A sketch grammar of Baïnounk Gubëeher

1 Introduction

Gubëeher is a Baïnounk language mainly spoken in Senegal by about 1000-1500 people. It is the patrimonial language (Lüpke) of Djibonker in Lower Casamance, about 20km west of Ziguinchor. This means that the language is considered the language of the founding clans of the village and their descendants. Other languages spoken in the village community, like varieties of Joola, Wolof, French are seen as later additions. Important urban diaspora populations originating from Djibonker can be found in the nearby town of Ziguinchor, and in the Senegalese capital Dakar. Gubëeher is closely related to a number of equally small languages scattered about Southern Senegal and Northern Guinea Bissau, none of which serves as a lingua franca, although a variety related to modern Baïnounk languages has probably had some relevance as trade language before and during the arrival of the first Portuguese settlers in the 15th century (Bühnen 1994).

The data presented here has been recorded and collected in Djibonker by the author on various fieldtrips between 2009 and the present day, totalling about 25 months of presence in the fieldsite.¹ For examples from recorded material, the name of the file the utterances has been taken from is provided;² the files can be accessed through the DoBeS corpus at http://dobes.mpi.nl/projects/bainounk/. This paper is partly based on the grammatical sketch in Cobbinah (2013), but also incorporates more recent insights. The Baïnounk languages have officially been recognised as national languages of Senegal in 2005. On the same occasion,

¹ Data used here is from the corpora of a Volkswagen Stiftung funded DoBeS project 'Pots, plants and peoples – a documentation of Bainounk knowledge systems' (2010–2013) and the Leverhulme project 'Crossroads – investigating the unexplored side of multilingualism' (2014–2019). Both were hosted at SOAS/London and led by Prof. Friederike Lüpke.

² The first three letters indicate the location of the recording (DJI for Djibonker), and the numbers the date of the recording in the format DD-MM-YY, followed by the initials of the collector (AC for Alexander Cobbinah). The data can be accessed at XXXX

an orthography also adopted for most other Senegalese languages was instated, which I also apply in this paper and in other publications on Gubëeher.³

1.1 Typological information

The Baïnounk languages are considered part of the Atlantic phylum of Niger Congo in the Africanist tradition, although their genetic links with other languages of this phylum, including the Joola languages that dominate large areas of Casamance, are very remote. In their newly proposed classification of Atlantic languages, Segerer and Pozdniakov⁴ class Baïnounk languages, with Wolof as their closest relative, within the branch of Northern Atlantic. Bak languages, including Joola and Manjaku, are classified as Central Atlantic in this approach. Research on Baïnounk languages, and on the related languages, Kobiana and Kasanga, has only started recently and is still in the early stages.⁵ All of these languages have complex noun class systems featuring prefixes as well as a plural suffix. They are equally complex in their verbal morphology, with a large variety of prefixes and suffixes indicating subject and object pronouns, TAM, and verbal derivations.

1.2 Cultural and sociological background

As a single-village language, the core speech community of Gubëeher is too compact spatially and socially to have developed dialectal differences. Age difference as a factor shaping linguistic behaviour is often evoked by speakers themselves, with older speakers usually considered more eloquent than younger ones. Ongoing research on multilingual language use

³ The symbols /c/, /j/, /ŋ/, and /x/ correspond to their IPA value; the following symbols diverge from IPA as explained: \ddot{e} [ϑ], \tilde{n} [n], \dot{e} [ϵ], $e[\epsilon]$, \dot{o} [ϑ], o [ϑ]. Vowel length is marked by double vowels. None of the Baïnounk languages is tonal.

⁴ The new classification was presented by Pozdniakov and Segerer in Ndayane/Senegal 2010 on the occasion of an internal workshop of the CNRS based research project Sénélangues. Their revised Atlantic phylum has not been published yet, but is applied by other authors such as Fisher (2015) and Creissels (this volume).

⁵ For Baïnounk Gubëeher see Cobbinah (2010, 2013, 2014, in press); for Baïnounk Gujaher see Lüpke (this volume); for Baïnounk Guñaamolo see Bao-Diop (2012); for Guñun of Djifanghor see Quint (2015); for Kobiana see Voisin (2015a and b).

in this area may later provide more detailed insights into these issues. In a cultural environment with very shallow social hierarchies, language plays a big role in conflict resolution and communal decision-making. Rhetorical skills, serving to argue a point with finesse, without antagonising opposing parties during negotiations or political meetings, are thus highly valued and are part of what is considered as speaking the language well. Natural casual conversation, on the other hand, is characterised by the use of less intricate rhetorical and syntactic structures, and the use of borrowed items and frequent codeswitching is the norm rather than the exception, even in the speech of persons reporting essentialist ideologies opposed to exactly these practices. The examples presented here are largely drawn from monolingual discourses by elder speakers, most of whom considered being recorded on tape or video a rather formal affair. The examples thus represent a fairly conservative and elaborate version of the language. Natural conversation is characterised by a high level of codeswitching and borrowing, the amount of which depends on the extent of shared language repertoires between participants in a given conversation. In the excerpts presented in Table (1), Camille, Dodo, and Damace all share knowledge of Gubëeher, French, Wolof, and various Joola varieties, whereas Jean, who comes from a Joola-speaking environment and has moved to Djibonker recently, has not yet mastered Gubëeher very well, but still uses it in this exchange of greetings to show his willingness to integrate. Further discussion of multilingual patterns in the area around Djibonker, Brin, and the adjacent Mof Avvi, as well as the continuation of the conversation in Table (1), can be accessed in Cobbinah et al (2017).

Speaker	Transcript	French	Langue
CAMILLE	Mon frère	Mon frère!	French
JEAN	Mon frère	Mon frère!	French
JEAN	Bunulobe? Bu?	Comment ça va? Comment?	Joola
DAMACE	Goro	Gendre!	Wolof
JEAN	Goro	Gendre!	Wolof
DAMACE	Ne gulobi?	Comment ça va?	Gubëeher
JEAN	Honjahonj	Rien (=ça va bien)	Gubëeher
CAMILLE	Mon frère	Mon frère!	French

Table (1)Example of multilingual conversation

CAMILLE	Beenoor umu gëdëëti	Le patron de beenor est venu	Gubëeher
Dodo	Ça c'est bunaapi	Ça c'est 'bunaapi' (=Taureau)	French/ Gubëeher
JEAN	Beenoor inoohi de, beenoor	Beenor est assis, beenor est	Gubëeher
	innoohi na.	assis ici.	
CAMILLE	Tu beenor inina tu	Tout Beenor est là	Gubëeher
ALEX	bëëb	Père	Gubëeher
CAMILLE	Alex ne gulobi	Alex, ça va?	Gubëeher
ALEX	Honjahonj	Bien	Gubëeher
CAMILLE	Bunaapi	Taureau	Gubëeher
Dodo	Bunaapi	Taureau	Gubëeher
CAMILLE	Ukontani, non?	Tu est content n'est-ce pas?	Gubëeher / French
Dodo	Ikontani mëëmëx	Je suis très content	Gubëeher/Joola/(Fre
			nch)
CAMILLE	imuñeni sa	Je souris!	Gubëeher
Dodo	Eee ikontani xolo	Oui, je suis très content	Gubëeher /(French)
CAMILLE	Bunaapi, fii iŋkontani ninaŋken	Taureau, tu est content comme	Gubëeher /(French)
		ça!	
Dodo	Me giwúúlen securité totale	Quand je te vois, c'est la	Gubëeher /French
		securité totale	

2 Relevant issues

Before starting on a description of specific grammatical forms I would like briefly to introduce two overarching issues shaping Gubëeher.

2.1 Constructional aspects of Gubëeher

In Gubëeher, roots are quite flexible in their compatibility with constructional frames, which can convey syntactic categories, argument structure, and semantic characteristics. The English language offers similar possibilities of inserting roots into verbal and nominal frames. A case for a constructional approach that assumes underspecified roots, similar to the one adopted here, has been made by Marantz (1997), Farrell (2001), and Barner and Bale (2002) for English. The constructional frames can be defined syntactically and morphologically. This constructional character is observable in various areas of Gubëeher's grammar and has been stipulated for other Atlantic languages (Watson 2015 for Kujireray; Bondéelle 2015 for

Wolof). In Gubëeher, noun classes, valency frames, and word class-defining morphology can be understood as constructional frames defining word class, valency status, and nominal semantics, in the absence of any overt morphological marking. In the area of word class, this means that certain lexical roots are attested in nominal, adjectival and verbal frames. Nominal frames are defined by noun class morphology; syntactically they can be modified by adjectives or determiners and they trigger noun class agreement on these modified items in attributive position. Verbal frames are defined by TAM, person/number inflection, and an argument structure. Adjectives bear noun class agreement and modify nouns. Many roots are compatible with more than one type of frame. Example (1) shows the root *raxi* 'black' in a verbal (1a), nominal (1b) and adjectival (1c) frame.

1. a)	a-raxi-i	b)	ba-raxi	c)	bu-dugund	bu-raxi
	3-black-PERF		CL.ba-black		AGR.bu-male.goat	AGR.bu-black
	's/he/it is black'		(colour) black'		'black billy goat'	

This proneness to categorial flexibility is even extended to borrowed items. The root *leekon*, from the French *l'école* 'school', can be used nominally and verbally. Since the verbal usage is not attested in the source language, this must be an innovation of Gubëeher, made possible by the constructional character of the language.

2. a)	leekon	b)	leekon-d-i
	school		school-NEG:PERF-1SG.NEG:PERF
	'school'		'I didn't go to school (lit: 'I didn't school')'

Roots that enter a nominal frame, and are fitted with noun class morphology, are not necessarily limited to one specific noun class or singular/plural paradigm. Many Gubëeher roots can combine with more than one noun class paradigm to form nouns of differing semantic nuances. Part of the meaning of the noun is provided by the noun class morphology. The example of the root *moot* in Table (2) is such a case; for a more detailed discussion see Cobbinah (2013) and Cobbinah (this volume).

NC	Prefix	Root	Semantic contribution of Meaning of noun	
paradigm			noun class marker	
si-/mun-	si-		TREE:SG.	'cotton tree'
	mum-		TREE:PL.	'cotton trees'
sin-/ñan-	sim-	moot	STRING:SG.	'cotton thread'
	ñam-		STRING:PL.	'cotton thread'
ja-	ja-		ORGANIC MATERIAL:COLL	'cotton'

Table (2)The root moot and its paradigmatic network (Cobbinah 2013: 116)

The possibility of using verbs in constructions of different valency statuses, i.e. in morphologically unmarked alternations, indicates that the constructional character of Gubëeher extends to valency as well. As example (3) shows, Gubëeher is quite liberal in terms of what kinds of participants are acceptable as direct objects⁶ – in this case the source of an emotion.

3.	a)	a-rox-i	b)	a-rox-i u-bër-ëm
		3-cry-ASP		3-cry-ASP CL.u-child-3SG.POSS
		'S/he cried'		'S/he mourned his/her child.'

A choice of other verbs that occur in unmarked alternations other than the frequent 'unexpressed object deletion' is listed in Table (3).

Verb	In monovalent construction	In bivalent construction	
babb	'be the same'	'share the same (house, parents	
		village)'	
bëŋk	'be afraid'	'fear s.o./sth.'	
jir	'run'	'flee from s.o./sth'	
ciil	'laugh'	'laugh about s.o.'	

Table (3)Verbs participating in unmarked alternations

2.2 Language contact effects

The speakers of Gubëeher living in Djibonker are heavily integrated through social, cultural, religious, and economic networks with surrounding communities, most of which speak

⁶ A similar point has been made by Bassène and Creissels (2013) with regard to Joola Eegimaa.

languages belonging to the Joola cluster, which are only distantly related to Gubëeher. Linguistic influences from Joola languages, as well as from lingua francas of wider circulation such as French, Wolof, and Kriyol (Portuguese Creole of Guinea-Bissau and Casamance), have had and still have a noticeable impact on the phonology, syntax, and vocabulary of Gubëeher. Individual language repertoires in Djibonker, as in Casamance in general, are very high, averaging at about six to seven languages. These large repertoires reflect the linguistically fragmented character of Casamance and the fact that any interchange with a non-villager necessarily involves the use of a language other than Gubëeher. Even within the village, and also within some households, a large variety of languages is used. Djibonker does not have an ethnically or linguistically homogeneous population due to the integration of spouses, war refugees, workers and government employees, and the settlement of strangers on peripheral village land. The most visible effect of multilingual repertoires and high language density is the high number of loanwords in Gubëeher from a host of different languages. The lack of historical data for the local languages makes it difficult or nearly impossible to identify loans from other regional languages that are by now well integrated. The oldest identifiable loans come from Casamance Portuguese Creole, some of which have been replaced by some speakers by a new generation of more recent loans from Wolof or French. French as the language of administration and education, and Wolof as the national lingua franca, are spoken by a large proportion of the Baïnounk speakers in Djibonker, as well as in the diaspora. Both languages are used frequently in patterns of codeswitching or language mixing with Gubëeher, and contribute a large number of loanwords to Gubëeher.

Gloss	Gubëeher	Kriolu	Recent loan	
'market'	feera	fera	marse	> marché (French)
'sock'	mia	meya	kawas	> kawas (Wolof)
'window'	janeela	janela	palanteer	> palanteer (Wolof)
'nail'	preegu	peregu	daaj	> <i>daaj</i> (Wolof)
'shop'	loosa	losa/rosa	butik	> <i>boutique</i> (French)

Table (4)Old Kriolu loans in Gubëeher

The mutual influences between Gubëeher and the surrounding Joola languages⁷ in the areas of lexicon, phonology, argument structure, and noun classification are being investigated by members of the Crossroads team (see footnote 1). A comparative wordlist is in the process of being compiled, with items in Gubëeher, Jóola Kujireray, and Jóola Eegimaa, in order to determine the extent of shared or cognate vocabulary between the three languages (Watson 2018). Some examples from the list are presented in Table (5).

Gloss	Gubëeher	Kujireray	Eegimaa
'grass'	ja- fos	ma- fos	ma -fos
'left'	may	may	may
'turtle'	tukund	e-tukund	e-tukund
'silk cotton tree'	ba-xon	e-rapay	ga-vvuh
'swim'	gu-way	ka-aj	ga-loy
'sting'	taf	taf	yow
'lip'	gu- bil	fu- bil	fu-bbeñ
'donkey'	a- sum	ji-kilibadoh	a- summ
'fist'	bu- moox	e-fanjen	e-mmox

 Table (5)
 Shared vocabulary between Gubëeher, Kujireray, and Eegimaa

For consequences of borrowing for the noun class systems of these languages, see Cobbinah (this volume) and the publications of the Crossroads Project (Watson 2018 & 2019; Lüpke 2016a, 2016b, 2018, Goodchild 2019, Goodchild & Weidl forthcoming, Weidl 2019).

3 Syntax

The unmarked word order is subject-verb-object-adjuncts. Subject and non-subjects are thus distinguished through word order. The subject NP precedes the verb; objects and adjuncts stand after the verb. Adjuncts can be introduced by prepositions or occur without prepositions, which blurs the distinction between arguments and adjuncts.

⁷ These are Joola Kujireray, spoken in Brin and described by Watson (2015), and Joola Eegimaa or Banjal, spoken in the villages of the kingdom Mof Ávvi, west of Djibonker, and described by Bassène (2006), Tendeng (2007), and Sagna (2008).

Subject	Verb	Object	Adjunct 1	Adjut	nct2	
elefa	a-yéd	gu-no-honom	ninni	а	bi-raf	
elephant	3-lift	CL.gu-thing-3SG.POSS	like.this	PREP	CL.bi-up	
'The elephant lifts his thing [nose] up like that.'						
ES, DJI271009AC5						

The following sections provide data and analyses on argument structure and focus constructions, as well as on relativization and subordination in conditional clauses. Research on clause linkage by repetition of parts of the sentence or the verb phrase (also known as tailhead linkage, see Thompson, Longacre & Shin 2007:273f) is ongoing and will be published separately.

3.1 Transitivity and argument encoding

Verbs that have one argument are labelled as intransitive; those that can have maximally two arguments as transitive; and ditransitive verbs with three arguments are also attested. The constructions these verbs occur in are here referred to as monovalent, bivalent, and trivalent.

Valency	Object is noun phrase	Object is affix
Monovalent constructions	Alex a-ceem-i	
	Alex 3-sleep-PERF	
	'Alex sleeps/slept'	
Bivalent construction	Alex a-wuul-i Asaña	a-wuul-em
	Alex 3-see-PERF Asaña	3-see-3SG.OBJ.PERF
	'Alex saw Asaña.'	'He saw her.'
	Alex a-wuul-i koloŋ	a-wuul-i [ø]
	Alex 3-see-PERF well	3-see-PERF [ø]
	'Alex saw the well.'	'He saw [it].'
Trivalent constructions	i-nëër-o dërëm-ëŋ	inëër-em-em
	1-give-2SG.OBJ money-PL	1-give-3SG.OBJ-3SG.OBJ

Table (6)	Mono-, bi-,	and trivale	ent constructions
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4.

	'I give you money.'	'I gave her to her.'
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As shown in the above table, animacy is relevant for the way objects can be expressed. Animate objects can be encoded using a full noun phrase or a pronoun, or alternatively an object suffix. Inanimate objects cannot be encoded using the series of object affixes. Unless they stand as full NPs or pronouns, they have to be elided. The distinction between valency as a property of constructions and transitivity as a property of verbs is necessary considering that many verbs are quite flexible in their compatibility with different types of valency frames, due to the presence of unmarked alternations such as unexpressed object deletion and the frequent ellipsis of object arguments (see also example (1) and the verbs in Table (3). In examples (5) and (6) the infinitivised forms of *tun* 'pick fruits' and *búf* 'sweep', here in periphrastic constructions, can occur in monovalent as well as bivalent constructions. The monovalent constructions in (5a) and (6a) are instances of unexpressed object deletion.

э.	a)	bu-tun	g-a-raad-i	b)	bu-tun	ha	di-maŋgu	g-a-raad-i
		CL.bu-pluck 'S∕he is picki	FOC.OBJ-3-AUX-PERF		CL.bu-pluck 'S/he is picki	CONN	CL.di-mang gos.'	O FOC.OBJ-3-AUX-PERF
6.	a)	bë-buf	g-a-raad-i	b	o) bu-buf	ha	fuŋku	g-a-raad-i

-

CL.ba-sweep FOC.OBJ-3-AUX-PERF CL.bu-sweep CONN room FOC.OBJ-3-AUX-PERF 'S/he is sweeping.' 'S/he is sweeping the living room.'

Some verbs, such as $b\hat{u}f$ in (6a), mark object deletion by means of an infinitivising noun class prefix, in this case $b\ddot{e}$ - (an allomorph of *ba*-), instead of the default infinitivising noun class prefix *bu*-. For more information on deleted objects and the distinction from ellipsis, see Cobbinah (2013).

Gubëeher is a pro-drop language, i.e. an overt subject NP is not required. Subject agreement prefixed to the verb is obligatory however, regardless of the presence of a subject NP. This type of subject agreement codes only for person and number, not for noun class. The item in example (7) is in class *bu*- but does trigger third person singular agreement in *a*-, the same way any other noun does, regardless of its noun class.

7. bu-bu-no bu-ni a-lik-a-ne
CL.bu-CL.bu-thing AGR.bu-REL 3-stand-REFL-SUB
'[...]that thing that stands there'
LM, DJI291110AC

The free pronouns in Table (7) can be used in isolation, in subject position before the verb, or in object position after the verb. Bound subject agreement is prefixed for the singular, and prefixed and suffixed for the plural, for all TAM paradigms except for the negative perfect, where person/number morphology is purely suffixed for all persons (see 7.1.2). Object arguments can manifest as full NPs, pronouns, or affixes.

Person	Free pronoun	Subject affix	Object affix
1SG	me	i-	$-Vm^8$
2sg	fi	и-	-0
3SG	AGR-mër	<i>a</i> -	-Vm
1pl.incl	mino	i-N0	-mino
1PL.EXCL	min	imin	-min
2PL	iŋkaan	uVŋ	-V:nuŋ
3pl	AGR-mër	a-N-	-eeneŋ

Table (7)Subject and object pronouns and affixes

Encoding of objects by way of suffixes is only an option for animate objects.

 8.
 a-lódin-em
 umu
 a-wala

 3-greet-3SG.OBJ
 CL.u:DEM.PROX
 3-answer

 'She greets her, she answers.'
 'She greets her, she answers.'

BS, DJI101010AC2

⁸ The first and third person singular and the second person plural are subject to vowel harmony (see 4.1.1); their vowel is assimilated to the last vowel of the inflected verb form to which it is suffixed.

Inanimate objects can only be expressed by means of a full noun phrase or a full pronoun, or are elided (see Table (6) for an example). As a consequence, object arguments are frequently elided in discourse, especially when they are inanimate. When the explicit mentioning of an inanimate object is demanded for pragmatic reasons, it is expressed with the anaphoric pronoun AGR-*mër*. In example (9), the object (*bu-nana* 'banana') is first introduced as a full NP, then referred to with the anaphoric pronoun, and then elided.

9. a-henji bu-nana pos-honom a-dëët-i а 3-have-PERF CL.bu-banana pocket-3sg.poss 3-go:VEN-PERF PREP a-fun-ot bu-mër a-keeful 3-take.out-VEN AGR.bu-PRO 3-peel 'He has a banana in his pocket. He came and takes it out, he peels (it).' ES, DJI110110AC5

The following prepositions are used to introduce adjuncts. Some of these prepositions consist of a spatial noun (*riéŋ* 'ground', *bihuun* 'back') that is connected to the noun with the morpheme *ha*, which is also used to coordinate nouns in genitive constructions.

Gubëeher	Gloss
bi	'at/next to'
aŋga	'with'
а	'at, on, to, in', general
	location or direction
mata/mata-ha	'because of'
muŋkoona(u)m ka	ʻin'
riéŋ ka	'under/below'
bihuun ka	'behind'
raaf ka [raa'ka]	'over/above'
jegenen ka	'in the middle of'
kantik ka [kanti'ka]	'next to'
bijiir ka [bijii'ka]	'in front of'
tiaŋ ka	'outside of'

Table (8)Prepositions

3.2 Marked word order and focus

Object arguments and adjuncts stand post-verbally in the unmarked clause; if they are fronted into pre-verbal position, the deviant word order has to be marked on the verb with the focus marker g-. These clauses are marked not only syntactically and morphologically but also pragmatically. Compare the unmarked (10), without an overt subject NP, but with person agreement on the verb, with example (11), where *mum-mer* 'salt', the object of the verb *ñoŋ* 'take', is fronted and the verb is g-marked. Using a construction like the one in (11), the speaker makes the point that she is taking the salt and not something else. This would also be the answer to the question 'What did you take?'

- 10.a-dëët-ia-ñoŋómleta-hanagu-palat3-go:VEN-PERF3-takeomelette3-putPREPCL.gu-plate'He came, took the omelette and put it on the plate.'ES, DJI110110ACES, DJI110110AC
- 11. mum-mér g-i-dëëk-ot bu-ñoŋ
 CL.mun-salt FOC.OBJ-1-go-INACT CL.bu-take
 'It was the salt I was going to take.'
 HS, field notes
- 12. ho g-u-ñon-t-i
 what FOC.OBJ-2-take-VEN-PERF
 'What did you take?'
 HS, field notes

In order to focus the subject NP, unmarked word order is maintained and the verb is prefixed with the morpheme *in*-, which is often used with free subject pronouns (13) and question words (14). The prefix *in*- substitutes for any pronominal subject prefixes on the verb stem.

13. u-ñoŋ m' in-nah-en

2-take 1sg FOC.SUBJ-give-2sg.POSS 'Take [it], it's me who gives [it to] you!' JHS, DJI211110AC

14. *han im-maŋ-en* who FOC.SUBJ-want-2SG.OBJ.PERF 'Who loves you?' KC, field notes

3.3 Subordination

Relative clauses are formed with a relative pronoun -(gV)ni that agrees with the noun class of the noun it modifies. Often, the verb of the subordinate clause is additionally marked with *-ne.* Subjects (15), objects (16Fehler! Verweisquelle konnte nicht gefunden werden.), and complements (see 17 for a local complement and 18 for comitative complements) can all be relativised.

- 15. Na u-diigen и-тоођ u-guni a-gu-ne bu-dëë' ha DEM CL.u-man AGR.u-DEM.DIST AGR.u-REL 3-be-sub CL.bu-go CONN abi Gubaabo PREP Ziguinchor 'That is the man who wants to go to Ziguinchor.' HS, field notes
- 16. ba-rux bë-gini u-ruh-ne a-ŋaarin-ot
 CL.ba-water AGR.ba-REL 2-drink-SUB 3-cold-INACT
 'The water you drank was cold.'
 HS, field notes
- 17. fuŋku ë-gini i-ceem-ex-ne ë-jóló-i

room AGR.a-REL 1-sleep-HAB-SUB 3-wide-PERF 'The room I sleep in is spacious.' HS, field notes

18. wol u-mooŋ u-guni i-waxa-min-ne a-laj-i child(CL.u) AGR.u-DEM.DIST AGR.u-REL 1-play-1PL.EXCL-SUB 3-evil-PERF gu-laj CL.gu-evil 'The kid I played with is very evil.' HS, field notes

Relative pronouns can also agree with adverbially used noun classes in what is here labelled the absolute use of noun class morphology. The resulting locative or causal relatives can introduce temporal, causal subordinate phrases: $f\ddot{e}(g\ddot{e})ni$ 'when; at the time when', $k\ddot{e}(g\ddot{e})ni$, bi(gi)ni 'at the location where', $d\ddot{e}(g\ddot{e})ni$ 'on the day that', $h\dot{o}(gu)ni$ 'that which'. For further examples and a discussion of this use of noun class prefixes, see Cobbinah (this volume).

19. fë-gëni u-raad-ot bi-ñooc-a fa-m g-i-raad-ot
AGR.fa-REL 2-AUX-INACT CL.bi-wash-REFL AGR.fa-PRO FOC.OBJ-1-AUX-INACT gu-yaax-la
CL.gu-eat-DISTR
'When/while you were washing yourself, I was eating.'
GS, field notes

Temporal or conditional adverbial clauses are formed with the prefix g-. The conjugated verb takes perfective morphology, reflecting the fact that the verb which states the condition or the temporally preceding event is complete. The prefix g- is also used for non-subject focus, but it is not clear at this point whether there is a connection between conditionals and focus constructions or whether this is a case of homonymy. The event denoted by the verb without

the conditional *g*-morpheme is always the causal or temporal consequence of the *g*-inflected verb.

20. *g-a-cuc-i barum a-hundul omlet a-nen riéŋ* COND-3-throw-PERF so.that 3-turn.around omelette 3-fall down 'When he throws the omelette in order to flip it around, it falls to the ground.' ES, DJI110110AC

In hypothetical conditionals the conditional clause is marked with the irrealis morphology umbo- (in some contexts or fast speech realised as $-\ddot{e}mbo$), the dependent clause leaves various options of either using irrealis or subjunctive. I could not determine a difference between purely hypothetical conditions and past conditions, but this might be due to limited data on this issue. The distribution of $-\ddot{e}mbo$ vs. $-\ddot{e}mboot$ (possibly a combination of $-\ddot{e}mbo$ and the past marker -ot) seems to be free, at least in elicitation speakers use both forms indiscriminately, though the latter appears to be more common.

- 21. g-i-dëëk-ëmbo i-wúúl-ëmbo
 COND-1-go-IRR 1-see-IRR
 'I I had gone, I would have seen'/ 'If I went I'd see.'
 HS, elicitation
- 22. g-i-dëëk-ëmboot i-wúúl
 COND-1-go-IRR 1-see
 'I I had gone, I would have seen'/ 'If I went I'd see.'
 HS, elicitation

For more examples of hypothetical conditional phrases see section 7.1.3.2.

4 Phonology

Gubëeher is not tonal, unlike many other Atlantic languages. Analyses of how accent operates in Gubëeher are not available, but acoustic impressions suggest a pitch-based accent.

4.1 Phoneme inventory

The following consonants have been established for Gubëeher.

	Bilabial	Labio- dental	Alveolar	Palatal	Velar	Glottal
Plosive	p b		t d	C f	k g	
Nasal	m		п	ſ	ŋ	
Flap			r			
Fricative		f	S		X	h
Approximant	W			j		
Lateral			1			

Table (9)Consonant phonemes of Gubëeher

The status of consonant gemination is unclear. It is audible on few items in Gubëeher; however, no minimal pairs have so far been found, so that its phonemic status is not certain. The vowel phonemes of Gubëeher are given in Table (10).

Front	Central	Back	
i/i:		u/u:	high
I/I:		ບ/ບ:	
e/e:		o/o:	mid
ε/ε:	ə/əː	ა/ა:	↓
	a/a:		low

Table (10)Vowel phonemes of Gubëeher

The feature of length is phonemic for all vowels. The oppositions [0]/[0], $[e]/[\varepsilon]$, [u]/[0], [i]/[I], and [a]/[0] have been attributed to the feature $\pm ATR$ for Guñaamolo and most Joola

languages. Comparable data on articulatory positions in Gubëeher are not available, so that the question of ATR cannot be settled, but the voice quality typical of ATR vowels has not been perceived. Since the Gubëeher vowels are clearly differentiable in terms of height and backness, the assumption of ATR as an additional feature is not necessary.

4.2 Phonological processes

Gubëeher features morphophonemic processes for consonant assimilation, contraction of syllables, and breaking up of consonant clusters. Progressive as well as regressive vowel harmony operates between roots and affixes, in fast speech even beyond word boundaries.

4.1.1 Vowel harmony

The vowels of Gubëeher can be divided into two series. The series are relevant for affixation in that the vowel of the affix tends to be of the same series as the vowel of the stem. Especially in inflected forms with several affixes, the rules of vowel harmony can be very complex and have not yet been fully established. Vowel harmony is not strictly applied, especially in fast speech, and there is considerable intra- and inter-speaker variation.

Table	(11)) Vowel series
-------	------	----------------

Series I	Series II
а	ə
ε	e
Ι	i
э	0
U	u

Minimal pairs of items with vowels of the two series are presented in Table (12). The vowel of the verb stem conditions the quality of the vowel of the third person prefix a- with stems that have series I vowels, and \ddot{e} - for those with series II vowels.

Table (12)Prefix root harmony on the example of a- '3SG'

Series I	Series II
a-na:x	ə-nə:x

's/he gives'	's/he is slow'
a-jeg	ə-jeg
's/he turns the head'	's/he steps'
a-yin	ə-yin
's/he does on purpose'	's/he sings'
a-hɔ:t	ə-ho:t
'it sticks'	'it smokes'
a-ru:x	ə-ru:x
's/he drinks'	'it [chicken] is sick'

With some affixes, the vowel of the affix harmonises not only with the stem vowel in terms of the two vowel series, but also in terms of vowel height. These include the future marker -hVrVx/ -kVrVx, the plural marker $-V\eta$, and the third person singular possessive suffix -hVnVm (see Table (13), and also the suffix of the second person plural possessive $-hV:nV\eta$. The vowels of these suffixes are dependent on the height and series of the last vowel of the verb stem to which they attach.

Table (13)Vowel harmony

Last vowel	Vowel of	Example	Example
of stem	possessive	3SG.POSS	FUT
	suffix		
а	а	-hanam,	-harax
Э	Э	-hənəm	-hərəx
Э, U	Э	-hənəm	-hərəx
0, U	0	-honom	-horox
Е, І	ε	-hɛnɛm	-herex
<i>e, i</i>	е	-henem	-herex

4.1.2 Consonant deletion

When a consonantal suffix is attached to a consonant-final root, the final consonant is often deleted, especially in fast speech. Elision is indicated by an inverted comma in transcriptions.

23. /wɔl-hum/

[wɔ-hum] 1. deletion

Input

	[wəː-hum]	2. v	vowel lengthening	
	child(CL.u)-1SG.POSS 'my child'			
24.	/rɔx-lin/	25.	/ja:k-lin/	Input
	[rə-lin]		[ɟaː-lin]	1. Deletion
	cry-CAUS		burn-CAUS	
	'make cry'		'burn (tr.)'	
26.	/a-bəg-t-i/	27.	/a-fur-t-i/	Input
	[a-bə-t-i]		[a-fu-t-i]	1. Deletion
	3-stay-ven-perf		3-go.out-ven-perf	
	's/he stayed there'		's/he came out'	

4.1.3 Assimilation

The initial consonant of a suffix beginning with or consisting of /r/ is realised as [d] when it is suffixed to a stem with final /n/ or /r/.

28.	li-r-ɛŋ
	be.nice-NEG.PERF-3SG.SUBJ
	'it is not nice'

29.	/bun-r-ɔŋ/	/mir-r-ɛŋ/	Input
	[bun-d-oŋ] n.a.	mir-d-eŋ [mi-d-eŋ]	 r-assimilation deletion
	be.beautiful-NEG.PERF-3SG.SUBJ	resemble-neg.perf-3sg.subj	
	'S/he/it is not beautiful'	'S/he/it does not resemble'	

The nasal consonants n, η , m, and \tilde{n} also assimilate to following consonants:

Environment	Realisation of nasal	Example
Palatal consonants (k, g, ŋ)	ŋ	<i>aŋ-gu</i> 'they are'
Bilabial consonants (m, b, p)	m	am-buñ 'they send'
Alveolar, dental and palatovelar	n	an-dén 'they put'
stops (d, t, n, c, j, ñ)		
Fricatives and glides (l, r, f, h, s,	deletion or nasalisation of	<i>a-roxi / ã-roxi</i> 'they
w, y)	preceeding vowel	cried'

Table (14)Regressive nasal assimilation

5 Nominal categories

5.1 Modifiers

Nouns can be modified by agreeing items (adjectives), non-agreeing items (quantifiers), numerals, demonstratives, and prepositional phrases.

Modifiers in Gubëeher agree in noun class and number with the head noun they modify. Like all modifiers in Gubëeher, they stand after the noun. There are no derivational affixes that derive adjectives from roots or that distinguish predicatively used stems from attributively used stems. The only indicators of the modifying function are the post-nominal position and the agreement morphology.

5.1.1 Demonstratives

Gubëeher has three sets of demonstratives susceptible to local (and discourse) proximity: one is proximal and two are clearly distal, although the exact parameters determining whether the choice between the two distal demonstratives is based on factors such as proximity, visibility, relationship to speaker or hearer, etc., have not yet been researched in detail.

The formation of these demonstratives involves the reduplication of agreement markers for the proximal and medial demonstrative. The distal one is formed with the base -gV:n. All of the demonstratives can be used as modifiers of a NP or anaphorically. Another pronoun, used as a third person pronoun, is formed with the base $-m \ddot{e}r$, which can be shortened to -m (Table (15). It cannot modify an NP. For an absolute use of demonstratives (i.e. without antecedent) for adverbial purposes, see chapter 3.

Label	Label Scheme		Example <i>si-/sin</i>	Example gu-
		agreement	agreement	agreement
proximal	AGR-(N)-AGR	bamba	sisi	gungu
distal	AGR-(N)-AGR- <i>V:ŋ</i>	bambaaŋ	siseeŋ	guŋgooŋ
distal	AGR-ŋV:n	baŋaan	siŋeen	guŋoon
anaphoric	AGR- <i>mër</i>	bëmër	simër	gumër
anaphoric short	AGR- <i>m</i>	bam	sim	gum

 Table (15)
 Examples of demonstratives in different agreement classes

The forms of the demonstratives agreeing with the vocalic noun class prefixes i/u- and adeviate from this pattern. See Table 25 for a full list of demonstratives in their various agreement patterns. All of the demonstrative pronouns combine exophoric, anaphoric, and discourse deictic or endophoric functions, and agree with the nouns they refer to.

30.	ë-dëëk	a-lax-at	guŋgu	gu-ni	ë-gu	bi	raaf
	3-go	3-grasp-ven	CL.gu:DEM.PROX	AGR.gu-REL	3-be	PREP	up
	'He tak	es the one that i	s on top.'				
	JHS, D.	JI101210AC					

g-a-wan-in-i 31. g-a-n-tijin-i raŋ-koot a-hub-un а COND-3-PL-finish-PERF COND-3-lie-CAUS-PERF 3-dig-CAUS PREP CL.ran-mat gu-jund guŋgooŋ AGR.gu:DEM.DIST CL.gu-hole 'After putting it on the mat, they fill in that hole.'

JHS, DJI101210AC

An alternative way of expressing demonstrative semantics consists of reduplication of the noun class prefix (32).

32. si-si-déén a-jin-ëm-a

CL.si-CL.si-kapok.tree 3-live-APPL-PASS 'This kapok tree is inhabited by spirits.' JMS, field notes

The form na, which does not agree, is used as demonstrative without antecedent (33).

33. na ho

DEM what 'What is that?'

5.1.2 Adjectives

Gubëeher has very little morphology that singles out adjectives, apart from agreement marking. Many roots which denote states when occurring with verbal morphology can be used attributively to modify noun phrases without any purely derivational morphology, although agreement with the noun class of the modified noun is mandatory. There are, however, some roots that can only be used as attributive modifiers. Adjectives in Gubëeher encode colour, size, dimension, and quality. Most roots that can be used in adjectival frames also occur in nominal or verbal frames as property nouns or stative verbs respectively (see example (1)). There are, however, some roots (see Table (16), which are only attested in attributive position, and never used predicatively.

Gubëeher	Gloss
tiini	'small'
dééni	ʻbig'
dé	ʻbig'
diigen	'male'
dikaam	'female'
haam	'new'
may	'left'
yaax	ʻright'
dinem	'other'

Table (16)Roots which are used as modifiers but not in verbal frames

laat	'-ever'
ruk	'other'
lindin	'whole'
man	'some'

Adjectives, i.e. modifiers which agree with their head noun, can occur with or without a suffixed *-i*. The function and distribution of the *-i* suffix is not yet understood, as there is considerable variation in the occurrence of the suffix, some speakers preferring or accepting only one or the other, others accepting both versions as equally grammatical. Most adjectives are suffixed with *-i* when used in an attributive frame like *ceep* 'slim/narrow' and *déj* 'tall', as in examples (34) and (35).

34. *bë-jíd ba-ceep-i* CL.ba-girl AGR.ba-slim-i 'slim girl'

35. *bë-jíd ba-déj-i* CL.ba-girl AGR.ba-tall-i 'tall girl'

Apart from the items in Table 16, the following roots have been attested without the *-i: bun* 'good/beautiful', *fer* 'white', *fuun* 'blue', *tilit* 'small', *run* 'full', *ceen* 'red', *dëën* 'sweet/little', *rahi* 'black', *dihel* 'grown up', *duhun* 'hot', *gaarin* 'cold'. Occasionally, attributive items occur with what seems to be verbal morphology, including the middle/reflexive or passive suffix *- a* (as in example (36)) or negation morphology (example (37)).

- 36. *pi-taari pi-lub-a* tobacco(CL.pi) AGR.pi-grind-PASS 'ground tobacco'
- 37. gu-sol gu-jón-d-оŋ CL.gu-shirt AGR.gu-good-NEG.PERF-3SG.SUBJ

'bad shirt'

5.1.3 Numbers

The counting system of Baïnounk Gubëeher is quinary, its base of 5 using a body part model up to 20. From 20 to 99 it is vigesimal. Accordingly, up to 'five' we find simplex numbers, while higher numerals up to 'ten' are construed as 'five and X', e.g. *ci-lax anga ha-naak* 'seven [lit.: five and two]'. The numbers 'five', 'ten', and 'fifteen' are body part analogies: compare *cilax* 'five' and *si-lax* 'hand', *haalax* 'ten' and *ha-lax* 'hands', and *halaa'sidiix* 'fifteen' (*halax sidiix* 'hands foot'). For the number 20, the word *u-nam* (plural: *ñan-nam*) 'king' is used. From 20 to 99 the system of Gubëeher is vigesimal, i.e. based on multiples of *u-nam* '20'. The number 60, for example, is expressed as *ñannamillal*, literally 'three twenties'; 77 is *ñannamillal anga haalaasidiix anga hanaak* 'three twenties and fifteen and two'. The numbers *teemer* 'hundred' (pl. *teemer-en*) and *wuli* 'thousand' (pl. *wuli-en*) are loans from Wolof and Mandinka respectively.

Nr.	Cardinal number	As modifier	Ordinal number
1	gugondúk	(Red.)-ndúk	-jaŋ, liix
2	ha-naak	-naak	-naakin
3	ha-lal	-lal	-laalin
4	ha-rendek	-rendek	-reenin
5	cilax	cilax	-han ka cilax
6	cilax aŋga gugonduk	cilax aŋga -duk	-han ka cilax aŋga –nduk
7	cilax aŋga hanaak	cilax aŋga -naak	
8	cilax aŋga hallal	cilax aŋga -llal	
9	cilax aŋga harendek	cilax aŋga -rendek	
10	haalax	haalax	

Table (17)Ordinal and cardinal numbers from one to ten

Table (18)Cardinal numbers higher than ten

Nr.	Cardinal number	Nr.	Cardinal number
11	haalax aŋga gugonduk	70	pannamillal aŋga
			haalax

12	haalax aŋga hana:k	71	ñannamillal aŋga
			haalax aŋga gugonduk
15	halaasidiix	80	ñannamirendek
16	halaasidiix aŋga	90	ñannamirendek aŋga
	gugonduk		haalax
20	unam	100	téémer
30	unam aŋga haalax	200	téémereŋ anaakaŋ
40	ñannaminak	1000	wuli
50	ñannaminak aŋga haalax	2000	wulieŋ anaakaŋ
60	ñannamillal		

Some quantifiers (Table (19) do not agree with the head noun they modify, but are particles which stand after the noun.

Table (19)Non-agreeing quantifiers

Gubëeher	Gloss
(nu)num	'too/as well'
pe	'all/the whole'
tu	'all/the whole'
bare	'only'

5.2 Possession

Possession is expressed verbally with the verb *cooc* 'have/be in possession of' or *henj* 'have/have with oneself'. The latter implies that the possessor is carrying the possessee with him at the time of speaking, whereas *cooc* refers to abstract possession.

For the expression of physical possession or part/whole relationships involving two NPs, these are connected with the invariable connective morpheme *ha* (or its allomorph *ka*), according to the structure 'Possessee CONN Possessor'.

38. koona ha u-ñaŋ-kum
 house CONN
 'my friend's house'

Number	Person		Possessive	Example koona	Example bukoor
			Affix	'house'	'town'
Sg.	1		-/h/um	koona-hum	bukoo-kum
	2		-/h/en	koona-hen	bukoo-ken
	3		-/h/VnVm	koona-hanam	bukoo-konom
Pl.	1 incl.		-/h/ënito	koona-hënito	bukoo-kënito
	excl.		-/h/ënit	koona-hënit	bukoo-kënit
	2		-/h/VnVn	koona-hanan	bukoo-kanan
	3		-/h/eneen	koona-heneen	bukoo-keneen

Table (20)Bound possessive affixes

The vowel of the third person singular and second person plural possessive suffix (Table (21)) is assimilated to the last vowel of the noun, according to the two rules of vowel harmony described in section 4.1.1.

Last vowel	Vowel of	3SG.POSS	2pl.poss
of noun	possessive		
	affix		
а	а	-hanam,	-hanan
Э	Э	-hënëm	-hënën
Э, U	Э	-honom	-honon
0, U	0	-honom	-hónon
Е, І	ε	-henem	-henen
<i>e, i</i>	е	-henem	-hénen

Table (21)Vowel harmony effects on possessive suffixes

The possessive suffixes are the same for singular and plural possessees, the plural being marked on the noun either by a plural noun class marker or by the plural suffix, depending on the inflectional type of the noun.

If the possessor is pronominal ('mine, yours, his etc.'), a pronominal base is employed which agrees with the ellided possessee (39).

39. ko-bor a-fun-ot a-naanam
CL.ko-rabbit 3-take.out-VEN AGR.a-POSS.3SG
'Rabbit takes out his one [jihi 'dog', a-agreement].'
LM, DJI240211AC2

The forms of the pronominal bases are provided in Table (22).

Person	Number	Affix
1	SG	-naam
2	SG	-nanken
3	SG	-naanam
1	PL.INCL	-ninito
	PL.EXCL	-ninit
2	PL	-neeneŋ
3	PL	-naanaŋ

Table (22)Independent possessive pronouns

Occasionally, and so far exclusively with animate nouns, double marking of the plural has been observed with possessives, i.e. the plural suffix occurs right after the stem and then again after the possessive suffix. This means of pluralising the possessive suffix is not accepted by all speakers for all nouns. Most speakers would use the form in (40b) as the first person singular possessive of *bë-kér-ëŋ* 'chickens' (the singular is *bë-kér*), but the doubly pluralised form in (40c) has been encountered in the corpus as well. For some terms denoting family members (e.g. *u-lina, udéén, a-som*), double suffixation is the norm (example (41)).

40. a)	bë-kér-ëŋ	b)	bë-kér-ëŋ-kum	c)	bë-kér-ëŋ-kum-oŋ
	CL.ba-chicken-PL 'chickens'		CL.ba-chicken-PL-1SG.POSS 'my chickens'		CL.ba-chicken-PL-1SG.POSS-PL 'my chickens'
41. a)	u-lina ⁹	b)	u-lina-hum	c)	a-lina-ŋ-kum-oŋ

⁹ The stem *lina* indicates that the sibling is of a different sex than the person referred to.

CL.u-sibling	CL.u- sibling-1SG.POSS	CL.asibling-PL-1SG.POSS-PL
'sibling'	'my sibling'	'my siblings'

With the nouns *bëëb* 'father', *nuun* 'mother', and *u-bër* 'offspring', the shorter allomorph of the third person singular possessive suffix -Vm is used instead of the usual form -hVnVm:

42.	bëëb-ëm	43.	nuun-om	44.	u-bër-ëm
	father-		mother-3sg.poss		CL.u-child-3sg.poss
	3sg.poss				
	'his/her		'his/her mother'		'his/her child'
	father'				

For nominal or adverbial modifiers, e.g. a location (45), a temporal adverb, or a relationship indicating purpose expressed with a nominalised verb (46), a particle agreeing with the head noun is used. It is alliterative with the NC prefix and has the form (C)V.

45. *in-diin-eŋ-kum i Gubaabo* CL.in-friend-PL-1SG.POSS AGR.i:CONN Ziguinchor 'My friends of Ziguinchor'

46. *ba-rux ba bu-rux* CL.ba-water AGR.ba:CONN CL.bu-drink 'drinking water [=water for drinking]'

5.3 Non-verbal predication

Equation and class-inclusion is conveyed by the juxtaposition of two NPs (47). For past reference it is possible to use the suffix -ot (48), also employed in verbal TAM paradigms, or alternatively the verb gu 'to be'with past morphology (49) For future reference or for the negated form the verb gu, has to be employed (50 & 51).

47. me u-saw

1sg cl.u-hunt

'I'm a hunter.'

48. *me u-saw-ot* 1sg CL.u-hunt-INACT 'I'm a hunter.'

- 49. *i-gu-ot u-saw* 1-be-PAST CL.u-hunt 'I was hunter.'
- 50. *i-gu-horox u-saw* 1-be-FUT CL.u-hunt 'I will be a hunter.'
- 51. gu-r-i u-saw be-NEG:PERF-1SG CL.u-hunt 'I will be a hunter.'

Locative predication can be expressed using a non-verbal copula which agrees with the noun class of its head noun. The locative copula is construed with a prefix *iN*- and the agreement marker of the located noun (52a).

Table (23)The locative copula

	Schema	Example	Example	Example	Example
		class <i>u</i> - and <i>a</i> -	class gu-	class <i>si</i> -	class <i>ba</i> -
Presentative	<i>iN</i> -Agr	innu	iŋgu	insi	imba
Locative	<i>iN</i> -Agr-ŋ	innuŋ	iŋgooŋ	inseeŋ	imbaaŋ

In case this construction is used to ask for the location of an object or person ('Where is X') a nasal velar is suffixed to the copula as in 52b. This also occurs when a locative complement is used ('It is in/on/atX')(53) (see 0.oft he

52. a) ba-pusun imba b) ba-pusun imba-ŋ

CL.ba-press	AGR.ba:LOC	CL.ba-press	AGR.ba:LOC-ŋ		
'There's the lemon juice!'		'Where's the	'Where's the lemon juice?'		
HS, field notes	3				

53. ba-pusun Imba-ŋ а ko-raafa ko-gini a-gu-ne-na CL.ba-press CL.ko-bottle 3-be-sub-there AGR.ba:LOC-PREP AGR.ko-REL hë-dii-xen abi CL.ha-foot-2sg.poss PREP 'The lemon juice is in the little bottle which is there at your feet.' HS, field notes

The locative copula does not have a negative equivalent, the verb gu 'to be' is used for this purpose.

54. a) ba-pusun gu-r-on-na CL.ba-press BE-NEG:PERF-3SG-THERE 'The lemon juice is not there' HS, field notes

55. *ba-pusun gu-r-oŋ a taabl* CL.ba-press be-NEG:PERF-3SG PREP table 'The lemon juice is not on the table' HS, field notes

6 Nominal classification

Noun class is the topic of various previous publications on Baïnounk Gubëeher (Cobbinah 2013;), so I will provide only a brief summary of relevant issues. For data on noun class semantics see also Cobbinah (this volume), and on verbal nouns Watson (this volume).

The noun class system of Gubëeher is characterised by a high number of prefixes, on the noun as well as on agreeing targets. The very large number of noun class morphemes and the resulting singular-plural combinations (or noun class paradigms) allow for the conveying of subtle semantic differences through noun class morphology (see Cobbinah this volume).

A subclass of nouns, making up about 25% of noun types, uses a plural suffix for pluralisation (Cobbinah 2017). A large proportion of these plural suffixing nouns, among which most loanwords, are prefixless. Another important feature of the Gubëeher noun class system is the existence of second plurals distinguishing count from mass plurals (see 6.1 for examples and Cobbinah and Lüpke 2014).

6.1 Noun class paradigms

Table (24) sums up the types of paradigms attested in Gubëeher in terms of whether they are monadic, paired, or triadic. Items in monadic paradigms usually denote masses or abstract concepts. Paired paradigms are the most common, and numerous of these encode a simple singular-plural distinction, while triadic paradigms have one singular and two plural forms. Many nouns denoting animals (insects, fish, some amphibians), grains, or other categories of small objects have two plurals, one of which is used to refer to countable or small quantities, the other for unlimited number value or with collective semantics. Noun class paradigms can also be distinguished on the basis of whether they employ plural prefixes or suffixes. The last column in Table (24) illustrates the way these types of paradigms are notated in this paper.

1	2	3	Number distinction	Notation
sin-ceem			mass/abstract	sin-
'sleep'				
bu-rul	i-rul		singular/plural	bu-/i-
'mouth'	'mouths'			
koona	koona-ŋ		singular/plural	ø/ ø-ŋ
'house'	'houses'			
bë-jíd	bë-jíd-éŋ		singular/plural	ba-/baŋ
ʻgirl'	ʻgirls'			
rën-jém	ñën-jém	jë-jém	singular/plural/collective	ran-/ñan-/ja-
'frog'	'frogs'	'frogs		
		(collective)'		
a-yum	a-yum-oŋ	bi-yum	singular/plural/collective	a-/aŋ/bi-

Table (24)Types of paradigms in Gubëeher

'bee'	'bees'	'bees	
		(collective)'	

Gubëeher prefixes combine in a very large number of ways to form noun class paradigms, some involving the plural suffix instead of a noun class prefix. This large number of paradigms makes it easier to identify semantic coherences; indeed, some of the paradigms are semantically very narrowly defined, although the noun class prefixes of which they consist occur in other combinations and logically have much broader semantic extensions. Table (25) lists all prefixes attested in Gubëeher togeter with the paradigms they occur in and a brief comment on salient semantic fields associated with each paradigm. For detailed information on noun class semantics in Gubëeher see Cobbinah (2013).

Prefix	One-class paradigm and infinitives	In paired paradigm	Domains	In triadic paradigm	Domain
ø (no	substances	ø-/ø-(-ŋ)	family members,		
prefix)	substances		animals, loans		
а	rice species, misc.	a-/a-(ŋ)	animals	a-/a-(-ŋ)/bi-	insects
	inf.: agriculture			bu-/i-/ba-	ground- growing fruits/tubers
ba	<i>ba</i> illnesses, elements, food from plants,	ba-/ba-(-ŋ)	animals, misc.		kernels/hard
				<i>a a</i>	fruits, small
	properties			gu-/ha-/ba-	jewellery, low
	groups of trees				plants
bi	abs.: locatives	bi-/i-	round objects/ body parts	a-/a-(-ŋ)/bi	insects
	misc. infinitives	bi-/a-(-ŋ)	misc.		
1	locatives	bu-/i-	round objects/ body parts	bu-/i-/ba	ground growing fruits/tubers
bu		1 (()	misc.	bu-i-/ja-	animals
	default infinitives	bu-/a-(ŋ)		bu-/i-/di	tree fruits
1.	abs.: temporal	da-/din-(-ŋ)	augmentative	/	
da	'dust', 'heat'	da-/a-(-ŋ)	'day'	/	
đi	viscous substances	/		bu-/i-/di-	tree fruits
din	/	da-/din-(-ŋ)	augmentative	/	
fa	abs.: temporal, inf.: 'jump'	fa-/fa-(-ŋ)	misc.	fa-/fa-(-ŋ)/ja-	fish

Table (25)Overview of the paradigms sorted by prefixes

Prefix	One-class paradigm	In paired	Domains	In triadic	Domain
	and infinitives	paradigm		paradigm	
fun	inf.: 'football'	fun-/fun-(- ŋ)	sea animals	gu-/ha-/fun-	'oyster'
gu	inf.: reflexives	gu-/ha-	long body parts, misc.	gu-/ha-/ba-	kernels/hard fruits, small jewellery, low plants
84	excrement, misc.	gu-/ñan-	'nose'	gu-/ha-/ja	grass, organic bits (plant and body), waterplants
ha	mine infinitions	an the	lang hadu nanta misa	gu-/ha-/ja	grass, organic bits (plant and body), waterplants
ha misc. infinitives	gu-/ha-	long body parts, misc.	gu-/ha-/ba	kernels/hard fruits, small jewellery, low plants	
ho	abs.: thing; diminutive of substance	ho-/ho-(-ŋ)	'thing'	/	
hu	/	hu-/hu-(-ŋ)	'thing'	/	
		bu-/i-	round objects/body parts, misc.	bu-/i-/di	fruits
i	/	bi-/i-	round objects/body parts	bu-/i-/ja-	animals
		si-/-i	'eye'	bu-/i-/ba	ground growing fruits, tubers
in	/	u-/in-	humans	u-/in-/in-(ŋ)	humans (grouped?)
ja	inf.: agriculture	ja-/ja-(-ŋ)	animals, misc.	gu-/ha-/ja	grass, organic bits (plant and body), waterplants
	groups of trees	to lic	cloth	ron lãon lia	amphihiana
	substances	ta-/ja-	CIOUI	ran-/ñan-/ja	amphibians
ji	inf.: animate verbs	ji-/ji-(-ŋ)	people (derog.), misc. tools and artefacts, animals	/	
ka	inf.: loans	/		/	
	abs.: locatives,	kan-/ñan -	misc.	,	
kan	misc. infinitives	kan-/kan-(ŋ)	misc.		

Prefix	One-class paradigm and infinitives	In paired paradigm	Domains	In triadic paradigm	Domain	
ko		ko-/ño-	diminutive			
kun	'hunger', 'palm wine' inf.: posture verbs	kun-/ñan -	'mortar'	/		
mun	liquids	si-/mun-	trees; wooden objects	,		
	inf.: 'urinate'	ran-/mun-	palm tree	/		
ñan		ran-/ñan-	misc., mats			
	inf.: 'laugh'	kan-/ñan -	misc.			
		sin-/ñan-	strings, fibres, long things	<i>ran-/ñan-/ja-</i> amphibians		
		u-/ñan-	humans			
ño	/	ko-/ño-	diminutive	/		
pi	'tobacco'			/		
ran	death, illness, sacrifice,	ran-/ñan -	misc., mats	ran-/ñan-/ja-	amphibians	
	inf.: 'weave'	ran-/mun-	palm tree			
si	human/negative properties	si-/mun-	trees; wooden objects, 'medicine', shrines			
	smells	si-/i-	'eye'			
	inf.: 'sleep'	si-/ha	arm, leg, last name			
sin	reciprocal infinitives, reciprocal relations	sin-/ñan-	strings, fibres, long things	/		
ta	'heat'	ta-/ta-(ŋ)	misc., birds	/		
	inf.: fishing	ta-/ja-	cloth			
ti	sap, 'cold', 'wax',	/		/		
u	1	u-/in-	humans	humans		
	/	u-/ñan -	humans	u-/in-/in-(ŋ)	(grouped?)	

6.2 Noun class agreement

In Gubëeher only some modifiers and pronouns agree with the noun. This includes numerals from one to four and adjectives, as well as the interrogative pronouns $AGR-\eta$ 'which' and AGR-*luhi* 'how many', and the relative pronoun AGR-*n(i)/-guni*, all of which prefix the agreement marker to the stem of the agreeing target. The demonstrative pronouns and the locative copula deviate from this pattern in that the locative copula suffixes the agreement marker to the base *in*- and the demonstratives involve patterns of reduplication (the segmentation and formation of demonstratives is summarised in Table (26) below and

described in section 5.1.1). The targets agree with the noun class prefixes and also with the plural suffix, for those nouns which use plural suffixes. Table (26) shows the agreement classes attested so far in Gubëeher, with selected targets including adjectives, numerals from one to four, the locative copula, and class-agreeing pronouns (demonstratives, some interrogative pronouns and the relative pronoun).

Agreement	NC	Agreement	DEM.PROX	DEM.DIST	DEM.DIST	LOC	REL
class	prefix	prefix					
А	а-						
	ji-		amu ¹⁰	amoon	anoon	innu	ä (aä)ni
	ja-	<i>a-</i>	amu	amooŋ	aŋoon	innu	ë-(gë)ni
	1						
BA	ba-	ba-	bamba	bambaaŋ	baŋaan	imba	bë-(gë)ni
BI	bi-	bi-	bimbi	bimbeeŋ	biŋeen	imbi	bi-(gi)ni
BU	bu-	bu-	bumbu	bumbooŋ	buŋoon	imbu	bu-(gu)ni
DA	da-	da-	danda	dandaaŋ	daŋaan	inda	dë-(gë)ni
DI	di-	di-	dindi	dindeeŋ	diŋeen	indi	di-(gi)ni
DIN	din-	din-	dindi	dindeeŋ	diŋeen	indi	di-(gi)ni
FA	fa-	fa-	fafa	fafaaŋ	faŋaan	ifa	fë-(gë)ni
FUN	fun-	fun-	fufu	fufooŋ	fuŋoon	ifu	fu-g(u)ni
GU	gu-	gu-	guŋgu	guŋgooŋ	guŋoon	iŋgu	gu-guni
HA	ha-	ha-	haha	hahaaŋ	haŋaan	iha	hë-(gë)ni
НО	ho-	ho-	hoho	hohooŋ	hoŋoon	iho	ho-(gu)ni
HU	hu-	hu-	huhu	huhooŋ	huŋoon	ihu	hu-(gu)ni
Ι	<i>i-</i>	<i>i</i> -	imi	imeeŋ	iŋeen	inni	i-(gi)ni
IN	in-						
	ñan-11	in-	imi	imeeŋ	iŋeen	inni	i-(gi)ni
	e-						
JA	ja-	ja-	janja	janjaaŋ	jaŋaan	inja	jë-(gë)ni
Л	ji-	ji-	jinji	jinjeeŋ	jiŋeen	inji	ji-(gi)ni
KA	ka-	ka-	kaka	kakaaŋ	kaŋaan	iŋka	kë-(gë)ni
KAN	kan-	kan-	kaka	kakaaŋ	kaŋaan	iŋka	kë-(gë)ni
КО	ko-	ko-	koko	kokooŋ	koŋoon	iŋko	ko-(gu)ni
KUN	kun-	kun-	kuku	kukooŋ	kuŋoon	iŋku	ku-(gu)ni

Table (26)Agreement classes, prefixed	es, and agreeing targets in Gubëeher
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¹⁰ The vocalic class a- deviates from the reduplication pattern observed in the formation of demonstratives and the locative copula of the other noun classes, in that it has u as a final vowel and not a as expected.

¹¹ This concerns terms denoting human with $\tilde{n}an$ - as plural noun class prefix on the noun, which have animacy agreement in that they agree with the human plural noun class *in*-.

MUN	mun-	mun-	тити	mumooŋ	muŋoon	immu	mu-(gu)ni
ÑAN	ñan-	ñan-	ñaña	ñañaaŋ	ñaŋaan	iñña	ñë-(gë)ni
ÑO	ño-	ño-	ñoño	ñoñooŋ	ñoŋoon	iñño	ño-(gu)ni
PI	pi-	pi-	pipi	pipeeŋ	piŋeen	impi	pi-(gi)ni
RAN	ran-	ran-	rara	raraaŋ	raŋaan	ira	rë-(gë)ni
SI	si-/sin-	si-	sisi	siseeŋ	siŋeen	isi	si-(gi)ni
SIN	sin-/si-	sin-	sisi	siseeŋ	siŋeen	isi	si-(gi)ni
ТА	ta	ta-	tata	tataaŋ	taŋaan	inta	të-(gë)ni
TIN	tin-	tin-	titi	titeeŋ	tiŋeen	inti	ti-(gi)ni
U	и-	и-	umu	итоођ	uŋoon	innu	u-(gu)ni

An overview of all types of agreeing targets in Gubëeher on the example of the noun *ha-sol* 'shirts' in agreement class *ha*- is provided in Table (27).

Target	Combination	Schema	Example with class	Gloss
			ha-	
adjectives	prefixed	AGR-stem	ha-sol hë-de	'big shirts'
numerals	prefixed,	AGR-stem	gu-sol gugoonduk	'one shirt'
(one – four)	involving		ha-sol ha-naak	'two shirts'
	reduplication		ha-sol ha-lal	'three shirts'
	for 'one'		ha-sol ha-rendek	'four shirts'
relative pronoun	prefixed	AGR- <i>(gV)ni</i>	ha-sol hë-(gë)ni	the shirts which
interrogative	prefixed	AGR-ŋ	ha-sol ha-ŋ	'which shirts'
pronoun 'which'				
interrogative	prefixed	AGR- <i>luh</i>	ha-sol ha-luh	'how many shirts'
pronoun				
'how many'				
locative	suffixed	<i>in</i> -AGR	ha-sol i'-ha	'there are the shirts'
		<i>in</i> -AGR-ŋ	ha-sol i'-ha-ŋ	'where are the shirts?'/
				'the shirts are here'
demonstrative	reduplicated	AGR- <i>(n)</i> -AGR	ha-sol ha-ha	'these shirts'
			ha-sol ha-ha-aŋ	'those shirs'
demonstrative	prefixed	AGR- <i>ŋVVn</i>	ha-sol ha-ŋaan	'those shirts'
distal				
independent	prefixed	AGR-POSS	ha-naam	'mine'
possessive				
attributive particle	stand-alone	AGR	gu-sol gu buxaana	'a shirt for wearing'

For those nouns which form their plural with the plural suffix $-V\eta$, this is reflected in agreement. A plural suffix $-V\eta$ is also suffixed to the agreeing target.

56. *féébi-en fafa-an fa-naam-an* goat(CL.fa)-PL AGR.fa:DEM.PROX-PL AGR.fa-1SG.POSS-PL 'These goats are mine' HS, field notes

7 Verb morphology

Gubëeher has a rich verbal morphology. TAM, person, number, and many verbal derivations are distinguished through affixes. The phonological processes and the order of affixes in cases of multiple affixation have not been explored exhaustively yet.

7.1 TAM

In Gubëeher, the most basic tense/aspect paradigm is unmarked TAM, which shows only person/number inflection. Unmarked TAM has modal semantics: it is obligatorily used in subordinate clauses such as phrasal finite complements of verbs like 'like', 'want', 'can', 'dare', etc., and in clauses introduced by subordinating conjunctions (57). In main clauses, unmarked TAM is used for the expression of wishes and with obligative semantics when asking for and granting permission (58). In discourse, unmarked TAM can be used in independent clauses as a neutral narrative form (59).

- 57. a-dëëg-ët bum anaŋgu a-ŋan jegeneŋ ka teren 3-come-VEN so.that and 3-enter middle CONN field 'He comes with the intention of getting to the middle of the soccer field.' LM, DJI291110AC
- 58. *i-dëëk gu-jila ha poŋ* 1-go CL.gu-buy CONN bread

'Should I go buy bread?' HS, observed communication

59. guguñuun nuŋ-kanaan a-likun an u-yaax-aŋ evening mother-2PL.POSS 3-cook and 2-eat-PL 'In the evening, your mothers cook (it) and you eat.' JHS, DJI211110AC

Gubëeher has many inflectional TAM paradigms, some prefixed and some suffixed, as well as periphrastic constructions, mainly for progressives and the near future. Particles, frequent in neighbouring Joola languages, are almost absent from Gubëeher; the only morpheme that could be analysed as a particle is the negative imperative morpheme *sam*.

Morpheme	Function	Gloss
/	unmarked TAM	/
- <i>i</i>	perfect	PERF
-ot	inactual	INACT
-hVrVh	future	FUT
- VX	habitual	HAB
-mboone	irreal	IRR
-Vti	imperative	IMP
- <i>t</i>	venitive	VEN
gV	modal	MOD
mb-	accomplished	ACC

Table (28)TAM markers in the affirmative

Gubëeher has four ways of expressing negation: the suffix -r for the perfective negative; the prefix *b*- for negation of the subjunctive; the prefix in *d*- for negation of the future and the habitual; and two particles that are in free variation for negative imperatives (overview in Table (29).

Table (29)TAM markers in the negative

Morpheme	Function	Gloss
- <i>1</i>	negation of perfect	NEG.PERF

d-	negation of future, habitual	NEG.FUT	
<i>b</i> -	negation of subjunctive	NEG.SUBJ	
sam/buruk	negation of imperative	NEG.IMP	

7.1.1 Affirmative TAM

The perfect is marked with the suffix -i. The first person plural inclusive in this aspect has the suppletive suffix -e in the perfect, as opposed to the suffix -o in unmarked TAM.

Table (30)Perfect paradigm

Singular				Plural				
Person	Person		TAM	Person	Person	Plural		Person:TAM
	prefix		suffix		prefix			suffix
1	<i>i</i> -		- <i>i</i>	1. incl.	i-	<i>n</i> -		-е
		[atom]		1. excl.	i-	/	[atom]	-imin
2	U-	[stem]	- <i>i</i>	2	и-		[stem]	-еŋ
3	a-		- <i>i</i>	3	а-	<i>n</i> -		-i

Some verbs have a past interpretation with the perfective (60), and some verbs have a stative or change-of-state reading (especially when used in a progressive construction) with the perfective marker (61).

60. *a-ruuh-i*

3-drink-PERF 'S/he has drunk'

61. a-ceen-i

3-red-perf 'It is red/it has become red'

As a rule of thumb, most verbs denoting properties and whose stems can be used attributively are among the second group. The modal verbs, and some verbs denoting states which cannot be used attributively (*yit* 'know', *yéég* 'understand', *ceem* 'sleep', *teet* 'make noise', *faan*

'smell (intr.)'), do also have a stative reading with the perfective suffix (62). Further research is needed to establish the nature of these verb classes.

62. a-ceem-i

3-sleep-PERF 'S/he sleeps/has slept'

The suffix -/h/VrV/h/ is used for future reference. Its vowels harmonise with the last vowel of the stem it attaches to. The /h/ phoneme can be pronounced as [k] when it is at the onset of a suffix that is attached to a stem with a final nasal, [f], or [r]; in all other cases it is pronounced as [h] or [x] in free variation. The first person inclusive suffix can be shortened to *-xuxo/-huho*.

Table (31) <i>F</i>	uture tense paradigm
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Singular				Plural						
Person	Person		TAM	Person	Person	Plural		TAM	Person	
	prefix				prefix	prefix			suffix	
1	i-	[stem]	-hVrVh	1 inc.	i-	п-	[stem]	-hu(ru)h	-0	
				1 exc.	i-			-hVrVh	-min	
2	И-			2	и-			-huruh	- <i>01</i> j	
3	<i>a</i> -			3	а-	п-		-hVrVh		

The future suffix can be used when referring to very concrete prognoses or intentions, or with modal overtones.

A rarer used future form, often used in conditional clauses, refers to an action accomplished in the future. It is formed by attaching the suffix *—reet* to the perfective form of the verb.

63. g-a-n-delin-t-i-reet a-n-yen-oonuŋ i-tij-i-min COND-3-PL-arrive-VEN-PERF-FUT2 3-PL-say-2PL.OBJ 1-finish-PERF-1PL.EXCL 'Once they have arrived, they will tell you: 'we have finished'.' JHS, DJI101210AC

The suffix -Vx is used in order to express that two actions occur simultaneously.

64. *ë -yin-ex a-yaax-ax* 3-sing-HAB 3-go-HAB 'He sings while eating.'

The particle ge can be preposed to the verb with semantic effect of consecutive actions 'and then/later you do X'. With some speakers the vowel harmonises with the prefix of subject agreement and is realised as go when preceding the u- of the second person and ga when preceding the a- of the third person prefix. In fast speech the vowel is also often elided.

65. *i-den na di-maŋgu go u-ñoŋ*1-put there Col.di-mango PART 2-take
'I put the mango there, later you take some'
LM, elicitation

In combination with the habitual marker -Vx the semantics is of doing the action bit by bit (in French: *de temps en temps* or *petit à petit*).

66. *i-den na di-maŋgu go u-ñoŋ-ox*1-put there Col.di-mango PART 2-take-Hab
'I put the mango there, you take little by little'
LM, elicitation

In a reduplicated construction that combines the particle ge and the habitual suffix –Vx the meaning is clearly habitual (67).

67. *fi g' u-rux-ox gu-rux xolo* 2sg MOD 2-drink-HAB CL.gu-drink much 'You have a habit of drinking a lot [of alcohol].' GS, field notes The inactual suffix -ot is used to express that events have occurred in the past and are not relevant for the present. This results either in a pluperfect reading, i.e. something has happened before the past referred to in discourse (cf. *dëëk* 'go' in example (68), or, for those verbs which have a stative reading with the perfective suffix -i, it is used to express a state in the past which is not relevant at the time of speaking, as with *yit* 'know' in example (69).

- 68. i-ciŋ-kenen buyeŋka imééréŋ in-dëëk-ot a-nu 'n a-yit-ne FOC-go-INACT CL.i-liver-3PL.POSS 3-hurt as 3-know-sub COMP 3pl bu-yaas aŋga u-digéén-i CL.bu-trip with CL.u-man-POSS 'They were upset because they knew that they had gone together on the trip, [him] with their husband.' LM, DJI240211AC2
- 69. *u-bëëhër* yit-r-eŋ-ot hë-bëŋgëët haha
 CL.u-Baïnounk know-NEG.PERF-3SG.SUBJ-INACT CL.ha-stool CL.ha:DEM.PROX *taburé-éŋ* bimbeeŋ
 stool-PL over.there
 'The Baïnounk didn't know these stools, little benches there.'
 AB, DJI121109AC2

The inactual suffix -*ot* can also be used for non-verbal predications. It can be suffixed to the non-verbal locative copula (70) and to nouns with a possessive suffix (71). On possessive nouns the possessive relationship is marked as belonging to the past and as not relevant any more. This use of the inactual marker, which is a typologically common phenomenon (Nordlinger and Sadler 2000), is also attested, though only for alienably possessed nouns, in Joola Eegimaa (Sagna 2008: 109).

70. Eko innuŋ-ot
Eko AGR.u:LOC-INACT
'Where was Eko [name]?.'

KC, field notes

71. Na koona-hum-ot DEM house-1sg.Poss-INACT 'That used to be my house' GS, field notes

7.1.1.1 Already

The suffix *-aar* is used to express that one has already had the occasion of doing something, in the sense that the experience is not new (0). In its negated form it translates as 'never going to do something', when used with the negative of the future/habitual (73), or as 'never having done something', when used with the negative perfect.

72. *i-dëëk-aar-i* Karabane
1-go-already-PERF Karabane
'I have already had the occasion to go to Karabane.'
GS, field notes

73. me d-i-cooc-aar dërëm-ëŋ
1SG NEG.FUT -1-have-ALREADY money-PL
'I will never have money.'
BS, observed communication

74. me wúúl-aa-d-i

1SG see-ALREADY-NEG:PERF-1SG'I have never seen [it].'BS, DJI101010AC2

A different paradigm conveys the notion that an action has already been done.

75. *imbi-yaax a-miñ*1:Acc-eat 3-take:time
'I have already eaten since a while ago'
LM, field notes

Although this paradigm is not very frequent in the corpus, it is attested and has been confirmed in elicitation. The morphology of the paradigm is complex, the affix indicating person is reduplicated around an affix -mb-.

Singular			Plural						
Person	Person		Person	Person	Plural		Person		
	prefix:			prefix:	prefix		suffix		
	TAM			TAM					
1	imbi-	[stem]	1 inc.	imbi-	<i>n</i> -		-0		
			1 exc.	imbi-		[-+]	-min		
2	umbu-		2	umbu-		[stem]	-Vŋ		
3	amba-		3	amba-	<i>n</i> -				

Table (32)Accomplished paradigm

7.1.2 Negated TAM

The suffixed -r is the negative equivalent of the affirmative perfective suffix -i. In the negative perfect paradigm, person marking is suffixed for all persons.

Singular				Plural				
Person	TAM Person			Person		TAM	Person	
			suffix				suffix	
1		- <i>1</i> *	-i	1 incl.		- <i>1</i> *	-е	
	[stem]			1 excl.	[stom]	-ľ	-imin	
2		- <i>1</i> *	-0	2	[stem]	-ľ	-oŋ	
3		- <i>1</i> *	-Vŋ	3		- <i>1</i> *	-VŋVŋ	

Table (33)Paradigm of the perfective negative

76. *umu*

lób-ur-oŋ

honj

thing(CL.ho)

AGR.u:DEM.PROX

speak-NEG.PERF-3SG.SUBJ

45

'She didn't say anything.' JHS, DJI101010AC2

The prefix d- is used to negate the future.

Singular			Plural						
Person	TAM	Person			TAM	Person	Plura		Person
		prefix				prefix	1		suffix
1		<i>i</i> -	1 incl.		i-	n-		-0	
	đ		[stem]	1 excl.	đ	i-	/	[stem]	-min
2	d-	u-		2	d-	U-	/		- <i>Vŋ</i>
3		a-		3		<i>a</i> -	n-		/

Table (34)Future negative paradigm

77. *me d-i-nap gu-hese gu-gonduk bare* 1SG NEG.FUT-1-pound CL.gu-peeled.rice AGR.gu-one only 'I won't pound only one single grain of rice!' BS, DJI101010AC2

The negative habitual is formed with the suffix -Vx and the prefix d- (78). The prefixed morpheme b- is the negative of the unmarked TAM; it is used in constructions with the verb *fan* 'not yet' and *ba* 'almost', but also in narrative negation and in dependent clauses in general.

78. *d-i-ceem-ex* bëërix
NEG.FUT-1-sleep-HAB noon
'I usually don't sleep during the day.'
HS, field notes

79. *ba-lat num iŋ-gu-ne b-u-yaax-aŋ* CL.ba-fast thus FOC:SUBJ-be-SUB NEG-2-eat-PL 'Fasting, that is you don't eat.' JHS, DJI211110AC 80. *fan-d-i b-i-delun ken i-maŋ* already-Neg:Perf-1Sg Neg:Subj-1-reach where 1-wANT 'I haven't yet got to where I wanted to (context: digging a hole)' LM, DJIPeche

81. *a-ba b-a-taak-am a gu-xunum* 3-almost NEG-3-cut-1SGOBJ PREP CL.gu-finger 'He almost cut at my finger.' LM, DJIPeche

Singular				Plural					
Person	TAM	Person		Person	TA	Person	Plural		Person
		prefix			М	prefix			suffix
1		<i>i</i> -		1. incl.		i-	11-		-0
	t.		[atom]	1. excl.	1	i-	/	[atoma]	-min
2	<i>b</i> -	U-	[stem]	2	<i>b</i> -	и-	/	[stem]	- <i>Vŋ</i>
3		a-		3		a-	n-		/

7.1.3 Mood

7.1.3.1 Imperatives

Usually, the forms of the unmarked conjugation are used with imperative functions, using the second person singular, the second person plural, and the first person plural inclusive.

82. a)	и-поŋ	b)	и-поŋ-оŋ	c)	in-ñoŋ-o
	2-take		2-take-PL		1pL-take-1pL.INCL
	'take!'		'take! [pl.]'		'let's take'

The morphologically marked imperative with *-Vti* (sg.) and *-Vteŋ* (pl.) is marginal in Gubëeher. However, it has been encountered occasionally with a few verbs, including *noox* 'sit' (83), *dëëk* 'go', and *ñoŋ* 'take'. This usage is possibly conventionalised.

83. a-yen-o man noox-ot-eŋ an i-'-rux-o
3-say-2sg.obj but sit-IMP-PL and 1-PL-drink-1PL.INCL
'He tells you: "but sit down and let's drink."
JHS, DJI101210AC,205:1

There are suppletive imperatives for some very frequently used commands: *so* 'come!', *indan* 'go!', and \tilde{i} 'take'.

The negative imperative is expressed with the particles *sam* or bu(ru)k, and occasionally the two together, *sam buruk*, which are preposed to the affirmative imperative form. These morphemes are in free variation and no semantic difference has been detected.

84.	a)	sam	u-niig	b)	bu(ru)k	u-niig
		NEG.IMP	2-watch		NEG.IMP	2-watch
		'Don't watch!'			'Don't wa	tch!'

7.1.3.2 Irrealis

The irrealis morphology -*Vmb* is used for hypothetical statements e.g. in conditional clauses. See also section 3.3 on conditional clauses. In slow speech the vowel of the affix is [u], but often it is realised as [ə] or shows vowel harmony. The ending -ot is reminiscent of the past suffix -ot, but the exact morphological analysis of these forms cannot be made at this point.

Singular				Plural				
Person	Person		TAM	Person	Person	Plural		TAM
	prefix				prefix:	prefix		
					TAM			
1	i-		-umbo(ot)	1 inc.	i-	п-		-umbo
		[stem]	-umbo(ot)	1 exc.	i-		[stem]	-umbomin
2	И-		-umbo(ot)	2	И-			-umboŋ

Table (36)*irrealis paradigm*

3 a-	-umbo(ot)	3	a-	п-		-umbo(ot)
------	-----------	---	----	----	--	-----------

85. g-i-cooc-ëmboo-ne gu-ru i-nëër-o
COND-1-have-IRR-SUB CL.gu-cola 1-give-2SG.OBJ
'If I had cola nuts I would give you [some].'
HS, field notes

86. g-i-n-dëëk-umb-r-e yit-imb-r-e COND-1-go-IRR-NEG:PERF-1PL.INCL know-IRR-NEG:PERF-1Pl.INCL:PERF 'If we (incl.) had gone, we (incl.) would have known.' HS, field notes

87. g-ë-gu-mboot a-har ka ji-fek yaax-imb-r-i
COND-3-be-IRR CL.a-meat CONN CL.ji-pig eat-IRR-NEG.PERF-1SG.SUBJ
'If it had been pork meat, I wouldn't have eaten it.'
AS, field notes

7.1.4 Periphrastic TAM constructions

The purely auxiliary verbs raad(88) and kan(89), and the verb gu 'to be' are used as auxiliary verbs in periphrastic constructions denoting progressive aspect.

88. ho g-u-raad-i bu-ye
what FOC.OBJ-2-AUX-PERF CL.bu-do
'What are you doing?
MaB, DJI090312AC16

89.	n'	a-tuc-o-ne	bu-luk	bumbooŋ	піпееŋ	пит
	as	3-throw-ven-sub	CL.bu-shaft	AGR.bu:DEM.DIST	like.that	too

g-a-ŋ-kannumbu-laarFOC.OBJ-3-PL-AUXtooCL.bu-clap'Depending on how he throws the kajandu shaft, they clap their hands, too.'JHS, DJI101210AC

A periphrastic construction formed with an auxiliary is compatible with the inactual (90) for past reference, and the venitive (91) for the expression of a proximate future.

90.	u-lamba	итти	sin-cem	g-a-raad-ot	a-jufula-t-i
	cl.u-boy	AGR.u:DEM.PROX	CL.sin-sleep	FOC.OBJ-3-AUX-INACT	3-wake.up-VEN-PERF
	ñimeni				
	now				
	'The boy v	was sleeping, now	he has just wo	ken up.'	
	LM, DJI29	91110AC			

91. *bumbu g-i-gu-t-i bu-bajul* AGR.bu:DEM.PROX FOC.OBJ-1-be-VEN-PERF CL.bu-break 'That is the one [*bu-nin* 'egg'] I am going to break.' BS, DJI101010AC2

The non-verbal locative predication 'be at', followed by the verbal noun, is occasionally used with progressive semantics (92).

92. *ineeŋ bë-lób* CL.i:LOC CL.ba-speak 'They are having a conversation.' JMS, field notes

7.1.5 The gerund

A form with combined nominal and verbal properties is prefixed with the noun class marker *ba*- and suffixed with *-er*. A morphologically and functionally identical form, prefixed with *ba*- and suffixed with *-er*, is attested in various Joola languages and has been labelled a gerund (Joola Banjal (Bassène 2006: 252); Joola Kujireray (Watson 2015); Joola Keerak (Robert and Segerer this volume). In these languages, like in Gubëeher, the gerund is used for manner nominalisations and adverbial complements. One of its uses is an adverbial function expressing the simultaneous or consecutive occurrence of two actions (93). The gerund can also form manner nouns (94).

- 93. a-dëëk-i bi kari ba-yaax-er mes
 3-go-PERF PREP someone CL.ba-eat-GER already
 'Having eaten he went to someone's place.'
 LM, field notes
- 94. bë-dëëk-er
 - CL.ba-go-GER
 - a) 'having gone'
 - b) 'manner of going/pocedure'

The gerund can be suffixed with possessive pronouns (95):

95. min ba-saat-er-kenem a bi-naal bala i-tollo-min 1PL.EXCL CL.ba-pass-GER-3SG.POSS PREP CL.bi-path before 1-notice-1PL.EXCL 'After passing him by on the road we noticed [that it was him].' LM, field notes

7.2 Verbal extensions

Gubëeher has a very productive inventory of verbal extensions. The status of some of the forms as to whether they derive or inflect is not entirely clear. Forms with passive or venitive

morphology cannot be infinitivised. For the venitive, forms such as *bu-fur-ot* 'to come out' are regarded as ungrammatical by most speakers. Extensions can decrease or increase valency, or convey aspectual/adverbial semantics. A stem can take more than one suffix, though the meaning of the resultant combined suffix may not be the sum of the semantics of each suffix that is involved. Most extensions are sensitive to lexical semantics, valency, or other semantic features of the verb. To give an example, the suffix *-un* derives causatives from most verbs, but with verbs of bodily excretion it has applicative semantics, e.g. *rëëj-un* 'defecate on' derived from *rëëj* 'defecate'. For many derived verbs, either a corresponding simplex form does not exist or the semantic relation between the extension and the verb stem is opaque. For glossing I have identified the most productive function, although many extensions have several functions and conventionalised or idiosyncratic usages.

Form	Functions	Gloss
-a(h)	passive	PASS
-a(h)	reflexive/middle	REFL
-ay	reciprocal, comitative	REC
-ëla	distributive	DISTR
-un	causative, applicative	CAUS
-liin	causative	CAUS
-ul	reversive, repetitive,	REV
-intiin	anticipatory	ANTCP
-um	applicative	APPL
-ur	benefactive	BEN
-ahiin	pluractional (repeated action	DER
	on one or several objects)	
-ot	venitive	VEN

Table (37)Verbal extensions

Benefactives and applicatives form ditransitive verbs from transitive ones by adding a second object participant to the argument structure. Causative extensions form transitive verbs from intransitive ones, adding a causee to the argument structure of the simplex verb. Gubëeher has two causative extensions, *-un* and *-liin/-riin*. There are no verbs that are compatible with both extensions. It is not clear what the difference between the two causativising suffixes is.

Stem	Gloss	Derived stem	Gloss
rox	'cry'	ro-liin	'cause to cry'
ñaŋ	'dance'	ñaŋ-liin	'make dance'
lik	'stand'	lik-riin	'put in upright position'
bëŋk	'be afraid'	bëŋk-liin	'frighten'

Table (38)The -liin causative

Table (39)The -un causative

Stem	Gloss	Derived stem	Gloss
yaax	'eat'	yaax-un	'make eat'
ŋaf	'go up'	ŋaf-un	'raise'
хис	'descend'	xuc-un	'bring down'
run	'be full'	run-un	'fill'

For verbs of excretion, *-un* derivations increase valency but the added argument is not a causee. The derivation introduces a locative participant in object position, denoting the ground on which the excretion takes place, as shown in Table 37.

Stem	Gloss	Derived stem	Gloss
sel	'urinate'	sel-un	'urinate on'
rëëj	'defecate'	rëëj-un	'defecate on'
loot	'spit/vomit'	loot-un	'spit/vomit on'

Table (40)The extension -un with an applicative function

Reflexive and passive derivations reduce valency, resulting in monovalent phrases. Reflexive marked verbs include grooming verbs, middles, reflexives proper, and many deponentia, for which an underived stem is not attested. The passive suffix -a(h) is very productive in Gubëeher: all transitive verbs can be passivised (97) in order to demote the subject of the corresponding active clause (96). The demoted subject cannot be expressed in a passive clause, either as an adjunct or otherwise, but is always deleted.

96. *a-naax-em gu-tuma* 3-tell-1SG.OBJ.PERF CL.gu-story 'S/he told me a story.'

LM, valency questionnaire

97. gu-tuma a-naax-a CL.gu-story 3-tell-PASS 'The/a story has been told.' LM, valency questionnaire

Passive morphology can also be used to form impersonal passives from transitive and intransitive verbs, i.e. the event is described as taking place without elaborating on the subject involved in the event (98).

98. muŋkoonam a-laac-a
inside 3-shout-PASS
'There is shouting going on inside. [lit.: Inside it is shouted.]'
LM, valency questionnaire

The passive suffix -a/-ah is formally identical to the reflexive suffix -a/-ah, but they can be distinguished distributionally and through semantic and syntactic tests. In the affirmative, passives are not compatible with perfective morphology; the plain form describes an event as having been accomplished (99). Reflexives, on the other hand, occur mainly with the perfective marker -i (101). The structural between the passive and the reflexive is visible in the negated forms: the negation suffix -r precedes the passive morpheme -a (100), but follows the reflexive morpheme -a (102).

99. gu-bol a-ñooc-a CL.gu-bowl 3-wash-PASS 'The bowl has been washed' LM, DJI280212AC8

100. gu-bol ñooc-ër-a

CL.gu-bowl wash-NEG-PASS 'The bowl has not been washed' LM, DJI280212AC8

101. a-ñooc-a-i

3-wash-REFL-PERF 'S/he has washed[his/her body].' *'S/he was washed.'

LM, DJI280212AC8

102. ñooc-a-r-aŋ

wash-REFL-NEG-3SG.SUBJ 'S/he has not washed his/her body *'S/he has not been washed.'

LM, DJI280212AC8

Examples of other derived verbs are provided in Table (41).

Stem	Gloss	Derived stem	Gloss
ñóóp	'hide (tr.)'	ñoop-a	'hide (oneself)'
yiñ	'shave (tr.)'	yiñ-a	a) 'shave (oneself)'
			b) 'get shaved'
niig	'look at'	niig-ay	'look at each other'
dëëk	ʻgo'	dëëk-ay	'go together'
dëëk	ʻgo'	dëëk-ëla	'stroll around'
ñooc	'wash'	ñooc-ëla	'wash listlessly'
fur	'leave'	fur-um	'go out from'
yaax	'eat'	yaax-um	a) 'eat with (instrument)'
			b) 'eat with (side dish)'
fóób	'cover (blanket)'	fóób-ul	'uncover'
rax-un	'lock'	rax-ul	'unlock'
lód	'build'	lód-ur	'build for'
tib	'search'	tib-ur	'search for'

Table (41)Examples of derived verbs

сеђ	'get up'	ceŋ-intiin	'get up early'	
toox-ul	'cut'	toox-ël-ahiin	'cut into pieces'	
babb	'be same'	babb-ël-ahiin	'mix together'	
хис	'descend'	xuc-ot	'descend towards speaker'	
nen	'fall'	nen-et	'fall down (if speaker is	
			down)'	

8 Summary

The Baïnounk languages, none of which have been described in depth until this decade, occupy a distinctive place within the Atlantic language family. The Baïnounk varieties Guñaamolo, Guñun, Gujaher, and Gubëeher are all very small languages, some of them even one-village languages, with limited distribution and all mainly used as in-group languages. The Baïnounk languages, including Kobiana and Kasanga, are clearly genetically related to each other, and share vocabulary and grammatical phenomena, but are genetically quite distinct from any other language of the Atlantic family. Typical Baïnounk features include elaborate focus and topic marking morphology, suffixed plurals, nasal-final noun class prefixes, very large noun class inventories, and a lack of noun class agreement with the verb. However, even within the Baïnounk languages, and even more so between Baïnounk and Kobiana/Kasanga, there are substantial lexical and grammatical differences that make mutual intelligibility difficult if not impossible. These divergences are most probably due to different language contact settings. Gubëeher, for instance, shares many features with languages of the Joola group. This is not surprising given that the village of Djibonker, whose patrimonial language is Gubëeher, is socially and ritually tightly integrated into Joola-dominated networks. Of the criteria that Robert and Segerer (this volume) identify as typically Joola, and as attested in Joola Keerak, the majority equally apply to Baïnounk Gubëeher, including the lack of consonant mutation, the locative copula, an inclusive/exclusive distinction for the first person plural, and complex TAM paradigms. The morphology of the gerund, the person/number affixes for the singular, the reduplication patterns for the formation of locative copulas and demonstratives, as well as the form and extension of some of the verbal derivational affixes, have direct equivalents in neighbouring Joola languages such as Kujireray and Eegimaa/Banjal, and also in Joola languages spoken further away. Research on areal features shaping and influencing Gubëeher, and conversely the Joola languages in close geographic contact with Gubëeher, is being undertaken with the aim of a fuller investigation of the role of multilingualism on language change. Other topics for further research inlcude the mechanics of vowel harmony, a better understanding of affix order and phonotactics and the role and nature of stress.

9 Appendix Conjugation table

Affirmative					Negative		
Sub	junctive						
(I go	o, may I go)						
Sg		Pl		Sg		Pl	
1	idëëk	incl	indëëko	1	bidëëk	incl	bindëëko
		excl	idëëmin			excl	bidëëmin
2	udëëk		udëëkëŋ	2	budëëk		budëëkëŋ
3	ëdëëk		ëndëëk	3	bëdëëk		bëndëëk
Per	fective						
(I w	ent/l didn't go)						
Sg		Ρl		Sg		Pl	
1	idëëki	incl	indëëké	1	dëëkiri	incl	dëëkré
		excl	idëëkimin			excl	dëëkirimin
2	udëëki		udëëkeŋ	2	dëëkuro		dëëkuroŋ
3	ëdëëki		ëndëëki	3	dëëkërëŋ		dëëkërëŋëŋ
Past	t Perfect						
(I ha	ad gone/ I hadn't g	one)					
Sg		Pl		Sg		Pl	
1	idëëkot	incl	indëëkté	1	dëëkiriot	incl	dëëkreot
		excl	idëëkotmin			excl	dëëkiriminot
2	udëëkot		udëëkoteŋ	2	dëëkuroot		dëëkërëŋot
3	ëdëëkot		ëndëëkot	3	dëëkërëŋot		dëëkërëŋot
Fut	ure			-			
(I w	ill go/ I won't go)						
Sg		Pl		Sg		Ρl	
1	idëëxërëx	incl	indëëkuruho	1	didëëk	incl	dindëëko
		excl	idëëxërëmin			excl	didëëmin
2	udëëxërëx		udëëxërëxëŋ	2	dudëëk		dudëëkëŋ
3	ëdëëxërëx		ëndëëxërëx	3	dëdëëk		dëndëëk
Hab	oitual						
(Lus	sually go/ I don't us	sually g	o)				
Sg		Pl		Sg		Pl	
1	idëëkëx	incl	indëëkuho	1	didëëkëx	incl	dindëëkuho
		excl	idëëkëhmin	1		excl	didëëkëxmin
2	udëëkëx		udëëkëxëŋ	2	dudëëkëx		dudëëkëxëŋ
3	ëdëëkëx		ëndëëkëx	3	dëdëëkëx		dëndëëkëx
Irre		1			1		
	ould go/I wouldn't	go)					
Sg		PI		Sg		Pl	
1	idëëkumboot	incl	indëëkumbo	1	dëëkëmbri	incl	dëëkëmbre
		excl	idëëkumbomin			excl	dëëkëmbrimin
2	udëëkeumboot		udëëkumboŋ	2	dëëkumbro		dudëëkumburoŋ
3	ëdëëkumboot		ëndëëkumboot	3	dëëkëmbrën		dëëkëmbrënën
Futi		1		-		1	
	ce I will have gone.)					
Sg		PI					
1	gidëëkiréét	incl	gindëëkéréét	-			
-	giacenneer	excl	gidëëkimindéét	+			
	gudëëkiréét		gudëëkendéét	+			
2				1	1	1	
2 3	gëdëëkiréét		gëndëëkiréét				

$T_{abla}(42)$	Conjugation table TAM with the work döölt 'as'	,
Table (42)	Conjugation table TAM with the verb deek 'go'	

(l've	already gone/ I co	ertainly	won't go)				
Sg		Ρl		Sg		Ρl	
1	imbidëëk	incl	imbindëëko	1	dimbidëëk	incl	dimbindëëko
		excl	imbidëëmin			excl	dimbidëëmin
2	umbudëëk		umbudëëkëŋ	2	dumbudëëk		dumbudëëkëŋ
3	ambëdëëk		ambëndëëk	3	dambëdëëk		dambëndëëk
Con	secutive		•		·	•	
(the	n you go)						
Sg		Ρl					
1	gé idëëk	incl	gé indëëko				
		excl	gé idëëmin				
2	gó udëëk		gó udëëkëŋ				
3	gë ëdëëk		gë ëndëëk				
Incr	emental		•		•		·
(I go	little by little)						
Sg		Ρl					
1	gé idëëkëx	incl	gé indëëkuho				
		excl	gé idëëkëhmin				
2	go udëëkëx		gó udëëkëxëŋ				
3	gë ëdëëkëx		gë ëndëëkëx				
alre (I ha	ady ive once gone/I ha	ave neve	er gone)				
Sg		Ρl		Sg		Ρl	
1	idëëkaari	incl	indëëkare	1	dëëkaadi	incl	dëëkaade
		excl	idëëkaarimin			excl	dëëkaadimin
2	udëëkaari		udëëkaareŋ	2	dëëkaado		dëëkaadoŋ
3	ëdëëkaari		ëndëëkaari	3	dëëkaadaŋ		dëëkaadaŋaŋ
Pass	sive		·		•		·
(l w	as seen/ I wasn't s	een)		-			
1	iwúúla	incl	inwúúlaho	1	wúúra	incl	? not attested?
		excl	iwúúlamin			excl	wúúramin
2	uwúúla		uwúúlahaŋ	2	wúúra		wúúrahaŋ
3	ëwúúla		ënwúúla	3	wúúra		wúúrahaŋ
	erative						
(go!	/ don't go!)				•		
2	udëëk		udëëkëŋ		sam udëëk		sam udëëkëŋ
	(supl.: indaan)		(supl.: indaanaŋ)				
					bu(ru)k udëëk		bu(ru)k udëëkëŋ
Ger (goi	und ng/having gone)						
1901	bëdëëkér						
	рецеекет						

10 Abbreviations

1,2,3	1 st , 2 nd and 3 rd person
AGR	agreement
ANTCP	anticipative
APPL	applicative
AUX	auxiliary
BEN	benefactive
CAUS	causative
CL	noun class
COLL	collective
COND	conditional
CONN	connective
DEM	demonstrative
DER	derivational suffix
DIST	distal
DISTR	distributive
EXCL	exclusive
FOC	focus
FUT	future
НАВ	habitual
IMP	imperative
INACT	inactual
INCL	inclusive
IRR	irreal
MOD	mode
Ν	noun
NEG	negative
OBJ	object
PASS	passive
PERF	perfective
PL	plural
PREP	preposition
PRO	pronoun
PROX	proximal
REC	reciprocal
REFL	reflexive
REL	relative
REV	reversive
SG	singular

SUB	subjunctive
SUBJ	subject
SUPL.	suppletive
ТАМ	tense, aspect, mood
TR	transitive
V	verb
V	vowel
VEN	venitive

Code	Gender	Age bracket	Language repertoire
BS	female	20-25	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Pulaar,
			Wolof, French
HS	female	40-50	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Pulaar,
			Wolof, French, Bayot, J. Kaasa, Kriolu, Mandinka
GS	male	25-30	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Wolof,
			French, Bayot, Joola Kaasa
LM	male	35-40	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Wolof,
			French, J.Kaasa, Kriolu
AB	male	50-60	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Wolof,
			French, J.Kaasa, Kriolu, Bayot
ES	male	10-15	B. Gubëeher, J. Kujireray, Wolof, French
MaB	female	20-25	B. Gubëeher, J. Kujireray, Wolof, French, J. Banjal
AS	male	30-40	French, Wolof, J. Kaasa, English, B. Gubëeher, J.
			Kujireray, J. Fogny
JHS	male	60-70	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Wolof,
			French, Bayot, J. Kaasa, Kriolu, Mandinka, Mancagne,
			Bassari
JMS	male	40-50	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Wolof,
			French, J. Kaasa, Kriolu,
KC	female	25-30	B. Gubëeher, J. Banjal, J. Fogny, J. Kujireray, Wolof,
			French, J. Kaasa, Bayot

11 Participants occurring in examples (B = Baïnounk, J = Joola)

12 References

- Bao-Diop, Sokhna. 2013. Description du baynunk guñaamolo, langue minoritaire du Sénégal: Analyse phonologique, morphologique et syntaxique. PhD thesis. INALCO, Paris.
- Barner, David, and Alan Bale. 2002. No nouns, no verbs. Psycholinguistic arguments in favor of lexical underspecification. Lingua 112(10): 771–791.
- Bassène, Alain-Christian. 2006. Description du jóola banjal (Sénégal). PhD thesis. Université Lumière Lyon 2.
- Bassène, Alain-Christian, and Denis Creissels. 2013. Valency patterns for bivalent verbs in two West African languages: Mandinka (Mande) and Jóola Banjal (Atlantic). Afrikanistik online 10. <u>http://www.afrikanistik-aegyptologie-online.de/archiv/2013/3758</u> (accessed 6 December 2016).
- Bondéelle, Olivier. 2015. Polysémie et structuration du lexique. Le cas du Wolof. PhD thesis. University of Leiden.
- Bühnen, Stephan. 1994. Geschichte Der Bainunk Und Kasanga. PhD thesis. Justus Liebig Universität Giessen.
- Cobbinah, Alexander. 2010. Casamance as an area of intense language contact. *Journal of language contact* THEMA 3: 175–201.
- Cobbinah, Alexander. 2013. Nominal classification and verbal nouns in Baïnounk Gubëeher. PhD Thesis. SOAS, London
- Cobbinah, Alexander. This volume. Noun class semantics in Atlantic languages. In The Oxford guide to the Atlantic languages of West Africa, edited by Friederike Lüpke. Oxford University Press: Oxford.
- Cobbinah, Alexander. 2017. Suffixed plurals in Baïnonk languages: Agreement patterns and diachronic development. In: Journal of African Languages and Linguistics 38(2): 145-185.
- Cobbinah, Alexander, and Friederike Lüpke. 2014. When number meets classification. The linguistic expression of number in Baïnounk languages. In Number Constructions and Semantics. Case studies from Africa, Amazonia, India and Oceania, edited by Gerrit Dimmendaal and Anne Storch, 199-220. Amsterdam/Philadelphia: John Benjamins.
- Cobbinah, Alexander, Abbie Hantgan, Friederike Lüpke and Rachel Watson. 2017. Carrefour des langues, carrefour des paradigmes. In Espaces, mobilités et éducation plurilingues: Éclairages d'Afrique ou d'ailleurs, edited by Michelle Auzanneau, 79-97. Paris: Édition des Archives Contemporaines.
- Creissels, Denis. This volume. Noun class systems in Atlantic languages. In Atlantic languages, edited by Friederike Lüpke. Oxford University Press: Oxford.

- Doneux, Jean Léonce. 1990. La place de la langue buy dans le groupe Atlantique de la Famille Kongo-kordofan. PhD thesis. Université Libre de Bruxelles.
- Farrell, Patrick. 2001. Functional shift as category underspecification. English Language and Linguistics 5(1): 109–130.
- Fisher, Alison. 2015. Lenition and gemination in Northern Atlantic roots. In Selected Proceedings of the 44th Annual Conference on African Linguistics, edited by Ruth Kramer et al., 84–97. Somerville, MA: Cascadilla Proceedings Project.
- Goodchild, Samantha, and Miriam Weidl. Forthcoming. "Translanguaging Practices in the Casamance, Senegal: Similar but Different; Two Case Studies." In Making Signs, Translanguaging Ethnographies: Exploring Urban, Rural, and Educational Spaces, edited by Elisabetta Adami and Ari Sherris. Bristol: Multilingual Matters.
- Goodchild, Samantha. 2019. Sociolinguistic spaces and multilingualism: practices and perceptions in Essyl, Senegal. PhD Diss., SOAS, University of London.

Krajcik

- Lüpke, Friederike. 2016a. "Pure Fiction The Interplay of Indexical and Essentialist Language Ideologies and Heterogeneous Practices: A View from Agnack." In African Language Documentation: New Data, Methods and Approaches, edited by Mandana Seyfeddinipur, 8–39. Language Documentation and Conservation special publication 10. University of Hawai'i. http://hdl.handle.net/10125/24650.
- Lüpke, Friederike. 2016b. "Uncovering Small-Scale Multilingualism." Critical Multilingualism Studies 4 (2): 35–74.
- Lüpke, Friederike. 2018. "Multiple Choice: Language Use and Cultural Practice in Rural Casamance between Convergence and Divergence." In Creolization and Pidginization in Contexts of Postcolonial Diversity: Language, Culture, Identity, edited by Jacqueline Knörr and Wilson Trajano Filho, 181–208. Leiden: Brill.
- Lüpke, Friederike. This volume. Baïnounk Gujaher. In Atlantic languages, edited by Friederike Lüpke. Oxford University Press: Oxford.
- Marantz, Alec. 1997. No escape from syntax. Don't try morphological analysis in the privacy of your own lexicon. In Proceedings of the 21st Annual Penn Linguistics Colloquium, edited by Alexis Dimitriadis and Laura Siegel, 201–225.
- Nordlinger, Rachel and Louisa Sadler. 2000. Tense as a nominal category. In Proceedings of the LFG00 Conference. CSLI Publications: Berkeley.
- Quint, Nicolas. 2015. Le système des classes nominales en nyun de Djifanghor. In *Typologie des systèmes de classes nominales dans les langues Atlantiques*, edited by Denis Creissels and Konstantin Podzniakov, 421–459. Köln: Rüdiger KöppeVerlag.

- Robert, Stéphane, and Guillaume Segerer. This volume. Joola Keeraak. A grammatical introduction. In Atlantic languages, edited by Friederike Lüpke. Oxford: Oxford University Press.
- Thompson, Sandra A., Longacre, Robert E. & Shin Ja J. Hwang. 2007. Adverbial clauses. In Language Typology and Syntactic Description, Vol. III: Complex Constructions, 2nd edn, Timothy Shopen (ed.), 237–300. Cambridge: CUP.
- Sagna, Serge. 2008. Formal and Semantic Properties of the Gújjolaay Eegimaa. PhD thesis. SOAS, London.
- Tendeng, Odile. 2007. Le Gusiilay: Un Essai de Systématisation. Bern: Peter Lang.
- Voisin, Sylvie. 2015a. Sur l'origine du suffixe du pluriel dans le groupe ñuñ-buy. LLA 1(1): 13–42.
- Voisin, Sylvie. 2015b. Les classes nominales en Kobiana. In *Typologie des systèmes de classes nominales dans les langues Atlantiques*, edited by Denis Creissels and Konstantin Podzniakov, 327–383. Köln: Rüdiger Köppe Verlag.
- Watson, Rachel. 2015. Noun classification and verbal nouns in Kujireray. PhD thesis. SOAS, London.
- Watson, Rachel. This volume a. A sketch of Kujireray. In The Oxford guide to the Atlantic languages of West Africa, edited by Friederike Lüpke. Oxford University Press: Oxford.
- Watson, Rachel. 2018. "Patterns of Lexical Correlation and Divergence in Casamance." Language & Communication 62 (B): 170–83.
- Watson, Rachel. 2019. "Language as Category: Using Prototype Theory to Create Reference Points for the Study of Multilingual Data." Language and Cognition 11 (1): 125–64.
- Weidl, Miriam. 2019. "Nga Ne!? [What Did You Say!?] The Role of Wolof in Multilingual Conversations in the Casamance: Fluidity of Linguistic Repertoires." PhD diss., SOAS, University of London.