam, Hausa, English and Fulfulde.

I met Jauro Babangida Tukura in Sarkin Dawa, where he hosted me during my first trip to the Kam community in November 2016 to January 2017. Jauro allowed me to stay in his newly built house which he had equipped with fans and with connections for a generator. This allowed me to charge my field equipment in the evening. His hospitality made fieldwork in the village much easier. He is a busy man and often travels around various Kam villages, but made time to visit me to work on vocabulary collection and tone analysis. He also showed me around in Abanderi, the village where his wife comes from and was my driver when I travelled to Sabongida Kamajim.


Jauro Babangida Tukura

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\title{
Jakob LESAGE \\ A grammar and lexicon of Kam (ànwذ̀m), a Niger-Congo language of central eastern Nigeria
}

\section*{Résumé}

Cette thèse fournit la première description détaillée du Kam (ànwj̀m), une langue Niger-Congo parlée à Taraba State, dans le centreest du Nigéria, par environ 8000 à 10000 personnes. La thèse propose une analyse de la grammaire et du lexique du Kam, informée par la typologie et la linguistique aréale, et contribue ainsi à notre compréhension de la structure grammaticale des langues NigerCongo. Cette description est basée sur des nouvelles données linguistiques récoltées dans la communauté Kam entre 2016 et 2018. Elle se compose de six parties : (1) introduction, (2) analyse phonologique, (3) morphosyntaxe nominale, (4) morphosyntaxe verbale, (5) morphosyntaxe des propositions et (6) un échantillon de texte et un lexique composé de 1550 entrées. Les caractéristiques du Kam qui peuvent être d'un intérêt particulier pour la linguistique africaine et la linguistique générale comprennent les plosives labio-vélaires \(k p\) et \(g b\); une différence prosodique entre les positions fortes et les positions faibles dans les thèmes prosodiques ; la morphologie tonale utilisée pour la dérivation et pour la flexion ; l'absence de classes nominales et du genre grammatical ; des pronoms logophoriques ; les STAMP-morphs (des morphèmes qui expriment simultanément la personne et le nombre grammatical du sujet, le temps, l'aspect et la polarité d'une proposition); les constructions multi-verbes ; des stratégies de réduplication verbale; la négation de la proposition finale ; et les interrogatives de contenu bipartite. Les Kam et leur langue font partie du paysage linguistique et culturel diversifié du nord-est et du centre-est du Nigéria. A ce jour, on classifie le Kam comme une langue isolée dans la sous-famille Adamawa du Niger-Congo. Cependant, comme l'unité généalogique des langues Adamawa n'est plus largement acceptée aujourd’hui, la classification du Kam et des autres langues devrai être révisée. Bien que cette thèse ne traite pas la classification de Kam, elle fournit les données grammaticales et lexicales indispensables pour toute comparaison entre le Kam et d'autres langues et familles de langues.

Mots-clés grammaire, langues africaines, langues Adamawa, prosodie, ton, morphologie tonale, pronoms logophoriques, réduplication

\section*{Résumé en anglais}

This thesis is the first extensive description of Kam (à \(\quad\) wòm), a Niger-Congo language spoken in Taraba State, central eastern Nigeria, by an estimated 8,000 to 10,000 people. It offers a typologically and areally informed analysis of the grammar and lexicon of Kam, thereby advancing our understanding of the grammatical structure of Niger-Congo languages. This description is based on novel linguistic data collected in the Kam community between 2016 and 2018. There are six parts: (1) introduction, (2) phonological analysis, (3) nominal morphosyntax, (4) verbal morphosyntax, (5) clausal morphosyntax and (6) a sample of text and a lexicon with approx. 1,550 entries. Features of Kam that may be particularly interesting for African and general linguistics include labial-velar stops \(k p\) and \(g b\); a difference between prosodically strong and prosodically weak positions in prosodic stems; tonal morphology used for both derivation and inflection; the absence of noun classes or gender; logophoric pronominals; STAMP-morphs; multi-verb constructions; verbal reduplication strategies; clause-final negation and bipartite content interrogatives. The Kam community and their language are part of the linguistically and culturally diverse landscape of north-east and central-east Nigeria. Previous research classified Kam as an isolated language within the Adamawa sub-family of Niger-Congo, whose genealogical unity is no longer widely accepted. Therefore, the classification of Kam and other languages should be reviewed. While classification is not addressed in this thesis, it provides grammatical and lexical data indispensable for any comparison between Kam and other languages and lineages.

Keywords kdx, Kam, Nyingwom, grammar, African languages, Nigeria, Niger-Congo, Adamawa languages, prosody, tone, tonal morphology, logophoric pronouns, serial verb constructions, reduplication, clause-final negation```


[^0]:    ${ }^{1}$ Translation: I am happy and grateful for your hospitality. I thank you people for what you have taught me and for the wonderful things that I have experienced with you. I want to thank everybody who has helped, in any way, to help me understand the Kam language and the Kam culture/world. The traditional people, the Muslim people and the Christian people. The elders, the children and all of my friends. Everyone in Kam country, from Garin Shingaw to Makafi, from Sarkin Dawa to Mayo Kam. From Fincon to Kamajim, and all villages in between and beyond. I would like to thank the elders, who provided the care and environment for me to work in. I also want to thank everyone who made the village a pleasant place to stay. Finally, I want to thank my main helpers. If not for them, I would not have been able to write this book. I put a picture and a short piece of text about each of the language helpers at the end of this book. Spending the last four years learning about your language and your world has been a great gift to me. I would like to thank you all one final time for this great thing you have given me.

[^1]:    ${ }^{2}$ Brief explorations have shown an interesting link between Kam, Mumuye [ISO 639-3: mzm; Glottocode: nucl1240], Nyesam [ISO 639-3: pbn; Glottocode: kpas1242] and Kugama/Wam [ISO 639-3: kow; Glottocode: kuga1239], all of which are spoken closely together and have previously been classified as Adamawa. All of these languages have a near-homonymous noun pair for the meanings bird and eye (cf. Lesage 2019, under review, Eveling Villa, p.c., Lora Litvinova, p.c.). In Kam, for example, they are translated as respectively núg and à.nùg, in Proto-Mumuyic as *Csa.nuy and *nuy, where *dja is a diminutive \{'child’ if I remember it right) (Shimizu 1979; tones are unclear), and in Nyesam as be.nuє and nuє (Eveling Villa, p.c., transcription preliminary and tones uncertain). While this is a very minimal hint, it is nonetheless significant and provides the beginning of a comparative series that demonstrates regular sound correspondences.
    ${ }^{3}$ Anderson 2011, 2012, 2015, 2016; Clements \& Rialland 2008; Dimmendaal 2001: 382-387; Dryer 2009; Güldemann 2003, 2018a: 481, 2019: 11-12; Hajek 2013; Hyman et al. 2015; Idiatov 2010; Idiatov \& Van de Velde 2015; Maddieson 2013b,c; Nikitina 2015; Rolle 2015; Segerer 2002-2007, 2015

[^2]:    ${ }^{4}$ There are other, not standardly used and less accepted terms that some people use to refer to the Glavda refugees. These terms are considered disrespectful by most of the Kam community and inappropriate in most social situations. My consultants asked me not to include them in my research. The terms are based on mispronounced words in Glavda.

[^3]:    5 'King' and 'chief' can in principle be used interchangeably, but the Kam people generally prefer 'king', which is why I use it here.
    ${ }^{6}$ Africapolis, an alternative source for population data, has no specific information regarding the Kam speaking area (Moriconi-Ebrard et al. 2008).

[^4]:    ${ }^{7}$ Population after a given timeframe can be estimated using a standard formula for population growth (cf. de Boer 2018), where $r$ is the growth rate, $N_{0}$ the starting population, $N_{t}$ the population after timeframe $t$ (current year - base year), and $e$ a natural constant:

    $$
    N_{t}=N_{0} e^{(r t)}
    $$

    ${ }^{8}$ The formula can be rearranged to determine $r$ (where $l n$ stands for the natural logarithm of $e$ ):

    $$
    r=\frac{\ln \left(\frac{N_{t}}{N_{0}}\right)}{t}
    $$

[^5]:    ${ }^{9}$ Statistics are from Jalingo, taken from
    https://www.meteoblue.com/en/weather/forecast/modelclimate/jalingo_nigeria_2336589. They are representative of the climate of the Kam speaking area as well.
    ${ }^{10}$ I do not know if the Kam have an indigenous name for the Taraba River.

[^6]:    ${ }^{11}$ My consultants sometimes challenged my perceptions of how a healthy landscape looks. When I arrived in Sarkin Dawa in November 2018, I was reading an issue of the Guardian that had a cover picture of a patch of rainforest devastated by wildfires in Brazil. When one of my consultants saw it out of context, he was delighted to see a wonderfully prepared piece of fertile farm land.

[^7]:    ${ }^{12}$ Currently (April 2020), Wikipedia uses the name Nyingwom, a name which it takes from Kleinewillinghöfer (2015). It does this to distinguish Kam from a group of Tai-Kadai languages spoken in China by over 1.5 million people of the Dong ethnic group. This language group is variously called Kam, Gam, lix Gaeml, Dong, or Tung-Chia, and can be found under the Glottocode kami1255.

[^8]:    ${ }^{13}$ The traditional chief, in any case, is believed to have power over rainfall. This statement seems to imply that the political king is also associated with special power over rainfall. It is not clear if this is the case.
    ${ }^{14}$ Some places are only accessible to people who follow the Kam traditional religion because they are associated with sites (such as shrines), artefacts, or people (such as the traditional king) and secrets that ought to be hidden from the non-initiated. Some of my consultants are afraid to go there because they are excluded from the traditional religion.

[^9]:    ${ }^{15}$ In some cases the village head's estimate was three or four times higher than that of some villagers.

[^10]:    ${ }^{16}$ Speaker numbers are meant to give a rough idea of the relative size of villages, but are in many cases likely to be exaggerated estimates by the village heads (compare with § 1.2.1.1).

[^11]:    ${ }^{17} a ̀ y w i ́$ is never found in isolation. It is only found in the place names mentioned here. Its meaning is not clear.
    ${ }^{18} \mathrm{Leg}$ is $\grave{a} b \grave{j} g$, so with a L tone on bj̀g, so this etymology may be wrong.
    ${ }^{19}$ Estimate by my consultant Danladi Baleri.
    ${ }^{20}$ Estimate by my consultant Danladi Baleri because of absence of the village head
    ${ }^{21}$ Estimate by my consultant Danladi Baleri.

[^12]:    ${ }^{22}$ àgà $y=$ upside, àtúkúrúu $=$ hill
    ${ }^{23}$ Estimate by my consultant Danladi Baleri.
    ${ }^{24}$ Tones are uncertain.

[^13]:    ${ }^{25}$ Tones are uncertain.
    ${ }^{26}$ This is allegedly a Jirim name.

[^14]:    ${ }^{27}$ Tones are uncertain.
    ${ }^{28}$ Estimate by my consultant Blessing Amidu Samuel.

[^15]:    ${ }^{29}$ Tones uncertain.
    ${ }^{30}$ Estimate by my consultant Blessing Amidu Samuel.
    ${ }^{31}$ Tones uncertain.

[^16]:    ${ }^{32}$ Tones uncertain.
    ${ }^{33}$ This name may be incorrect or incorrectly transcribed.

[^17]:    ${ }^{34}$ Tones uncertain.

[^18]:    ${ }^{35}$ I wrote this typological overview with the questions of the Grambank questionnaire in mind (Skirgård et. al. forthcoming).

[^19]:    ${ }^{36}$ One could also argue that tense, aspect and polarity are marked on pronominals by means of tone (cf. § 13.2)
    ${ }^{37}$ My use of 'prosodic prefix' is inspired by Van de Velde's (2008) description of Eton.

[^20]:    ${ }^{38}$ This M could be a downstepped H, cf. footnote 69 on p. 174.

[^21]:    ${ }^{39}$ ISO 639-3: juk; Glottocode: wapa1235
    ${ }^{40}$ Glottocode: bend 1256
    ${ }^{41}$ Glottocode: delt 1251
    ${ }^{42}$ Glottocode: tula 1250
    ${ }^{43}$ ISO 639-3: pip; Glottocode: pero1241
    ${ }^{44}$ ISO 639-3: kuh; Glottocode: kush1236

[^22]:    ${ }^{45}$ Currently, this list is publicly accessible via Google Drive:
    https://drive.google.com/drive/folders/1fUDMB6LS3DZ6OS-17eQAkNtk0hRGSRK5?usp=sharing

[^23]:    ${ }^{46}$ Picture taken by Babangida Audu.

[^24]:    ${ }^{47} r$ in $n \grave{r}$ 'spear' and hár '(not) until' are exceptions. It is possible that these items have a trill instead of a tap as a final sound, but this needs to be checked again. Note that hár is a borrowing, likely from Hausa (har) or Adamawa Fulfulde (har). I do not know if ǹ̀r is a borrowing or what language it may be borrowed from.

[^25]:    ${ }^{48}$ The capital symbols do not represent archiphonemes or any deep level of abstraction. They merely symbolize that voice distinctions are neutralized in the relevant positions and that choosing to represent each consonant with a voiced or voiceless phoneme would be an arbitrary choice.

[^26]:    ${ }^{49}$ None for $i$ vs. $\dot{\boldsymbol{t}}$; only one minimal pair and two near-minimal pairs for $e$ vs. $\varepsilon$, and only one near-minimal pair for $o$ vs. $\supset$, see § 742.5 below.

[^27]:    ${ }^{50} 46$ tokens were used in total. 8 for $\varepsilon, 8$ for $\dot{i}, 7$ for $u, 6$ for $o, 5$ for $e, 4$ for $i, 4$ for $a, 4$ for $\supset$

[^28]:    ${ }^{51}$ After a nasal consonant, all vowels are sometimes nasal. This may be a phonotactic restriction or a phonological rule. I have observed different realizations of such vowels, both nasal(ized) and non-nasal(ized). This has not been a focus of my research and I do not take them into account in the current analysis. I plan to check nasal vowels and possible instances of nasalization in future work on Kam. New observations and their implications for other parts of this grammar will be taken into account in subsequent versions of this grammar.

[^29]:    ${ }^{52}$ Tone is uncertain.

[^30]:    ${ }^{53}$ The tone of this verb is uncertain.

[^31]:    ${ }^{54}$ I do not take into account the sole HM contour tone observed in just one form, the proximal demonstrative/relativizer $b a$.

[^32]:    ${ }^{55}$ Nominal prepositions are included under nouns here.

[^33]:    ${ }^{56}$ Exceptionally, a nasal prosodic prefix seems to be dropped in $f o ̈ ̀$, the lexical form of which is $\grave{m} f o ̀ ̀ . ~ T h i s ~ m a y ~ a l s o ~$ simply be an alternative rapid pronunciation of $\grave{m} f o ̈ ̀$, since such dropping of nasal prosodic prefixes has not been observed elsewhere so far.

[^34]:    ${ }^{57}$ The capital symbols $\mathrm{P}, \mathrm{T}$ and K do not represent archiphonemes or any deep level of abstraction. They merely symbolize that voice distinctions are neutralized in the relevant positions and that choosing to represent each consonant with a voiced or voiceless phoneme would be an arbitrary choice.

[^35]:    ${ }^{58}$ It is not clear what the derivative function of $-t i$ is in this example. It does not appear to be iterative ('to be tired' is not 'to shiver repeatedly') or causative ('to be tired' is not 'to cause to shiver').

[^36]:    ${ }^{59}$ I wish to thank Dmitry Idiatov for this suggestion.

[^37]:    ${ }^{60}$ In other words, two thirds of all prosodic prefixes are $\grave{a}$ - and about one third is $\grave{N}$.

[^38]:    ${ }^{61}$ See also Giegerich (2015: 10-11) on associative attribution vs. ascriptive attribution in English.
    ${ }^{62}$ I do not believe that the only difference between a compound and a phrase is that phrases are compositional and compounds are non-compositional or lexicalized. From that perspective a compound is essentially a lexicalized phrase. One could, of course, continue along this line and say that nouns can simply be formed by means of complex noun phrases and that there is no such thing as a separate compound construction in Kam. I believe, however, that it is important to distinguish those complex noun phrases that can function as complex nouns (which I consider compounds) from those that cannot (=non-compounds). The main distinguishing characteristic between the two is, as I argue in the text, the descriptive vs. classificatory nature of the modifier.

[^39]:    ${ }^{63}$ This M could be a downstepped H, cf. footnote 69 on p. 174.
    ${ }^{64}$ I wish to thank Jeff Good for this suggestion.

[^40]:    ${ }^{65}$ sćj is a species of tree with thorns that I was not able to identify. My informants called it kaya in Hausa, which is a general name for 'thorn'.
    ${ }^{66}$ There is an unexpected vowel $i$ after $\grave{n} t o ́ y ~ ' m o u n t a i n ' ~ h e r e . ~ N o t e ~ a l s o ~ t h a t ~ i n ~ t h e ~ n a m e s ~ i n c l u d i n g ~ n ̀ t o ́ y ~ a s ~ a ~$ component, the L tone of $\grave{n} t \dot{y} \eta$ is dropped.

[^41]:    ${ }^{67}$ I do not currently have enough information to provide a clear picture of the meanings or uses of each term mentioned here. For example, it is not clear to me whether there are different deities that have different names, or whether there is one deity that goes by different names. The functions of different officials or different types of magic could also not be investigated within the scope of the current project. Meek (1931b: 538-550) provides some discussion of Kam traditional religion, but I was not able to fully verify his discussion with my consultants.

[^42]:    ${ }^{68}$ One lexeme, ánt $\bar{r} r \overline{1}$ 'truth' has all formal properties of an adjective but has only been attested as a noun.

[^43]:    ${ }^{69}$ This M could be a downstepped H. In the examples I used to check the tone of this type of derivation, a H after these adjectives is pronounced higher than the M that is found on the stem (e.g. áb̄$r \bar{r} \bar{a} \dot{a} b a^{-‘}$ This is a big [thing] here.'). However, I have also sporadically heard a H tone after adjectives that is pronounced at the same height as the tone pattern of the stem. The latter situation could be explained by an analysis that treats the replacive tone pattern on adjectives as $H$, which is downstepped by the floating $L$ tone of the prefix $\dot{a}^{L}$. The $H$ tones following an adjective could, then, be pronounced on the same (downstepped) register as the H tone on the adjective ( $\dot{a}^{\downarrow} b$ br $^{\prime} \dot{a}$ á ba), or the register could be reset and the following H tones are pronounced as regular (non-downstepped) H tones. The exact pronunciation could depend on the phonological context and on the speaker.

[^44]:    ${ }^{70}$ This could mean that á- and the floating ${ }^{\mathrm{L}}$ tone are in fact two different prefixes. In constructions such as (230), there may not be an underlying $\dot{a}$-prefix, but only a floating ${ }^{\mathrm{L}}$ tone. Perhaps this floating ${ }^{\mathrm{L}}$ tone goes back to a prefix $\grave{a}$ - segmentally identical to the H tone $\dot{a}$ prefix, maybe the nominalizing $\grave{a}$ - mentioned in § 7.2.3.

[^45]:    ${ }^{71}$ Here and in the next example, the fact the tone is not M may indicate that these are not deverbal derivations but that the derivational pattern is different. These adjectives may, for example, derive from nouns.

[^46]:    ${ }^{72}$ I only found these alternative pronunciations in possessive pronominals. The fact that I did not find them for object pronominals may be due to my pool of speakers or it may be because these pronunciations are only possible in possessive pronominals.

[^47]:    ${ }^{73} m \bar{a}$ is a Hausa additive marker that can be translated as 'too, also, even, still' which has a variety of different uses (Newman 2000: 327-328). It is also used in Kam but since I only found it twice in my corpus I do not discuss it in this dissertation. Readers are referred to Newman's (2000) grammar of Hausa for more on this particle.

[^48]:    ${ }^{74}$ A particle is often considered as a type of word, so some readers might point out that mentioning both is superfluous here. Neither word nor particle have a clear definition in the general linguistic literature. In this grammar, I generally refrain from using these terms but I mention them here since plural words have been of interest in the areal typological literature on the Macro-Sudan belt (cf. § 1.3.7).

[^49]:    ${ }^{75}$ My analysis of presentative demonstratives was inspired by Treis (2018).

[^50]:    ${ }^{76}$ The tones of this item are not certain.

[^51]:    ${ }^{91}$ In the original translation: 'He was Kam'. There are no tense and aspect distinctions in verbless clauses.

[^52]:    ${ }^{92} \mathrm{EXP}=$ experiencer

[^53]:    ${ }^{93}$ Some grammatical markers are optional, e.g. the pre-verbal negator màg, the perfective aspect marker $\grave{a}$ and the immediately post-object negative future marker $r$ д̀. I discuss these and other markers, some optional and some obligatory, in Chapter 1.

[^54]:    ${ }^{94}$ I would like to thank Dmitry Idiatov for providing useful references that I have not yet implemented but plan to use to flesh out the analysis of clause-final negation in Kam.

