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The Verb in Bozo Jenaama

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This paper is dedicated to my friend
Maggie whose kindness and prayers
kept me at it, when it was tough going.
Thank you, for your company and
encouragement along the way.

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1 Introduction

Jenaama is one of four main varieties within the Bozo language cluster, all of which are spoken in the interior delta of the Niger river in Mali. Except for Tigemaxo, the linguistic documentation of any of these varieties is poor. Monteil (1933) and Daget, Konipo and Sanakoua[1] (1953) are attempts of a description of what was then considered one language with many dialects (Blecke, 1996:3). DKS, even though presenting a wealth of language data and being invaluable to show some of the diachronic changes that have occurred within the last 50 years, remains fragmentary, especially in its grammatical description (ibid.). The book often served as a starting point for my own research and thus proved helpful.

In this paper, I will attempt to describe the verb system of Bozo Jenaama. After an introduction which covers the classification of the language, geographic and demographic data, and a brief description of its phonology, I will first describe the morphological properties of Jenaama verbs, differentiating mainly between aspect and transitivity. I will also look at derivational processes, before moving on to the syntactic properties of Jenaama verbs, in discussing tense, aspect and mood. As a conclusion, I will summarize my findings as well as point out major areas of further research that may complete the study of this particular verb system in the future.

The writing of any academic paper is unthinkable without the help and support of numerous people. Many have contributed to this paper, and I can only thank a few of them. My thanks goes especially to the staff of the African Linguistics department of the University of Leiden, first and foremost to Maarten Mous who has given invaluable help to both content and style of this paper. I could not have written it without his help. My thanks also goes to Constance Kutsch Lojenga who encouraged me to pursue this particular study program and who was there for me all along the way. I also want to acknowledge my colleagues Klaudia Hamm, as well as Thomas and Bärbel Blecke. Klaudia started to collect the different verb forms and tried a first classification – I am building on her work. Thomas' dissertation on Tigemaxo proved a starting point for my thoughts on Jenaama. He and his wife Bärbel took the time to discuss things with me and thus helped to shape my thoughts. Last but not least I want to thank the people of Djambakourou who let me share their lives for so many years, who have opened their houses and hearts to me, a stranger, and have given me insights into their fascinating language. May God pay them back for the kindness they have shown me!

1.1 Classification

Within Niger-Congo, Bozo is in the Northwestern branch of the Mande language family (Kastenholz 1996:70). The closest neighbor of Bozo is Soninke. Other more remotely related languages are Bobo Mandare, also known as Sya or Bobo fing, and the Samogo languages in the South of Mali and Burkina Faso. The following chart is adapted from Blühberger 2003:2 and shows the place of Bozo-Jenaama within North-Western Branch of the Mande language family:

[1] In this paper this book will be referred to as DKS

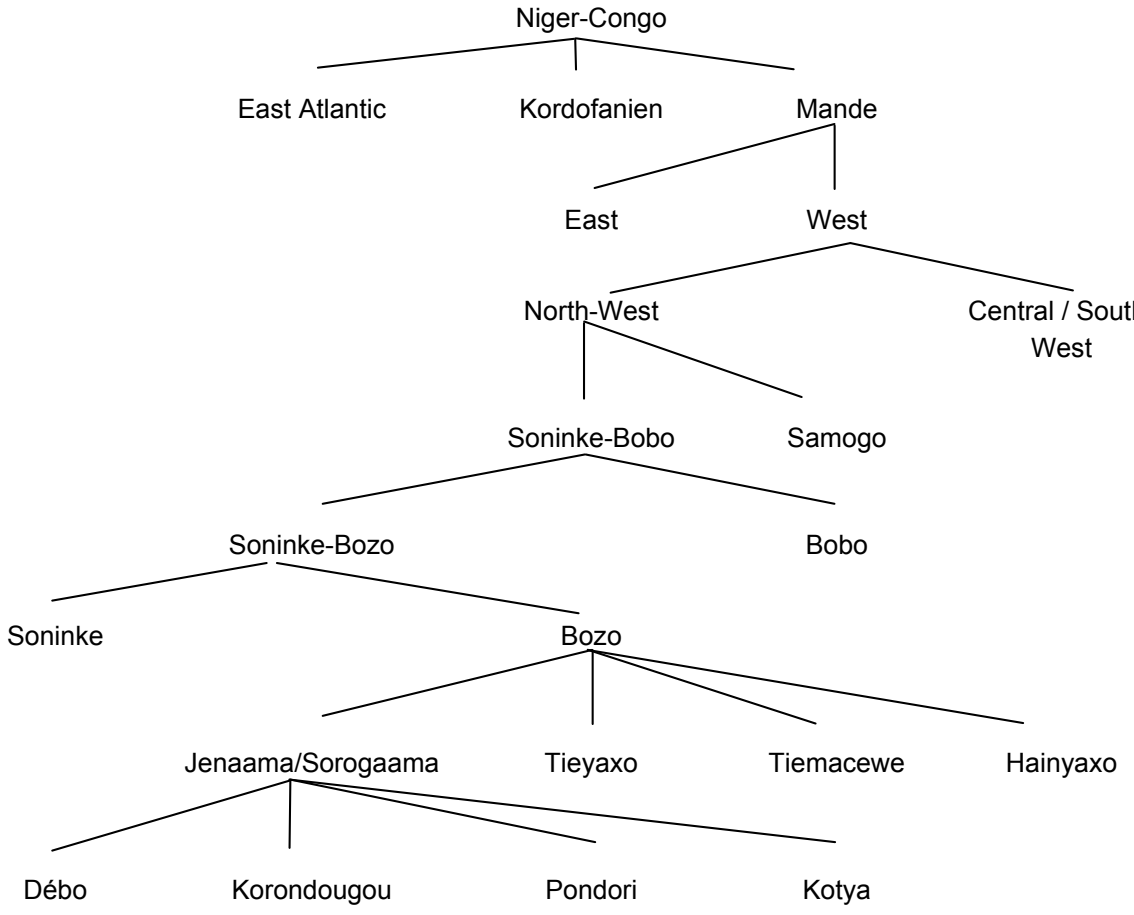

Figure 1: Classification of Bozo Jenaama

1.1.1 Dialects

According to a survey conducted in 1991 by Smeltzer and Smeltzer, (Smeltzer and Smeltzer, 1995), there are six dialects of Jenaama. They are from North to South: Debo, Korondougou North, Korondougou South, Kotia, Pondori North, and Pondori South. Another survey, conducted by my colleague Jutta Blühberger, showed though, that the dialect boundaries are not as clear cut as it seemed looking at the results of the first survey (Blühberger 2003:24). It also became obvious that the names used by the Smeltzers refer to geographical areas and are not used by the people to refer to the variety of the language they are speaking. Native speakers refer to their language either as Sorogaama or Jenaama. The first means “language of the Bozo” the latter “ language of Djenné”. One of Blühbergers conclusions is to keep the names of the dialects as used by Smeltzer and Smeltzer (1995) but drop the north – south distinction of Korondougou and Pondori (ibid.). She also suggests to no longer use the term Sorogaama to refer to the language but use Jenaama instead (Blühberger 2003:24). The reason for this suggestion is that in some areas, especially between Mopti and Konna, people mean Tigemaxo, when using “Sorogaama”, whereas all speakers throughout the area accept “Jenaama” as the name for their language and it is also unambiguous (Blühberger, 2003:4).

1.2 Geography, Demography

Jenaama is spoken in the interior Delta of the Niger River in Mali, West Africa. Its southern border is around San, roughly 350 km northeast of the capital Bamako. Its northern border is Niafounké, about 80 km southwest of Timbuktu. The zone where Jenaama is spoken covers about 240 km North – South, and about 65 km East –

West. It includes the administrative circles of Jenné, Mopti, Yuvaru and part of Ténénkou. The following map taken from Blühberger 2003:xxii shows the area Bozo is spoken, next to it there is a map showing the Niger interior Delta (Blühberger 2003:xx).

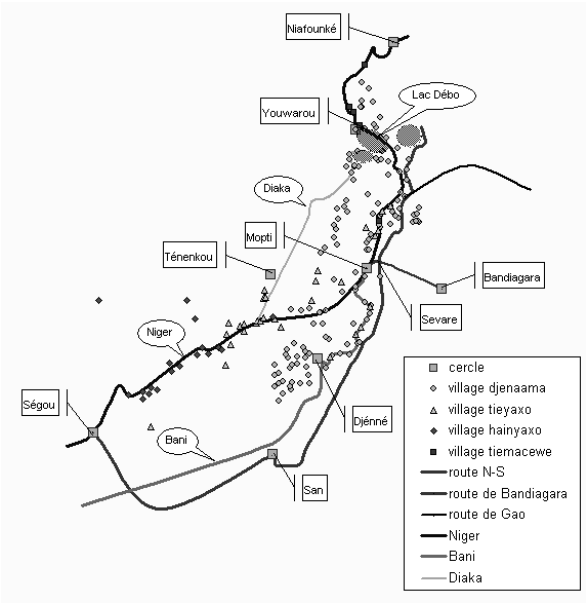

Figure 2: Bozo-speaking villages (Blühberger, 2003:xxii)

Figure 3: Map of the interior delta of the Niger river (Blühberger, 2003:xx)

As accurate census data is hard to come by, all statements about population figures are an estimate. Blecke (1996:9) quotes census data from 1987 which claims, that 117.696 Malians speak one of the Bozo varieties. Blühberger (2003:xix) gives a number of 160.000 speakers of Jenaama only. She bases her figures on census data from 1996, but excludes the Jenaama-speaking population of Bamako and other big cities, as nobody has these figures.

Jenaama is the mother tongue of three ethnic groups: Bozo, Somono and Nononké or Marka. Bozo and Somono are fishermen, whereas the Nononké or Marka are rice farmers. The Bozo call themselves Sorogo (pl. Soroge). The Jenaama name for Somono is Komuo (pl. Kombie). The Nononké call themselves Jenenge (i.e. people of Djenné). The latter group is ethnically mixed, possibly Malinke and Soninke who came to the area two or three generations ago to farm in the delta. They abandoned their original languages and took on one of the languages of the area, in this case Jenaama.

The word Bozo is Bambara and can be translated as “straw house” or “straw hut”, referring to the temporary housing the Bozo use when on their fishing trips (Blecke, 1996:7).

1.3 Language Data and Informants

1.3.1 Language Data

I collected the greater part of the language data used in this paper between 1995 and 2006. The example data has two main sources, one is directly elicited with informants, the second is a corpus of texts of different genres collected between 1996 and 2004. All texts have been transcribed from tapes and are interlinearized. I also used texts written by native speakers of Jenaama, during several workshops, for

use as a pedagogical help for teachers of Bozo schools in Mali. The biggest flaw of all the text material is the lack of tone marking. All example sentences in this paper, taken from texts, are not marked for tone. The non-text material was mainly elicited for the analysis of tone and is marked for tone.

The bulk of the material was elicited in Djambakourou, a village about 60 km north of Mopti and about 10 km west of the main road between Mopti and Gao. Djambakourou[2] is the main village of the Borondougou Commune and lies within the 5th region, the circle of Mopti and what, in French administrative terms, is called the "arrondissement" of Konna. Djambakourou has a population of about 2000 people the majority of which speak Jenaama. Other languages spoken in Djambakourou are Bambara (mainly as a second or trade language) and Fulfulde. The influence of the latter can be seen mainly in the vocabulary.

There are 12 villages that are said to speak the same variety of Jenaama as Djambakourou itself, namely: Foussi, Bogo, Singo, Komio (known as "Borondougou"), Sense, Sense Ladji, Kona, Kottaga, Saarewa, Djentaga, Kobi, Denga and Konna (known as "Korondougou")[3] (Tietie Timbo, villager in Djambakourou, personal communication). Each of these villages speaks the language with slight variations which are considered minor and do not hinder intercomprehension. Native speakers of Jenaama in the area can tell, however, which village someone comes from by these differences (Tietie Timbo, personal communication).

1.3.2 Informants

My main informants in Djambakourou were Ousmane Soumaré (for texts), Aly A. Timbo (for tone and texts), and Tietie Timbo (demographic and cultural information).

1.4 Phonology

Jenaama phonology, on the whole, does not pose any great difficulties except for two areas, namely vowel sequences with its consequences for syllable structure and nasalization. In the following, I will give a short introduction to consonants, vowels and tone in Bozo Jenaama, enough to give the reader an idea how to pronounce the examples. I will also very briefly discuss the two problem areas of vowel sequences and nasalization. For the examples, unless otherwise stated, I will use a broad phonological transcription, basically following IPA with the exception of the palatal glide that will be transcribed as /*y*/[4].

1.4.1 Consonants

Jenaama has 19 consonants: stops, fricatives, affricates, nasals and approximants. Fricatives are few and occur only voicelessly. The voiceless glottal fricative /h/ appears mainly in loanwords from either Fulfulde or Arabic. The palatal affricate /c/ does not occur in all dialects. The Djambakuru dialect only uses it in *cɛmi* "ten". Where /c/ is used in other dialects, Djambakuru uses /ti/ instead. The distribution of /r/ is restricted to word-medial position. The following table shows the consonants of Jenaama:

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[2] Alternative spellings that can be found are: Diambacourou, Djambacourou or Diambakourou.
[3] As far as possible the official names are being used.
[4] Except for examples (37) and (38) in Appendix I, where /*y*/ is used to transcribe a high round front vowel.

			Labial	Alveolar	Palatal	Velar	Glottal
Obstruants	**Stops/Affricates**	*voiceless*	p	t	(c)	k	
		voiced	b	d	j	g	
	Fricatives		f	s			(h)
Resonants	**Nasals**		m	n	ɲ	ŋ	
	Approximants	Laterals		l			
		Vibrants		r			
		Semi-Vowels	w		y		

Table 1: Consonant inventory of Jenaama[5]

1.4.2 Vowels

Jenaama has a seven-vowel system. The mid vowels are restricted in their distribution: Half open vowels can never occur with half closed ones within one root. The following table shows the vowel phonemes in Bozo Jenaama:

	Front vowels	***Central vowels***	***Back vowels***
Close	i		u
Half close	e		o
Half open	ɛ		ɔ
Open		a	

Table 2: Short-Vowel inventory of Jenaama

Each short vowel has a long counterpart, as is shown in the following table:

	Front vowels	***Central vowels***	***Back vowels***
Closed	ii		uu
Half closed	ee		oo
Half open	ɛɛ		ɔɔ
Open		aa	

Table 3: Long-Vowel Inventory of Jenaama

1.4.3 Tone

Jenaama has two contrastive tones: High and Low. The tone-bearing unit is the mora. The reason being that one-syllable, two-moraic words behave like disyllabic words in the number of tonal melodies that can be found on them and in the processes that can be observed.

There are four tonal melodies that are found on disyllabic words of all different classes, nouns, verbs and adjectives alike. These melodies are: H, L.H, H.L, L.HL. HL and L.HL appear on the surface as H.HL and LH.HL respectively, the reason being H-spreading within the word. There is no L melody. Looking at different tonal processes within the language, makes the hypothesis possible that what appears as L.HL is underlyingly a L melody that inserts H.

[5] Marginal phonemes are put in brackets.

The same four tonal melodies are found on monosyllabic, bi-moraic words, regardless of word category. The following examples show all tonal melodies on both monosyllabic bi-moraic words as well as on disyllabic words. Examples (11) and (12) show the surface realization of underlying HL, examples (13) to (15) the surface realization of L.HL.

(1)	wáá		heat
(2)	dúú		to grind
(3)	júgú		tree
(4)	débé		to sow
(5)	kàá		father
(6)	kɛ̀ɛ́		to steal
(7)	kògó		house
(8)	jìgí		to believe
(9)	dóò		cotton
(10)	kéì		to call
(11)	kɛ́dɛ̀	[kɛ́dɛ̃̂]	wall
(12)	gɔ́bì	[gɔ́bĩ̂]	to turn to turn
(13)	dǔò	[dǔô]	cheek
(14)	nɛ̌nɛ̀	[nɛ̌nɛ̃̂]	afternoon
(15)	kɔ̌mɔ̀	[kɔ̌mɔ̃̂]	to cry, to wail

Tri-syllabic words are rarer and show a greater variety of tonal melodies than mono- or disyllabic words. I will not treat them here.

Monosyllabic, mono-moraic words only show two melodies: H and HL.

Since the analysis of the tonal system is not complete yet, examples in this paper show surface tone and all tones will be marked.

1.4.4 Vowel Sequences and Syllable Structure

One of the main problem areas of the phonology of all Bozo languages is vowel sequence and resulting from that, syllable structure. In Jenaama, when two vowels follow each other, either the first or the second one has to be high. A sequence of two non-high vowels is not allowed.

In non-derived words, where the first vowel is the high one, both vowels have to be either front or back vowels, mixing is not allowed. It would thus be possible to interpret the high vowel of such a vowel sequence as semivowel. The tonal melodies that are found on these words speak against such an interpretation because each segment carries its own tone. In many cases the first tone is different from the second, a fact which also argues against interpreting the first consonant as either palatalized or labialized.

In words, where the second vowel is the high one, the first one does not always have to have the same position. Thus a front vowel can be followed by a back one. In the Djambakourou dialect the words with a back vowel in V_2 position are exceedingly rare. The dialects in and around Mopti use these combinations more often. What is /oo/ in Djambakourou corresponds to /eu/ in Mopti.

The first set of examples show words with the high vowel in first position, followed by a non-high vowel. The second set shows words where the high vowel is in V_2 position. Examples (25) show words that are pronounced with /oo/ in Djambakourou, with /eu/ in Mopti.

(16)	dìɛ́	species of fish
(17)	kíè	thigh
(18)	bùɔ́	dike
(19)	dǔɔ̀	cheek
(20)	káín	to work, work
(21)	kɔ́ìn	to sweep
(22)	káíràn	peace
(23)	sai	to pull
(24)	toi	new

	Djambakourou	**Mopti**	**Gloss**
(25)	kóó	kéú	moon
(26)	tóó	téú	meat
(27)	dóò	déù	cotton

1.4.5 Nasalization

Nasalization is the second problem area within Bozo-Jenaama phonology. There is a surface contrast between nasalized and non-nasalized vowels:

(28)	tí	to plant (PFV)	tĩ́	to do (PFV)
(29)	bé	to come (PFV)	bẽ́	to return (PFV)
(30)	kíɛ́	to pass by (PFV)	kĩ̀ ɛ̃́	to arrive
(31)	bá	to go out (PFV)	bã́	to shave

At the same time complementary distribution is found between nasalized vowel before pause on the one hand, and a non-nasalized vowel plus a nasal at the other hand. In order to illustrate this point, examples (32) to (35) are transcribed in phonetic transcription.

(32) [tĩ́#] to do (PFV)

vs.

(33)	[a	kɔŋ	gala	wɔ	**tin**	tende	nii.]
	3SG	though	SBJV	3SGFOC	do.PFV	well	in

He had to spend this (time) in the well.

And:

(34) [kĩ̀ɛ̃́#] to arrive (PFV)

vs.

(35)	[Ali	**kiɛŋ**	-ga	mɔbeli	la	waatu	mɔ̃ᵘ̃,	a	be	a
	Ali	arrive.PFV	-PFV.FOC	car	at	moment	REL	3SG	SEQU	3SG
	tin,	janbaaŋ	ŋ	kõᵘ̃].						
	do.PFV	crowd	COP	big						

When Ali arrived at the car, he found out that there was a big crowd.

The above data allows the conclusion that what appears on the surface as a nasalized vowel before pause is underlyingly a combination of Vowel and Nasal. The majority of Jenaama words begin with a consonant. The above examples show that whenever a surface nasalized vowel is followed by a consonant (even after word boundaries) the vowel is de-nasalized and a Nasal appears. In the few rare cases, where a "nasalized" vowel is followed by another vowel, all traces of the nasal disappear. In the following example, what is transcribed as *na'a* phonetically, is a contraction of *nân* "COND" and *à* "3SG" and is pronounced [*náà*].

(36) [ɲii kanaŋke na'a puɔ … e ga a
if master COND.3SG love 3PL IPFV 3SG
tolo a buɔi]
sell 3SG with
If the master so wants it … they would sell him (their brother) to him (the master).

2 Morphology

2.1 Introduction

A first, superficial look at Jenaama verb forms will probably confuse anyone who wants to either learn or analyze the language. Quite a number of verbs have several forms, and native speakers cannot always adequately explain when to use which. A closer look, though, reveals regularities and an underlying system that allows to class Jenaama verbs according to their syllable structure.

Before I attempt to establish such a verb-class system, I will discuss the problem of word categories (in particular verbs and nouns) in Mande languages in general. I will then show the different verb stems of Jenaama that mark aspect and transitivity, followed by a brief discussion of the different predicate markers used for marking tense, mood and aspect and their combination with different verb forms[6]. I will then discuss transitivity in Jenaama and finally have a look at derivational processes.

2.2 Noun – Verb Distinction in Mande

One of the biggest problems in Mande linguistics is the establishment of lexical categories; the main reason being the isolating character of these languages and the resulting lack of morphology (Blecke, 1996:40).

There are two ways of classifying words in a language into categories: according to their morphology and according to distribution (Creissels, 2006a:16). The first criterion is difficult to apply in most Mande languages because of the above mentioned lack of morphology. The researcher is thus left with the second criterion, the distributional characteristics of the different lexemes.

In the following I will give a short overview of what can be found in other Mande languages, mainly from the western and northern branches. I will then look at Tigemaxo which is most closely related and finally draw conclusions for Jenaama.

Koranko, a West-Mande language, does not allow any categorization according to morphological properties of lexemes because there is no morphology (Kastenholz, 1987:121). Worse, practically all verbs (with very few exceptions) can be used without any formal difference in a noun slot (ibid:122). When used as a noun, there are certain restrictions, though. Such nouns are not marked for plural and are often used in a generic sense (ibid:122). Jeli, another West-Mande language, shows similar characteristics. Verbal bases used in a nominal slot do not take plural marking either. Mandinka, a language spoken in Senegambia, uses verbs in noun positions without any morphological changes: "*… toutes les unités lexicales bases de constituant verbal ont au moins la faculté d'apparaître comme base de constituant nominale …"* (Creissels, 1983:25). In Bambara, spoken mainly in Mali, verbs can be used in nominal slots without derivation (Dumestre, 1994:138-142, quoted in: Blecke, 1996:41).

[6] For a more detailed discussion of predicate markers see chapter 4.1

The most closely related language to Jenaama is Tigemaxo. Blecke argues for a clear noun-verb distinction already in the lexicon. He does so on the basis of the morphological, as well as syntactical and semantical characteristics of the lexemes in question (1996:43f). He rejects the notion of unspecified verbo-nouns in the lexicon that is being put forward by Creissels (1983:25) for Mandinka and by Diagana (1994:17) for Soninke (Blecke 1996:44). He describes the relationship between lexemes that can be the head of a NP as well as a VP without any formal change as derivational (ibid:44).

A fairly large group of verbs in Tigemaxo has only one stem, i.e. the differentiation between perfective and imperfective is marked only by the presence or absence of a predicative marker (Blecke, 1996:61). In Jenaama, however, all verbs have at least two stems, i.e. the imperfective is always marked on the verb itself, in addition to the presence of a predicate marker[7]. Contrary to some of the languages discussed above, there is morphological marking on verbs at least for one of the aspects, which speaks for the distinction between verbs and nouns already in the lexicon.

Jenaama has a number of verbs that can be used either in a verb or in a noun slot, that do not show any formal difference in the perfective. In that case only their place in a predication and the semantic and pragmatic context makes it clear, whether it is a verb or a noun. Examples (37) to (44) show some of these words in isolation. Example (45) shows the usage of *kɛ́lɛ́* "to fight" as a noun in a postpositional phrase, example (46) illustrates its verbal usage.

	Verb	**Noun**	**Gloss**
(37)	bàndá	bàndá	to be tired (PFV), tiredness
(38)	bílá	bílá	to live (PFV), life
(39)	kɛ́lɛ́	kɛ́lɛ́	to fight (PFV), fight, war
(40)	kíídí	kíídí	to judge (PFV), judgement
(41)	kùmú	kùmú	to sleep (PFV), sleep
(42)	dìɛ̀mú	dìɛ̀mú	to speak (PFV), language
(43)	kàlé	kàlé	to die (PFV), death
(44)	káín	káín	to work (PFV), work

(45)	aa	mai	suo	buoli	gu	gɔpi	kɛlɛ	nii
	2PL	must not	go.IPFV	wrestling	DEF	change	fight	in

You must not turn the wrestling into a fight.

(46)	kǎngè	kɛ́lɛ́	kògó	níì
	hyena	fight.PFV	house	in

The hyena fought in the house.

The number of words in Jenaama that can be used either as nouns or as verbs without any formal marking is not huge, even though the examples above represent by no means a complete inventory. Either of the above presented solutions to the problem seems unsatisfactory. Underspecification in the lexicon, as proposed by Creissels, does not account for the fact that within the syntactic context the word (either verb or noun) is clearly defined and unambiguous (Blecke, 1996:41). On a morphological level, verbs and nouns can be clearly differentiated as well. Nouns can be combined with markers for determination and number, whereas verbs show markings for aspect and in some cases transitivity (ibid.). Blecke's suggestion of a zero-derivation from verb to noun offers itself as the logical solution for the problem

[7] See the following chapter for a detailed description of the different verb stems.

of categorization (1996:44; 78f, 80-83). Zero derivation from verb to noun, as suggested by Blecke, is problematic, though, as it is no longer productive and as the number of words affected is small. It still seems the more satisfying solution for a notoriously difficult problem. For want of any better solution, I will argue for it.

2.3 Verb Morphology

The basic word order in Jenaama is S PM O Vb. The verb is not marked for either person or number, the only marking it carries is for tense/aspect. For some verbs, transitivity is marked as well. That means, that each verb in Bozo Jenaama has at least two forms, a perfective (unmarked) and an imperfective (marked) form. Transitivity is marked on a fairly large number of verbs as well. In this chapter I will first discuss aspectual marking and in the second part explore transitivity, its formal expression and usage within the language.

Each verb has at least two stems, perfective and imperfective. Some verbs have a third stem, the intransitive. Examples (47) to (49) give the forms of the verb *săn* "to buy" in isolation. Examples (51) to (53) show the same verb used in the context of a sentence. One of the areas that need further research, is the interplay between aspect and transitivity. It seems at first glance, that the intransitive stem does not differentiate between perfective and imperfective.

(47) săn to buy (PFV)
(48) sàná to buy (IPFV)
(49) sɛ̀nɛ́ to buy (ITR)

(50)

an	ga	daaba	pende	sana
2SG	IPFV	animal	two	buy.IPFV.TR

You buy/are buying two animals (plow oxen).

(51)

ǹ	pie	keesu	toi	san	aa	te ...
1SG	too	box	new	buy.PFV.TR	2PL	for

I also bought a new box for you.

(52)

à	gá	sɛ̀nɛ́
3SG	IPFV	buy.ITR

He buys/is buying.

(53)

à	sɛ̀nɛ́
3SG	buy.ITR

He bought.

When asked for the equivalent of Bambara *i be sani ke* "You do buying", where the verb *san* "to buy" is nominalized and the verb *ke* "to do" added, I got *án sɛ̀nɛ́* "you buy". It might be asked, whether the intransitive verb as used in examples (52) and (53), is a verb or a noun. To find an answer to that question, further research will be needed. If the intransitive were to be analyzed as a nominal form, the examples (52) and (53) should be translated as "He does buying" and "He did buying", respectively. One argument for regarding intransitive forms as nouns is the fact that, with only a few exceptions, derivational affixes are added to the intransitive stem of a verb.

2.3.1 Aspect

Aspect is marked morphologically directly on the verb. The simpler, unmarked form is the perfective, the imperfective is derived from it. There is no direct formal correlation between the perfective and the imperfective of a verb. That means, that it is not possible to predict the imperfective form of any given verb by looking at its perfective.

There are tendencies, but especially class-two and class-three verbs do not allow for the prediction of the imperfective.

In the following, I will attempt to class Jenaama verbs according to their imperfective form. It will become clear, that classes are formed mainly on the basis of the syllable structure of their members, rather than of their syntactic or semantic properties.

2.3.1.1 Class 1

Class 1, which consists mainly of disyllabic verbs, forms the imperfective by lengthening the final vowel and adding a low tone:

(54)	bílá	to live (PFV)	bíláà	to live (IPFV)
(55)	kùmú	to sleep (PFV)	kùmúù	to sleep (IPFV)

When the verb in question ends in a low tone, a high tone is inserted between the final low of the perfective stem and the added low of the lengthened vowel:

(56)	sábà	to write (PFV)	sábǎà	to write (IPFV)
(57)	síndì	to begin (PFV)	síndǐì	to begin (IPFV)
(58)	kɔ̌mɔ̀	to cry (PFV)	kɔ̌mɔ̌ɔ̀	to cry (IPFV)
(59)	kɔ̌gɔ̀	to stumble (PFV)	kɔ̌gɔ̌ɔ̀	to stumble (IPFV)

Class one is the only one of all the verb classes that is open. Loan verbs form their imperfective according to the class-one pattern, as is shown in the following examples:

(60)	tábà	to find (PFV)	tábǎà	to find (IPFV)	Fulfulde: tawaade
(61)	híní	can (PFV)	hínîì	can (IPFV)	Arab. ?
(62)	hádà	to hinder (PFV)	hádǎà	to hinder (IPFV)	Fulfulde: haɓude

A subgroup of this class consists of mono-syllabic, bi-moraic words. They do not show any segmental difference between perfective and imperfective. There is a difference on the suprasegmental level as the imperfective adds a low tone to the second vowel, as illustrated below.

(63)	bàí	to let (PFV)	bàî	to let (IPFV)
(64)	kìɛ̃n	to arrive (PFV)	kìɛ̂n	to arrive (IPFV)
(65)	díɛ́	to eat (PFV)	díɛ̂	to eat (IPFV)
(66)	káín	to work (PFV)	káîn	to work (IPFV)

2.3.1.2 Class 2

Class 2 verbs are monosyllabic in their perfective form and end in a mid vowel (either open or close, both front[8] and back). The imperfective inserts a high vowel (either /i/ or /u/ according to the position of the stem vowel) in front of the stem vowel. The tone of the inserted vowel is identical to the tone of the stem vowel. This process is illustrated by the examples below.

(67)	bé	to come (PFV)	bíé	to come (IPFV)
(68)	sé	to say (PFV)	síé	to say (IPFV)
(69)	bó	to burn (PFV)	búó	to burn (IPFV)
(70)	dɔ́	to circumcise (PFV)	dúɔ́	to circumcise (IPFV)
(71)	gó	to cry (PFV)	gúó	to cry (IPFV)

[8] All verbs *Cɛ*, that I have found in the dictionary, form their imperfective according to class-three pattern.

2.3.1.3 Class 3

The greater part of class-three verbs are monosyllabic in their perfective form. The imperfective is formed by adding another syllable to the perfective.

Comparing examples (70) and (73) shows that even though their perfective forms are identical, the imperfective of the two verbs is formed differently. There is no clue in their surface form that would explain why their behavior is different. A look at their underlying structure, however, offers a possible explanation.

I start on the hypothesis that the underlying form of any class-three verb is CVC. The second consonant is either /l/ or /n/. Jenaama does not allow CVC syllables before pause, so for the perfective, the /l/ is deleted and the /n/ appears only in a final nasalized vowel. When the reduplicated vowel of the imperfective is added there is no need of the deletion of the second consonant of the underlying form, which then appears on the surface.

In the following I will give a list of some class-three verbs.

(72)	bá	to go out (PFV)	bálá	to go out (IPFV)
(73)	dɔ́	to harness (PFV)	dɔ́lɔ́	to harness (IPFV)
(74)	kô	to stab (PFV)	kòló	to stab (IPFV)
(75)	tí	to plant (PFV)	tílí	to plant (IPFV)
(76)	bán	to shave (PFV)	báná	to shave (IPFV)
(77)	bɛ̌n	to strangle (PFV)	bɛ̀nɛ́	to strangle (IPFV)
(78)	kɔ́n	to pasture (PFV)	kɔ́nɔ́	to pasture (IPFV)
(79)	sín	to bite (PFV)	síní	to bite (IPFV)
(80)	bén	to return (PFV)	béndé	to return (IPFV)
(81)	bǒn	to leak (PFV)	bòndó	to leak (IPFV)
(82)	pɛ̀ɛ́	to lick (PFV)	pɛ̀ɛ́lɛ́	to lick (IPFV)

Examples (80) and (81) show another anomaly that can only be explained by a phonological distribution restriction, namely that a combination of Nasal and following mid vowels, either /e/ or /o/, is not allowed. Thus /d/ gets inserted in order to avoid this sequence.

Example (82) is an exception, the only one in my data, as the perfective is two-moraic.

2.3.1.4 Exceptions

The following examples are exceptions to the rules established above. Example (83) comes closest to the other Class III verbs, as C_2 of the imperfective is a nasal and the vowel of the last syllable carries the expected high tone. (84) is completely different from the established classes; *–gi* as morpheme does not exist anywhere else in the verb system.

In (85) the intransitive form (for detailed discussion see below) is also used for the perfective. The form of the imperfective suggests that the original perfective, that got lost over time, was *kàn*.

(83)	tîn	to do (PFV)	tîná	to do (IPFV)
(84)	dé	to take (PFV)	dégí	to take (IPFV)
(85)	kàí	to see (PFV)	kàná	to see (IPFV)

A second group of exceptions uses the participle suffix "*–ná*" in order to form the imperfective. Examples (86) to (88) differ in their imperfective form from examples (76) to (80), as that there are two nasals, one being part of the verb stem, the other

belonging to the suffix. A possible reason for this anomaly is the structure of the verbs in question, they are disyllabic and the second syllable is either bi-moraic or has a word-final nasal. That makes them heavy and that could be a possible reason for their using of the participle form. Another possible explanation could be found in the semantics of the verbs in question. This shall be subject to further research.

(86)	súgòn	to crouch down (PFV)	súgònná	to crouch down (IPFV)
(87)	kàláàn	to study/read (PFV)	kàláànná	to study/read (IPFV)
(88)	tɔ́rɔ̀n	to punish (PFV)	tɔ́rɔ̀nná	to punish (IPFV)

2.3.1.5 TAM Markers and Verb Stems

Blecke claims for Bozo Tigemaxo, that a sentence has to be understood in a perfective sense, unless a predicate marker is present (Blecke 1996:61). This is also true for Bozo Jenaama. There, the simple, unmarked perfective does not use any predicate marker[9]. In Jenaama as well as in Tigemaxo, the marked form is the imperfective, as it is more complex lexically, as well as marked syntactically by a TAM marker.

Example (89) gives the perfective usage of the verb *tin* "to do", Example (90) shows the imperfective usage in its first part and the subjunctive which asks for the perfective verb stem in its second part:

(89)	ǹ	ɲɔn	kain	pie	tin	yan	nii
	1SG	DEM	work	too	do.PFV	there	in

I did this work there too.

(90)	silan	-be	ga	mɔn	tina	ǹ	gala	ŋɔn	tin
	Islam	-PL	IPFV	REL	do.IPFV	1SG	SBJV	DEM	do.PFV
	silan	-be	buɔi						
	Islam	-PL	with						

Whatever the Muslims do, I should do with them.

Different TAM markers ask for different verb forms. Some of the aspects do coincide with tense, e.g. the unmarked perfective most often can be translated by past tense. In the following, I will give a short list of TAM markers and the verb forms they use, together with examples of their usage[10]. I will first give examples for TAM markers that require the perfective form of the verb. The second set of examples shows TAM markers that require the imperfective verb form.

2.3.1.6 TAM Markers Using the Perfective Verb Stem[11]

As has been mentioned above zero marking, both lexically and syntactically, is used to express perfective and/or past meaning, as in example (91).

(91)	à	kùmú
	3SG	sleep.PFV

He slept.

Example (92) shows the negation of the perfective aspect using the marker *tè*:

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[9] There are predicate markers that are used to express perfective, as I will explain further down, but they add another semantic shade to the perfective sentence.

[10] For a more detailed discussion of TAM markers and the function of the different aspects see chapter 4.

[11] The example in the following two sections were all elicited for tonal analysis.

(92) à té[12] kùmú
3SG PFV.NEG sleep.PFV
He did not sleep.

The sequential marker *bè*, which is used in narratives and procedural texts, uses the perfective stem, as shown in example (94).

(93) à bé kùmú
3SG SEQU sleep.PFV
(Then) he slept.

Example (94) shows the subjunctive marker *gálà*, that uses the perfective. So does the conditional marker *nân* and its negation *nàà tè*, exemplified in (95) and (96) respectively.

(94) à gálà kùmú
3SG SBJV sleep.PFV
He must sleep.

(95) à nân kùmú …
3SG COND sleep.PFV
If/when he sleeps …

(96) à nàà té kùmú …
3SG COND.NEG PFV.NEG sleep.PFV
If/when he does not sleep …

Interestingly enough, the future marker *gábè* and its negative counterpart *nábè* use the perfective stem of the verb, as can be seen in the following two examples.

(97) à gàbé kùmú
3SG FUT sleep.PFV
He will sleep.

(98) à nàbé kùmú
3SG FUT.NEG sleep.PFV
He will not sleep.

2.3.1.7 TAM Markers Using the Imperfective Verb Stem

There are only two TAM markers that use the imperfective verb stem, namely the imperfective marker *gà* and its negative counterpart *ná*, as is illustrated in the following two examples.

(99) à gá kùmúù
3SG IPFV sleep.IPFV
He sleeps/is sleeping.

(100) à ná kùmúù
3SG IPFV.NEG sleep.IPFV
He does not sleep/is not sleeping.

---

[12] Most TAM markers have low tone in the underlying form but show polarity on the surface, i.e. they take the opposite tone from the tone on the following syllable. The TAM markers in question are: *gà, tè, bè, pɔ̀*. In all relevant examples surface tone will be marked.

2.3.1.8 Auxiliaries and Verb Stems

There are a number of verbs in Jenaama that can either occur as full verbs or take on the role of auxiliaries and add aspect to the main verb of a clause (Creissels, 2006a:161). In this type of construction the second verb uses the imperfective verb form. The verbs in the following examples can serve as either auxiliaries or full verbs.

		meaning full verb	meaning auxiliary
(101)	kàí	to see	progressive, punctual
(102)	kóndó	to stay	durative
(103)	pɔ̌	to sit	past before past

The verb *pɔ̌* is an exception in so far, as it shows characteristics of both, TAM markers and auxiliaries at the same time. The tone of the original verb differs from that of the auxiliary. The full verb has HL tone pattern, whereas the auxiliary has underlying L and shows surface polarity, like most of the other TAM markers. The main verb of the clause is in the imperfective, which is the reason I analyze *pɔ̌* as auxiliary, rather than as TAM marker. In the following, I give examples of all the above mentioned auxiliaries and show, that the main verb is in the imperfective.

(104) à kàí kùmúù
3SG PROG sleep.IPFV
He is sleeping (right now).

(105) à kóndó kùmúù
3SG DUR sleep.IPFV
He kept on sleeping.

(106) à pɔ́ kùmúù
3SG PAST sleep.IPFV
He had slept.

There are also words that can only occur as auxiliaries and not as full verbs. They are used to express mood. I class them as auxiliaries because they are structurally different from TAM markers and they use the imperfective form of the verb. These verbs are *háánà* "to have to", *màí* "must not (ITR)", and *màá* "must not (TR)"[13].

2.3.2 Transitivity[14]

The second major differentiation in the verb system of Bozo Jenaama is transitivity.

The transitive form of a verb is the more basic, unmarked one. Interestingly enough, when asked, native speakers of Jenaama agree, that the citation form of a verb is its intransitive, thus marked form. Blecke notes for Tigemaxo that in most cases the intransitive form of the verb is the one also used as derivational basis (Blecke, 1996:73). This is also true for Jenaama, which I will show in the chapter on verbal derivation.

Formally, it can safely be assumed that historically, parallel to Soninke and Tigemaxo, a suffix *–i* was used productively to intransitivize a transitive verb (Blecke, 1996:66).

The following examples show the intransitive suffix openly.

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[13] See chapter 4.5.5 for example sentences.
[14] For an extensive list of intransitive verbs see appendix I.

No.	Transitive.PFV	Intransitive	Gloss
(107)	bó	bóí	to fry
(108)	dó	dóí	to give
(109)	dɔ́	dɔ́í	to circumcise

In most cases, though, the suffix can no longer be seen on the surface, but its assimilation effects on one or, in the case of some two-syllable verbs, both vowels can be observed. Back vowels keep their height but are being fronted, thus /u/ becomes /i/, /o/ becomes /e/ and /ɔ/ becomes /ɛ/. The only central vowel /a/ becomes /ɛ/ in almost all cases. Front vowels do not show assimilation, there is no formal marking of transitivity (Blecke 1996:69). That means, that given an intransitive form, it is not always possible to reconstruct its transitive, as can be seen from the following graph.

(110) Ciɛ ← Caa + i
Ciɛ ← Cuɔ + i
Ciɛ ← Ciɛ + i

It has to be read as follows: The combination Ciɛ of an intransitive verb either stems from the original Caa plus the added suffix –*i*, from Cuɔ plus that suffix, or from Ciɛ plus that same suffix.

DKS (1953:55f) lists a few forms that, at least in the area I have been working, are no longer used, the most prominent of them being *díɛ́* "to eat (ITR)" vs. *díá* "to eat (TR)". More research in other dialect areas needs to be conducted, in order to find out, whether these forms are preserved somewhere else.

2.3.2.1 The Verbs *bá* "to leave", *pá* "to fill" and *jǎ* "to descend, to lodge"

The verbs *bá* "to leave", *pá* "to fill" and *jǎ* "to descent, to lodge" are special, as some of the forms they show are different from the other verbs. There is a strong possibility that these few verbs preserve an older system that is no longer productive. In the following example I will mainly look at *bá* "to leave" because it is the most complete of the three. I will give the forms that are attested and briefly discuss the derivational process involved. I then have a look at the two other verbs that function in the same way. Examples (111) to (115) show the five forms of this verb that are attested.

(111)	bá	to leave (PFV, ITR)
(112)	bálá	to leave (IPFV, ITR)
(113)	báá	to put out (PFV, TR)
(114)	báà	to put out (IPFV, TR)
(115)	–bíɛ́	to leave (ITR, DER.BAS.)

Example (115) –*bíɛ́* is no longer found independently only in compounds like in (116).

(116) bàndà -bíɛ́
fatigue -leave
to rest

For this verb *bá*, the intransitive form is the unmarked one. The transitive counterpart is derived from it by lengthening the stem vowel. When the intransitive suffix –*i* is added in example (115), the assimilation effects can be seen on both vowels, which are fronted and the first one raised. There is no longer a productive rule for other verbs of that structure that would derive the transitive form from the intransitive.

The two other verbs that I mentioned above, *pá* "to fill" and *jǎ* "to descend, to lodge" are less complete in their forms. I did not find *piɛ* nor *jiɛ* and whether there is a transitive form *jàá*, needs to be further researched.

2.3.2.2 Intransitive Verbs with an Obligatory Postpostional Phrase

Some intransitive verbs use an obligatory postpositional phrase to express either a patient or a beneficiary. These verbs are all intrinsically intransitive and not derived from a transitive counterpart. Even though (117) formally looks like a derived intransitive, I could not find a transitive counterpart, which means that a transitive form was either lost or never existed. (123) has an unusual form and could well be a loan from Arabic, a suspicion that is strengthened by the fact that the verb is part of religious jargon where many words are borrowings from Arabic. (125) is definitely a loan from Arabic, which accounts for its phonological structure of a sequence of three vowels, which cannot be found otherwise in the language.

(117) níɛ̀ to pity

(118) à níɛ́ ɲímí tè
3SG have pity.PFV person for
He pitied the person.

(119) sùjúdù to prostrate (used normally in connection with God)

(120) ń[15] na a kai -ga,
1SG PFV 3SG see.PFV -PFV
koo yen tɔɲɔn sujudu ǹ te
moon and star prostrate.PFV 1SG for
I saw how the moon and the star(s) fell prostrate before me.

(121) wɔ̀ɔ́n to follow

(122) a wɔɔn ɲimi buɔi/pa
3SG follow.PFV person with
He followed the person.

(123) jàjúúrù to adore, to venerate

(124) ǹ ga jajuuruu e buɔi/pa
1SG IPFV venerate.IPFV 3PL with
I venerate/adore them.

(125) dùɔ́ù to bless

(126) nje so duɔu e dembe te
1SG.EX go.PFV bless.IPFV 3PL family.PL for
We went to give blessings to their family.

2.4 Derivation

In this chapter I will look at several derivational processes, some of which are category preserving, like the causative, some change the word category, as will be described in chapters 2.4.2 and 2.4.3.

2.4.1 Causative

The causative is a very productive derivational process in Jenaama. It is formed by adding the suffix *–ní* to the intransitive verb stem[16].

[15] The first-person singular pronoun changes its tone from L to H in the perfective.

(127)	kùmú	to sleep (PFV)	kùmùní	to make someone sleep (PFV)
(128)	ɲíní	to wash (PFV)	ɲíníní	to make someone wash (PFV)
(129)	sɛ́ bɛ̀	to write (PFV, ITR)	sɛ́ bɛ̀ ní	to make s.o. write (PFV)
(130)	bǔdì	to cut (PFV, ITR)	bǔdìní	to make s.o. cut s.t. (PFV)

Applying the causative suffix to an intransitive verb increases the number of arguments from one to two. Adding the causative suffix to a transitive verb does not increase the number of arguments required. Example (131) shows the intransitive use of a verb, example (132) shows its causative usage. Examples (133) and (134) show a transitive verb and its causative.

(131) gaba ga siɛnsiɛn kɔla a kuma hali
current IPFV sand hit.IPFV 3SG on until
sɔgu gala **pu** siɛn kuma
grass SBJV **grow.PFV** sand on
The current (of the river) puts sand on it (the sleeping crocodile), until grass grows on the sand.

(132) a pie be a sulu **pu** **-ni**
3SG too NAR 3SG rest grow.PFV -CAUS
It makes the rest of it (grains of rice) grow too.

(133) aa be a **sɛ** saaku nii
2PL SEQU 3SG put .PFV.TR sack in
You (then) put it in a sack.

(134) Kɔɔla a kɔ, be a ɲiɛn kaa be a **sɛi** **-ni**
Kola 3SG hit NAR 3SG head break NAR 3SG put.ITR -CAUS.PF
kuun nii
boat in
Kola hit them, killed them and put them into the boat (lit. made them put into the boat).

Each causativized verb in its imperfective acts like all other class-one verbs, lengthening the last stem vowel and adding a low tone at the end, which proves that *–ní* is a suffix and not a clitic.

(135) lúɔ́n to finish (PFV) lúɔ́níì to make s.o/s.t. finish (IPFV)

(136) duga -kɔle nan **luɔn** [...] duga be ń kɔ
rice cut COND finish.PF rice SEQU 3SG.CR hit.PFV
When the cutting of the rice is finished, then it will be threshed.

(137) ɲaanu ɲii ala nan duɲa ke ga tie
tomorrow if God COND allow.PF 1PL.INC IPFV field
luɔn -nii
finish.PFV -CAUS.IPFV
Tomorrow, if God permits, we will finish (ploughing) the field.

Adding the causative suffix to the verb *luɔn* "to finish" allows for its transitive use. The non-causative form cannot be used transitively, the patient of such a sentence has to be coded as an oblique; using a direct object like in example (137) would be ungrammatical. Example (138) shows the correct usage of the *luɔn*, (139) is incorrect.

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[16] There are a few exceptions, where the transitive stem is used, e.g. *màlá* "to raise" vs. *màlání* "to teach". The verbs *bá, pá* and *jǎ* use an allomorph *–lí*.

(138) ke luɔn[17] tie pa/buɔi
1SG finish.PF field with
We (all) have finished the field.

(139) * ke tie luɔn

2.4.1.1 Causatives from Nouns and Adjectives

2.4.1.1.1 Nouns

Even though in most cases the causative suffix is added to either an intransitive or a transitive verb, it can also be added to nouns which then assume verbal semantics. In many cases the noun itself is derived from either an adjective or a verb. The following examples show the adjective first, then the derived noun and then an example sentence that shows the causative derived from the noun.

(140) nɔ́ɔ́tɔ́n difficult (adj.)
(141) nɔ́ɔ́tɔ́mɔ́ difficulty
(142) aa gala aa nɔɔtɔmɔ -ni, aa gala kɔ ǹ na.
2PL SBJV 2PL difficulty -CAUS.PFV 2PL SBJV help.PFV 1SG to
Make any effort to help me.

(143) kɛ́ndɛ́n to be healthy
(144) kɛ́náámá health
(145) ɲɔn sii te Ali kɛnaama -ni
DEM kind PFV.NEG Ali health -CAUS.PFV
All this did not make Aly well.

The following example is the only one of its kind, I could find in my data. The noun used as a basis for the causative is a compound noun. The resulting sentence is intransitive. Example (146) shows the etymology of *sabantie* "qu'uranic school", (147) its causative usage.

(146) saba -n -tie
write EPH -know.ITR
Qu'ranic school
(147) nje sabantie -ni a ten kamuna kan
1PL:Ex qu'ranic school -CAUS.PFV 3SG big brother old at
We went to qu'ranic school at his big brother's (house).

2.4.1.1.2 Adjectives

Blecke (1996:100) describes causatives that are formed from adjectives and gives the following examples.

	Tigemaxo:	Jenaama	Gloss
(148)	xɔlɔ	bulon	big
(149)	xɔlɔni	bulaama -ni	to make big, to honor
(150)	tie	tien	heavy
(151)	tie-na-ni	tiema -ni	to make heavy

Jenaama often uses the abstract noun that is derived from an adjective as the basis for the causative, as examples (142) and (145) show. I did not find a causative that is directly derived from an adjective.

[17] *luɔn* only has a perfective form.

As will be explained in chapter 2.4.3, verbs can be used as adjectives by adding the suffix *–ná*, forming a participle. These can take the causative suffix, like example (152) shows.

(152)	Ala	gala	a	saa	-wɔn	mɔɔ	-na	-ni	a	buɔi
	God	SBJV	3SG	lie down	-place	cold	-PART	-CAUS.PFV	3SG	with

May God make his resting place cool!

2.4.1.2 Causatives from Transitive Verbs

Adding the causative suffix to an intransitive verb, makes it transitive, adding an argument to the sentence, which has been shown in example (137). Causatives can also be formed from transitive verbs. Contrary to other languages, no extra argument is added to the sentence. Blecke observes the same phenomenon for Tigemaxo (1996:258).

Example (153) illustrates the transitive usage of the verb *mɛ̌n* "to drink". Example (154) shows the same verb causativized and the patient of the action encoded in a postpositional phrase. Creissels (2006b:63) observes that Hungarian can also encode the patient of a causative in an oblique.

(153)	a	ga	saaboi	mɛnɛ
	3SG	IPFV	saanbe	drink.IPFV

He drinks/is drinking saanbe (infusion from a medical plant).

(154)	a	bai,	ǹ	gala	saaboi	suɔ	a	te;	ǹ	gala	a
	3SG	let	1SG	SBJV	saanbe	cook.PFV	3SG	for	1SG	SBJV	3SG
	mɛn	-ni	**a**	**ni.**							
	drink	CAUS.PFV	3SG	with							

Let me cook Saanbe for him, and make him drink it.

2.4.1.3 Lexicalized Morphological Causative

There are two types of lexicalized causatives. The first type has a causative and non-causative form that coexist. The meaning of the causative verb, tough related to the non-causative, has undergone a slight change. Sometimes the literal meaning is also preserved. The basis for such a causative can be either a noun or a verb. The second type has either lost the non-causative form (and only the tonal patterns or the semantics point to an original non-causative form) or even though it exists, it is hardly used at all. Examples (155) to (159) illustrate the first type, examples (160) to (162) the second.

(155)	kìé	to run	kìèní	to drive, to make run
(156)	bílá	to live	bílání	to feed
(157)	kíí	to lift	kííní	to stir
(158)	mɔ̀nɔ̀mí	to play, to dance	mɔ̀nɔ́mìní	to cradle
(159)	túó	to follow	túéní	to guide
(160)		?	tíéní	to pour
(161)		?	tíɛ̀ní	to unite, put together
(162)	kiɛ	to light	kíɛ́ní	to light

2.4.2 Derivations from Verb to Noun

Nouns can be derived from verbs either by adding a suffix or by using the intransitive form. It is also possible to use the transitive form of some verbs in a noun slot without any further formal change, as shown in examples (37) to (46). In the first two cases the direction of the derivation is, rather obviously, from verb to noun. For the case of

the unchanged, transitive form being used in a noun slot, the direction is less obvious. In the following, I will discuss three different derivational affixes that change verbs into nouns, namely *–yá* "Agent", *-wɔn* "place", and *–gú* "action".

2.4.2.1 Agent

The suffix *-yá* changes a verb into a noun, denoting the performer of an action. This derivation is very productive and, with a few exceptions, semantically stable, as illustrated in the examples below in isolation (examples (163) to (165)) and within the context of a sentence (example (166)).

(163)	sùɔ́	to cultivate (PFV)	sùɔ̀yá	cultivator, farmer
(164)	débé	to sow (PFV)	débéyá	tailor
(165)	sɛ́bɛ̀	to write (PFV, ITR)	sɛ́bɛ̀yá	writer

(166)	dɔi	-ya	be	be
	circumscise	-ACT	SEQU	come.PFV

He who circumscises came.

Below are two examples which show a slight semantic change. I did not find *wìɛ̀yá* "butcher" in the context of a text. Example (169) shows, that *kìèyá* is used in the sense of "pilot" or as the literal translation suggest, "driver of …".

(167)	wíɛ̀	to kill (ITR)	wìɛ̀yá	butcher[18]
(168)	kìé	to run (PFV)	kìèyá	driver

(169)	Ali	be	ń	ɲɛn	piti-piti,	be	ń	pansɛ	-na
	Ali	SEQ	3S.CR	head	balance.PF	SEQ	3S.CR	fasten	-PART

namaɲa	sana	pirinti	-kuun	kie	-ya.
well	like	fly.PF	-boat	run	-ACT

Aly balances his head, it is well fastened, like for a pilot.

2.4.2.2 Place

The suffix *-wɔn*[19] added to the intransitive form of a verb, transforms it into a noun with the meaning "place of …". The following examples illustrate this derivational process first in isolation and then in the context of a sentence.

(170)	sùɔ́	to cook	sỳɛ́wɔn	kitchen
(171)	sáá	to sleep	sááwɔn	place to sleep (either bed or sleeping house)
(172)	sùɔ́	to plough	sùɔ́wɔn	field, place to plough

(173)	subaa	nii	nje	so	-ga	a
	morning	in	1PL.INC	go.PFV	-PFV	3SG

diɛn	tuben	-wɔn
child	name	-place

In the morning we went to the place of the name-giving ceremony.

2.4.2.3 Action

The suffix *–gú*, added to a verb, transforms it into a noun with the meaning "action of …", as is illustrated by the below examples in isolation and within the context of a sentence.

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[18] In order to say "a killer" the word *ŋímí* "person" has to be added: *ŋímíwìɛ̀yá*

[19] I do not have the tone for this suffix.

(174)	nǔùn	to swim	nǔǹgú	(the act of) swimming
(175)	gánsɛ̀	to inform (ITR)	gánsɛ̀gú	(the act of) informing

(176)	bambala	kaigu	pie	ga	kalaan	-gu	miɛn
	Bambara	man	also	IPFV	read	-ACTN	hear.PFV

The Bambara heard the reading (of the qu'uranic teacher).

This derivation is not fully productive. The number of nouns that can be derived by this method is limited. It will be necessary to further look into the semantic properties of the verbs that can undergo this particular derivational process and see if there is any correlation.

In many cases, especially when the perfective form of a given verb consists only of one syllable of the CV and CVN type, Jenaama speakers, when asked about the citation form, insist on using *–gú*. Below I will give a few examples where the citation form uses *–gú*.

(177)	bá	to leave	bágú	to leave (cit.)
(178)	dɛ̌n	to fasten	dèngú	to fasten (cit.)
(179)	gó	to cry	gógú	to cry (cit.)

There are also a number of disyllabic words that seem to need the suffix in their citation form. So far I have not found a reason why in some cases it has to be used whereas in others it is absent, as can be seen in the following examples.

(180)	dɛ́bɛ̀	to fold (PFV)	dɛ́bɛ̀gú	to fold (cit.)
(181)	gɔ́bì[20]	to turn (PFV)	gɔ́bìgú	to turn (cit.)
(182)	júkà	to fine (PFV)	júkàgú	to fine (cit.)

vs.

(183)	díbì	to grill (PFV)	díbì	to grill (cit.)
(184)	jǔgì	to pound (PFV)	jǔgì	to pound (cit.)
(185)	kébé	to build (PFV)	kébé	to build (cit.)

2.4.3 From Verb to Adjective: Participles

Any verb can be used as an adjective by adding the suffix *-ná* to the derivational, base of the verb. The resulting participle is used like an adjective to modify a noun. In the following examples I will show first the verb, then its participle and lastly the use of the latter in the context of a sentence.

(186)	gùú	to last	gùùna	lasting

(187)	an	nan	kogo	gu	ga	kogo	guu	-na	ni
	2SG	mother	house	DET	COP	house	last	–PART	PP

Your mother's house is an old (lit: lasting) house.

(188)	gáálɛ̀	to crush (ITR)	gáálɛ̀ná	crushed

(189)	a	alikama	gaalɛ	-na	de
	3SG	wheat	crush.ITR	-PART	take

She took crushed wheat.

A participle that has been derived in that way can be used as a verb describing a state, as is shown in the following example.

[20] This form alternates with *gɔ́pì*.

(190) e pɔ -na sɔngɔ nii
3PL sit -PART bush in
They were sitting in the bush (i.e. living there).

In connection with the imperfective predicate maker *gà* the participle describes the end product of a process, as shown in the below examples.

(191) a ga piin -na
3SG IPFV be black -PART
It has become black.

(192) juu bulon ga sɛ -na ń kana
dress big IPFV put -PART 3SG.CR neck
A beautiful (lit. big) dress is (found) put on his neck.

Blecke (1996:83) mentions a non-resultative participle that is formed by adding the suffix *–tɔ* to the verb stem. I have not been able to find a similar construction in Jenaama.

3 Adjectives

3.1 Introduction

Adjectives in Bozo Jenaama are interesting to look at, even in the scope of this paper on the verb because insights into the interplay between word categories can be gleaned.

Compared to the other word categories, the number of adjectives in the lexicon is considerably smaller than the number of verbs or nouns. In this chapter, I will describe the morphology of Jenaama adjectives and will attempt to establish them as a class apart. I will also show their different usages, as well as some derivational processes.

3.2 Morphology[21]

A good number of adjectives have three forms. One is used as a modifier in a NP (attributive usage) the second one is used in non-verbal predications (predicative usage) and the third is a purely verbal form. There is an abstract base form of either CVV or CVCV structure. The predicative form is derived by adding a nasal to it, the attributive form adds *–gu*, the verbalizing suffix is *–ga*. In examples (193) to (196) the different forms for one of these adjectives, *bìán* "sly", are shown.

(193) Abstract base form: bia- sly
(194) predicative form: bìán sly
(195) attributibe form: bíàgú sly (attrib.)
(196) verbal Form: bìàgà to be sly

Examples (197) to (199) were elicited one by one. It was hard for my informant to come up with an explanation for how the different forms are being used. These constructions are very rare in texts, thus making it difficult to find an accurate translation. This area of the language merits a more in-depth research, also with regards to the tonal changes that occur on the different forms.

(197) à ǹ bíà -n
3SG COP sly -ADJZ
He is sly.

[21] An extensive list of adjectives with their respective forms will be given in the appendix.

(198) kú gà ɲímí bíà -gú nì
DEM COP person sly -ADJZ PP
This is a sly person.

(199) a bìà -gà
3SG sly -VBZ
He has become sly.

The negation of example (197) is formed with the imperfective negation marker *ná* in example (200).

(200) à ná ǹ bìà -n
3SG IPFV.NEG COP sly -ADJZ
He is not sly.

The negation of the verbal form in (199) uses the perfective negative marker *tè,* as shown below.

(201) à té bìà -gà
3SG PFV.NEG sly -VBZ
He has not become sly.

The participle of *bìàgà*, *bìàgànà*, is used to describe the end product of a process, as is shown in example (202), whereas the predicative form *bìàn* together with the completion marker *pɔ̀* denotes a state in the past, as shown in (203).

(202) à pɔ́ bìà -gà -nà
3SG PAST sly -VBZ PART
He had become sly.

vs.

(203) à pɔ́ ˈń bìà -n
3SG PAST COP sly -ADJZ
He was sly.

Other adjectives only have two forms, an attributive form and a verbal form. The derivational process from one to the other is not as clear as for the adjectives with three forms. Similarly to examples (191) and (192), the participle ending *–nà*, when added to the verbal form of the adjective denotes the end result of a process, like in example (209). Examples (204) to (206) below show the different forms the adjective *píín* "white" can take in isolation, (207) to (209) in the context of a sentence.

(204) citation form, attributive form: píín white
(205) verbal form: pìɛ́ to be white
(206) participle: pìɛ́nà to become white

(207) kú gá jùù píín nî
DEM IPFV clothes black PP
These are black clothes.

(208) à pìɛ́n
3SG be black.PF
It is black.

(209) à pìɛ̀ -ná ní
3SG be black -PART PP
It has become black.

4 Tense, Aspect and Mood (TAM)

Information given in a clause or sentence needs to be seen according to its sequence in real time (tense), its internal temporal structure (aspect) and the speaker's attitude towards a given situation and his position regarding the truth of that situation respectively (mood) (Payne 1997:233f). In Jenaama, as well as in Tigemaxo, the main differentiations are aspect and mood, tense is only a secondary consideration (Blecke 1994:132). TAM marking mainly uses predicate markers, even though the verb itself is also marked for aspect, as has been shown above.

I will start the following section with a more detailed discussion of predicate markers and their differentiation from auxiliaries, then proceed to describe the different aspects and moods that can be found in the language and explore their functions. Predicate markers act as copula in non-verbal predications, which merits a closer look at this sentence type. To conclude this chapter, I will give a table that shows the relationship between the different predicate markers and the verb form used.

4.1 Predicate Markers and Auxiliaries

In Jenaama, predicate markers are a closed class. They, together with the verb, form the predicate in verbal predications. In non-verbal predications they are used as copula. Some predicate markers can be combined with others. Except for *gà* and *ná*, that are used to mark imperfective, all predicate markers use the perfective form of the verb. This feature differentiates them from auxiliaries, which, as I will show later in this chapter, use the imperfective form of the verb. In the following table I will give an overview over the different predicate markers, their function within a clause, whether they can be combined with other predicate markers, and whether they occur in verbal and non-verbal predications alike.

Predicate marker	Function	Combinations	Verbal Predications	Non-Verbal Predications
gà	IPFV	gábè, gala	X	X
ná	IPFV.NEG	nábè, nátè	X	X
∅	PFV	-	X	-
-gá	PFV	-	X	-
ye	PFV	-	X	X
tè	PFV.NEG	nátè, náàtè	X	-
bè	SEQU	gàbé, nábé	X	-
nân	COND	-	X	-
la	Q	gálà (?)	X	X
ye	IMP.PL	-	X	-
n	HORT	-	X	-

Table 4: Predicate markers and their function

When used in a transitive clause, the position of the predicate marker is between subject and object, as illustrated in the examples below.

(210) à **gá** bànú kìlɛ̀ɛ̀
3SG IPFV pestle possess.IPFV
(S)he *has a pestle*

(211) à **gálà** jùú ɲíní
3SG SBJV clothes wash.PFV
(S)he must wash clothes.

In the following, intransitive sentences, the predicate marker immediately precedes the verb.

(212) à **gá** kùmúù
3SG IPFV sleep.IPFV
He sleeps/is sleeping.

(213) à **gálà** bé
3SG SBJV come.PFV
He must come.

The perfective suffix *–gá* is slightly different from the other predicate markers, as it is bound to the verb and not a free morpheme. The distribution of this suffix, which I will look at later in this chapter, indicates that it plays a role for sentence focus in certain contexts, as well as on discourse level.

Some aspects use an auxiliary as their primary marker. Auxiliaries are placed between a possible predicate marker and the main verb of a sentence. The verb following an auxiliary has to be in the imperfective form, as can be seen in the following example. This example also shows, that in this case, imperfective does not coincide with present tense but that its usage is prompted by the auxiliary, which itself is in the perfective because of the sequential marker *bè*.

(214) e tii -ga -na nɔgu pa, kange be **kondo** a sie, ...
3P close-VBZ -PART village to hyena SEQU DUR 3SG say.IPFV
When they came closer to the village, the hyena kept saying ...

Example (215) illustrates that the auxiliary *kóndó* "DUR" behaves like a class-one verb when used in the imperfective.

(215) kaigu kanaa ye ga **kondoo** suo
man friend PL IPFV DUR.IPFV go.IPFV
The friends of the man (bridegroom) keep coming.

There is only a restricted number of verbs that are used as auxiliaries, and they do not all behave in the same way. The above examples show that *kóndó* is used in different aspects whereas other auxiliaries, like e.g. *kàí* "progressive" is only found in the perfective[22], as the following examples show.

(216) a kai a sɔlɔɔ tun
3SG PROG 3S knead.IPFV again
She was kneading it (the dough) again.

(217) e kaa kai suo Sagan gu …
3PL father PROG go.IPFV Mopti DEF …
Their father was going to Mopti …

The third auxiliary mentioned in 2.3.1.8, *pɔ̀*, is rarer than the others. In my texts it mostly occurs in combination with *nân* "conditional". The meaning of this construction changes, compared to the meaning of constructions that uses the simple *pɔ̀*. I will discuss this briefly in chapter 4.2.1.3.

Perfective forms, though seemingly rare in texts, can easily be elicited. The following two examples illustrate the combined use of *nân* and *pɔ̀*.

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[22] This might be due to the nature of texts I have been using where I have not found a single occurrence of *kàí* in any other than perfective aspect. This does not exclude the possibility of its occurrence in other aspects somewhere else.

(218) Nɔrɔnbe nan pɔ keba -nii …
Marka.Pl COND PAST marry -CAUS.IPFV …
When the Marka get married …

(219) e nan pɔ suɛ[23] mɔn saan kan …
3PL COND PAST cook.ITR REL all at …
When they cook at whoever's house …

The following examples were elicited in the context of the tonal analysis and show *pɔ̀* in its simple, uncombined form.

(220) à pɔ́ à kúnú
3SG PAST 3SG catch.IPFV
He had caught it/him.

(221) à pɔ̀ júgú tílí
3SG PAST tree plant.IPFV
He had planted a tree.

As has been mentioned in the previous discussion on auxiliaries (chapter 2.3.1.8), the origin of auxiliaries can be traced back to verbs. Most of them occur as full verbs as well. A closer look at their behavior reveals that they are in different stages of grammaticalization. The most flexible and verb-like member of this group is *kóndó*, the one acting like a predicate marker in every respect is *bè*. That is why it will be treated as such, rather than an auxiliary, even though its origins can be traced back to the verb *bíé* "to come" (Blecke, 1996:141).

The number of auxiliaries, both in Jenaama as well as in Tigemaxo, is so small that it may be questioned whether a separate category should be proposed (Blecke, 1996:231). In spite of their limited number, it can be observed that the few auxiliaries there are, are in different stages on a grammaticalization process. The following table illustrates the different stages of grammaticalization these words are at. It looks at the possible combinations with TAM markers, whether surface polar tone is present and at the form of the main verb of the clause.

	Combination with TAM Markers	**Surface Polar Tone**	**Form of following Verb**
kóndó	yes (acts like a full verb)	No	IPFV
káì	no	No	IPFV
pɔ̀	limited	Yes	IPFV
bè	limited	Yes	PFV

Table 5: Stages of Grammaticalization of auxiliaries

4.2 Aspect

4.2.1 Perfective

In Jenaama as well as in Tigemaxo (Blecke 1996:134), the perfective is the unmarked, simplest form. In most cases there is no TAM marker and the underived, perfective verb stem is used:

(222) à kùmù[24]
3SG sleep.PFV
He slept.

[23] The intransitive verb form makes it clear that *pɔ* in this case is an auxiliary and not the noun "thing".

(223) à jùú ɲíní
3SG clothes wash.PFV
He washed clothes.

The perfective denotes an action happening before the speech act and thus correlates with grammatical past. It marks an action or process that is complete.

In some contexts the perfective is marked by a predicate marker. The first-person singular demands the marker *ná*, whenever the direct object of a transitive verb immediately following the TAM marker, begins with a vowel, as shown in examples (224) and (225). In Jenaama the few words that do start with a vowel are either pronouns or proper names (mostly of Arabic origin).

(224) ń[25] ná à débé
1SG PFV 3SG sew.PFV
I sewed it.

(225) ń na Anta yɛɛ -ga yan
1SG PFV Anta give birth -PFV there
I gave birth to Anta there.

The difference between this marker and the one that marks imperfective negative is only a very slight one. The main difference is in the verb[26] but in case of a first-person singular pronoun, the tone changes from L to H in the perfective. Example (226) shows the imperfective negative, example (227) the perfective affirmative. In both cases the subject is a first-person singular pronoun and the object a third-person singular pronoun.

(226) ǹ ná à débéè
1SG IPFV.NEG 3SG sew.IPFV
I don't sew/am not sewing.

vs.

(227) ń ná à débé
1SG PFV 3SG sew.PFV
I sewed it.

Another predicate marker that is used to denote perfective is *ye*, the exact function of which is not yet clear. The majority of occurances in the texts are together with verbs of a static meaning, like "to be hungry" in the following example.

(228) duɔn ye a kun namaɲa
hunger PFV 3SG catch.PFV much
He was very hungry (Lit: Hunger caught him mightily).

The marker is also in found in examples like the following adjectival non-verbal predication:

(229) a kain lɔgu ye n kon namaɲa
3SG work opening PFV COP many very
She has very many work places.

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[24] The underlying tone for *kùmú* is LH but in the perfective this tonal melody changes to LL, the reason of which cannot be explained satisfactorily. The three other tonal melodies do not undergo any change in the perfective.
[25] In the perfective the tone of the 1st pronoun changes from L to H, thus making it difficult to differentiate it from the 3rd person coreferential pronoun.
[26] which for CVV verbs is only a tone difference.

The marker is often found together with *se* "to say (PFV)" to underline either the reason for telling a particular story, to give a certain explanation, or to stress the fact that a certain person said a certain thing. In informal conversation, *ye* is used in cases the hearer did not understand what was being said and the speaker repeats himself. For pronouns ending in a nasal, the allomorph *dye* is used, as illustrated in the following example.

(230) an **dye** se[27] ɲimi ye a se -ga an te
2SG **PFV** say.PFV person PFV 3SG say.PFV -PFV.FOC 2SG for
ɲii an nan yuɔ diɛ saan,
if 2SG COND fish eat.PFV COND
an ga dienaama miɛn.
2SG IPFV Jenaama hear.IPFV
You said (that) people told you if you eat fish you will understand Jenaama.

In other contexts, *ye* is used to mark simple perfective, the reason for its use being unclear. The following example is taken from a text, where the informant recounts watching somebody baking bread. The phrase occurs numerous times throughout his acount, always using *ye*:

(231) a ye ń sugu ɲini
3SG PFV 3SG.CR hand wash.PFV
She washed her hands.

4.2.1.1 The Perfective Suffix *-gà*

As has been mentioned above, the perfective suffix *–gà* is an exception, as it is attached to the verb and not an independent particle. DKS mentions it as the regular way for the Sorogo dialects to express perfective (1953:64). I have noticed, that speakers of the dialect in and south of Mopti use *–gà* to mark simple perfective in most cases. I also confirmed this obeservation with my colleague Marko Hakkola, who works in one of these southern dialects.

The suffix *-gà* is attached to the perfective form of the verb. In the the example below *-gà* marks simple perfective:

(232) ǹ pie kii -ga ǹ kaa pa
1SG also stand up -PFV 1SG father with
I also grew up at my father's.

In the dialect I was working in, the usage of *-gà* for the simple perfective, often seems to depend largely on the preference of the individual speaker. Its presence or absence does not seem to make any difference in meaning. But whenever an emphatic or relative pronoun is used, the presence of *–gà* in the perfective is obligatory, as illustrated in the following examples.

(233) ǹ giin sikɛn wɔ tin -ga yan
1SG year three 3SG.EMP do.PF -PFV there
I spent three years there.

(234) saakɔn e luɔ kaɲa kaɲa -ga
now 3PL EMP share.PFV share.PFV PFV
That's all that they shared, one by one.

[27] Normally this transitive verb cannot be used without the object.

(235) e molee bai -ga diɛna ni ...
3PL REL.PL leave -PFV child with
Those who were children (then) ...

(236) a pɔ kɔlɔn mɔn sɛ -ga jii nii ...
3SG thing grain REL put.PFV -PFV water in
The grainy thing which she put into the water ...

Adding the suffix *-ga* is obligatory even when the third-person emphatic pronoun is used in a fixed expression like *wɔni* "therefore", as shown in the example below.

(237) wɔni tenbe e so -ga nɔgu nii
therefore big brother.PL 3PL go -PFV village in
Therefore the big brothers went into the village.

That questions in the perfective, using either "what" or "who", also demand the adding of the suffix *–gà*, is illustrated in the following two examples.

(238) wula la be -ga?
who Q come.PFV -PFV
"Who came?"

(239) a la muɔ sii tin -ga?
3SG Q what kind do.PFV -PFV
What did he do?

Looking at all the instances where *–ga* is obligatory, it seems that there is a connection between this suffix and sentence focus. The exact relationship between the two needs further research, though. It is also possible that *-gá* functions on discourse level, the nature of this function has to be further researched as well.

4.2.1.2 Completion in Non-Verbal Predications

Generally speaking, non-verbal predications are not marked for either tense or aspect. There is a possibility, though, to express the completion of a certain state, the fact that things have changed. I did not find this construction in texts, but by asking for the negative counterpart of an adjectival non-verbal predication.

The default copula for adjectival non-verbal predications is *ǹ*. Whenever a speaker wants to make clear that a certain state is no longer valid, he uses *pɔ̀* plus *ǹ*. The first example is taken from a narrative text and gives the default form of a adjectival non-verbal predication, the second one shows the combination of *pɔ̀* and *ǹ*.

(240) haya! a n mai
Well 3SG COP good
Well, this is good!

(241) à pɔ́ ǹ màì
3SG CPL COP good
It was good (but is no longer so).

Within a narrative text, the TAM marker *ye* can be found in non-verbal constructions as well. The exact meaning and function of it is not quite clear, but it could be an expression that at the time the events of the story took place, the state described was true. This seems to be the case in the following example taken from a narrative text.

(242) Ali hangele ye n den
Ali mind TAM COP sweet
Ali has got a good mind.

4.2.1.3 The Auxiliary *pɔ̀* in Verbal Predications

The auxiliary *pɔ̀* can also be found in verbal predications. I do not have any instances in texts, only in elicited sentences. From its usage in non-verbal predications, I assume that it adds an aspect of completness to an utterance. In order to establish its exact meaning and function, further resarch will be necessary.

The main verb in a clause using *pɔ̀* is in the imperfective form, which leads me to analyze *pɔ̀* as an auxiliary rather than a purely grammatical particle. This analysis could be strengthened if *pɔ* were to be found in combination with TAM markers. The only other TAM marker that I found in combination with *pɔ̀* is *nân* "COND", as shown in example (243). For its usage and possible meaning see the next chapter.

(243) à pɔ́ à débéè̀
3SG CPL 3SG sew.IPFV
She had (?) sewn it.

4.2.1.4 The Auxiliary *pɔ̀* in Conditional Clauses

Examples (218) and (219) show that *pɔ̀* is also used in conditional clauses. The exact meaning and the differentiation between this and other conditional forms need to be further researched.

4.2.2 Imperfective

The imperfective uses the predicate marker *gà* in combination with the derived, imperfective verb form, as illustrated in the following examples.

(244) à gá kùmúù̀
3SG IPFV sleep.IPFV
He sleeps/is sleeping

(245) à gà jùú ɲíníì
3SG IPFV clothes wash.IPFV
She washes clothes

The imperfective is used to describe actions that happen at the time of the speech act, as well as to describe a general truth or a repeated action, like in the following example.

(246) duga kule ga ń tina sugu wɔ ni
rice cut IPFV 3SG .CR do.IPFV hand 3SG.EMP with
The cutting of the rice is done by hand.

Together with an adverb of time, the imperfective is used to convey future meaning, as illustrated in the example below.

(247) ɲaanu ɲii Ala nan duɲa ke ga tie luɔ -nii
tomorrow if God COND allow 1PL.INC IPFV field finish -CAUS.IPFV
Tomorrow, if it is God's will, we will finish (ploughing) the field.

In the context of a story, the imperfective marks a series of events that happen roughly at the same time. The next five example sentences are taken from a story. The imperfective is used to carry on the action.

(248) mɔli kaigu ken ga suo ɲii -wɔn
teacher man one IPFV go.IPFV march -LOC
(One day) a certain qu'ranic teacher went on a trip.

(249) mɔli ga kalaanna waatu saan
teacher IPFV read.IPFV moment all
The teacher always reads (i.e. the Qu'uran).

(250) a ga kalaanna kubu taa -na,
3SG IPFV read.IPFV day stand -PART
He reads during the day.

(251) a ga kalaanna nɛnɛ nii
3SG IPFV read.IPFV afternoon in
He reads in the afternoon.

(252) a ga kalaanna guu nii
3SG IPFV read.IPFV night in
He reads at night.

The imperfective marker *gà* is also used in non-verbal predications where, together with a postposition[28], it forms the copula in nominal clauses and possessives, as illustrated in the following examples. They all come from a narrative text and are thus translated with past tense, even though they are not marked for either tense or aspect.

(253) wɔ ga a jatigi ni
3SG.EMP COP 3SG host with
He was his host.

(254) ǹ ga taga -pɔ ni;
1SG COP create -thing with
mɔli kaigu pie ga taga -pɔ ni
teacher man also COP create -thing with
I am a created being, the teacher is also a created being.

(255) diɛn kaigu tembe- pende ga a te
child man ten two COP 3SG for
He had twelve children.

(256) foto ga a sigi[29]
photo COP 3SG in hand
He had a photo (i.e. holding it in his hand)

Together with an adverb of location and, in some cases, an additional postposition, *gà* forms locatives, like in the following two examples.

(257) sen ga yan nii
way COP there in
There is/was a way.

(258) jugu ga yan
tree IPFV there
A tree is/was there.

4.2.3 Progressive

As the translation of example (249) shows, the imperfective can also have a progressive meaning, which becomes clear only by the immediate context. In

[28] The most frequent postposition is *ni* "with", even though others can be found as well.
[29] The word *sigi* is a combination of *sugu* "hand" plus the postpositional affix –i.

addition, Jenaama also has a grammatically marked progressive which uses the auxiliary *káì*, in combination with the imperfective form of the verb. An action happens exactly at the moment the speaker opens his mouth, like in example (259):

(259) à kàí bíé
3SG PROG come.IPFV
He is coming (right now).

This expression can also be heard when somebody is leaving, in which case it means "I'll be right back."

4.2.4 Durative

The verb *kóndó* "to stay", when used as an auxiliary, denotes an action that is performed several times or by several people, as well as an event that continues for a period of time. The main verb is in the imperfective form. As has been mentioned above, *kóndó* occurs in combination with different TAM markers and is itself marked for aspect, as illustrated in the examples below.

(260) e be kondo e tubɛn sabaa
3PL SEQU DUR.PFV 3PL name write.IPFV
They keep writing down their names.

(261) kaigu kanaa ye ga kondoo suo
man friend PL IPFV DUR.IPFV go.IPFV
The man's friends keep leaving.

(262) e kondo -ga kie a tegaa
3PL DUR.PFV -PFV run.IPFV 3SG before
They kept running ahead of him.

4.2.5 Sequence of Events

In a narrative or procedural text, a special predicate marker is used to indicate a sequence of events. In the case of narrative, these events happen roughly at the same time. The examples below are taken from the same story, I used in examples (248) - (252). In this story the use of the imperfective alternates with the use of the sequential marker.

(263) mɔli kaigu ken ga suo ɲii -wɔn
teacher man one IPFV go.IPFV march -LOC
(One day) a certain qu'ranic teacher goes on a trip.

(264) a be so bambala nɔgu nii
3SG SEQU go.PFV Bambara village in
He went to a Bambara village.

(265) bambala kaigu ken be a ja -li
Bambara man one SEQU 3SG host CAUS
A Bambara took him in.

The following sentence is an example for a procedural text, explaining all about rice planting.

(266) duga- kule nan luɔn … duga be ń ko
riz cut COND finish.PFV riz SEQU 3SG.CR hit.PFV
When the cutting of the rice is finished, the rice is threshed.

4.2.6 Future

It seems, that Jenaama belongs to a group of languages that differentiate only between present and non-present (Payne, 1997:236), the verb form used for grammatical future being the perfective. The TAM marker used to indicate future is in fact a combination of two markers *gà* "IPFV" and *bè* "SEQU", as can be seen in the example below.

(267) mun kɔn gabe an kun,
cold nevertheless FUT 2SG catch.PFV
saabi juu na an kana
because clothes COP.NEG 2SG neck
You will be cold because you are not wearing any clothes (i.e. that are warm enough to protect you from the cold).

The tone patterns of the two markers are consistent with their single counterparts, *gà* showing L and *bè* taking the opposite tone of the following syllable. It would thus be possible to write them separately. They cannot be separated by any word, though, therefore I will write them as one word, like in the following examples.

(268) ǹ gàbé à débé
1SG FUT 3SG sew.PFV
I will sew it.

(269) ǹ gàbè júgú tí
1SG FUT tree plant.PFV
I will plant a tree.

The future is frequently used in procedural or explanatory texts to refer to a certain state of affairs, like in example (270).

(270) an gabe a taba[30], nɔgu saan ga sɔngɔ nii
2SGG FUT 3SG find.PFV village all COP wilderness in
You will find, that all the village is in the wilderness.

4.3 Mood

In Jenaama, the following moods can be found: imperative, hortative, subjunctive and conditional.

4.3.1 Imperative

Jenaama differentiates singular and plural imperative. The singular consists only of the verb in its basic, unmarked form and, in the case of transitive verbs, a direct object preceding it (Examples (271) and (272)). The plural imperative uses the 2nd person plural pronoun together with a marker *yè*, as illustrated in examples (273) and (274).

(271) bé!
come.PFV
Come!

(272) à dé!
3SG take.PFV
Take it!

[30] The word *tábà* is a loan from Fulfulde, the more southern dialects use *tín* "to do" in the same context.

(273) áá yè bé!
2PL IMP come.PFV
Come (PL)!

(274) áá y'à dé!
2PL IMP.3SG take.PFV
Take it (PL)!

4.3.2 Hortative

In the hortative, the first-person plural, inclusive pronoun is used together with the TAM marker *n* for hortative, and the perfective form of the verb, as illustrated in the following example.

(275) ke n kalaan -gu kun ke sugu pende nii
1PL.INC HORT read -NOM catch.PFV 1PL.INC hand two in
Let us grasp education/literacy with our two hands!

Example (276) is taken from everyday language, and is used to invite someone to join a meal:

(276) be ke n diɛ!
come.PF 1PL.INC HORT eat.PFV
Come, let's eat!

4.3.3 Subjunctive

In Jenaama, the subjunctive expresses obligation and wish. It is marked by the TAM marker *gálà*[31], which is actually a combination of the imperfective marker *gà* and possibly the question marker *la.* The verb has to be in the perfective form. In order to denote obligation, the subjunctive does not necessarily occur in a subordinate clause. Often enough, this notion is expressed by using a simple sentence, as is illustrated by the following two examples.

(277) an kuɔn kɔn, an gala yaage a te
2SG husband though 2SG SBJV respect.ITR 3SG for
Your husband, though, you have to respect him.

(278) an gala a bai
2SG SBJV 3SG leave.PFV
You have to/must leave it.

Obligation can also be expressed using the auxiliary *háánà* "to have to". In that case, the obligation seems to be stronger. I did not find this construction in texts, I've only heard it conversationally and elicited, like in the following example.

(279) an ga haanaa a bai
2SG IPFV have.to.IPFV 3SG leave.IPFV
You have to leave it.

To express want or wish, a second phrase "I want it, that …" is obligatory. In these cases, the subjunctive is in the subordinate clause.

(280) e be a maa, ee gala a bondo kule
3PL SEQU 3SG want.PFV 3PL.CR SBJV 3SG neck cut.PFV
They wanted to cut his throat.

The subjunctive marker *gálà* is also used in benedictions, as illustrated below.

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[31] The dialects in and south of Mopti use *gana*.

(281) Ala gala a saa -wɔn mɔɔ -na -ni a buɔi
God SBJV 3SG lie down -place cold -PART -CAUS.PFV 3SG with
May God make his resting place cool! (This benediction is used after a funeral, for condolences to the family of the deceased.)

(282) Ala gala ɲɔn talan wasi ke na
God SBJV DEM day show.PFV 1PL.INC to
May God show us this day! (This benediction is the almost inevitable answer when intent is expressed.)

4.3.4 Conditional

There are two TAM markers that are used in conditional clauses: *nân* and *paa*. The translation for *nân* is either "if" or "when", depending on the context of the sentence. The verb is in the perfective form. The conjunction *ɲii* "if" at the beginning of the conditional clause is optional, as well as a subordinate marker *saan* at its end. The full range of arguments is shown in the following example, the ones optional are in brackets.

(283) (ɲii) a nan be ɲaanu (saan), a ga a kana.
if 3SG COND come.PFV tomorrow (SUB) 3SG IPFV 3SG see.IPFV
If he comes tomorrow, he will see him.

The same structure can also mean: *If he came tomorrow he would see him*, depending on its context. The following example describes an event that happened in the past. Therefore *nân* has to be translated by "when".

(284) ɲii jugu diɛnbe pie nan muɔ, …
if tree child.PL also COND ripe.PFV …
nje tulu diɛnbe saan ga buɔ keili, …
1PL.EXC living quarter child.PL all IPFV each other call.IPFV
When the fruits of the trees were ripe we children that lived in one part of the village called each other …

The following two examples illustrate the difference between *nân* and *paa* when used with the simple perfective form of the verb. To express certainty that an action will happen, *paa* is used, whereas *nân* denotes uncertainty about whether an event will take place.

(285) an paa so Sagan, so Ali kan
2SG COND go.PFV Mopti go.PFV Aly at
When you go to Mopti, go to Aly's house (i.e. the speaker is aware of concrete plans of the other person to go to Mopti, the event will take place).

(286) an nan so Sagan, so Ali kan
if COND go.PFV Mopti go.PFV Ali at
If you go to Mopti, go to Aly's house (i.e. it is by no means certain if or when this will happen).

Whenever *paa* is used together with the suffix *–ga*, the sentence expresses a condition that cannot be met, an impossibility. In that case, the second clause uses future, as illustrated in the following example.

(287) a paa be -ga, a gabe a kai.
3SG COND come.PFV -PFV 3SG FUT 3SG see.PFV
If he had come he would have seen him.

Even when the first clause is marked for past by an adverb, the second clause uses the future, as shown below.

(288) a pa be -ga digɛn, a gabe a kai
3SG COND come.PF -PFV yesterday 3SG FUT 3SG see.PFV
If he had come yesterday, he would have seen him.

4.4 Questions

In this chapter I will treat yes/no questions, information questions and non-verbal questions. A question mark will only be used in places, where the question is marked by intonation only.

4.4.1 Yes/No Questions

In Jenaama, there are three ways to form a question expecting either "yes" or "no" as an answer. One way is to use rising intonation at the end of the sentence, the second way is to insert the particle *ta* at the end of the sentence in question. The third type uses a loanword from Fulfulde, *tama*. This last type is found less often in texts than the other two, but it is normally the one given first, when eliciting yes/no questions in isolation. The different types are illustrated by the following three examples.

(289) ke na kain wai?
1PL.INCL IPFV.NEG work.IPFV today
Aren't we working today?

(290) ke na kain wai ta
1PL.INCL IPFV work.IPFV today Q
Aren't we working today?

(291) tama Sauna be -ga
Q Saona come.PFV -PFV
Did (the people of) Saona come?

The question particle *ta* is often used for rhetorical questions, as in the examples below.

(292) an kɔn na hinii an tie sani -ga nii
2SG nevertheless IPFV.NEG can.IPFV 2SG field clean VBZ -CAUS.IPFV
kala an gala a buo ta
besides 2SG SBJV 3SG burn Q
As for you, can't you clean your field without resorting to burning it?

(293) aa na hinii syɛ, aa te
2PL IPFV.NEG can.IPFV cook.ITR 2PL PFV.NEG
jugu- kule ta
tree- cut Q
You cannot cook without cutting trees?

4.4.2 Information Questions

Information questions use question words in order to ask for the desired information. The question word takes the place of the constituent asked for. When asking for the subject or the direct object[32] of a sentence, the TAM marker *la*, after a nasal, its allomorph *da*, is used, as can be seen in the following examples.

[32] It is probably also used for obliques. My data does not confirm it, though.

(294) wula[33] la bie
who Q come.IPFV
Who is coming?

(295) an da wula kana
2SG Q who see.IPFV
Whom do you see?

(296) a la wula kana
3SG Q who see.IPFV
Whom does he see?

(297) muɔ sii la ń tina
what kind Q 3SG.CR do.IPFV
What is happening?

(298) an da muɔ sii tina
2SG Q what kind do.IPFV
What are you doing?

(299) a la muɔ sii tina
3SG Q what kind do.IPFV
What is he doing?

As has been mentioned above, when asking for something or someone in the past, the use of the perfective suffix *–ga* in combination with *muɔ sii* "what" and *wula* "who" is obligatory, as illustrated below.

(300) wula la be -ga
who Q come.PFV -PFV
Who came?

(301) an da wula kai -ga
2SG Q who see.PFV -PFV
Whom did you see?

(302) a la wula kai -ga
3SG Q who see.PFV -PFV
Whom did you see?

(303) muɔ sii la ń tin -ga
what kind Q 3SG.CR do.PFV -PFV
What happened?

(304) an da muɔ sii tin -ga
2SG Q what kind do.PFV -PFV
What did you do?

(305) a la muɔ sii tin -ga
3SG Q what kind do.PFV -PFV
What did he do?

When asking for any peripheral constituent of a sentence, *la* is not being used, as can be seen in the examples below.

[33] Some speakers use *ila* instead of *wula*. Which one to use, seems to be a question of personal preference.

(306) kuun ye ga suo muɔ waatu
canoe PL IPFV go.IPFV what moment
When do the boats leave?

(307) a ga bala mi
3SG IPFV leave.IPFV where
Where does he come from? (This phrase is normally used to find out about a person's place of origin.)

(308) a ga bala mitiɛ
3SG IPFV leave.IPFV where
Where does he come from? (i.e. Where did he leave to come here now?)

(309) suɔntɔmɔ ga diɛ baana mɔn nii
caiman IPFV eat.IPFV manner REL in
How does the caiman eat?

4.4.3 Non-Verbal Questions

There are two ways of forming non-verbal questions. The shorter one consists only of the question word and a postposition acting as copula. The longer one involves both, the TAM marker for questions (*la*) and a postposition. The two of them together form the copula. Examples (310) and (311) illustrate the simpler, examples (312) and (313) the more complex form.

(310) wula ni
who PP
Who is it?

(311) muɔ sii ni
what kind PP
What is it?

(312) ku la wula ni
DEM Q who PP
Who is that?

(313) ku la muɔ sii ni
DEM Q what kind PP
What is this?

4.5 Negation

Creissels remarks for Mandinka, that negation is completely integrated into the system of predicate markers, which makes the system different from European languages (Creissels, 1983:20). The same can be said about Jenaama. This is why, I will treat negation under a separate heading, rather than under the relevant aspect/mood headings. Another reason for giving it a separate chapter is that not every affirmative aspect/mood has a negative counterpart. The usage of the perfective negative differs slightly from the affirmative.

4.5.1 Negative Perfective

The perfective, negative, in its most simple usage, negates past events and uses the TAM marker *tè*, as is shown in the following examples.

(314) à té kùmù
3SG PFV.NEG sleep.PFV
He did not sleep

(315) à tè támú kìlɛ̀
3SG PFV.NEG loan possess.PFV
He did not have a loan.

(316) ǹ té à débé
1SG PFV.NEG 3SG sew.PFV
I did not sew it.

(317) duɔn te a kun
hunger PFV.NEG 3SG catch.PFV
He was not hungry. (Lit.: Hunger did not grab him.)

The TAM marker *tè* is also used to denote actions that have not happened yet. Often an adverb of time marks the event as not completed. The first of the following examples is part of an introduction to a description how crocodiles live. My informant explained, that he had not seen these things for himself, but had heard about them. Even though, his statements were true and in a sense a present reality at the time this text was recorded, he still used *tè.* The second example, also from a text, expresses something that has not come to pass at the time of speaking. With the adverb *suɔni* "not yet", the use of the negative perfective *tè* is obligarory, as shown in example (319).

(318) ǹ pɔ mɔn miɛ -ga, ǹ te a kai
1SG thing REL hear.PFV -PFV 1SG PFV.NEG 3SG see.PFV
(This is) something that I've heard but not seen.

(319) kɔɔn- jii te san suɔni
rain water PFV.NEG fall.PFV yet
The rains have not started yet.

As has been mentioned in the chapter on adjectives, *tè* is also used to negate sentences using the verbs derived from adjectives, as shown in the example below.

(320) à tè káásí -gá
3SG PFV.NEG bitter -VBZ
It is not bitter.

My informant explained to me, that this sentence should be translated by "It is not bitter enough" or "It has not become bitter yet". That means that *tè* denotes "not yet" in this example, like in examples (318) and (319) above.

4.5.2 Negative Imperfective

The TAM marker for the negative imperfective is *ná*. Negative imperfective negates events happening at the time of the speech act, as shown in the below examples.

(321) à ná kùmúù
3SG IPFV.NEG sleep.IPFV
He does not sleep/is not sleeping.

(322) à ná támú kìlɛ́ɛ̀
3SG IPFV.NEG loan possess.IPFV
He does not have a loan.

(323) Seini: ǹ na sɔngɔ buo, ǹ ga ǹ tie wɔ
Seini: 1SG IMP.NEG bush burn.IPFV 1SG IPFV 1SG field 3SG.EMP
buɔ
burn.IPFV
Seini: "I do not burn the bush, it is my field that I burn."

Adjectival non-verbal predications, as well as possessives and locatives, also use *ná*, as can be seen in the examples below.

(324) à ná ǹ kón
3SG IPFV.NEG COP many
There were not many (of it).

(325) diɛnbe na a te
child.PL COP.NEG 3SG for
He does/did not have children.

(326) foto na a sigi
photo COP.NEG 3SG in hand
He did/does not hold a photo in his hand.

(327) sen na yan
way COP.NEG there
There is/was no way.

(328) jugu na yan
tree COP.NEG there
There are no trees.

The examples below show, that nominal non-verbal predications have their own negation marker *nan*.

(329) wɔ nan[34] a jatigi ni
3SG.EMP COP.NEG 3SG host with
He is/was not his host.

(330) ǹ nan taga -pɔ ni
1SG COP.NEG create thing with
I am not a created being.

The marker *nan* is not to be confused with the negation of adjectival non-verbal predications of example (324). My informant insists of the latter being two words, whereas he wants to write *nan* in examples (329) and (330) as one word. There is also a tonal difference between those two markers. The copula *ǹ* has its own tone, whereas the *n* of *nan* does not carry tone.

4.5.3 Negative Future

To negate events or actions that lie in the future a combination of the negative imperfective *ná* and the sequential marker *bè* is used. As for the affirmative future, the verb is in the perfective form, which is illustrated by the following two examples.

(331) ǹ nábé à débé
1SG FUT.NEG 3SG sew.PFV
I will not sew it.

(332) ǹ nábè júgú tí
1SG FUT.NEG tree plant.PFV
I will not plant a tree.

4.5.4 Negative Conditional

Negative conditional is rare in my texts, I only found one instance of it (see example (339) further down), but I was able to elicit quite a number of this sentence type for

[34] Any nasal that precedes a vowel is deleted so the actual pronunciation of *nan a* would be [naa].

the tonal analysis. It is a rare construction and I've hardly come across it in spoken discourse, either. Negative conditional uses a combination of markers, namely *náà* and *tè.* It is interesting to remark, that contrary to the Future negative, the first marker is not the same as in the affirmative sentence. The verb is in the perfective form.

(333) ǹ náà té à débé …
1SGG COND.NEG PFV.NEG 3SG sew.PFV
If/when I do/did not sew …

(334) à náà tè bé …
3SGG COND.NEG PFV.NEG come.PFV
If/When he does/did not come …

I did not elicit, nor do I find an instance of the negation of an impossibility construction. This is an area of further research.

4.5.5 Negative Imperative and Subjunctive

There are no TAM markers to mark negative imperative or subjunctive. For expressing these, Jenaama uses an auxiliary construction. There are two possibilities, one is restricted to 2nd person subjunctive and imperative. The auxiliary used is *màí* for intransitive, and *màá* for transitive verbs. The other persons use the negation of the auxiliary *háánà.* Examples (335) and (336) show the usage of *màí* and *màá*, respectively; example (337) shows the negation of *háánà*.

(335) án màí bíé
2SG must not .ITR come.IPFV
Don't come!

(336) án màá à báâ
2SG must not.TR 3SG put.outside.IPFV
Don't put it outside!

(337) à ná háánà[35] bíé
3SG IPFV.NEG must come.IPFV
He must not come.

4.5.6 Constituent negation

So far, I have been treating clausal negation, i.e. the negation covers the whole sentence. When the scope of the negation is only one constituent of the sentence, Jenaama still uses the negative predicate marker. The constituent that is being negated needs to be marked, though. Jenaama does that by adding *síí* "a kind of" after it. This is illustrated in the following examples.

(338) ǹ ye e kuun kai -ga gu, kuun sii na
1Sg PFV 3PL boat see.PFV -PFV DET boat kind of IPFV.NEG
hinii a kɛlɛɛ
can.IPFV 3SG beat.IPFV
Of all their boats I saw, none could beat it.

(339) kain sii na suo tega,
work kind of IPFV.NEG go.IPFV ahead

[35] I would assume, that the last vowel of *háánà* is lengthened in the imperfective, it needs to be further checked, though.

ɲii	an	naa	te	kalaan
if	2SGg	SBJV.NEG	PFV.NEG	read.PFV

No work will go ahead unless you know how to read (and write).

The same usage of *síí* is found in non-verbal predications:

(340)

nɔɔtɔmɔ	sii	na	a	nii
difficulty	kind of	IPFV.NEG	3SG	in

There is no difficulty in it.

Ɲimi sii "nobody", as well as *pɔ sii* "nothing" have become fixed expressions, and not all native speakers are still aware of the meaning of *sii*.

(341)

ɲimi	sii	na	hini	duga	luɔn	-ni	bala
person	kind of	IPFV.NEG	can	rice	finish	-CAUS	leave.IPFV
dubaa							
on the earth							

Nobody can make an end with the grains of rice that are in the ground.

(342)

an	te	pɔ	sii	se	kala	tuɔna
2SG	PFV.NEG	thing	kind of	say.PFV	except	truth

You said nothing but the truth.

In the example below *ɲimi sii* is used with a verb that has negative semantics to express negativity. Further research would have to look more into this very small group of verbs with negative semantics and find out whether they can be used with the full set of TAM markers.

(343)

ɲimi	sii	kɔndɔ,	ń	gala	a	ken
person	kind of	not.able.to.PFV	3SGG.CR	SBJV	3SGG	break.PFV

Nobody is able to break it.

4.6 Summary

The following table presents an overview of the different TAM markers and auxiliaries together with the verb stem used for each one.

		Perfective Verbform	Imperfective Verbform
Aspect	Perfective	∅/ná	
		-gà	
	Eventuality (?)	ye	
	Sequential	bè	
	Future	gàbé	
	Imperfective		gà
	Completion (?)		pɔ̀ (aux)
	Progressive		káì (aux)
	Durative		kóndó (aux)
Mood	Imperative	∅/ye	
	Hortative	n	
	Subjunctive	gálà	
	Conditional	nân, paa	
Question	Perfective	la + -ga	
	Imperfective		la
Negation	Perfective	tè	
	Not yet	tè	
	Future	nábè	
	Conditional	náà tè	
	Imperfective		ná

Table 6: Overview of Aspect/Mood, TAM markers and verb forms used

5 Conclusion

The most interesting and fascinating aspect of the Jenaama verb system is its differentiation according to aspect and transitivity, which results in three distinctive verb stems. Not all verbs differentiate a transitive and intransitive stem, but all differentiate, either segmentally or suprasegmentally, between perfective and imperfective. This latter differentiation allows a classification of Jenaama verbs according to their respective (underlying) structure. A point of further research in this area is the lexical status of the intransitive, whether it is a noun that in same contexts is used in a verb slot or whether it is a verb that can be used as a noun without further derivation.

On a syntactic level, Jenaama differentiates mainly between aspect and mood. Tense is only a secondary consideration that coincides with aspect in the perfective and to some extent in the imperfective. Predicate markers and auxiliaries are in most cases an obligatory part of a well formed sentence in this language. Only the most unmarked form, which in Jenaama is the simple perfective, does not need such a marker. Secondary marking can be observed on the verb itself in the case of the imperfective. The biggest area of further research lies in the interplay between tone and aspect/mood. Even a superficial glance at the list of adjectives in appendix II shows that there is more to be discovered, as the tonal processes that are indicated there have not found an explanation yet.

This paper can also be used as a starting point to explore the area of complex predicates and serial verbs. The notorious difficulty establishing word classes in the Mande-language family, makes the latter an interesting and worthwhile area of study which should be undertaken.

Numerous “holes” and areas of further research have been discovered and mentioned in this paper, of which I have only mentioned the most obvious and interesting here. My hope is that in some way or another these holes will be filled to complete the study of this language.

Abbreviations

ACT	actor
ACTN	action
ADJZ	adjectivizer
aux	auxiliary
C	consonant
CAUS	causative
cit	citation form
COP	copula
COND	conditional
CR	co-referential
DEF	definite
DET	determiner
DEM	demonstrative
DKS	Daget, Konipo, Sanakoua, 1953
EMP	emphatic
EPH	epenthetic
EX	exclusive
f	following
FUT	future
H	high tone
HORT	hortative
ibid	ibidem, at the same place
i.e.	that is
INC	inclusive
IPFV	imperfective
ITR	intransitive
L	low tone
lit	literally
N	nasal
NEG	negative
NP	noun phrase
O	object
PFV	perfective
PL	plural
PP	postposition
PART	participle
PAST	completed past
PM	predicate marker
PP	postposition
Q	question
REL	relative pronoun
S	subject
SG	singular
SEQU	sequential
SBJV	subjunctive
SUB	subordinate marker
TR	transitive
TAM	Tense, Aspect, Mood
V	vowel
Vb	verb

VBZ	verbalizer
VP	verb phrase
vs	versus

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Appendix I: Intransitive Verbs

The below examples show different results of the assimilation process and it needs further research to answer some of the questions that arise looking at them. In examples (1) to (25) only the last vowel is affected by the assimilation process. In examples (26) to (38) both vowels are effected and it is not clear what blocks the assimilation rule from being applied to the first vowel in the first set of examples.

No.	transitive Form	intransitive Form	Gloss
(1)	bòbá	bòbɛ́	to pick, to select
(2)	gala	gáálɛ́	to crush
(3)	gánsà	gánsɛ̀	to inform
(4)	jìgìtá	jìgìtɛ́	to shake
(5)	kàmá	kàmɛ́	to withdraw
(6)	kúbá	kúbɛ́	to cover up
(7)	kùlùbá	kùlùbɛ́	to stir
(8)	màlá	màlɛ́	to raise, educate, train
(9)	pǎndà	pǎndɛ́	to kick (horse, ox)
(10)	pìlá	pìlɛ́	to miss, to fail
(11)	sùmá	sùmɛ́	to mesure
(12)	síná	sínɛ́	to bite
(13)	bùú	bùí	to milk
(14)	dúú	dúí	to grind
(15)	pùú	pùí	to breathe
(16)	sùgú	sùgí	to plant
(17)	sùsú	sùsí	to stutter
(18)	búlóó	búléé	to bend, to fold
(19)	kúóló	kúólé	to crack
(20)	gúó	gúé	to skin
(21)	púó	púé	to winnow
(22)	púɔ́	píɛ́	to love
(23)	tògó	tògé	to pay
(24)	tóló	tólé	to sell
(25)	sɔ́sɔ́	sɔ́sɛ́	to pound
(26)	sábà	sɛ́bɛ̀	to write
(27)	sààbá	sɛ̀ɛ̀bɛ́	to dig
(28)	sàná	sɛ̀nɛ́	to buy
(29)	tǎgà	tɛ̌gɛ̀	to create
(30)	tàngá	tɛ̀ngɛ́	to supervise
(31)	jántà	jántɛ̀ ~ jɛ́ntɛ̀	to tell (a story)
(32)	púó	píé~ púé	to pierce
(33)	ɲàá	ɲìɛ́	to deep fry
(34)	sàá	sìɛ́	to trim
(35)	yàá	yìɛ́	to put
(36)	màá	mìɛ́	to search
(37)	tùɔ́n	tỳɛ́n	to look at
(38)	sùɔ́	sỳɛ́	to cook

No.	transitive Form	intransitive Form	Gloss
(39)	kɔ́lɔ́ ~ kɔ́lá	kɔ́lé[36]	to hit
(40)	múnú	múnɛ́[37]	to insult
(41)	-	kúmɛ́[38]	to trap, catch
(42)	-	kùsɛ́[39]	to give
(43)	màá	màí	not to be allowed to[40]

Table 7: List of Verbs with transitive and intransitive forms

Examples (37) and (38) are interesting phonologically. What can be observed that the roundness of the vowel is kept, which results in a high front rounded [y] after non-round consonants. /p/ which is round does not produce this effect as can be seen in Examples (21), (22) and (32).

[36] This form is interesting phonologically because according to the distribution restriction of the mid vowels it should be *kɔ́lɛ́*. My informant told me that this form is due to the fact that it has a pluralic meaning, a claim that definitely needs further clarification and research. Formally it would be a possibility since the distribution restriction does not extend beyond morpheme or word boundaries. In that case *kɔ́lɛ́* could be analyzed as *kɔ́lɛ́* + *e* "Pl" = *kɔ́lé*.

[37] Another interesting form that according to the other verbs should be *múní* instead of *múnɛ́*.

[38] There is no corresponding transitive form and I have heard the intransitive one used only in the case of noun incorporation like e.g. *yúɔ́kúmɛ́* "fishing". Used transitively the sentence would be:

à yúɔ́ kún
3SG fish catch.PFV
He caught the fish.

[39] This is the same case as for *kúmɛ́*. It is more rare and I have not heard it other than as citation form.

[40] My informant denies every connection between the two but its usage points to a relationship between them, even though the form is interesting, especially when compared with (36). And explanation needs to be found why there are these two different forms.

Appendix II: Adjectives

Citation form	Gloss	Predicative Form	Attributive Form	Verbal form
píín	black	X	píín	pìɛ́n, pìɛ̀nà
kúón	white	X	kúón	kɔ́ɔ́n, kɔ́ɔ́ná
tɔ̀mɔ́	red	X	tɔ́mɔ́n	tɔ̀mɔ̀nà
búlà	blue	X	búlà	X
dúɔ̀	small	X	dúɔ̀gú	dùɔ̀gá
bìágá	sly	bìàn	bíàgú	bìàgá
mìɛ̀gá	thin	mìɛ́n	míɛ̀gú	mìɛ̀gá
nìɛ̀gá	easy	nìɛ̀n	níɛ̀gú	nìɛ̀gá
pùlùgà	soft	pùlùn	púlùgù	pùlùgá
pàsìgà	better	pàsùn	pásígú	pàsìgà
tììgá	near	tíín	tíìgú	tììgá
káásígá	bitter	káásígú	káásín	káásígá
bánù	big	bánù	bánù	bánáàmànà
bùlǒn	tall	bùlôn	búlón	bùlààmànà
dáámá	far	dáán	dáán	dáámá
démá	sharp	dén	démáná	?
démà	sweet	dén	dénbúón	?
kɛ́náámá	health, healthy	kɛ́ndɛ́n	kɛ́náámáná	kɛ́náámáná
kɔ́ɔ́sɔ́ɪ	long	kɔ́ɔ́sɔ́ɪ	kɔ́ɔ́sɔ́ɪ	kɔ̀sààmá
kudu	short	kùdùn	kudu	?
màí	good	màì	X	máínà
màɲá	good	X	mɔ́ɲɔ́, màɲànà	màɲà
sánígá	clean	sánún	sánígáná	X
ɲíɛ́[41]	evil	ɲíín	ɲíɛ́ná	ɲíɛ́
ɲúɔ́	bad	X	ɲúɔ́	X
tíémá	heavy	tíén	tíén	tíémá
tóndón	high	tóndoń	tóndón	tóndáámá
kúsààmá	much, many	kón	kúsà	kúˈsáámà

Table 8: List of Adjectives

[41] Even though my informant gave me these two adjectives as separate words, with a different translation, a look at their distribution shows that one is derived from the other. The second word *ɲúɔ́* only has a attributive form, the respective form for *ɲíɛ́* is a participle form, making the distribution of the two complementary. The tones on both words are the same as well. Both arguments speak for one lexical entry with two realizations.