A MANDINKA GRAMMAR SKETCH

Created by the students in Linguistics 4053/5063 Linguistic Field Methods with Dr. Marcia Haag

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1. Introduction (*Nicole Umayam*)

The Mandinka (Mandé) language, also called Bambara, is spoken by roughly 1.3 million native speakers in Mali, Senegal, the Gambia, Ivory Coast, Guinea, Burkina Faso, Sierra Leone, Liberia, Guinea-Bissau, and Chad. West Africa has an incredibly rich history of language contact and multilingualism, and such phenomena are observed in the Mandinka data as well (see section 12 for a discussion of loan words and linguistic history).

The data presented in this grammar sketch was collected over 12 elicitation sessions during the spring of 2014, by Dr. Marcia Haag's Linguistic Field Methods course (LING 4063/5063) at the University of Oklahoma. On Tuesdays a pair of students worked with Mrs. Soumare to elicit data while the rest of the class transcribed. On Thursdays a discussion was held to review and analyze data and propose components of the script for the following elicitation session. Our speaker was unfailingly gracious and patient throughout this endeavor, particularly during our early attempts at elicitation.

The following sections represent our best analysis based on the data we found over the semester. It is not intended to be an exhaustive description. To the contrary, our short exploration has only begun to scratch the surface of the Mandinka language, though we hope that some parts of our analysis—unfettered by outside research—will accurately portray its enigmatic beauty. Since the following sections were written by individuals in the class taking data from their respective notes, there is variation in the lexicon, glossing methods, and transcriptions. Therefore, any errors found in this grammar sketch are entirely our own.

2. Phonology (Devon Kimler)

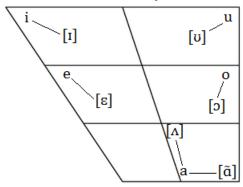
Mandinka is a strongly CV language with occasional dips into CVN and CCV structures, although the latter is often caused by some external phonological process, as will be detailed below. It would also appear that Mandinka utilizes some kind of tonal process, but our data on the subject is insufficient to make any concrete conclusions.

Phonemes

Table 1. showcases the standard five vowel system present in Mandinka's phoneme inventory. In addition to the phonemes shown in this chart, I have also included the vowels' laxed allophones, which can be found word initially, medially, and finally. Please note that all of

the phonemic vowels have nasalized allophones as well, however only /a/ changes its place of articulation when nasalized.

Table 1. Vowel Inventory



	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d				k g			
Nasal	m			n			ր	ŋ			
Trill				r							
Tap											
Fricative		f v*		s z*	ſ						h
Lateral Fricative											
Approximant	w			L			j	w			
Lateral Approximant				1							

Table 2. Consonant Inventory

Affricates: t∫ dʒ

The starred phonemes, /v/ and /z/, we have determined to be present only in loan words. There was brief discussion over whether /v/ was in fact an allophone of /f/, however ultimately our data was inconclusive, and in the absence of a consistent environment, our only agreed-upon instances of /v/ occurred in loan words. (With the exception of [vla], meaning "seven." This is the only recorded instance of [v] outside of known loan words.)

There are several controversial inclusions and omissions on this chart, such as the inclusion of the alveolar approximant /I/ and the omission of the uvular fricative [B]. For the former, there was heavy debate over whether the several rhotics we had heard in our elicitations were allophones of the same phoneme or themselves separate phonemes, however ultimately it was decided after trial and error that, for lack of a consistent environment that we could find either in, both the approximant /I/ and the trill /r/ should be included. As for the toss-up between /h/ and [B], we debated for a long time over what exactly the backed fricative we were hearing was. With many in the elicitation group hearing either sound, we tentatively decided on /h/ as a phoneme, with [B] as an allophone, determining that we only ever heard [B] word medially where otherwise we would expect /h/.

Phonological Processes

/f/ and $[\phi]$ Distinction

Mandinka undergoes a process wherein the phoneme /f/ becomes $[\phi]$ when found either word initially or after a rounded vowel. The rule can be written as such.

 $/f/ > [\phi] / #___ or V_{+round}____$

We see this process in the following examples:

(1) [badʒi φitini] (April 15) "pond" (lit. "small lake")

(2) $[\phi in \varepsilon]$ (April 15)

"wind"

(3) [kudula] (Jan. 28)
"hat"
(4) [nafe] (April 15)
"before"

We have conflicting data, however, where we find /f/ in the instances that we would expect to find [ϕ]; this distinction is from what I believe to be a fully enunciated form (utilizing the phoneme) versus a more laxed form of the word (utilizing the allophone). I base this on the fact that we ONLY find /f/ where we would expect [ϕ], and never vice versa.

(5) [fitini] (Feb. 4)
"short"
(6) [fanta] (Feb. 18)
A Female Name

(7) [kle besã kofe] (April 8) "The sun is behind the clouds."

As we can see in examples (1)-(3), we find $[\phi]$ exactly where we would anticipate it being, and in example (4), where we would expect to find /f/, we do. However, in examples (5) through (7), we see /f/ in positions we would normally expect to find $[\phi]$, however, we don't have a single example of $[\phi]$ being found word medially following an unrounded vowel, indicating that /f/ must become $[\phi]$ in certain contexts, and remains /f/ when being fully enunciated.

/h/ and [s] Distinction

Mandinka shifts its voiceless glottal fricative /h/ forward into the uvular fricative [B] when found word medially. The rule can be written as follows.

/h/ > [B] / Word Medial

(8)[a hakiri kadi] (Jan. 28)
"She is clever."
(9)[kononi taʁara] (Feb. 11)
"The pigeon flew."

(10) [mamadu te ſnoвo abada] (April 22) "Mamadu never sleeps." As can be seen in example (8), we find /h/ only word initially, while [taʁara] ("fly") in example (9) and [fnoko] ("sleep") in example (10) indicate that we find [μ] word medially.

[ç] Insertion

When we find /i/ word finally, in less enunciated speech, our speaker will insert the voiceless palatal fricative [ç] at the end of the word. The rule can be written as such.

 $\emptyset > [c] / i_#$

(11) [boliç] (April 22)
"cup"
(12) [untunje boliç] (Feb. 11)
"I ran."

(13) [benã boliç] (Feb. 11) "I will run."

As we can see from these three examples, the phone [ç], found nowhere else in the Mandinka language, is inserted word finally after an [i].

Nasal Assimilation

Mandinka often assimilates its first person pronoun [ne] or simply [n] to the placement of the consonant following it. The rule can be written as such.

 $N_{place} > C_{place} / _ C$

(14) [nte bolo sõ] (March 25) "I will not be buying a basket."

(15) [mbeka bolo sõ] (March 25) "I am buying a basket."

(16) [nteka bolo sõ] (March 25) "I am not buying a basket."

The nasal first person, found utterance initially in each of these elicitations, can be clearly seen to assimilate to the position of the consonant immediately following it. While it retains its normal alveolar location coming before the alveolar stop [t] in examples (14) and (16), in example (15) we see it becoming bilabial in order to accommodate the bilabial stop [b] coming after it.

Vowel Deletion

Between consonants, Mandinka can delete vowels, leaving a consonant cluster in the surface form. The rule can be written as such.

 $[i] > \emptyset / C_C$

(This rule is not 100% accurate, and appears to primarily occur when the first consonant is a [b] and the second consonant is not a plosive.)

(17)[mobili] (April 22) (Enunciated)
"car"
(18)[mobli] (April 22) (Not Enunciated)
"car"

(19) [dʒon bise doŋgli dala] (March 25) "Who can sing?"

(20) [dʒon bse doŋgli dala] (March 25) "Who can sing?"

As we can see in both (17) and (19), our fully enunciated forms, [i] is found word medially between [b] and another consonant, however in (18) and (20), their respective, more casual counterparts, we find the [i] deleted between the two, giving us the consonant cluster [bl] and the near-affricate [bs] respectively.

Vowel Lengthening

The Mandinka morpheme -[u], which acts as a plural marker, can instead be merged into one long vowel when applied to a word already ending in [u]. The rule can be written as follows.

While in example (24) we find [u] existing as a separate syllable at the end of the word, not merging with the word final [ã] at all, we see that, in example (22), [ulu] ("dog") has become instead [ulu:]. Where the standard rule of pluralization to apply, we might find [ulu.u] instead, however, Mandinka instead opts to merge the two similar sounds together, simply lengthening it to compensate.

Contractions

Mandinka appears to have a system of contraction. On March 11, when we attempted to elicit the phrase "We will help you all," our speaker began by giving us [ambe aũ dema], and then corrected herself to [ambese aũ dema], stating that they were "going to avoid contractions." We were unfortunately unable to determine the exact process of contraction present in Mandinka.

3. Pronouns (Kyle Shaw)

The pronouns of Mandinka are a surprisingly straightforward set of words that contrast only person and number. Apart from some cases in which they undergo phonological assimilation, they do not change: whether subject, object, or possessive, the pronouns maintain the same basic form in every context.

In examples (1) - (27), we see all pronouns and their allomorphic variants, along with the reflexive form:

(1) ne tẽ 1S NEG		g	la LOC	(Feb. 1	.3)
'I am not r	unning [*]	-			
(2) n-tũne 1S-PAST 'I heard yo			(Feb. 1	1)	
(3) m-benã 1S-FUT 'I will run	run	(Feb. 1	1)		
(4) ŋ-ga 1S-POSS 'My house	house			5	(Jan. 28)

Note that the first person singular pronoun, /ne/, may assimilate to the following consonant. For example, in (2), it appears in front of /tũne/ as prenasalized /nt/; and in (3), it matches the bilabial quality of the /b/ in /benã/, becoming /m/.

(5) ãu je karãke'lau deje (Mar. 4) 1PL be teacher.PL be 'We are teachers' (6) i-tũp-ãu je (Feb. 11) **2S-PAST-1PL** see 'You (sg) saw us' ka-dzñ (Feb. 4) (7) ãu tɛ'li 1PL friend POSS-tall 'Our friend is tall' (8) i-mã фã (Jan. 28) 2S-NEG tall 'You are not tall' (9) u-ji je (Feb. 11) 3PL-2S see 'They see you (sg) (10) i-fa be (Jan. 28) kənə so 2S.POSS-father be house in 'Your father is in the house'

Once again, note that some phonological alterations take place. In (9), for example, the glide /j/ is inserted between /u/ and /i/; this is a common occurrence in speech and adds no morphological information.

(11) au-ba je sini (Feb. 11) 2PL-FUT.3S tomorrow see 'You (pl) will see her tomorrow' (12) ãu-jau (Feb. 11) je 1PL-2PL see 'We see you (pl)' (13) au (Feb. 18) ba 2PL.POSS aunt 'Your aunt' (14) a-mã koro (Feb. 25) 3S-NEG old 'She is not old' (15) a-tupe livri ka'lã (Mar. 4) 3S-PAST book read 'He read the book' (Feb. 11) (16) a-tupe pa'ro kĩ

3S-PAST cat bite 'It bit the cat'

Examples (14) - (16) illustrate that Mandinka does not make a gender distinction in its third person singular pronoun. In fact, there is no gender distinction in the pronouns at all – a concept that is perhaps slightly foreign to native speakers of Germanic or Romance languages.

(17) u-tup-a 3PL-PAST-3S 'They saw her'	je see	(Feb. 1	11)
(18) au-tupe 2PL-PAST 'You (pl) heard l	a 3S nim'	mε hear	(Feb. 11)
(19) a-fa 3S.POSS-father 'Her father is not		dʒã tall	(Jan. 28)
(20) a-ka glo'ki 3S-POSS shirt 'his shirt'	(Jan. 2	28)	

One may have noted the inconsistent appearance of the particle /ka/, as in (19) versus (20). It seems to function as the possessive marker; however, it is not always present in the data. Closer inspection reveals that, when it is absent, the possessed thing is a family member. All other possessed things take /ka/ and its allomorphic variants.

(21) u-tup-ãu anfor'se agã'bo dugu-la (Apr. 8) 3PL-PAST-1PL force leave village-LOC 'They forced us to leave the village'

(22) au tun-u je (Feb. 11) 2PL PAST-3PL see 'You (pl) saw them'

(23) u-ka wu'lu: (Feb. 4) 3PL-POSS dog.PL 'their dogs'

Finally, reflexive pronouns in Mandinka are formed by combining the pronoun in question with the form /jere/ (also /j ϵ r ϵ /). Examples (24) – (27) illustrate this.

(24) u-tupe u-jere je (Feb. 11) 3PL-PAST 3PL-REFL see 'They saw themselves'

(25) ãu-tupe 1PL-PAST 'We saw ourselv	ãu-jere 1PL-REFL res'	je see	(Feb. 11)
(26) au-tune 2PL-PAST 'You (pl) saw yo	au-jɛrɛ 2PL-REFL purselves'	je see	(Feb. 11)
(27) a-tune a-jɛrɛ 3S-PAST 3S-RE 'It saw itself/He		(Feb.	11)

Although the full set of reflexives was not elicited, based on the complete consistency of the data above, it seems safe to assume that the rule will apply to all persons and numbers. Likewise, although we did not obtain 'she saw herself,' it is safe to assume that it would be the same data found in example (27).

A summary of Mandinka's pronouns is presented in Table 3.

Tadle 3. Th	e Pronouns of Manoin	ІКА	
	Subject/Object	Possessive	Reflexive
1P sg	n(e)		
1P pl	ãu		
2P s g	i	1 ~~	Liona
2P pl	au	+ga	+jere
3P s g	а		
3P pl	u		

Table 3. The Pronouns of Mandinka

4. Word and Constituent Order (Coree Clinton)

Noun Phrase Structure

The structure of the NP is usually [determiner phrase][Noun][Adjective], as seen in examples like the following:

 a ka fleri dʒemã (Jan 28)
 3sg POS flower beautiful "her white flower"

(2) *ni wulu teli* (Jan 28) DEM dog fast "That fast dog"

The determiner phrase can be as simple as a single demonstrative (as in (2)) or be relatively complex, like having a NP possessor (like (3)):

(3) *m= ba ka wulu* (Feb 18) 1sg= mother POS dog "My mother's dog"

As an observant reader will note, there also seems to be a difference in (3) between how possession with "my mother" and "my mother's dog" works. This is because Mandinka distinguishes between alienable and inalienable possession, with alienable possession being marked with the overt possession marker ka:

- (4) *i kũsigi* (Jan 28) 2sg hair "your hair"
- (5) $\eta = ga$ so (Jan 28) 1sg=POSS house "my house"
- (6) n = ke je tohoma (Feb 4)
 1sg= uncle PAST walk
 "my uncle walked"

Where (4) and (6) are inalienably possessed (part of the body and a family member respectively) and (5) is alienably possessed.

Demonstratives seem to occupy the same position, but there is a catch, for while possessive phrases always appear to the left of the noun, and the vast majority of demonstratives in the DP appear to the left of the noun being described, we got a handful of examples where the demonstrative appeared to the right of the noun:

```
(7) ni wulu (Jan 21)
DEM dog
"This dog"
(8) wulu ni (Jan 21)
dog DEM
"This dog"
(9) o- kulu ni (Jan 28)
(0?)- mountain DEM
"Those hills"
```

Where (7) and (8) were both given as valid translations of "this dog", suggesting that there is no difference between the two forms. However, the sparsity of these sort of examples suggests that there is some sort of difference. We don't seem to have any example which would illustrate how the adjectives are ordered with respect to demonstratives appearing on the right side of the noun, or even if the two structures are allowed together in the first place.

Clause-Internal Structure

Clauses in Mandinka seem to universally have a Subject position appearing near the beginning of the clause, followed by the tense/aspect/model/negation markers (the order of these relative to each other being handled in the sections on Tense Aspect and Modality, and Negation). Here, we will deal with clauses where the predicate is an adjective, postposition phrase, NP, and VP separately.

Starting with adjective predicates, they seem to participate in a special construction, with *ka* connecting the subject to the adjective:

(10) a ka kegũ (Jan 28) 3sg (ka?) intelligent "she is intelligent"

(11) *u ka dʒã* (Feb 4) 3pl *(ka?)* tall "They are tall"

There was also a particle *ka* used to mark what looked like progressive aspect, which seems like a reasonable thing to be used in this type of construction, so they may be the same marker.

Next we have examples where the predicate of the sentence is a postpostional phrase, which are straight forwardly [Subject][TAM][PP] in structure:

(12) η= ga wulu be so kelefe (Jan 28)
1sg= POSS dog PRES house beside
"My dog is beside the house"

With the PP phrase being *so kelefe.* There seems to be some internal (possibly morphological) structure to postpostions. See the section on postpostions for more information.

What is maybe more interesting is the structure of phrases with an NP predicates. There, we get a "copula" *deje*, as seen in examples (13) and (14):

(13) *ne j =i fa deje* (Jan 28) 1sg PRES =2sg father COPULA "I am your father"

(14) *ni je fanta ka kononi* (Feb 25) 1sg PRES Fanta POSS bird "That is Fanta's bird"

And this is always true of the sentences we saw with NP predicates. However, there are probably more complicated things going on with *deje*. For example, *deje* might not mark only NP predicates, as we have one possible counterexample, where *deje* appears with what looks like an adjective:

(15) *nim boro je korakora deje* (Feb 4)

DEM basket PRES new COPULA "That basket is new"

Granted, we don't know what a proper analysis of *korakora* (and these "reduplicated adjectives" in general), and this may just as likely be evidence that *korakora* is a noun, as it is that this is a situation where *deje* can appear with adjective predicates.

Also, deje is likely not a single morpheme, as there are plenty of examples where de and je end up doing different things. For one, we have (16), which is similar to (15) except it is negated, and de does not appear with je:

(16) *ni* fezi te korakora je (Feb 4) DEM chair NEG new (je?) "The chair is not new"

Also, we have (17), which despite being very similar in structure to (13), has what looks like the two elements appearing in a different order:

(17) *ni* t*fi je a fa ja de* (Jan 28) DEM man PRES 3sg father (*ja?*) COPULA "That man is her father"

Where *ja* might be related to the *je* of *deje*, but we probably do not have enough information to give a proper analysis of these differences.

Mandinka clauses with VPs are basically the same as the stative constructions, with the subject appearing at the beginning of the clause, and the subject and the VP being separated by the tense/aspect/modal section just like the stative structures:

- (18) *i je sigi* (Feb 4) 2sg PAST sit "You sat"
- (19) *a je saŋkaso lipa* (Feb 4) 3sg PAST tree hit "He hit the tree"
- (20) *n= tun= t =i koro- muso fe* (Feb 18) 1sg= PERF= NEG =2sg older.sibling- female like "I didn't like your older sister"

Clause Level Adjuncts

There are plenty of clause level adjuncts, which can appear on either side of the main clause:

(21) *a= je buli kunũ* (Feb 4) 3sg= PAST run yesterday "They ran yesterday"

- (22) *ni doni sera, a be-na jele* (Apr 22) "soon," 3sg FUT-(*na?*) laugh "she will laugh soon"
- (23) *a be-na jele ni doni sera* (Apr 22) 3sg FUT*-(na?)* laugh "soon" "she will laugh soon"

where (22) and (23) were both elicited for the same sentence, and only differ by the placement of the adjunct *ni doni sera*. Unfortunately, we don't have much evidence about clause level PP adjuncts, and as such do not know how they are usually ordered with respect to the main clause.

Structure of VP

Mandinka is an SOV language, as can be seen in examples (24) and (25):

- (24) *u be so ni je wa* (Feb 18) 3pl FUT house DEM see Q "Will they see this house?"
- (25) s*ega je boro sã* (Mar 4) Sega PAST basket buy "Sega bought a basket"

Where *so ni* "this house" is the direct object in (24) and *boro* "basket" is the direct object in (25). This, along with the fact that Mandinka has postpositions, suggests that it should be analyzed as a head-final language, but note that the TAM particles all branch to the left of the VP, and that this also needs to be accounted for.

Indeed, Mandinka also does interesting things with the order of Ditransitive and dependent clause structures which would be unexpected of a head-final language. Unlike the object of the verb, dependent clauses and the recipient clause for the verb di "to give" both appear to the right of the verb. For example the recipient clause appears at the end of the clause in (24) and (25):

- (26) a je wulu di au =be ma (Feb 18) 3sg PAST dog give 2pl =all to "He gave you all a dog"
- (27) *m* = *ba* tune boro di i= doho- muso ma (Feb 25) 1sg =mother PAST basket give 2sg= younger.sibling- female to "My mother gave a basket to your sister"

With the postposition phrase *aube ma* and *idohomuso ma* appearing after the verb *di* "give". Also, note that, as hinted at by the English glosses for (26) and (27), we always got the structure with a postposition phrase, despite trying to directly elicit structures like in the English gloss of (26), with *di* having two arguments. In this case, the word order is accounted for by a

totally reasonable analysis where *ma* is a postposition, and the PP phrase it heads is an adjunct to the VP.

Onto dependent clauses. They also appear to the left, again despite what we might expect of a head-final language. Examples:

- (28) a tum =be a ηana ko ne buli (Feb 18) 3sg PERF =PAST 3sg think COMP 1sg run "She thought that I ran"
- (29) fa -u be b =a $d\tilde{o}$ k =u be tahara (Feb 18) father -PL all PRES =3sg know COMP =3pl FUT leave "All the fathers know that they are going"

Where *ko ne buli* is the imbedded clause in (28) and *ku be tahara* is the imbedded clause of (29). We should expect that the CP would appear to the left of the verb if Mandinka was a proper head-final language. However, note the *a* appearing in both examples, which (as suggested by the gloss), look like they are probably the 3rd person singular pronoun, making (29) for example, more faithfully translate roughly to something like "all the fathers know it, that they are going". This means that that object position expected to be filled by the CP is instead filled with a pronoun argument, and depending on the analysis given, this could account for the surface order seen.

Other Structures

Conjunction and Disjunction

Mandinka has a couple of relevant phrase and clause level connectives. To start, Mandinka has a disjunctive *wala*, which as illustrated by examples (30) and (31), can be used to most any two clauses of the same type:

(30) m=be fe ka-taha butiki la wala be fe ka-taha so (Apr 1)
1sg=PRES want to-go store LOC or PRES want to-go home
"I want to go to the store or I want to go home"

(31) fanta wala sega be tahara dugu la (Apr 1)
Fanta or Sega FUT go town LOC
"Fanta or Sega is going to town"

Where is (30) *wala* connects the structures just below the subject position, and in (31) it connects two NPs. This behavior contrasts with Mandinka conjunction, where there seems to be two different connectives, one for phrase level connection and one for NP level connection, as seen in examples (32) and (33) respectively:

- (32) i be fe ka-taha butiki la i i be fe tahara so (Apr 1)
 2sg PRES want to-go store LOC and 2sg PRES want go home
 "you want to go to the store then you want to go home"
- (33) *gloki-u ni korofi-u tum-be fere lẽ* (Apr 1) shirt-PL and pants-PL PAST-PERF sell PASSIVE "The shirts and the pants where sold"

Where in (32), the connective is *i* and in (33), the connective is *ni*. Obviously, the similar phonetic structure of these suggests they might actually be the same, but the discrepancy is interesting none the less.

Question Structures

See section 5 on Mandinka questions for the word order of yes-no and WH questions.

5. Tense, Aspect, and Mood (Galen Buttitta and Ian Stewart)

Constituent Order

TAM marking in Mandinka always precedes the verb and succeeds the subject. If a direct object is present it will precede said direct object (Mandinka being an SOVX language). Within the TAM hierarchy itself, the positioning of multiple morphemes, if present, generally tends to adhere to the pattern in example (1).

(1) PST + NEG + aspect + (obligation/possibility) + INF

Tense

Mandinka seems to exhibit a two-way distinction between past and non-past, and potentially a three-way distinction between past, present, and future, depending upon the analysis of the morpheme na. The nonpast is the default state and goes unmarked; the past is marked using the particle $t\tilde{u}$.

The morpheme *na* is problematic; it does not occur in the same slot as does $t\tilde{u}$, but when it occurs without $t\tilde{u}$ it seems to correspond in a one-to-one fashion with the English "will" (in the sense of a future), as can be seen in examples (2) and (3).

- (2) au bena wulu la kule (Apr. 8)
 au be-na wulu la kule
 2PL INDF-FUT dog CAUS bark
 "Y'all will make the dog bark."
- (3) *a tenaka dema* (Mar. 4) a te-na-ka dema 3SG NEG.INDF-FUT-PROG help "He is not going to help me."

However, combinations involving $t\tilde{u}$ and na are attested, and when these occur together the meaning seems to be a construction involving the future perfect, such as in examples (4) and (5).

(4) *пtũtena taʁa dugu la* (Mar. 25)
 n-tũ-te-na taʁa dugu la 1SG-PST-NEG.INDF.FUT go town to "I will not have been to town."

(5) *пtũbena taкa dugu la* (Mar. 25)
 n-tũ-be-na taкa dugu la 1ST-PST-INDF.FUT go town to "I will have been to town."

Aspect

Aspect in Mandinka seems to fall into one of two categories, here described as "definite" and "indefinite" and following Leipzig glossing convention for those terms. "Definite" aspect, marked by the morpheme $j\theta$, generally seems to refer to events that have some sort of fixed terminus in time, either at a starting point or an ending point; "indefinite" aspect, marked by $b\theta$, is considerably more nebulous and often seems to refer to a likelihood or potentiality (or lack thereof) on behalf of a verb. While not perfect, it seems this analysis works for the greater part of tokens collected. In (6) and (7), one can see examples of each of these.

- (6) *ni je ninĩŋga mbe taʁa dugu la* (Mar. 11) n-i je n-ninĩŋga mbe taʁa dugu-Ø la if-2SG.SUBJ DEF 1SG-ask 1SG-INDF go town-SG to "If you asked, I would go to town."
 (7) *nau ba fe, ãmbena taʁa dugu la* (Mar. 11)
- n-au ba fe ãm-be-na taʁa dugu-Ø la if-2PL.SUBJ DEF want 2PL.SUBJ-INDF-FUT go town-SG to "If y'all want, we will go to town."

Aspect seems to be marked optionally, although in this case the default typically seems to be inferred from contextual clues (but note counterexamples such as statements of social status).

Negation

Two forms of negation have been elicited, $m\tilde{a}$ and te. Their usage seems to correspond to negatives of *je* and *be* respectively, in that $m\tilde{a}$ generally seems to indicate a negation involving a fixed period in time or terminus thereof, whereas *te* seems to be a more general negative. An example with the *be/te* alternation can be seen in (8) and (9).

- (8) mbeka boro sã (Mar. 25)
 m-be-ka boro sã
 1SG-INDF-PROG basket buy
 "I am buying a basket."
- (9) *nteka boro sã* (Mar. 25)
 n-te-ka boro sã
 1SG-NEG.INDF-PROG basket buy
 "I am not buying a basket."

This being said, *te* notably crops up in some copular constructions. Generally, these seem to be one kind of "never" statement or another — either an explicit never or an illogical statement. The examples (10), (11), (12), and (13) exhibit this behavior.

- (10) *mamadu te fn 0ь 0 abada* (Apr. 22) mamadu te fn 0ь 0 abada Mamadu NEG.INDF sleep never "Mamadu never sleeps."
- (11) *paro te dumunîke dlã dʒukoro* (Apr. 8)
 paro te dumunîke dlã dʒukoro
 cat NEG.INDF eat bed under
 "The cat never eats under the bed."
- (12) *naro te boro je* (Mar. 25) paro te boro je cat NEG.INDF basket be "The cat is not a basket."
- (13) nĩ te boro je (Feb. 18)
 nĩ te boro je
 it NEG.INDF basket be
 "It is not a basket."

It is possible that one of several things is happening: one, Mandinka may be making a distinction along the lines of noun class (specifically, worked materials vs. raw materials) with a pursuant distinction in the definiteness of aspect; or two, the speaker may have been trying to utter a sentence she judged as absurd, coming up with the way that sounded least problematic to her.

Mood

The Infinitive

The infinitive is marked with either a preposed or prefixed particle ka- attached to the verb stem. The use of the infinitive in verbal constructions is well-attested in the tokens collected. The particle ka seems to occur in several tokens, but the exact function of this particle is unknown.

(14)	<i>kadi</i> (Feb. 18) ka-di INF-give "to give"	(16)	<i>kadõ</i> (Feb. 18) ka-dõ INF-know "to know"	(18)	<i>kafereli ke</i> (Apr. 1) ka-fereli ke INF-clean ? "to clean"
(15)	<i>kafe</i> (Feb. 18) ka-fe INF-like "to like"	(17)	<i>katobili ke</i> (Apr. 1) ka-tobili ke INF-cook ? "to cook"		

The Imperative

Imperatives seem to be formed simply by using the verb stem. In one token, the form aje was elicited, possibly an indication of concrete time with respect to the action; it seems it was a

contracted form of *auje. Based on this information the default seems to be the singular, which is unmarked. It is unknown if *je* is absolutely required for all imperative constructions.

- (19) buruu dumu (Mar. 11)
 buruu dumu
 bread eat.IMP
 "You! eat the bread!"
- (20) aje buruu dumu (Mar. 11)
 a-je buruu dumu
 2PL.SUBJ-DEF bread eat.IMP
 "Y'all! eat the bread!"

There were not very many tokens elicited with a negative imperative; what two there are seem to consist of a phrase with a negative verb (*Cf.* "don't" in English) followed by a complementary CP in a similar vein to other such sentences having been elicited. In the case of negative imperatives the default appears to be the singular, much in the same way as in the normal imperatives.

- (21) kana кobu sõ (Mar. 11) kana кobu-Ø sõ NEG.IMP dress-SG buy "You! don't buy the dress!"
- (22) au kana vobu sõ (Mar. 11) au kana vobu-Ø sõ 2PL NEG.IMP dress-SG buy "Y'all! don't buy the dress!"

Expectation

A morpheme that shows up in several instances in the elicited tokens is ηga . When it appears in the tokens, it is typically part of an expression of the deontic mood (see next section), part of an if-then statement, or, in one instance, surfacing in a sentence involving a force of nature:

(23) fne tũjenga so la bĩ dugu ma (Apr. 22) fne tũ-je-nga so-Ø la bĩ dugu ma wind PST-DEF-EXP house-SG CAUS fall ground to "The wind blew my house over."

Given this data it seems that the morpheme ηga carries some force about expectation, a lack of surprise at an outcome, or the entertainment of the possibility of something happening.

The Deontic and the Potential

Mandinka seems to have some sort of expression (possibly a complex or periphrastic one, as explained below) for indicating deontic (hereinafter DEON) and potential (hereinafter POT) moods. The deontic indicates something akin to obligation or necessity and seems to consist of *kanga* followed by an infinitive, such as in example (24).

(24) a kaŋgã ku dema (Mar. 11)
a kaŋga k-u dema
3PS DEON INF-3PL.OBJ help
"He should help them."
"He must help them."

The potential mood indicates possibility of something occurring and seems to typically be marked by *se* or *ise*. These forms can either combine with an aspectual marker or precede an infinitive (in the latter case much the same as *yga* can), as in (25).

(25) ntise kasã ije (Mar. 11)
n-t-ise ka-sã i-je
1SG.SUBJ-NEG.INDF-POT INF-buy 2SG-BEN
"I may not buy it for you (because I don't have permission)."

One exception to the previously-discussed rules seems to be the construction *se kake*, which seems to indicate that something is forbidden, such as can be seen in (26).

(26)	nĩ kuluu se kake so kono (Mar. 24)						
	nĩ	kulu-u	se	ka-ke	so-Ø	kono	
	DET	rock-PL	POT	INF-impossible	house-SG	in	
	"Those rocks cannot be in the house."						

6. Wh-words and the structure of Questions (Ka'eo Yoshikawa)

1.1 Data

Mandinka interrogatives and question words are summarized in Table 4.

Tadle 4. Qu	iestion wo	oras						
mu	muna	jorodzuma	mi	dzor	токоти	tumadʒuma	t∫ogodi	wa
'what'	'why'	'where'	'where'	'who'	'someone'	'when'	'how'	INT

1.2 Yes/No Questions

Mandinka prefers to have its question marker at the end of its sentence. As illustrated in these examples:

1.2a

tε	bi- bolo	wa?
tea	2sg own.PRES.	interrogative
' do y	ou have tea?'	

1.2b

in- tunjε	wulu-ni	dɛma	wa?
2.sg- PST	dog- this	give.PRES.	interrogative
' did you give	me this dog?'		

These two examples (1.2a) and 1.2b) both illustrate the interrogative marker being at the end of the sentence, almost exhibiting a "tagged question" structure. It is important to note that in (1.2b) the indirect object/recipient ("me") is not overtly marked and it has been speculated that the morpheme that represents the indirect object/recipient has been absorbed by one of the other morphemes, or it is marked on the verb "dɛma".

1.3 wh-words

Mandinka does not have wh- movement to form its questions like English does, but rather, whwords are locked in position and depending on what they are replacing decides their location. For example, words that mean "where", "when" and "why" can be either at the front of the sentence as illustrated below:

1.3a

muna	i-	ju	dɛma
why	2.SG	3.PI	LOBJECT give. PRES.
'why o	did you	help	them?'

1.3b

be-	jorodzuma	dorotle;
MODAL-	where	brother
'where is my	brother?"	

These two examples (1.3a and 1.3b) demonstrate the wh-word at the front of the sentence. In addition to this, "where", "when" and "why" can be at the end of the sentence as illustrated below:

1.3c

Fanta Fanta 'When is Fa			dʒuma? when
qorot∫ε	be-	jorodzuma?	

uoвоije	06-	JorouSuma
brother	MODAL-	where?
'where is r	ny brother?''	

1.3e

1.3d

qorotl€	be-	mi?
brother	MODAL-	where?
'where is my	brother?'	

1.3f i- ju dɛma muna 2.SG 3.PL.OBJECT give. PRES. why 'why did you help them?'

The examples above (1.3c - 1.3f) all demonstrate the wh- words at the end of the sentence. The flexibility of the wh-word locations being either at the front or at the end is because they replace adjuncts. It is important to note here that there is not a token that illustrates "when" being at the front of the sentence. It can be assumed that "when" can move like "where" and "why" because of what it replaces in Mandinka. But from the data that I specifically collected, I have no record of a token with "when" being at the front of the sentence. In addition to this, "tumadʒuma" has been shortened in example 1.3c to "dʒuma". The only reason I could conclude is because "dʒuma" is more what is organically spoken, and "tumadʒuma" is the formal version.

It is interesting to note here what the speaker gives for "where". The tokens show two words, "jorodʒuma" (1.3b and 1.3d) and "mi" (1.3e) both meaning "where". The speaker clarified that "jorodʒuma" was in a formal register, while "mi" was used in the informal register. There is reason to believe that "jorodʒuma" is the interrogative while "mi" is the indefinite, but consider these two tokens:

1.3g

qorotle	be-	jorodzuma?
brother	MODAL-	where?
'where is m	y brother?"	

1.3h

n-	ta-	dõ	qorotl€	be-	jorodzuma
1.Sg.NOM	NEG.	that	brother	MODAL-	where?
'I don't kn	ow where r	ny brot	her is"		

These examples (1.3g and 1.3h) illustrate "jorodʒuma" as both the interrogative and the indefinite.

Concerning the wh- words, what and who, they are in base position because they replace arguments, as illustrated below:

1.3i

dzõ-	5	dõ-	5
who-	SUB.3.Sg	that-	SUB.3.Sg
'who i	s that?'		

1.3j

i-	tun-	jε	dzõ	dɛma
SUB.2.SG	PST	OBJ.3.Sg	who	help
'who did you l	nelp?'			

1.3k

i-	be-	ka	mu	sõ?
SUB.2.SG	MODAL-	INF.	what	buy
'what are you	ı buying?'			

1.4 indefinite wh- words

It is important to note here that most of the "wh - words" in the data table (1.1) are the same word in their interrogative forms and their indefinite forms, except the wh- word, "who". Please consider these two tokens:

1.4a

dʒõ tun- ji dɛma? who PST. OBJ.2.SG help 'who helped you?"

1.4b

n- ta dõ alε- jε moκomu- jε 1.Sg.NOM NEG. that know.PRES 3.Sg.OBJ someone/person 3.Sg.OBJ ' I don't know who she is?'

In example 1.4a, the word "who" is represented as "dʒõ" which is expected, but in the example, 1.4b, "who" is represented as "moromu" which was not the token received when the elicitor asked for "who" as an isolated token. This proves that there is an interrogative "who" and an indefinite "who. If this was not the case, then we would expect examples 1.3h and 1.3g to behave the same as examples 1.4a and 1.4b, but they do not.

7. Comparison and Possession (Erin Moss)

Comparison in Mandinka occurs by using a particular grammatical structure with no apparent morphology akin to English /er/ nor any explicit comparative words like "more" or "less." For an object Object1 that is more of some Quality than an object Object2, the format "Object1 /ka/ Quality /ni/ Object2 /je/" is used.

The following examples illustrate this.

Examples

All examples are from April 15th, 2014.

```
(1)
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ne ka doro ni korotfe je

1s COP small DET brother COP

'I am smaller than my brother.'

In this example, the first item in comparison is /ne/ 'I,' the adjective of comparison is /dogo/ 'small,' and the second item is /korotʃe/ 'brother.'
(2)

sega kaso: ka dovo ni ne ka so: je

Sega POSS house COP small DET 1s POSS house COP 'Sega's house is smaller than my house.'

In this example, the first item being compared is /sega ka so:/ 'Sega's house,' the quality being compared is again /doʁo/ 'small,' and the second item is /ne ka so:/ 'my house.' (3)

wulu fima ka teli ni wulu dzema je

dog black COP fast DET dog white COP

'The black dog is faster than the white dog.'

Here, the first item being compared is /wulu fima/ 'black dog,' the trait being compared is /teli/ 'fast,' and the second item in the comparison is /wulu dʒema/ 'white dog.'

(4)

ni boro ka doвo ni boro doni je DET basket COP small DET basket other COP 'This basket is smaller than the other basket.'

Finally, in this example the first object in the comparison is /boro/ 'basket,' the quality of comparison is once more /doko/ 'small,' and the second object being compared is again /boro/ 'basket.'

Possession with /bolo/

Possession as represented by the verb "have" in English is represented by the verb /bolo/ in Mandinka, but this verb behaves in a remarkably different fashion than the English "have." Where in English, the possessor is the subject of a sentence and the possession is the object—such as in English "I have a book"—with Mandinka /bolo/, these roles are switched. The possession is the subject of /bolo/, and the possessor is the object.

The following examples illustrate this.

Examples

All examples are from April 15th, 2014.

(1)

so: fitini be m-ba bolo

house small COP 1s.POSS-mother have

'My mother has a small house.'

In this example, the item being possessed is /so: fit ini/ 'small house,' and the possessor is /m-ba/ 'my mother.'

(2)

misi tsama tũm-b-u bolo

cow many PST-COP-3p have

'They had many cows.'

In this example, the item being possessed is /mijî tjama/ 'many cows,' and the possessor is /u/ 'they.' Note the lack of the plural-marking /u/ on /mijî/.

(3)

bato: duru ni miſi na:ni ni wulu saba tũ-fana tũm-b-a bolo boat five CONJ cow four CONJ dog three PST-also PST-COP-3s have 'He also had three dogs, four cows, and five boats.'

In this example, the items being possessed are /bato: duru/ 'five boats,' /miʃi na:ni/ 'four cows,' and /wulu saba/ 'three dogs.' The plural /u/ is once more absent. The possessor is /a/, 'he.' Interestingly, the past marker/tũ/ appears twice.

(4)

wulu fima tũm-be m-fa bolo dog black PST-COP 1s-father have 'My father had a black dog.'

Here, the possessed thing is /wulu fima/ 'black dog,' and the possessor is /m-fa/ 'my father.'

8. Postpositions (Cassie Swatek)

Simple Postpositions

Mandinka has a set of simple postpositions, where the lexical word appears immediately following the object of the postposition. These postpositions include those that indicate relative proximity, the locative postposition, the benefactive markers, as well as several others. Some of these consist of only one syllable and only one morpheme, such as the locative marker and the benefactive markers, but the postpositions that indicate relative proximity, as well as some of the others, appear to be made up of two or more morphemes that combine to create more complex meanings.

Relative Proximity

From the data that we gathered, we found four postpositions that indicate relative proximity, meaning that they are used to indicate when an object or motion is in a position or takes place in relation to another object. These four postpositions are shown below along with their predominant glosses.

(1)	kerefe	(2)	kofe
	by		behind
	ʻby'		'behind'
(3)	nafe	(4)	sãfe
	in front		above
	'in front'		'above'

All four of these postpositions include the morpheme [-fe], which appears to indicate when a postposition refers to relative proximity. This morpheme is used in combination with others, such as [kere], to give the meanings that are glossed above. This combining of morphemes means that we can pull apart these postpositions and attempt to assign meaning to the other parts.

The morpheme [kere] appears in the postposition that primarily means 'by,' though we also have two examples from February fourth where it was used to mean 'to'. These meanings lead me to believe that [kere] indicates general proximity that does not relate to any particular direction. It is frequently used in a temporal sense where one object or person is in a position relative to another object. Consider the following example:

(11) wulu tumbe i fa kere- fe (Feb. 18) dog past 2p.s. father prox- rel. 'The dog was by your father' In this sentence, [kerefe] is used to indicate that the dog was in the general proximity of the person 'your father'. However, in the examples where [kerefe] was used as 'to', this same sort of logic could also be used. Consider the following:

(47)	i	ji	buli	wulu	kere-	fe	(Feb. 4)
	2p.s.	past	run	dog	prox-	rel.	
	'You	ran to tl	he dog'				

One possible interpretation of the English sentence is that the dog ran to a position that was in relative proximity to the person 'you', which explain why this particular postposition was used in this way. However, later on, the speaker stopped using this postposition in the way, relying on the locative postposition instead (see below).

The second relative proximity postposition, [kofe], is primarily used with the meaning of 'behind', though, again, we have a couple outlying examples where it is used to mean 'around.' The most accessible way to analyze the meaning of the morpheme [ko] is that it indicates directionality of proximity, specifically indicating that the object or motion is behind the object of the postposition. This, again, is usually used in a temporal sense, meaning that the object or motion is physically behind the object of the postposition. Consider the following example:

(90)	sãnkaso	be	wulu	kofe
	tree	is	dog	behind
	'The tree is			

In the world, the tree is physically behind the dog. However, this particular postposition can also be used to mean 'around', as in the following example:

(51)	m-	be	buli	SO	kofe	(Apr. 8)
	1p.s.	fut.	run	house	around	
	'I will					

However, this is the only example that we have where this particular postposition is used in this way. There is a partial explanation for this, though. The English sentence can mean just that the person 'I' will run around back of the house without returning to the front, which would be consistent with the analysis that we have. This particular postposition was also used, in a single token, to modify the verb 'run' in order to create the meaning of 'chase'. The example is below:

(49)	wulu	ji	buli	i	kofe
	dog	past	run	2p.s.	behind
	'The c	log cha	sed you	ı'	

This example shows that this particular postposition can be used to give the meaning of 'to chase' by approximating the meaning with 'to run behind.'

The third relative proximity postposition that we found was [nafe], which means 'in front', and it is largely the same case as with [kofe], except it is much more straightforward. This postposition only has the one usage, as far as we have seen. This leads me to believe that [na] indicates directionality of proximity in the forward direction. Consider the following example:

> (36) ba tuni d30 mobli nafe (Apr. 22) goat past stand car in front 'The goat stood in front of the car'

This example shows the single meaning that we have for [nafe], which is a temporal, physical location in front of another object.

The fourth and final relative proximity postposition that we found was [sõfe], which also indicates directionality of proximity. This particular postposition has several, related meanings based on our elicitation, which include 'on', 'above', 'over', and 'up'. All of these have a general upward directionality aspect, which can be attributed to the [sõ] morpheme. This postposition can be used to either indicate a temporal position or indicate the direction of a motion relative to an object. Consider the following examples:

(41)	tle	be	jiri-	u	sõ-fe		(Apr. 8)		
	sun	is	tree-	pl.	up-pro	X.			
	'The s	un is ab	ove the	trees'					
(20)	wulu	ka	kolo	be	tabli	sõ-fe	(Apr. 8)		
	dog	poss.	bone	is	table	up-pro)X		
'The dog's bone is on the table'									
(42)	sara-	u	tupe	pã	bento	sõ-fe	(Apr. 8)		
	sheep-	- pl.	past	jump	fence	up-pro)X		
	'The s	heep ju	mped or	ver the	fence'				
(23)	naro	tuni	buli	kulu		sõ-fe	(Apr. 22)		
	cat	past	run	mount	ain	up-pro)X		
	'The c	at ran u	p the m	ountain	,				

In examples 20 and 41 from April eighth, we see the temporal use of [sõfe] for the position of the sun as 'above' the trees and for the bone as 'on' the table. Both of these sentences involve an object in a position that is relatively upwards from the object of the postposition. In example 42 from April eighth, we see [sõfe] used to indicate the directionality of the jumping motion as relatively upwards from the fence. In the final example, 23 from April twenty-second, we see this postposition used to indicate upwards motion again, with reference to where the cat ran in relation to the mountain.

It is worth mentioning that all of the positions that are indicated by these postpositions are impermanent states, which can be changed.

Locative

The single postposition that we found during the semester that had the most meanings was the marker [la], which we agreed as a class was a kind of locative marker. It seemed to pair up with different verbs in order to give a variety of meanings ranging from 'on' and 'in', to 'from' and 'to', and the object of the postposition was nearly always something that was not easily moved, or is traditionally stationary, indicating a specific location. In combination with different verbs, [la] took on what appeared to be different meanings from an English perspective. Consider the following examples:

(53)		je past	•	∫ezi chair	la loc		(Feb. 4)			
	-	on the ch		•						
(60)	u	taʁara	dugu	la			(Feb. 4)			
	3р.р.	go	city	loc.						
	'They	went to	the city	,						
(26)	∫e		tun-te	butiki	la		(Apr. 1)			
	chicke	n	pst-neg	gstore	loc.					
'there was no chicken at the store'										
(52)	limorc	je	fneta	fenetri		la	(Apr. 22)			

fly(n) past fly(v) window loc 'The fly flew through the window'

All of these examples have the marker [la] but in no two of these examples does it have the same gloss in English. However, semantically the meaning of [la] in all of these sentences is approximately the same, where it indicates a location that is either associated with the verb or is required for the verb. So, in example 53, from Feb. 4, [la] indicates that there is a relationship between the verb 'to sit' and the location associated with the noun 'chair,' and the actual relationship of the person 'I' to the chair is inferred based on the verb. This same logic can be applied to all of these examples, and indeed, all of the examples we have with the marker [la], including the copular examples, like the one below:

> (63) m- be ke dugu la (Mar. 4) 1p.s. fut. be city loc. 'I will be in the city'

In this example, [la] is connected with 'be', indicating the location of the person 'I'. This postposition is used in many related structures, including the circumpositions discussed below.

Benefactive

Mandinka also has two postpositions that indicate when an object or action is for the benefit of a person. The first of these is [mã], which is associated with the verb 'give' in the way that in English we give something 'to' someone. Consider the following example:

(27)	ãu	be	boro-u	di	а	mã	(Feb. 18)
	1p.p.	fut.	basket-pl	give	3p.s.	to	
	'We w	vill give	e her baskets'				

In English, we have two ways of expressing this relationship between and object and a person. There is the ditransitive construction that selects for two noun phrases, as in the elicited form 'We will give her baskets' above, and there is the ditransitive construction that selects for one noun phrase and one prepositional phrase, as in the alternate for 'We will give baskets to her'. This second form is the only construction available in Mandinka, which utilizes [mã] as a postposition in the same way that we use 'to' in English.

The second benefactive postposition in Mandinka is [je], which has the approximate meaning of 'for' or 'for the benefit of'. Consider the following examples:

(39)	n-	tupe	boro sõ	u-	je	(Mar. 25)
	1p.s.	past	basket buy	3p.p-	for	
	'I bou	ght a ba	asket for them'			
(41)	a	je	sankaso	lipa	Fanta- je	(Mar. 25)
	3p.s	past	tree	hit	Fanta- for	
	'He h	it a tree	for Fanta'			

In example 39, from Mar. 25, [je] indicates who the baskets are meant for, and who the buying of the baskets will benefit, 'them'. The case is similar in example 41, from Mar. 25, where the action of hitting a tree was done for the benefit of Fanta. This is one of many meanings for the phonetic form [je], but it is the only meaning associated with this form as used as a postposition.

Miscellaneous

There are a number of postpositions that we found that do not fall into the categories listed above, but they are still simple postpositions. These include the postpositions that indicate when an object is physically inside of something, when an object is among other objects, when an object moves around another object, and when an object is physically under another object.

The postposition [kono] indicates when an object is physically inside or surrounded by another object. Consider the following example:

(88)	i	fa	be	SO	kono	(Jan. 28)
	2p.s.	father	is	house	inside	
	'Your	father is				

In this example, [kono] is used to indicate the position of the person 'your father' as inside the house. However, in combination with verbs of motion, this particular postposition can also be interpreted as 'into' or 'through', though the base meaning of being 'inside' of something else is still viable. Consider the following two examples:

(40)	demseni		segi	dona	tu	kono	(Apr. 22)			
	Child		eight	walk	forest	inside				
'Eight children walked into the forest.'										
(46)	wulu	saba	tuni	buli	tu	kono	(Apr. 8)			
	dog three past run forest inside									
'Three dogs ran through the forest'										

In combination with the verbs 'run' and 'walk', [kono] indicates where the running and walking took place and how it is related to the forest. However, when used in this way, the locative postposition can also be used express approximately the same meaning.

The postposition [tula] indicates when an object or person is among a group of other objects or people. We only have a single example of this use, which is presented below:

(52) fe kelẽ be mifi-u tula (Apr. 8) chick. one be cow-pl among 'There is one chicken among the cows'

In this example, [tula] is used to indicated that the chicken is surrounded by a group of cows, giving the meaning 'among'.

The postposition [kuna] is used to indicate when a motion takes place in a circle around another object, as in the following example:

(55)	а	tuni	pã	kalo	kuna	(Apr. 22)
	3p.s.	past	jump	moon	around	
	'He ju					

When we elicited this example, we made it very clear that we were asking for a postposition that indicated motion in a circle around an object, and [kuna] was the postposition that was given. This is the only example that we have of this postposition.

The final simple postposition that we encountered this semester was $[\overline{d_3}ukoro]$, which indicates when one object is underneath another object, as in the example below:

(23) wulu ka kolo te tabli d̄3ukoro (Apr.8) dog poss. bone neg. table under 'The dog's bone is not under the table'

Although this is a negated sentence, the postposition $[\widehat{d_3}ukoro]$ indicates the spatial relationship between the bone and the table, which is being negated. I am sure that there

are at least two different morphemes in this particular postposition, but with the data that we gathered this semester, I cannot break this postposition down into its meaningful parts.

Circumpositions

In addition to the simple postpositions discussed above, we also encountered four circumpositions that indicate relative position. This may be due to a literal translation from English to Mandinka, since all four include the locative marker [la] as a postposition, which most frequently means 'to'. In English, many of these circumpositions are also indicated with more than one word, one of which is normally to. *Relative Position*

The circumposition that indicates when something is 'close to' something else is a combination of the locative marker [la] and the general proximity marker that we discussed earlier [kere], where [kere] appears immediately preceding the object of the postposition, and [la] appears immediately following the object, in the normal

postposition place, as in the following example:

(84)	nũ	ka	kere	i-	la	(Jan. 28)
	nose	be	prox.	2p.s.	loc	
	'My n	lose is	close to y			

The combination of these two morphemes allows speakers of Mandinka to express when something is 'close to' something else. As noted above, this might be a literal translation from English, where 'to' is used, but we cannot be sure, and we only have one good example of this circumposition.

The circumposition that indicates when one object is 'far away' from another is a combination of the locative marker [la] and a morpheme $[\widehat{d_3}\widetilde{o}]$, which likely indicates distance in the same way that [kere] indicates proximity. This circumposition is constructed the same way as the circumposition above, meaning 'close to', where the [la] appears in the postposition place, following the object, and $[\widehat{d_3}\widetilde{o}]$ appears immediately preceding the object, as in the example below.

(89)	i	fa	ka	d3õ	SO	la	(Jan. 28)
	2p.s.	father	be	dist.	house	loc.	
	'Your						

In this example, the combination of morphemes on either side of the object indicates that the subject of the sentence is distant from the location associated with the house. We also saw the morpheme $[\widehat{d_3}\widetilde{o}]$ used to indicate distance in copular sentences that dealt with distance.

We also elicited the postpositions that indicate 'on the left' and 'on the right', which appear to be somewhat idiomatic in the same way that English is sometimes. On occasion, we refer to the 'left-hand side' or the 'right-hand side' of something, and in the examples that we have, it appears that Mandinka does something similar. Consider our two examples:

(35)	livri	be	numa	bolo	la		(Apr. 4)
	book	be	left	hand	loc.		
	'The b	ook is	on the le	eft'			
(45)	SO	be	dumui	ni	bolo	la	(Apr. 4)
	House	be	food		hand	loc.	
	'The house is on the right'						

As seen in the gloss, these phrases actually do include the word 'hand', giving the meaning that they are in the location that relates to the left or right hand. In example 45, from Apr. 4, we actually see the word for 'food' as well, which is an interesting side note.

9. Adverbs (Cassie Swatek)

Time Adverbs

Time adverbs indicate when something happens. We actually gathered quite a bit of data on time adverbs, totaling up to about ten total adverbs that relate to when actions took place. All of these adverbs appear in adjunct positions, and most primarily appear at the end of sentences, though there are some that appeared at the beginning as well. In my discussion, I will break these adverbs up into two categories: lexical and phrasal.

Lexical Time Adverbs

These adverbs consist of single morphemes that stand on their own to indicate when an action takes place. These are words like [sini], meaning 'tomorrow'; [kunu], meaning 'yesterday'; [bi], meaning 'today'; and [sisã], meaning now. All of these seem to be single lexical units that cannot be broken down into meaningful parts. 'Now' may be an exception to this, but from the data that we have it is difficult to tell. According to our data, these adverbs appear at the end of the sentence or at the beginning, as in the examples below.

(100)	wulu	be	bo:	dugu	la	sini	(Feb. 4)
	dog	fut.	leave	town	loc.	tomor	row
	'The d	log will	leave th	he town	tomorr	ow'	
(35)	sisã	u	beka	mi∫i	mugã	pĩni	(Apr. 22)
	now	3p.p.	prog.	cow	100	look	
	'They are now looking for 100 cows'						
	-			-			

These examples show a couple of the uses of the lexical time adverbs, which appear at the beginning of the sentence, as in example 35 from Apr. 22, or at the end of the sentence, as in example 100 from Feb. 4.

Phrasal Time Adverbs

The phrasal time adverbs are made up of multiple morphemes that combine to create complex concepts. These, as with the lexical adverbs, appear in adjunct positions at the beginning of end of sentences. The adverbs that we have in this category can be broken down into two categories based on related meaning and morphology.

The first grouping of phrasal time adverbs is based on the shared morpheme [a] and the shared association with actions that took place to a certain point in time. These adverbs include [alibi], meaning 'still'; [amena], meaning 'a long time ago'; and [amema], meaning 'a little while ago'. All of these can be understood as previously mentioned, where an action took place until a certain point or at a certain point in time in relation to the present. The easiest phrasal adverb to break down is [alibi], which has the morpheme [a], which could indicate specificity of the time period, and it also has the morpheme [bi], which we have already identified as the morpheme that means 'today'. Combined with this, it feel it is reasonable to analyze [li] as an approximate to 'until', leaving us with the approximate meaning for [alibi] as 'until today'. The adverbs [amena] and [amema] can similarly be broken down based on their similarities, where [me] could indicate a time in the past, and [na] could indicate that the time period was long ago and

[ma] could indicate that that it was a short time ago. However, these interpretations are tentative at best and would require more data to be conclusive. As with the other adverbs, these function as adjuncts that appear at the beginning or end of the sentence, as in the following examples:

(20)	alibi	u	beka	u	ka	mi∫i-u	ŋĩni	(Apr. 22)
	still	3p.p.	prog.	3p.p.	poss	cow-pl	look	
	'They	are stil	l lookin	g for the	eir cow	s.'		
(31)	sega	ji	buli	amena	l	(Feb. 18)		
	Sega	past	run	long.ti	me.agc)		
	'Sega ran a long time ago'							

The syntactic distribution of these adverbs is, as previously mentioned, essentially the same as most of the other adverbs. The semantics of these adverbs were interesting, thought I am sure that there is much that I missed or misinterpreted.

The second set of phrasal adverbs relate to actions that are continued, which is indicated by the morpheme [ni]. These adverbs include [nituma], which means 'for a short time'; [nila], which means 'for a long time', and [ni donisera], which means 'soon'. The last in this list is a bit less connected, and it is likely related to French, but the marker [ni] is present, connecting it to the other two in some way. The best way to identify the connection is that these have some sort of semantic element that is related to continuation. Beyond that connection, it is difficult to identify the morphemes and what they mean individually because there is just so little data. As with the other phrasal adverbs above, these primarily appear at the beginning of sentences and at the end of sentences.

Manner Adverbs

We have very few adverbs that describe the way in which actions were done, but the few that we do have seem show at least some patterns. Based on one of the adverbs that was used for 'quickly' we can see that adverbs can be based off of adjectives, such as [teli] for 'fast' being modified to become [teli:ja] as an adjective. However, there are also lexical adverbs for both quickly and slowly, [do:ni] and [d3ona], respectively. These adverbs tend to appear immediately following the verb they modify, and both of the lexical adverbs can undergo reduplication, as in the example below:

(24)	sega	ni	ne	tune	∫e	dumu	donidoni
	Sega	and	1p.s.	past	chick.	eat	slowly
	'Sega and I slowly ate chicken.'						(Apr. 1)

In this example, the adverb appears immediately following the verb 'eat', and is reduplicated. The only case of a manner adverb that we have where it was not reduplicated was with the manner adverb that was derived from [teli]. We have so little data on manner adverbs that it is difficult to identify any patterns beyond these.

Frequency Adverbs

Frequency adverbs indicate how often an action occurs. From the data that we gathered this semester, Mandinka has at least three frequency adverbs. The first one is actually a loanword from Arabic, [abada], which means 'never' in both languages. As with the other adverbs, [abada] is used in an adjunct position, usually at the end of the sentence, as in the example below:

(21) mamadu te fлоко abada (Apr. 22) Mamadu neg. sleep never

'Mamadu never sleeps'

The position of [abada] at the end of the sentence is consistent with the other adverbs in Mandinka, but it is also consistent with the use of this adverb in Arabic.

The other two frequency adverbs that we have are related; both refer to actions that are repeated or will be repeated. The adverb [tumabe] means 'always' and indicates that an action is repeated over time, and the adverb [tuguni] means 'again', indicating that an action was repeated. These two adverbs share the morpheme [tu], which leads me to believe that [tu] is indicative of repetition and that these adverbs are made up of different morphemes much like the postpositions are. However, based on the information that I have, it is difficult to assign meaning to the other parts of these adverbs. These two adverbs appear in adjunct positions, primarily at the end of sentences, though we have evidence to show that they can appear between a verb and a postpositional phrase. Consider the following examples:

(27)	a	tũti	∫ora	tuguni	(Apr. 22)	
	3p.s.	past	sneeze	again		
	'She s	neezed	again'			
(41)	demse	eniu	bi	toroma	tumabe	1

(41)	demseniu	D1	toroma	tumabe	tu kono
	children	pres.	walk	always	forest inside
	'Children are	e always	walking inte	o the forest'	(Apr. 22)

In example 27, from Apr. 22, the adverb [tuguni] appears at the end of the sentence, as we have seen in many of the other adverbs. However, example 41, from Apr. 22, we see an example of an adverb appearing between the verb and the postpositional phrase. When we elicited that particular example, our speaker actually went out of her way to give us this sentence in three different forms, where the adverb appeared in all three of the expected adjunct positions. It seems that any of these types of adverbs could appear in any of these positions, but sentence final seems to be the preferred position for adverbs.

Degree Adverb

Degree adverbs indicate the degree to which something is true. We only got a single degree adverb, 'very' and even that we only actually have in one solid example. When something is true to a great degree, the word [kosobe] is added as an adjunt following the adjective modified, as in the following example:

(23) a tuna ka gelẽ kosobe (Mar. 25) 3p.s. past be funny very 'She was very funny'

In this example, [kosobe] modifies the adjective 'funny', and thus it comes immediately after the adjective. As I mentioned before, we only actually elicited this once, so for a long time, we believed that there were no adverbs of this type in Mandinka.

10. Valence-Changing Structures and Semantic Roles *(Luis Molina)* Semantic Roles

In general, the semantic roles for verbs in Mandinka tend to align with their English counterparts, as in:

(1) *Aθ* 'see'

experiencer	patient
subject	direct object

(2)	<i>lipa</i> 'hit'			
	agent	patient		
	subject	direct object		

There is, however, one notable exception present in the data; while the semantic roles for the verb *to have* are the same as in English, their orders are reversed:

(3) *bolo* 'have'

patient agent direct object subject

This can be seen in the following:

- (3.1) wulu b-a bolo (Apr. 8) dog DUR.he have 'he has a dog'
- (3.2) miſiwu te fa:nta bolo (Apr. 8) cows NEG Fanta have 'Fanta does not have cows'

In both examples, the direct object appears at the beginning the sentence and the subject appears immediately before the verb. As will be seen from the section on syntax, that is contrary to the typical ordering of sentences in Mandinka.

Valence-Changing Structures

The valence of a lexical item is its ability to govern a certain number of arguments. Verbs, in particular, tend to have differing and interesting patterns for valence; that is, they have a variety of arguments that they govern, and the numbers can change based on different factors. Some of these structures for Mandinka will be explored in this section.

A meaningful lexical item to analyze is the verb *to drink*. In English, it tends to contain two semantic roles, as shown in (5):

(4) *drink*

subject

agent	patient
subject	direct object

However, one of those roles may be unoccupied if there is no object specified. In Mandinka, the same concept—the lack of a requirement that both roles be assigned—also applies, as can be seen from these tokens:

(4.1)	man	be DUR nan drinks	water		(Feb. 11)
	agent		patien	t	

object

(4.2) wulu be (Feb. 4)mĩ dog DUR drink 'the dog drinks' agent patient subject Ø This remains the case even when tense is added: (4.3) parowu bi mĩ (Feb. 4) cats FUT drink 'the cats will drink' (4.4) wulu Λ -a (Feb. 11) mĩ dog PST.it drink 'the dog drank it'

Like English, Mandinka does not require a deobjective marker (a marker that supplants the object) to accomplish this change in valence. Though the [be] marker could potentially be interpreted as a deobjective, it is here interpreted instead as a durative, since it generally appears to better fit as a marker for habitual action.

Passive Construction

The passive construction in Mandinka, in contrast to the English construction, does not result from a modification in the syntax or a change in semantic roles. Instead, a marker ([lẽ]) is used to indicate passivity. This can be seen from the following:

(Apr. 1)

(5.1) si	gilã	tumbe	sã	lẽ	
cl	nair	PST	buy	PASS	
ʻt	he ch	air was	bough	ť	
(5.2) m	ifi i	tumbe	fere	ã	

(5.2) miſi tumbe fere lẽ (Apr. 1) cow PST sell PASS 'the cow was sold'

As noted, the semantic roles do not change in the passive construction—the subject and object are still in their usual position; a passive marker has simply been added.

Conclusion

From the data available, it would appear that Mandinka tends to prefer to retain a regular number of semantic roles and to keep them in the same syntactic positions. A large portion of semantic constructions are addressed through the use of individual particles (such as the [be] and [lẽ] markers mentioned above), rather than through morphological means.

11. Negation *(Kati Stone) Ma and Te Negation* The class examined the Mandinka data and two forms of negation were found. Sometimes sentences are negated with /mã/ and sometimes they are negated with /te/. As the class studied negation and tried to discover why one form was used as opposed to the other, the class decided that this question was beyond the scope of this class; we could not possibly learn in the short amount of time that we had why each form is used. We speculated a great deal and contemplated many options, but nothing we thought of would work for discovering why /mã/ was used instead of /te/ or why /te/ was used instead of /mã/

sed instead of /te/ or why /te/ was used instead of /ma/.	
(52) so tunte dzele	(April 1)
house past-neg clean	
'The house was not cleaned'	
(53) sega tunmã soko	(April 1)
Sega past-neg house-clean	
'Sega did not clean the house'	
(37) a tuñ mã ſnoho	(March 4)
3s past neg sleep	
'She did not sleep'	
She did not sleep	
(38) a te ſnoho	(March 4)
3s neg. sleep	(Waren +)
'She is not going to sleep'	
She is not going to sleep	
(39) a te ſnoho	(March 4)
	(Iviaicii 4)
3s neg. sleep	
'She will not sleep'	
(51)	$(M_{2}, 1, 1, 1, 1)$
(51) mãnga kasõ ije	(March 11)
Neg-should buy you	
'I should not buy it for you (but I will anyway)'	

'I should not buy it for you (but I will anyway)²

One hypotheses pondered by the class was that when a sentence is in past tense that /mã/ would be used and in future tense /te/ would be used. This hypothesis did not explain why in present tense /mã/ and /te/ are both used. As illustrated in examples (53) from March 11 and (37) from March 4 we can see that /mã/ is used in past tense. These two examples are representative of many more. However, in example (52) we can see that it is not universally true for Mandinka. Example (52) is past tense and /te/ is used instead of /mã/. Examples (38) and (39) are both future tense and again are representative of many future tense negation sentences that use /te/ as their negated form. Example (51) illustrates the best example of a future tense sentence that we have that uses /mã/ as the negation form. Example (51) implies that this action will be in the future and since /mã/ is used this also disproves our tense hypotheses. Thus, we could not continue with this hypothesis.

(37) nin boro mãkor (Feb. 4) the basket neg.-old 'The basket is not old'

(9) wulu te koroledog not old-particle'The dog is not old'	(March 11)
(29) amã koro 3s-neg old 'She is not old'	(Feb. 25)

As illustrated in examples (37) and (29) /mã/ is used as the negated form when the sentence '_____ is not old' is translated; however, in example (9) 'The dog is not old' uses /te/ to negate the sentence. 'Dog' and 'she' are both animate but one uses /te/ and one /mã/ to negate the sentence. 'Basket' is inanimate and 'she' is animate but since they both use the same form of negation, negation based on animacy is out of the question. These three sentences are also in the same format and almost identical in every way. This is one problem we had when trying to discover the difference between the negation marker /mã/ and the negation marker /te/. We keep running into sentences of similar form that use different negations.

(15) nɛte	furu	le		(March 4)
1 st p. sing.	-neg. mar	ried		
'I am not ma	arried'			
(46) Fanta,		mãndi	лe	(Feb. 25)
Fanta,	1 st p. sing.	neghappy	particle	

'I am not happy, Fanta'

As illustrated in examples (15) and (46) above these sentences have similar structures yet different types of negation. Example (15) 'I am not married' has /te/ as the negating form but example (46) 'I am not happy, Fanta' has /mã/ as the negative form.

 (37) a tuñ mã ∫noho 3s past neg sleep 'She did not sleep' 	(March 4)
(38) a te ſnoho 3s neg. sleep 'She is not going to sleep'	(March 4)
(39) a te ſnoho 3s neg. sleep 'She will not sleep'	(March 4)
(21) mamadu teſnoho abada Mamadu negsleep never 'Mamadu never sleeps'	(April 22)
(28) ute najɛ le abada	(Feb. 25)

They-neg smile particle never 'They will never smile'

Another hypothesis the class contemplated was a thought that both forms of negation could be freely chosen whenever the speaker chooses but that /mã/ at times might be used to specify that an action has not happened, but that it still could happen. This hypothesis is closely related to the tense hypothesis. In example (37) this hypothesis would say that /mã/ is used because she did not sleep instead of saying she never sleeps. In examples (38) and (39) above /te/ is used and we can see one reason why this hypothesis does not seem to work. In these examples it could just as easily be specified that the sentence meaning is not that 'she will never sleep'; however, that specification is not made. As illustrated in example (21) if the speaker would like to indicate that an action never happens there is a word for that. The possible Arabic loanword /abada/ could mean 'ever' instead of 'never' because when it is used the negation form of /te/ is also used as in examples (21) and (28). This hypothesis is not likely because of similar sentences that do not make the distinction of 'it could happen' and because of words such as /abada/ that may be used to indicate that things may never happen.

Negated Modals

We examined negated modals in Mandinka and came to the conclusion that modals have a negation word in the sentence and are not their own separate word, if the English translation of the modal even appears in the Mandinka sentence.

 (50) nte kasõ ijε 1s-neg. buy you 'I cannot buy it for you' 	(March 11)
(56) ã kaŋga ku demã3s must them help'He must help them'	(March 11)
(52) mãŋga kasõijε negmust buy-you'I must not buy it for you'	(March 11)
(32) a ber livuli kalõ3s will book read'he will read the book'	(March 4)
(36) ãu ber tetaha2pl will neg-go'You all will not be going'	(Feb. 18)

In example (50) the English modal 'can' is not translated into Mandinka. In example (56) we can see that 'must' is /kanga/ but in example (52) the /ka/ is replaced by the negation marker /mã/. So there is a partial modal replacement, but the meaning of the modal stays and is negated. As seen

in example (32) the modal 'will' is /bei/. When a sentence is negated with /bei/ as in example (36) the negation is added after the modal but before the verb.

Unknown negation

There were two sentences that we could not find the negation in and a few sentences with 'nobody' that were difficult to gloss.

(53) kana ?	robu s dress b				(March 11)
		2	one person)	,	
(54) ãũ 2 nd p. pl. 'Don't buy	?	dress	som buy nany people)	,	(March 11)

In examples (53) and (54) we can only assume that negation is coded in /kana/ in some way. There is no $/m\tilde{a}/$ and there is not /te/ in these sentences. As was stated before to understand the negation of Mandinka is beyond the scope of this class and the time we had.

-	?	neg-1p-poss.	wulu dog	fe. like	((Feb. 18)
'No one like	es m	ly dog				
(54) moho person 'nobody lik	?	neg.1p-uncle	fe like		((Feb. 18)
(4) moho person 'person'					((Jan. 21)

There are two instances when /mohosi/ is used. This is illustrated in examples (64) and (54). Both instances are when the English 'nobody' or 'no one' is used. Anytime we have 'person' (/moho/) in any other sentence it is as seen in example (4), simply /moho/. This would lead us to believe that /mohosi/ is 'nobody' however each sentence (64) and (54) also have the negated form /te/ also. If /si/ is another type of negation in Mandinka we need to consider that in English this would be a double negative making a positive sentence, but maybe either /si/ is not a form of negation or in Mandinka this would not be a double negation. Either way we would need to do more research on this to come to a conclusion as to what function /si/ has in this sentence.

Negation Conclusions

Though this class did not provide enough time to fully understand the negation of Mandinka we were able to gather some general ideas about what might be happening in Mandinka negation. Seventy of the sentences that were negated use /te/ as the negating form, but only 27 use /mã/. From this we can speculate that /te/ is more commonly used and possibly the underlying form of negation. However, given the data that we do have, not much more can be defined as to when /mã/ is used or when /te/ is used.

12. Loan words and processes of lexicalization (Nicole Umayam)

The Mandinka people have long been in contact with speakers of other languages. French colonization, inter-continental trade, and proximity all contribute to multilingual influence in the Mandinka language. Like our speaker, Mrs. Soumare, the speakers of the Mandinka language are often multilingual. Mrs. Soumare is a speaker of Mandinka, Wolof, French, Serer, Spanish, French, and English. She also has working knowledge of Diola, Arabic, Italian, German, and Chinese, making her something of a language savant.

In the data, we identified tokens of French, Arabic, Swahili, and Wolof origin. This analysis provides one potential way of determining which are loan words are which have been lexicalized into Mandinka. More data is needed to provide an accurate picture.

French

By far, most of the loan words came from the French language. Considering the long history of contact and colonization of the French in West Africa and the fact that the French language is used daily by our speaker, French influence is expected. When a single French lexical item is borrowed, it is rephonologized into Mandinka with a final vowel, as illustrated by examples (1)-(4).

(1)	/∫ambri/	'room'	from French /ʃambr ⁱ /
(2)	/livri~livri/	'book'	from French /liv1/
(3)	/ekolde/	'student'	from French /ekol/ 'school'
(4)	/t∫ezi/	'chair'	from French /tjez/

We observed the use of several French function words given in phrases, such as the following:

/ni/ 'nor' /ni doni **sera**/ 'soon' /me/ 'but' /donki/ 'so'

French verbs were also incorporated into Mandinka speech, as illustrated by verb /forse/ 'to force.' Not enough data is present to determine whether or not Mandinka speakers are able to recognize which words are French in origin.

Other languages

We also identified some loan words from Arabic. Most of the idioms of greetings and leave-takings are from Arabic, such as /salamalekum/ 'hello', but we also had one token of an Arabic loan for an adverb: /abada/ 'never'.

Similarly, we had one token that was identified by our instructor as a loan word from Swahili. The verb /lipa/ 'to hit' is the only token from this data set, though it is likely that more loan words exist.

/abada/	'never'	/dõ/	'know'
/aji/	'no'	/dohʌtʃɛ/	'son'
/akan/	'buy'	/doh⊼musov/	'son'
/alarmu/	'alarm clock'	/dohomisu/	
			'younger male cousin'
/amamɛ/	'a little while ago'	/dohotse/	'younger female cousin'
/amena/	'long ago'	/doktoro/	'doctor'
/aniversari/	'party'	/donglidaja/	'sing'
/ao/	'yes'	/doni/	'slowly / carefully'
/arabu(kon?)/	'talk'	/dibi/	'dark'
/ba/	'goat'	/dibite/	'light'
/ba/	'mother'	/dõm/	'day'
/balõŋ/	'ball'	/dou/	'day'
/balum/	'bowl'	/dugu/	'city / town'
/bambalakun/	'Mandinka Language'	/dugufitini/	'village'
/bambana/	'Mandinka people'	/dugula/	'town/city'
/batou/	'boat'	/duguma/	'ground'
/bedimi/	'upset'	/dumu/	'eat'
/bedʒi/	'river'	/dumuni/	'food'
/bɛdʒifitini/	'pond'	/duni/	'food'
/bɛli/	'blue'	/dʒãn/	'who'
/bɛli bɛli ba/	'big'	/dʒege/	'fish'
/bɛnto/	'fence'	/dʒɛmã/	'white'
/bi/	'day/today/forest'	/dʒi/	'water'
/bĩn/	'fall'	/d30/	'stand' v.
/bla/	'set / place'	/dʒuku/	'mean'
/bohəlĩ/	'blue'	/dʒumdʒum/	'tall'
/boli/	'run/cup'	/erdi/	'flower'
/bombi tɛri/	'potato'	/fa/	'father/thing'
/boro/	'basket'	/fajʌi/	'leaf'
/bulu/	'arm'	/fãŋga/	'strong'
/da/	'door'	/Fanta/	'name of a woman'
/dã/	'know'	/fãũ/	'egg'
/dabla/	'stop'	/fe/	'like' v.
/dabli/	'table'	/fɛ/	'want'
/damne/	'start'	/fɛ̃nta/	ʻfly' v.
/demnia/	'resumed'	/fɛrɛ/	'sell'
/dẽnt∫ɛ/	'son'	/fili/	'flower'
/dɛ̃musoʊ/	'daughter'	/fim _A /	'black'
/demseni/	'baby'	/fimfim/	'ant'
/detʃɛ/	'nephew'	/fitĩni/	'small / short'
/dɛdija/	'handsome'	/kolo/	'bone'
/fla/	'two'	/fnɛ/	'wind'
/di/	'give'	/folon/	'smart'
/dima/	'help' v.	/fulu/	'marry'
/fusi/	'zero'	/koro/	'old'
/1051/	2010	/ KULU/	olu

Appendix A: Mandinka Lexicon (Julie Odom)

/aadumuni/	'food'	/korotʃɛ/	'older male cousin'
/gadumuni/	'wine'	v	'hat'
/glo/ /glo/ri/	'shirt'	/kufulõŋ/ /kule/	'bark' v.
/gloki/ /inkoromisu/	'older female cousin'	/kulu/	
			'rock/mountain'
/ja/	'eyes'	/kulufitĩni/	'hill'
/jele/	'laugh' v.	/kuluſi/	'pants'
/jelɛs/	'smile'	/kuma/	'talk' v.
/jɛ/	'see'	/kũni/	'nice'
/joro dʒumã/	'where'	/kũnu/	'yesterday'
/kabo/	'big'	/kʌlu/	'month'
/kadʒʌ̃n/	'far away'	/korakora/	'new'
/kafɛ/	'behind'	/kusĩŋki/	'hair'
/kafi/	'black'	/ladʒõ/	'build' v.
/kago/	'bitter'	/lalɛrila/	'funny'
/kãko/	'bath'	/lalijalilila/	'funny'
/kakuma/	'listen'	/lau/	'cup'
/kali(la)/	'break'	/lɛ/	ʻpig'
/kalile/	'broken'	/lipa/	'hit'
/kalo/	'moon'	/livɪɾi/	'book'
/kalom kela/	'teacher'	/mago/	'need'
/kalõŋ/	'read'	/maha/	'touch' v.
/kamuke/	'instructions'	/makɛ/	'grandfather'
/kanuludi/	'bread'	/makɛba/	'uncle'
/kari/	'break' v.	/Mamadu/	'male name'
/kenema/	'outside'	/mamamuso/	'grandmother'
/kɛ/	'live in a location'	/me/	'hear'
/kɛbũn/	'clever / intelligent'	/mi/	'drink'
/kere/	'break'	/miʃi/	'cow'
/kerefe/	'near / by'	/mna/	'eye'
/keveri/	'celebration'	/mobli/	'car'
/kile/	'sun'	/mode/	'grandchild'
/kĩni/	'rice'	/moha/	'person'
/kilɛ/	'one'	/mohasobe/	'trustworthy'
/kini/	'bite'	/mohobe/	'everyone'
/kitlõngɛ/	'swim' v.	/mohodo/	'someone'
/kltonge/ /klt/	'sun'	/mũ/	'what'
/kli/	'sun'	/mũnã/	'fly (the insect)'
/ko/	'clean'	/mururu/	'bread'
/ko/ /kohodʒi/	'ocean'	/musaflãnala/	'2nd wife'
/koldẽn/			'woman'
	'student' 'in'	/muso/	
/kolʌn/		/sõn/	'feel(an emotion)'
/musofila/	'1st wife'	/na/	'come towards'
/kono/	'forest'	/nakagela/	'funny'
/kononi/	'bird / pigeon'	/nafɛ/	'before/in front'
/koramiso/	'older sister'	/naro/	'cat'
/nasoro/	'might'	/ʃɛzila/	'chair'

		_	
/nɛdɛdʒuhu/	'orange'	/ʃnɛ/	'steal'
/nedɛmuhu/	'yellow'	/ʃnoho/	'sleep'
/(ka)ni/	'kind'	/ʃu/	'moon'
/ni/	'and/on'	/ta/	'carry'
/nga/	'break' v.	/taha/	'go / leave'
/noho/	'easy'	/tahara/	ʻfly'
/nono/	'milk'	/tahamoho bera	'visit' v.
/nonolabo/	ʻmilk' v.	/tanimuso/	'aunt'
/nukudʒi/	'green'	/tasuma/	'fire'
/nũn/	'nose'	/tɛɡɛt/	'arm'
/okʌlu/	'hill'	/terdi/	'friend'
/olõnvla/	·7'	/teri/	'fast'
/*ordanatari/	'computer'	/tɛrija/	'quickly'
/pã/	'jump'	/ti/	'tea'
/pomi/	'apple'	/tili/	'fast'
/reiza/	'grape'	/tiri/	'friend'
/ridou ~ ridu:/	'curtain'		'sneeze' v.
	'dress'	/tiʃo/ /tobilila/	
/rogu:/ /P.olria/			'cook' (occupation) 'walk'
/Rokia/	'female name'	/tohoma/	
/roni/	'circle'	/tonilike/	'cook' v.
/saba/	'three'	/tu/	'forest'
/sɛgi/	·8'	/tuguni/	'again'
/sɛu/	'leg'	/tulula/	'flood' v.
/samara/	'shoe'	/tuma dʒumã/	'when'
/sãndʒi/	'rain' v.	/tʃe/	'chicken'
/sãŋkaso/	'tree'	/tʃɛ/	'man'
/sara/	'sheep'	/tfɛkani/	'nice'
/serdame/	'afraid'	/t∫ɛkõni/	'beautiful'
/sɛ/	'lake'	/tʃɛkʌdʒugũn/	'ugly'
/Sega/	'common name of a	/t∫ilimã/	'beautiful'
	man'		
/segana bara/	'visit'	/tʃohodi/	'how'
/sɛ̃m/	'leg/foot'	/ubeka/	'look'
/seni/	'tomorrow'	/ugula/	'market'
/sida/	'road'	/ulu/	'dog'
/sigi/	'sit'	/wala/	'or'
/so/	'house/cage"	/wɛmʌ/	'red'
/son/	'buy'	/wɪlimõnba/	'vibrant red'
/sokolona/	'room'	/yiri/	'plant'
/sou/	'room'		
/sugu/	'market'		
/sukarobala/	'sweet'		
/suku/	'soup'		
/suma/	'slow'		
/surdum/	'short'		
/ʃɛ/	'chicken'		
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